

Proof of Evidence - Planning

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Land North of Browns Lane, Tamworth

APP/K3415/W/24/3340089 (Appeal A)

APP/Z3445/W/24/334/0094 (Appeal B)

Town and Country Planning Act 1990

Conjoined Section 78 Appeal

Outline application for up to 210 dwellings, public open space, landscaping, sustainable urban drainage, access and associated infrastructure (All matters reserved except for access).

Summix BLT Developments Limited



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LIST OF APPENDICES

Appendix 1 Written Statement on Highways

1. INTRODUCTION

1.1 My name is Benjamin Ward. I hold a Master of Science in Urban Regeneration. I am a Chartered Member of the Royal Town Planning Institute. I hold the position of Planning Director of Marrons, a firm of town planning consultants. I have worked within the town planning field for over ten years in various positions in local government and the private sector.

1.2 I am instructed by Summix BLT Developments Limited (“the Appellant”) to provide evidence to this inquiry on planning matters, including compliance with the Development Plan, material considerations and the planning balance.

1.3 This proof of evidence should be read in conjunction with the Appellant’s Statement of Case (“SoC”), the Statements of Common Ground (“SoCG”), and the evidence provided by other expert witnesses named below.

1.4 My proof draws on the evidence of the following:

- Mr James Stacey, on affordable housing need and supply;
- Mr Mike Carr, on design, character and appearance matters;
- Mr James Atkin, on landscape matters; and

- Ms. Gail Stoten, on heritage matters.

1.5 Appended to my proof is the Written Statement on Highways by Mr. James Byrne of Mode Transport Planning which addresses the representations of interested parties made in respect of highways and transport matters.

1.6 This proof is structured as follows:

- Section 2 – The Development Plan
- Section 3 – Material Considerations
- Section 4 – The Planning Balance

1.7 In preparing my Evidence, I understand my professional duty to the Inquiry. I declare that:

- To the best of my knowledge, information and belief, this Proof of Evidence complies with the requirement of the giving of expert evidence and, as a witness, I understand my duty to the Inspector and have complied with this duty;
- I believe the facts I have stated in this Proof of Evidence are true and the opinions I have expressed are correct;

- The Proof of Evidence includes all the facts which I regard as being relevant to the opinion which I have expressed and I have drawn to the attention of the Inspector any matter which would affect the validity of that opinion; and
- The provision of the Proof of Evidence complies with the Code of Professional Conduct of the Royal Town Planning Institute, as set down in the Ethics and Professional Standards Advice for RTPI Members.

2. THE DEVELOPMENT PLAN

- 2.1 Section 38(6) of the Planning Compulsory Purchase Act 2004 states that planning applications should be determined in accordance with the Development Plan unless material considerations indicate otherwise.
- 2.2 I consider in the following paragraphs whether the Appeal Proposal complies with the Development Plan when read as a whole. In setting out my position on this matter, I have considered the findings of the Court of Appeal in *Cornwall Council v Corbett [2020] EWCA Civ 508 [CD 8.1.1]*. Legal submissions are left to the advocate acting on behalf of the Appellant, but I confirm the principles of relevance of this case.
- 2.3 The judgement affirms that a conflict with a single or small number of policies of the Development Plan does not mean that a scheme is in conflict with the Development Plan automatically. Development Plans can often contain different policies that pull in different directions and the weight to be accorded to policies in determining compliance with the Development Plan read as a whole, is a matter planning judgement. I refer to paragraphs 28 to 30 and 45 of the judgement in support of those principles.

Lichfield District Council

2.4 The Development Plan for the District of Lichfield comprises the Local Plan Strategy 2015 (“LPS”) [CD 3.1.1] and the Local Plan Allocations Document 2019 (“LPAD”) [CD 3.1.2], which provide for development needs to 2029. The Appeal Site falls within a designated Neighbourhood Area for which a Neighbourhood Plan has been adopted, namely the Wigginton, Hopwas and Comberford Neighbourhood Plan 2016.

2.5 Lichfield District Council has adopted a number of Supplementary Planning Documents (SPDs), including in respect of Biodiversity [CD 3.1.4]. I refer to the latter in my discussion below on the weight to be afforded to Biodiversity Net Gain.

Tamworth Borough Council

2.6 The Development Plan for the Borough of Tamworth comprises the Tamworth Borough Council Local Plan (2016), which provides for development needs to 2031.

Relevant Policies of the Development Plan

2.7 Section 5 of each SoCG [**CD 5.3** and **CD 5.4**] identifies the policies that are of relevance to the determination of this appeal. I assess the Appeal Proposal’s compliance with each of the agreed most important policies hereunder.

Most Important Policies

Lichfield LPS Core Policy 1 (CP1): The Spatial Strategy

2.8 CP1 anticipates that a minimum of 10,030 dwellings will be delivered in the Plan period between 2009 and 2029 at the most sustainable and accessible locations in accordance with the Settlement Hierarchy at Table 4.1 and the Key Diagram at Map 4.1. Paragraph 4.10 explains that the spatial strategy seeks to concentrate major growth within urban areas alongside improvements to key services, facilities and infrastructure in order to reduce the need to travel.

2.9 The Settlement Hierarchy identifies Tamworth as a “Neighbouring Town,” within the third tier, alongside Rugeley. Table 4.1 and the Key Diagram at Map 4.1 identify a Broad Development Location (“BDL”) to the North of Tamworth. It anticipates that approximately 10% of the overall housing requirement will be focused here.

2.10 On page 25, CP1 provides a bulleted list of locations where the majority of future development will be directed. The North of Tamworth BDL is one such location. The last paragraph of the policy text on that page clarifies that this area will assist in delivering homes in part to meet needs arising from Tamworth.

2.11 The housing requirement is appropriately expressed as a minimum. That should also be seen in the context of the Government’s objective of “significantly boosting” the supply of homes, as set out at paragraph 60 of the National Planning Policy Framework (“the Framework”) [CD 3.3.1].

2.12 The Appeal Site has a clear physical and functional relationship with Tamworth and would therefore relate to this sustainable, neighbouring town at which CP1 envisages strategic growth. Even so, CP1 is clear that growth associated with Tamworth will be focused at the North of Tamworth BDL. I return to this matter in relation to LPS Core Policy 6 below, but suffice to say that the BDL, by definition, only provides a general indication of where development can happen and it is a matter of judgement whether the Appeal Site falls within or outside of that area. In my judgement, for the reasons outlined below, the Appeal Proposal does fall at the general location where development associated with the North of Tamworth is deemed to be acceptable.

2.13 By virtue of the Appeal Site’s location on the edge of a major urban area at the North of Tamworth BDL and that the housing requirement within CP1 is expressed as a minimum only, I do not consider there to be any conflict between

the Appeal Proposal and the thrust of CP1 in relation to the amount or location of housing.

2.14 CP1 contains a series of provisions in relation to the environmental impacts of new development. Notably, it does not require development proposals to entirely avoid impact or, to use its terminology, “pressure” on the natural, built and historic environment. Rather, it requires proposals to minimise or mitigate such impacts. Reference is also made to protecting and enhancing the District’s significant high quality and natural and built environment in their own right and identifies a list of significant assets, which includes the District’s conservation areas.

2.15 It is common ground that the Appeal Proposal would result in less than substantial harm to Wigginton Conservation Area, though the magnitude of harm remains in dispute. Ms Stoten demonstrates in her proof [CD 7.3] that the Appeal Proposal’s impact will result in less than substantial harm, at the lower end of that scale. In this respect, some conflict may be read with CP1’s provision to protect and enhance the Conservation Area in its own right, but the resultant harm, which is less than substantial, must be balanced against the public benefits of the Appeal Proposal, as per the requirements of the Framework. I will return to this matter in the planning balance below.

2.16 In the fifth paragraph of the policy text on page 25, CP1 refers to the District’s existing communities and settlements and states that appropriate proposals

which will contribute to their improved sustainability, cohesion and community wellbeing will be supported. The Appeal Proposal would deliver up to 210 dwellings for affordable homes, thereby making a significant contribution to meeting affordable housing need in the District of Lichfield and the Borough of Tamworth, which Mr Stacey’s proof [CD 7.2] concludes is both acute and immediate. Indeed, CP1 itself at paragraph 4.14 of the supporting text recognises the provision of affordable housing within the District as a key challenge and that opportunities are limited in providing new affordable housing alongside open market developments due to issues of viability, concluding that new and innovative approaches to provision will therefore need to be explored.

2.17 The Appellant is working in partnership with Platform Housing Group, a nationally recognised developer and provider of affordable housing with a significant track record in the region. The Appeal Proposal represents an innovative approach to help redress the District’s significant affordability challenges in a manner that will promote community wellbeing, as per the objective of CP1.

LPS Core Policy 3 (CP3): Delivering Sustainable Development

2.18 CP3 is a general policy relating to sustainable development. It sets out seventeen criteria for development proposals. Lichfield District Council alleges conflict with CP3 in its Reasons for Refusal, but does not elaborate on which criterion or criteria it considers to be infringed.

2.19 I set out my assessment against each of the policy criteria below, having regard to the evidence of Mr Atkin on landscape matters, Mr Carr on design matters and Mr Stacey on housing need matters.

Requirement	Scheme Compliance
Protect and enhance the character and distinctiveness of Lichfield District and its settlements.	The Appeal Proposal is accompanied by a well-considered design and landscape framework to ensure the quality of future detailed applications. A significant area of undeveloped land will be retained between the built envelope of the Appeal Proposal and the village of Wigginton. Whilst less than substantial harm will occur at the lowest end of the scale to the setting of Wigginton’s Conservation Area, this only gives rise to minimal conflict with CP3, given the low scale of the harm

	and the weighty countervailing public benefits.
Protect the amenity of our residents and improve their overall quality of life through the provision of appropriate infrastructure, services and facilities.	It is common ground that the Appeal Proposal would not have an adverse impact on residential amenity, subject to planning conditions. Similarly, infrastructure matters can be addressed by way of Planning Obligations. The Appeal Site is in a sustainable location, allowing ease of access to infrastructure services and facilities.
Promote social cohesion and inclusion and reduce inequalities, and ensure access for all sectors of the community to adequate and affordable housing and a range of facilities, in both our urban and rural areas.	The Appeal Proposal will contribute to the reduction of inequalities and promote social cohesion through the provision of 100% affordable housing, thus allowing persons unable to participate in the housing market access to a home.

<p>Assist in the regeneration and evolution of towns and villages and surrounding areas in meeting the changing needs of their population over time and maintaining the vitality, viability and vibrancy of local communities.</p>	<p>As Mr Stacey’s proof indicates, the need for affordable housing has grown substantially in the District. The Appeal Proposal will make a substantial contribution to addressing these needs, thereby according with this limb of CP3.</p>
<p>Be of a scale and nature appropriate to its locality.</p>	<p>The Appeal Site is located on the edge of a major settlement (Tamworth), which is recognised in the LPS as location for strategic housing growth within the Plan period. In this context, the provision of up to 210 dwellings would not be of a scale and nature inappropriate to the locality. No conflict is identified.</p>
<p>Encourage the re-use of previously developed land in the most sustainable locations, and encouraging the reuse of buildings as a sustainable option.</p>	<p>Given the nature of the Appeal Site and Proposal, it would not re-use previously developed land nor would it encourage the re-use of buildings. As it is recognised elsewhere within the</p>

	LPS that development needs cannot be provided effectively through PDL exclusively, this is not a source of fundamental conflict.
Ensure that development on brownfield sites affected by contamination is remediated and that any ground instability is addressed.	Not applicable.
Reduce the overall need to travel, whilst optimising choice of sustainable modes of travel, particularly walking, cycling and public transport	The Appeal Site is situated on the edge of a large urban area (Tamworth) and is accessible to the services, facilities and infrastructure located therein by sustainable modes of transport, including public transport.
Use our natural resources prudently and conserve, enhance and expand natural, built and heritage assets and	The Appeal Proposal would result in a minor degree of less than substantial harm to the setting of Wigginton Conservation Area. That is a source of

improve our understanding of them wherever possible	conflict with this provision but must be weighed against the public benefits of the Appeal Proposal.
Minimise and manage water, waste and pollution in a sustainable way through reduction, re-use and recycling measures in both the construction and use of buildings in line with the requirement of the Code for Sustainable Homes or its successors, including adequate space provision within buildings/layouts for appropriate storage and sorting of materials for recycling.	The proof of Mr Carr sets out measures that will be incorporated to minimise and manage water and waste. This can also be considered further through subsequent detailed applications. No conflict is identified.
Give priority to utilising ground infiltration drainage techniques and including sustainable drainage techniques and incorporate other sustainable measures for managing	It is common ground that drainage and flooding matters can be addressed acceptably.

surface water run-off such as green roofs in new development.	
Guide development away from known areas of risk as identified in the Strategic Flood Risk Assessment and Surface Water Management Plan.	The Appeal Site is within Flood Zone 1 and is at the lowest risk of flooding. No conflict is identified.
Avoid sterilisation of mineral resources.	The Appeal Site is not within a mineral safeguarding area.
Minimise levels of pollution or contamination to air, land soil or water including noise and light pollution and avoid unacceptable uses within source protection zone 1 areas to safeguard water resources and water quality.	The Appeal Proposal is of a nature that it would not result in material harm to air, land, soil or water nor would it generate nor be susceptible to air or noise pollution.

<p>Ensure that all new development are located and designed to maximise energy efficiency and utilise sustainable design and construction techniques appropriate to the size and type of development.</p>	<p>The proof of Mr Carr sets out measures that will facilitates energy efficiency and utilise sustainable design and construction techniques.</p>
<p>Maximise opportunities to protect and enhance biodiversity, geodiversity and green infrastructure.</p>	<p>It is common ground that the Appeal Proposal would be acceptable in relation to ecology and biodiversity.</p>
<p>Facilitate energy conservation through energy efficiency measures as a priority and the utilisation of renewable energy resources wherever possible, in line with the energy hierarchy.</p>	<p>This matter can be addressed through good and appropriate design at the Reserved Matters stage and adherence to the current Building Regulations.</p>

LPS Core Policy 6 (Core Policy 6): Housing Delivery

2.20 There are two main matters of dispute between Lichfield District Council and the Appellant in relation to CP6; firstly, in relation to how the Appeal Site should be situated within the spatial strategy and secondly, whether the Appeal Proposal would distort the spatial strategy in relation to the overall proportions of housing distribution within the District. I address each matter in turn below.

The Appeal Site's Spatial Location

2.21 In its Statement of Case [CD 5.4], the LPA asserts the Appeal Site falls to be considered as part of the “remaining rural areas” for the purposes of CP6. In consequence, it becomes subject to the provisions of the second paragraph and the bulleted list of the policy text on page 51, which set out the policy approach in these areas. It only permits residential development in a specific number of instances that would not apply to the Appeal Proposal. I do not consider this to be a correct application of CP6 because the Appeal Site is not, in terms of its spatial location, within the “remaining rural areas,” but on the edge of a large town, which occupies its own tier of the settlement hierarchy and is a focal point for strategic growth within the current Plan period.

2.22 In support of my approach, I refer to Policy Rural 1: Rural Area on page 121 of the LPS. This policy distinguishes between the rural settlements in terms of those which will support greater levels of housing growth set out within the first

paragraph of the policy text and those “smaller villages” in the second paragraph, which will accommodate 5% of growth. The policy approach to those smaller villages corresponds to CP6’s approach in relation to the “other rural areas,” in that such locations will only accommodate housing growth within the village boundaries, through the conversion of buildings, through rural exception sites or through community-led plans.

2.23 LPS Table 4.1 containing the Settlement Hierarchy lists “Other Rural” settlements in the last row, which from the language used corresponds to CP6’s references to “other rural areas.” The Appeal Site is not physically or functionally a part of these settlements, but adjacent to Tamworth, which adds further weight to my view that CP6’s restraints in this regard applies to the District’s smaller settlements and hence do not apply here.

2.24 I also draw attention to paragraph 162 of the Inspector’s Report [CD 6.1.1] into the LPS. Here, the Inspector distinguishes between the Key Rural Settlements which will accommodate 11% of growth and 5% in the “other rural areas,” which corresponds to the level of growth (i.e. 5%) to the named settlements in the last row of LPS Table 4.1.

2.25 Given the above, CP6’s reference to “other rural areas” is made in the context of distinguishing the general strategy between the larger, key rural settlements and those other, smaller rural villages. It does not articulate an all-encompassing approach to land outside of settlement boundaries and

allocations to the countryside more generally. Rather, it sets out the general policy approach to the named settlements not referred in the earlier parts of CP6.

2.26 I am also mindful of the context of the Appeal Site itself, which directly abuts the town of Tamworth to its south with its access lying within the Borough of Tamworth and inside the urban area. On the eastern side of the railway line just beyond the Appeal Site's eastern boundary, lies Arkall Farm, a large-scale committed housing site under construction and which is, itself, an expansion to Tamworth. Future residents of the Appeal Proposal will not rely on Wigginton or any other rural settlement to meet their daily needs. They will rely on the services, facilities and infrastructure within Tamworth. Therefore, to consider the Appeal Site as within the "remaining rural areas" for the purposes of Policy CP6, does not reflect the situation on the ground given the clear physical and functional relationships the Appeal Site has to a major urban area.

2.27 Despite the argument now advanced in its Statement of Case, Lichfield District Council had previously agreed with me as regards the spatial location of the Appeal Site. In its Reason for Refusal 1, the Council refers to concerns about the proportionality of growth to the North of Tamworth and in doing so, refers to the level of committed growth in that location.

2.28 Similarly, within the SoCG between the Appellant and Lichfield District Council, it is common ground that the policies relevant to the determination of this appeal

include Policy: North of Tamworth, which I will return to below. Where there is uncommon ground between the appeal parties, it is relation to “*whether the Appeal Proposal would result in a disproportionate level of growth beyond that envisaged within the Development Plan to the North of Tamworth.*” [My Emphasis]

2.29 Reason for Refusal 1 and the uncommon ground agreed between the appeal parties as regards spatial strategy, are all predicated on the Appeal Site’s location to the North of Tamworth. With respect, it a contradictory position to take, as the LPA does, that on one hand the Appeal Proposal would result in a disproportionate amount of growth at one of the LPS’s key spatial locations for growth, but then to say that it also lies outside of that same location.

2.30 In its Statement of Case, the LPA refers to Map 15.1 of the LPS (found on page 116), which delineates the general extent of the Broad Development Location to the North of Tamworth. It is stated that the BDL does not include Appeal Site. I do not consider Map 15.1 enables one to say with precision whether land does or does not fall within the Broad Development Location; firstly, given that the location it identifies is, by definition, only broad or general and secondly, Map 15.1 is only conceptual and diagrammatic. In support of that observation, land subsequently allocated and developed as part of the Broad Development Location to the North of Tamworth clearly falls outside of the orange dashed-line of Map 15.1 which purports to identify the BDL. Conversely, a part of the

eastern portion of the Appeal Site does fall within the Broad Development Location as drawn.

2.31 I refer to Lichfield District Council’s interactive local plan map, which I have provided an extract of at Figure 1 below. This portrays the Broad Development Location identified at Map 1.15, only at a more useful scale and in relation to subsequent allocations within the LPAD. The red shading indicates the extent of the land allocations made in the LPAD to the North of Tamworth. The orange dashed line and cross-hatch delineate the extent of the North of Tamworth BDL. Each of the subsequent allocations are significantly more extensive than suggested by Map 15.1 which supports my view that the latter is not a precise delineation of the Broad Development Location’s extent and it does not preclude other land such as the Appeal Site that is physically and functionally well-related to Tamworth in the general vicinity from coming forward for development.

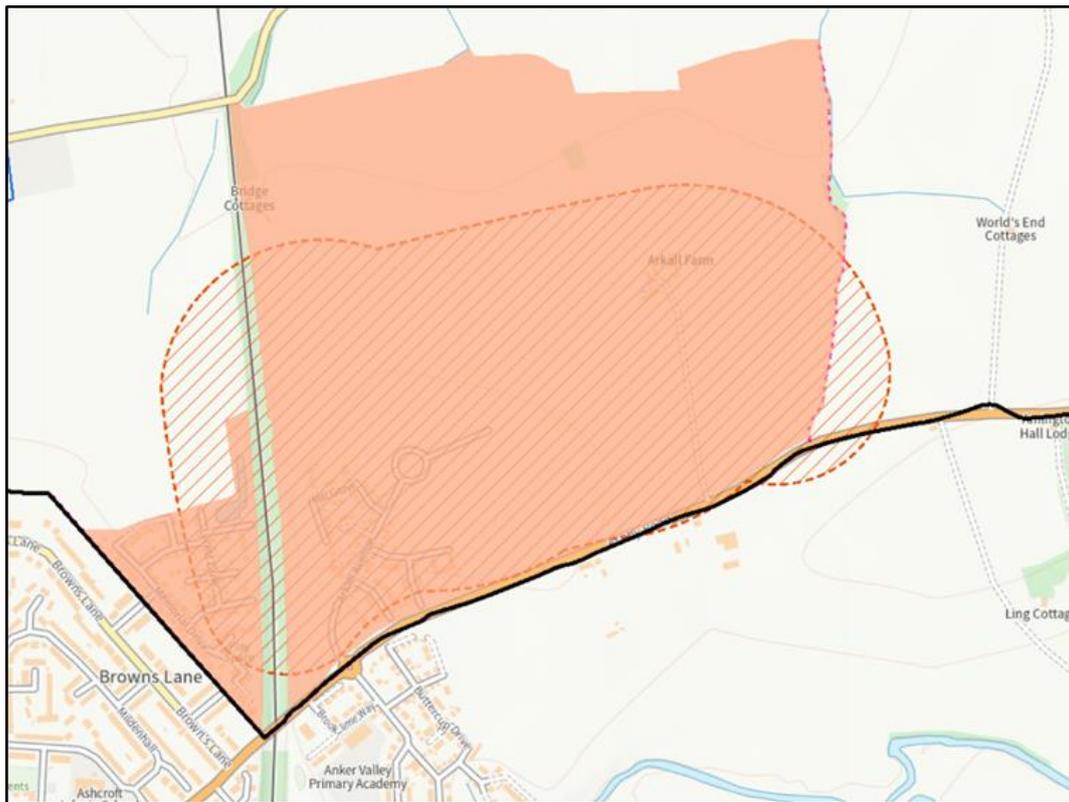


Figure 1 North of Tamworth BDL with Allocations Overlaid

Would the Appeal Proposal undermine the CP6's apportionment of growth?

2.32 CP6 addresses the apportionment of housing growth across key locations in the District, including 1,000 to the North of Tamworth, of which 500 units would be to meet Tamworth Borough Council's needs. The overall distribution of new homes is shown in Table 8.1 of the LPS. Appendix B of the LPAD indicates that LPS Table 8.1 is superseded by LPAD Table 4.1, which contains a replacement housing distribution and delivery table. LPAD Table 4.1 also supersedes the

“Residential” column of LPS Table 4.1, which sets out the apportionment of housing growth across the Settlement Hierarchy. Somewhat confusingly, whilst reference is made throughout the LPAD to Table 4.1 indicating updated housing distribution figures, no such table exists within the LPAD itself and I have assumed that Appendix B actually means to refer readers to LPAD Table 5.1, which is to be found on pages 16 and 17. It is to this table which I will refer to below, as it contains the most up-to-date position as regards the Development Plan’s strategic apportionment of growth.

2.33 LPAD Table 5.1 indicates that the original apportionment of 1,000 homes to the North of Tamworth in the LPS is exceeded by allocations made in the LPAD, amounting to 1,165 homes overall at this location. The Appeal Proposal would result in that figure being exceeded still further, resulting in 1,375 homes. Looked at in isolation and in absolute percentage terms, the resultant growth at Tamworth with the Appeal Proposal would result in a 37.5% increase over and above the approximate amount of housing envisaged there within the LPS or an 18% increase in housing over and above the updated figures for Tamworth within the LPAD. But this must be looked at in the context of other parts of the Plan Area, which have also seen significant departures from their original housing apportionment in the LPS, without the conclusion being reached that this would represent a distortion of the LPS’s spatial strategy.

2.34 The Rural Areas, excluding Fradley, for example, were envisaged to accommodate an upper range 1,593 homes over the plan period as per LPS Table 8.1. The more recent figures in LPAD Table 5.1 indicate that these areas will accommodate 2,300. That would represent a 44% increase over their original apportionment. Rugeley, as a further example, sits within the same tier as Tamworth and accommodated 26% beyond its original apportionment in the LPS.

2.35 I consider in my Table 1 below how the Appeal Proposal would relate to the overall pattern of growth in the District. The LPAD indicates Tamworth will accommodate 10.26% of gross housing provision. With the addition of the Appeal Proposal, that figure would rise to 11.89% or a 1.63% increase in Tamworth's share of committed growth. In consequence, there will be a small, in most cases a less than 0.5%, swing away from other settlements within the District, and so the Appeal Proposal would not unduly skew growth away from other locations and toward Tamworth. In other words, the proportion of growth between Tamworth and other settlements would remain roughly the same and spatial strategy's broad distribution of growth under the Development Plan would remain intact when considered in the context of the overall pattern of development in the District. Tamworth would also continue to accommodate a percentage of growth broadly in line with its tier of the settlement hierarchy and still slightly less than other, comparable locations, such as Rugeley and even the rural settlement of Fradley.

2.36 Therefore, when considered in the context of the overall pattern of development in the District there would be a broad trend of similarity in the distribution of housing growth, such there would be no significant distortion of the Development Plan’s spatial strategy.

Table 1 Distribution of Housing Provision under the Development Plan

Settlement	Gross Housing Provision (Committed)	%	Gross Provision w/ Proposal	% Proposal w/ Proposal	% + / -
Lichfield	3988	35.14	3988	34.50	-0.64
Burntwood	1054	9.29	1054	9.12	-0.17
Rugeley	1422	12.53	1422	12.30	-0.23
Tamworth	1165	10.26	1375	11.89	1.63
Fradley	1421	12.52	1421	12.29	-0.23
Armitage	293	2.58	293	2.53	-0.05
Alrewas	193	1.70	193	1.67	-0.03
Fazeley	250	2.20	250	2.16	-0.04
Shenstone	104	0.92	104	0.90	-0.02
Whittington	38	0.33	38	0.33	-0.01
Other Rural	1422	12.53	1422	12.30	-0.23
Total	11350	100	11560	100	

2.37 Timing of delivery is also relevant. The Development Plan provides for the amount and distribution of housing over the period to 2029. The two chief and indeed only components of housing supply at the North of Tamworth comprise North of Browns Lane (Site NT2), a completed development of 165 homes which abuts the Appeal Site to the south east, and Arkall Farm (Site NT1), which is permitted in outline for 1,000, with approximately 300 homes benefiting from detailed permission lying to the east of the Appeal Site.

2.38 Lichfield District Council's Five Year Housing Land Supply Assessment dated July 2023 [CD 6.1.5] indicates that Arkall Farm has seen 79 completions. Over the period 2023/2024 to 2027/2028, the trajectory on page 34 indicates that 492 units will be built. Whilst the trajectory does not cover 2028/2029, it can be reasonably assumed that about 100 units will be built then, too. That equates to 592 units of supply at Arkall Farm to the end of the Plan period which, along with the 79 completions, equates to total provision of 671. Added to the 165 units completed at Browns Lane (Site NT2), North of Tamworth would see 836 dwellings delivered to 2029. That is 164 dwellings below even the LPS's approximate apportionment of growth to this location and 329 dwellings below the total number of dwellings expected at Tamworth to 2029. Assuming the Appeal Proposal came forward in its totality before the end of the Plan period, North of Tamworth would only accommodate a very modest balance of 46 dwellings beyond the approximate figure originally expressed within the LPS

and still well below the overall level of housing expected in this location to end of the Plan period.

2.39 Even if numerically speaking and cumulative with commitments the Appeal Proposal was considered to amount to a distortion of the spatial strategy, this would not occur within the current Plan period given that the Development Plan calls for approximately 1,000 homes to the North of Tamworth. Indeed, with the Appeal Proposal, North of Tamworth would deliver almost exactly the amount of housing it is expected to by 2029. By 2029, one of two things will have likely happened. Either the Council will have adopted a new local plan identifying additional sources of housing supply over a longer time horizon or the five year housing land supply will very likely have faltered, requiring the release of unallocated sites via the development management process. Either way, by the end of the Plan period current planning policy framework will have been overtaken by events.

2.40 The failure of the spatial strategy to deliver for development needs to the North of Tamworth before the end of the Plan period is significant, given that the North of Tamworth BDL is not only meant to provide for Lichfield's own housing needs within the current Plan period, but also for Tamworth's. It is therefore clear that far from distorting the spatial strategy, the Appeal Proposal would result the amount of development which the Development Plan indicates is necessary at this location by 2029.

CP6: Other Requirements

2.41 CP6 sets out four bullet points comprising objectives for residential development to meet. The Appeal Proposal would demonstrably contribute to the achievement of sustainable communities, through its provision of much-needed affordable housing in the context of a sustainable location, close to where much of such need arises. For the same reason, the Appeal Proposal would also assist in meeting identified housing needs, including affordable homes, for both the District of Lichfield and the neighbouring town of Tamworth. The Appeal Proposal would be accompanied by the provision of significant public open space and green infrastructure, which will also support sustainable communities. Accordingly, the Appeal Proposal complements these objectives of CP6.

LPS Core Policy 14 (CP14): Our Built and Historic Environment

2.42 It is common ground that the Appeal Proposal would result in less than substantial harm to the setting Wigginton Conservation Area, albeit the level of that harm is in dispute. In this sense, a conflict would arise with CP14 which, amongst other things, requires the settings of designated heritage assets to be conserved, enhanced and given the highest level of protection. CP14 is silent as to the balancing exercise one is required to perform as per the Framework between the less than substantial harm arising and the public benefits of the

development. I will return to the balancing exercise between the heritage harm identified and the public benefits in the planning balance below.

Policy H2: Provision of Affordable Homes

2.43 Policy H2 sets a target of up to 40% affordable housing from qualifying developments, but acknowledges the exact proportion of affordable homes on sites will vary depending on market conditions. The Appeal Proposal would be provided as 100% affordable housing.

2.44 I anticipate that matters of mix and tenure will be addressed through the Section 106 agreement, which at the time of writing is under discussion with the Councils. There is no reason, in principle, why a satisfactory mix and tenure in line with the objectives of Policy H2 could not be achieved.

2.45 Policy H2 sets out an approach of support for housing development on small rural exception sites to meet local needs, subject to a series of detailed criteria. This limb of Policy H2 does not apply to the Appeal Proposal, but it is permissive in nature in that it allows for the principle of meeting affordable housing need at a parish level, but it does not preclude the meeting of affordable housing need at other scales.

2.46 I do not identify a conflict with Policy H2.

LPS Policy: North of Tamworth

2.47 Policy: North of Tamworth states that within the Broad Development Location, approximately 1,000 dwellings will be delivered by 2029. I have already outlined above how the Appeal Proposal would not undermine this intent.

2.48 The policy articulates a number of detailed criteria, none of which are matters of dispute between the Appellant and Lichfield District Council, other than in respect of the requirement to cause no coalescence with Wigginton village. Mr Atkin’s proof [CD 7.4] deals with this matter and outlines how the separate identities of Wigginton and the Appeal Proposal would be retained, both spatially and visually. I consider there to be no conflict with this element of Policy: North of Tamworth.

Wigginton, Hopwas and Comberford Neighbourhood Plan [CD 3.1.3]

2.49 The most important policies of the Neighbourhood Plan comprise Policy W1, which repeats the requirement of Policy: North of Tamworth in respect of coalescence; Policy WHC1 which repeats the same requirement yet again and Policy WHC3, which relates to the protection of the historic environment.

2.50 I do not repeat the content of Mr Atkin’s proof in respect of the Appeal Proposal’s retention of the spatial and visual separation of Wigginton and Tamworth, other than to say that on his evidence, no conflict would arise with Policies W1 or

WHNC1 of the NP. Given the less than substantial harm that would arise to the setting of Wigginton Conservation Area, there would be some conflict with Policy WH3, but one must go on to balance that harm against the public benefits of the Appeal Proposal, which I will return to when considering the planning balance below.

Other Lichfield District related policies

2.51 Lichfield District Council has alleged conflict with a number of other policies comprising LPS Policy BE1 relating to high quality development; LPAD Policy BE2 relating to heritage assets; and LPAD Policy NT1 relating to North of Tamworth Housing Allocations.

2.52 LPS Policy BE1 mostly relates to design. It is common ground that Lichfield District Council is not pursuing a design case. However, the first bullet point of Policy BE1 states that development will be permitted where it has a positive impact on, amongst other things, conservation areas. As it is common ground there would be less than substantial harm to the setting of Wigginton Conservation Area, the Appeal Proposal would conflict with this element of Policy BE1, but as above the less than substantial harm must be balanced against the public benefits of the Framework. I return to this matter in the planning balance.

2.53 LPAD Policy BE2 also relates to heritage assets. However, this policy is different from the preceding policies dealing with heritage matters in that the public benefits balancing exercise one is required to perform under the Framework is expressly acknowledged. Policy BE2 allows for proposals to be permitted where the public benefits accruing would outweigh the heritage harm. Subject to that balancing exercise, compliance with Policy BE2 can be demonstrated. I return to this matter below in the planning balance.

2.54 LPAD Policy NT1 is a policy which deals with specific land allocations that do not cover the Appeal Site. By definition, it does not apply to the Appeal Site and therefore no conflict arises.

Tamworth Borough Local Plan – Policy EN5 (Design of New Development)
[CD 3.2.1]

2.55 Tamworth Borough Council's sole Reason for Refusal cites conflict with Policy EN5, which sets out a number of detailed design criteria. The conflict identified by Tamworth Borough Council is wholly reliant on Lichfield District Council's refusal of planning permission, given that the formation of an access in Tamworth would have no purpose in the absence of consent from neighbouring Lichfield District Council and, per the Borough Council's reasoning, a harmful impact to the area's character. It is common ground [CD 5.5] between the Appellant and Tamworth Borough Council that should the substantive matters of dispute with Lichfield District Council be resolved in the Appellant's favour

that Tamworth Borough Council’s Reason for Refusal will fall away. In that circumstance, no conflict would arise with Policy EN5.

The Concerns of Interested Parties

2.56 I consider briefly here the representations of interested parties insofar as they relate to material planning considerations. The concerns expressed can be summarised as follows:

- Sufficient housing including affordable housing has been built in the area already rendering more unnecessary;
- There are more favourable sites to the North of Tamworth;
- Insufficient infrastructure capacity including highways infrastructure and;
- Loss of green space

2.57 Mr Stacey’s proof indicates that Lichfield District and neighbouring Tamworth have considerable unmet need for affordable housing. I have discussed above how Lichfield District Council’s own evidence indicates that insufficient housing will be built in the area to the end of the Plan period to meet North of Tamworth’s housing apportionment.

2.58 The Appeal Proposal’s acceptability in planning terms will be determined on its merits. In my opinion, the availability and desirability of other potential sites is not a matter for this inquiry.

2.59 Highways and transport matters raised by third parties are addressed in the Written Statement on Highways by Mr Byrne. I do not repeat these here other than to say that that highways and transport issues are a matter of common ground between the Councils and the Appellant subject to the requisite mitigation being secured by way of the planning obligations and/or planning conditions. In respect of other infrastructure matters, planning obligations will be entered into to mitigate the scheme’s impact in relation to schools and healthcare.

2.60 I have already described above how the Appeal Proposal would result in the delivery of substantial levels of public open space well in excess of policy requirements. But for a public right of way running north to south in the westernmost field which would be retained and enhanced for green infrastructure, the Appeal Site, including the part that would be developed for housing, is not publically accessible and so there would be a net benefit for recreation arising from the Appeal Proposal and not a loss. The same would also apply in respect of ecology and biodiversity given the 20% BNG that will be provided.

3. MATERIAL CONSIDERATIONS

3.1 There are varied material considerations relevant to the determination of the appeal. I consider these in turn below.

National Planning Policy Framework (December 2023) [CD 3.3.1]

3.2 The Framework includes numerous policies that are relevant to the determination of this appeal, including the need to boost significantly the supply of housing and meeting the housing need of different groups, including those in need of affordable housing.

The Provision of Affordable Housing

3.3 The proof of Mr Stacey outlines evidence of an acute national housing crisis, and one which has been acknowledged by successive Governments. The need for affordable housing in Lichfield and Tamworth is acute, immediate and worsening. There is little prospect of a Plan-led solution to this issue.

3.4 The LPS was adopted in February 2015 based on housing needs evidence from 2012. Lichfield District Council recognised as long ago as 2018 that the LPS was in need of a complete update. The LPAD enshrined the need for an update in Policy LPR, which required an early review to replace the adopted LPS in all respects, including in relation to the housing requirement, unmet need from

surrounding areas (including from Tamworth) and the appropriateness of the existing settlement hierarchy and strategic distribution of growth. Submission of such a Plan for examination was required by December 2021.

3.5 Paragraph 11.3 of the LPAD acknowledges the unmet need arising from Tamworth, which equates to 825 dwellings. In his report [CD 6.1.2], the Inspector undertaking the examination of the LPAD determined that the early review mechanism was necessary for soundness to, amongst other things, address unmet housing need arising in Tamworth and the Greater Birmingham Housing Market Area (GMBA). The Inspector, whilst recognising that the allocation Arkall Farm went “*some way*” to addressing Tamworth’s needs, took the view that land immediately to the north of Tamworth was the “*most logical area of search*” to recover Tamworth’s housing shortfall but, that this was best undertaken as part of a review to the Development Plan rather than through a series of uncoordinated planning applications.

3.6 Within the context of a Plan-led system, it is true generally that overall housing needs, including unmet needs from surrounding areas, are best addressed through plan-making. Unfortunately, plan-making in Lichfield District suffered a significant setback following withdrawal of the Local Plan to 2040 from examination in October 2023. Whilst the District Council has set out a timetable for the preparation of a new Local Plan in its Local Development Scheme (LDS) of March 2024 [CD 6.1.6], the earliest anticipated date for adoption is

January/February 2027. Given that evidence gathering for the new Local Plan began in January 2024, achieving adoption in approximately three years is an unrealistically optimistic assumption, given that the now defunct emerging Local Plan to 2040 underwent its first consultation in April 2018 and was still not adopted over five years later when it was withdrawn from examination.

3.7 The lack of timely plan-making in Lichfield and the resultant delay in the delivery of new homes, including affordable homes, has serious social consequences for the community, in particular for persons who are unable to access the property market and are thus in need of affordable homes. Mr Stacey’s proof indicates that the need for affordable homes in Tamworth and Lichfield District is both acute and immediate. The Appeal Proposal would help to alleviate this pressing need whereas there little immediate or short term prospect of a Plan-led solution.

3.8 Where a significant and immediate need exists as it does in this case for affordable housing in both the District of Lichfield and Tamworth, the Appeal Site offers the benefit of offering a highly sustainable location on the edge of a large, urban settlement and in a general location where the spatial strategy envisages strategic housing growth within the current Plan period. Tamworth also hosts a confirmed level of unmet housing need generally amounting to 825 dwellings, as confirmed in its Local Plan at Policy SS1 [CD 3.2.1]. In this respect,

there are key locational benefits to the Appeal Proposal in that it would meet housing need close to where a significant proportion of it arises.

- 3.9 Lichfield District Council has drawn attention to its ability to demonstrate a five year housing land supply. The analysis underpinning Mr Stacey’s proof is clear that the five year supply of deliverable housing sites will not come close to meeting affordable need. In addition, given the datedness LPS and the likely timescales for its replacement, the five year housing land supply may begin to falter in the near future given the absence of timely plan-making, which was acknowledged by officers in a committee report published in October 2023 [**CD 6.1.3**]. This acknowledged that whilst the five year housing land supply position was currently “strong,” it was likely to decrease in the coming years as the allocations made through the adopted policy framework are built out and completed and that consequentially, that may be challenging to maintain a five year supply of deliverable housing sites in the medium term.

Deliverability of Affordable Homes

- 3.10 The Appeal Proposal will be built out by Platform Housing Group, a well-known developer of affordable housing and registered provider. As discussed in Mr Carr’s proof, work has already commenced on the design principles that will shape the applications for reserved matters based on the evolution of the scheme to date. Given that Platform Housing Group is working in partnership with the Appellant to bring forward much-needed affordable homes in this area

and given Platform Housing Group’s excellent track record and reputation, there is increased certainty around the delivery of these homes, which I submit is also a material consideration weighing positively in the planning balance.

Weight to be given to 20% biodiversity net gain

3.11 The Appeal Proposal would deliver 20% biodiversity net gain. The requirement for 20% net gain flows from the Biodiversity & Development Supplementary Planning Document (2016) [CD 3.1.4]. The statutory biodiversity metric is now in force, but only applies in respect of planning applications made on or after 12th February 2024 and thus, the statutory metric does not apply to the Appeal Proposal. That said, the PPG states that a policy which requires a gain of greater 10% on an area wide basis may still be relevant as the statutory biodiversity gain objective is for at least 10% [CD 3.3.2]. In this respect, it should be noted that the requirement for 20% biodiversity net gain in Lichfield is contained within a Supplementary Planning Document, which does not have the force of policy.

3.12 Elsewhere the PPG the advises that Plan-makers should not seek a higher percentage than the statutory objective of 10% for biodiversity net gain unless justified, which requires evidence relating to local need, opportunities and impact upon viability [CD 3.3.2]. That clearly indicates that if a Council wishes to impose a net gain higher than the statutory amount, this must be by way of a Development Plan Document. Given the datedness of the planning policy framework within Lichfield, and the fact that this is currently subject to a

complete review, there is no guarantee that without the appropriate evidence referred to within the PPG that the requirement for 20% net gain would be carried through into the new Local Plan, as the PPG sets a high bar for this. Similarly, as one would expect given the datedness of the policy framework, there is no specific statement within the LPS (LPS Policy NR3 only requires a net gain rather than a specific amount) or the relevant SPD as to how the requirements of the PPG have been discharged. In light of that fact, the SPD should be considered out-of-date, on the basis that there is no evidence to suggest its requirements are justified by the information which national planning policy now states is needed to require a net gain above the statutory amount.

3.13 On the basis that the statutory metric does not apply to the Appeal Proposal and the SPD which requires a 20% net gain is out-of-date, I consider the Appeal Proposal's provision of 20% net gain to be a material consideration that weighs positively in the planning balance.

The economic benefits of new housing

3.14 The building of new homes supports economic activity among businesses involved in construction and their wider supply chain. Employment is also generated through construction, which adds wealth through employee compensation that is then spent through the wider economy.

3.15 The Economic Impact of Building Social Housing produced by the Centre for Economics and Business Research (CEBR) [CD 6.1.4] on behalf of Shelter and the National Housing Federation dated February 2024 estimates that:

- For every £1 in Gross Value Added (GVA) directly generated, a further £1.43 is supported through indirect and induced impact challenges;
- For every job directly generated by social housing investment, a further 1.54 jobs are supported in the wider economy in England; and
- For every £1 in employee compensation directly generated, a further £1.24 of compensation is supported through the indirect impact challenge through supply chains and an additional £0.60 of compensation supported in spending across the wider economy.

3.16 CEBR also estimates the economic impact of managing social housing. For every £1 in GVA directly generated by the management of social housing, a further £1.56 is supported through indirect and induced impacts. For every job directly generated by the management of social housing, a further 1.12 jobs are supported in the wider economy.

3.17 CEBR also concludes that social housing acts as a countervailing stabiliser in housing construction in terms of the role it places in preserving the economy's housebuilding capacity during economic downturns, enabling a stronger

recovery from them. Given the current, well-documented slowdown in the wider economy including the housebuilding industry associated with significantly higher interest rates, the Appeal Proposal will play a role in supporting construction activity through the delivery of affordable housing, at a time when market and market-led provision has slowed.

3.18 Given the above, I consider that the economic benefits of the Appeal Proposal should weigh positively in favour of the Appeal Proposal.

Other Material Considerations

3.19 The Appeal Proposal would result in the provision of a significant amount of public open space and green infrastructure in excess of policy requirements. The creation of new public open space and green infrastructure close to a major area of population (Tamworth) would become a significant wider community benefit and would encourage health and well-being.

3.20 The Appeal Proposal would be built in accordance with the current Building Regulations which require specific measures to reduce carbon emissions. This would increase the amount of energy efficient housing stock in the area and make a contribution to reducing carbon emissions and thereby addressing the challenges posted by climate change.

3.21 Contributions towards social infrastructure namely education and healthcare would be secured by the Planning Obligation thereby resulting in improved local facilities. The Appeal Proposal would also result in additional Council Tax revenues which would help to support the provision of local public services. These are also material considerations that weigh positively in the planning balance.

4. PLANNING BALANCE

Planning Balance under the Development Plan

- 4.1 The Appeal Site is not allocated for development and lies beyond any urban area or settlement boundary. However, the Appeal Proposal would still comply with the Development Plan when read as a whole, as it would follow its urban-focused spatial strategy and broad distribution housing growth. The Appeal Proposal would also complement the strategic priorities of the Development Plan as it would help to address housing affordability concerns, contribute toward meeting the housing needs of Tamworth, reduce the need to travel and provide substantial amounts of public open space and Green Infrastructure thereby encouraging health and wellbeing.
- 4.2 In addition, Lichfield District Council’s assessment of housing land supply to the North of Tamworth indicates that the apportionment of growth to this area will not be met before the end of the Plan period and there will be a shortfall of at least 164 dwellings. The Appeal Proposal would plug this gap in the spatial strategy and facilitate the delivery of development which the Development Plan indicates is needed, at the time it is needed and general location it is needed and expected.
- 4.3 I note that vis-à-vis the lack of any allocation for the Appeal Site this same circumstance did not preclude the conclusion that the 1,000 dwellings at

neighbouring Arkall Farm complied with the Development Plan read as a whole when that scheme was considered at appeal at a time prior to the allocation of the Site in the LPAD. In recommending to the Secretary of State that planning permission should be granted, the Planning Inspector noted [CD 8.1.2] that given CP6 relied on the BDL to the North of Tamworth delivering 1,000 homes to 2029, that the scheme was policy compliant and essential to delivering the identified housing needs of both Tamworth and the District of Lichfield. It is now clear that this need will not be met by Arkall Farm and other committed sites by the end of the Plan period, meaning that the Appeal Proposal would facilitate this key objective of the Development Plan to deliver the requisite level of growth to the North of Tamworth.

4.4 Lichfield District Council alleges conflict with the Development Plan in terms harm to the spatial strategy, to the setting of Wigginton Conservation Area and to a conflict with the various policies which deal with the separation of Wigginton and Tamworth. My position is that the Appeal Proposal would accord with the spatial strategy. On the basis of Mr Atkin's proof, I conclude the spatial and visual separation of Wigginton and Tamworth would be retained. On the basis of Ms Stoten's proof, there would be less than substantial harm at the very low end of the scale to the setting of Wigginton Conservation Area.

4.5 I have identified above conflict with policies dealing with heritage assets on the basis that less than substantial harm will arise from the Appeal Proposal to

Wigginton Conservation Area. Paragraph 206 of the Framework specifies that great weight should be given to the conservation of designated heritage assets and that the more important the asset, the greater the weight should be. As required by the Framework, I have given great weight to the less than substantial heritage harm arising and weighed that harm against the public benefits of the Appeal Proposal, which I summarise below.

- **Provision of affordable housing for which there is an acute and immediate need**

- **Deliverability of affordable housing**

- **Provision of 20% Biodiversity Net Gain**

- **Economic Benefits of the Appeal Proposal**

- **Other Benefits:**
 - **Carbon Dioxide Emission Reductions**

 - **Public Open Space**

 - **Financial contributions towards social infrastructure**

 - **Additional Council Tax Revenues**

4.6 On the basis of the varied public benefits identified above and noting Ms Stoten’s conclusion that the harm to the setting of Wigginton’s Conservation Area would be at the very low end of less than substantial, I consider that the public benefits accruing from the scheme to outweigh the less than substantial harm arising.

4.7 Given how I have assessed these issues under the relevant policies of the Development Plan, there is no conclusion other than the Appeal Proposal complies with it when read as a whole.

Section 38(6) Balance

4.8 In the previous section, I considered a number of material considerations that I consider to weigh in favour of the Appeal Proposal. I deal under this section with the weight to be accorded to those benefits in the planning balance. I then go onto consider the other side of the planning balance, in the event that the Appeal Proposal was deemed to conflict with the Development Plan when read as a whole in light of its provisions regarding the amount and/or location of new housing development.

4.9 Affordable housing need in both Tamworth and the District of Lichfield is severe and acute. The Appeal Proposal would make a considerable contribution to redressing those needs and provide homes for people unable to access the

housing market. There is no foreseeable prospect of a plan-led solution to this issue.

4.10 Even if there was a conflict with the Development Plan when read as a whole in terms of its policies relating to the general amount and location of housing growth, that conflict should be weighed in the balance against the material considerations I have set out at Section 3 above.

4.11 In light of the acute and immediate shortfall of affordable homes across the District of Lichfield and the Borough of Tamworth, as well as the lack of any realistic plan-led solution to this issue in the short and medium term, I consider that the provision of affordable housing through the appeal scheme carries **very substantial weight** in favour of the Appeal Proposal.

4.12 Given the acute need for these affordable homes, the involvement of Platform Housing Group and the increased certainty this gives to the speedy delivery of these homes on the ground is a benefit of **substantial weight** in favour of the Appeal Proposal.

4.13 Whilst an SPD is adopted which requires a 20% Biodiversity Net Gain to be delivered, it is out of date when considered against the backdrop of national policy on this issue as set out in the Planning Practice Guidance. The statutory metric does not apply to the Appeal Proposal, Accordingly, the Appellant's commitment to deliver such a significant scale of BNG when it is not required to

do so under policy or legislation is a benefit of **substantial weight** in favour of the Appeal Proposal.

4.14 The construction of affordable homes and then the management of the social rented units would accrue positive direct and indirect economic impacts from increased local spend in the community and local supply chains. Industry research indicates that during times of economic downturn in the housing market generally such as the circumstances which prevail today, affordable housing delivery can act as a ballast for protecting capacity within the construction industry allowing for a faster “bounce back” in the general market once economic conditions improve. I accord these economic benefits **substantial weight** in the planning balance.

4.15 There are a variety of other benefits accruing from the Appeal Proposal. It would secure areas of publically accessible green space in excess of planning policy requirements. This will provide a resource for the local community and promote health and wellbeing. The new homes would be constructed to modern Building Regulation standards thereby reducing carbon emissions. The Appeal Proposal would also, via the Planning Obligation, secure financial contributions towards social infrastructure, namely education and healthcare, which would support the improvement of local facilities. In addition, the influx of new residents would introduce additional sources of revenue for the local authority in the form of

Council Tax, which in turn would fund the delivery of local services. I accord these benefits **moderate weight** in the planning balance.

4.16 I now consider the sources of potential conflict with the Development Plan and its spatial strategy.

4.17 There are potential conflicts with the Development Plan’s spatial strategy in three respects. The first is in relation to CP6 if I am wrong about its provisions regarding “other rural areas.” The second would be in relation to the location of the Appeal Site in respect of the Tamworth North BDL if I am wrong about that. The third would be if I am wrong in respect of the Appeal Proposal’s effects on the broad distribution of growth and that it would constitute a distortion of the spatial strategy, amounting to a conflict with CP6.

4.18 In my view, any harm arising from the Appeal Proposal to the Development Plan’s spatial strategy must be viewed against the backdrop of the fact that the LPS is dated. It will become time-expired in about five years. Until October 2023 prior to its withdrawal from examination, the Lichfield District Council had been progressing a new local plan five years in the making, which would have resulted in the total replacement of the LPS and the allocation of new housing sites to meet growth needs to 2040. Whilst that plan-making exercise has been abandoned and re-started, there is a long-standing acceptance as embedded within by LPAD Policy LPR that the Development Plan will be reviewed in its

totality and as a consequence, there will inevitably need to be further growth beyond that which the Development Plan anticipates to 2029.

4.19 Additional housing sites coming forward over and above those allocated in the LPS and LPAD is therefore inevitable in the not too distant future whether this is a result of a future lack of a five year housing land supply, a successful plan-making effort or, indeed, windfall schemes such as the Appeal Proposal coming forward to meet an acute housing need, which is not being addressed through timely plan-making. In that context, the Appeal Proposal's conflict with the spatial strategy, if it is found to have occurred, should be accorded lesser weight than the considerable benefits of the Appeal Proposal I have outlined above.

4.20 I have already outlined the Appeal Site's locational sustainability in respect of the fact that it lies on the edge of a major town, the second largest by population in the County of Staffordshire. Thus, fundamentally, the Appeal Proposal would reduce the need to travel and reliance on the private car which is a key objective of the Development plan, the Framework and land use planning generally.

4.21 Other than concerns in relation to coalescence between Tamworth and Wigginton, neither Council has raised issues in relation to the Appeal Proposal's landscape impact or visual impact more generally. The Appeal Site is well-contained by the built-form associated with a large town. Even if there is a breach of the policies dealing with the spatial strategy, there is no breach of their underlying intent to achieve sustainable development when considered

against the backdrop of the acute affordable housing need identified by Mr Stacey's proof. Indeed, the Appeal Site is a logical and sustainable location to recover such a need.

4.22 In terms of the benefits arising from the provision of affordable housing, these should also be seen in the context of a dated planning policy framework based on evidence of housing need from over a decade ago. The planning policy framework is and has been since 2018 the subject of a total local plan review which is ongoing and is still no closer to being completed than when it was originally started. That review was meant to address important matters of unmet need from Tamworth and the Greater Birmingham Housing Market Area. It would have also needed to address updated affordable housing need evidence. Given that the plan-making process has stalled, there is little choice but to address these matters in the context of decisions on planning applications if the needs of the community are to be met.

4.23 In that context, I consider that the benefits of the Appeal Proposal including the provision of a substantial amount of affordable housing in the location proposed are varied and weighty which warrant a decision other than in accordance with the Development Plan.

Appendix 1 – Written Statement on Highways



Summix BLT Developments Limited

Land North of Browns Lane, Tamworth

Written Statement on
Highways
(APP/K3415/W/24/3340089
Appeal A and
APP/K3445/W/24/3340094
Appeal B)

June 2024



Summix BLT Developments Limited

Land North of Browns Lane, Tamworth

Written Statement on Highways
(APP/K3415/W/24/3340089
Appeal A and
APP/K3445/W/24/3340094 Appeal
B)

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APPENDICES

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1. Introduction

1.1 Personal Statement

- 1.1.1 My name is David Frisby; I am a Director of mode transport planning (mode), which is a transport planning consultancy that provides independent transport planning advice to developers, as well as Local Authorities.
- 1.1.2 I am a Bachelor of Engineering Graduate (with Honours) in Civil Engineering from Kingston University, having gained this degree in 2000. I am a Chartered Engineer and an Elected Fellow of the Chartered Institution of Highways and Transportation.
- 1.1.3 My professional experience has been gained entirely in the field of highways and transportation, the last twenty five years having been spent in the transport aspects of major development planning applications on projects such as the Maidenhead Town Centre redevelopment; Westfield Shopping Centre at White City; Kettering East & Priors Hall in Northamptonshire; Brighton Marina regeneration in Brighton and Hove; and more recently, Long Marston Airfield at Stratford upon Avon in Warwickshire; Arkall Farm/Gungate Corridor at Tamworth in Staffordshire; Upper Heyford in Oxfordshire and the allocation of the Worcester Parkway in Worcestershire.
- 1.1.4 This written statement on highways has been prepared on transportation matters on behalf of Summix BLT Developments Limited in relation to the Highways impacts at Gungate Corridor in Tamworth. I have been involved in the project since the Summer of 2019 as the Project Director overseeing the transportation assessment work on the site now known as Land North of Browns Lane, Tamworth.
- 1.1.5 In addition, I provided evidence at the Arkall Farm Inquiry after being appointed by Lichfield District Council (LDC) with regards to supporting their decision to accept the recommendation for approval by Staffordshire County Council (SCC) (in their role as Local Highway Authority LHA and statutory consultee) at the Call In Inquiry for the proposed residential scheme at Arkall Farm. mode provided highways and transport planning support to both LDC and the Applicant (Barwood Strategic Land II LLP) to review the scheme and represent the LPA at the Inquiry.

1.1.6 I have examined the site and its surroundings; I am familiar with the transport related documents that resulted in the highways proposals submitted as part of the original planning application and that are therefore relevant to this written statement on highways.

1.1.7 The evidence that I have prepared and provided is true and has been prepared in accordance with the guidance of my professional institution, irrespective of by whom I am instructed by.

2. Introduction

2.1 Preamble

2.1.1 I have been appointed by Summix BLT Developments Limited (the Appellant) to prepare this written statement on highways in support of the Appeal against the decision to refuse the outline planning permission for the proposed development on Land North of Browns Lane, Tamworth (scheme Ref. Tamworth Borough Council (TBC) 0241/2018 and LDC Ref. 18/00840/OUTMEI).

2.2 Background

2.2.1 SCC in their role as LHA supported the scheme and concluded that the development would not have a severe impact on the operation or safety of the highway network. In SCCs formal response 'Form X' document (dated 13/01/2022) (**CD4.5**) they confirmed that there was no objection subject to conditions:

“Following the review of the initially submitted application documents, amended plans and additional information, it is not considered that the development proposals would have an adverse impact on the surrounding highway network or on highway safety.

RECOMMENDATION:

There are no objections on Highway grounds to the proposed development ...”

2.2.2 Whilst the scheme was fully supported by SCC as LHA, it was recommended for refusal by LDC and TBC in their role as Local Planning Authority (LPA) in their associated officer reports (dated 27/11/2023 – LDC officer report **CD2.6** and 5/12/2023 – TBC officer report **CD2.7**), but not on specific highways grounds.

2.2.3 The scheme was subsequently refused at the associated Planning Committee for each LPA (LDC Planning Committee - 27/11/2023 and TBC Planning Committee – 05/12/2023), however highways and transportation issues were not cited as a reason for refusal (RfR) on the Decision Notice (DN) from either LPA (**CD 2.1** and **CD 2.2**).

2.3 Purpose of this Written Statement on Highways

- 2.3.1 Whilst no highways and transportation reason for refusal featured on the associated DN and the outline planning application was recommended for approval by SCC in their role as LHA through their Form X (**CD4.5**), this written statement on highways is submitted to set out the agreed position on highways matters and address concerns raised by interested parties. This is to give assurances to the Inspector that the scheme is acceptable in transportation and highway terms and that the view of the LHA that the scheme would not result in any adverse severe highway impacts still remains.
- 2.3.2 This document also refers, where appropriate, to the S73 application (24/00457/OUTMEI) that has recently been submitted by Barwood Strategic Land II LLP. This seeks to remove Conditions 24, 25, 26, 28, 30 and vary Conditions 27 and 29 of outline consent (14/00516/OUTMEI) (**CD8.1.2**) that proposes to remove the agreed Monitor and Manage (M&M) Mitigation Strategy and to proposed and agree, via the LHA, a physical highway mitigation measure that could deliver the full extent of consented development at Arkall Farm.
- 2.3.3 The S73 application (at the time of writing) is yet to be determined and still under consideration by the relevant authorities, it is understood that it S73 is due to be determined by the 08/08/2024.

3. Land North of Browns Lane, Tamworth

3.1 Site Location & Proposed Development

3.1.1 The appeal site is located off Browns Lane, north of Perry Crofts in Tamworth. It is bound by agricultural land to the north, residential dwellings to the east and south and Main Road to the west. The scheme was validated on 11/06/2018 and the description of development is provided below:

“Outline application for up to 210 dwellings, public open space, landscaping, sustainable urban drainage and associated infrastructure. All matters reserved except access.”

3.2 Background

3.2.1 As part of the work to support the planning application, a Transport Assessment and Travel Plan were submitted as part of the original outline planning application submission. As part of the subsequent post submission discussions, SCC in their role as LHA provided initial comments on the submission in which additional points of clarification were requested that included:

- Revised future year assessment of off-site junctions;
- Site access queries including vehicle tracking assessments;
- Travel Plan queries; and,
- Capacity concerns of the Gungate Corridor.

3.2.2 Subsequent extensions of time were agreed between the parties whilst matters were sufficiently addressed. Following the initial comments, several additional Technical Notes and submissions were provided to SCC that addressed the matters raised.

3.2.3 The key elements of the post application work demonstrated that the scheme was acceptable in highways terms and allowed SCC to support the scheme has been provided below.

- 3.2.4 As part of the additional undertaken post application, further capacity assessments were undertaken of the local junctions (outside of the Gungate Corridor) for a revised future year of 2029 (from 2022) to be consistent with the Gungate Corridor model.
- 3.2.5 The traffic was growthed to 2029 using robust parameters and included all known and requested committed development. The capacity assessments did not show a capacity concern except for the A513/ Gillway Lane/ Comberford Road/ Coton Lane junction. At this junction SCC had previously identified a mitigation scheme and had received financial contributions towards its delivery from a number of other approved developments and Summix BLT Development Limited asked to contribute a fair and proportionate cost to this scheme (£47,900 index linked).
- 3.2.6 The principal focus of the post application work of the appeal site was accounting for the Arkall Farm scheme (CD8.1.2) through the Gungate Corridor. This had to be undertaken in relation to the agreed Monitor & Manage (M&M) strategy that was vehemently promoted by Barwood Strategic Land II LLP/Stantec (prior to their Section 73 application) at the Arkall Farm Inquiry.
- 3.2.7 The fixed position (and only physical mitigation scheme) detailed in the application/conditions/Inquiry of the Arkall Farm application was the scheme presented in drawing number 28648-5502-012A. This scheme allowed no more than 300 dwellings (Condition 27), a point all parties agree with. This was therefore the effective starting point (i.e. the base line of the Brown Lane assessment).
- 3.2.8 The other Conditions 24 (M&M) 28 (300 – 500 dwellings) and 29 (500 – 1,000 dwellings) are a much more ‘fluid’ form of mitigation and this was the approach Barwood felt was most beneficial. It is clear from the Condition wording that there isn’t a fixed position given that the mitigation is based on the M&M approach (with surveys to be undertaken at defined periods of time) and that the mitigation is referred to as *‘include consideration’* and list is *‘not exhaustive’*; as such the necessary traffic survey work has been completed and reported to SCC before any form of mitigation can be implemented beyond the delivery of 300 units at Arkell Farm.

3.2.9 As such, the proposed highways mitigation scheme that mode designed in August 2021 discussed and agreed with SCC (Drawing GG-LE-HAD-OF-DR-CE-SK06-S2-A1-Rev A (**CD1.1.3**), provided a nil detriment position to the known and agreed position of Barwood first phase (up to 300 units). Therefore, if the appeal is allowed it would undermine the position Barwood's agreed at the Inquiry in 2018 and when the M&M starts; by allowing the Appeal the implementation of the proposed mitigation would not prejudice Barwood's approval.

3.2.10 Our approach, model and capacity results were agreed with SCC (and JCT in their role as approved model auditor) in their Form X' document (**CD4.5**) in which they confirmed:

The proposed mitigation scheme has been subject to junction capacity assessments using a Staffordshire County Council approved LinSig model. The LinSig model was previously developed by JCT Consultancy Limited and used to assess the traffic impacts from the consented Land north of Ashby Road, Tamworth (LDC Ref. 14/00516/OUTMEI) development. The modelling outputs demonstrated that the proposed development of 210 dwellings and 300 dwellings at Land north of Ashby Road, Tamworth (LDC Ref. 14/00516/OUTMEI) could be accommodated by the proposed mitigation scheme (2029 forecast year) without prejudicing the delivery of the wider development at Land north of Ashby Road, Tamworth (LDC Ref. 14/00516/OUTMEI). Staffordshire County Council subsequently commissioned JCT Consultancy Limited to undertake an audit of the updated LinSig model. No major issues were identified with the model inputs and therefore the LinSig model and the outputs were considered acceptable.

3.2.11 Further work was subsequently requested on the site access to show a visibility splay based on the recorded 85th percentile of speeds rather than posted speed limit and additional vehicle tracking. This was undertaken and shown in Drawing J32 4320 PS 001 (**CD1.1.4**) which was again accepted and agreed with SCC and detailed as Condition 5 of the Form X (**CD4.5**).

3.2.12 Furthermore, the Travel Plan was also updated to reflect SCC comments relating to policy and measures and the revised document (211020 J324320 TP003 Rev C 'Travel Plan' was agreed with SCC and detailed as Condition 7 of the Form X (**CD4.5**).

3.2.13 Following the submission of the additional work, SCC in their role as LHA were satisfied that their final comments were suitably addressed. As such, SCC supported the scheme and concluded that the development would not have a severe impact on the operation or safety of the highway network, and would not prejudice Barwood's approval at Arkall Farm. In SCCs formal response Form X document (**CD4.5**) they confirmed that there was no objection subject to conditions:

“Following the review of the initially submitted application documents, amended plans and additional information, it is not considered that the development proposals would have an adverse impact on the surrounding highway network or on highway safety.

RECOMMENDATION:

There are no objections on Highway grounds to the proposed development...”

4. S73 Application (24/00457/OUTMEI)

4.1 Introduction

4.1.1 A S73 application (24/00457/OUTMEI) has been submitted by Barwood Strategic Land II LLP that seeks to remove conditions 24, 25, 26, 28, 30 and vary conditions 27 and 29 of outline consent 14/00516/OUTMEI which propose to remove the Monitor and Manage (M&M) Mitigation Strategy and agree, via the Highway Authority, the package of highways mitigation measures required to deliver the full extent of consented development at Arkall Farm. This S73 application (at the time of writing) is yet to be determined and still under consideration by the relevant authorities but is expected to be determined on 08/08/2024.

4.1.2 To provide clarity on determining this Appeal and to address comments made by the interested parties, a sensitivity test has been undertaken which reviews the “mode” mitigation proposals if the LPA were minded to approve the S73.

4.2 Sensitivity Review

4.2.1 The S73 application as submitted, principally relies on the same mitigation as submitted and agreed with the LHA for the Land North of Browns Lane, the Appeal scheme being considered. The mitigation shown on the submitted plans (Stantec Ref. 332010705-300-003 and 332010705-300-004 (**Appendix A**) alongside the Transport Statement (Stantec Ref. 332010705-602-TS) have been reviewed.

4.2.2 Generally, the Linsig model and the physical mitigation shown in the submitted drawings for the Gungate Corridor are very similar to the agreed position between Summix and the LPA.

4.2.3 It is also understood to have built upon revised survey work and parameters (traffic generation/trip rates/distributions) established from an early round of M&M survey work, with Surveys agreed and undertaken in 2021. However, the model is not identical with some notable differences identified as follows:

- Offadrive:
 - The intergreens for the pedestrian clearances are longer than mode’s model.

- There are a few differences in the phase delays.
- The new left turn lane on Offadrive is modelled as 1 PCU long, instead of the longer 7PCU in our model and also shown as a longer lane on the Stantec drawing.
- The saturation flows on Offadrive are a little different due to changes in the lane widths e.g. Stantec used 4m wide lanes on Offadrive as opposed to the mode model 3.91/3.95m lanes.
- Fountains:
 - The intergreens are shorter in places than mode's model. For example, northbound Upper Gungate Phase A to Comberford phase C is set to 6 seconds whereas mode has used 7 seconds. Likewise for phase C to Phase A.
 - The saturation flows on Upper Gungate is a bit lower than mode has used as a result of assuming a 3.5m lane width instead of 3.6m.
 - The flare lengths used are lower as follows, northbound Upper Gungate 7 PCU versus 10.3 PCU, Comberford 5 PCU versus 9.5 PCU and Southbound Ashby 4 PCU vs 6.3 PCU.
- Lower Gungate:
 - There are some differences to the intergreens, namely the dummy clearance phases for the pedestrian crossings that have been reduced.
- General:
 - A network wide cycle time of 90 seconds seems to have been applied in the AM peak, this is different to the mode model which uses several different cycle times. The PM peak is similar, but importantly has different cycle times for the key nodes of Fountains and Offadrive. For example, in the PM peak, Fountains uses two cycles of 70 seconds, whereas we use one cycle of 78 seconds, Offadrive uses 90 seconds but mode used 102 seconds.
 - The model submitted as part of the S73 doesn't include any flows to and from zone E (the college access), Zone H (St John St) or Zone I (the car park) – these form a part of the corridor and were included in the mode agreed scheme. Whilst the flows associated with these uses will have been counted in the traffic flow survey, the impact of the accesses will not have been so. The college access in modes model equates to the following movements:
 - *49 in and 23 out in the AM*
 - *9 in and 13 out in the PM*
 - The primary difference is in the base flows used - As a guide, the total cordon network flows in the mode model were 4,222 (AM) and 4,659 (PM). The S73 model flows for the

do something scenario are 3,737 (AM) and 3,916 (PM). So the base flows are lower in the S73 work.

4.2.4 Given the queries outlined above and that the LHA is yet to provide formal response as to whether the Barwood Strategic Land II LLP model, parameters and approach is acceptable; the flows from their revised model (Arkall Farm 1,000 and future year flows) have been extracted from the submitted model for the S73 application and reviewed within the mode model.

4.2.5 The mode model was approved and audited with both SCC and JCT as part of the Appeal scheme. The traffic from Arkall Farm (1,000 units and future year flows) have been added to the traffic associated with the Appeal site and tested within the model approved model (i.e the position that Barwood Strategic Land II LLP has objected to not being included to date). A summary is provided in **Table 4.1** below and full output attached at **Appendix B**.

Table 4.1 2029 Arkall Farm 1,000 units with 210 Browns Lane

Junction	Arm/Approach	AM (0800 – 0900)			PM (1700 – 1800)		
		DoS %	MMQ	PRC	DoS %	MMQ	PRC
Fountains	Upper Gungate	70.8	16.4	2.80%	41.4		-15.40%
	Comberford Road	87.5	16.1		30.6		
	Ashby Road	85.7	20.4		7.4		
	Upper Gungate SB	47.9	2.2		0.6		
	Upper Gungate NB	54.2	5.6		2.8		
Offadrive	Upper Gungate (N)	93.3	21.4	-3.70%	8.4		-1.90%
	Offadrive	87.5	10.4		15.6		
	Upper Gungate (S)	60.5	8.2		26.8		
	Salters Lane	82.8	6.0		7.8		

4.2.6 The results detailed above are broadly comparable with the approved position mode had agreed with SCC for the Land North of Browns Lane Application. However, more importantly the results are comparable to the Arkall Farm initial phase (at 300 units) results, which SCC accepted and was the starting point for mode's nil detriment approach. This was shown in Table 4.1 of TN002 and is summarised below in **Table 4.2** below.

Table 4.2 Extract of Table 4.1 of TN002 ‘Summary of 2029 Future Year with consented and AF (300 units) and PBA/Stantec mitigation (28648-5502-012 Rev A) and no LSTF’

Junction	Arm/Approach	AM (0800 – 0900)			PM (1700 – 1800)		
		DoS %	MMQ	PRC	DoS %	MMQ	PRC
Fountains	Upper Gungate	61.2	11.6	2.2%	104.8	73.2	-16.4%
	Comberford Road	88.1	13.2		102.3	26.8	
	Ashby Road	88.1	19.9		55.0	8.1	
	Upper Gungate SB	75.4	9.0		52.4	1.0	
	Upper Gungate NB	49.6	4.5		76.6	3.3	
Offadrive	Upper Gungate (N)	99.8	34.1	-10.8	85.1	16.3	-3.4
	Offadrive	97.2	16.9		90.4	20.8	
	Upper Gungate (S)	51.0	3.9		93.0	23.3	
	Salters Lane	93.3	8.9		85.8	7.5	

4.2.7 On this basis, it should be considered that both schemes can be accommodated (if the S73 is approved) as part of the approved mitigation measures that have been audited, accepted and agreed with by JCT and SCC. This would also specifically address the objection made by Barwood Strategic Land II LLP.

5. Summary and Conclusions

5.1 Summary

5.1.1 It is important to note that SCC did not object to the outline planning application and the mitigation scheme and associated Gungate corridor model was approved. Despite the recommendation for approval from the LHA, the outline planning application was refused at Committee but with no highway RfR.

5.2 Conclusions

5.2.1 It is considered that the information submitted as part of the outline planning application and referenced within this Transport Appeal Statement, demonstrates that:

- Appropriate and suitable consideration has been made to the cumulative impacts arising from other committed development;
- Provided a suitable mitigation strategy that the LHA has approved;
- Does not prejudice the delivery of the consented Arkall Farm scheme based on the known fixed points;
- Even if the S73 is approved, both schemes can be accommodated as part of the approved mitigation measures that have been audited, accepted and agreed with by JCT and SCC as part of the Land North of Browns Lane scheme; and.
- The scheme does not have a severe impact on the operation of the highway.

5.2.2 On this basis, it is considered the scheme should not be refused on highway grounds.

Summix BLT Development Limited

Land North of Browns Lane, Tamworth

Written Statement on Highways (APP/K3415/W/24/3340089 Appeal A and
APP/K3445/W/24/3340094 Appeal B)

mode

transport planning

APPENDICES

Summix BLT Development Limited

Land North of Browns Lane, Tamworth

Written Statement on Highways (APP/K3415/W/24/3340089 Appeal A and
APP/K3445/W/24/3340094 Appeal B)

mode

transport planning

APPENDIX A

S73 24/00457/OUTMEI Drawings (Stantec Ref. 332010705-300-003 and
332010705-300-004)



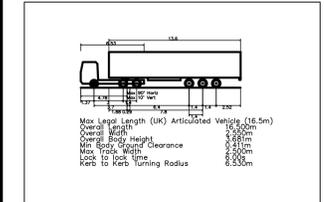
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- KEY
- KERBLINE CHANGES
 - ROAD MARKING CHANGES
 - TACTILE PAVING
 - SIGNAL EQUIPMENT
 - PEDESTRIAN GUARDRAIL
 - HIGHWAY BOUNDARY

VEHICLE PROFILE



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Client/Project
 ARKALL FARM, TAMWORTH

Title
 GUNGATE CORRIDOR MITIGATION SCHEME -NORTHERN SECTION WITH TRACKING

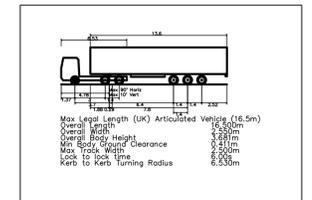
Project No. 33201705	Scale 1:250 @ A1
Revision	Drawing No.

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- KEY**
- KERBLINE CHANGES
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 - PEDESTRIAN GUARDRAIL
 - HIGHWAY BOUNDARY

VEHICLE PROFILE



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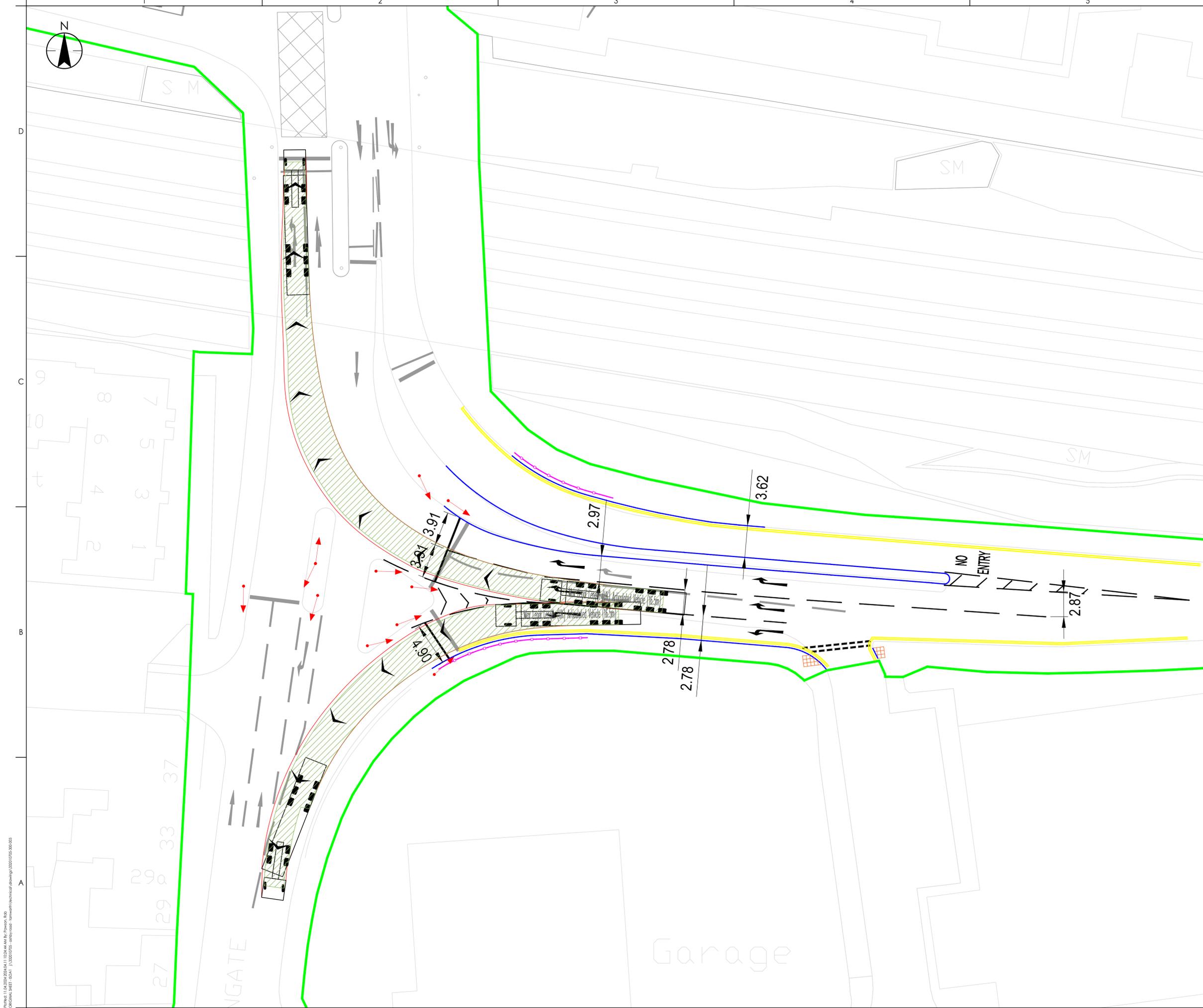
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 ARKALL FARM, TAMWORTH

Title
GUNGATE CORRIDOR MITIGATION SCHEME - SOUTHERN SECTION WITH TRACKING

Project No. 332010705	Scale 1:200 @A1
Revision	Drawing No.
-	332010705-300-003



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Summix BLT Development Limited

Land North of Browns Lane, Tamworth

Written Statement on Highways (APP/K3415/W/24/3340089 Appeal A and
APP/K3445/W/24/3340094 Appeal B)

mode

transport planning

APPENDIX B

Revised Junction Modelling Output Files

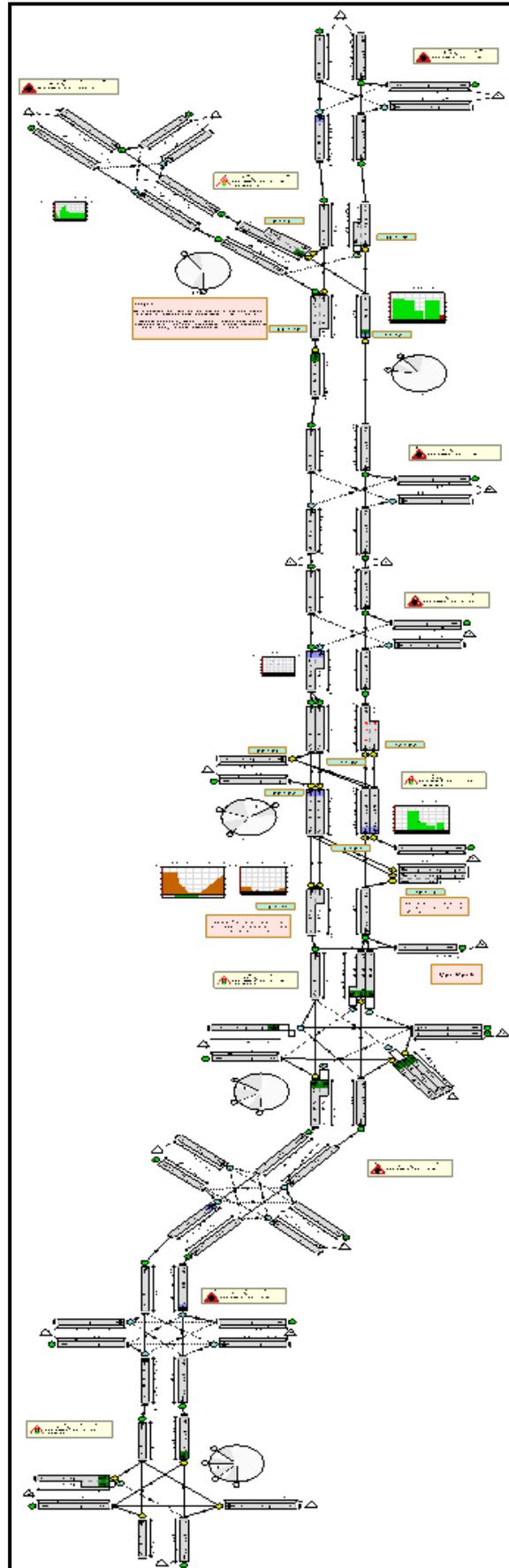
Basic Results Summary
Basic Results Summary

User and Project Details

Project:	17063 Upper Gungate
Title:	Gungate Network 2017 + Mode Mitigation
Location:	Tamworth
Additional detail:	
File name:	Gungate Network Option A - Mode MIT.lsg3x
Author:	AL
Company:	
Address:	

Basic Results Summary

Scenario 1: '1' (FG60: 'AM1 2029 + Arkalls1000', Plan 2: 'Peds J9')
Network Layout Diagram



Basic Results Summary

Network Results

Basic Results Summary

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Gungate Network 2017 + Mode Mitigation	-	-	-		-	-	-	-	-	-	91.0%	1309	64	2	71.9	-	-
J1: Ashby Road Ashby Road	-	-	-		-	-	-	-	-	-	50.5%	253	0	0	0.9	-	-
2/1	B5493 Ashby Road NB Ahead Right	O	-		-	-	-	643	2000	1272	50.5%	142	0	0	0.7	3.9	7.4
3/1	Ashby Road Left Right	O	-		-	-	-	111	Inf	424	26.2%	111	0	0	0.2	5.7	0.2
J2: Comberford Road Wigginton Road	-	-	-		-	-	-	-	-	-	36.0%	284	0	0	0.4	-	-
2/1	A513 Comberford Road NB Ahead Right	O	-		-	-	-	482	2000	1337	36.0%	129	0	0	0.3	2.1	0.3
3/1	Wigginton Road Left Right	O	-		-	-	-	155	Inf	625	24.8%	155	0	0	0.2	3.8	0.2
J3: Upper Gungate College Access	-	-	-		-	-	-	-	-	-	47.9%	0	0	0	0.5	-	-
2/1	Upper Gungate NB Ahead Right	O	-		-	-	-	958	2000	2000	47.9%	0	0	0	0.5	1.7	0.5
3/1	College Access Left Right	O	-		-	-	-	0	Inf	230	0.0%	0	0	0	0.0	0.0	0.0
J4: Upper Gungate Croft Street	-	-	-		-	-	-	-	-	-	47.7%	273	0	0	1.5	-	-

Basic Results Summary

2/1+2/2	Upper Gungate NB Ahead Right	U+O	-	-	-	-	1098	2000: Inf	1959+344	47.7 : 47.7%	164	0	0	0.9	2.8	15.9
3/1	Croft Street Left Right	O	-	-	-	-	109	Inf	236	46.2%	109	0	0	0.7	22.6	1.7
J5: Aldergate Corporation Street	-	-	-	-	-	-	-	-	-	34.5%	0	0	0	0.4	-	-
1/1	Aldergate SB Ahead Left Right	O	-	-	-	-	535	2000	2000	26.8%	0	0	0	0.2	1.2	0.2
2/1	Aldergate NB Ahead Right Left	O	-	-	-	-	690	2000	2000	34.5%	0	0	0	0.3	1.4	0.3
3/1	Corporation Street Left Right Ahead	O	-	-	-	-	0	Inf	374	0.0%	0	0	0	0.0	0.0	0.0
7/1	Car Park Right Left Ahead	O	-	-	-	-	0	Inf	495	0.0%	0	0	0	0.0	0.0	0.0
J6: Aldergate St John Street	-	-	-	-	-	-	-	-	-	34.5%	0	0	0	0.4	-	-
1/1	Aldergate SB Ahead Right Left	O	-	-	-	-	535	2000	2000	26.8%	0	0	0	0.2	1.2	0.2
2/1	Sanbach Road South NB Ahead Left Right	O	-	-	-	-	690	2000	2000	34.5%	0	0	0	0.3	1.4	0.3
3/1	Car Park Left Right Ahead	O	-	-	-	-	0	Inf	362	0.0%	0	0	0	0.0	0.0	0.0
4/1	St John Street Right Left Ahead	O	-	-	-	-	0	Inf	521	0.0%	0	0	0	0.0	0.0	0.0
J7: Ashby Rd Comberford Rd	-	-	-	-	-	-	-	-	-	84.3%	72	0	0	19.0	-	-
1/1+1/2	Upper Gungate Left Ahead	U	- C3:A	-	-	-	958	1934:1975	586+783	70.0 : 70.0%	-	-	-	3.1	11.7	16.4
2/2+2/1	Comberford Rd Left Right	U	C3:C	1	29	-	563	1820:1697	555+113	84.3 : 84.3%	-	-	-	6.7	43.1	13.5
3/1+3/2	Ashby Rd Right Ahead	U+O	C3:B	1	47	-	880	1915:1730	963+86	83.9 : 83.9%	72	0	0	6.8	28.0	20.3

Basic Results Summary

6/1	Ahead	U	C5:A		1	68	-	1276	1965	1747	73.1%	-	-	-	1.4	4.0	2.0
7/1	Northbound Entry Ahead	U	C5:A		1	68	-	958	1965	1747	54.8%	-	-	-	0.9	3.4	5.7
J8: Offdrive	-	-	-		-	-	-	-	-	-	91.0%	0	0	0	30.5	-	-
1/1+1/2	Upper Gungate (S) Ahead	U	C1:D		1	29	-	500	1975:2115	665+152	61.2 : 61.2%	-	-	-	3.4	24.1	8.3
2/1	Upper Gungate NB Left Ahead	U	C1:B		1	59	-	752	1941	1493	50.4%	-	-	-	0.6	2.8	0.8
2/2	Upper Gungate NB Ahead	U	C1:B		1	59	-	472	2115	1627	29.0%	-	-	-	0.2	1.7	0.3
3/1	Salters Lane Right Left	U	C1:G		1	8	-	184	1927	222	82.8%	-	-	-	3.9	75.9	6.0
4/2+4/1	Upper Gungate (N) Ahead	U	C1:K C1:A		1	36:58	-	1315	1990:2015	624+821	91.0 : 91.0%	-	-	-	8.1	22.2	18.4
5/1	Upper Gungate SB Left	U	C1:E		1	62	-	842	1942	1569	53.7%	-	-	-	0.8	3.5	3.0
5/2	Upper Gungate SB Ahead	U	C1:C		1	49	-	644	1990	1276	50.5%	-	-	-	0.6	3.1	0.6
6/2+6/1	Offdrive Right Left	U	C1:F		1	16	-	505	1928:1949	391+181	88.3 : 88.3%	-	-	-	7.4	52.4	10.7
6/3	Offdrive Right	U	C1:F		1	16	-	379	2059	449	84.5%	-	-	-	5.6	53.3	10.3
J9: Hospital St	-	-	-		-	-	-	-	-	-	62.2%	413	64	2	10.3	-	-
1/1+1/2	Aldergate Left Ahead Right	U+O	C4:A		1	46	-	690	1930:1858	922+186	62.2 : 62.2%	115	0	1	3.5	18.2	11.3
2/1	Hospital St Right Left Ahead	O	C4:C		1	7	-	116	1888	252	46.1%	17	0	0	1.6	49.4	3.1
3/1	Upper Gungate Left	O	C4:E		1	68	-	220	2015	579	38.0%	156	64	0	0.4	6.7	1.2
3/2+3/3	Upper Gungate Ahead Right	U+O	C4:B		1	46	-	559	1895:1712	865+191	53.0 : 53.0%	101	0	0	2.7	17.6	8.4

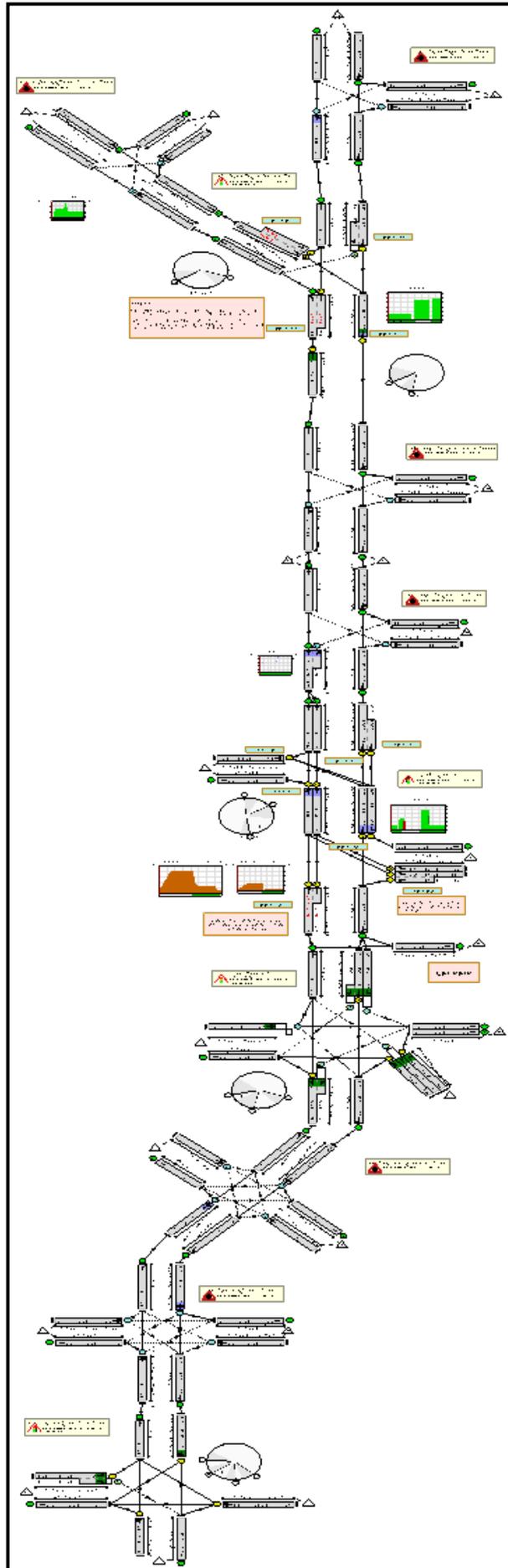
Basic Results Summary

4/1	Lower Gungate U-Turn Left	U	C4:D		1	7	-	92	1781	237	38.7%	-	-	-	1.2	48.0	2.4
4/2	Lower Gungate Ahead	O	C4:D		1	7	-	24	1772	138	17.4%	24	0	0	0.3	51.3	0.6
4/3	Lower Gungate Right	U	C4:D		1	7	-	39	1657	221	17.7%	-	-	-	0.5	44.5	1.0
J10: Lichfield Street Silver Street	-	-	-		-	-	-	-	-	-	62.7%	14	0	0	7.9	-	-
1/1	Silver St Ahead Left	U	C2:D		1	7	-	27	1775	129	20.9%	-	-	-	0.5	65.7	0.9
2/1+2/2	Lichfield St Left Right	U+O	C2:A		1	60	-	663	1814:1747	1035+22	62.7 : 62.7%	14	0	0	3.6	19.7	14.0
3/1	Aldergate Ahead Right	U	C2:B		1	63	-	535	1705	1038	51.5%	-	-	-	2.4	15.8	9.7
4/1	Church St Right Left Ahead	U	C2:C		1	8	-	71	1808	148	48.0%	-	-	-	1.4	71.4	2.5
		C1	Stream: 1	PRC for Signalled Lanes (%):	-1.1			Total Delay for Signalled Lanes (pcuHr):		29.69			Cycle Time (s):		78		
		C1	Stream: 2	PRC for Signalled Lanes (%):	67.7			Total Delay for Signalled Lanes (pcuHr):		0.83			Cycle Time (s):		78		
		C2		PRC for Signalled Lanes (%):	43.5			Total Delay for Signalled Lanes (pcuHr):		7.88			Cycle Time (s):		110		
		C3	Stream: 1	PRC for Signalled Lanes (%):	6.8			Total Delay for Signalled Lanes (pcuHr):		13.58			Cycle Time (s):		90		
		C4		PRC for Signalled Lanes (%):	44.6			Total Delay for Signalled Lanes (pcuHr):		10.27			Cycle Time (s):		90		
		C5		PRC for Signalled Lanes (%):	23.2			Total Delay for Signalled Lanes (pcuHr):		2.30			Cycle Time (s):		90		
				PRC Over All Lanes (%):	-1.1			Total Delay Over All Lanes(pcuHr):		71.88							

Basic Results Summary

Scenario 2: '2' (FG61: 'PM 2029 + Arkalls1000', Plan 2: 'Peds J9')

Network Layout Diagram



Basic Results Summary

Network Results

Basic Results Summary

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Gungate Network 2017 + Mode Mitigation	-	-	-		-	-	-	-	-	-	97.7%	1209	38	18	108.2	-	-
J1: Ashby Road Ashby Road	-	-	-		-	-	-	-	-	-	53.3%	206	0	0	0.8	-	-
2/1	B5493 Ashby Road NB Ahead Right	O	-		-	-	-	941	2000	1766	53.3%	63	0	0	0.6	2.3	0.8
3/1	Ashby Road Left Right	O	-		-	-	-	143	Inf	514	27.8%	143	0	0	0.2	4.8	0.2
J2: Comberford Road Wigginton Road	-	-	-		-	-	-	-	-	-	48.6%	345	0	0	0.6	-	-
2/1	A513 Comberford Road NB Ahead Right	O	-		-	-	-	606	2000	1246	48.6%	199	0	0	0.5	2.8	0.5
3/1	Wigginton Road Left Right	O	-		-	-	-	146	Inf	627	23.3%	146	0	0	0.2	3.7	0.2
J3: Upper Gungate College Access	-	-	-		-	-	-	-	-	-	70.3%	0	0	0	1.2	-	-
2/1	Upper Gungate NB Ahead Right	O	-		-	-	-	1406	2000	2000	70.3%	0	0	0	1.2	3.0	1.2
3/1	College Access Left Right	O	-		-	-	-	0	Inf	259	0.0%	0	0	0	0.0	0.0	0.0
J4: Upper Gungate Croft Street	-	-	-		-	-	-	-	-	-	69.7%	130	0	0	3.4	-	-

Basic Results Summary

2/1+2/2	Upper Gungate NB Ahead Right	U+O	-	-	-	-	1449	2000: Inf	1990+87	69.7 : 69.7%	61	0	0	2.6	6.6	39.3
3/1	Croft Street Left Right	O	-	-	-	-	69	Inf	161	42.8%	69	0	0	0.8	39.2	1.8
J5: Aldergate Corporation Street	-	-	-	-	-	-	-	-	-	46.5%	0	0	0	0.6	-	-
1/1	Aldergate SB Ahead Left Right	O	-	-	-	-	543	2000	2000	27.2%	0	0	0	0.2	1.2	0.2
2/1	Aldergate NB Ahead Right Left	O	-	-	-	-	930	2000	2000	46.5%	0	0	0	0.4	1.7	0.4
3/1	Corporation Street Left Right Ahead	O	-	-	-	-	0	Inf	327	0.0%	0	0	0	0.0	0.0	0.0
7/1	Car Park Right Left Ahead	O	-	-	-	-	0	Inf	440	0.0%	0	0	0	0.0	0.0	0.0
J6: Aldergate St John Street	-	-	-	-	-	-	-	-	-	46.5%	0	0	0	0.6	-	-
1/1	Aldergate SB Ahead Right Left	O	-	-	-	-	543	2000	2000	27.2%	0	0	0	0.2	1.2	0.2
2/1	Sanbach Road South NB Ahead Left Right	O	-	-	-	-	930	2000	2000	46.5%	0	0	0	0.4	1.7	0.4
3/1	Car Park Left Right Ahead	O	-	-	-	-	0	Inf	315	0.0%	0	0	0	0.0	0.0	0.0
4/1	St John Street Right Left Ahead	O	-	-	-	-	0	Inf	467	0.0%	0	0	0	0.0	0.0	0.0
J7: Ashby Rd Comberford Rd	-	-	-	-	-	-	-	-	-	97.7%	58	0	15	32.8	-	-
1/1+1/2	Upper Gungate Left Ahead	U	- C3:A	-	-	-	1406	1934:1975	545+893	97.7 : 97.7%	-	-	-	15.8	40.3	34.7
2/2+2/1	Comberford Rd Left Right	U	C3:C	1	20	-	544	1820:1697	490+70	97.2 : 97.2%	-	-	-	12.5	82.8	18.8
3/1+3/2	Ashby Rd Right Ahead	U+O	C3:B	1	44	-	611	1915:1730	1011+115	53.2 : 63.5%	58	0	15	2.7	15.9	7.4

Basic Results Summary

6/1	Ahead	U	C5:A		1	56	-	1014	1965	1940	52.3%	-	-	-	0.5	1.9	0.5
7/1	Northbound Entry Ahead	U	C5:A		1	56	-	1406	1965	1940	72.5%	-	-	-	1.3	3.4	2.5
J8: Offadrive	-	-	-		-	-	-	-	-	-	90.7%	0	0	0	36.3	-	-
1/1+1/2	Upper Gungate (S) Ahead	U	C1:D		1	46	-	884	1975:2115	735+239	90.7 : 90.7%	-	-	-	10.4	42.4	26.0
2/1	Upper Gungate NB Left Ahead	U	C1:B		1	82	-	1001	1942	1580	63.3%	-	-	-	1.0	3.5	1.4
2/2	Upper Gungate NB Ahead	U	C1:B		1	82	-	617	2115	1721	35.9%	-	-	-	0.3	1.8	0.5
3/1	Salters Lane Right Left	U	C1:G		1	9	-	168	1927	189	88.9%	-	-	-	5.2	111.8	7.8
4/2+4/1	Upper Gungate (N) Ahead	U	C1:K C1:A		1	53:81	-	1043	1990:2015	594+903	69.6 : 69.6%	-	-	-	3.3	11.4	8.3
5/1	Upper Gungate SB Left	U	C1:E		1	86	-	693	1942	1656	41.8%	-	-	-	0.6	3.3	3.9
5/2	Upper Gungate SB Ahead	U	C1:C		1	67	-	506	1990	1327	38.1%	-	-	-	0.4	3.0	0.6
6/2+6/1	Offadrive Right Left	U	C1:F		1	22	-	470	1928:1949	382+155	87.5 : 87.5%	-	-	-	7.9	60.8	13.0
6/3	Offadrive Right	U	C1:F		1	22	-	400	2059	464	86.2%	-	-	-	7.1	63.7	13.7
J9: Hospital St	-	-	-		-	-	-	-	-	-	89.9%	437	38	3	18.4	-	-
1/1+1/2	Aldergate Left Ahead Right	U+O	C4:A		1	40	-	930	1935:1858	816+218	89.9 : 89.9%	194	0	2	9.3	36.0	23.7
2/1	Hospital St Right Left Ahead	O	C4:C		1	13	-	261	1891	420	62.1%	15	0	0	3.1	42.8	6.7
3/1	Upper Gungate Left	O	C4:E		1	68	-	157	2015	581	27.0%	119	38	0	0.2	5.0	0.6
3/2+3/3	Upper Gungate Ahead Right	U+O	C4:B		1	40	-	480	1895:1712	859+109	49.6 : 49.6%	54	0	0	2.8	20.7	7.8

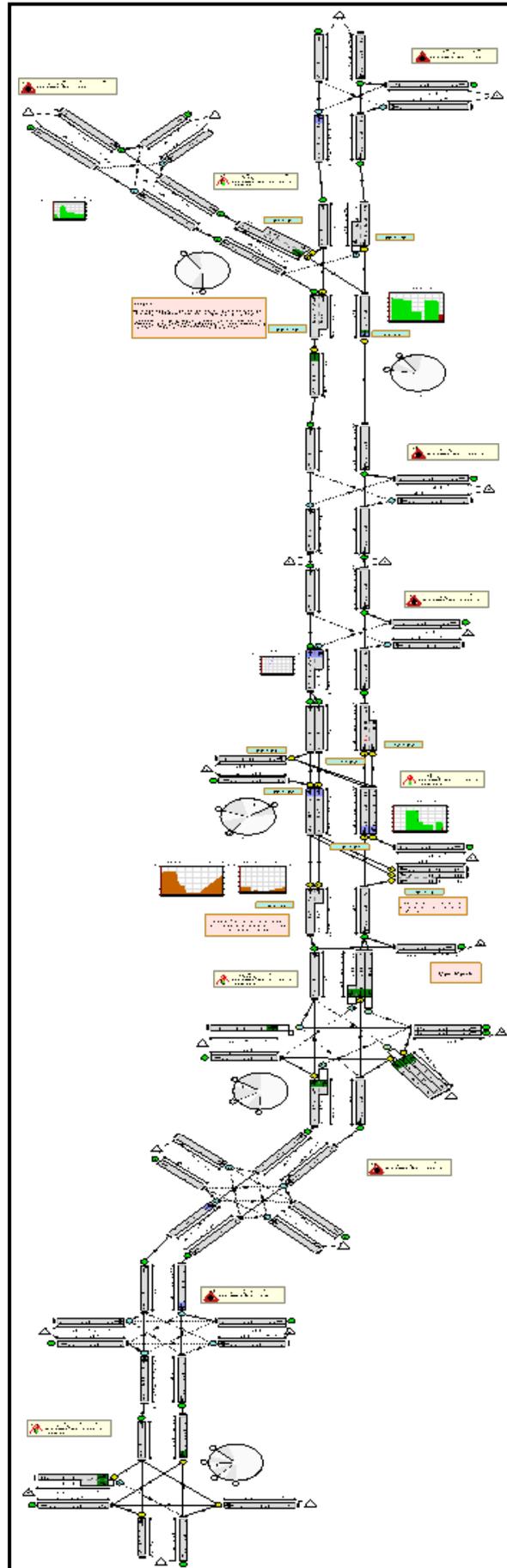
Basic Results Summary

4/1	Lower Gungate U-Turn Left	U	C4:D		1	13	-	126	1753	390	32.3%	-	-	-	1.3	36.2	2.9	
4/2	Lower Gungate Ahead	O	C4:D		1	13	-	57	1772	160	35.7%	56	0	1	0.8	52.3	1.4	
4/3	Lower Gungate Right	U	C4:D		1	13	-	92	1657	368	25.0%	-	-	-	0.9	35.3	2.1	
J10: Lichfield Street Silver Street	-	-	-		-	-	-	-	-	-	84.9%	32	0	0	13.4	-	-	
1/1	Silver St Ahead Left	U	C2:D		1	7	-	63	1804	131	48.0%	-	-	-	1.3	75.1	2.3	
2/1+2/2	Lichfield St Left Right	U+O	C2:A		1	58	-	885	1814:1747	1005+38	84.9 : 84.9%	32	0	0	7.5	30.6	24.9	
3/1	Aldergate Ahead Right	U	C2:B		1	61	-	543	1706	1024	53.0%	-	-	-	2.5	16.6	10.2	
4/1	Church St Right Left Ahead	U	C2:C		1	10	-	107	1830	183	58.5%	-	-	-	2.1	70.6	3.8	
		C1	Stream: 1	PRC for Signalled Lanes (%):	-0.8	Total Delay for Signalled Lanes (pcuHr):				35.66	Cycle Time (s):		102					
		C1	Stream: 2	PRC for Signalled Lanes (%):	115.1	Total Delay for Signalled Lanes (pcuHr):				0.64	Cycle Time (s):		102					
		C2		PRC for Signalled Lanes (%):	6.0	Total Delay for Signalled Lanes (pcuHr):				13.44	Cycle Time (s):		110					
		C3	Stream: 1	PRC for Signalled Lanes (%):	-8.0	Total Delay for Signalled Lanes (pcuHr):				15.21	Cycle Time (s):		78					
		C4		PRC for Signalled Lanes (%):	0.1	Total Delay for Signalled Lanes (pcuHr):				18.38	Cycle Time (s):		90					
		C5		PRC for Signalled Lanes (%):	24.2	Total Delay for Signalled Lanes (pcuHr):				1.87	Cycle Time (s):		78					
				PRC Over All Lanes (%):	-8.6	Total Delay Over All Lanes(pcuHr):				108.18								

Basic Results Summary

Scenario 3: '3' (FG62: 'AM1 2029 + Arkalls1000 (ST)', Plan 2: 'Peds J9')

Network Layout Diagram



Basic Results Summary

Network Results

Basic Results Summary

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Gungate Network 2017 + Mode Mitigation	-	-	-		-	-	-	-	-	-	88.8%	1308	64	2	67.5	-	-
J1: Ashby Road Ashby Road	-	-	-		-	-	-	-	-	-	48.1%	253	0	0	0.8	-	-
2/1	B5493 Ashby Road NB Ahead Right	O	-		-	-	-	606	2000	1259	48.1%	142	0	0	0.6	3.6	6.3
3/1	Ashby Road Left Right	O	-		-	-	-	111	Inf	438	25.4%	111	0	0	0.2	5.5	0.2
J2: Comberford Road Wigginton Road	-	-	-		-	-	-	-	-	-	36.0%	284	0	0	0.4	-	-
2/1	A513 Comberford Road NB Ahead Right	O	-		-	-	-	482	2000	1339	36.0%	129	0	0	0.3	2.1	0.3
3/1	Wigginton Road Left Right	O	-		-	-	-	155	Inf	627	24.7%	155	0	0	0.2	3.8	0.2
J3: Upper Gungate College Access	-	-	-		-	-	-	-	-	-	46.4%	0	0	0	0.4	-	-
2/1	Upper Gungate NB Ahead Right	O	-		-	-	-	927	2000	2000	46.4%	0	0	0	0.4	1.7	0.4
3/1	College Access Left Right	O	-		-	-	-	0	Inf	251	0.0%	0	0	0	0.0	0.0	0.0
J4: Upper Gungate Croft Street	-	-	-		-	-	-	-	-	-	46.1%	273	0	0	1.4	-	-

Basic Results Summary

2/1+2/2	Upper Gungate NB Ahead Right	U+O	-	-	-	-	1067	2000: Inf	1958+356	46.1 : 46.1%	164	0	0	0.8	2.6	15.0
3/1	Croft Street Left Right	O	-	-	-	-	109	Inf	253	43.1%	109	0	0	0.6	19.1	1.6
J5: Aldergate Corporation Street	-	-	-	-	-	-	-	-	-	33.8%	0	0	0	0.4	-	-
1/1	Aldergate SB Ahead Left Right	O	-	-	-	-	524	2000	2000	26.2%	0	0	0	0.2	1.2	0.2
2/1	Aldergate NB Ahead Right Left	O	-	-	-	-	676	2000	2000	33.8%	0	0	0	0.3	1.4	0.3
3/1	Corporation Street Left Right Ahead	O	-	-	-	-	0	Inf	379	0.0%	0	0	0	0.0	0.0	0.0
7/1	Car Park Right Left Ahead	O	-	-	-	-	0	Inf	500	0.0%	0	0	0	0.0	0.0	0.0
J6: Aldergate St John Street	-	-	-	-	-	-	-	-	-	33.8%	0	0	0	0.4	-	-
1/1	Aldergate SB Ahead Right Left	O	-	-	-	-	524	2000	2000	26.2%	0	0	0	0.2	1.2	0.2
2/1	Sanbach Road South NB Ahead Left Right	O	-	-	-	-	676	2000	2000	33.8%	0	0	0	0.3	1.4	0.3
3/1	Car Park Left Right Ahead	O	-	-	-	-	0	Inf	367	0.0%	0	0	0	0.0	0.0	0.0
4/1	St John Street Right Left Ahead	O	-	-	-	-	0	Inf	525	0.0%	0	0	0	0.0	0.0	0.0
J7: Ashby Rd Comberford Rd	-	-	-	-	-	-	-	-	-	84.0%	72	0	0	17.6	-	-
1/1+1/2	Upper Gungate Left Ahead	U	- C3:A	-	-	-	927	1934:1975	613+773	66.8 : 66.8%	-	-	-	2.8	10.9	16.2
2/2+2/1	Comberford Rd Left Right	U	C3:C	1	29	-	557	1820:1697	557+106	84.0 : 84.0%	-	-	-	6.7	43.0	13.4
3/1+3/2	Ashby Rd Right Ahead	U+O	C3:B	1	47	-	845	1915:1730	960+89	80.5 : 80.5%	72	0	0	6.0	25.6	18.3

Basic Results Summary

6/1	Ahead	U	C5:A		1	68	-	1241	1965	1747	71.0%	-	-	-	1.3	3.7	1.9
7/1	Northbound Entry Ahead	U	C5:A		1	68	-	927	1965	1747	53.1%	-	-	-	0.8	3.2	5.2
J8: Offdrive	-	-	-		-	-	-	-	-	-	88.8%	0	0	0	28.3	-	-
1/1+1/2	Upper Gungate (S) Ahead	U	C1:D		1	29	-	486	1975:2115	670+144	59.7 : 59.7%	-	-	-	3.2	23.8	8.1
2/1	Upper Gungate NB Left Ahead	U	C1:B		1	59	-	736	1941	1493	49.3%	-	-	-	0.6	2.8	0.8
2/2	Upper Gungate NB Ahead	U	C1:B		1	59	-	457	2115	1627	28.1%	-	-	-	0.2	1.7	0.3
3/1	Salters Lane Right Left	U	C1:G		1	8	-	184	1927	222	82.8%	-	-	-	3.9	75.9	6.0
4/2+4/1	Upper Gungate (N) Ahead	U	C1:K C1:A		1	36:58	-	1280	1990:2015	626+815	88.8 : 88.8%	-	-	-	7.1	19.9	16.3
5/1	Upper Gungate SB Left	U	C1:E		1	62	-	819	1942	1569	52.2%	-	-	-	0.8	3.5	3.0
5/2	Upper Gungate SB Ahead	U	C1:C		1	49	-	632	1990	1276	49.5%	-	-	-	0.5	3.1	0.6
6/2+6/1	Offdrive Right Left	U	C1:F		1	16	-	496	1928:1949	390+186	86.1 : 86.1%	-	-	-	6.7	48.9	9.7
6/3	Offdrive Right	U	C1:F		1	16	-	371	2059	449	82.7%	-	-	-	5.3	51.0	9.9
J9: Hospital St	-	-	-		-	-	-	-	-	-	60.9%	412	64	2	10.0	-	-
1/1+1/2	Aldergate Left Ahead Right	U+O	C4:A		1	46	-	676	1930:1858	919+190	60.9 : 60.9%	115	0	1	3.4	17.9	10.8
2/1	Hospital St Right Left Ahead	O	C4:C		1	7	-	116	1888	252	46.1%	17	0	0	1.6	49.4	3.1
3/1	Upper Gungate Left	O	C4:E		1	68	-	220	2015	579	38.0%	156	64	0	0.4	6.7	1.2
3/2+3/3	Upper Gungate Ahead Right	U+O	C4:B		1	46	-	547	1895:1712	863+193	51.8 : 51.8%	100	0	0	2.6	17.3	8.2

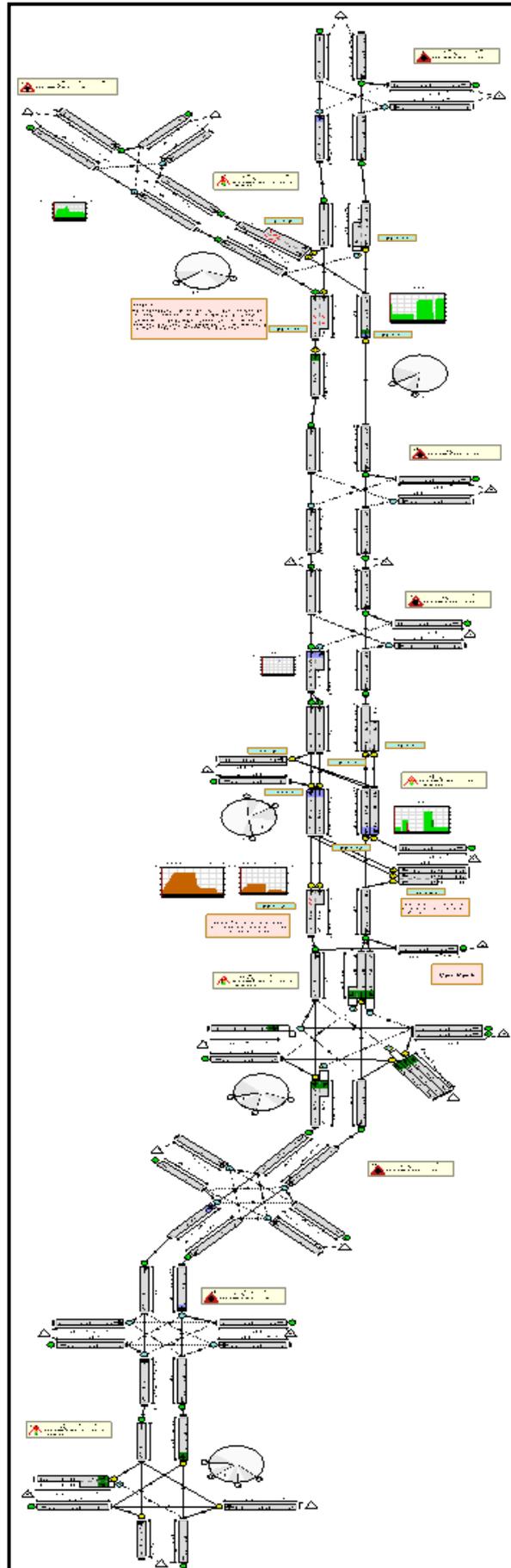
Basic Results Summary

4/1	Lower Gungate U-Turn Left	U	C4:D		1	7	-	92	1781	237	38.7%	-	-	-	1.2	48.0	2.4	
4/2	Lower Gungate Ahead	O	C4:D		1	7	-	24	1772	138	17.4%	24	0	0	0.3	51.3	0.6	
4/3	Lower Gungate Right	U	C4:D		1	7	-	39	1657	221	17.7%	-	-	-	0.5	44.5	1.0	
J10: Lichfield Street Silver Street	-	-	-		-	-	-	-	-	-	61.4%	14	0	0	7.7	-	-	
1/1	Silver St Ahead Left	U	C2:D		1	7	-	27	1775	129	20.9%	-	-	-	0.5	65.7	0.9	
2/1+2/2	Lichfield St Left Right	U+O	C2:A		1	60	-	649	1814:1747	1034+23	61.4 : 61.4%	14	0	0	3.5	19.4	13.5	
3/1	Aldergate Ahead Right	U	C2:B		1	63	-	524	1705	1038	50.5%	-	-	-	2.3	15.6	9.5	
4/1	Church St Right Left Ahead	U	C2:C		1	8	-	71	1808	148	48.0%	-	-	-	1.4	71.4	2.5	
		C1	Stream: 1	PRC for Signalled Lanes (%):	1.3			Total Delay for Signalled Lanes (pcuHr):		27.50			Cycle Time (s):		78			
		C1	Stream: 2	PRC for Signalled Lanes (%):	72.4			Total Delay for Signalled Lanes (pcuHr):		0.79			Cycle Time (s):		78			
		C2		PRC for Signalled Lanes (%):	46.6			Total Delay for Signalled Lanes (pcuHr):		7.67			Cycle Time (s):		110			
		C3	Stream: 1	PRC for Signalled Lanes (%):	7.1			Total Delay for Signalled Lanes (pcuHr):		12.67			Cycle Time (s):		90			
		C4		PRC for Signalled Lanes (%):	47.7			Total Delay for Signalled Lanes (pcuHr):		10.04			Cycle Time (s):		90			
		C5		PRC for Signalled Lanes (%):	26.7			Total Delay for Signalled Lanes (pcuHr):		2.12			Cycle Time (s):		90			
				PRC Over All Lanes (%):	1.3			Total Delay Over All Lanes(pcuHr):		67.46								

Basic Results Summary

Scenario 4: '4' (FG63: 'PM 2029 + Arkalls1000 (ST)', Plan 2: 'Peds J9')

Network Layout Diagram



Basic Results Summary

Network Results

Basic Results Summary

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Gungate Network 2017 + Mode Mitigation	-	-	-		-	-	-	-	-	-	97.4%	1212	38	13	105.9	-	-
J1: Ashby Road Ashby Road	-	-	-		-	-	-	-	-	-	53.1%	206	0	0	0.8	-	-
2/1	B5493 Ashby Road NB Ahead Right	O	-		-	-	-	937	2000	1766	53.1%	63	0	0	0.6	2.3	0.8
3/1	Ashby Road Left Right	O	-		-	-	-	143	Inf	517	27.7%	143	0	0	0.2	4.8	0.2
J2: Comberford Road Wigginton Road	-	-	-		-	-	-	-	-	-	48.6%	345	0	0	0.6	-	-
2/1	A513 Comberford Road NB Ahead Right	O	-		-	-	-	605	2000	1246	48.6%	199	0	0	0.5	2.8	0.5
3/1	Wigginton Road Left Right	O	-		-	-	-	146	Inf	627	23.3%	146	0	0	0.2	3.7	0.2
J3: Upper Gungate College Access	-	-	-		-	-	-	-	-	-	70.1%	0	0	0	1.2	-	-
2/1	Upper Gungate NB Ahead Right	O	-		-	-	-	1402	2000	2000	70.1%	0	0	0	1.2	3.0	1.2
3/1	College Access Left Right	O	-		-	-	-	0	Inf	261	0.0%	0	0	0	0.0	0.0	0.0
J4: Upper Gungate Croft Street	-	-	-		-	-	-	-	-	-	69.5%	130	0	0	3.4	-	-

Basic Results Summary

2/1+2/2	Upper Gungate NB Ahead Right	U+O	-	-	-	-	1445	2000: Inf	1990+88	69.5 : 69.5%	61	0	0	2.8	6.9	40.9
3/1	Croft Street Left Right	O	-	-	-	-	69	Inf	166	41.6%	69	0	0	0.7	35.9	1.8
J5: Aldergate Corporation Street	-	-	-	-	-	-	-	-	-	46.4%	0	0	0	0.6	-	-
1/1	Aldergate SB Ahead Left Right	O	-	-	-	-	541	2000	2000	27.1%	0	0	0	0.2	1.2	0.2
2/1	Aldergate NB Ahead Right Left	O	-	-	-	-	927	2000	2000	46.4%	0	0	0	0.4	1.7	0.4
3/1	Corporation Street Left Right Ahead	O	-	-	-	-	0	Inf	328	0.0%	0	0	0	0.0	0.0	0.0
7/1	Car Park Right Left Ahead	O	-	-	-	-	0	Inf	441	0.0%	0	0	0	0.0	0.0	0.0
J6: Aldergate St John Street	-	-	-	-	-	-	-	-	-	46.4%	0	0	0	0.6	-	-
1/1	Aldergate SB Ahead Right Left	O	-	-	-	-	541	2000	2000	27.1%	0	0	0	0.2	1.2	0.2
2/1	Sanbach Road South NB Ahead Left Right	O	-	-	-	-	927	2000	2000	46.4%	0	0	0	0.4	1.7	0.4
3/1	Car Park Left Right Ahead	O	-	-	-	-	0	Inf	316	0.0%	0	0	0	0.0	0.0	0.0
4/1	St John Street Right Left Ahead	O	-	-	-	-	0	Inf	468	0.0%	0	0	0	0.0	0.0	0.0
J7: Ashby Rd Comberford Rd	-	-	-	-	-	-	-	-	-	97.4%	63	0	9	31.9	-	-
1/1+1/2	Upper Gungate Left Ahead	U	- C3:A	-	-	-	1402	1934:1975	547+892	97.4 : 97.4%	-	-	-	14.9	38.3	33.5
2/2+2/1	Comberford Rd Left Right	U	C3:C	1	20	-	544	1820:1697	490+70	97.2 : 97.2%	-	-	-	12.5	82.8	18.8
3/1+3/2	Ashby Rd Right Ahead	U+O	C3:B	1	44	-	603	1915:1730	1011+119	52.5 : 60.4%	63	0	9	2.6	15.7	7.4

Basic Results Summary

6/1	Ahead	U	C5:A		1	56	-	1007	1965	1940	51.9%	-	-	-	0.5	1.9	0.5
7/1	Northbound Entry Ahead	U	C5:A		1	56	-	1402	1965	1940	72.3%	-	-	-	1.3	3.4	2.5
J8: Offadrive	-	-	-		-	-	-	-	-	-	88.9%	0	0	0	35.2	-	-
1/1+1/2	Upper Gungate (S) Ahead	U	C1:D		1	46	-	881	1975:2115	693+300	88.8 : 88.8%	-	-	-	9.5	38.7	24.2
2/1	Upper Gungate NB Left Ahead	U	C1:B		1	82	-	950	1940	1579	60.2%	-	-	-	0.8	3.2	1.3
2/2	Upper Gungate NB Ahead	U	C1:B		1	82	-	664	2115	1721	38.6%	-	-	-	0.4	1.9	0.5
3/1	Salters Lane Right Left	U	C1:G		1	9	-	168	1927	189	88.9%	-	-	-	5.2	111.8	7.8
4/2+4/1	Upper Gungate (N) Ahead	U	C1:K C1:A		1	53:81	-	1036	1990:2015	594+904	69.2 : 69.2%	-	-	-	3.3	11.3	8.1
5/1	Upper Gungate SB Left	U	C1:E		1	86	-	689	1942	1656	41.6%	-	-	-	0.6	3.3	3.9
5/2	Upper Gungate SB Ahead	U	C1:C		1	67	-	503	1990	1327	37.9%	-	-	-	0.4	3.0	0.6
6/2+6/1	Offadrive Right Left	U	C1:F		1	22	-	471	1928:1949	382+155	87.7 : 87.7%	-	-	-	8.0	61.2	13.1
6/3	Offadrive Right	U	C1:F		1	22	-	398	2059	464	85.7%	-	-	-	7.0	63.0	13.5
J9: Hospital St	-	-	-		-	-	-	-	-	-	89.6%	436	38	3	18.2	-	-
1/1+1/2	Aldergate Left Ahead Right	U+O	C4:A		1	40	-	927	1935:1858	815+219	89.6 : 89.6%	194	0	2	9.1	35.5	23.6
2/1	Hospital St Right Left Ahead	O	C4:C		1	13	-	261	1891	420	62.1%	15	0	0	3.1	42.8	6.7
3/1	Upper Gungate Left	O	C4:E		1	68	-	157	2015	581	27.0%	119	38	0	0.2	5.0	0.6
3/2+3/3	Upper Gungate Ahead Right	U+O	C4:B		1	40	-	477	1895:1712	860+107	49.3 : 49.3%	53	0	0	2.7	20.6	7.8

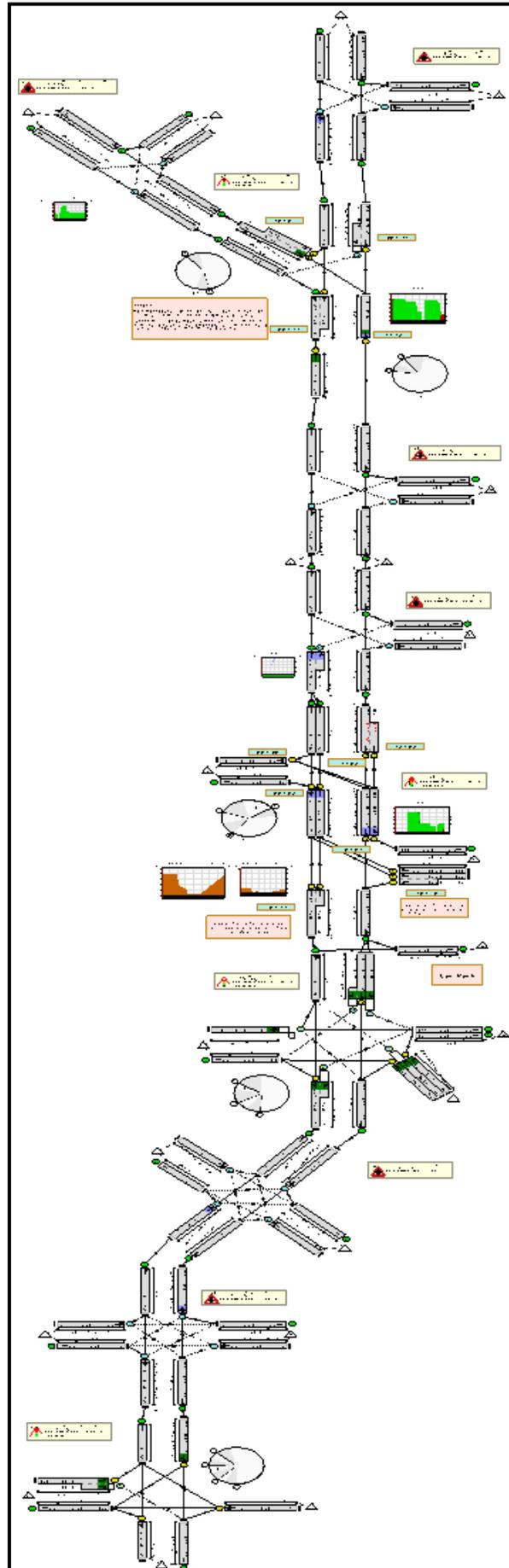
Basic Results Summary

4/1	Lower Gungate U-Turn Left	U	C4:D		1	13	-	126	1753	390	32.3%	-	-	-	1.3	36.2	2.9
4/2	Lower Gungate Ahead	O	C4:D		1	13	-	57	1772	160	35.7%	56	0	1	0.8	52.3	1.4
4/3	Lower Gungate Right	U	C4:D		1	13	-	92	1657	368	25.0%	-	-	-	0.9	35.3	2.1
J10: Lichfield Street Silver Street	-	-	-		-	-	-	-	-	-	84.6%	32	0	0	13.3	-	-
1/1	Silver St Ahead Left	U	C2:D		1	7	-	63	1804	131	48.0%	-	-	-	1.3	75.1	2.3
2/1+2/2	Lichfield St Left Right	U+O	C2:A		1	58	-	882	1814:1747	1005+38	84.6 : 84.6%	32	0	0	7.4	30.3	24.5
3/1	Aldergate Ahead Right	U	C2:B		1	61	-	541	1706	1024	52.9%	-	-	-	2.5	16.6	10.2
4/1	Church St Right Left Ahead	U	C2:C		1	10	-	107	1830	183	58.5%	-	-	-	2.1	70.6	3.8
		C1	Stream: 1	PRC for Signalled Lanes (%):	1.2			Total Delay for Signalled Lanes (pcuHr):		34.55			Cycle Time (s):		102		
		C1	Stream: 2	PRC for Signalled Lanes (%):	116.4			Total Delay for Signalled Lanes (pcuHr):		0.64			Cycle Time (s):		102		
		C2		PRC for Signalled Lanes (%):	6.4			Total Delay for Signalled Lanes (pcuHr):		13.33			Cycle Time (s):		110		
		C3	Stream: 1	PRC for Signalled Lanes (%):	-8.0			Total Delay for Signalled Lanes (pcuHr):		15.15			Cycle Time (s):		78		
		C4		PRC for Signalled Lanes (%):	0.4			Total Delay for Signalled Lanes (pcuHr):		18.19			Cycle Time (s):		90		
		C5		PRC for Signalled Lanes (%):	24.5			Total Delay for Signalled Lanes (pcuHr):		1.85			Cycle Time (s):		78		
				PRC Over All Lanes (%):	-8.2			Total Delay Over All Lanes(pcuHr):		105.88							

Basic Results Summary

Scenario 5: '5' (FG64: 'AM1 2029 + Arkalls1000 + Browns2', Plan 2: 'Peds J9')

Network Layout Diagram



Basic Results Summary

Network Results

Basic Results Summary

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Gungate Network 2017 + Mode Mitigation	-	-	-		-	-	-	-	-	-	95.4%	1400	64	2	82.0	-	-
J1: Ashby Road Ashby Road	-	-	-		-	-	-	-	-	-	50.5%	253	0	0	0.9	-	-
2/1	B5493 Ashby Road NB Ahead Right	O	-		-	-	-	643	2000	1272	50.5%	142	0	0	0.8	4.3	8.2
3/1	Ashby Road Left Right	O	-		-	-	-	111	Inf	423	26.2%	111	0	0	0.2	5.8	0.2
J2: Comberford Road Wigginton Road	-	-	-		-	-	-	-	-	-	38.9%	372	0	0	0.6	-	-
2/1	A513 Comberford Road NB Ahead Right	O	-		-	-	-	502	2000	1291	38.9%	149	0	0	0.3	2.3	0.3
3/1	Wigginton Road Left Right	O	-		-	-	-	223	Inf	625	35.7%	223	0	0	0.3	4.5	0.3
J3: Upper Gungate College Access	-	-	-		-	-	-	-	-	-	48.9%	0	0	0	0.5	-	-
2/1	Upper Gungate NB Ahead Right	O	-		-	-	-	978	2000	2000	48.9%	0	0	0	0.5	1.8	0.5
3/1	College Access Left Right	O	-		-	-	-	0	Inf	204	0.0%	0	0	0	0.0	0.0	0.0
J4: Upper Gungate Croft Street	-	-	-		-	-	-	-	-	-	49.6%	273	0	0	1.7	-	-

Basic Results Summary

2/1+2/2	Upper Gungate NB Ahead Right	U+O	-	-	-	-	1118	2000: Inf	1960+337	48.7 : 48.7%	164	0	0	0.9	3.0	17.1
3/1	Croft Street Left Right	O	-	-	-	-	109	Inf	220	49.6%	109	0	0	0.8	25.8	1.9
J5: Aldergate Corporation Street	-	-	-	-	-	-	-	-	-	34.9%	0	0	0	0.5	-	-
1/1	Aldergate SB Ahead Left Right	O	-	-	-	-	559	2000	2000	28.0%	0	0	0	0.2	1.2	0.2
2/1	Aldergate NB Ahead Right Left	O	-	-	-	-	697	2000	2000	34.9%	0	0	0	0.3	1.4	0.3
3/1	Corporation Street Left Right Ahead	O	-	-	-	-	0	Inf	367	0.0%	0	0	0	0.0	0.0	0.0
7/1	Car Park Right Left Ahead	O	-	-	-	-	0	Inf	491	0.0%	0	0	0	0.0	0.0	0.0
J6: Aldergate St John Street	-	-	-	-	-	-	-	-	-	34.9%	0	0	0	0.5	-	-
1/1	Aldergate SB Ahead Right Left	O	-	-	-	-	559	2000	2000	28.0%	0	0	0	0.2	1.2	0.2
2/1	Sanbach Road South NB Ahead Left Right	O	-	-	-	-	697	2000	2000	34.9%	0	0	0	0.3	1.4	0.3
3/1	Car Park Left Right Ahead	O	-	-	-	-	0	Inf	355	0.0%	0	0	0	0.0	0.0	0.0
4/1	St John Street Right Left Ahead	O	-	-	-	-	0	Inf	518	0.0%	0	0	0	0.0	0.0	0.0
J7: Ashby Rd Comberford Rd	-	-	-	-	-	-	-	-	-	89.3%	72	0	0	23.0	-	-
1/1+1/2	Upper Gungate Left Ahead	U	- C3:A	-	-	-	978	1934:1975	580+739	74.2 : 74.2%	-	-	-	3.7	13.5	16.6
2/2+2/1	Comberford Rd Left Right	U	C3:C	1	32	-	631	1820:1697	610+108	87.8 : 87.8%	-	-	-	7.9	44.8	16.2
3/1+3/2	Ashby Rd Right Ahead	U+O	C3:B	1	44	-	880	1915:1730	905+81	89.3 : 89.3%	72	0	0	8.8	36.1	22.9

Basic Results Summary

6/1	Ahead	U	C5:A		1	68	-	1344	1965	1747	76.9%	-	-	-	1.7	4.6	2.4
7/1	Northbound Entry Ahead	U	C5:A		1	68	-	978	1965	1747	56.0%	-	-	-	0.9	3.4	5.8
J8: Offdrive	-	-	-		-	-	-	-	-	-	95.4%	0	0	0	35.6	-	-
1/1+1/2	Upper Gungate (S) Ahead	U	C1:D		1	29	-	508	1975:2115	666+149	62.3 : 62.3%	-	-	-	3.4	24.4	8.5
2/1	Upper Gungate NB Left Ahead	U	C1:B		1	59	-	765	1942	1494	51.2%	-	-	-	0.6	2.8	0.9
2/2	Upper Gungate NB Ahead	U	C1:B		1	59	-	479	2115	1627	29.4%	-	-	-	0.2	1.7	0.3
3/1	Salters Lane Right Left	U	C1:G		1	8	-	184	1927	222	82.8%	-	-	-	3.9	75.9	6.0
4/2+4/1	Upper Gungate (N) Ahead	U	C1:K C1:A		1	36:58	-	1383	1990:2015	623+826	95.4 : 95.4%	-	-	-	12.2	31.7	25.3
5/1	Upper Gungate SB Left	U	C1:E		1	62	-	883	1942	1569	56.3%	-	-	-	0.9	3.7	3.1
5/2	Upper Gungate SB Ahead	U	C1:C		1	49	-	671	1990	1276	52.6%	-	-	-	0.6	3.3	0.7
6/2+6/1	Offdrive Right Left	U	C1:F		1	16	-	510	1928:1949	391+179	89.5 : 89.5%	-	-	-	7.8	54.8	11.2
6/3	Offdrive Right	U	C1:F		1	16	-	386	2059	449	86.0%	-	-	-	6.0	55.7	10.9
J9: Hospital St	-	-	-		-	-	-	-	-	-	62.9%	416	64	2	10.6	-	-
1/1+1/2	Aldergate Left Ahead Right	U+O	C4:A		1	46	-	697	1930:1858	924+184	62.9 : 62.9%	115	0	1	3.6	18.5	11.5
2/1	Hospital St Right Left Ahead	O	C4:C		1	7	-	116	1888	252	46.1%	17	0	0	1.6	49.4	3.1
3/1	Upper Gungate Left	O	C4:E		1	68	-	222	2015	579	38.4%	158	64	0	0.4	6.7	1.2
3/2+3/3	Upper Gungate Ahead Right	U+O	C4:B		1	46	-	584	1895:1712	871+184	55.4 : 55.4%	102	0	0	2.9	18.0	9.1

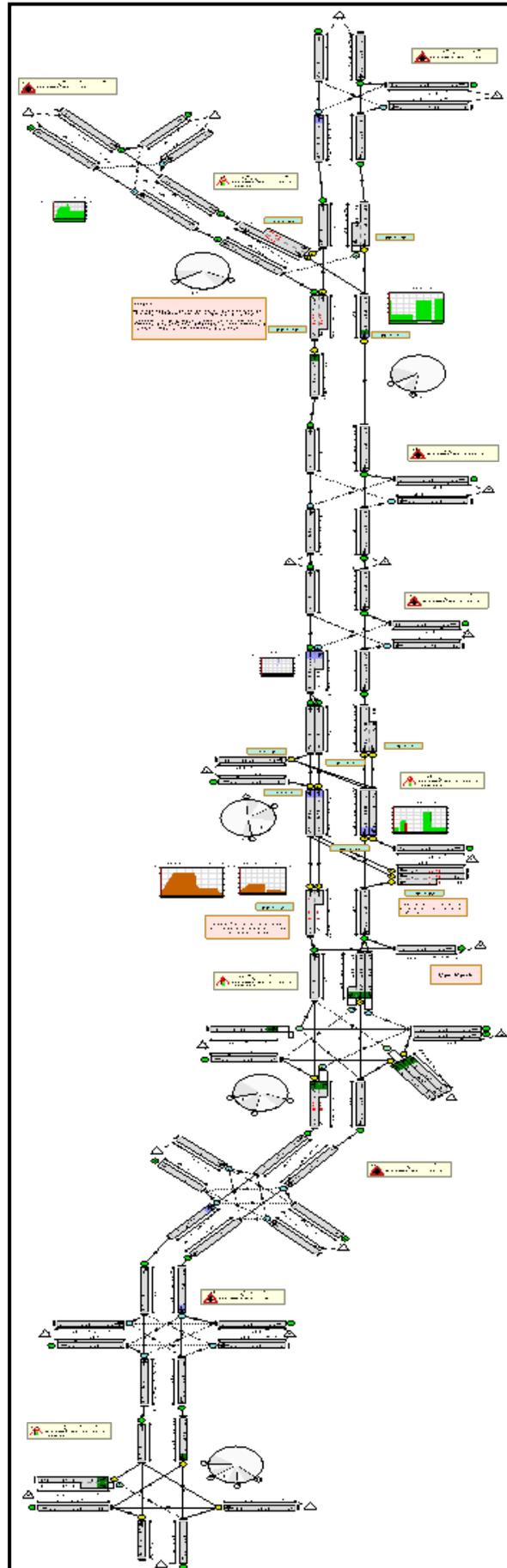
Basic Results Summary

4/1	Lower Gungate U-Turn Left	U	C4:D		1	7	-	92	1781	237	38.7%	-	-	-	1.2	48.0	2.4	
4/2	Lower Gungate Ahead	O	C4:D		1	7	-	25	1772	138	18.1%	25	0	0	0.4	51.6	0.7	
4/3	Lower Gungate Right	U	C4:D		1	7	-	39	1657	221	17.7%	-	-	-	0.5	44.5	1.0	
J10: Lichfield Street Silver Street	-	-	-		-	-	-	-	-	-	63.4%	14	0	0	8.1	-	-	
1/1	Silver St Ahead Left	U	C2:D		1	7	-	27	1775	129	20.9%	-	-	-	0.5	65.7	0.9	
2/1+2/2	Lichfield St Left Right	U+O	C2:A		1	60	-	670	1814:1747	1035+22	63.4 : 63.4%	14	0	0	3.7	19.9	14.2	
3/1	Aldergate Ahead Right	U	C2:B		1	63	-	559	1705	1038	53.8%	-	-	-	2.5	16.2	10.4	
4/1	Church St Right Left Ahead	U	C2:C		1	8	-	71	1808	148	48.0%	-	-	-	1.4	71.4	2.5	
		C1	Stream: 1	PRC for Signalled Lanes (%):	-6.0			Total Delay for Signalled Lanes (pcuHr):		34.69			Cycle Time (s):		78			
		C1	Stream: 2	PRC for Signalled Lanes (%):	59.9			Total Delay for Signalled Lanes (pcuHr):		0.90			Cycle Time (s):		78			
		C2		PRC for Signalled Lanes (%):	42.0			Total Delay for Signalled Lanes (pcuHr):		8.13			Cycle Time (s):		110			
		C3	Stream: 1	PRC for Signalled Lanes (%):	0.8			Total Delay for Signalled Lanes (pcuHr):		16.69			Cycle Time (s):		90			
		C4		PRC for Signalled Lanes (%):	43.1			Total Delay for Signalled Lanes (pcuHr):		10.58			Cycle Time (s):		90			
		C5		PRC for Signalled Lanes (%):	17.0			Total Delay for Signalled Lanes (pcuHr):		2.66			Cycle Time (s):		90			
				PRC Over All Lanes (%):	-6.0			Total Delay Over All Lanes(pcuHr):		81.95								

Basic Results Summary

Scenario 6: '6' (FG65: 'PM 2029 + Arkalls1000 + Browns2', Plan 2: 'Peds J9')

Network Layout Diagram



Basic Results Summary

Network Results

Basic Results Summary

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Gungate Network 2017 + Mode Mitigation	-	-	-		-	-	-	-	-	-	103.9%	1302	38	23	134.1	-	-
J1: Ashby Road Ashby Road	-	-	-		-	-	-	-	-	-	53.1%	206	0	0	0.8	-	-
2/1	B5493 Ashby Road NB Ahead Right	O	-		-	-	-	941	2000	1766	53.1%	63	0	0	0.6	2.3	0.8
3/1	Ashby Road Left Right	O	-		-	-	-	143	Inf	515	27.8%	143	0	0	0.2	4.8	0.2
J2: Comberford Road Wigginton Road	-	-	-		-	-	-	-	-	-	57.8%	443	0	0	0.9	-	-
2/1	A513 Comberford Road NB Ahead Right	O	-		-	-	-	671	2000	1160	57.8%	264	0	0	0.7	3.7	0.7
3/1	Wigginton Road Left Right	O	-		-	-	-	179	Inf	627	28.5%	179	0	0	0.2	4.0	0.2
J3: Upper Gungate College Access	-	-	-		-	-	-	-	-	-	73.6%	0	0	0	1.4	-	-
2/1	Upper Gungate NB Ahead Right	O	-		-	-	-	1471	2000	2000	73.6%	0	0	0	1.4	3.4	1.4
3/1	College Access Left Right	O	-		-	-	-	0	Inf	248	0.0%	0	0	0	0.0	0.0	0.0
J4: Upper Gungate Croft Street	-	-	-		-	-	-	-	-	-	73.0%	130	0	0	4.6	-	-

Basic Results Summary

2/1+2/2	Upper Gungate NB Ahead Right	U+O	-	-	-	-	1514	2000: Inf	1991+84	73.0 : 73.0%	61	0	0	3.6	8.4	44.5
3/1	Croft Street Left Right	O	-	-	-	-	69	Inf	133	51.7%	69	0	0	1.1	55.9	2.1
J5: Aldergate Corporation Street	-	-	-	-	-	-	-	-	-	47.7%	0	0	0	0.6	-	-
1/1	Aldergate SB Ahead Left Right	O	-	-	-	-	555	2000	2000	27.5%	0	0	0	0.2	1.2	0.2
2/1	Aldergate NB Ahead Right Left	O	-	-	-	-	953	2000	2000	47.7%	0	0	0	0.5	1.7	0.5
3/1	Corporation Street Left Right Ahead	O	-	-	-	-	0	Inf	321	0.0%	0	0	0	0.0	0.0	0.0
7/1	Car Park Right Left Ahead	O	-	-	-	-	0	Inf	434	0.0%	0	0	0	0.0	0.0	0.0
J6: Aldergate St John Street	-	-	-	-	-	-	-	-	-	47.7%	0	0	0	0.6	-	-
1/1	Aldergate SB Ahead Right Left	O	-	-	-	-	555	2000	2000	27.5%	0	0	0	0.2	1.2	0.2
2/1	Sanbach Road South NB Ahead Left Right	O	-	-	-	-	953	2000	2000	47.7%	0	0	0	0.5	1.7	0.5
3/1	Car Park Left Right Ahead	O	-	-	-	-	0	Inf	309	0.0%	0	0	0	0.0	0.0	0.0
4/1	St John Street Right Left Ahead	O	-	-	-	-	0	Inf	461	0.0%	0	0	0	0.0	0.0	0.0
J7: Ashby Rd Comberford Rd	-	-	-	-	-	-	-	-	-	103.9%	57	0	16	50.5	-	-
1/1+1/2	Upper Gungate Left Ahead	U	- C3:A	-	-	-	1471	1934:1975	599+875	99.8 : 99.8%	-	-	-	22.1	54.0	43.1
2/2+2/1	Comberford Rd Left Right	U	C3:C	1	20	-	577	1820:1697	490+65	103.9 : 103.9%	-	-	-	23.7	147.8	30.6

Basic Results Summary

3/1+3/2	Ashby Rd Right Ahead	U+O	C3:B		1	44	-	611	1915:1730	1011+120	53.2 : 60.8%	57	0	16	2.6	15.5	7.4
6/1	Ahead	U	C5:A		1	56	-	1047	1965	1940	53.0%	-	-	-	0.6	2.0	0.6
7/1	Northbound Entry Ahead	U	C5:A		1	56	-	1471	1965	1940	75.8%	-	-	-	1.6	3.8	2.8
J8: Offadrive	-	-	-		-	-	-	-	-	-	92.1%	0	0	0	40.4	-	-
1/1+1/2	Upper Gungate (S) Ahead	U	C1:D		1	46	-	910	1975:2115	702+287	92.1 : 92.1%	-	-	-	11.3	44.6	27.3
2/1	Upper Gungate NB Left Ahead	U	C1:B		1	82	-	998	1942	1580	63.2%	-	-	-	1.0	3.4	1.4
2/2	Upper Gungate NB Ahead	U	C1:B		1	82	-	685	2115	1721	39.8%	-	-	-	0.4	1.9	0.6
3/1	Salters Lane Right Left	U	C1:G		1	9	-	168	1927	189	88.9%	-	-	-	5.2	111.8	7.8
4/2+4/1	Upper Gungate (N) Ahead	U	C1:K C1:A		1	53:81	-	1076	1990:2015	594+903	70.6 : 70.6%	-	-	-	3.4	11.5	8.5
5/1	Upper Gungate SB Left	U	C1:E		1	86	-	713	1942	1656	42.4%	-	-	-	0.7	3.3	3.9
5/2	Upper Gungate SB Ahead	U	C1:C		1	67	-	519	1990	1327	38.6%	-	-	-	0.4	3.1	0.6
6/2+6/1	Offadrive Right Left	U	C1:F		1	22	-	488	1928:1949	384+148	91.7 : 91.7%	-	-	-	9.6	70.6	15.2
6/3	Offadrive Right	U	C1:F		1	22	-	421	2059	464	90.7%	-	-	-	8.6	73.4	15.7
J9: Hospital St	-	-	-		-	-	-	-	-	-	92.3%	434	38	7	19.9	-	-
1/1+1/2	Aldergate Left Ahead Right	U+O	C4:A		1	40	-	953	1935:1858	820+212	92.3 : 92.3%	194	0	2	10.7	40.3	25.9
2/1	Hospital St Right Left Ahead	O	C4:C		1	13	-	262	1891	420	62.3%	15	0	0	3.1	42.9	6.7
3/1	Upper Gungate Left	O	C4:E		1	68	-	158	2015	581	26.9%	118	38	0	0.2	5.0	0.6

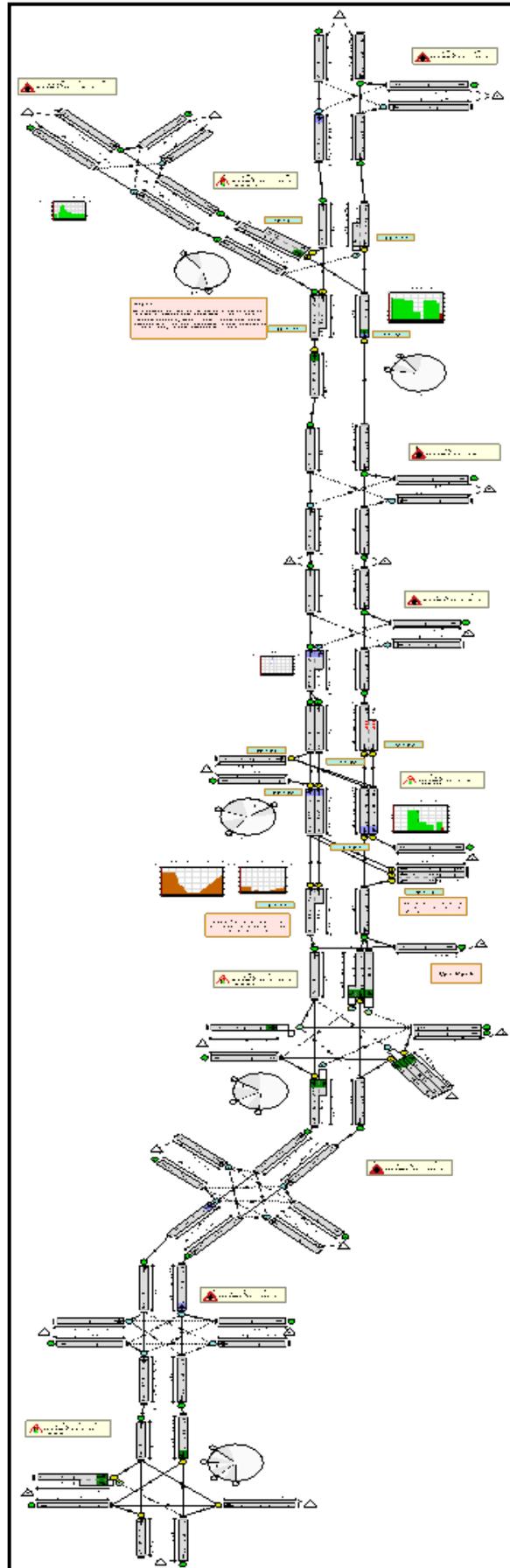
Basic Results Summary

3/2+3/3	Upper Gungate Ahead Right	U+O	C4:B		1	40	-	492	1895:1712	861+106	50.3 : 50.3%	49	0	4	2.8	21.0	8.0
4/1	Lower Gungate U-Turn Left	U	C4:D		1	13	-	126	1753	390	32.3%	-	-	-	1.3	36.2	2.9
4/2	Lower Gungate Ahead	O	C4:D		1	13	-	59	1772	160	36.9%	58	0	1	0.9	52.8	1.5
4/3	Lower Gungate Right	U	C4:D		1	13	-	92	1657	368	25.0%	-	-	-	0.9	35.3	2.1
J10: Lichfield Street Silver Street	-	-	-		-	-	-	-	-	-	87.1%	32	0	0	14.2	-	-
1/1	Silver St Ahead Left	U	C2:D		1	7	-	63	1804	131	48.0%	-	-	-	1.3	75.1	2.3
2/1+2/2	Lichfield St Left Right	U+O	C2:A		1	58	-	908	1814:1747	1006+37	87.1 : 87.1%	32	0	0	8.3	32.8	26.5
3/1	Aldergate Ahead Right	U	C2:B		1	61	-	555	1706	1024	53.7%	-	-	-	2.6	16.8	10.4
4/1	Church St Right Left Ahead	U	C2:C		1	10	-	107	1830	183	58.5%	-	-	-	2.1	70.6	3.8
		C1	Stream: 1 PRC for Signalled Lanes (%):		-2.3		Total Delay for Signalled Lanes (pcuHr):		39.79		Cycle Time (s):		102				
		C1	Stream: 2 PRC for Signalled Lanes (%):		112.4		Total Delay for Signalled Lanes (pcuHr):		0.65		Cycle Time (s):		102				
		C2	PRC for Signalled Lanes (%):		3.3		Total Delay for Signalled Lanes (pcuHr):		14.25		Cycle Time (s):		110				
		C3	Stream: 1 PRC for Signalled Lanes (%):		-15.4		Total Delay for Signalled Lanes (pcuHr):		26.32		Cycle Time (s):		78				
		C4	PRC for Signalled Lanes (%):		-2.5		Total Delay for Signalled Lanes (pcuHr):		19.88		Cycle Time (s):		90				
		C5	PRC for Signalled Lanes (%):		18.7		Total Delay for Signalled Lanes (pcuHr):		2.13		Cycle Time (s):		78				
			PRC Over All Lanes (%):		-15.4		Total Delay Over All Lanes(pcuHr):		134.07								

Basic Results Summary

Scenario 7: '7' (FG66: 'AM1 2029 + Arkalls1000 (ST) + Browns2', Plan 2: 'Peds J9')

Network Layout Diagram



Basic Results Summary

Network Results

Basic Results Summary

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Gungate Network 2017 + Mode Mitigation	-	-	-		-	-	-	-	-	-	93.3%	1399	64	2	75.3	-	-
J1: Ashby Road Ashby Road	-	-	-		-	-	-	-	-	-	48.1%	253	0	0	0.8	-	-
2/1	B5493 Ashby Road NB Ahead Right	O	-		-	-	-	606	2000	1259	48.1%	142	0	0	0.7	3.9	7.1
3/1	Ashby Road Left Right	O	-		-	-	-	111	Inf	437	25.4%	111	0	0	0.2	5.5	0.2
J2: Comberford Road Wigginton Road	-	-	-		-	-	-	-	-	-	38.8%	372	0	0	0.6	-	-
2/1	A513 Comberford Road NB Ahead Right	O	-		-	-	-	502	2000	1293	38.8%	149	0	0	0.3	2.3	0.3
3/1	Wigginton Road Left Right	O	-		-	-	-	223	Inf	627	35.6%	223	0	0	0.3	4.5	0.3
J3: Upper Gungate College Access	-	-	-		-	-	-	-	-	-	47.4%	0	0	0	0.4	-	-
2/1	Upper Gungate NB Ahead Right	O	-		-	-	-	947	2000	2000	47.4%	0	0	0	0.4	1.7	0.4
3/1	College Access Left Right	O	-		-	-	-	0	Inf	224	0.0%	0	0	0	0.0	0.0	0.0
J4: Upper Gungate Croft Street	-	-	-		-	-	-	-	-	-	47.1%	273	0	0	1.5	-	-

Basic Results Summary

2/1+2/2	Upper Gungate NB Ahead Right	U+O	-	-	-	-	1087	2000: Inf	1959+348	47.1 : 47.1%	164	0	0	0.8	2.8	15.7
3/1	Croft Street Left Right	O	-	-	-	-	109	Inf	232	47.0%	109	0	0	0.7	23.1	1.8
J5: Aldergate Corporation Street	-	-	-	-	-	-	-	-	-	34.2%	0	0	0	0.4	-	-
1/1	Aldergate SB Ahead Left Right	O	-	-	-	-	548	2000	2000	27.4%	0	0	0	0.2	1.2	0.2
2/1	Aldergate NB Ahead Right Left	O	-	-	-	-	683	2000	2000	34.2%	0	0	0	0.3	1.4	0.3
3/1	Corporation Street Left Right Ahead	O	-	-	-	-	0	Inf	372	0.0%	0	0	0	0.0	0.0	0.0
7/1	Car Park Right Left Ahead	O	-	-	-	-	0	Inf	496	0.0%	0	0	0	0.0	0.0	0.0
J6: Aldergate St John Street	-	-	-	-	-	-	-	-	-	34.2%	0	0	0	0.4	-	-
1/1	Aldergate SB Ahead Right Left	O	-	-	-	-	548	2000	2000	27.4%	0	0	0	0.2	1.2	0.2
2/1	Sanbach Road South NB Ahead Left Right	O	-	-	-	-	683	2000	2000	34.2%	0	0	0	0.3	1.4	0.3
3/1	Car Park Left Right Ahead	O	-	-	-	-	0	Inf	360	0.0%	0	0	0	0.0	0.0	0.0
4/1	St John Street Right Left Ahead	O	-	-	-	-	0	Inf	522	0.0%	0	0	0	0.0	0.0	0.0
J7: Ashby Rd Comberford Rd	-	-	-	-	-	-	-	-	-	87.5%	72	0	0	20.9	-	-
1/1+1/2	Upper Gungate Left Ahead	U	- C3:A	-	-	-	947	1934:1975	607+730	70.8 : 70.8%	-	-	-	3.3	12.5	16.4
2/2+2/1	Comberford Rd Left Right	U	C3:C	1	32	-	625	1820:1697	612+102	87.5 : 87.5%	-	-	-	7.7	44.5	16.1
3/1+3/2	Ashby Rd Right Ahead	U+O	C3:B	1	44	-	845	1915:1730	902+84	85.7 : 85.7%	72	0	0	7.5	31.8	20.4

Basic Results Summary

6/1	Ahead	U	C5:A		1	68	-	1309	1965	1747	74.9%	-	-	-	1.6	4.3	2.2
7/1	Northbound Entry Ahead	U	C5:A		1	68	-	947	1965	1747	54.2%	-	-	-	0.9	3.3	5.6
J8: Offdrive	-	-	-		-	-	-	-	-	-	93.3%	0	0	0	31.9	-	-
1/1+1/2	Upper Gungate (S) Ahead	U	C1:D		1	29	-	494	1975:2115	666+150	60.5 : 60.5%	-	-	-	3.3	24.0	8.2
2/1	Upper Gungate NB Left Ahead	U	C1:B		1	59	-	745	1941	1493	49.9%	-	-	-	0.6	2.8	0.8
2/2	Upper Gungate NB Ahead	U	C1:B		1	59	-	468	2115	1627	28.8%	-	-	-	0.2	1.7	0.3
3/1	Salters Lane Right Left	U	C1:G		1	8	-	184	1927	222	82.8%	-	-	-	3.9	75.9	6.0
4/2+4/1	Upper Gungate (N) Ahead	U	C1:K C1:A		1	36:58	-	1348	1990:2015	625+820	93.3 : 93.3%	-	-	-	9.8	26.3	21.4
5/1	Upper Gungate SB Left	U	C1:E		1	62	-	860	1942	1569	54.8%	-	-	-	0.9	3.6	3.1
5/2	Upper Gungate SB Ahead	U	C1:C		1	49	-	659	1990	1276	51.7%	-	-	-	0.6	3.2	0.6
6/2+6/1	Offdrive Right Left	U	C1:F		1	16	-	502	1928:1949	391+183	87.5 : 87.5%	-	-	-	7.1	51.2	10.4
6/3	Offdrive Right	U	C1:F		1	16	-	377	2059	449	84.0%	-	-	-	5.5	52.7	10.2
J9: Hospital St	-	-	-		-	-	-	-	-	-	61.6%	415	64	2	10.3	-	-
1/1+1/2	Aldergate Left Ahead Right	U+O	C4:A		1	46	-	683	1930:1858	920+188	61.6 : 61.6%	115	0	1	3.4	18.1	11.0
2/1	Hospital St Right Left Ahead	O	C4:C		1	7	-	116	1888	252	46.1%	17	0	0	1.6	49.4	3.1
3/1	Upper Gungate Left	O	C4:E		1	68	-	222	2015	579	38.4%	158	64	0	0.4	6.7	1.2
3/2+3/3	Upper Gungate Ahead Right	U+O	C4:B		1	46	-	572	1895:1712	869+186	54.2 : 54.2%	101	0	0	2.8	17.7	8.8

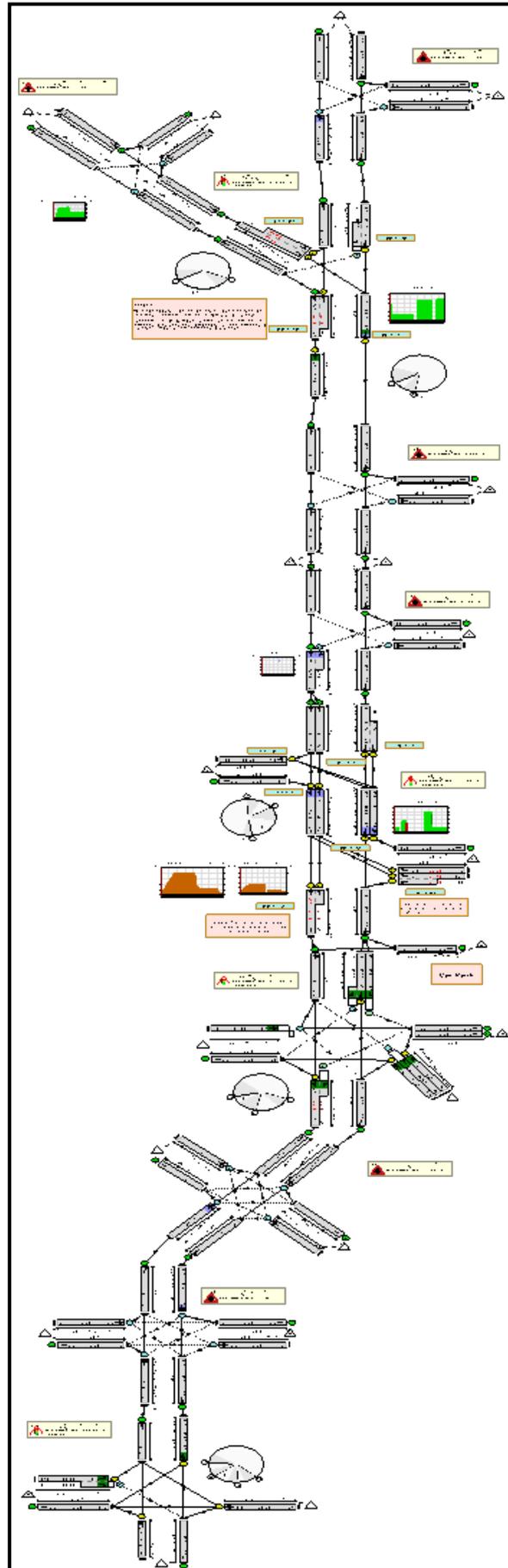
Basic Results Summary

4/1	Lower Gungate U-Turn Left	U	C4:D		1	7	-	92	1781	237	38.7%	-	-	-	1.2	48.0	2.4	
4/2	Lower Gungate Ahead	O	C4:D		1	7	-	25	1772	138	18.1%	25	0	0	0.4	51.6	0.7	
4/3	Lower Gungate Right	U	C4:D		1	7	-	39	1657	221	17.7%	-	-	-	0.5	44.5	1.0	
J10: Lichfield Street Silver Street	-	-	-		-	-	-	-	-	-	62.1%	14	0	0	7.9	-	-	
1/1	Silver St Ahead Left	U	C2:D		1	7	-	27	1775	129	20.9%	-	-	-	0.5	65.7	0.9	
2/1+2/2	Lichfield St Left Right	U+O	C2:A		1	60	-	656	1814:1747	1034+23	62.1 : 62.1%	14	0	0	3.6	19.6	13.6	
3/1	Aldergate Ahead Right	U	C2:B		1	63	-	548	1705	1038	52.8%	-	-	-	2.4	16.0	10.1	
4/1	Church St Right Left Ahead	U	C2:C		1	8	-	71	1808	148	48.0%	-	-	-	1.4	71.4	2.5	
		C1	Stream: 1	PRC for Signalled Lanes (%):	-3.7			Total Delay for Signalled Lanes (pcuHr):		31.04			Cycle Time (s):		78			
		C1	Stream: 2	PRC for Signalled Lanes (%):	64.1			Total Delay for Signalled Lanes (pcuHr):		0.86			Cycle Time (s):		78			
		C2		PRC for Signalled Lanes (%):	45.0			Total Delay for Signalled Lanes (pcuHr):		7.91			Cycle Time (s):		110			
		C3	Stream: 1	PRC for Signalled Lanes (%):	2.8			Total Delay for Signalled Lanes (pcuHr):		15.19			Cycle Time (s):		90			
		C4		PRC for Signalled Lanes (%):	46.1			Total Delay for Signalled Lanes (pcuHr):		10.33			Cycle Time (s):		90			
		C5		PRC for Signalled Lanes (%):	20.1			Total Delay for Signalled Lanes (pcuHr):		2.43			Cycle Time (s):		90			
				PRC Over All Lanes (%):	-3.7			Total Delay Over All Lanes(pcuHr):		75.32								

Basic Results Summary

Scenario 8: '8' (FG67: 'PM 2029 + Arkalls1000 (ST) + Browns2', Plan 2: 'Peds J9')

Network Layout Diagram



Basic Results Summary

Network Results

Basic Results Summary

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Gungate Network 2017 + Mode Mitigation	-	-	-		-	-	-	-	-	-	103.9%	1309	38	14	131.6	-	-
J1: Ashby Road Ashby Road	-	-	-		-	-	-	-	-	-	52.9%	206	0	0	0.8	-	-
2/1	B5493 Ashby Road NB Ahead Right	O	-		-	-	-	937	2000	1766	52.9%	63	0	0	0.6	2.2	0.8
3/1	Ashby Road Left Right	O	-		-	-	-	143	Inf	517	27.6%	143	0	0	0.2	4.8	0.2
J2: Comberford Road Wigginton Road	-	-	-		-	-	-	-	-	-	57.8%	443	0	0	0.9	-	-
2/1	A513 Comberford Road NB Ahead Right	O	-		-	-	-	670	2000	1159	57.8%	264	0	0	0.7	3.7	0.7
3/1	Wigginton Road Left Right	O	-		-	-	-	179	Inf	627	28.5%	179	0	0	0.2	4.0	0.2
J3: Upper Gungate College Access	-	-	-		-	-	-	-	-	-	73.4%	0	0	0	1.4	-	-
2/1	Upper Gungate NB Ahead Right	O	-		-	-	-	1467	2000	2000	73.4%	0	0	0	1.4	3.4	1.4
3/1	College Access Left Right	O	-		-	-	-	0	Inf	250	0.0%	0	0	0	0.0	0.0	0.0
J4: Upper Gungate Croft Street	-	-	-		-	-	-	-	-	-	72.8%	130	0	0	4.5	-	-

Basic Results Summary

2/1+2/2	Upper Gungate NB Ahead Right	U+O	-	-	-	-	1510	2000: Inf	1991+84	72.8 : 72.8%	61	0	0	3.5	8.4	44.3
3/1	Croft Street Left Right	O	-	-	-	-	69	Inf	138	49.9%	69	0	0	1.0	51.1	2.1
J5: Aldergate Corporation Street	-	-	-	-	-	-	-	-	-	47.5%	0	0	0	0.6	-	-
1/1	Aldergate SB Ahead Left Right	O	-	-	-	-	553	2000	2000	27.4%	0	0	0	0.2	1.2	0.2
2/1	Aldergate NB Ahead Right Left	O	-	-	-	-	950	2000	2000	47.5%	0	0	0	0.5	1.7	0.5
3/1	Corporation Street Left Right Ahead	O	-	-	-	-	0	Inf	322	0.0%	0	0	0	0.0	0.0	0.0
7/1	Car Park Right Left Ahead	O	-	-	-	-	0	Inf	435	0.0%	0	0	0	0.0	0.0	0.0
J6: Aldergate St John Street	-	-	-	-	-	-	-	-	-	47.5%	0	0	0	0.6	-	-
1/1	Aldergate SB Ahead Right Left	O	-	-	-	-	553	2000	2000	27.4%	0	0	0	0.2	1.2	0.2
2/1	Sanbach Road South NB Ahead Left Right	O	-	-	-	-	950	2000	2000	47.5%	0	0	0	0.5	1.7	0.5
3/1	Car Park Left Right Ahead	O	-	-	-	-	0	Inf	310	0.0%	0	0	0	0.0	0.0	0.0
4/1	St John Street Right Left Ahead	O	-	-	-	-	0	Inf	462	0.0%	0	0	0	0.0	0.0	0.0
J7: Ashby Rd Comberford Rd	-	-	-	-	-	-	-	-	-	103.9%	61	0	11	49.1	-	-
1/1+1/2	Upper Gungate Left Ahead	U	- C3:A	-	-	-	1467	1934:1975	601+874	99.4 : 99.4%	-	-	-	20.7	50.9	41.4
2/2+2/1	Comberford Rd Left Right	U	C3:C	1	20	-	577	1820:1697	490+65	103.9 : 103.9%	-	-	-	23.7	147.8	30.6

Basic Results Summary

3/1+3/2	Ashby Rd Right Ahead	U+O	C3:B		1	44	-	603	1915:1730	1011+121	52.5 : 59.6%	61	0	11	2.6	15.4	7.4
6/1	Ahead	U	C5:A		1	56	-	1040	1965	1940	52.6%	-	-	-	0.6	2.0	0.6
7/1	Northbound Entry Ahead	U	C5:A		1	56	-	1467	1965	1940	75.6%	-	-	-	1.6	3.8	2.8
J8: Offdrive	-	-	-		-	-	-	-	-	-	91.7%	0	0	0	39.9	-	-
1/1+1/2	Upper Gungate (S) Ahead	U	C1:D		1	46	-	907	1975:2115	695+296	91.5 : 91.5%	-	-	-	10.9	43.3	26.8
2/1	Upper Gungate NB Left Ahead	U	C1:B		1	82	-	988	1942	1580	62.5%	-	-	-	0.9	3.4	1.4
2/2	Upper Gungate NB Ahead	U	C1:B		1	82	-	691	2115	1721	40.2%	-	-	-	0.4	2.0	0.6
3/1	Salters Lane Right Left	U	C1:G		1	9	-	168	1927	189	88.9%	-	-	-	5.2	111.8	7.8
4/2+4/1	Upper Gungate (N) Ahead	U	C1:K C1:A		1	53:81	-	1069	1990:2015	594+904	70.1 : 70.1%	-	-	-	3.3	11.4	8.4
5/1	Upper Gungate SB Left	U	C1:E		1	86	-	709	1942	1656	42.1%	-	-	-	0.6	3.3	3.9
5/2	Upper Gungate SB Ahead	U	C1:C		1	67	-	516	1990	1327	38.3%	-	-	-	0.4	3.1	0.6
6/2+6/1	Offdrive Right Left	U	C1:F		1	22	-	488	1928:1949	384+148	91.7 : 91.7%	-	-	-	9.6	70.6	15.2
6/3	Offdrive Right	U	C1:F		1	22	-	420	2059	464	90.5%	-	-	-	8.5	72.8	15.6
J9: Hospital St	-	-	-		-	-	-	-	-	-	92.0%	437	38	3	19.6	-	-
1/1+1/2	Aldergate Left Ahead Right	U+O	C4:A		1	40	-	950	1935:1858	820+213	92.0 : 92.0%	194	0	2	10.5	39.6	25.7
2/1	Hospital St Right Left Ahead	O	C4:C		1	13	-	262	1891	420	62.3%	15	0	0	3.1	42.9	6.7
3/1	Upper Gungate Left	O	C4:E		1	68	-	158	2015	581	26.9%	118	38	0	0.2	5.0	0.6

Basic Results Summary

3/2+3/3	Upper Gungate Ahead Right	U+O	C4:B		1	40	-	489	1895:1712	862+105	50.0 : 50.0%	52	0	0	2.8	20.9	7.9
4/1	Lower Gungate U-Turn Left	U	C4:D		1	13	-	126	1753	390	32.3%	-	-	-	1.3	36.2	2.9
4/2	Lower Gungate Ahead	O	C4:D		1	13	-	59	1772	160	36.9%	58	0	1	0.9	52.8	1.5
4/3	Lower Gungate Right	U	C4:D		1	13	-	92	1657	368	25.0%	-	-	-	0.9	35.3	2.1
J10: Lichfield Street Silver Street	-	-	-		-	-	-	-	-	-	86.8%	32	0	0	14.1	-	-
1/1	Silver St Ahead Left	U	C2:D		1	7	-	63	1804	131	48.0%	-	-	-	1.3	75.1	2.3
2/1+2/2	Lichfield St Left Right	U+O	C2:A		1	58	-	905	1814:1747	1006+37	86.8 : 86.8%	32	0	0	8.2	32.5	26.3
3/1	Aldergate Ahead Right	U	C2:B		1	61	-	553	1706	1024	53.5%	-	-	-	2.5	16.7	10.3
4/1	Church St Right Left Ahead	U	C2:C		1	10	-	107	1830	183	58.5%	-	-	-	2.1	70.6	3.8
		C1	Stream: 1 PRC for Signalled Lanes (%):		-1.9		Total Delay for Signalled Lanes (pcuHr):		39.27		Cycle Time (s):		102				
		C1	Stream: 2 PRC for Signalled Lanes (%):		113.6		Total Delay for Signalled Lanes (pcuHr):		0.65		Cycle Time (s):		102				
		C2	PRC for Signalled Lanes (%):		3.7		Total Delay for Signalled Lanes (pcuHr):		14.13		Cycle Time (s):		110				
		C3	Stream: 1 PRC for Signalled Lanes (%):		-15.4		Total Delay for Signalled Lanes (pcuHr):		26.27		Cycle Time (s):		78				
		C4	PRC for Signalled Lanes (%):		-2.2		Total Delay for Signalled Lanes (pcuHr):		19.64		Cycle Time (s):		90				
		C5	PRC for Signalled Lanes (%):		19.0		Total Delay for Signalled Lanes (pcuHr):		2.11		Cycle Time (s):		78				
			PRC Over All Lanes (%):		-15.4		Total Delay Over All Lanes(pcuHr):		131.61								



transport planning

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