From:	Archie Mackay-James
To:	Caroline Ford; Hannah Leary
Cc:	Alex Chrusciak; Nigel Simkin; Nick Fell; "Rob Bolton (Firethorn Trust (Fitzrovia))"; Jamie Miller; Paul Martin; Eleanor Musgrove; Chris Webb
Subject:	RE: Viability - 21/01630/OUT Firethorn at NW Bicester. Commercially sensitive and confidential
Date:	11 May 2022 17:48:52
Attachments:	image008.jpg image009.jpg image002.jpg b48a476b-416d-43c9-8a7d-d187c5f31d5a.png image001.gif image006.gif 4c364efe-bd25-4d37-81a8-dec9e56aab48.png Land at NW Bicester. Updated accommodation schedule.pdf Appendices.zip 22 04 21 - NW Bicester - Summary Programme - Rev A.pdf Land at North West Bicester. Viability response.pdf Stantec Reponse on Bioregional comments.pdf Land at North West Bicester - FVA Executive Summary.pdf

---

Dear Caroline,

Please find our viability response letter attached. As detailed in the response, we are in the process of appraising the amended scheme and will forward our updated viability position based on this shortly.

We also attach an updated Executive Summary following your previous request. In terms of the publication of information in the public domain, paragraph 19 of the PPG details:

"Where an exemption from publication is sought, the planning authority must be satisfied that the information to be excluded is commercially sensitive. This might include information relating to negotiations, such as ongoing negotiations over land purchase, and information relating to compensation that may be due to individuals, such as right to light compensation. The aggregated information should be clearly set out to the satisfaction of the decision maker. Any sensitive personal information should not be made public."

The landowner is currently in negotiations with a developer to acquire the site and also in negotiations separately with another neighbouring landowner regarding land assembly. We therefore satisfy the definition above regarding ongoing negotiations over land purchase and therefore an exemption from publication of the full Financial Viability Assessment is sought due to it being commercially sensitive.

The updated executive summary that is attached should be made publicly available. In line with the PPG, this sets out the gross development value, benchmark land value including landowner premium, costs, as set out in the guidance where applicable and return to developer. The executive summary also refers back to the viability assessment that informed the plan and summarises what has changed since then as well as setting out the proposed developer contributions and how this compares with policy requirements.

Please also find attached Stantec's response on the comments provided by Bioregional.

We trust this clarifies the current submission position in relation to viability and I would be happy to discuss further once you've had the opportunity to review.

Kind Regards

Archie

Archie Mackay-James
MRICS
Senior Associate
Affordable Housing & Viability
07467 941544

RAPLEYS LLP
66 St James's Street London SW1A 1NE
0370 777 6292 | www.rapleys.com
London | Birmingham | Bristol | Cambridge | Edinburgh | Huntingdon | Manchester

From: Caroline Ford <Caroline.Ford@Cherwell-DC.gov.uk>
Sent: 27 April 2022 10:10
To: Archie Mackay-James <Archie.Mackay-James@rapleys.com>; Hannah Leary <Hannah.Leary@bartonwillmore.co.uk>
Cc: rb@reviewpartners.uk.com; Alex Chrusciak <Alex.Chrusciak@cherwell-dc.gov.uk>; Nigel Simkin <Nigel.Simkin@hld-uk.com>; pmartin@firethorntrust.com; Eleanor Musgrove <emusgrove@firethorntrust.com>
Subject: RE: Viability - 21/01630/OUT Firethorn at NW Bicester

Hi Archie,

The only documents in the public domain are for the Himley Village site where a reserved matters submission is currently pending (although the scheme itself is not acceptable) – the reference is 21/02337/REM. Other discussions are at the pre-application stage and therefore are confidential. I am aware that Firethorn does know that the developer they have been in discussions with has approached the Council for advice and so you may also wish to approach them for details of the proposals they have asked the Council to consider.

Kind regards
Caroline

Caroline Ford BA. (Hons) MA MRTPI
Principal Planning Officer – Major Projects Planning Team
Development Management Division
Environment and Place Directorate
Cherwell District Council
Tel: 01295 221823
Email: caroline.ford@cherwell-dc.gov.uk
Web: www.cherwell.gov.uk

Find us on Facebook www.facebook.com/cherwelldistrictcouncil
Follow us on Twitter @Cherwellcouncil

My usual working hours are: Monday to Friday, 09:00am to 17:15pm.

Coronavirus (COVID-19): The Planning and Development services have been set up to work remotely. Customers are asked to contact the planning team via planning@cherwell-dc.gov.uk or to use the Council's customer contact form at Contact Us. For the latest information on Planning and Development please visit www.cherwell-dc.gov.uk.

From: Archie Mackay-James <Archie.Mackay-James@rapleys.com>

Sent: 26 April 2022 19:46
To: Caroline Ford <Caroline.Ford@Cherwell-DC.gov.uk>; Hannah Leary <Hannah.Leary@bartonwillmore.co.uk>
Cc: rb@reviewpartners.uk.com; Alex Chrusciak <Alex.Chrusciak@cherwell-dc.gov.uk>; Nigel Simkin <Nigel.Simkin@hld-uk.com>; pmartin@firethorntrust.com; Eleanor Musgrove <emusgrove@firethorntrust.com>
Subject: RE: Viability - 21/01630/OUT Firethorn at NW Bicester

Dear Caroline,

Please can you forward indicative proposals from developers relating to NW Bicester that you refer to in your email below?

Kind Regards

Archie

Archie Mackay-James
MRICS
Senior Associate
Affordable Housing & Viability
07467 941544

RAPLEYS LLP
66 St James's Street London SW1A 1NE
0370 777 6292 | **www.rapleys.com**
London | Birmingham | Bristol | Cambridge | Edinburgh | Huntingdon | Manchester

---

From: Caroline Ford <Caroline.Ford@Cherwell-DC.gov.uk>
Sent: 14 April 2022 15:34
To: Hannah Leary <Hannah.Leary@bartonwillmore.co.uk>
Cc: rb@reviewpartners.uk.com; Archie Mackay-James <Archie.Mackay-James@rapleys.com>; Alex Chrusciak <Alex.Chrusciak@cherwell-dc.gov.uk>; Nigel Simkin <Nigel.Simkin@hld-uk.com>; pmartin@firethorntrust.com; Eleanor Musgrove <emusgrove@firethorntrust.com>
Subject: Viability - 21/01630/OUT Firethorn at NW Bicester

Dear Hannah,

I write in respect to the ongoing viability work and specifically to advise on some of the points arising from the letter sent from Archie at Rapleys dated 5th April 2022, received 7th April 2022.

Firstly, a point which has also arisen elsewhere and which has therefore been a matter we have looked into is the availability of the information relating to viability in the public domain. We have currently not published the majority of the submitted information other than the executive summary and therefore we have also not published any of the advice provided by the Council's advisors (albeit the advice from HLD is currently draft for consideration and discussion).

The PPG is clear that any viability assessment should be prepared on the basis that it will be made publicly available other than in exceptional circumstances. Even in those circumstances (and we would need to understand if this is the case), an executive summary should be made publicly available and this in itself is also addressed by the PPG in that it should be prepared in accordance with the Government's data format and to present the data and findings more clearly so that the process and findings are accessible to affected communities. It sets out that as a minimum, the Government recommends that the executive summary sets out the gross development value, benchmark land value including landowner premium, costs, as set out in the guidance where applicable and return to developer. It also sets out that where a viability assessment is submitted to accompany a planning application, the executive summary should refer back to the viability assessment that informed the plan and summarise what has changed since then as well as setting out the proposed developer contributions and how this compares with policy requirements.

The PPG is clear that information used in viability assessment is not usually specific to a developer and therefore need not contain commercially sensitive data, however if specific details are deemed to be commercially sensitive then the information should be aggregated in published viability assessments and executive summaries and included as part of total costs figures.

Having reviewed this guidance, it is clear that the information submitted should be made public. Before doing so however, I can give you an opportunity to consider the guidance and to advise if there are exceptional circumstances which mean that the submitted information should be kept out of the public domain. If that were the case and the Local Planning Authority were content that certain information were commercially sensitive, then the Executive Summary would need considerable updating to provide more detailed information as to the case being made and as set out by the PPG guidance. We will also need to consider the publication of the advice provided to the Council by its advisors. This ensures accountability and transparency of process as we move through to considering how a viability gap might be closed as part of the public record.

Please can you consider this further and advise me on your thoughts on this?

Nigel Simkin has raised a number of queries of matters to review which are summarised within his email of 23 March 2022. I note that you have queried these and my response is as below.

- Whilst your comments with regard to the proposed development mix and area assumptions and the fact that these have been formulated following detailed engagement with several major PLC housebuilders is noted, I have to disagree that these should remain unchanged. The evidence referred to by Nigel identifies that other sites in the area have provided for 5 bed dwellings and that square footage for various sized dwellings are under provided for against local comparable examples (in particular 2 bed market dwellings are significantly smaller than 2 bed flats and 2 bed affordable housing units which is not supported by evidence). Indeed indicative proposals from developers relating to NW Bicester indicate that 5 bed dwellings are likely to be provided at NW Bicester which could reasonably be assumed to apply to this particular site and that the square footage of proposed dwellings are more closely aligned to those examples found in the local area compared to the square footage assumptions you have modelled. That also demonstrates

that affordable dwellings tend to also be smaller than market equivalent dwellings (particularly noticeable on the larger plots – i.e. 4 bed dwellings), yet your assumptions suggest larger affordable dwellings than their market counterparts in some cases. I don't therefore agree that reasonable and justified assumptions have been made and would agree with Nigel Simkin's advice that you should update area assumptions and therefore values to consider the impact upon viability.

- Whilst the provision of garages may be desirable from a marketing point of view, these are not required to meet planning requirements and I would agree with Nigel that a reduced level of garaging should be considered in terms of its impact upon viability. Ongoing discussions relating to schemes at NW Bicester also indicates that garages are most often associated with detached 4 and 5 bed dwellings rather than at the significant level you assume. The confirmation of whether residential sales values take account of garage provision would be appreciated.
- The level of visitor parking would need to be queried with OCC as the Highway Authority. Please note, you have included within the S106 heads of terms a figure of £950 per dwelling for 'adoption of unallocated parking bays' – I am unclear on where this figure has been derived from and having checked with OCC, I am advised that these would not be adopted so this figure would need to be removed.
- With regard to the provision of electric vehicle charging points for visitors, the Oxfordshire Electric Vehicle Infrastructure Strategy suggests that provision must be made for EV charging for each residential unit with an allocated parking space and that non-allocated spaces should be provided with at least 25% having electric charging points installed. The provision of ducting to enable the further roll out of charging infrastructure would be beneficial. I am aware that there are planned changes to the Building Regulations in this respect but from the evidence provided, you have identified 50% of visitor parking and car club spaces which, whilst positive is not a requirement and could therefore be reduced, positively impacting upon viability, especially where other necessary infrastructure could be at risk.

I will be separately issuing the comments from Bioregional, hopefully next week. I have reviewed them and have asked for a couple of updates in order that the response can be passed to you and it is hoped that this will be ready to provide to you next week.

Lastly, I will be looking to update the S106 heads of terms matters and advise Nigel of this over the coming weeks.

I trust this is of assistance and I look forward to hearing from you. This advice is provided entirely without prejudice.

Kind regards
Caroline

Caroline Ford BA. (Hons) MA MRTPI
Principal Planning Officer – Major Projects Planning Team
Development Management Division
Environment and Place Directorate
Cherwell District Council
Tel: 01295 221823

Email: caroline.ford@cherwell-dc.gov.uk
Web: www.cherwell.gov.uk

Find us on Facebook www.facebook.com/cherwelldistrictcouncil
Follow us on Twitter @Cherwellcouncil

My usual working hours are: Monday to Friday, 09:00am to 17:15pm.

Coronavirus (COVID-19): The Planning and Development services have been set up to work remotely. Customers are asked to contact the planning team via planning@cherwell-dc.gov.uk or to use the Council's customer contact form at Contact Us. For the latest information on Planning and Development please visit www.cherwell-dc.gov.uk.

intended recipient, please notify the sender immediately.

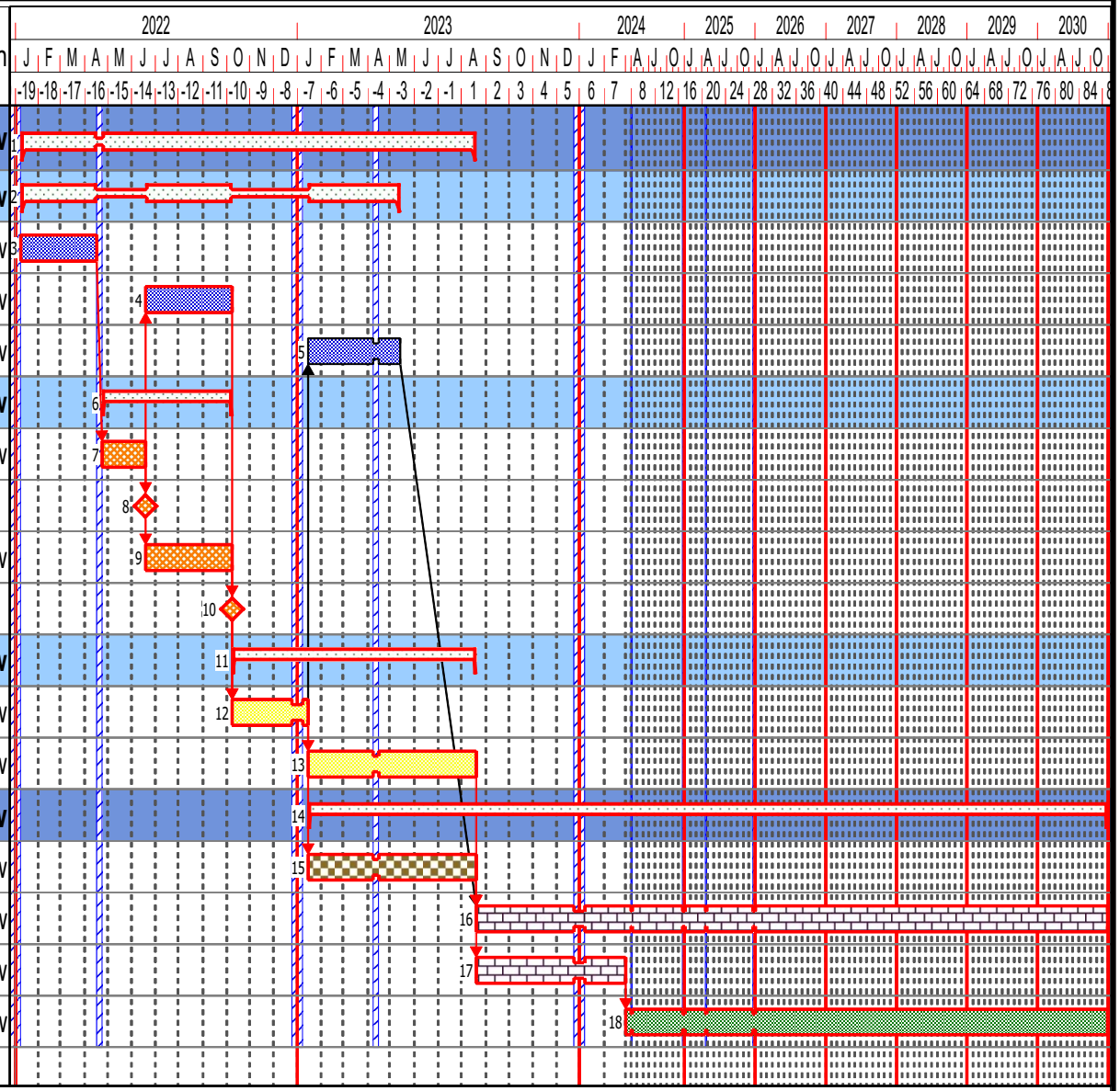
Whilst the Council has taken every reasonable precaution to minimise the risk of computer software viruses, it cannot accept liability for any damage which you may sustain as a result of such viruses. You should carry out your own virus checks before opening the e-mail(and/or any attachments).

Unless expressly stated otherwise, the contents of this e-mail represent only the views of the sender and does not impose any legal obligation upon the Council or commit the Council to any course of action..

NW Bicester
DRAFT - Delivery Programme

GT GARDINER &THEOBALD

Line	Activity Name	Start	Finish	Duration
1	**Pre Construction**	**10 Jan 22**	**18 Aug 23**	**80w**
2	**Design**	**10 Jan 22**	**12 May 23**	**66w**
3	RIBA Stage 2	10 Jan 22	15 Apr 22	14w
4	RIBA Stage 3	20 Jun 22	07 Oct 22	16w
5	RIBA Stage 4	16 Jan 23	12 May 23	16w
6	**Planning**	**25 Apr 22**	**10 Oct 22**	**24w**
7	Prep RMA	25 Apr 22	17 Jun 22	8w
8	Submit RMA	20 Jun 22	20 Jun 22	
9	Determination	20 Jun 22	07 Oct 22	16w
10	Permission Granted	10 Oct 22	10 Oct 22	
11	**Procurement**	**10 Oct 22**	**18 Aug 23**	**42w**
12	Stage 1 Procurement (fix priced enabling works)	10 Oct 22	13 Jan 23	12w
13	PCSA Period	16 Jan 23	18 Aug 23	30w
14	**Construction**	**16 Jan 23**	**27 Dec 30**	**406w**
15	Initial Enabling works (initial plot creation)	16 Jan 23	18 Aug 23	30w
16	Constuction works	21 Aug 23	27 Dec 30	376w
17	Construction to deliver First units	21 Aug 23	01 Mar 24	26w
18	Gradual handover units	04 Mar 24	27 Dec 30	350w



G&T Code Library

Design | Planning | Procurement | Enabling Works | Construction

Programme no : -		Revision: A	Status: DRAFT - For Discussion
Prepared by : -	Issue Date: 21/04/2022	Date Revised: 21/04/2022	Page: 1 of 1

This programme has been produced in accordance with the attached Assumptions and Exclusions.Additionally it is recommended that a further 10% contingency is assumed to reflect market conditions and the level of design information available.

L:\GTMS\Met\Users\Planners\Richard Crosby\Bicester\22 04 21 - NW Bicester - Summary Programme - Rev A.pp

66 St James's Street
St James's
London
SW1A 1NE

0370 777 6292
info@rapleys.com
rapleys.com

LONDON
BIRMINGHAM
BRISTOL
CAMBRIDGE
EDINBURGH
HUNTINGDON
MANCHESTER

AAMJ/20-00678

11 May 2022

Caroline Ford
Development Management Division
Environment and Place Directorate
Cherwell District Council
Bodicote House
White Post Road
Bodicote
Banbury
OX15 4AA

Dear Caroline,

Re: Land at North West Bicester Firethorn

Following your email on Thursday 14th April and our call last week, we have reviewed the proposed development mix and areas as well as the provision of garages, visitor parking and electric charging points. We consider these points below and present the amended scheme proposals in light of the feedback received. We are in the process of appraising the amended scheme and will forward our updated viability position based on this shortly.

We have now had the opportunity to fully consider HLD's 1st draft development viability appraisal and accompanying note that outlines the rationale for the suggested changes to the appraisal assumptions that informed our Financial Viability Assessment (FVA) submitted last year. This letter provides further clarification on our submission appraisal assumptions with supporting rationale and evidence as required. The table at the end of this letter presents the current position on the appraisal assumptions.

Development Mix assumptions

In terms of development mix, we note your comments that indicative proposals from developers relating to NW Bicester indicate that 5 bed dwellings are likely to be provided at NW Bicester. We have subsequently reviewed the policy position and other indicative proposals and have now included some 5 bedroom houses in the updated accommodation schedule attached.

We note HLD's observation that there are no private 1-bedroom apartments allocated for the scheme delivering 30% affordable housing. We would comment that the applicant is prioritising the delivery of 1-bedroom units as affordable housing and due to the small number of 1-bedroom units, it is not possible to also provide 1 bedroom private market units when assuming 30% affordable housing. This could change when delivering lower levels of affordable housing subject to viability.

Development area assumptions

In terms of our assumed development areas, we note HLD's observation that 590 sq ft is very small for a private 2 bed semi detached house. Following this, we have reviewed unit sizes for market comparable 2 bedroom semi detached dwellings and note the following:

- 2 bedroom semi-detached house measuring 620 sq ft at the Hemins Place development by David Wilson Homes.
- 2 bedroom semi-detached houses at the Kingsmere development by Linden Homes measuring 646 sq ft.
- 2 bedroom Semi-detached houses (Kenley Plots) at the Kingsmere development by Barratt Homes measuring 679 sq ft.
- 2 bedroom semi-detached house measuring 765 sq ft at the Elsmbrook development by Crest Nicholson.

In light of the comparable evidence above, the applicant has instructed Mosaic to update the accommodation schedule so that the private two bedroom semi-detached and terraced houses measure 679 sq ft which is in line with the 3 bedroom terraced houses at the Kingsmere development by Barratt Homes.

HLD also commented that 737 sq ft is on the small side for a 3 bed terraced house. We have reviewed unit sizes for comparable 3 bedroom terraced dwellings and note that in the neighbouring Elmsbrook development by Crest Nicholson, there are 3 bedroom terraced houses measuring 818 sq ft. In light of this, we have updated the accommodation schedule so that the private three bedroom terraced dwellings measure 824 sq ft in line with the 3 bedroom terraced houses at the Elmsbrook development.

HLD have commented that the 4 bedroom dwellings are small noting that typically 4 beds in Bicester are 1,200 - 1,500 sq ft and widely delivered in the market as detached rather than semi-detached dwellings. We also note your comment that local market evidence demonstrates that affordable dwellings tend to also be smaller than market equivalent dwellings (particularly noticeable on the larger plots – i.e. 4 bed dwellings), yet our assumptions suggest larger affordable dwellings than their market counterparts in some cases. In light of these comments, we have amended the proposed mix so that there are a greater proportion of larger 4-bedroom dwellings allocated as private. We have also updated the mix so that the private four bedroom detached dwellings measure 1212 sq ft and 1375 sq ft which is the same size as the affordable four bedroom detached dwellings.

The applicant has instructed their architect, Mosaic, to adjust the accommodation schedule on this basis and this is attached and summarized in the table below.

Unit Type	No.	%
1 Bed Unit	35	7%
2 Bed Unit	164	33%
3 Bed Unit	140	28%
4 Bed Unit	113	23%
5 Bed Unit	48	10%
Total	500	100%

This demonstrates that when increasing the individual sizes of the units above the overall quantum of development has to be reduced from 530 units to 500 units so that the Net Developable Area can accommodate the scheme. It should be noted that this is a notional reduction in unit numbers for the purposes of comparison as part of the viability discussion, and not an actual reduction in numbers as proposed within the outline planning application. The application remains for 'up to 530 homes', and this notional reduction represents one way in which the scheme could be delivered – with the mix previously proposed being another way in which the scheme could be delivered.

As mentioned, we are in the process of appraising the updated accommodation schedule and anticipate that whilst increasing the sizes of the units above may yield a higher individual unit value, this will largely be offset by the increase in build costs which will also increase on a per sq ft basis which will have a largely negligible effect on the overall land value.

We anticipate that the reduced quantum of the scheme will have a negative impact on the overall land value, increasing the deficit between the residual land value and benchmark land value and reduce the scheme's ability to deliver affordable housing, s106 contributions and sustainable design.

Apartment Gross to Net area assumptions

We accept HLD's proposal to adjust the gross to net ratio for the apartment block to 80% and the cost plan will be updated on this basis and circulated for review shortly.

Provision of garages

HLD initially queried the extent of garages that are in the scheme (i.e. whether they would all be required as they come at significant cost). The Council have subsequently suggested that garages are most often associated with detached 4 and 5 bed dwellings. In light of this, the cost plan will be updated on the assumption that garages are provided with detached 4 and 5 bedroom houses only.

Visitor Parking

The Council have queried the extensive areas of visitor car parking assumed by the Applicant in the Cost Plan. We have confirmed that the areas of visitor car parking was informed following discussions with Oxford County Council (OCC) and the current car parking standards set out within Table A6.B1 of Appendix F of the CDC Residential Design Guide SPD (adopted on the 16th of July 2018). The Council have subsequently confirmed the level of visitor parking would need to be queried with OCC as the Highway Authority and we await feedback on this. In the interim, we maintain our submission position on visitor car parking provision.

Adoption of unallocated parking bays S106 cost
We note that the S106 cost of £950 per dwelling for 'adoption of unallocated parking bays' should be removed from our respective appraisals. We therefore acknowledge that the contribution will not form part of the S106 package.

Electric Vehicle Charging Points for visitors
In our submission position, we assumed a 50% provision informed by the Parking Standards set out within CDC's SPD – Residential Design Guide (Adopted July 2018). The SPD states that "every home should have access to at least one electric charging point."

You subsequently referred to the Oxfordshire Electric Vehicle Infrastructure Strategy which suggests that provision must be made for EV charging for each residential unit with an allocated parking space and that non-allocated spaces should be provided with at least 25% having electric charging points installed. The provision of ducting to enable the further roll out of charging infrastructure would be beneficial.

In light of this, the cost plan will be updated to reflect 25% provision with ducting.

Viability appraisal assumptions
Since the submission of the original FVA dated October 2021, there has been significant upward movement in both residential sales values as well as build costs. In terms of build costs, emerging tender price indices are increasing on a monthly basis, this is still in large part as a result of the supply chain issues caused by the Covid Pandemic, as well as post-Brexit impact on labor costs in the construction industry but there is now an increasing impact on costs caused by the effects of the Ukraine-Russia war.

However, in an effort to fix a position for the purpose of assessing viability and reaching an agreed position in time for the June committee, we propose continuing to adopt the construction costs advised by G & T in Q1 2022 and residential sales values as of Q1 2022.

Once an agreed position is agreed on these two appraisal assumptions, we recommend that build costs should be increased in line with the BCIS all in Tender to the date that the position is agreed whilst residential sales values should be increased in line with the land registry price index rebased to the postcode.

Should an agreed position not be reached which enables the viability position to be heard at the June committee, we reserve the right to amend our position on this.

Private Sales values
As the table below demonstrates, HLD were broadly aligned with the average residential values of the flats and 2 bedroom houses in the original scheme but they have adjusted the values of some of the three and four bedroom dwellings to Q1 pricing. Based on these adjustments HLD, conclude that the private GDV is £3.5 million higher than our adopted GDV assuming 100% private housing, which is 1.6% higher.

Dwelling Type	Area Sq ft	Storeys	Bedrooms	House/Flat	HLD OMV	Rapleys OMV	Difference
FLATS							
Flat	538	3	1	Flat	£260,000	£260,000	£0
FOG	538	3	1	Flat	£265,000	£265,000	£0
Flat	753	3	2	Flat	£300,000	£300,000	£0
Flat	753	3	2	Flat	£300,000	£295,000	£5,000
FOG	753	3	2	Flat	£315,000	£315,000	£0
HOUSES							
Semi-Detached	590	2	2	House	£290,000	£280,000	£10,000
Terraced	755	2	2	House	£320,000	£320,000	£0
Terraced	856	2	2	House	£330,000	£330,000	£0
Semi-Detached	856	2	2	House	£340,000	£330,000	£10,000
Terraced	737	2	3	House	£330,000	£330,000	£0
Semi-Detached	958	2	3	House	£395,000	£385,000	£10,000
Wide-Front - Semi	947	2	3	House	£395,000	£385,000	£10,000
Terraced 2.5 Storey	1,068	2.5	3	House	£375,000	£375,000	£0
Terraced 3 Storey	1,210	3	3	House	£415,000	£415,000	£0
Terraced	1,000	2	3	House	£380,000	£370,000	£10,000
Semi-Detached	1,000	2	3	House	£395,000	£370,000	£25,000
Bungalow	1,114	1	3	Bungalow	£465,000	£465,000	£0
Bungalow	1,368	1	3	Bungalow	£475,000	£475,000	£0
Semi-Detached	1,045	2	4	House	£430,000	£430,000	£0
Detached 2.5 Storey	1,235	2.5	4	House	£485,000	£450,000	£35,000
Detached	1,546	2	4	House	£535,000	£480,000	£55,000

We accept that residential sales values should be re-assessed to reflect current market conditions as at Q1 2022 and we have reviewed the comparable evidence and values provided by HLD in conjunction with Green and Co on the basis of the adjusted scheme.

We will circulate our updated, priced schedule of accommodation taking into consideration the garage provision together with our updated viability position once this is finalised.

Affordable Housing Values

The table below summarises the differences in affordable values between Rapleys and HLD.

Tenure	Rapleys Assumption	HLD assumption
Social Rent	30%	35%
Affordable Rent	50%	55%
Shared Ownership	70%	65%

We would request that HLD confirm the valuation assumptions that have informed their proposed discount levels, specifically for social rent and affordable rent values. As detailed in our submission, our affordable rent value discount is on the basis of internal valuation software which assumes affordable rents should be up to 80% market rent levels with rents capped at Local Housing Allowance to support affordability. Please can HLD confirm the rental assumptions that have informed their proposed affordable rent value of 55% of open market value?

HIF Funding

HLD have reduced the assumed HIF funding of £6.7 million to £1, noting that CDC should confirm the precise position relating to any HIF funding received (i.e. will the Applicant receive any of these monies, and will they be required to contribute to the infrastructure that the HIF delivered - as HLD understand that CDC may need to 'pay back' the HIF monies to Homes England?).

For the purposes of viability negotiations, we are happy to adjust HIF Funding to £1 whilst this matter is clarified with CDC. Clearly the inclusion of HIF funding has a material impact on the viability position and we reserve the right to amend our conclusions in the event that it is clarified that the applicant will be in a position to received HIF Funding.

Construction Costs and Infrastructure Costs

The applicant had instructed G & T to provide an updated Order of Cost for NW Bicester which rebased the scheme to 2Q 2022. This combines the previously reported inflation of 2.4% since Q3 2021 with the latest emerging tender price indices which have been revised upwards as the effects of the Ukraine-Russia war impact the construction industry.

The revised combined inflation figure is 5.9% (a further 3.5% above the previous 2.4%). Previously, G&T took a moderated view on inflationary pressures as there was evidence to suggest the market was beginning to soften post-pandemic. However, this has been superseded by the Ukraine-Russia war which has only compounded the already very high oil and gas prices, with building elements that undergo the energy intensive manufacturing process particularly exposed. The revised Order of Cost also picks up some further minor cost adjustments following G&T's review of RLF's detailed cost estimate. The resulting impact means that the total build cost had increased to £118 million.

However, as previously mentioned, in an effort to reach an agreed position, we recommend adopting build costs as at Q1 2022. We will circulate the updated cost plan together with our updated viability position once this is finalized.

We appreciate that RLF and Gardiner and Theobald (G & T) have already engaged in negotiations regarding build cost and infrastructure assumptions, which has narrowed the delta between their respective positions. However, upon further review of RLF's full cost plan, G & T have provided the following comments clarifying their current position and the rationale informing this in addition to some queries in relation to RLF's assumptions.

Within the tables attached, G & T have listed all items where a delta exists between RLF and G&T. G&T's approach has been to list two columns where it believes there is opportunity for improved alignment through an uplift on RLF's cost position.

One column is a requested minimum which is predominantly on the principles of aligning measures, scoping assumptions/ allowances, application of Prelims and Overheads and where G&T believes RLF's pricing is particularly light (G&T respects that RLF has its own data set, but G&T has identified where pricing is significantly lower than its own data range). The second column takes this a step further. Further to the analysis, the proposed uplifts are c. £1.25m and £2m+ respectively.

We request that RLF review G & T's comments in the tables attached and respond accordingly.

Professional fees

HLD have confirmed that they are happy with the 8% assumed for professional fees but have removed the allowance from applying on contingency. It is normal to include a contingency allowance for any unexpected increases in construction costs due to unforeseen circumstances. By the logic that contingency allows for any unexpected increases in construction costs, additional proportionate professional fees would also be incurred just as expected construction costs would command proportionate professional fees. We therefore maintain that professional fees should be applied to both construction costs and contingency for construction and infrastructure costs.

Private marketing fees

HLD have allowed 1.5% for marketing; 1% for agents fees and 0.35% for legal fees. This provides a slightly lower marketing and disposal fees allowance of 2.85% in comparison with our submission position of 3%. We argue that a legal fee of 0.5% is the market norm for residential transactions and therefore maintain that marketing fees should equate to 3%.

Affordable marketing fees

HLD identify that an agency fee for the affordable housing is also included in our development appraisal of 0.5%. However HLD have removed this from their development appraisal on the basis it is typical that most house builders undertake the affordable housing sale to a Registered Provider themselves (rather than this being undertaken by external agents).

In our experience, it is common for housebuilders to outsource the sale of Affordable units to Registered Providers and we have carried out agency instructions on this basis. In our original FVA, we reported offers received from various Registered Providers which had been obtained via an affordable housing agent. Therefore it is incorrect to remove an affordable housing agency fee 0.5% from the appraisal, not least because it is at the lower end of agency fee levels for affordable housing transactions.

Finance

HLD have assumed 6.5% debit rate and have not allowed for a credit rate, in line with their market experience, which is not in line with the local plan evidence base. As detailed by the NPPG, viability consultants are required to provide evidence of what has changed since the viability assessment that informed the plan. We are not

satisfied that HLD have provided justification as to what has changed since the viability evidence base was produced and therefore maintain that a debit finance rate of 7% is appropriate.

Phasing

The table below illustrates the differences in our respective positions on the phasing of the proposed development. In light of the scheme adjustments, there is scope that our phasing assumptions will be amended slightly.

Phasing	Rapleys assumption	HLD Assumption
Purchase	1	1
Pre-Construction / Procurement	12 months	6 months
Construction	88 months	83 months
Private Sales Period	93 months	83 months sales period (staggered four months from the start of construction),
Affordable Sales Period	76 months	Quarterly tranches of sales to an RP

The applicant has liaised with G & T since receiving HLD's draft appraisal and G & T have subsequently provided a summary program for the scheme, which is attached and we respond to HLD's phraseology observations with reference to this.

Pre-Construction period

In their comments accompanying the draft appraisal, HLD express concern that construction commences some 12 months after project start (with very limited activities taking place in the first 12 months). In addition, HLD note that our appraisal then assumes that it takes a further year from the start of construction for a house to be sold.

We can confirm that the rationale for the construction period starting 12 months after purchase is that the subject planning application is an outline planning application and therefore prior to enabling or construction works commencing, any purchaser would need to obtain detailed planning consent before legally commencing with construction works on site.

G & T advise that it would take 14 weeks / 3.5 months to finalise RIBA stage design following which preparation for a reserved matters application (RMA) could commence. G & T have allowed for 8 weeks / 2 months to prepare the RMA and 16 weeks / 4 months for determination following submission. In total this equates to 9.5 months allowance for obtaining detailed planning consent.

Following detailed planning consent, a procurement process would be required whereby the master developer would be under competitive conditions let to a regional housebuilder that is capable of delivering significant infrastructure. For the procurement process, G & T have advised that a further 3 months should be allowed for the stage 1 Procurement (for fixed price enabling works).

When combining the process for obtaining detailed planning consented and completing the initial procurement process, this equates to a pre-construction process of 12 months during which enabling works and construction works would not be able to legally or feasibly progress. We hope that this allays HLD's concerns and if not, we

request that HLD confirm what allowances they have allowed for within their cashflow for a detailed planning application and procurement process, which would need to occur prior to up front infrastructure works commencing on site.

Construction period and timing of sales period commencement

We have assumed a construction period of 88 months, which was originally advised by G & T at submission, assuming a construction rate of 6 units per month (4 private units and 2 affordable units). HLD have assumed a construction period of 83 months, on the basis of a construction rate of 4 units per month for private units only. HLD have not clarified the construction rate for affordable units and the impact of this on the overall construction period and this is requested.

Following a more detailed review, G & T's programme manager has advised in the delivery programme attached that a 376 week / 88 month construction period is appropriate for the original scheme following a 30 week / 7 month period for initial enabling works, which equates to a total construction period of 95 months. We therefore maintain that a construction period of 88 months is conservative and reserve the right to amend our construction assumptions to 95 months.

HLD have assumed an 83 month sales period (staggered four months from the start of construction), given that in their experience, houses can be constructed within a four-month period by typical house builders and then are sold to the market.

In the attached phasing timeline, G & T advise that following the 3 month procurement process, a 6 month period should be allowed for Initial Enabling works (initial plot creation) before construction works can begin. They have then advised that an additional 6 months would be required before the completed units could be handed over for sale. Therefore our assumption that sales commence 12 months following the commencement of infrastructure works is reasonable and the soonest that sales could begin taking into consideration the pre-construction period and then the necessary plot creation and construction works to build the first houses.

Cashflow

Infrastructure Costs

As detailed in G & T's cost plan in the FVA submission, it is assumed all works will be built in one continuous phase with infrastructure and house/ apartment construction taking place concurrently. However whilst there will be overlap between the infrastructure works and house construction, a significant portion of infrastructure will need to be installed prior to the first houses being constructed.

For the purpose of the submission, G & T advised that the infrastructure cost of £21,888,000 should be cashflowed across the construction period as follows:

Year of construction	% Per annum
Year 1	20
Year 2	40
Year 3	55
Year 4	70
Year 5	80
Year 6	90
Year 7	95
Year 8	100

HLD confirm that in their view, most of the infrastructure costs are 'external works', rather than up-front infrastructure works, and hence in their opinion can be incurred over the duration of the construction period. They have therefore assumed £2,892,525 during pre-construction with the remaining infrastructure costs delivered over the life of the construction period.

We have forwarded these comments to G & T for review and they have commented that HLD have not made any allowance for the need to construct some onsite roads delivered to base course to act as haul roads to serve the initial phase of development and access to key infrastructure site features. This would also trigger the requirement for some onsite utilities to be laid in the road/ footway and capped for onward connection.

20% of the infrastructure subtotal of £21.3m before inflation = £4.3m. A breakdown reveals a potentially higher upfront spend as follows:

Development Platform: £1.594m (Environmental, Demo, Site Clearance & Prep)

Utilities Reinforcements: £1.067m

New Access: £0.17m

On-site roads: £0.662m (say 15% of road network (£6.3m excl. new access incl. above) delivered to base course to act has haul road to serve first phase of houses to be constructed and key infrastructure, say 70% of cost is sub-base and kerbing, with finishes/ making good remaining 30%. So, 15% of £6.3m = £945k, 70% of £945k = £662k)

On-site utilities distribution: £0.6m (refer road comment; 15% of £4.029m)

Surface Water: £0.27m (detention basins, swales, outfalls etc. for surface water treatment during earthworks and construction)

SUBTOTAL: **£4.4m**
Inflation: £0.44m
TOTAL: **£4.8m**

We therefore maintain that 20% of infrastructure costs incurred in year 1 is conservative and request that HLD confirm what allowances they have made for onsite / haul roads and associated services.

Construction costs

In our submission position, construction costs were phased on an 'S curve' in the appraisal cash-flow, in line with the RICS guidance note titled "Valuation of development property 1st edition, October 2019." Rather than being distributed equally over the development period, generally the costs are quite small at the beginning of a construction project, relatively accelerate in the middle and reduce towards the end of the construction period. The purpose of an s-curve is to reflect more accurately the incidence of the costs in a particular project.

HLD comment that whilst this is appropriate for large blocks of apartments, it is not appropriate for larger residential schemes where house builders typically 'smooth out' construction costs incurred by moving trades around dwellings which are at different stages of completion. HLD have therefore pro-rata'd the construction costs over for the residential build over the construction period on a monthly basis.

We maintain that the S curve is appropriate for the valuation of development property in the context of viability, which should assume a reasonable set of assumptions including cashflowing construction costs rather than assuming a bespoke cashflow mode. We would request that evidence is provided confirming the house builders that adopt the proposed alternative cash flow modelling.

Affordable Housing

HLD note that the affordable housing is not timed in line with the delivery of sales, and they cannot understand the rationale for the different timing assumptions that have been applied in our submission position. For the scheme delivering 30% affordable housing, given the quantum of affordable housing units being delivered, we have adopted the forward funded approach which is usually adopted where a registered provider is acquiring this number of units from a developer, making monthly staged payments through the construction period with payments starting 12 months after construction has commenced upon golden brick.

Benchmark Land Value

In our submission position, we proposed a benchmark land value of £11.8 million which assumes £200,000 per acre. This was informed by an evidence base for agricultural land values and reference to local plan viability assessment, specifically CDC's Local Plan Partial review – viability assessment (July 2017) which advises that a benchmark of £500,000 per hectare / £200,000 per acre gross is adopted for Core Development Sites for greenfield housing land.

HLD have reduced the rate to £150,000 per gross acre on the basis that this is more in line with (although actually slightly above) the BLV per acre of just under £130,000 per gross acre assumed in the previous FVA submission undertaken by Turner Morum on behalf of A2 Dominion in 2018. HLD state that it seems odd that the landowners are now proposing a higher BLV than they did three to four years ago, particularly given the significant viability issues that are being experienced at the site.

Hence we are in agreement that the approach to viability should follow the PPG and RICS Guidance, and that a benchmark land value should be established on the basis of the existing use value plus a premium to the landowner.

It should be noted that the land is owned by a different entity for the purpose of this viability assessment and Rapleys have been instructed to carry out the viability assessment based on current day evidence and policy precedent. Whilst previous viability negotiations are helpful in providing a context to the current negotiations, all appraisal inputs need to be based on current evidence and policy rather than historical precedent.

We have provided an evidence base and policy basis for our proposed benchmark land value and when asked to provide an evidence base justifying their benchmark land value, HLD forwarded an appeal decision in relation to Land South of Steeds Farm, Coxwell Road, in Faringdon which provides some commentary on Landowner's premium.

We would firstly highlight that the appeal scheme is located in a different local authority, the Vale of White Horse District Council, which has it's own SPD and local plan viability evidence base for existing use values. Whilst we accept that the multiplier adopted was 10x the existing use value in this appeal case, it makes reference to the premium being decided on a case-specific basis and with reference to the Council's own Viability Study documents.

We would argue that the proposed scheme at Land at North West Bicester is a superior site in terms of proximity to a larger urban settlement. Therefore the multiplier should be closer to 20x to incentivize the landowner to release the land for development and this is supported by the Council's own viability study documents, specifically CDC's Local Plan Partial review – viability assessment (July 2017).
The Council's advisers have not provided any evidence to support £150,000 per acre other than the approach that this has been agreed by other parties against a previous application which our understanding never concluded. We therefore request that a more detailed evidence base is provided justifying the benchmark land value assumptions.

Viability appraisal summary
The table below summarises the current position on the appraisal assumptions.

Appraisal input	Submission position	HLD / Council position	Current status
Private GDV and Sales Values	£185.3 million (£402 psf)	£188.8 million (£410 psf)	We will circulate our updated, priced schedule of accommodation together with our updated viability position once this is finalised.
Social Rent values	30% of OMV	35% of OMV	Request that HLD confirm the valuation assumptions that have informed their proposed discount levels, specifically for social rent.
Affordable Rent values	50% of OMV	55% of OMV	Request that HLD confirm the valuation assumptions that have informed their proposed discount levels.
Shared Ownership Values	70% om OMV	65% of OMV	Agreed at 65% of OMV
HIF funding	£6.7 million*	£1	We assumed £6.7 million of HIF funding in our submission position but have reduced this to £317,000 post submission. HLD have assumed £1 for HIF funding on the basis that CDC will need to consider what (if any) HIF Funding the Applicant may receive.

			HLD comment that they understand that the HIF monies have already been used to deliver infrastructure, which is not included in the Applicant's FVA appraisal, and that the Applicant will be asked to make a contribution to this infrastructure to CDC as the HIF funding monies needs to be repaid. £1 assumed subject confirmation.
Base Build Costs	Amended build costs position following negotiations: **£114.5 million**	Based on RLF cost position following negotiations with G & T: **£108.6 million**	Updated cost position to be provided based on updated scheme.
Infrastructure Contingency	10%	10%	Agreed.
Developer Contingency	5%	5%	Agreed
Professional fees	8%	8%	HLD have agreed with professional fees of 8% but have not applied these to contingency costs. We disagree that this is the correct methodology.
Phasing			Response provided.
	· One month for purchase;	· One month for site purchase.	
	· 12 month lead-in;	· Six months lead-in period.	
	· 88 month construction period;	· 83 month construction period.	

	· One year lag from the start to construction to the construction of the first house; and · 93 months sales period.	· 83 months sales period (staggered four months from the start of construction), given that in our experience, houses can be constructed within a four-month period by typical house builders and then are sold to the market.	
Infrastructure Phasing	G & T advised that the infrastructure expenditure should be cashflowed across the construction period as follows.	HLD confirm that in their view, most of the infrastructure costs are 'external works', rather than up-front infrastructure works, and hence in our opinion can be incurred over the duration of the construction period. They have therefore assumed £2,892,525 during pre-construction with the remaining infrastructure costs delivered over the life of the construction period.	G & T have provided detailed response.
S106 / CIL Costs	Total S106 contributions of £35.8 million equating to £19,000 per unit.	Total S106 contributions of £35.8 million equating to £19,000 per unit.	Case officer to update the S106 heads of terms matters
Marketing / Sales Costs	3% for marketing, agency and legals for private sale units.	1.5% for marketing; 1% for agents fees and 0.35% for legal fees. This provides a slightly lower marketing and disposal fees allowance of 2.85%.	Response provided.
Sales Agent Fee (Affordable)	0.5%.	0%	HLD have assumed that it is typical that most house builders undertake the affordable housing sale to a Registered Provider themselves. We disagree with this.
Finance assumptions	7% debit and 0.5% credit	6.5% debit and 0% credit	Response provided. Assumption in line with local plan viability evidence base.

Profit	20% on GDV for private and 6% for affordable	20% on GDV for private and 6% for affordable	Agreed
Benchmark Land Value	£11.8 million based upon a gross site area of 59 acres and a rate of £200,000 per gross acre.	£8.85 million based upon a gross site area of 59 acres and a rate of £150,000 per gross acre.	Response provided.

We trust this clarifies the current position and we would be happy to discuss further once you've had the opportunity to review.

Yours sincerely,

Archie Mackay-James
BA (Hons) MSc MRICS
Senior Associate - Residential Professional Services
archie.mackay-james@rapleys.com
07467 941544

Archie Mackay-James

From: Riggall, Jonathan <jonathan.riggall@stantec.com>
Sent: 10 May 2022 18:03
To: Archie Mackay-James
Cc: Rob Bolton; Nick Fell; hannah.leary@bartonwillmore.co.uk; Tom Motchman
Subject: Viability Model - Bicester Firethorn

Dear Archie

Following from my review of the Bioregional commentary on the viability model there are three general areas their response considers which I have responded to below.

1) Inclusion of technology within the viability model for the Future Homes Standard

Building Regulations allows a flexible approach for house builders to meet defined targets within Part L. As such developers are free to use a combination of fabric and technology solutions to meet fabric energy efficiency target, primary energy target and the target emission rate of Part L. The inclusion of a primary energy target drives the inclusion of on plot renewable technology. All technology within SAP are available to a developer including PV, WWHR, and night storage heaters to meet the targets.

In costing for the FHS inclusion of known and available technology have been included including PV and WWHR. These are also both within the notional home model that defines the current (2021) Part L target emission rate. If these solutions are removed from the viability model the cost of other measures such as fabric energy efficiency would have to increase to achieve the primary energy target and target emission rate.

2) Heating technology costing

The energy strategy proposes options which prioritise ASHP. It also allows flexibility (see above) to use smart night storage heaters where ASHP are technically unimplementable. The use of smart night storage heating allows for greater flexibility in using renewable energy generation (onsite, near site and off site) and balancing power demand away from peak periods, were heat pumps are less flexible by the nature of the technology. Where there are constraints on heat pump technology, smart night storage heating is an alternative.

In costing heat pump technology there is no significant variation in costs associated with domestic scale technology (i.e 5-6kW). The sizing of heat pumps is also likely to be driven by hot water supply not heating, so the relationship between reducing the size of heat pump technology and through increasing fabric standards is limited by the need for hot water.

The reference documents used by Bioregional exclude a range of cost factors for heat pump technology such as labour/skills, commissioning, inflation and other ancillary costs. The use of up-to-date build costs data, which includes the impact of inflation in building materials and technology, rather than past reference standards is important.

3) Allowing for carbon offsetting within the S.106

There are a wide number of variables that will affect the final emission rate of the development, the offsetting delivery method and therefore the 'cost' of offsetting. With regards to developing an approach to carbon offsetting, a similar methodology used in other development S.106 would be recommended at this outline planning stage.

Jonny Riggall
Mobile: +44 7917372806
jonathan.riggall@stantec.com

Stantec

Financial Viability Assessment Executive Summary for
Firethorn Trust

LAND AT NORTH WEST BICESTER HOME FARM, LOWER FARM AND SGR2 CAVERSFIELD OXFORDSHIRE OX27

11th May 2022

Our Ref: AAMJ/20-00678

70 Pall Mall London SW1Y 5ES
0370 777 6292 | info@rapleys.com | rapleys.com
LONDON | BIRMINGHAM | BRISTOL | CAMBRIDGE | EDINBURGH | HUNTINGDON | MANCHESTER

1 INTRODUCTION

1.1 We have been instructed by Firethorn Trust (the applicant) to provide an Executive Summary for the Financial Viability Assessment of their proposed scheme at Land at North West Bicester. The proposal consists of:

> *"outline planning approval for the construction of up to 530 dwellings, including details of the site access arrangement."*

1.2 The proposed site forms part of the wider North West Bicester Eco-Town, which is captured in planning policy by Cherwell Local Plan Policy Bicester 1. Planning permission will only be granted for development at North West Bicester in accordance with a comprehensive masterplan for the whole area to be approved by the council as part of a North West Bicester Supplementary Planning Document (NWB SPD). The development description for the NWB Eco-Town is a new zero carbon mixed use development including 6,000 homes, employment uses, schools, green space and strategic infrastructure proposed across the 400 hectares identified.

1.3 True zero carbon (TZC), is a key requirement within the NWB SPD - one of a series of requirements/potential obligations on development within the North West Bicester site including affordable housing and Section 106 contributions.

1.4 Whilst the wider masterplan has been allocated for development in the adopted Local Plan, the delivery of the proposed site has been frustrated by viability issues, principally on the delivery of the Council's policy objectives of net carbon homes, the cost of the necessary infrastructure amongst other policy requirements such as 40% open space and affordable housing.

1.5 The purpose of this executive summary is to consider, in an open book format, the financial viability of the proposed scheme and the level of affordable housing and financial Section 106 contributions that can be supported whilst also delivering a True Zero Carbon (TZC) development.

1.6 The applicant is seeking to maximise the amount of affordable housing delivered on site subject to viability testing. However, if it is not viable for the development to deliver policy compliant levels of affordable housing and meet the requirements imposed by delivering a TZC scheme we will need to engage with CDC to identify its priorities in terms of affordable housing delivery against the TZC requirements.

1.7 In preparing this executive summary we have considered Cherwell Local Plan 2011-2031, North West Bicester SPD February 2016 and Developer Contributions SPD, February 2018.

1.8 The financial viability assessment (FVA) considers the total value of the completed scheme and the total cost of its delivery, using recognised residual appraisal software - Argus Developer. In accordance with standard viability methodology, the resulting residual land value is then compared with an appropriate benchmark value to determine the scheme's viability.

1.9 The advice set out in this executive summary is provided in the context of negotiating planning obligations and therefore in accordance with PS 1 of the RICS Valuation – Global Standards (November 2021) incorporating the IVSC International Valuation Standards (Red Book), the provisions of VPS 1 – 5 are not of mandatory application and accordingly this report should not be relied upon as a Red Book Valuation.

1.10 Specifically we would state:

- Our advice and opinions contained herein are given without liability, therefore falling outside the scope of the requirement of the RICS Valuation – Global Standards November 2019 Edition.

- We have not conducted a full survey, inspection and measurement nor undertaken all the necessary enquiries required in providing a Red Book Valuation.

1.11 In accordance with the RICS Financial Viability in planning: conduct and reporting (May 2019) (FVIP), in preparing this report we have acted with objectivity and impartially, without interference and with reference to all appropriate available sources of information. This report fully complies with the requirements set out in FVIP.

1.12 We have been provided with, and relied upon, the following key information:

- Planning Statement provided by Barton Wilmore.
- Affordable Housing Statement provided by Pioneer.
- Residential sales values provided by Green and Co estate agents.
- Cost plan provided by Gardiner and Theobald (G & T).

2 ASSUMPTIONS

2.1 In undertaking this report, unless otherwise specifically stated, we have made the following assumptions:

- We assume that the site is held freehold with vacant possession and free from all encumbrances such as onerous covenants, easements and rights of way.
- We assume that there are no items that could lead to adverse development costs such as contamination, adverse ground conditions, right of light issues or the designation of an area of archaeological significance.
- We understand that a small portion of the Site (in the eastern parcel) lies within the extents of Flood Zone 2 and Flood Zone 3 along the eastern boundary of the eastern parcel. We assume that the costs required to deal with flood prevention measures are accounted for within the cost plan.
- We have assumed planning permission will be granted for the development as described above.

2.2 If any of these assumptions prove to be incorrect they could have a significant impact on our conclusions.

3 EXECUTIVE SUMMARY

3.1 We have assessed the Residual Land Values (RLV) of the proposed scheme based on the following scenarios:

1. North West Bicester Traditional House Building Costs - no extra-over costs associated with Future Homes Standards or True Zero Carbon.

2. House Building Costs based on Future Homes Standard (FHS).

3. House Building Costs based on True Zero Carbon (TZC).

3.2 For the purpose of this FVA, we have assumed the following definitions.

NORTH WEST BICESTER TRADITIONAL HOUSE BUILDING

3.3 As a base position, we have assumed a scenario that the scheme is delivered in line with the specification requirements for North West Bicester Traditional House building standards. This assumes compliance with the Council's other policies of sustainability, healthier lifestyle, open space etc. and compliance with current Building Regulations requirements for overall carbon emissions and space heating energy demand.

3.4 This baseline position has been costed within G & T's cost estimate and we have assessed the scheme's ability to deliver affordable housing on the assumption that the scheme is delivered in line with traditional house building standards.

FUTURE HOMES STANDARD

3.5 The second scenario that we have assessed is the proposed residential homes are constructed to "the Future Homes Standard: Changes to Part L and Part F of the Building Regulations for new dwellings." The Future Homes Standard will require new build homes to be future-proofed with low carbon heating and world-leading levels of energy efficiency; it will be introduced by 2025. New homes built to the Future Homes Standard will have carbon dioxide emissions at least 75% lower than those build to current Building Regulations standards.

3.6 G & T's Cost Estimate includes for measures to satisfy the above definition of Future Homes Standard (plus photovoltaic (PV) panels). In order to achieve the Future Homes Standard, the space heating and domestic hot water (DHW) strategy for all house types is to be delivered by individual Air Source Heat Pumps (ASHP) for houses and smart night storage heating for the flats plus the inclusion of PV on the roof.

3.7 We have assessed the scheme's ability to deliver affordable housing on the assumption that the scheme is delivered to the FHS specification.

TRUE ZERO CARBON HOMES

3.8 The third scenario that we have assumed is where the proposed scheme is delivered in compliance with the definition of True Zero Carbon. Development Principle 2 of the SPD defines "true" zero carbon development – the central element of the Eco Town concept – as follows:

> *"over a year the net carbon dioxide emissions from all energy use (from both regulated and unregulated energy uses) within buildings on the eco-town development as a whole are zero or below."*

3.9 This definition assumes the exclusion of embodied carbon and emissions from transport but inclusion of all buildings – not just houses but also commercial and public sector buildings. For the avoidance of doubt, regulated energy use comes from space heating, hot water, fans and lighting whereas unregulated energy use comes from plug-in appliances and cooking.

3.10 As mentioned, G & T's cost estimate includes for measures to satisfy the above definition of FHS and in order to satisfy the definition of TZC Homes as defined at point 3.8, carbon offsetting contributions are necessary to supplement the additional design measures. The estimated contribution is excluded from G & T's costs estimate and therefore the carbon offset contributions need to be added to the 'all-in' build cost rate as advised in the cost estimate to determine the overall build cost rate to deliver TZC.

3.11 The applicant has instructed Stantec to calculate the Carbon offset contributions that would be required to realise TZC and we have added this to the 'all-in' build cost against which we have tested the scheme's ability to deliver affordable housing.

3.12 The alternative way that the scheme could seek to deliver on TZC is to upgrade the District Heating Network and the applicant has been engaging with SSE regarding a decarbonisation proposal of the existing DHN which involves removing the current gas supply and installing an industrial sized ground source heat pump. This is an alternative option that has not been assessed in this viability assessment, but the applicant is open to discussing this further with the Council as an alternative option.

3.13 On the basis of above, we have modelled the following affordable housing tenure scenarios:

Affordable Housing Scenarios
Affordable Housing – Mix of Affordable Rent (AR) & Shared Ownership (SO)
1. 30% AH (70% AR / 30% SO) – North West Bicester Traditional House Building Costs
2. 30% AH (70% AR / 30% SO) – Future Homes Standard Build Costs
3. 30% AH (70% AR / 30% SO) – True Zero Carbon House Build Costs
Affordable Housing – Mix of Social Rent (SR) & Shared Ownership (SO)
4. 30% AH (70% SR / 30% SO) – North West Bicester Traditional House Building Costs
5. 30% AH (70% SR / 30% SO) – Future Homes Standard Build Costs
6. 30% AH (70% SR / 30% SO) – True Zero Carbon House Build Costs
Affordable Housing – All Shared Ownership
7. 30% AH (100% SO) - North West Bicester Traditional House Building Costs
8. 30% AH (100% SO) – Future Homes Standard Build Costs
9. 30% AH (100% SO) – True Zero Carbon House Build Costs
No Affordable Housing – 100% Private Tenure
10. 100% Private Tenure - North West Bicester Traditional House Building Costs
11. 100% Private Tenure – Future Homes Standard Build Costs
12. 100% Private Tenure – True Zero Carbon House Build Costs

3.14 Specifically, we have established that the scheme delivering 30% affordable housing (70% AR / 30% SO) when adopting True Zero Carbon House Build Costs generates a Net Development Value (NDV) of £169.99 million. The total costs for delivering the scheme are £141.95 million. We have assumed a developer return of £28.03 million which equates to 17.17% return on GDV.

3.15 We calculate that the Existing Use Valuation (EUV) of the site is £0.67 million. We have applied a premium multiplier of 17.5. We have assumed a benchmark land value of £200,000 per acre which generates a benchmark land value of £11.8 million. The table below summarises the viability position.

Assumption	Adopted Amount
NET DEVELOPMENT VALUE	£169.99 million
DEVELOPMENT COSTS	£141.95 million
PROFIT	£28.03 million
APPROPRIATE BENCHMARK VALUE (Including Premium)	£11.8 million

3.16 When the residual land value of the proposed scheme delivering 30% affordable housing of is compared against the Benchmark land value of £11.8 million, this produces a deficit. Therefore we conclude that the proposed scheme cannot viably deliver 30% affordable housing (70% AR / 30% SO) when adopting True Zero Carbon House Build Costs.

3.17 When comparing the above residual land values with an appropriate Benchmark Land Value, we can confirm the following:

Affordable Housing Scenarios	
Affordable Housing – Mix of Affordable Rent (AR) & Shared Ownership (SO)	**Viable/Not Viable**
1. 30% AH (70% AR / 30% SO) – North West Bicester Traditional House Building Costs	Viable
2. 30% AH (70% AR / 30% SO) – Future Homes Standard Build Costs	Not Viable
3. 30% AH (70% AR / 30% SO) – True Zero Carbon House Build Costs	Not Viable
Affordable Housing – Mix of Social Rent (SR) & Shared Ownership (SO)	
4. 30% AH (70% SR / 30% SO) – North West Bicester Traditional House Building Costs	Not Viable
5. 30% AH (70% SR / 30% SO) – Future Homes Standard Build Costs	Not Viable
6. 30% AH (70% SR / 30% SO) – True Zero Carbon House Build Costs	Not Viable
Affordable Housing – All Shared Ownership	
7. 30% AH (100% SO) - North West Bicester Traditional House Building Costs	Viable
8. 30% AH (100% SO) – Future Homes Standard Build Costs	Not Viable
9. 30% AH (100% SO) – True Zero Carbon House Build Costs	Not Viable
No Affordable Housing – 100% Private Tenure	
10. 100% Private Tenure - North West Bicester Traditional House Building Costs	Viable
11. 100% Private Tenure – Future Homes Standard Build Costs	Not Viable
12. 100% Private Tenure – True Zero Carbon House Build Costs	Not Viable

3.18 We have established the scheme could deliver 30% affordable housing (70% AR / 30% SO) if it were constructed based on what we are calling 'North West Bicester Traditional House Building Costs'. These are house building costs that are fully compliant with current building regulations but do not incur the additional 'extra over' cost of meeting FHS or TZC.

3.19 The cost plan presents a 'layering' of the costs of delivering to FHS. This set outs clearly the additional costs that are required over and above 'traditional house building' costs in order to meet first, the Future Homes Standards and then additionally the cost of building to True Zero Carbon.

3.20 Our financial modelling demonstrates that it is the cost of building to FHS and then additionally to TZC requirements that is challenging to deliver and not the delivery of affordable housing. Subject to agreement with HLD on the viability inputs, the applicant seeks to engage with the CDC regarding flexibility with regard to FHS and TZC requirements.

3.21 In addition to the 'extra-over' cost of constructing the houses to meet FHS and then TZC there are also considerable s.106 and strategic infrastructure financial contributions that are having a material impact on the viability of the proposed scheme. As set out in the report, the total s106 contributions are currently very high in our experience of schemes of this size and nature and the strategic infrastructure contribution is still to be confirmed. If further information is provided to us in this regard we may need to amend our conclusions.

4 APPRAISAL INPUTS

4.1 We have adopted inputs that reflect cost and values as at the date of this report. There is a possibility that our assumptions may change in accordance with the market as the scheme evolves and further information comes to light. We set out below our assumptions in respect of these inputs with reference to the viability assessment that informed the plan. We also set out the proposed developer contributions and how this compares with policy requirements

CONTINGENCY

4.2 We have applied the following contingency allowances:

- Infrastructure costs: 10%
- House build costs: 5%

4.3 In Cherwell District Plan's viability testing (July 2017), a contingency of 5% of build cost is applied hence our adopted assumption for house build costs is in line with Cherwell's Local Plan Viability evidence base. We have applied a higher contingency allowance for infrastructure works to account for the uncertainty associated with infrastructure works for a scheme of this size and nature as advised by G & T.

PROFESSIONAL FEES

4.4 We have adopted professional fees at 8% which is considered reasonable for a scheme of this size and is in line with current industry practice for residential schemes of this scale and nature.

4.5 In Cherwell District Plan's viability testing (July 2017), professional fees are set at 10% of build costs whilst acknowledging that residential schemes often assume professional fees of 6-8%. Hence our adopted assumption is at the mid-range end of the assumptions detailed in Cherwell's Local Plan Viability evidence base.

SECTION 106 CONTRIBUTIONS

4.6 The table below summarises the s106 costs per unit, the basis of indexation, the indexed contribution per dwelling and the total s106 contribution per dwelling.

S106 Contribution	Basis of indexation	S106 contribution per dwelling (as sought by CDC/OCC)	Total s106 contribution
Health	CPIH from Q2 2017	£281.29	£149,084
Neighbourhood Police	CPIH from Q2 2017	£164.03	£86,936
Community Building Provision	CPIH from Q2 2017	£1,139.37	£603,864
Road Crossing to Caversfield Church*	Unindexed	£1	£1
Community Development Workers	CPIH from Q2 2017	£376.70	£199,648
Community Development Fund	CPIH from Q2 2017	£49.10	£26,023
Primary School	BCIS All-in TPI from 327	£11,163.28	£5,916,540
Secondary School	BCIS All-in TPI from 327	£7,805.38	£4,136,850
Special Education Needs	BCIS All-in TPI from 327	£558.26	£295,876
Sports pavilion contribution	CPIH from Q2 2017	£534.48	£283,275
Sports Pitches and Maintenance	CPIH from Q2 2017	£518.25	£274,673
Burial Ground	CPIH from Q2 2017	£10.91	£5,780
Community Management Organisation	CPIH from Q2 2017	£1,537.21	£814,722
Community Facility Maintenance	CPIH from Q2 2017	£427.23	£226,430
Waste	CPIH from Q2 2017	£106.90	£56,655
Bus Provision	CPIH Index from Q4 2020	£1,179.46	£625,114
Pedestrian/Cycle Infrastructure	PUB SEC Index from Dec 20	£707.56	£375,008
Right of Way Contribution	PUB SEC Index from July 21	£32.87	£17,419
Improvements to junction of Charlotte Avenue/B4100	PUB SEC Index from Dec 20	£84.79	£44,937
Improvements to junction of B4100/A4095	PUB SEC Index from Dec 20	£499.02	£264,478
Travel Monitoring Plan	CPIH Index from Dec 2020	£5.48	£2,903
Adoption of Unallocated Parking Bays	CPIH from Q2 2017	£1,029.93	£545,864
Local Road Improvements	CPIH from Q4 2020	£377.35	£199,995
Bicester Leisure Centre contribution	CPIH from Q2 2017	£534.48	£283,275
Biodiversity	CPIH from Q2 2017	£65.35	£34,637
Strategic Highway Contribution	Unindexed	£5882.35	£3,117,646
Library Services	CPIH from Q2 2017	£58.34	£30,919
Children's services	CPIH from Q2 2017	£8.68	£4,602
Village traffic calming	CPIH from Q2 2017	£62.34	£33,039
Secondary School land Contribution	CPIH from Q4 2020	£677.17	£358,901
Total		£35,878.53	£19,015,094

* The G & T cost estimate includes for delivery of a signalised pedestrian crossing to Caversfield Church totalling £195,000.

4.7 The confirms that our total adopted s106 costs is c. £19 million which equates to c. £35,900 per unit.

FINANCE

4.8 We have included finance costs at 7% inclusive of arrangement fees and a credit rate of 0.25%. This is in line with Cherwell District Plan's viability testing (July 2017) where a 7% finance cost is applied.

5 BENCHMARK LAND VALUE

5.1 The Viability Guidance Note attached to the 2019 NPPF confirms that a benchmark land value should be established on the basis of the existing use value (EUV) of the land. It defines EUV as the value of the land in its existing use together with the right to implement any development for which there are policy compliant extant planning consents, including realistic deemed consents, but without regard to alternative uses.

5.2 The premium for the landowner should reflect the minimum return at which it is considered a reasonable landowner would be willing to sell their land. The premium should provide a reasonable incentive, in comparison with other options available, for the landowner to sell land for development while allowing a sufficient contribution to comply with policy requirements.

5.3 The PPG at paragraph 16 details that the premium is the amount above existing use value (EUV) that goes to the landowner. The premium should provide a reasonable incentive for a landowner to bring forward land for development while allowing a sufficient contribution to fully comply with policy requirements.

5.4 The Financial Viability in Planning (FVIP) details that when providing benchmark land value we must report the current use value (CUV) referred to as EUV or first component in the PPG referred to above. For the Benchmark Land Value, we have relied upon the Existing Use Value plus premium approach as advocated by national planning guidance and FVIP.

5.5 As previously mentioned, the Site comprises two parcels of land, with a total area of 23.97 hectares / 59 acres, made up of an eastern and Western Parcel. The land is predominantly grassland with fields bounded by hedges with some large trees, woodland, and plantation. The land is classified as good to moderate value (primarily Grade 3b) under the Agricultural Land Classification system.

5.6 CDC's Affordable Housing Viability Study (March 2013) which forms part of the Local Plan, states that evidence suggests BLV's ranging between £200,000 and £240,000 per gross acre are appropriate for Greenfield sites.

5.7 In CDC's CIL Levy Viability Update (September 2016), for large greenfield sites providing 150+ units they state that the suitable benchmark land value rate is £375,000 per hectare which equates to £150,000 per acre. This is based on HCA draft guidance (2010), where benchmarks tend to be in the range of 10 to 20 times agricultural value. The CIL viability update note assumes an agricultural of £25,000 per hectare / £10,121 per acre based on RICS: Rural Land Market Survey H1 (2015) with a multiplier of 15 times agricultural land value.

5.8 In CDC's Local Plan Partial review – viability assessment (July 2017) a benchmark of £500,000 per hectare / £200,000 per acre gross is adopted for Core Development Sites for greenfield housing land.

5.9 We have reviewed agricultural land values in Bicester based on current market evidence and the table below details comparable sites that are currently being marketed in the locality.

Address	Description	Acres	Hectares	Price	Price per Acre
Marsh Gibbon, Bicester OX27 0AN	4 bedroom house with farm buildings and arable grass and permanent pasture.	129	52.36	£1,500,000	£11,627.91
Piddington, Bicester OX25 1QE	6 bedroom farmhouse with traditional farm buildings and modern livestock building	134	54.23	£2,200,000	£16,417.91
Water Stratford, Buckingham, MK18 5DR	Arable Land with small areas of woodland	244	98	£2,200,000	£9,016.39
Ardley Road, Middleton Stoney, Bicester, OX25	Residential farm with modern and traditional farm buildings and a mix of mainly arable land.	133	54	£2,750,000	£20,676.69

5.10 We have liaised with the agent marketing Ardley Road, located to the West of Bicester confirmed that the site is now under offer and that the arable land component of the deal equates to £13,500 per acre. Based on the description and location of the subject site, the agent recommended that agricultural land values would be between £10,000 and £12,000 per acre and the agent marketing the sites at Piddington and Ardley Road agreed with this assessment.

5.11 Cherwell's CIL Levy viability update note acknowledges that what a landowner may seek for its land is dependent upon its location, characteristics, type of uses, as well as personal circumstances relating to any deal that is done. The subject site is an edge of settlement greenfield site located on the edge of Bicester with high development potential given the site forms part of the wider North West Bicester SPD allocation. Therefore the premium to incentivise the landowner to release the land for development should be at the upper end of the range of 10 to 20 times of agricultural value.

5.12 The sensitivity table below details the impacts on the benchmark land value per acre depending on the agricultural land value and premium adopted.

Benchmark land value Sensitivity		Premium multiplier		
		x15	x17.5	x20
Agricultural land value per acre	£10,000	£150,000	£175,000	£200,000
	£11,000	£165,000	£192,500	£220,000
	£12,000	£180,000	£210,000	£240,000

5.13 This demonstrates that the appropriate rate per acre to adopt for the benchmark land value should be between £150,000 and £240,000 depending on the agricultural land value adopted and the premium multiplier.

5.14 Taking all of the above into consideration, we have assumed a benchmark land value of £200,000 per acre. When applied to the gross acreage of 59 acres, this generates a benchmark land value of £11.8 million which we have adopted.

Series:	BCIS All-in TPI

Series number: 101 quarterly
Base: 1985 mean = 100
Last updated: 31-Mar-2022
Downloaded: 20-Apr-2022 17:47

Date	Index	Status	ıivalent sam	Percentage change		
				On year	On quarter	
May-2020	335	Provisional		0.0	0.0	
Aug-2020	330	Provisional		-1.5	-1.5	
Nov-2020	328	Provisional		-1.5	-0.6	
Feb-2021	328	Provisional		-2.1	0.0	
May-2021	331	Provisional		-1.2	0.9	
Aug-2021	339	Provisional		2.7	2.4	
Nov-2021	344	Provisional		4.9	1.5	
Feb-2022	349	Provisional		6.4	1.5	
May-2022	359	Forecast		8.5	2.9	5.9%
Aug-2022	367	Forecast		8.3	2.2	
Nov-2022	369	Forecast		7.3	0.5	
Feb-2023	373	Forecast		6.9	1.1	
May-2023	375	Forecast		4.5	0.5	
Aug-2023	375	Forecast		2.2	0.0	
Nov-2023	378	Forecast		2.4	0.8	
Feb-2024	384	Forecast		2.9	1.6	
May-2024	389	Forecast		3.7	1.3	
Aug-2024	389	Forecast		3.7	0.0	
Nov-2024	393	Forecast		4.0	1.0	
Feb-2025	400	Forecast		4.2	1.8	
May-2025	405	Forecast		4.1	1.3	
Aug-2025	405	Forecast		4.1	0.0	
Nov-2025	407	Forecast		3.6	0.5	
Feb-2026	415	Forecast		3.8	2.0	
May-2026	420	Forecast		3.7	1.2	
Aug-2026	420	Forecast		3.7	0.0	

G&T TENDER PRICE INDEX

UPDATED TO G&T TPI 1ST QUARTER 2022

GT GARDINER &THEOBALD

NATIONAL INFLATION CALCULATION TOOL			
Base date indice	Uplift Date indice	Inflation Rate	Inflated %
3Q2021	2Q2022	#N/A	#N/A

#

LONDON INFLATION CALCULATION TOOL			
Base date indice	Uplift Date indice	Inflation Rate	Inflated %
4Q2017	4Q2022	#N/A	#N/A

Note: Enter dates for uplift calculation on the grey shaded cells

	National TPI	QoQ	YoY	London TPI	QoQ	YoY
1Q2020	210.7	0.2%	0.9%	273.7	0.2%	1.0%
2Q2020	209.9	-0.4%	0.3%	272.6	-0.4%	0.3%
3Q2020	209.0	-0.4%	-0.3%	271.6	-0.4%	-0.4%
4Q2020	208.2	-0.4%	-1.0%	270.5	-0.4%	-1.0%
1Q2021	204.0	-2.0%	-3.2%	265.1	-2.0%	-3.2%
2Q2021	209.1	2.5%	-0.4%	271.7	2.5%	-0.4%
3Q2021	211.2	1.0%	1.0%	274.4	1.0%	1.0%
4Q2021	213.3	1.0%	2.5%	277.1	1.0%	2.5%

Q3 21 - Q4 21	1.0%
Q1 22 - Q2 22	2.75%
TOTAL:	3.75%

Emerging TPI for 2022 is 5.5% (due for formal release shortly)

NORTH WEST BICESTER
VIABILITY ORDER OF COST ESTIMATE

G&T v RLF Detailed Final Comparison 20.04.22

		RLF				G&T				Variance	Proposed Adjustments for RLF Agreement: Recommended Minimum		Proposed Adjustment		Comment
1	Environmental & Ecological														
2	Demo, Site Clearance, Land Formation														
3	Roads														
	New Access. Bellmouths x4	4	nr	20,000	80,000	4	nr	30,000	120,000	40,000			40,000	Align with G&T assumption - prov sum	
	Site Prelims & Overheads	13.5%			10,800	13.5%			16,200	5,400			5,400		
	Traffic Management	10%			9,080	10%			13,620	4,540			4,540		
	6m carriageway, 2m footpath both sides (incl. signage, lighting, street furniture, road markings, traffic calming etc)	1,241	m	1,170	1,451,970	1,231	m	1,420	1,748,020	296,050	94,316	Propose c. 50% uplift to £60m2	172,340	Align footpath construction with G&T (extra £140lm)	RLF footpath £41m2 - deemed insufficient as build up similar to highway to accept infrequent vehicle kerb mounting. G&T £76m2. Resulting delta of £170k/ £140lm. Can RLF revisit pricing of this element?
	Extra Over for calming traffic measures; raised tables with enhanced finishes to straight road lengths	5	Nr	10,000	50,000	10	Nr	10,000	100,000	50,000	50,000	Align with G&T assumption for traffic calming - prov sum	50,000	Align with G&T assumption for traffic calming - prov sum	G&T traffic calming every c. 120m, RFL c. 250m - deemed an under provision. Can RLF revisit this?
	7m shared space carriageway (incl. signage, lighting, road markings, traffic calming etc, bins excl.)	2,205	m	1,110	2,447,550	2,127	m	1,160	2,467,320	19,770					
	Extra Over for enhanced permeable finishes; block paving	2,205	m	133	293,265	2,127	m	175	372,225	78,960			19,740	25% of delta	Allowance needs to include baffles, lining, discharge perforated drain, deeper foundations etc. G&T allowance
	Hammerheads/ turning circles to Plot Roads					5	nr	3,500	17,500	17,500					Included in RLF road measures, G&T extra over. Minor
	Parking lay-bys to Plot Roads (assumed); 1 per 50m	44	Nr	2,125	93,500	43	Nr	3,500	148,890	55,390					As per RLF's rate below
	4m shared space carriageway (incl. signage, lighting, road markings, traffic calming etc,	808	m	735	593,880	871	m	730	635,830	41,950					
	Extra Over for enhanced permeable finishes; block paving	808	m	76	61,408	871	m	100	87,100	25,692					As above
	Hammerheads/ turning circles to Plot Roads					2	nr	3,500	7,000	7,000					
	Site Prelims & Overheads	13.5%			691,412				771,374	79,962	19,483		32,681		Pro-rata calc
	Traffic Management	10%													
										Subtotal 722,214	163,799		324,701		
4	Offsite Infrastructure														
	Pedestrian Crossing				101,000				195,000	94,000	23,500	25% of delta in absence of cost information from RLF	94,000	Align with G&T	Cost detail not provided by RLF. Is this available?
										Subtotal 94,000	23,500		94,000		
5	Utilities - Reinforcements														
	Reinforcements														
	Allowance for connection to existing sewer network (developer cost); 3 locations (2nr Charlotte Avenue, 1nr Wintergarden Fields); connection to public sewer (Table 8.6.1.)	3	nr	14,910	44,730	3	nr	20,940	62,820	18,090			18,090	Request to align with Stantec's interpretation	
	Site Prelims & Overheads	13.5%			141,567				0	(141,567)	(141,567)	Omit if RLF agrees to apply prelims to distribution section	(141,567)	Omit if RLF agrees to apply prelims to distribution section	Off-site works that do not attract Site Prelims & Overheads as these are infrastrucuture charges. On-site distribution deoes require Site Prelims & Overheads applied however
										Subtotal (123,477)	(141,567)		(123,477)		
6	Utilities - Onsite Distribution														
	Electricity														
	Onsite distribution	3,446	m	90.00	310,140	3,358	m	90.00	302,220	(7,920)					
	HV feed to access roads (trenching only - by developer) - confirmed to be by developer (Contestable option)	1,241	m	20.00	24,820	1,231	m	125	153,875	129,055	43,832	EO for single trench £55.32 priced as per water	43,832	EO for single trench £55.32 priced as per water	G&T thought it was agreed that HV cabling to primary access roads would be laid in its own trench. G&T deems £20 p/m insufficient for non-multi utility trenching (e.g. water is £55.32)
	LV feed to plot roads (trenching only - by developer) - confirmed to be by developer (Contestable option)	2,205	m	31.61	69,700	2,127	m	125	265,875	196,175			49,044	25% of delta	G&T is unsure of RLF's pricing approach - is this multi-utility or single trench? If the latter, it indicates the trenching allowance for HV is insufficient
	Water														
	Trenching by developer; excavation and backfill, assumed multi-utility trench (LV, Water, Comms)	3,446	m	68.30	235,362	2,127	m	35	74,445	(160,917)			(40,229)	25% of delta	RLF: Multi-utility trench allowance for water and telecoms G&T: Multi-utility trench for LV, comms and water (the £35 p/m is an extra over)
	Trenching by developer; excavation and backfill	647	m	55.32	35,792	1,966	m	125	245,750	209,958			52,489	25% of delta	Residual trenching (non multi-utility trench).
	Service Connections														
	Trenching by developer; excavation and backfill	449	m	31.61	14,193	449	m	125	56,125	41,932			10,483	25% of delta	Non multi-utility trench
	As above	467	m	31.61	14,762	467	m	125	58,375	43,613			10,903	25% of delta	Non multi-utility trench
	Telecomms														
	To Access Roads; 6-way	1,241	m	0	-	1,231	m	150	184,650	184,650			46,163	25% of delta	RLF: Incl in Water allowance
	To Plot roads; 4-way; assumed multi-utility trench (LV, Water, Comms)	2,205	m	0	-	2,127	m	70	148,890	148,890			37,223	25% of delta	G&T: Multi-utility trench EO with LV - 4x ducts laid across for simple identification
	BT Joint Chambers, every 75m assumed					45	Nr	1000	44,773	44,773	44,773	Align with G&T allowances			Please can RLF advise as to why this was not included in their Cost Plan?
	Pro-rata adjustment for 530 units (current layout based on 474 Stantec base calc. + 40 houses to reflect uplift from 409 to 449 = 514)				0	3%	%	1,280,155	39,849	39,849	39,849	Pro-rata calc. required	39,849	Pro-rata calc. required	
	Site Prelims & Overheads	13.5%			0				479,173	479,173	379,132	13.5% on RLF's base subtotal + allowances above	395,508	13.5% on RLF's base subtotal + allowances above	RLF has missed off Site Prelims & Overheads to this section
										Subtotal 1,349,232	507,587		645,265		
	TOTAL Combined:	11,901	m	33.16	394,629	11,725	m	101.32	1,187,985						
7	Surface Water														
	Creation of detention ponds	6,300	m3	10	63,000	6,300	m3	12.5	78,750	15,750					
	Creation of swales	888	m3	10	8,880	888	m3	12.5	11,102	2,222					
	Landscaping to basins	10,710	m2	7.5	80,325	10,753	m2	7.5	80,644	319					
	Allowance for headwalls/ outfalls	9	nr	1,500	13,500	9	nr	5,000	45,000	31,500	31,500	Align with G&T allowances	31,500	Align with G&T allowances	G&T cost is based on very recent cost data for storm drainage in Bicester. £1,500 is deemed insufficient for pre-Refer to parking section - G&T would request that RLF aligns with G&T's parking £/m2 in the first instance - since RLF's rates include the EO for permeable paving whereas G&T's EO is captured here.
	Extra Over allowance for permeable paving to car parking spaces and circulation, with 300mm thick subbase attenuation to apartment parking and visitor parking; allowance for			Excl. - Incl. in parking		6,156	m2	25	153,900	153,900					
	Piped collection; 450mm dia, s-bed, n.e. 3.5m	1,241	m	182	225,862	1,231	m	300	369,300	143,438			35,860	25% of delta	G&T based on recent data; deems RLF rate insufficient for s-bed 450mm drainage incl. connections and phased capping. G&T is also aware of the requirement for deeper drainage (5m+) in certain areas of the scheme and has therefore applied a blended rate

	Piped collection; 225mm dia, s-bed, n.e. 3.5m	2,205	m	95	209,475	2,127	m	250	531,750		322,275			80,569	25% of delta	As above
	Manholes	78	nr	2,250	175,500	75	nr	3500	261,411		85,911	85,911	Align with G&T allowances	85,911	Align with G&T allowances	G&T cost is based on very recent cost data for storm drainage in Bicester. £2,250 is deemed insufficient for pre-cast manhole chambers
	Site Prelims & Overheads	13.5%			111,246				213,213		101,967	15,851		31,568		
										Subtotal	857,282	133,262		265,408		
8	Foul Drainage															
	Lateral drains - Houses	2764	m	90	248,760	1347	m	200	269,400		20,640					3m lateral drain per dwelling
	Lateral drains - Apartment					40	m	300	12,000		12,000					5m lateral drain per apartment
	100mm/ 150mm dia pipe - minor roads; 150mm dia, n.e. 3.5m, class s bed	3,446	m	90	310,140	3,770	m	200	754,000		443,860	29,160	Adopt Stantec's measures	110,965	25% of delta	G&T based on recent data; deems RLF rate insufficient for s-bed 150mm drainage incl. connections. G&T is also aware of the requirement for deeper drainage (5m+) in certain areas of the scheme and has therefore
	Inspection Chambers	6	nr	1,750	10,500						(10,500)	(10,500)	Align with G&T allowances	(10,500)	Align with G&T allowances	
	225m dia pipe - to access roads; 225mm dia, n.e. 4m, class s bed	323	m	101	32,623	323	m	250	80,750		48,127			12,032	25% of delta	As above. Measure aligned with RLF and Stantec
	Manholes & inspection chambers to Access and Plot roads; 1m - 1.5m to plot roads, 2.5m - 3m access roads, 45m centres	50	nr	1,750	87,500	91	nr	3,000	272,867		185,367	185,367	Align with G&T allowances	185,367	Align with G&T allowances	G&T amended to 45m centres in line with Surface Water. G&T thought this was agreed. RLF has included 75m centres. Further, G&T deems £1,750 insufficient for pre-cast chambers
	Site Prelims & Overheads				93,086				187,517		94,432	27,544		40,212		
										Subtotal	793,925	231,570		338,075		
9	Public Realm															
	Pathways	3,750	m2	60	225,000	3,750	m2	75	281,250		56,250					
	Timber edging to above	6,000	m	10	60,000	6,000	m	25	150,000		90,000	22,500	25% of delta	90,000	Align with G&T	G&T deems RLF's rate insufficient and would not cover the material element for a pathway that needs to be built for prolonged heavy usage, not a domestic setting.
	Redistribute topsoil	80,939	m2	7.5	607,043	79,211	m2	7.5	594,083		(12,959)					
	Cycle stands	265	nr	150	39,750	265	nr	200	53,000		13,250					
	Site Prelims & Overheads				278,037				297,820		19,783	3,038		12,150		
										Subtotal	166,324	25,538		102,150		
10	Parking															
	Garages	298	nr	8,000	2,384,000	300	nr	8,000	2,400,000		16,000	16,000	Align with quantity	16,000	Align with quantity	Has RLF missed off the 2 bungalows?
	Car ports	131	nr	4,000	524,000	131	nr	4,000	524,000		-					
	Allocated parking	1,471	m2	157	230,947	1,530	m2	165	252,450		21,503	21,503	EO for permeable paving	21,503	EO for permeable paving	Refer to surface water comment
	Unallocated parking	3,213	m2	157	504,441	257	nr	3,000	771,000		266,559	266,559	Include circulation space	266,559	Include circulation space	RLF has based upon 12.5m2 per space, whereas G&T has allowed for 18m2 space to include circulation, which is in line with combined space and circulation required. This would be aligned with the allocated parking above which G&T and RLF are in agreement with.
										Subtotal	304,062	304,062		304,062		
11	House Build Costs															
	Houses				48,678,388				49,491,402		813,014					Houses: G&T £120ft2, RLF £118ft2 Detached: G&T £140ft2, RLF £138ft2 Bungalow: G&T £145ft2, RLF £143ft2
	Flats				11,026,726				11,259,808		233,082					G&T £145ft2, RLF £142ft2
										Subtotal	1,046,096	-		-		
12	Future Homes Standard															
	Permeable Finishes to Houses				374,071				356,886		(17,185)					
	Future Homes Standard to Houses				8,874,454				9,429,000		554,546			110,909	20% of delta/ £250 per house	Delta due to differential for ASHP extra over from boilers c. £1,200 per house, predominantly driven by application of differing inflation indices to uplift the C&B report from 2017, G&T (PHCPI) v. RLF (BCIS TPI), G&T believes the PHCPI is a better representation of the housing construction market
	Future Homes Standard to Flats				916,626				972,000		55,374					
	Rain/ Greywater harvesting to Houses				5,172,592				5,388,000		215,408					RLF has adopted G&T's costs but excl. rounding up
	Rain/ Greywater harvesting to Flats				735,480				793,800		58,320					
	Garages to FOG				128,000				128,000		-					
	Lifts to Apartments				272,400				272,400		-					Comp error - cell calc. not picked up in subtotal collection
	Fruit Trees				101,923				101,923		-					
	Passive Venting				245,160				245,160		-					
										Subtotal	866,463	-		110,909		
										TOTAL Main Delta excl. contingency	6,076,122	1,247,750		2,061,092		

Summary	RLF 21.02.22		G&T 21.04.22		Variance
SUBTOTAL	95,703,000		101,779,830		6,076,830
Contingency	9,570,300		10,177,983		607,683
TOTAL before inflation	105,273,300		111,957,813		6,684,513

GT GARDINER &THEOBALD

RUSSIA-UKRAINE CONFLICT:
IMPACT ON ENERGY/ MATERIAL PRICES AND SCENARIOS FOR TENDER PRICING

14th March 2022

EXECUTIVE SUMMARY

After some encouraging signs that pandemic-related supply issues were beginning to ease and construction material price inflation subside towards the end of 2021, global markets have been hit by another major supply shock.

Russia's invasion of Ukraine has replaced Covid-19 as the top risk to global supply, with the crisis prompting a spike in energy costs and a consequent resumption of an inflationary trend. Rising energy prices will invariably impact the manufacturing costs for many construction products and materials. Indeed, the CLC has confirmed that manufacturers have increased prices by between 5-10% so far this year, with the cost of the most energy-intensive products rising by as much as 20%.

While the UK is not as reliant on Russian energy and commodities as mainland Europe, the shockwaves stemming from the crisis will be far-reaching. As a result of Russia's actions, supply chain disruption, shortages, and price hikes will affect materials and deliveries. The reallocation of certain types of materials will only intensify the situation.

This report explores to what extent the UK is exposed to the impacts of the crisis, and how it might impact construction costs. An assessment of the potential implications for certain key trade packages is included, as well as a table outlining three potential scenarios and how each might impact demand, supply, and macroeconomic factors. The potential effect on tender price inflation has also been provided for each scenario.

Russia exports a number of key commodities used in the construction sector. Metals such as aluminium, iron (semi-finished and hot rolled) and refined copper accounted for more than 6.2% of Russia's exports in 2021. Steel-related exports (flat rolled, steel bars, ingots and wire) only represented 0.4% ($1.95bn) of Russia's total exports in 2021, but it is still the world's fifth largest steel-producing country, producing 76Mt of crude steel in 2021 (or 3.9% of total global steel production last year).[4] Furthermore, Russia exports a large amount of the steelmaking ingredient iron ore ($3.8bn worth or 0.77% of its total exports in 2021), while Ukraine exports nearly double the amount of iron ore as Russia does.[5]

Russia also exports various types of wood, particularly 'sawn wood' which in 2021 accounted for nearly 1.3% of Russia's exports. However, according to Forest Research, the UK does not import large volumes of wood types from Russia. Both sawn softwood and hardwood from Russia accounted for 5% and 1% respectively of the UK's total imports for each category. The UK is slightly more reliant on Russia for wooden pellets and plywood though, with 12% and 8% of the UK's total imports for each category.[6] However, globally, Russia is a significant producer and exporter of various wood types [7] which could push global prices higher as countries look for alternative sources of supply.

While the conflict will impact global supply and pricing on a number of key commodities, most of the upward price pressure will be felt from higher energy prices.

Source: [4] https://worldsteel.org/media-centre/press-releases/2022/december-2021-crude-steel-production-and-2021-global-totals/
[5] https://oec.world/en/profile/country/rus/?subnationalTimeSelector=timeYear
[6] https://www.forestresearch.gov.uk/tools-and-resources/statistics/forestry-statistics/forestry-statistics-2018/trade/origin-of-wood-imports/
[7] https://www.forestresearch.gov.uk/tools-and-resources/statistics/forestry-statistics/forestry-statistics-2018/trade/origin-of-wood-imports/

HOW EXPOSED IS THE UK TO OIL AND GAS PRICE HIKES?

Gas and oil prices on the international markets have increased sharply following Russia's invasion of Ukraine. The Government has said that for the UK, the most likely economic impact, at least initially, will come through higher global energy prices. However, there is a great deal of uncertainty as to how sustained these, and any further, price increases may be.[8]

4.1. Oil

The UK is less reliant on Russian oil than the EU. Around 30% of the EU's oil imports come from Russia while the UK imports around 8%, instead relying on Norway and the US for the vast majority of its imported crude oil.

Brent crude oil prices peaked above $130 a barrel on 7th March – the highest level for almost 14 years – before paring gains to around $108 a barrel on 14th March following reports that OPEC+ is considering ramping up production to ease turmoil in the energy markets. However, the US has imposed an immediate ban on Russian oil whilst the UK plans to phase out oil imports through the end of 2022. Furthermore, BP and Shell are also stepping back further from doing business with Russia, which will stoke inflationary pressure.

Meanwhile, UK natural gas prices (for next day delivery) hit a new record high of more than £6 per therm on 7th March 2022 – 10-15 times higher than normal. However, UK gas prices subsequently fell to just under £3 a therm as concerns over a ban on Russian supplies faded after the UK and European governments restricted the embargo to just Russian oil purchases.

4.2. Gas

The UK only gets around 3% of its natural gas from Russia so is unlikely to face a physical shortage of supplies, but Europe is far more reliant, with 40% of its natural gas coming from Russia. However, European and UK gas prices move in tandem.

Although Russian gas supply is currently unaffected, disruption of Russian gas exports European countries would also push up prices in other markets the UK uses, such as Norway and Qatar, as demand for alternative gas sources would rise across Europe.

While European buyers with long-term contracts with Gazprom are still drawing maximum gas from Russia under those agreements, companies with more flexible shorter-term contracts have started to look for alternative sources of supply, resulting in additional demand for alternative gas sources.

4.3. Sanctions

Adding to global inflationary pressures, the US announced a ban on all Russian energy imports. The UK, which imports relatively low volumes of Russian oil and gas, has taken the approach to phase out imports of Russian oil and oil products and is "considering" banning Russian natural gas.

Due to its heavy reliance on oil and gas, the EU can ill-afford to cut off the continent's energy lifeline by imposing energy sanctions. Plans to switch to alternative suppliers and reduce dependence on Russian supplies will take several years, leaving the energy market dynamics largely unchanged in the short-term.

High energy prices are also being supported by increased risk that Russia could turn off gas supplies to Europe and other parts of the world. Indeed, in response to Western sanctions, Russia plans to ban exports of certain commodities and raw materials, with details to be confirmed by the Russian cabinet during the week commencing 14th March 2022.

Source: [8] https://blog.bizvibe.com/blog/largest-wood-producing-countries#:~:text=China%20has%20grown%20rapidly%20over,wood%2Dbased%20panels%20and%20paper

HOW WILL INCREASING FUEL COSTS IMPACT UK CONSTRUCTION PROJECTS?

While construction is a less energy-intensive sector, it does procure products and materials from very energy-intensive sectors which will invariably pass on the effects of higher energy prices in the form of price hikes (I.e., 'second-round effects'). The production of concrete, cement and bricks will be affected by higher energy prices, but the basic metals industry is even more exposed to rising electricity and gas prices.

The material, manufacture location, shipping route, local transport, currency exchange, as well as wider supply and demand factors all have a significant impact on construction costs. Therefore, finding a direct correlation between energy and construction price is difficult and the more relevant focus is on the compounded impact of inflation on the overall construction price.

Nevertheless, the cost of energy used to produce construction materials (as well as for direct use in transport and on construction sites) is set to remain high and generate a new inflationary trend for UK construction in 2022 and potentially beyond. These renewed inflationary pressures are likely to result in:

- Increased attractiveness of off-site construction (with fewer vehicle journeys to and from site)
- Increase and acceleration of renewable and alternative energy construction projects (e.g., advanced and small modular nuclear reactors) to wean UK off fossil fuels
- Some projects becoming unviable as costs rise and finances becomes less certain/ unprofitable
- Shelving of some projects and a slowdown in new work as clients assess the economic impact of the conflict
- Contractors placing greater preference on the use of fluctuation clauses in contracts to allow for price rises in an inflationary environment (i.e. risk management)

Main Contractors are reporting the following issues for each trade in light of the Russia-Ukraine conflict:

Trade	Impact of Russia-Ukraine Conflict
Groundworks and Frame	• Concrete/ cement: natural gas fuels cement kilns as part of the production process • Concrete/ cement: the energy-intensive production process means prices for finished materials will edge higher as rising natural gas prices make their way through to market pricing • Concrete/ cement: price increase of 19% applied in January 2022 and increases of between £13-16/ tonne of cement are rumoured from April • Cement replacement GGBS (a by-product of iron manufacturing, with Ukraine being the 5th largest iron manufacturer and Russia the 9th largest) is now at price parity with cement and is set to rise further due to worldwide shortages and the vast amount of energy required to produce it • Concrete alternatives are available but at a premium of c.30-40/ m3 • Concrete pricing can be fixed for up to 2 years, but the market is applying large premiums to provide this fixed price option • Rebar: No issue with supply but multiple price increases have been seen between 24 Feb – 10 Mar 2022. Morrisroe are forecasting that average rebar material prices will increase from £820/t in Q1 to £1,150/t in Q2 2022 • Price offers from rebar suppliers are open for acceptance for a matter of hours, with fixity of only a few months at best • Steel: British Steel price increase announcement on 10th March 2022 that prices for UK structural steel sections for all new orders were to increase by £250/t with immediate effect • Steel increase blamed on extraordinary volatility in commodity and energy prices causing significant hikes to key inputs in the steel manufacturing process, as well as significant disruption to international trade flows • Potential delays with UK not accepting Russian Cargo Ships at ports
Façade	• Higher steel and aluminium prices are having a knock-on effect on prices • Suppliers are reporting 30% rises in aluminium products due to high energy and Billet prices increasing production costs as well as fears of supply disruption • Russia accounts for 6% of global aluminium production but many buyers have voluntarily stopped buying the material • Price rises have been applied by leading curtain wall fabricators. However, applied curtain wall system price increases do not fully cover the raw material/ energy price rises • Lead times are extending due to aluminium systems houses reaching capacity with unitised systems working on a 60 week plus lead time • Suppliers are being advised to place cladding orders as soon as possible to avoid potential durational impacts • Some European Façade contractors are experiencing difficulties with deliveries to site. Some of their delivery drivers are Ukrainian and are staying in Ukraine to fight • Oil supply from Russia to have an effect on bitumen-based roof products

Brick and Blockwork	• Availability not impacted but further price increases are expected due to rising energy costs (natural gas fuels brick kilns) • Increasing gas prices are forcing brick manufacturers to renege on pricing agreements and implement new pricing structures
Drylining and Plastering	• British Gypsum metal is sourced from China whilst board is manufactured in the UK, therefore supply should be unaffected • Main cause for concern is rising energy costs putting pressure on manufacturers and logistics • BG price increases of 8-10% expected in May 2022. Some contractors are "front loading" programmes to avoid price rises which could increase lead times beyond c.4 weeks
Joinery and Carpentry	• Russia is the largest softwood exporter globally (exporting US$5.8bn[9] worth in 2021) so if sanctions placed on Russia extend to timber, there will likely be European-wide shortages • Although Russia and Ukraine are only responsible for a relatively small amount of UK wood product imports used in construction, the loss of global raw material supplies will have a knock-on effect on prices in all markets
Tiling and Stone	• Majority of stone comes from Western Europe so no immediate concerns over availability
MEP	• Suppliers indicate that there is no direct impact to supply currently but expect some price impact in the coming months • Cost and availability issues developing in the production/ supply of PE and PP plastics due to gas, oil, and petrol-chemical price increases. This will impact all phases of a project • Areas of concern: steel-related products (e.g., M&E containment, pipework, conveyance products and fabricated products), copper-related products (e.g., pipework, conveyance products, cabling and general system components), all aluminium products (e.g., heat exchangers, lifts, and fans) • Potential supply and pricing issue of refrigerant gas • High aluminium prices to affect lifts
Landscaping	• Concern over availability and cost of bituminous materials used for road construction, roofing, waterproofing etc

Source: [9]The global export value of all forest and wood products in 2021 was US$12 billion.

SCENARIO PLANNING FOR THE RUSSIA-UKRAINE CONFLICT

Although the UK has few direct economic links to Russia and trade between the two is small relative to the size of either economy, Russia's invasion of Ukraine and the sanctions imposed on it in response could have a significant impact on the UK economy.

In this volatile and fast-moving situation, we've outlined three potential scenarios and how each might impact demand, supply, and macroeconomic factors. In advance of our next TPI research publication due for publication in April 2022, we also give guidance on how possible scenarios might affect construction tender price inflation in 2022.

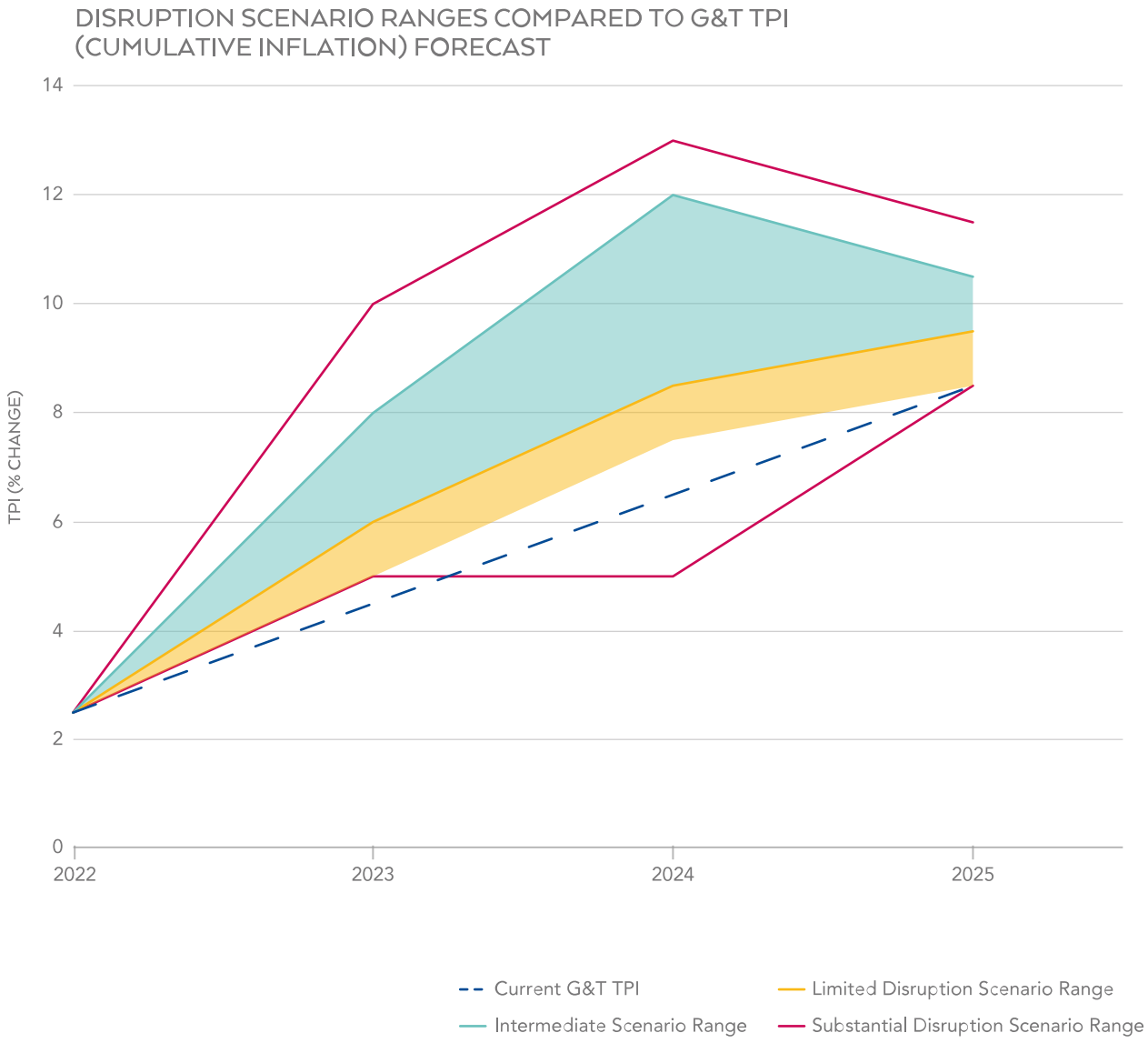
	Limited Disruption Scenario	Intermediate Scenario	Substantial Disruption Scenario
Demand	• Firms and consumers behaving with increased caution as confidence falls	• Firms and consumers adopt a 'wait and see' approach, cutting back and delaying investment/ consumption plans	• Loss of confidence among markets and consumers
Supply	• Oil and gas supplies continue to flow. Uncertainty is short-term and prices stabilise at elevated levels • Short-term commodity price volatility as the supply chain reacts to sourcing/supply issues • Short-term disruption of energy supply to Europe will push wholesale energy prices higher globally • Traders reluctant to deal with Russian suppliers • Higher energy prices cause a spike in CPI inflation	• Energy supply from Russia is reduced but not eliminated • Strengthening of sanctions/ restrictions placed on trade between Russia and Europe • Difficulties in paying Russian firms for oil and gas, resulting in a reduction of supply • Supply chain disruption/ delays due to suspensions of production on a variety of goods/raw materials • Some localised damage to physical infrastructure (eg, pipelines that cross Ukraine to bring Russian gas to Europe • Disruption to keep energy prices elevated, exacerbating already high inflation	• Russia turns off supply of natural gas and crude oil to Europe • Large-scale disruption to Russian energy supplies would force the EU to increase imports from elsewhere, pushing market prices higher • Global commodity prices surge due to reduction in supply • Non-critical industries could be forced to shut down or mandate a reduction in oil/gas usage (commercially and in homes) until alternative energy sources are secured
Macro	• Muted impact on UK GDP but could become starker in 2023 as households exposed to higher energy prices rein in spending • Rising interest rates to deal with temporary price shock • Investors to move their money out of emerging economies and towards advanced economies as they look for safer, less volatile assets	• Prolonged and heightened geopolitical uncertainty holding back economic growth with further inflation ('stagflation') • Post-pandemic recovery delayed but not completely derailed • Prolonged high energy costs have negative spill overs, prompting a mild economic downturn	• Persistent falls in in industrial production, employment and international trade • Energy rationing would impact GDP growth, pushing the UK and Europe into a prolonged and unavoidable recession • Governments/central banks to provide extraordinary fiscal support to offset higher energy prices
	Potential Impact on UK Construction		
	• Initial spike on input costs as resources are squeezed	• European imports become scarce as energy effects industrial shut down	• Demand collapses on war footing. Lack of work potentially reduces pricing

The fan chart above shows the potential shape of tender price inflation under each of the three scenarios above:

- Limited disruption scenario: spike in tender pricing in 2022 driven by higher energy and commodity pricing. Increased oil and gas prices to affect key material production and transportation costs. Resultant tender price inflation might increase to c.+3.5% to 4.5% in 2022. Once supply chains adapt and diversify sources of supply, the spike in pricing is likely to start to level off from 2023 onwards, returning towards G&T's previous long-term average TPI forecast of 2% in 2024-25.

- Intermediate scenario: If the severity/ scope of sanctions significantly increases or Russian energy and commodity supply is squeezed, the price shock will be more severe and tender price inflation potentially more extreme. However, inflation would likely follow a similar pattern to the limited disruption scenario, with the rate of inflation subsiding from 2023 as commodities from Russia and Ukraine are sourced elsewhere and alternative global supply is ramped up.

- Substantial disruption scenario: If Russia were to cut off energy supply, this would have significant knock-on effects for European economic output and inflation. Under this scenario, there would likely be a prolonged period of stagflation, where demand for construction projects could drop significantly due to uncertainty or concerns over the viability of schemes. With reduced new orders and output growth, tendering could arguably be more competitive as contractors absorb inflated material and transport costs to secure work. Even in this extreme scenario, inflation would eventually fall back as global supply chains adjust to new norms.



CONCLUSION

Rising fuel prices have been one of the key issues to emerge from the Russia-Ukraine conflict to date, with the conflict producing an almost instantaneous global supply shock. The medium to long-term nature of the conflict (and related sanctions) means fossil fuel supply and its vulnerability will be an issue for the construction industry for some time.

Prior to the conflict, there were early signs of construction material price inflation easing, but with spiking energy costs, construction materials and products will resume the major inflationary trend. As a result of Russia's actions, supply chain disruption, shortages, and price hikes will affect materials and deliveries. The reallocation of certain types of materials will only intensify the situation.

Whether the impact to economic norms is a direct result of the destabilising effect of the conflict or an "opportunity" for suppliers to legitimise price rises, that may have been due to underlying energy price rises, is impossible to say.

The conflict will have a profound disruptive effect on supply chains that were already stressed following the global pandemic. It remains to be seen how the additional risks will impact construction activity in the coming months, but projects may be disrupted if suppliers are unable to provide or afford certain products. Regardless of how the conflict unwinds, further inflation in the UK construction sector seems inevitable.

If you have any questions regarding any of the information above, please contact your usual contact at Gardiner & Theobald.

gardiner.com