Consultation Response – Technical Note

(Planning Applications 21/03267/OUT and 21/03268/OUT)



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Introduction

- 1. This Technical Note responds to specific items amongst the outstanding matters raised by National Highways (NH) and/or Oxfordshire County Council (OCC) on the above applications for Albion Land (AL). The response below does not directly respond to a third application (21/03266/F) regarding site access and enabling works to the western site (21/03268/OUT). Outstanding consultation queries on this and other issues on 21/03267 and 21/03268 will be addressed once the matters covered in this Note are resolved.
- 2. The currently relevant highway authority consultation responses are:
 - National Highways (NH) Application Reference No. 21/03267/OUT response dated 24/10/22.
 - National Highways Application Reference No. 21/03268/OUT response dated 24/10/22.
 - Oxfordshire County Council (OCC) Application Reference No. 21/03267/OUT
 responses dated 18/11/21 and 22/04/22.
 - Oxfordshire County Council Application Reference No. 21/03268/OUT responses dated 19/11/21 and 28/04/22.
- 3. OCC consultation responses differ between the two applications. The content of the NH response is the same for each application.
- 4. DTA and their appointed modelling consultants (Vectos) have been engaging regularly with NH consultants and OCC officers from pre-application submission (Spring 2021) through to mid-July 2022. Throughout this period, the authorities required that Growth Fund (GF) works on the adjacent Strategic Road Network (SRN), including a planned scheme at the A43/B4100 Baynard's Green roundabout be included within Reference Case tests. A scheme drawing was provided to the applicant by the highway authorities in November 2021, although with insufficient supporting detail to fully comply with the authorities Reference Case requirement.

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- 5. Further clarity was sought from that point on whether the tabled GF Scheme was coming forward in the advised form. In the absence of definitive clarification from the authorities, in July 2022 the applicant decided that there was no merit in undertaking further (potentially abortive) work.
- 6. It was confirmed by OCC in an email dated 7/10/22 that GF monies were being reallocated, whereby funding for the M40 J10 GF works had been reduced from £18.8 million to £8.7 million pounds. It was subsequently, confirmed by OCC in an email dated 24/10/22 that the GF works at Baynards Green roundabout were no longer coming forward, and that it should be assumed that M40 J10 GF works will now focus on Padbury roundabout.
- 7. In terms of the AL planning applications this represents an important change in the Reference Case against which the impacts of the proposals are therefore to be evaluated.
- 8. Finally in regards of introductory context, the position has been clarified with the local planning and local highway authority regarding Committed Development (including Development and Highway Infrastructure) for inclusion in highway network capacity testing. Traffic from developments (along with programmed infrastructure) considered to be committed by OCC and Cherwell District Council (CDC) are included within OCC's Bicester Traffic Model (BTM) as part of an Uncertainty Log, the contents of which have been agreed by NH. Use of the BTM in identifying traffic forecasts is a requirement of both OCC and NH.
- 9. Beyond that, the latest position is that CDC and OCC have confirmed that cumulative traffic capacity sensitivity testing will be required to include the pending Tritax Symmetry application east of Baynards Green (App Ref No. 22/01340/OUT) that was submitted after the AL applications; but that sensitivity testing is not required on the SRFI proposals south of Ardley village.

Response to NH Consultation Response

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- 10. The remainder of this Note responds to the NH consultation responses (24/10/22) the content of which is the same for both applications. A copy of one of the responses is provided at **Appendix A** for ease of reference. The current position is as follows:
 - i) Site Trip Generation, Distribution and Assignment Methodology agreed.
 - ii) Modelling software to be used for capacity assessments agreed.
 - iii) Eastern site floor area inconsistency. It is confirmed that the TA correctly states the floorspace for the eastern site at 100,000 sqm.
 - iv) Bicester Traffic Model (BTM) runs were commissioned in 2022 Q1 and Q2 as per OCC and NH requirements and have been provided to both parties. NH have requested additional output BTM data to confirm extent of any further Strategic Road Network (SRN) junctions to be assessed. DTA will prepare a short Note in due course.
 - v) Committed Development traffic as set out at paragraph 7. Committed sites have been agreed with the planning and local highway authority, as required by NH. It is acknowledged that a sensitivity cumulative test with traffic from M40 J10 Tritax Symmetry application will be required. CDC/OCC have confirmed that sensitivity testing of the SRFI is not required.
 - vi) It is agreed that the applicant will undertake junction capacity assessments at M40 J10 and A43 Baynards Green using NH's VISSIM model. If an "in principle" position is established with the authorities on the mitigation proposed in this Note, VISSIM modelling of site impact (East + West; West Only; and East Only) and cumulative testing as defined at item iv) would then be undertaken.
 - vii) The authorities had required that the A43 Growth Deal scheme was incorporated into the VISSIM model. For the reasons set out above this position has changed, with no GF improvement scheme at Baynards Green. This requirement is now clearly superseded and is no longer relevant.
 - viii) M40 J10 merge/diverge assessment will be updated in due course.
 - ix) The application TAs had included an interim Baynards Green mitigation scheme in advance of the GF scheme being completed. This is no longer relevant given the removal of the GF scheme.
 - x) Geotechnical matters will be responded to in due course.

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- 11. In light of the removal of the Baynards Green Growth Fund scheme, a revised strategy is proposed by the applicant. As an interim step, in advance of modelling with the NH VISSIM model, BTM flows have been included within a JUNCTIONS 10 assessment of the existing junction performance. Electronic JUNCTIONS 10 files will be made available to the highway authorities under separate cover. This assessment supersedes the version in the application TAs which were based on observed 2021 count data growthed up to opening year (2025) and which had not been considered appropriate by NH.
- 12. The results of the assessment of the existing junction are summarised in **Table 1**. This confirms that the junction experiences congestion in 2026 and 2031 with long queues predicted on the A43 and B4100(E) during peak periods.

Table 1 – Summary of JUNCTIONS 10 Assessment of Baynards Green Existing Geometry (BTM Reference Case Flows)

Coomers (Commercially										
		AM		PM						
	Queue	Delay RFC		Network	Queue	Delay	RFC	Network		
	(PCU)	(s)		Residual	(PCU)	(s)		Residual		
				Capacity				Capacity		
Reference Case (BTM 2026)										
B4100(W)	1.7	12.44	0.63		1.1	13.74	0.52	120/		
A43(N)	236.4	386.45	1.22	-19%	3.8	8.26	0.78			
B4100(E)	27.6	146.51	1.05	-19%	51.9	195.53	1.11	-12%		
A43(S)	3.9	8.49	0.78		42.7	67.80	1.02			
Reference Case (BTM Flows 2031)										
B4100(W)	2.4	18.08	0.71		1.6	18.07	0.62			
A43(N)	335.9	569.55	1.30	220/	3.7	8.07	0.79	210/		
B4100(E)	57.4	309.00	1.14	-23%	135.6	492.63	1.31	-21%		
A43(S)	7.7	15.08	0.89		208.4	353.12	1.18			

13. With the addition of the AL site traffic (East + West), not surprisingly the operational performance further worsens as shown in **Table 2** in 2026 and 2031.

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Table 2 – Summary of JUNCTIONS 10 Assessment of Baynards Green Existing Geometry (With Development)

		AM		PM						
	Queue (PCU)	Delay (s)	RFC	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	Network Residual Capacity		
2026 + Development										
B4100(W)	1.6	12.06	0.62		1.1	13.66	0.53			
A43(N)	325.6	553.75	1.29	-22%	4.6	9.74	0.83	1.40/		
B4100(E)	45.9	267.04	1.12		69.2	261.0	1.17	-14%		
A43(S)	3.7	7.65	0.79		146.7	223.69	1.12			
2031 + Development										
B4100(W)	3.1	23.03	0.77		1.4	16.09	0.59			
A43(N)	503.6	829.64	1.40	-29%	4.4	9.37	0.82	250/		
B4100(E)	98.9	552.32	1.23	-29%	121.4	440.55	1.29	-25%		
A43(S)	10.4	19.63	0.92		399.3	652.15	1.29			

- 14. In order to mitigate the impact of the application sites (East + West) traffic, a concept mitigation scheme has been prepared and is shown on DTA Drawing 17213-25a-GA. The inscribed circle diameter of the roundabout is increased from 70m to 85m, with additional approach lanes and flaring identified. The proposed junction layout meets with relevant design standards. A signalised pedestrian/cyclist crossing is provided on the A43(S) arm.
- 15. The BTM with Development flows with agreed site trip generation and distribution have been assessed in JUNCTIONS 10 in 2026 and 2031. The results are summarised at **Table 3** below.



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Table 3 – Summary of JUNCTIONS 10 Output of Proposed Baynards Green Mitigation Scheme (BTM Flows including Development)

	AM							PM					
	Queue (PCU)	Delay(s)	RFC	LOS	Junction Delay(s)	Network Residual Capacity	Queue (PCU)	Delay(s)	RFC	LOS	Junction Delay(s)	Network Residual Capacity	
2026 + Development													
A – B4100 W	0.8	5.92	0.42	Α		9%	0.6	7.09	0.35	Α	- F 74		
B – A43N	6.0	8.51	0.85	Α	7.06		1.3	2.65	0.54	Α		14%	
C – B4100 E	2.5	13.19	0.70	В		7.06	7.06	[C-B4100 E]	1.7	6.91	0.60	Α	5.74
D – A43 S	1.4	2.87	0.56	Α			4.0	7.35	0.82	Α			
2031 + Development													
A – B4100 W	1.1	7.83	0.50	Α	13.23		0.7	8.32	0.41	Α			
B – A43 N	12.5	17.34	0.93	С		2%	1.3	2.81	0.55	Α	10.20	0%	
C – B4100 E	5.4	25.16	0.84	D		[C-B4100 E]	2.2	7.90	0.67	Α	18.28	[D-A43 S]	
D – A43 S	2.3	4.17	0.68	Α			24.3	32.68	0.97	D			

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- 16. The appraisal clearly demonstrates that the proposed scheme fully mitigates the impact of the development proposed via both applications (East + West) at the junction. Indeed, the scheme also provides betterment in the sense that the junction is forecast to operate within capacity in 2031, with only modest queues forming. This includes the effect of accommodating committed development traffic as included within the BTM, as agreed with CDC/OCC. The forecast operational level allows significant confidence that any detailed revisions to design detail or traffic flow forecast refinements will not change the conclusion that the proposal mitigates site impact at Baynards Green.
- 17. This proposal is presented with the expectation that discussions with NH and OCC can develop in the sense of refining the Baynards Green mitigation scheme and reaching an "in principle" agreement subject to that dialogue taking place. Thereafter the additional impact appraisals (in VISSIM) would be undertaken. This would include sensitivity testing as described above; and testing of each AL application separately, as well as in combination.
- 18. Detailed engagement in the form of face-to-face or as a fall-back online meeting to discuss the concept design is now sought with NH/OCC/CDC to enable progress on the AL applications which had previously been halted awaiting clarification on the GF works.
- 19. Following that engagement, progress can be made on the further technical appraisal required on the SRN; the sustainable transport mitigation package; and the access designs.



Appendix A

National Highways Consultation Response



National Highways Planning Response (NHPR 21-09) Formal Recommendation to an Application for Planning Permission

From: Andrew Jinks (Regional Director)

Operations Directorate

Midlands Region National Highways

PlanningM@nationalhighways.co.uk

To: Cherwell District Council – FAO: David Lowin

CC: <u>transportplanning@dft.gov.uk</u>

spatialplanning@nationalhighways.co.uk

Council's Reference: 21/03267/OUT

Location: OS Parcel 0006, Southeast of Baynards House adjoining A43, Baynards

Green

Proposal: Outline planning permission (all matters reserved except for access) for the erection of buildings comprising logistics (Use Class B8) and ancillary Office (Use Class E(g)(i)) floorspace and associated infrastructure; construction of new site access from the B4100; creation of internal roads and access routes; and hard and soft landscaping

National Highways Ref: 92857

Referring to the consultation on a planning application dated 5 Oct 2021 referenced above, in the vicinity of the A43 and M40 that form part of the Strategic Road Network, notice is hereby given that National Highways' formal recommendation is that we:

- a) offer no objection (see reasons at Annex A);
- b) recommend that conditions should be attached to any planning permission that may be granted (see Annex A National Highways recommended Planning Conditions & reasons);
- c) recommend that planning permission not be granted for a specified period (see reasons at Annex A);
- d) recommend that the application be refused (see reasons at Annex A)

Highways Act 1980 Section 175B is not relevant to this application.¹

This represents National Highways' formal recommendation and is copied to the Department for Transport as per the terms of our Licence.

Should the Local Planning Authority not propose to determine the application in accordance with this recommendation they are required to consult the Secretary of State for Transport, as set out in the Town and Country Planning (Development Affecting Trunk Roads) Direction 2018, via transportplanning@dft.gov.uk and may not determine the application until the consultation process is complete.

Date: 24 October 2022

Signature:

Name: Martin Seldon Position: Assistant Spatial Planner

National Highways

National Highways, The Cube, 199 Wharfside Street, Birmingham, B1 1RN

Martin.Seldon@nationalhighways.co.uk

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¹ Where relevant, further information will be provided within Annex A.

Annex A National Highways' assessment of the proposed development

National Highways has been appointed by the Secretary of State for Transport as a strategic highway company under the provisions of the Infrastructure Act 2015 and is the highway authority, traffic authority and street authority for the Strategic Road Network (SRN). The SRN is a critical national asset and as such we work to ensure that it operates and is managed in the public interest, both in respect of current activities and needs as well as in providing effective stewardship of its long-term operation and integrity.

Recommended Non-Approval

It is recommended that the application should not be approved for a further period of three months from the date of this response to allow the applicant to provide the additional information required.

Reasons

National Highways has been engaging with the applicant and their consultants on this development proposal since the pre-application stage in July 2021, and have agreed on the following matters with the applicant:

- 1. Trip generation
- 2. Trip distribution and assignment methodology
- 3. Modelling software to be used for capacity assessments

While the applicant submitted a Transport Assessment (TA) in support of the planning application, we noted that the trip distribution and capacity assessments undertaken were not in line with what had previously been agreed upon. We continue to have discussions with the applicant and consider that the outstanding matters will be resolved in due course.

National Highways issued a holding recommendation response on 25 July 2022 detailing the concerns identified with regard to the traffic related matters and geotechnical matters. The following sections detail the up-to-date position of this planning application from a National Highways' perspective.

Traffic related matters

Quantum of development

We noted some inconsistencies between the total floorspace proposed for the Eastern Parcel in the Application Form and that stated within the TA. While the floorspace for the Eastern Parcel is stated as 100,000 sq.m within the TA submitted, it is entered as 107,000 sq.m in the Application Form. Therefore, we require the applicant to use the floorspace stated within the Application Form for all the assessments to ensure that the worst-case scenario is considered.

Trip distribution

Based on several discussions with the applicant's consultant, it was agreed that the light vehicle trip distribution and assignment would be undertaken using the Bicester Transport Model (BTM) available for the area. Based on our review of the modelling brief provided in December 2021, the scope of the model runs to be performed and the outputs to be extracted were agreed with the applicant.

The traffic survey data available with National Highways for the area was supplied to the consultant to help determine the proposed HGV distribution for the development, which will be fed into the BTM model for undertaking the runs. Having reviewed the HGV trip distributions undertaken by the consultant, we are content with the proposed HGV trip distribution and have no further comment to provide on this.

Following this, the applicant's consultant submitted the initial outputs from BTM for our review. Based on our review, we provided our comments to the consultant in an email in July 2022 and recommended that they submit additional output plots to aid our review. Following the satisfactory review of the BTM runs, we will be in a better position to recommend the wider SRN junctions that are to be assessed in detail. Post approval of the BTM outputs, we would welcome the consultant to submit a short note on the matrix development methodology.

Committed development

We note that the uncertainty log has been updated by the consultant and has been agreed upon by the Oxfordshire County Council. As such, we have no further comments to raise.

Discussions are ongoing between the applicant, National Highways and Oxfordshire County Council on the need for sensitivity tests regarding development proposals in the area.

Capacity assessments

Capacity assessments have been undertaken using Junctions software for the western and eastern site accesses and the A43 Baynards Green roundabout, and results were presented within the TA. However, it was agreed that the applicant will undertake junction capacity assessments at M40 J10 and A43 Baynards Green roundabout using National Highways' VISSIM model developed for M40 J10 in the area. Therefore, a detailed review of the assessments as presented within the TA was not undertaken by National Highways.

Based on discussions with the applicant, it was agreed that the A43 Growth Deal scheme (as per the latest design drawings) will be incorporated into the model for assessing the development impacts with the scheme in place. As such, National Highways provided the VISSIM models developed for M40 J10 along with the Local Model Validation Report (LMVR) and A43 Growth Deal schemes drawings. We

understand that there are some uncertainties regarding the Baynards Green element of the Growth Deal scheme. Until further clarity is provided on this, we understand that that the applicant will not be updating the models with the latest drawings.

We are in continuous engagement with the applicant's consultant regarding the suitability of the updated M40 J10 VISSIM model to be used for undertaking further assessments. In line with this, the applicant's consultant has provided an updated VISSIM model to address the comments raised by National Highways. We are currently reviewing these comments and undertaking some further checks. We will provide our comments to the consultant in due course.

Merge/ Diverge Assessments

While the applicant has carried out merge and diverge assessments on the slip roads at M40 J10, we are unable to undertake the checks as the flow data is unavailable. We would therefore welcome this data being provided to us for our review.

Interim mitigation scheme

The applicant has proposed an interim mitigation scheme at the A43 Baynards Green roundabout which includes widening of the B4100 entries and a standalone signal-controlled toucan (pedestrian and cycle) crossing.

Given the concerns set out above and the uncertainty of some elements of the Growth Deal, there remain outstanding concerns. National Highways is therefore not yet in a position to comment on the suitability of the interim mitigation scheme.

The outstanding concerns are likely to be resolved in due course and National Highways will provide comments accordingly.

Following the completion of the assessments, we would expect that the applicant provides a revised TA to reflect the updates noted above.

Geotechnical matters

In addition, the submitted preliminary Ground Investigation report is a geoenvironmental Phase 2 investigation for the main developments themselves. It does not include any details of the boundaries with National Highways operations, aside from a comment about excavations in (Part 1(2) (1).pdf):

7.5 Excavations

Excavations up to 3-4m deep are locally envisaged as part of the reprofiling works to create the required development platforms. At these depths excavations are expected to be in a combination of weathered rock strata comprising gravelly clay and clayey gravel and competent rock strength strata (limestone).

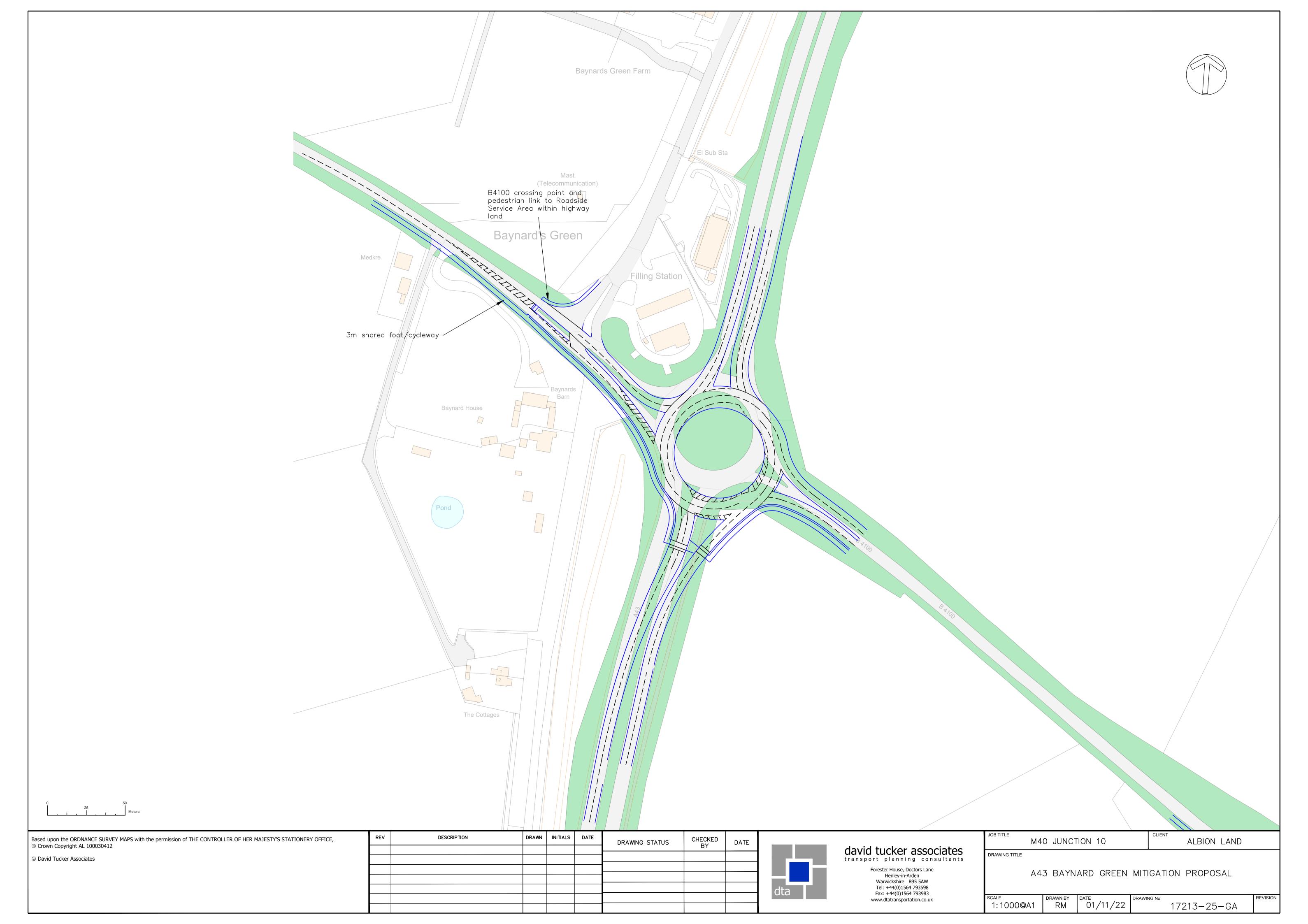
The applicant will need to advise / confirm if there will be any earthworks associated with the development(s) in relatively close proximity to National Highways boundaries (e.g. the stability of the balancing ponds, etc). In the first instance, some cross sections (to scale) through the boundaries showing the proposed extent of the development, its features and any proposed changes in elevation (excavations, landscaping) etc should be submitted for further assessment. Once received, we will review to determine the possible extent of any geotechnical reporting under the Design Manual for Roads and Bridges (DMRB) standard CD 622, which may be required to confirm the extent of any geotechnical risk to the SRN.

Once this information has been provided, we can fully assess the potential impact on the drainage of the site and whether this can effectively be mitigated.



Drawings

DTA Drawing 17213-25a-GA Baynards Green Mitigation



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