
Title: OCC.LR.10006 – A4421 Buckingham Road Schedule 17 Lorry Route Supplementary Note

1MC12 – Stage 2 - Main Works Civils for C2 and C3 Sectors

OCC.LR.10006 – A4421 Buckingham Road Schedule 17 Lorry Route Supplementary Note

Document no: 1MC12-EKF-TP-NOT-CS09-000002

Revision	Date	Author	Checked by	Approved by	Revision details	EKFB Reviewer (EKFB Contractors only)
C01	11/08/22	A Fare	S Randall	A Solanki	First Issue	

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1 Introduction

The purpose of this supplementary note is to provide Oxfordshire County Council (OCC) additional information to assist their determination of the A4421 Buckingham Road Schedule 17 Lorry Route (OCC.LR.10006).

The note will use information from the Environmental Statement (ES), additional assessments, construction information, plans, maps and images.

2 Summary of Schedule 17 Lorry Route and Changes

This Schedule 17 Lorry Route application has been submitted to Oxfordshire County Council to partially supersede the OCC.LR.10004 Lorry Route application which has been approved. It does not fully supersede the approved lorry route application due to peak hour restrictions on the A43/A421 junction (explained in section 3.1), however OCC.LR.10004 will only be used for a maximum of 24 movements during each peak hour, as has been previously discussed and agreed between EKFB and OCC. This restriction on the M40 Junction 9/A41 route will be outlined in the next revision of the Local Traffic Management Plan.

OCC.LR.10006 is from the A43/A421 junction, along the A421, turning south onto the A4421 to access the compound areas. This has been chosen as it will reduce the impact of HS2 traffic around Bicester and through Newton Purcell, whilst improving safety for vulnerable road users.

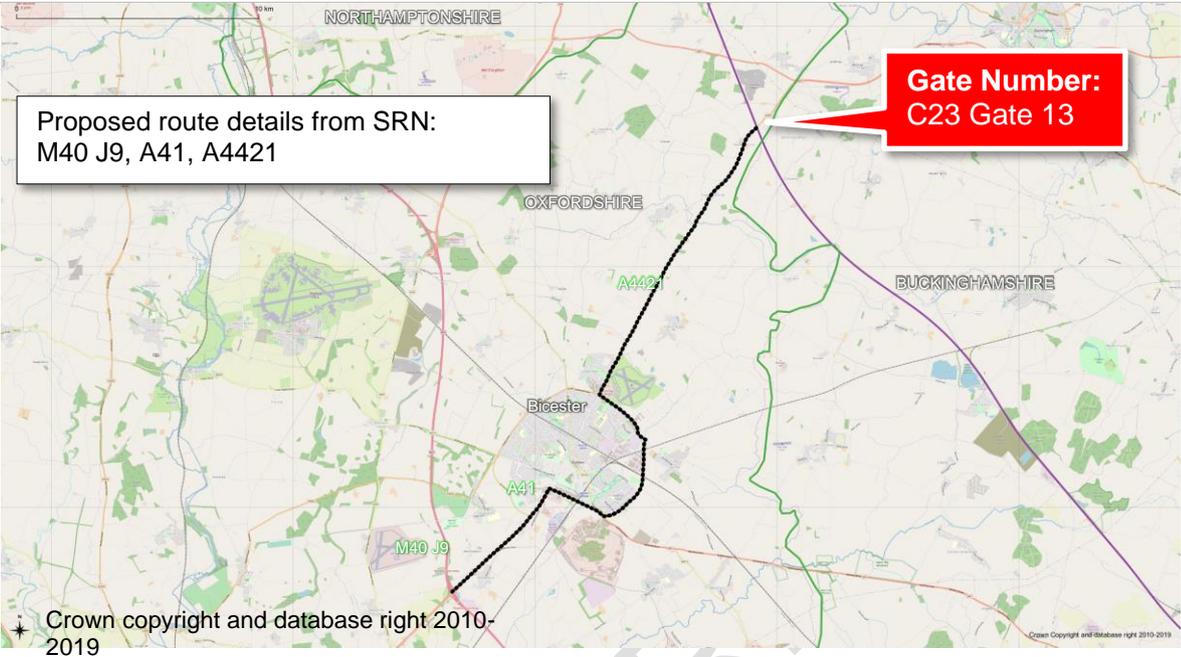
OCC.LR.10006 also includes an additional access from the A4421, meaning EKFB can manage vehicle flows more efficiently and reduce congestion at the work site access/egress points.

Table 1 shows the OCC.LR.10004 Lorry Route and proposed restrictions on that route once the OCC.LR.10006 Lorry Route has been approved. These restrictions will remain in place unless the A421 is unavailable for reasons out of EKFB/HS2's control.



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Table 1: OCC.LR.10004 Lorry Route and Restrictions

<p>Route name: A4421 Buckingham Road.</p> 			
<p>Route start date: September 2022</p>	<p>Summary of works:</p> <ul style="list-style-type: none"> • Helmdon Embankment • Turweston Cutting • Turweston Embankment • Grovehill Embankment • Westbury Embankment • Calvert Cutting • Twyford Embankment • Twyford Cutting • Godington Embankments • Chetwode Cutting • Chetwode Embankment • Barton Hartshorn Embankment • All highways, structures and utility works associated with the above. 		
<p>Route end date: June 2025</p>			
<p>Expected peak: September 2022 to March 2024</p>			
<p>Construction traffic forecast</p> <table border="1"> <tr> <td>LGV: 48</td> <td>Combined: 320</td> </tr> </table>		LGV: 48	Combined: 320
LGV: 48	Combined: 320		
<p>Mitigation Measures:</p> <ul style="list-style-type: none"> • Only to be used as a Lorry Route during the AM peak (0800 and 0900) and the PM peak (1700 and 1800). Unless the following apply: <ol style="list-style-type: none"> 1. A421 route becomes unavailable for reasons outside of EKFB/HS2's control 			



3 Additional Information

Sections 3.1 to 3.5 will address the queries and clarifications requested by Oxfordshire County Council in order to streamline the determination process of the submission OCC.LR.10006.

3.1 Summarising the improvements

3.1.1 Bicester and Newton Purcell Traffic

The first benefit of using the A421 route as opposed to the route from the M40 Junction 9 is the reduction in traffic around Bicester.

At peak, EKFB will have up to 380 LGV movements per day to the A4421 Buckingham Road, split in any proportion between the north and south access. This is an additional 50% over the baseline LGV volumes (760 daily movements). Though this was assessed and accepted as part of the ES, it was also concluded that this increase could create additional congestion around Bicester. This effect is compounded with the housing developments and East-West Rail which were not factored into the HS2 transport assessments in the ES; likely pushing the baseline traffic higher than the ES predicted.

Changing the route from the M40 Junction 9 to the A43/A421 route will reduce the numbers back – or close – to the baseline, with HS2 LGV only using the route from the M40 Junction 9 for up to 48 movements per day – and confined only to two hours each day (08:00-09:00 and 17:00-18:00), a 6% increase on baseline traffic. This LGV increase is negligible compared to baseline traffic conditions, and significant betterment compared to the ES.

Further, using the A421 route will reduce LGV traffic through Newton Purcell. The baseline through Newton Purcell is 296 LGV per day. EKFB's peak movements of 380 per day is a 128% increase on the baseline. Again, though this was accepted in the ES and is EMR compliant, reducing the number of vehicles passing close to residential dwellings is a benefit to the local communities.

Changing the route from the M40 Junction 9 to the A43/A421 route will reduce the numbers back – or close – to the baseline conditions, with HS2 LGV only using the route for up to 48 movements per day, a 16% increase on baseline conditions, which is a significant betterment compared to the ES.

The congested areas around Bicester Village will also be positively impacted by the change of route, as will local communities, with noise and air quality being better than the ES had predicted around Bicester and through Newton Purcell.

The result is that there will be significant improvements compared to the effects stated in the ES around Bicester, and through Newton Purcell. It will also improve safety, as the A43/A421 route does not pass residential dwellings, and the risk to vulnerable road users is lower.

3.1.2 Compound Access

An additional benefit of this Schedule 17 Lorry Route is the addition of the south access. Land constraints to the south are less restrictive, and therefore EKFB has been able to construct a larger security plaza and access. This has three primary beneficial impacts:



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1. A proportion of vehicles can turn left into the site, which lowers the risk and delay caused by vehicles turning right into the work site access;
2. Being able to split allocation ensures EKFB can mitigate multiple vehicles arriving simultaneously. Although convoy arrivals are prohibited, the additional access gives stacking space and allows mitigation should this happen;
3. The additional space to the south has allowed for a larger plaza, wider bellmouth and more stacking space for HGV. This has the effect of improving safety, reducing potential congestion and allowing EKFB to manage vehicle flows more appropriately.

3.2 Cumulative Traffic

The change of route will result in traffic flow being altered on both routes. The M40 Junction 9/A41 route will see a reduction in traffic, whilst the A43/A421 route will see an increase.

The change in traffic numbers will be a direct swap, and will only affect Heavy Goods Vehicles. Vehicles below 3.5t and workforce will use the same routes they are currently, based on the optimal route to the compound areas.

Table 2 outlines the changes in vehicle flows on each relevant section of highway. The 48 movements per day which will still be using the M40 Junction 9 / A41 route has been factored in to the calculations, which are based from the ES 2021 predictions + HS2 peak flows.

Table 2: HGV Movements Per Highway Link

Highway Link	HGV Movements		Change
	OCC.LR.10004	OCC.LR.10006	
M40 J9 / A41	1994	1662	-20%
A4421 (South of HS2)	676	344	-51%
A4421 (North of HS2)	919	1109	21%
A421	1112	1444	30%
A43 (North of A421)	6880	7046	2%
A43 (South of A421)	6107	6273	3%

As shown in Table 2, there are significant decreases in traffic flow along both the A41 and A4421 (South of HS2). This will reduce the impact around Bicester and Newton Purcell as detailed in Section 3.1.1.

There is a small increase in HGV movements on the A43, however an increase of 2-3% is not significant.

There are increases in traffic along the A421 and A4421 (North of HS2) which required further assessment to determine whether they would create new significant effects. Mitigation has already been proposed to reduce the number of HGV on the A43/A421 Barley Mow



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Roundabout and the A421/A4421 roundabout in the AM and PM peak hours to the values stated in the Environmental Statement to avoid creating additional congestion and delay.

The inter-peak hour flows have also been assessed to ensure they are compliant. The result of these assessments is outlined below:

- A43/A421 junction and A421/A4421 Junction – Peak hour (All Vehicle) flows are 89% higher than the inter-peak flows
- EKFB proposal increases inter-peak flows by approximately 12%
- This is still 77% lower than the peak hour flows, and a 12% All Vehicle increase during the inter-peak does not create a new significant effect.

Compliance Plan

To ensure this is maintained, EKFB will restrict booking slots for HGV in the AM and PM Peak hours, and flows are monitored weekly to ensure compliance is being maintained and proactive action can be taken.

3.3 Double Handling

Once materials have accessed a construction compound, EKFB's Site Access Road and Haul Road will be used to transport these across the route as required. Double-handling is to be kept to an absolute minimum and it will not constitute a significant proportion of movements. Currently, double-handling is less than 2% of EKFB's movements, and this is predicted to improve as more sections of the Site Access Road become operational across the route.

3.4 ROMIS – Incidents

EKFB plans to use the Vehicle Management Booking System to be proactive in spotting and reporting incidents, and this has been utilised to good effect. There will be times where – due to the volume of deliveries across the route – incidents are missed, or drivers do not utilise the systems correctly meaning we do not have the visibility required to report these incidents.

In these cases, we rely on the public to report incidents, which are promptly investigated and action is taken.

As our systems become more robust and the supply chain utilisation of the systems increases, EKFB's ability to record and report incidents proactively will continue to improve.



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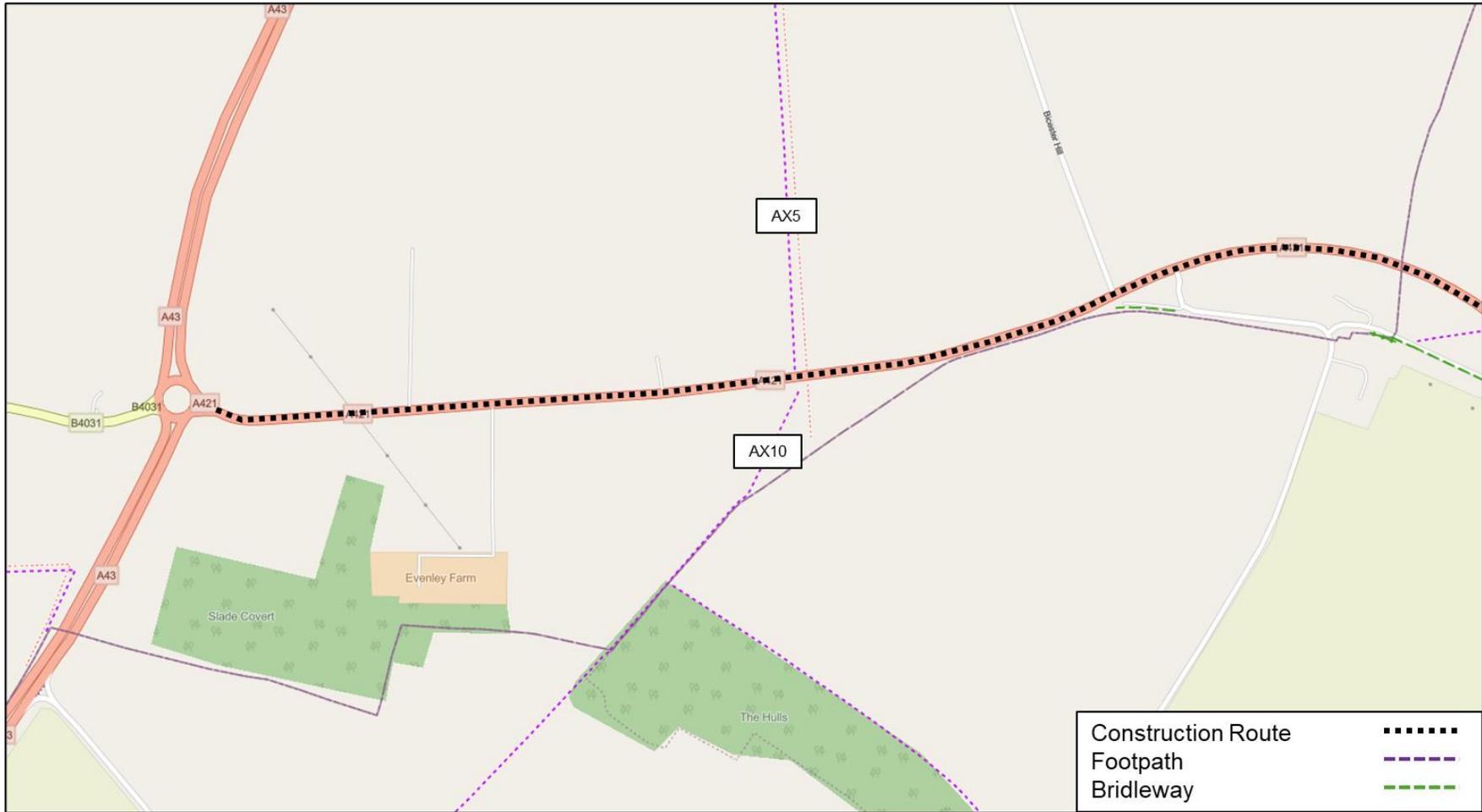
3.5 Maps and Plans

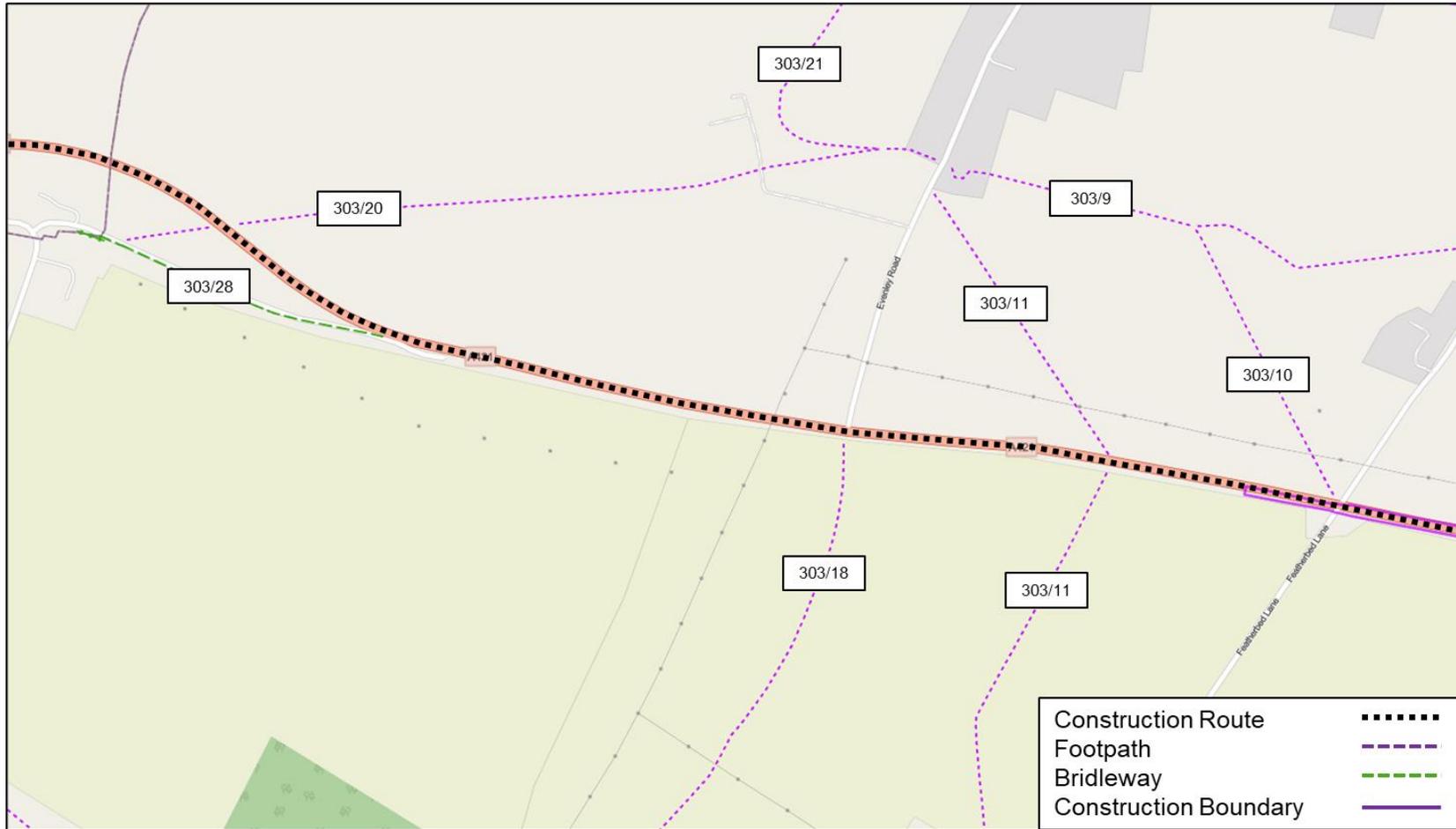
EKFB notes Oxfordshire County Council's request to enhance the plans for approval, however due to the restrictions on the planning application drawings this is not possible.

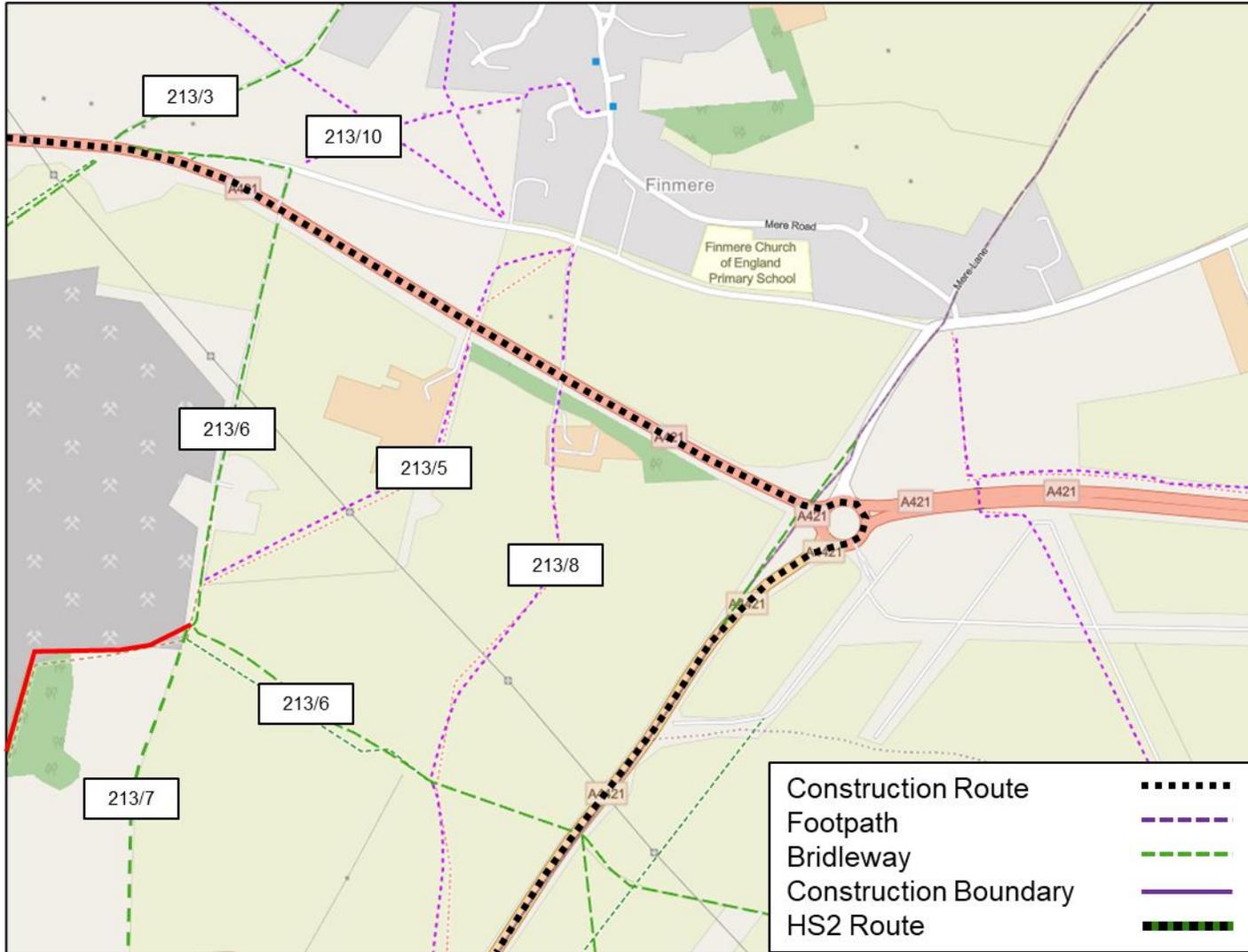
Therefore, below are a series of drawings, plans and designs for the route, access and compound arrangements to provide the additional information OCC has requested.

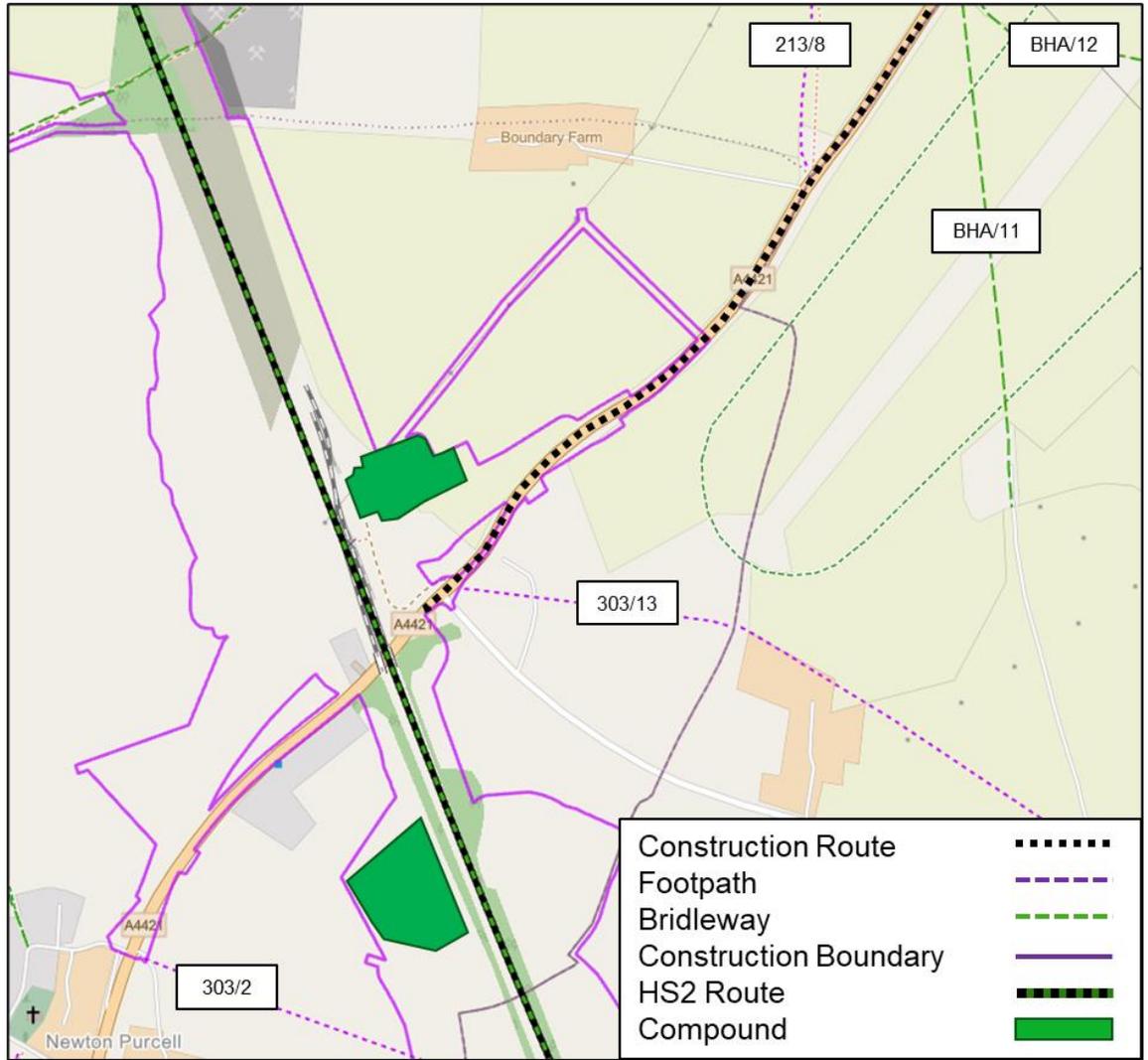
3.5.1 Route Plans

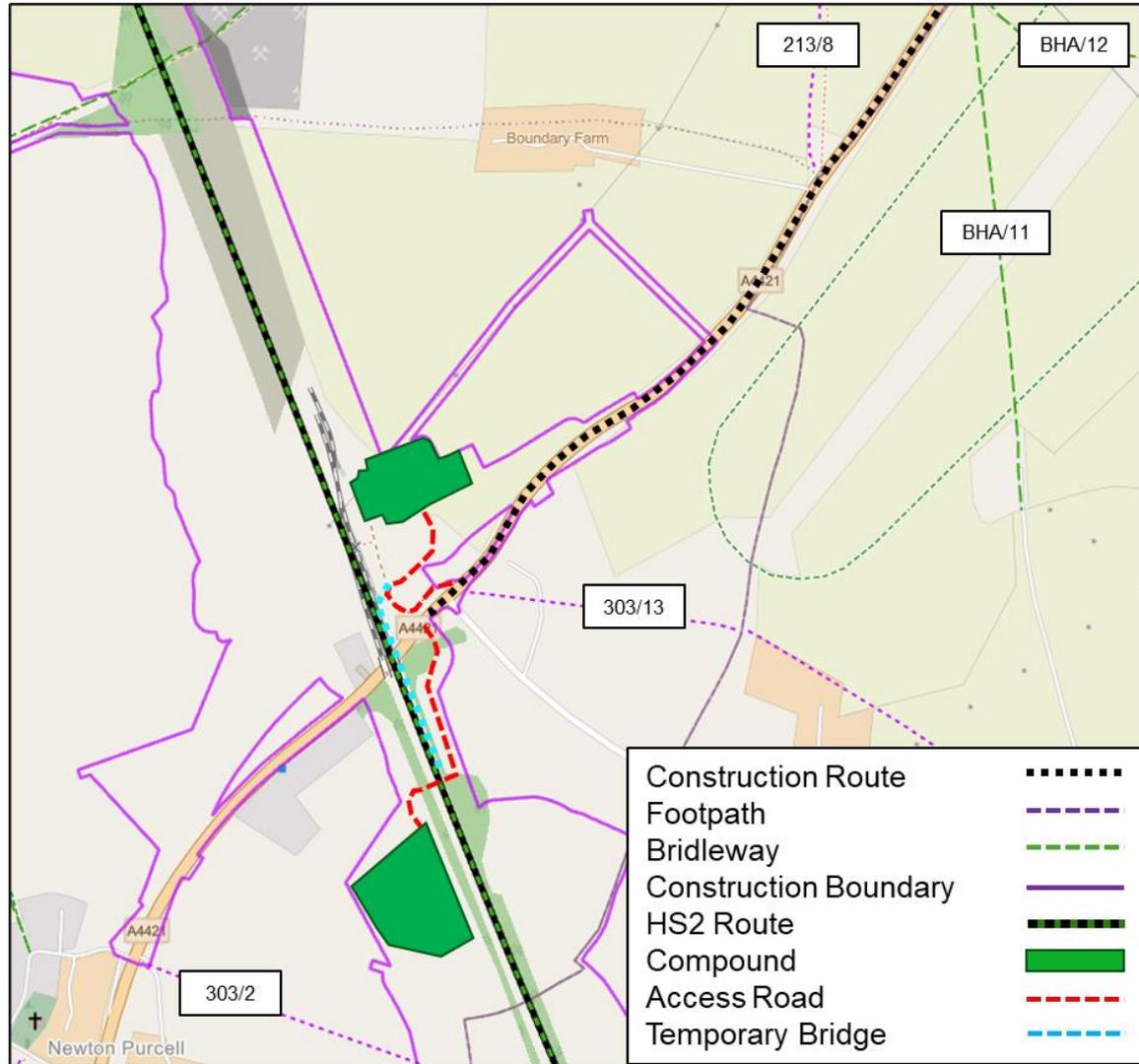












3.5.2 Site Layout





