Stairfoot Quarry

The Re-engineering and Restoration of Yew Tree Quarry Through the Importation of Non-Hazardous Excavated Soil Materials

Transport Assessment

Prepared for

GREEN EARTH DEVELOPMENTS GROUP

Green Earth Developments (Group) Ltd

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1.0 INTRODUCTION

1.1 Overview

1.1.1 Axis has been appointed by Green Earth (Stairfoot) Limited (the Applicant) to provide transport and highways advice in relation to a full planning application for the restoration of Yew Tree Quarry through the infill with non-hazardous excavated soil materials (the Proposed Development), located at the Stairfoot Brickworks, Wombwell Lane, Stairfoot, Barnsley.

1.1.2 This Transport Assessment (TA) has been prepared to inform Barnsley Metropolitan Borough Council (BMBC), which is the relevant Local Planning Authority (LPA) and Local Highway Authority (LHA), of the anticipated transport-related implications associated with the Proposed Development.

1.2 Pre-Application Discussions

1.2.1 A formal Pre-application Advice Request was submitted to BMBC in August 2022. A response to the Pre-application Advice Request was received from BMBC, dated 11th August 2022. While this did not contain any specific comments from the LHA, it did note that any application would need to consider Traffic and Transportation impacts regardless of whether the application was deemed to require an Environmental Impact Assessment (EIA) development or not.

1.2.2 Subsequently, an Environmental Statement (ES) Scoping Report was submitted to BMBC in December 2024. BMBC Highways Development Control provided a formal consultation response to this, dated 20th December 2024. The LHA's comments simply identified that the planning application should be supported by a TA.

1.2.3 The LHA's comments also suggested that a Travel Plan (TP) should be prepared. However, on the basis that the Proposed Development would only have around 5no. operatives based permanently at the Site for the duration of the restoration works, it is considered that a TP is not necessary in this case.

1.2.4 A copy of the LHA's pre-application response is contained in **Appendix A**, to the rear of this report.

1.2.5 The remainder of this TA has been prepared with due regard to the LHA's pre-application response, alongside the relevant sections of the Planning Practice Guidance.

1.3 Report Structure

1.3.1 This report sets out a suggested scope for the TA as follows:

i) **Chapter 2** summarises the local and national policy and guidance that is relevant to the Proposed Development in terms of transport and highways;
ii) **Chapter 3** provides a review of the existing local highway conditions surrounding the Site, including a description of the local network, a review of background traffic levels and an analysis of recent accident data on the local highway network;
iii) **Chapter 4** describes the Proposed Development, including the proposed access arrangements. It also sets out the forecast number of vehicle trips that could be generated by the Proposed Development and sets out the likely distribution of the development-related traffic on the local highway network;
iv) **Chapter 5** assesses the impact of the Proposed Development;
v) **Chapter 6** sets out the proposed mitigation measures to be implemented to minimise the impact of the Proposed Development on the Public Rights of Way in the vicinity of the Site; and
vi) **Chapter 7** summarises and concludes the report.

2.0 NATIONAL AND LOCAL POLICY CONTEXT

2.1 Introduction

2.1.1 This section of the TA reviews the transportation planning policy that is relevant to the Proposed Development, with reference to the following documents:

i) National Planning Policy Framework (NPPF);
ii) Barnsley Local Plan;
iii) Sheffield City Region Transport Strategy; and
iv) Barnsley Transport Strategy.

2.2 National Planning Policy Framework (2024)

2.2.1 The National Planning Policy Framework (NPPF) was initially published by the Ministry of Housing, Communities and Local Government in 2012 and was most recently revised in December 2024.

2.2.2 At the heart of the NPPF is a presumption in favour of sustainable development. In this context, it is fundamental that sustainable transport is promoted. Section 9 of the NPPF sets out polices for promoting sustainable transport, and the relevant polices for the Proposed Development are set out below.

2.2.3 Paragraph 109 of the NPPF states:

"Transport issues should be considered from the earliest stages of plan-making and development proposals, using a vision-led approach to identify transport solutions that deliver well-designed, sustainable and popular places. This should involve:

a) making transport considerations an important part of early engagement with local communities;

b) ensuring patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places;

c) understanding and addressing the potential impacts of development on transport networks;

d) realising opportunities from existing or proposed transport infrastructure, and changing transport technology and usage – for example in relation to the scale, location or density of development that can be accommodated;

e) identifying and pursuing opportunities to promote walking, cycling and public transport use; and

f) identifying, assessing and taking into account the environmental impacts of traffic and transport infrastructure – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains."

2.2.4 At paragraph 110 the NPPF states:

"The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making."

2.2.5 The NPPF sets out a key test for the acceptability of planning applications in terms of transport and highway matters at paragraphs 115 and 116. Paragraph 115 of the NPPF states that, when assessing planning applications, it should be ensured that:

"a) sustainable transport modes are prioritised taking account of the vision for the site, the type of development and its location;

b) safe and suitable access to the site can be achieved for all users;

c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and

d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree through a vision-led approach."

2.2.6 At paragraph 116 of the NPPF it is stated that:

"Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios."

2.3 Barnsley Local Plan

2.3.1 Adopted in January 2019, the Barnsley Local Plan sets policies and proposals for the development of land within Barnsley up to 2033 and provides the spatial framework to deliver sustainable economic growth for the borough.

2.3.2 The Vision of the document consists of the following five objectives which underpin the approach to the whole strategy;

i) Provide opportunities for the creation of new jobs and protection of existing jobs;
ii) Improve the conditions in which people live, work, travel and take leisure;
iii) Widen the choice of high quality homes;
iv) Improve the design of development; and
v) Protect and enhance Barnsley's natural assets and achieve net gains in biodiversity.

2.3.3 Section 12 of the Local Plan relates to Transport and contains five policies (T1 – T5). Of most relevance to this TA is Policy T4 (New development and Transport Safety), which reads as follows:

"New development will be expected to be designed and built to provide all transport users within and surrounding the development with safe, secure and convenient access and movement.

If a development is not suitably served by the existing highway, or would create or add to problems of safety or the efficiency of the highway or any adjoining rail infrastructure for users, we will expect developers to take mitigating action or to make a financial contribution to make sure the necessary improvements go ahead."

2.3.4 Also of relevance to the Proposed Development from a transport perspective is Policy T3 (New development and Sustainable Travel), which states that new developments will be expected to:

"Provide a transport statement or assessment in line with guidance set out in the National Planning Policy Framework and guidance including where appropriate regard for cross boundary local authority impacts."

2.4 Sheffield City Region Transport Strategy

2.4.1 The Sheffield City Region Transport Strategy sets out the transport priorities for the region up to 2040.

2.4.2 The document sets out the following transport vision:

"We will build a transport system that works for everyone, connecting people to the places they want to go within the Sheffield City Region as well as nationally and internationally.

Our transport system will be safe, reliable, clean, green and affordable. It will be one of the best in the United Kingdom and Europe."

2.4.3 Supporting this vision are three goals, including:

i) Residents and businesses connected to economic opportunity;
ii) A cleaner and greener Sheffield City Region; and
iii) Safe, reliable and accessible transport network.

2.4.4 Section 4 of the document sets out the policies that underpin the transport goals which align with the Major's transport commitments. These policies are set out as follows:

i) Policy 1 – Improve the existing transport network to enhance access to jobs, markets, skills and supply chains adopting technology solutions to support this;
ii) Policy 2 – Enhance productivity by making our transport system faster, more reliable and more resilient, considering the role of new technologies to achieve this;
iii) Policy 3 – Invest in integrated packages of infrastructure to unlock future economic growth and support Local Plans, including new housing provision;
iv) Policy 4 – Improve air quality across our City Region to meet legal thresholds, supporting improved health and activity for all, especially in designated AQMAs and CAZs;

v) Policy 5 – Lead the way towards a low carbon transport network, including a zero-carbon public transport network;
vi) Policy 6 – Work in tandem with the planning and development community to create attractive places;
vii) Policy 7 – Ensure people feel safe when they travel and invest in our streets to make them more attractive places;
viii) Policy 8 – Enhance our multi-modal transport system which encourages sustainable travel choices and is embedded in the assessment of transport requirements for new development, particularly for active travel; and
ix) Policy 9 – Ensure our transport network offers sustainable and inclusive access for all to local services, employment opportunities and our green and recreational spaces.

2.5 Barnsley Transport Strategy

2.5.1 BMBC's Transport Strategy document, entitled Barnsley Borough – Moving from A to B outlines the Council's commitment to improving transport options and reducing the negative impacts of travel.

2.5.2 The Barnsley Transport Strategy document contains a series of objectives and key projects which set out BMBC's commitment to achieving the overarching policy objectives contained within the Barnsley Local Plan and the Sheffield City Region Transport Strategy.

2.6 Compliance with Policy

2.6.1 It is noted that a large majority of the above policy considerations relate to matters of accessibility and sustainability. It is not considered that accessibility should form a major consideration of the appropriateness of the development, particularly given the industrial and quarrying nature of the proposal.

2.6.2 The remainder of this report considers if the proposal complies with the NPPF test which prevents refusal on highway grounds unless there would be an unacceptable impact on highway safety or if the residual cumulative impacts on the road networks would be 'severe.'

3.0 EXISTING CONDITIONS

3.1 Site Location

3.1.1 The former Stairfoot Quarry Complex (the Quarry) is circa 18 hectares of land located approximately 2km from the centre of Barnsley on the eastern edge of the town. The area is largely residential.

3.1.2 The Application Site comprises the former Yew Tree Quarry, which is a circa 4.7ha broadly triangular area within the wider Stairfoot Quarry Complex. The Site is bounded to the north by the rear gardens of properties on St Pauls Parade and to the west and east by an area of woodland. A public right of way (PRoW), Footpath 234, runs to the south from the southeast to the northwest of the Application Site, beyond which is South Quarry and the former Stairfoot Brickworks site. The Trans Pennine Trail runs from east to west between South Quarry and the former Brickworks site.

3.1.3 The site location is illustrated in **Image 3.1**.

Image 3.1 – Site Location

3.2 Local Highway Network

3.2.1 The location of the Site in relation to the highway network is shown in **Image 3.2**.

Image 3.2 – Local Highway Network

3.2.2 The A633 routes in a general north / south alignment from the A6133 / A633 Stairfoot Roundabout to the A6195 / A633 Wath Road Roundabout at Brampton / Wombwell.

3.2.3 Within the vicinity of the Site, the A633 Wombwell Lane comprises a two-way carriageway with a single lane in each direction. A circa 3m wide strip of central hatching is present along the carriageway within the vicinity of the Site, which provides a series of right turning pockets to the adjacent commercial uses to the south-west of the Site. It is subject to a 40mph speed limit.

3.2.4 The Site has historically been (and continues to be) accessed via a private right of way through the former (now cleared) Stairfoot Brickworks site, which connects to the A633 Wombwell Lane.

3.2.5 The Site access junction currently takes the form of a ghost-island right turn junction with the A633 Wombwell Lane. However, an application for the redevelopment of the former Stairfoot Brickworks site (ref. 2024/0373), to comprise a glass recycling and repurposing facility was granted by Barnsley Metropolitan Borough Council (BMBC) in November 2024. This planning application includes a series of improvements to

the site access junction in the form of widening to the bellmouth to better facilitate HGVs, and the provision of a pedestrian refuge island.

3.2.6 It should however be noted that the access improvements that are proposed under application 2024/0373 were already approved by BMBC on 28th September 2023, under an earlier enabling works application (ref. 2022/1218) for the site's wider redevelopment.

3.2.7 It should also be noted that the applications at the former Stairfoot Brickworks do not prejudice the access to the Proposed Development. The opposite is the case – the works approved and proposed at the former Brickworks site would only serve to enhance access for the Proposed Development, and this issue has been discussed and agree with the applicant team for the former Brickworks site.

3.3 Observed Background Traffic Flows

3.3.1 In order to inform this TA, Axis commissioned Automatic Traffic Counts (ATCs) to be undertaken along the A633 Wombwell Lane, to the north and south of the access to the former Stairfoot Brickworks site. The ATCs were undertaken between 7th March – 13th March 2023 (inclusive).

3.3.2 The surveyed traffic flows for the weekday peak hours and 12-hour two-way flows are summarised in **Table 3.1** below.

Table 3.1 – Summary of ATC Survey Results

Date	Time Period	Observed Two-way Total Vehicle Traffic Flow		
		ATC 1 (South)	ATC 2 (North)	Average
Tuesday 7th March 2023	08:00-09:00	1,409	1,402	1,406
	16:00-17:00	1,480	1,461	1,471
	Daily	19,602	19,718	19,660
Wednesday 8th March 2023	08:00-09:00	1,501	1,492	1,497
	16:00-17:00	1,400	1,390	1,395
	Daily	18,896	19,116	19,006
Thursday 9th March 2024	08:00-09:00	1,354	1,330	1,342
	16:00-17:00	1,035	1,046	1,041
	Daily	15,935	16,222	16,079
Friday 10th March 2023*	08:00-09:00	590*	622*	606*
	16:00-17:00	1,079*	1,109*	1,094*
	Daily	13,274*	13,603*	13,439*
Saturday 11th March 2023	Daily	16,128	16,653	16,391
Sunday 12th March 2023	Daily	12,896	13,064	12,980
Monday 13th March 2023	08:00-09:00	1,374	1,380	1,377
	16:00-17:00	1,488	1,423	1,456

Date	Time Period	Observed Two-way Total Vehicle Traffic Flow		
		ATC 1 (South)	ATC 2 (North)	Average
	Daily	19,035	19,187	19,111
Average Weekday (08:00-09:00)		**1,410**	**1,401**	**1,406**
Average Weekday (16:00-17:00)		**1,351**	**1,330**	**1,341**
Average Weekday (Daily)		**18,367**	**18,561**	**18,463**
Average Day		**17,082**	**17,327**	**17,205**

3.3.3 It should be noted that the traffic movements recorded on Friday 10th March 2023 are comparatively low when considered against the traffic flows during the other surveyed weekdays. This could have been due to a variety of factors, such as roadworks / diversions as a result of planned or emergency roadworks. In any event, the Friday figures have been discounted for the purpose of the assessment.

3.3.4 Review of **Table 3.1** demonstrates that the A633 Wombwell Lane, in the vicinity of the Site, carries in the region of 18,463 two-way total vehicle movements per weekday, and 17,205 two-way total vehicle movements per average day. During the weekday AM (08:00-09:00) peak hour, the A633 Wombwell Lane caries an average of just over 1,400 two-way vehicle trips, and in the weekday PM peak hour (16:00-17:00), the A633 carries an average of between 1,300 and 1,400 two-way vehicle trips.

3.4 Accident Data

3.4.1 Personal Injury Accident (PIA) data for the highway network adjacent to the Site has been obtained from the online CrashMap resource[1]. Data was extracted for the most recently available three-year period, which is 2021 to 2023 inclusive.

3.4.2 The accident record for the study area is shown on **Image 3.3**.

[1] www.crashmap.co.uk

Image 3.3 – Road Safety Record along the A633 Wombwell Lane (2020 – 2022 Inclusive)

3.4.3 **Image 3.3** shows that 13 accidents have occurred during the assessed period, of which 5 resulted in serious injury, with the remainder being classified as 'slight'. Only two accidents within this period occurred in the vicinity of the proposed site access.

3.4.4 Volumetrically, the accident history along this approximately 1km length of carriageway equates to approximately 4.3 accidents per year on average. The traffic data summarised in **Table 3.1** above shows a two-way average annual daily flow along Wombwell Lane of approximately 18,500 vehicles.

3.4.5 In this context, therefore, the accident record is not considered to be unusually onerous. It is therefore considered that the existing accident record does not present a material concern in the context of the proposed development.

3.5 Available Local Sustainable Transport Connections

3.5.1 Given the nature of the Proposed Development, which offers few realistic opportunities to utilise alternative transport options due to road haulage, a review of sustainable local transport options has not been undertaken.

3.6 Public Rights of Way Network

3.6.1 The Trans Pennine Trail (TPT) and Public Footpaths 323 and 324 are all located within or on the boundary of the Site.

3.6.2 On Thursday 11th July 2024, a footpath survey was undertaken between 07:00 and 19:00, which counted all pedestrian, cyclist and horse rider movements by direction along the TPT and Public Footpaths 323 and 324.

3.6.3 **Image 3.4** shows the location of the TPT and Footpaths 323 and 324 in the context of the Site, alongside the locations at which the footpath surveys were undertaken.

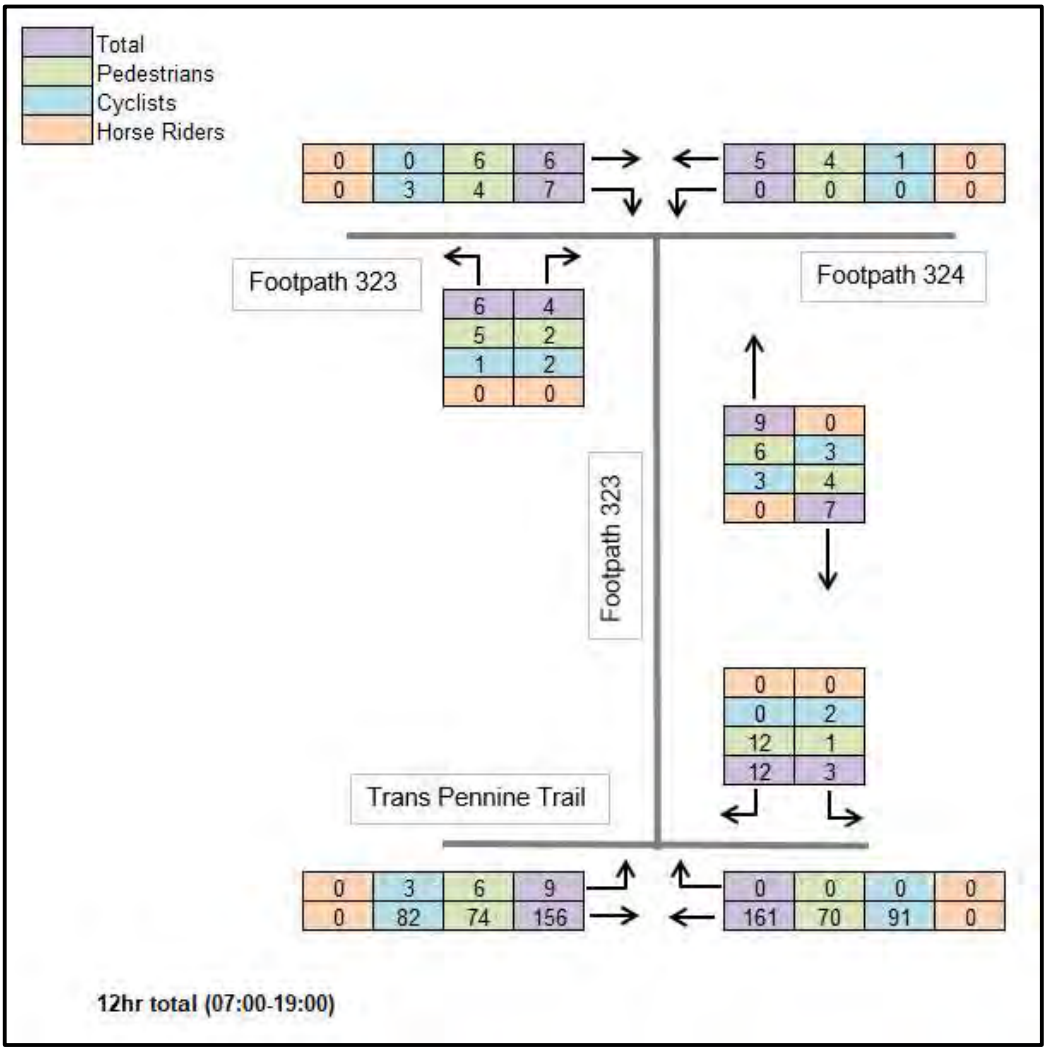
Image 3.4 – PRoW Network

3.6.4 The results of the footpath survey are summarised in the diagram shown on **Image 3.5**.

3.6.5 Review of **Image 3.5** demonstrates that within the vicinity of the Site, the TPT carries a total of around 326 two-way movements per day (between 07:00 – 19:00), including 150 two-way pedestrian movements, and around 176 two-way cyclist movements. This equates to 27 two-way movements per hour, on average.

3.6.6 The section of Public Footpath 323 which routes to the north of the TPT carries a total of around 24 two-way movements, and Public Footpath 324 carries a total of around 15 two-way movements per day.

Image 3.5 – Footpath Survey Results Summary (12hr Total, 07:00 – 19:00)



3.6.7 It is anticipated that access to all PRoW routes would be maintained during the restoration phase, with management in place to ensure that all routes can be safely used, including temporary diversion where necessary. The proposed mitigation to manage and limit the impact of the Proposed Development on the PRoW network is set out in **Section 6.2** of this TA.

4.0 PROPOSED DEVELOPMENT

4.1 General

4.1.1 The Proposed Development comprises the restoration of Yew Tree Quarry. This will require the importation of 400,000m^3 of suitable, non-hazardous restoration material over a period of 111 weeks.

4.1.2 The proposed restoration masterplan is provided in **Appendix B**.

4.1.3 Restoration material would be imported to the Site using 8-wheel tipper vehicles with typical 15-tonne payloads. The Site would receive material 5 days per week, Monday to Friday 07:30 – 16:30. Although restoration activities are expected to occur on Saturday, with operations limited to 08:00 – 13:00, there would be no vehicle deliveries during this time.

4.1.4 Restoration material would be delivered straight into the void and placed immediately in accordance with the phasing plan. Stockpiling of materials would not typically be expected to occur.

4.1.5 It is proposed to use the following items of plant and machinery on site:

i) Dozers
ii) Roller
iii) 8-wheel road Tipper HGVs

4.2 Access

4.2.1 Access to the Site would be taken from the historical access into the former Stairfoot Brickworks site, off the A633 Wombwell Lane. As set out earlier, an enabling works planning application was approved by BMBC in September 2023 (ref. 2022/1218), which allows for a series of improvements to the existing access junction off Wombwell Lane. This enabling works application relates to a more recent full planning application, submitted by Potters Ballotini Limited, for the redevelopment of the former Stairfoot Brickworks site to comprise a glass recycling and repurposing facility (ref. 2024/0373).

4.2.2 Axis has liaised with the applicant team for the former Brickworks scheme in order to ensure that their redevelopment plans do not prejudice the right of way that the

Site currently benefits from through this site, and to therefore ensure that safe and suitable means of access can be achieved to facilitate the Proposed Development. The proposed site access arrangements are illustrated in **Drawing no. 3263-01-D01** in **Appendix C**.

4.3 Staffing Requirements

4.3.1 The Site compound would include a parking area providing contractor parking for up to 8no. vehicles. However, it is understood that for the majority of the restoration period there would be a requirement for a maximum of 5no. staff based on Site to oversee and carry out restoration activities.

4.4 Traffic Generation

4.4.1 Given the nature of the scheme, suitable trip rates from comparable sites are not available within the industry standard TRICS database. The traffic-generating potential of the scheme has therefore been calculated using a first principles approach, utilising industry knowledge and information supplied by the applicant.

4.4.2 To estimate the traffic generating potential of the proposal for material potentially earmarked for use in the Yew Tree Quarry restoration scheme, the following assumptions have been made:

i) The infilling scheme is forecast to involve the importation of circa 400,000m^3 of suitable, non-hazardous restoration material;
ii) It is assumed that material will be imported over a 111-week period;
iii) It is assumed that the typical payload of HGVs used to move the restoration material to the Site will be 9m^3;
iv) It is assumed that restoration work will be operating 5 days a week (Monday – Friday) all year round, and that importation of restoration materials would only occur on weekdays; and
v) The operating hours of the restoration works would be 07:00 to 17:00, during weekdays, with movement of vehicles importing restoration materials occurring between 07:30 to 16:30. The planning application does not include for the importation of materials on Saturdays. As such it has been assumed for robustness that all deliveries would occur on weekdays. There would be no activity on Sundays and Bank Holidays.

4.4.3 With regards to the above, the first principles daily traffic forecasts of the HGV movements that may be expected to be generated by the proposed scheme are summarised in **Table 4.1**.

Table 4.2 – 'First Principles' Trip Generation Forecasts

Main Assumptions	HGV Trip Forecasts
The total volume of material to be imported is	400,000m^3 of soil
If the typical payload of HGVs importing material is	9m^3
Then the amount of HGV import movements will be	44,444 one-way HGV movements
This equals	88,888 two-way HGV movements
Number of operational days which are weekdays	555 days
Which equates to	4,995 hours
Volume import per hour (assuming a constant rate of import)	80m^3 per hour
Which equates to	9 HGV movement per hour (one-way)
Or	18 HGV movements per hour (two-way)
If the max deviation from average is 100 deliveries per day, then this would equal	**20 HGV movements per hour (two-way)**
During a weekday this equates to	80 HGV movements per day (one-way)
Or	160 HGV movements per day (two-way)
If the max deviation from average is 100 deliveries per day, then this would equal	**200 HGV movements per day (two-way)**

4.4.4 **Table 4.1** shows that the average number of two-way HGV movements on weekdays would be approximately 160 per day, or 18 two-way movements per hour.

4.4.5 It should be noted that import material would be sourced on a 'campaign' basis and would therefore be variable and determined by the market and the availability of material. As such, there is likely to be some variability from the average daily HGV traffic forecasts set out above. However, it is anticipated that the number of HGVs to the Site per day would not exceed 200 two-way trips (i.e. 100 arrivals + 100 departures).

4.4.6 As noted above, it is anticipated that the number of staff based at the Site to oversee and undertake restoration activity would be minimal, with a maximum of 5 staff required. It has been assumed that all staff would travel to and from the Site in individual vehicles.

4.4.7 It is anticipated there would be a single shift per day, with all construction staff arriving at the Site in the hour prior to the start of shift at 07:00 and departing in the hour following the end of the working day at 17:00. It is also anticipated that HGV

deliveries would be managed so as to be evenly spread throughout the working day, and to avoid highway peak hours where possible.

4.4.8 Accordingly, **Table 4.2** presents the forecast daily trip generation profile, based on the estimated maximum daily trip generation summarised in **Table 4.1** above.

Table 4.2 – Forecast Maximum Weekday Trip Generation Profile

Trip Generation Profile (Typical Weekday)										
Hour Begin	Hour End	HGVs			Staff (One Shift)			TOTAL		
		Arrive	Depart	Two-Way	Arrive	Depart	Two-Way	Arrive	Depart	Two-Way
05:00	06:00			0			0	0	0	0
06:00	07:00			0			0	0	0	0
07:00	08:00	6	6	12	5	0	5	11	6	17
08:00	09:00	11	11	22			0	11	11	22
09:00	10:00	11	11	22			0	11	11	22
10:00	11:00	11	11	22			0	11	11	22
11:00	12:00	11	11	22			0	11	11	22
12:00	13:00	11	11	22			0	11	11	22
13:00	14:00	11	11	22			0	11	11	22
14:00	15:00	11	11	22			0	11	11	22
15:00	16:00	11	11	22			0	11	11	22
16:00	17:00	6	6	12	0	5	5	6	11	17
17:00	18:00			0			0	0	0	0
18:00	19:00			0			0	0	0	0
19:00	20:00			0			0	0	0	0
Daily Total		**100**	**100**	**200**	**5**	**5**	**10**	**105**	**105**	**210**

4.4.9 **Table 4.2** identifies that the Proposed Development would generate up to 22 two-way HGVs per hour, on average. Such a level of trip generation would not be sustained over a long period of time and would be offset by days which are less intensive.

4.4.10 This increase in traffic is not anticipated to create any material impact in terms of local highway safety or capacity. Additional assessment of the impact of development-related traffic is provided in **Chapter 5**.

4.5 Trip Distribution

4.5.1 The exact source of the soil import material is unknown at this stage. As noted above, material will be sourced on a ‘campaign basis’, as and when available from a number of sources, but primarily from large scale excavation / development projects. It is

likely that import material would be derived from within the local authority area, but there may be some material arising from further afield.

4.5.2 However, although the exact source of material is unknown, HGVs will nonetheless route via appropriate routes through the strategic highway network, minimising the cumulative impact on sensitive receptors and avoiding residential areas where possible, or where such movements are expressly prohibited (i.e. weight restrictions).

4.5.3 The distribution of development traffic has therefore been calculated based on a population-weighted gravity model methodology.

4.5.4 The Site is located within the Middle Super Output Area (MSOA) of 'Barnsley 015' and the trips that would be generated by the Proposed Development have therefore been distributed and assigned on the wider surrounding highway network using the 2011 census 'journey to work' statistics (census dataset WU03EW) for this MSOA. The resultant distribution model is contained in **Appendix D** and is summarised in **Table 4.3**.

Table 4.3 – Proposed Development Trip Distribution

Route (To/From the Site)	% Distribution
A633 Wombwell Lane (north)	72%
A633 Wombwell Lane (south)	28%
Total	**100 %**

4.5.5 Using the above trip distribution, the Proposed Development trips have been assigned onto the local highway network as illustrated in **Figures 1** to **3** in **Appendix E**, for the AM peak (08:00 – 09:00), PM peak (16:00 – 17:00) and AAWT time periods, respectively.

5.0 TRAFFIC IMPACT

5.1 Introduction

5.1.1 The following sections set out the methodology that has been used to assess the impact of the Proposed Development on the operation of the local highway network.

5.2 Future Year Traffic Growth Assumptions

5.2.1 The 2023 traffic surveys, as summarised in **Section 3.3** earlier within this report, have been used to form the basis of a link flow percentage impact assessment in order to establish the operation of the local highway network during the period of restoration activity.

5.2.2 The Proposed Development would comprise the restoration of Stairfoot Quarry over a period of 111 weeks. It is anticipated that the restoration period would commence in early 2026 and would last until early 2028. As such, an assessment has been undertaken for a future year of 2027, in order to assess the proposed operation of the Site against the context of additional traffic demand on the local highway network arising from any general development that occurs in the local area over time.

5.2.3 Growth in background traffic between the baseline year (2023) and the assessment years has been forecast using TEMPRO growth factors (Version 8, NETMv80_Core_Scenario dataset), calculated for the Middle Super Output Area (MSOA) of 'Barnsley 015', within which the Site is located. The resulting growth factors are shown in **Table 5.1**.

Table 5.1 – TEMPRO Locally Adjusted Growth Factors (2023 – 2027)

Area	Weekday AM Peak Period	Weekday PM Peak Period	AAWT
Barnsley 015	1.0292	1.0324	1.0548

5.2.4 The observed baseline traffic flows used in the assessment are illustrated in **Figures 4** to **6** in **Appendix E**, for the AM peak (08:00 – 09:00), PM peak (16:00 – 17:00) and AAWT time periods, respectively.

5.2.5 The factored 2027 base flows for the same time periods are illustrated in **Figures 7** to **9** in **Appendix E**.

5.3 Committed Development Traffic

5.3.1 A review of approved planning applications on the BMBC planning portal has been undertaken in order to identify relevant committed developments with potential to generate significant volumes of traffic within the local highway network. Traffic from the following committed developments has been accounted for within this assessment:

i) The approved erection of 250 dwellings on land off Beachcroft Way to the north of the Site (ref: 2021/0668);
ii) The approved erection of 100 dwellings at Low Valley Farm to the south-east of the Site (ref: 2021/0668); and
iii) The proposed construction of a glass recycling and repurposing facility based at the former Stairfoot Brickworks adjacent to the Site.

5.3.2 Vehicle trip generation for each of these development sites was taken from the TAs submitted in support of the respective planning applications. The committed development trips used in the assessment are illustrated in **Figure 10** to **21** in **Appendix E**.

5.4 Percentage Impact Assessment

5.4.1 The guidance on critical thresholds for percentage traffic impacts within The Institute of Environmental Management and Assessment (IEMA) publication '*Guidelines for the Environmental Assessment of Traffic and Movement*' (July 2023) has been considered in the assessment of the results. Although intended to identify highway links that should be included in an environmental impact assessment, it nonetheless offers a useful reference guide for the thresholds at which a development might be considered to cause a material impact on the local highway network.

5.4.2 Paragraph 2.16 of the guidance states:

"*Following the determination of a study area, it is recommended the competent traffic and movement expert applies two broad rules of thumb as criteria to assist in delimiting the scale and extent of the environmental assessment:*

Rule 1 *include highway links where traffic flows will increase by more than 30% (or the number of heavy goods vehicles will increase by more than 30%)*

Rule 2 *include highway links of high sensitivity where traffic flows have increased by 10% or more.*"

5.4.3 Paragraph 2.18 states that:

"*Traffic forecasting is not an exact science and the accuracy of projections is open to debate. It is generally accepted that accuracies greater than 10% are not achievable. It should also be noted that the day-to-day variation of traffic on a road is frequently at least some + or –10%. At a basic level, it should therefore be assumed that projected changes in traffic of less than 10% create no discernible environmental impact.*"

5.4.4 With regard to the above, a link impact of less than 10% can be considered nominal as the daily fluctuations of traffic may frequently exceed this figure. A 30% impact is therefore taken as the threshold at which a development might begin to cause material adverse environmental effects.

Peak Hour Assessment on A633 Wombwell Lane

5.4.5 The traffic impact of the development proposals on the local highway network, using the baseline data from the MCCs has been assessed utilising a percentage link impact assessment on the following three links: -

i) Link 1: A633 Wombwell Lane (north of Site access); and
ii) Link 2: A633 Wombwell Lane (south of Site access).

5.4.6 The results of this assessment expressed as both total vehicles and HGVs during the 2027 (AM, PM and Weekday Operating Hours) periods are presented within **Table 5.2**. All flows are two-way. From the 2023 baseline traffic flows, the AM and PM peak time periods have been identified as 08:00 to 09:00 and 16:00 to 17:00, respectively. The Weekday Operating Hours comprises a 10-hour period between 07:00 – 17:00.

Table 5.2 – Percentage Link Impact Assessment on Links 1 & 2 (2027)

2027											
2027 Base (AM)	2027 Base (PM)	2027 Base (Weekday)	Dev. Traff. (AM)	Dev. Traff. (PM)	Dev Traff. (Weekday)	2027 Do Some (AM)	2027 Do Some (PM)	2027 Do Some (Weekday)	% (AM)	% (PM)	% (Weekday)
Link 1: A633 Wombwell Lane (north of Site)											
Total Vehicles											
1,483	1,422	14,900	16	12	152	1,499	1,434	15,052	1.1	0.8	1.0

HGVs											
28	12	223	16	8	144	44	20	367	57.1	66.7	64.6
Link 2: A633 Wombwell Lane (south of Site)											
Total Vehicles											
1,487	1,426	14,954	6	5	58	1,492	1,431	15,012	0.3	0.4	0.4
HGVs											
29	16	253	6	4	56	35	20	309	20.7	25.0	22.1

5.4.7 The results of the percentage impact analysis during 2027 identify that the maximum impact would relate to HGV movements along the A63 Wombwell Lane to the north of the Site, when there is forecast to be a greater that 50% increase in movements in all time periods. The highest impact of total vehicles also occurs on link 1, but this is approximately 1%. To the south of the Site, the impact of Proposed Development traffic falls below the IEMA Rule 1 30% threshold for all time periods for both total vehicles and HGVs.

5.4.8 However, the percentage impact assessment should be viewed in the context of the low baseline traffic flows observed on many of the links, which therefore creates the impression, when viewed comparatively, that the impact of the Proposed Development might be greater than it actually would be. In absolute terms, the impact of development-related traffic

5.4.9 In practice, the increase in HGV movements along these links would be relatively small in absolute terms and would equate to 2 HGV movements every 7-8 minutes on average along Wombwell Lane to the north of the Site. There are no practical or amenity impact reasons why Wombwell Lane would not be capable of accommodating the proposed HGV trips. Additional consideration of the potential impact of the scheme is provided in the Environmental Statement (ES) accompanying this application.

5.5 Appraisal of Site Access Junction

5.5.1 The Department for Transport's (DFT's) 'Guidance on Transport Assessment' (2007) document sets out 30 two-way peak hour vehicle trips as the suggested threshold which would trigger the need for more formal assessment of development traffic impact. Appendix B of the same document also suggests that a net increase of 100 or more daily two-way vehicle movements would also trigger the need for a full TA.

5.5.2 Although the guidance has since been withdrawn, it nonetheless offers a useful rule of thumb for the threshold at which a development might be considered to cause a material impact on the local highway network, and in the absence of any similar thresholds in the NPPG or HE guidance documents.

5.5.3 As shown in **Table 5.2**, the Proposed Development is anticipated to result in a net increase in daily vehicle movements in excess of 100 two-way trips on the local highway network. However, even when operating at maximum capacity, the Proposed Development would generate fewer than 30 two-way trips during the highway peak periods.

5.5.4 As such, it is not considered that any further detailed junction capacity modelling is required.

5.6 Summary

5.6.1 Overall, the effect of this additional traffic on the local highway network would be acceptable during the "2027 future year" scenario. The Proposed Development would not result in a percentage impact greater than the 10% IEMA threshold in relation to overall traffic flows on any of the assessed links in any of the assessed time periods in the 2027 assessment year.

5.6.2 The link flow assessments do indicate that the Proposed Development would result in percentage increases in HGV traffic of significantly greater than the 30% IEMA thresholds on Wombwell Lane to the north of the Site in all scenarios. However, this is due to the low baseline traffic levels. The actual impact in absolute terms would be low, with the average hourly increase in vehicle movements during the busiest periods of activity equating to two movements every 7-8 minutes.

5.6.3 There are no practical reasons why the assessed links would not be capable of accepting this number of HGVs, and therefore there is no reason to expect that the modest increase in trips would have a cumulative negative impact on the local highway network. It is therefore considered that the proposed scheme will not lead to an unacceptable impact on the local highway network.

6.0 MANAGEMENT OF IMPACT ON PUBLIC RIGHTS OF WAY

6.1 Introduction

6.1.1 The following sections set out the proposed mitigation measures that would be implemented in order to manage and limit the impact of the Proposed Development on the PRoW network.

6.2 Proposed Mitigation Strategy

6.2.1 As described in **Section 3.6**, the Trans Pennine Trail (TPT) and Public Footpaths 323 and 324 are all located within or along the boundary of the Site.

6.2.2 The route of Footpath 323 crosses the Site in the vicinity of the compound area before running south-west along the eastern side of the access track. Footpath 324 splits off from Footpath 323 to the south of the Site compound area and routes in a south-eastward direction along the southern edge of the site boundary to connect to the TPT. The route of the TPT crosses the Site access track approximately 150m south-west of the Site compound area but otherwise is remote from the Proposed Development.

6.2.3 In order to safely manage the impact of the Proposed Development on these PRoW routes and allow the PRoWs to remain open to all users throughout the restoration period, it is proposed that a temporary diversion of Footpaths 323 and 324 would be implemented, using a temporary Traffic Regulation Order (TRO) under the Road Traffic Regulation Act 1984. The route of Footpath 323 where it crosses the northern end of the Site access track would be fenced off to either side of the access track. The route of the temporary footpath diversion would follow existing footpaths through the woodland and fields to the west of the access track, as shown illustratively on **Image 6.1**. Signage would be placed at key junction points along the PRoW network to advise of the temporary footpath diversion route.

6.2.4 The temporary PRoW diversion route would have the greatest impact on users of Public Footpath 324, as they would be required to re-route along the TPT. However, when having regard to the limited user numbers observed along this Public Footpath (i.e. 15 two-way movements per day, as illustrated on **Image 3.5**) and the temporary nature of the diversion, this is considered to result in minimal disruption to users. It should also be noted that the TPT also provides users with a more user-friendly, and well surfaced route.

Image 6.1 – Illustrative Temporary PRoW Diversion Route

6.2.5 As noted above, there would be no impact on the route of the TPT resulting from restoration activity at the Site, and as such the trail would remain open and available at all times during the restoration period with no requirement for temporary closures or diversions. However, it would be necessary to implement a managed crossing point to ensure that PRoW users are protected from Site traffic when crossing the Site access track.

6.2.6 It is proposed that the crossing point would be managed through the installation of gates across the Site access track on each side of the PRoW crossing. These would be secured in the 'closed' position to construction traffic, allowing priority to PRoW users.

6.2.7 When approaching, drivers of Site vehicles would be required to manually open each of the gates and secured in position to close off the PRoW on each side of the access track, to temporarily prevent access along the PRoW while vehicles make the crossing. Once the vehicle has crossed the PRoW, the gates would be returned and locked into their original position. During intense periods of vehicular activity, a banksman could be deployed at the crossing to control construction vehicle movements across the PRoW.

6.2.8 These proposed PRoW management mitigation measures are illustrated on **Drawing no. 3263-01-D02** in **Appendix F**.

7.0 SUMMARY AND CONCLUSIONS

7.1.1 This Transport Statement (TS) has been prepared by Axis on behalf of Green Earth Developments (Group) Limited to consider the highways and transport matters related to the proposals for the restoration of the Yew Tree Quarry, located at the Stairfoot Brickworks, Wombwell Lane, Stairfoot, Barnsley.

7.1.2 The road safety record of the local highway network has been examined within the most recently available 3-year period (2020-2022 inclusive). The analysis does not indicate that there are any existing highway safety issues that could be worsened by the Proposed Development.

7.1.3 Access to the Site is from the A633 Wombwell Lane, via a private right of way through the former (now cleared) Stairfoot Brickworks site. The Site access junction into the Brickworks site currently takes the form of a ghost-island right turn junction with the A633 Wombwell Lane. This junction is currently undergoing improvement works as part of a separate planning application for the redevelopment of the Brickworks site, including widening to the bellmouth to better facilitate HGVs, and the provision of a pedestrian refuge island. Swept path analysis demonstrates that the proposed site access arrangements will satisfactorily cater for the traffic movements associated with the Proposed Development.

7.1.4 The proposed restoration scheme would involve the importation of approximately 400,000m^3 of non-hazardous restoration material (principally soils and inert material) over a 111-week period. Restoration material would be imported to the Site using 8-wheel tipper vehicles with typical 15-tonne payloads.

7.1.5 The Site would receive material 5 days per week, Monday to Friday 07:30 – 16:30. Although restoration activities would also occur on Saturday between 08:00 – 13:00, there would be no vehicle movements during this time. No HGV movements would take place on Sundays and Bank Holidays.

7.1.6 The traffic-generating potential of the proposed restoration scheme has been calculated using a first principles approach, utilising industry knowledge and information supplied by the applicant. The trip generation calculations indicate that that the average number of two-way HGV movements on weekdays would be approximately 160 per day, or 18 two-way movements per hour.

7.1.7 To provide a highly robust, worst-case scenario, the possibility for daily variation in HGV movements has also been considered, to account for the variable availability of import material, which would be determined by the market and the availability of material. It is anticipated that the maximum number of HGVs to the Site per day would not exceed 200 two-way trips (i.e. 100 arrivals + 100 departures).

7.1.8 Restoration activities are expected to commence in early 2026 and last for a period of 111 weeks. To assess the impact of the Proposed Development on the local highway network, the forecast increase in traffic resulting from the proposed development has been compared to the baseline traffic flows for a 2027 future year scenario. This assessment has also taken into account the estimated traffic generation associated with a number of committed development sites, including the proposed redevelopment of the Stairfoot Brickworks site.

7.1.9 The assessment indicates that in absolute terms, the impact of the proposal on the local highway network would be low, with flows which are largely within the expected day to day fluctuations of traffic. The Proposed Development is forecast to result in a percentage increase in HGV traffic which exceeds the 30% IEMA thresholds on the A633 Wombwell Lane to the north of the Site. However, this is due to the low baseline traffic levels. The actual impact in absolute terms will be low, with the average hourly increase in vehicle movements during the busiest periods of activity equating to 2 HGV movements every 7-8 minutes on average along Wombwell Lane to the north of the Site. There are no practical or amenity impact reasons why Wombwell Lane would not be capable of accommodating the proposed HGV trips.

7.1.10 There is no reason to expect that the modest increase in trips will have a cumulative negative impact on the local highway network. It is therefore considered that the proposed scheme will not lead to an unacceptable impact on the local highway network.

7.1.11 Paragraph 116 of the National Planning Policy Framework states that:

"*Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe*".

7.1.12 Based on the evidence presented in this TA, no unacceptable impact would be created by the scheme.

Appendix A – BMBC Pre-Application Scoping Response

Duncan Carter

From: Lake , Wayne (GROUP LEADER HDC) <WayneLake@barnsley.gov.uk>
Sent: 13 September 2022 09:51
To: Ward , Elaine (SENIOR PLANNING OFFICER)
Cc: HighwaysPlngApps
Subject: Stairfoot brickworks - Restoration

Hi Elaine,

In advance of your site meeting on Friday, and without prejudice to a formal pre-app response being provided, please find the following previously conveyed to the Highways and Transport consultant on the Potters Ballotini pre-app enquiry:

Further to our previous discussion, my preferred option is the improved junction with island in order to cater for the left in / left out without encroachment into the opposing lane whilst accommodating pedestrian movement across the bell mouth itself.

Having reviewed the information regarding trip generation, it would appear as though the development may not generate 30 or more two way trips in any hour, however it would appear to have the potential to generate in the region of 108 daily two way trips (140 trips whilst the site is being developed). If this is indeed the case, I confirm that a Transport Statement rather than a Transport Assessment will be required to support any forthcoming application together with the information requested as part of the formal pre-application enquiry.

Please note that full details of trip generation etc will be required before we agree that either a TA or TS would be required for this proposal.

Also TPT …….

Hope that helps.

Kind Regards

Wayne

Wayne Lake MSc MCIHT
Group Leader - Highways Development Control
Transport
Growth and Sustainability
Barnsley Council

Telephone: 01226 772587
Email: waynelake@barnsley.gov.uk
Mail: PO Box 634, BARNSLEY. S70 9GG

*Sat Nav reference: S70 2DR

Duncan Carter

From: Catling , Rik (RIGHTS OF WAY DEFINITIVE MAP OFFICER) <RikCatling@barnsley.gov.uk> on behalf of Public Rights of Way <PublicRightsofWay@barnsley.gov.uk>
Sent: 30 August 2022 17:16
To: DevelopmentControl & DevelopmentManagement
Cc: Ford , Sarah (SENIOR RIGHTS OF WAY OFFICER); Loach , Mandy (TPT TEAM LEADER)
Subject: RE: 2022/ENQ/00353 Stairfoot Quarry
Attachments: Stairfoot Quarry PROW.pdf; TCO form 2022-23 editable.pdf; 2022/ENQ/00353 Stairfoot Quarry

Good afternoon

A public footpath crosses the full length of the site, as shown on the attached plan. The Trans Pennine Trail is situated to the south of the site.

The proposed new levels appear to affect the existing PROW as follows. Letters are as shown on the attached plan.

A-B: The footpath appears to be included within the cross section A-A1, with a new 1:3 gradient introduced across the path.
B-C: the existing gradient is not shown, but a proposed 1:4 gradient is shown.
C-D: appears to be largely unaffected.
D-E appears to be unaffected.

Any full planning application should include confirm exactly which sections of PROW are affected by the proposed new levels. The recorded PROW should be untouched wherever possible. The PROW department will object to any proposed new gradients which are steeper than the existing gradients unless very good reasons are provided for altering them.

The proposals also suggest that 80 HGVs will enter the site per day over a 4 year period, with access taken from the former brickworks. This would involve crossing the Trans Pennine Trail (TPT). The TPT is a major multi-user route and very well-used. It must remain safely open to the public at all times, and any proposals must accommodate this. Again, if this cannot be achieved then PROW would object to the proposals. The remaining PROW should remain open as much as possible, but where this is not possible for safety reasons then a temporary closure order would have to be arranged, at cost (application form attached for information).

A construction management plan will be required which addresses the following as a minimum:

- The proposed access route into the site.
- How any proposed TPT crossing will be managed, providing priority to members to of the public.
- How any TPT crossing point will be maintained to keep it free from mud or other obstructions.
- How the public footpaths at the site will be affected, the measures taken to ensure public safety and any proposed temporary closures.

The enquiry also mentions the possibility of permissive footpaths in the future. Any such path should be subject to a formal permissive path agreement with the Council.

Regards

Rik Catling
Definitive Map Officer
Barnsley Metropolitan Borough Council

From: Bladen , Angela (PLANNING & BUILDING CONTROL ASSISTANT) <AngelaBladen@barnsley.gov.uk>
Sent: 18 August 2022 10:20
To: Biodiversity Consultations <biodiversityconsultations@barnsley.gov.uk>; 'planningconsultation@coal.gov.uk' <planningconsultation@coal.gov.uk>; development@yorkshirehumberdrainage.gov.uk; 'sp-yorkshire@environment-agency.gov.uk' <sp-yorkshire@environment-agency.gov.uk>; Scott , John (SERVICE MANAGER) <JohnScott@barnsley.gov.uk>; HighwayDrainage <HighwayDrainage@barnsley.gov.uk>; HighwaysPlngApps <HighwaysPlngApps@barnsley.gov.uk>; anne.vickers@hse.gov.uk; Jowett , Edward (FORESTRY OFFICER) <EdwardJowett@barnsley.gov.uk>; PollutionControl <PollutionControl@barnsley.gov.uk>; Planning Consultation Mailin <planningconsultation@yorkshirewater.co.uk>; Public Rights of Way <PublicRightsofWay@barnsley.gov.uk>; James , Paul (PRINCIPAL MINING ENGINEER - GROUP LEADER) <PaulJames@barnsley.gov.uk>; Trans Pennine Trail Info <Info@TransPennineTrail.org.uk>
Cc: Ward , Elaine (SENIOR PLANNING OFFICER) <ElaineWard@barnsley.gov.uk>
Subject: 2022/ENQ/00353 Stairfoot Quarry

Dear Sir / Madam,

ENQUIRY NO:	2022/ENQ/00353
DESCRIPTION:	Restoration and aftercare scheme including de-watering, re-engineering of historical quarry voids and importation of non-hazardous excavated soil materials
LOCATION:	Stairfoot Quarry, Wombwell Lane, Stairfoot, Barnsley

Please find above overview of a Planning Enquiry for your attention and comment.

If you have any objections or comments to make, please send them either:

- Online via www.barnsley.gov.uk/planningexplorer using the 'Add Comments' function,
- By email to developmentmanagement@barnsley.gov.uk or
- By post to the address shown at the bottom of this page

We would be obliged to receive any observations at the earliest opportunity or within 21 days of the date of this letter by the latest. If you are unable to reply by this date, please contact the Case Officer, Elaine Ward , to discuss whether a longer period can be agreed. (Please note, The Town and Country Planning (Local Authority Consultations etc.) (England) Order 2018 extends periods of public consultation by one day for each bank or public holiday which occurs during the consultation period)

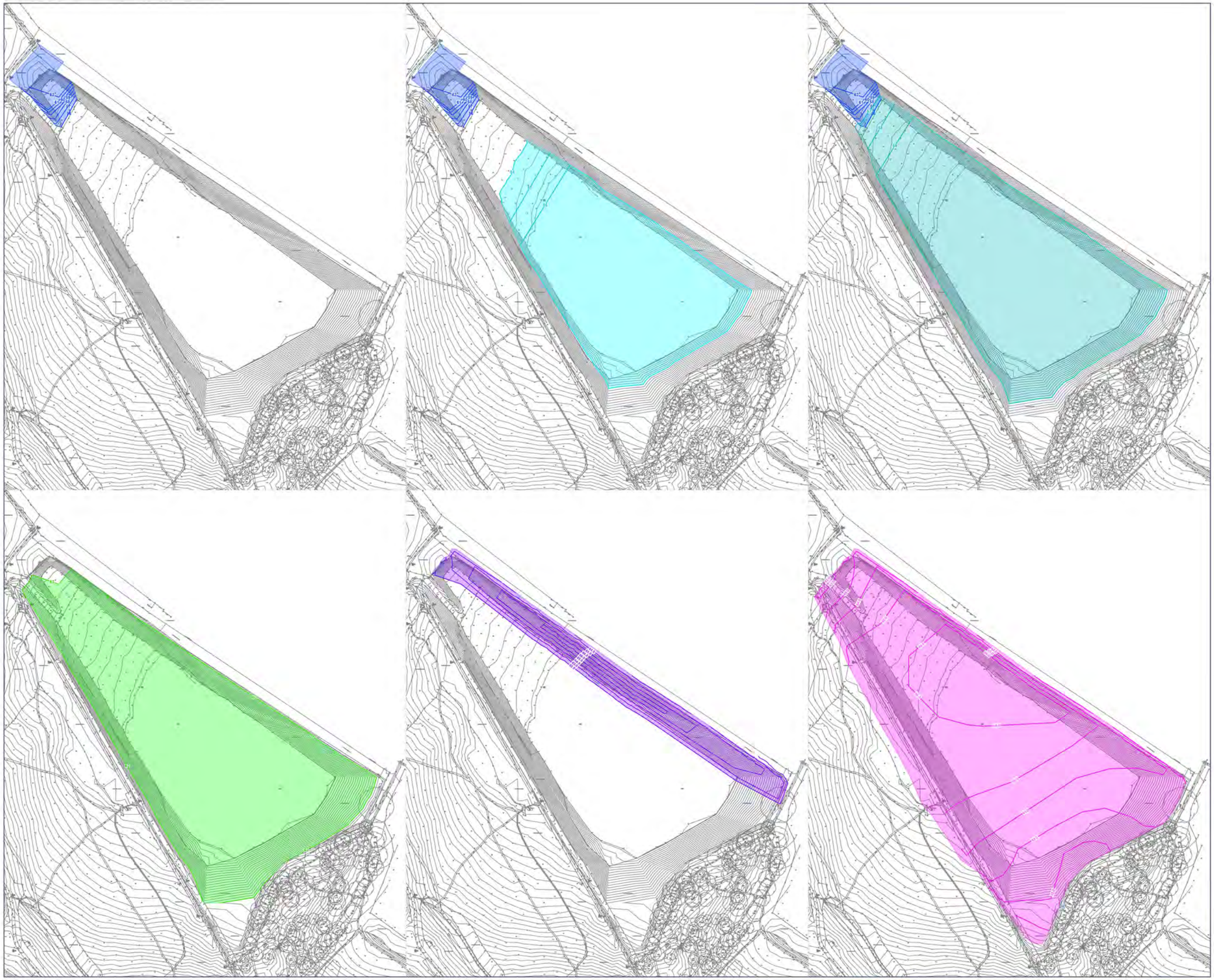
If you have no objections or comments to make, a response is not required.

Yours faithfully

Development Management

Development Management Inner Team

Appendix B – Proposed Site Restoration Masterplan



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revision: desc: date:

0 50 100 150 200 250 300m

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axis

Client
Green Earth Group

Project
Stairfoot Quarry Restoration

Drawing Title
Phasing Plan

Scale	Status
1:3000 @A3	--

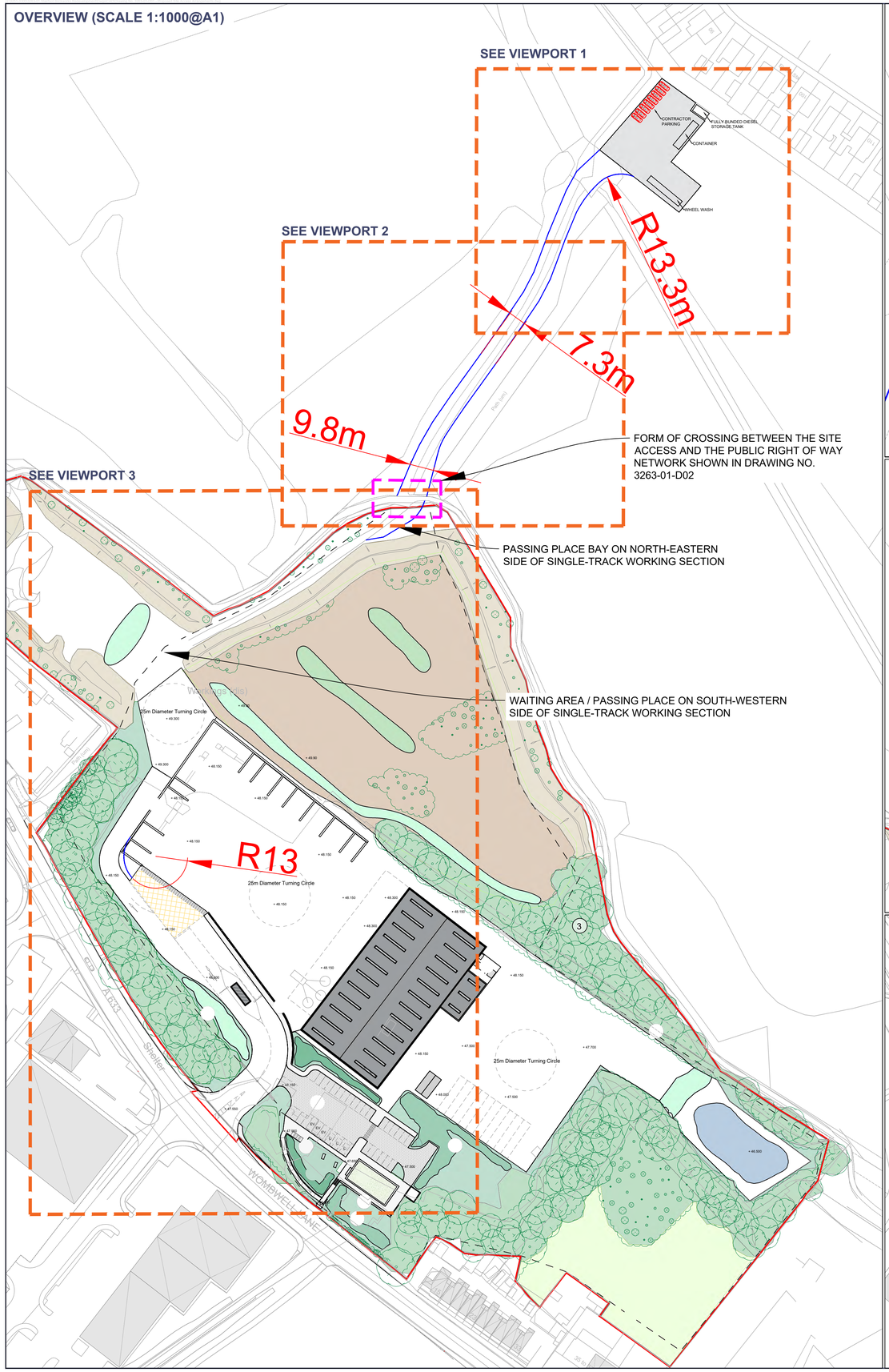
Date	Drawn	Checked
October 2024	SM	SH

Dwg no
2363-01-SK002

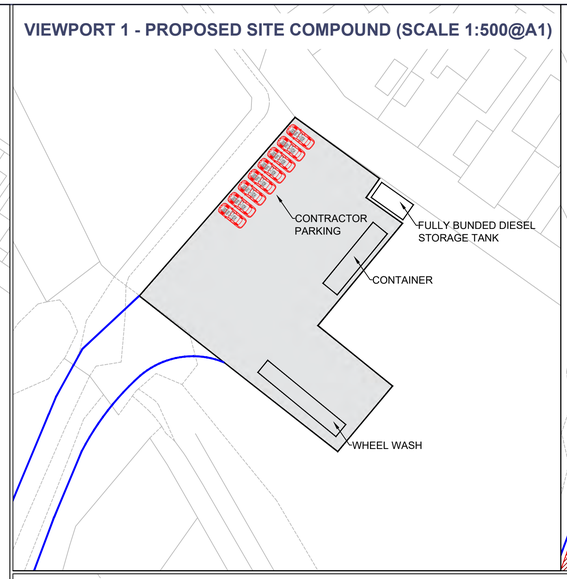
Rev

Appendix C – Drawing No. 3263-01-D01: Proposed Site Access Arrangements

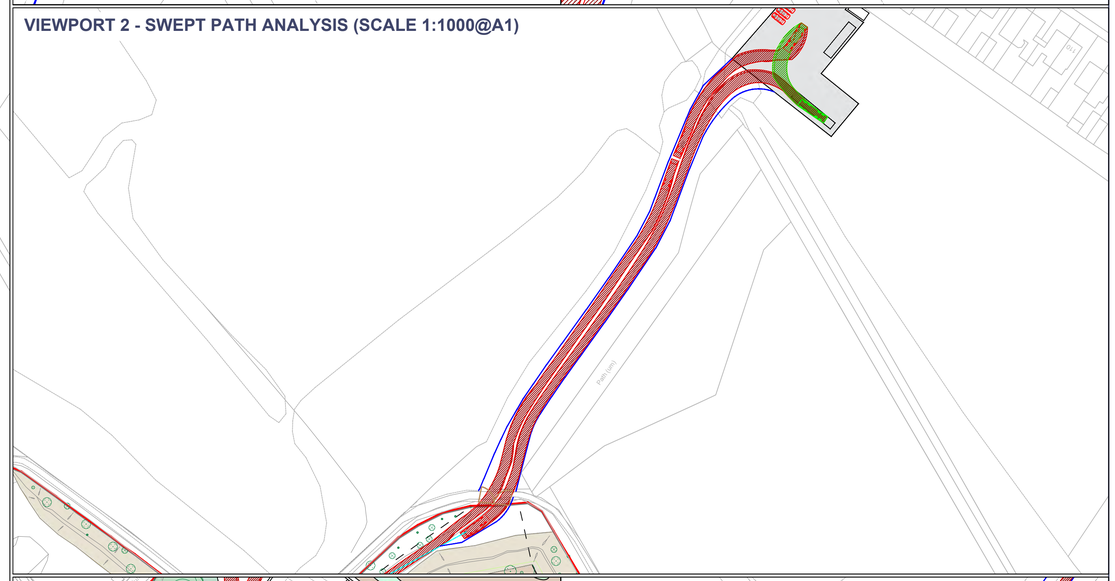
OVERVIEW (SCALE 1:1000@A1)



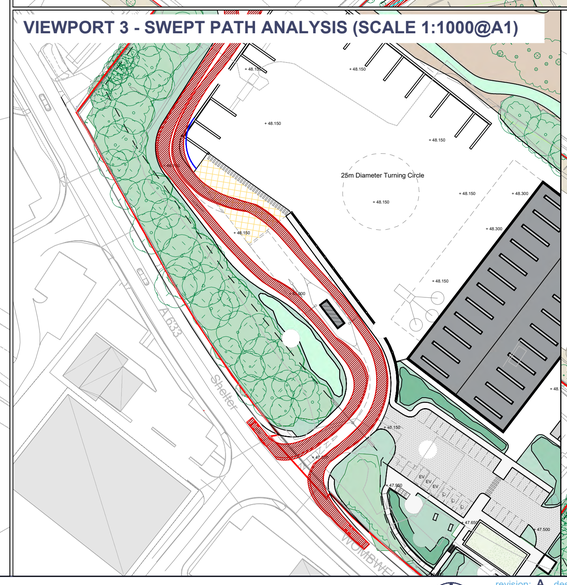
VIEWPORT 1 - PROPOSED SITE COMPOUND (SCALE 1:500@A1)

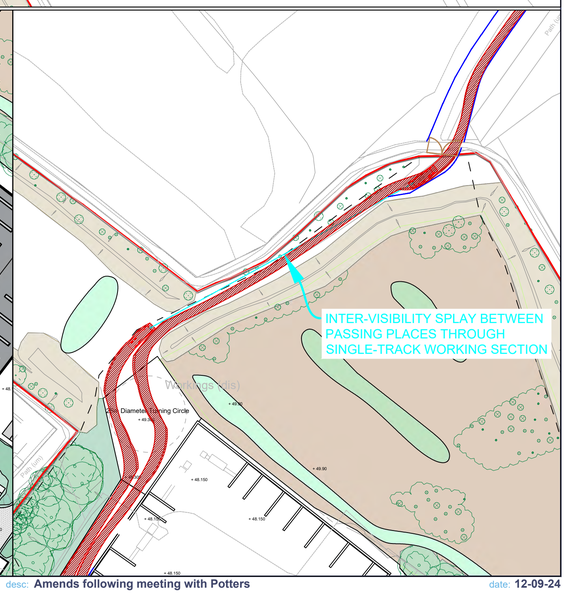


VIEWPORT 2 - SWEPT PATH ANALYSIS (SCALE 1:1000@A1)



VIEWPORT 3 - SWEPT PATH ANALYSIS (SCALE 1:1000@A1)

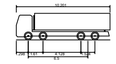




Proposed Widening to Access

Application Ref. 2024/0373 Site Boundary

Design Vehicle:



Large Tipper	
Overall Length	10.201m
Overall Width	2.495m
Overall Body Height	2.890m
Min Body Ground Clearance	0.341m
Track Width	2.471m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	11.550m

revision: **A** desc: **Amends following meeting with Potters** date: **12-09-24**

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Client
Green Earth Group

Project
Stairfoot Quarry Restoration

Drawing Title
Proposed Site Access Arrangements

Scale	Status
As Stated	**Planning**

Date	Drawn	Checked
May 2025	**AB/DC**	**LK**

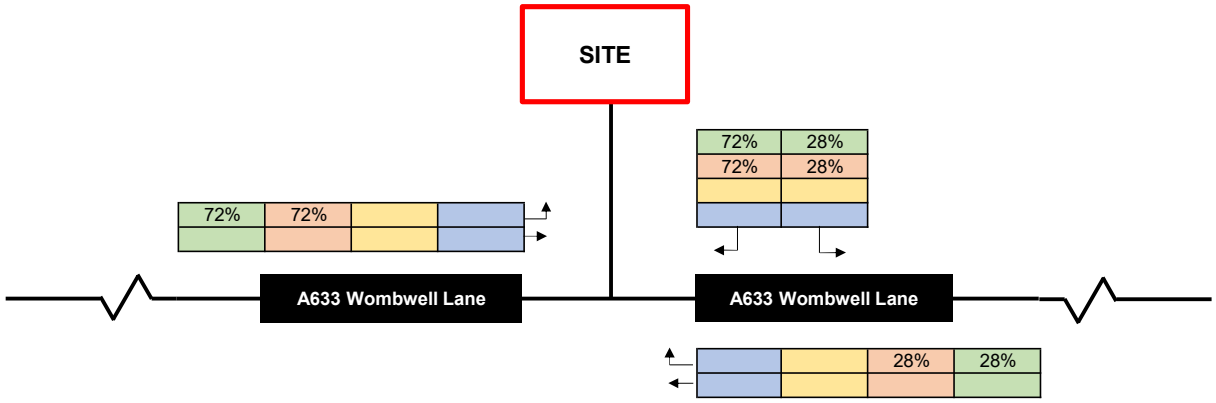
Dwg no	Rev
3263-01-D01	**A**

Appendix D – Development Trip Distribution

Key

Lights
HGVs
Total Vehicles
PCU

HGV to PCU Factor: 2



Project Name: Stairfoot Brickworks Redevelopment
Project Number: 3263-01
Description: Proposed Development Trip Distribution

Appendix E – Baseline Traffic Flow Diagrams

Key

Lights
HGVs
Total Vehicles
PCU

HGV to PCU Factor: 2

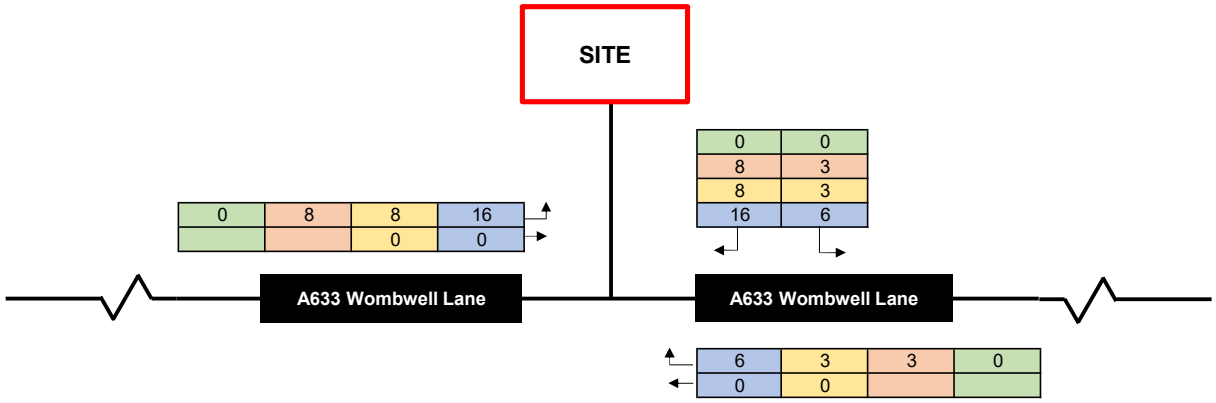


Figure: 1
Project Name: Stairfoot Brickworks Redevelopment
Project Number: 3263-01
Description: Proposed Development Trip Assignment
Period: AM Peak Hour (8:00am - 9:00am)

Key

Lights
HGVs
Total Vehicles
PCU

HGV to PCU Factor: 2

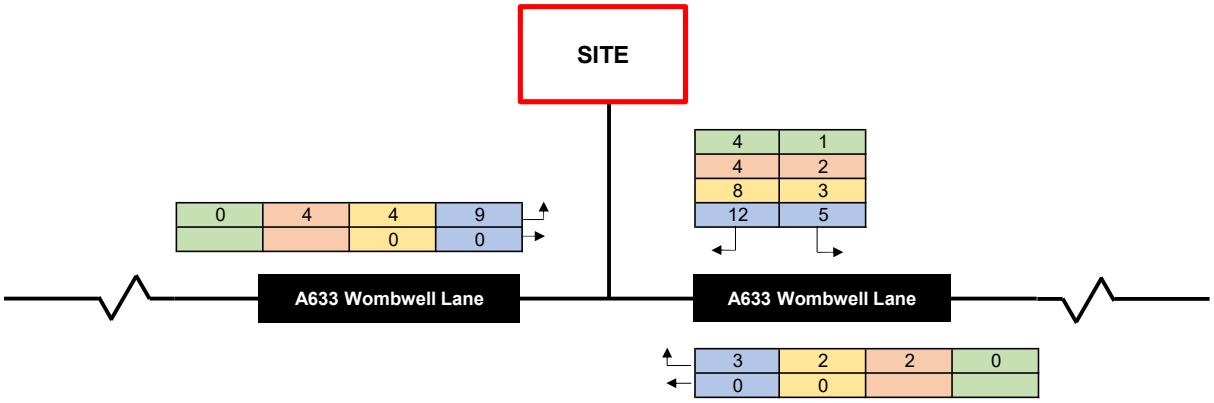


Figure: 2
Project Name: Stairfoot Brickworks Redevelopment
Project Number: 3263-01
Description: Proposed Development Trip Assignment
Period: PM Peak Hour (16:00 -17:00)

Key

Lights
HGVs
Total Vehicles
PCU

HGV to PCU Factor: 2

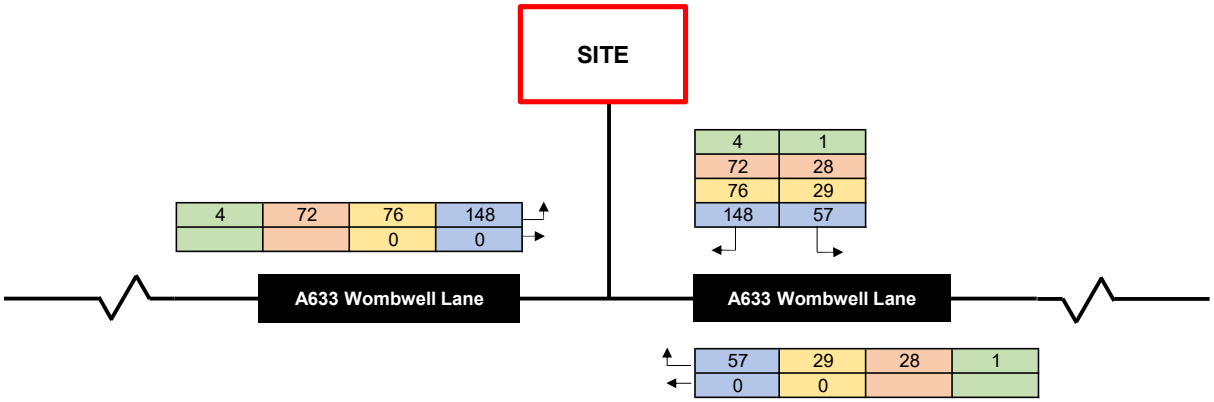


Figure: 3
Project Name: Stairfoot Brickworks Redevelopment
Project Number: 3263-01
Description: Proposed Development Trip Assignment
Period: 10hr AAWT (7:00am - 5:00pm)

Key

Lights
HGVs
Total Vehicles
PCU

HGV to PCU Factor: 2

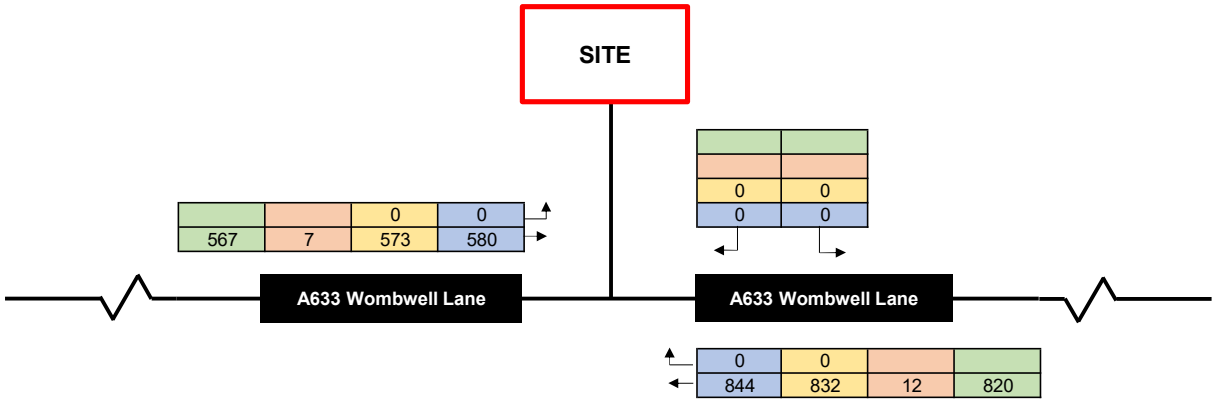


Figure: 4
Project Name: Stairfoot Brickworks Redevelopment
Project Number: 3263-01
Description: 2023 Observed Flows - Weekday AM Peak
Period: 08:00-09:00

Key

Lights
HGVs
Total Vehicles
PCU

HGV to PCU Factor: 2

Figure: 5
Project Name: Stairfoot Brickworks Redevelopment
Project Number: 3263-01
Description: 2023 Observed Flows - Weekday PM Peak
Period: 16:00-17:00

Key

Lights
HGVs
Total Vehicles
PCU

HGV to PCU Factor: 2

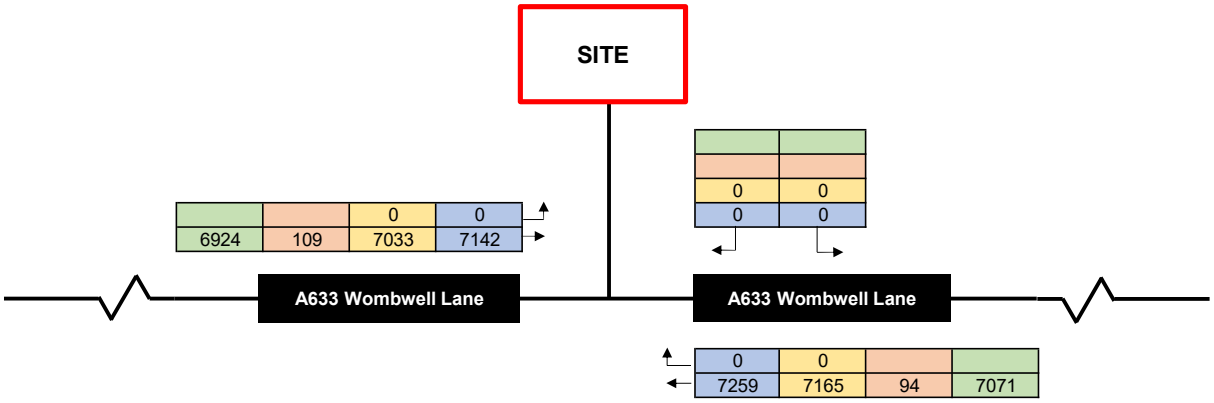


Figure: 6
Project Name: Stairfoot Brickworks Redevelopment
Project Number: 3263-01
Description: 2023 Observed Flows - 10-hour AAWT
Period: 07:00-17:00

Key

Lights
HGVs
Total Vehicles
PCU

HGV to PCU Factor: 2

TEMPRO Factor:
1.029

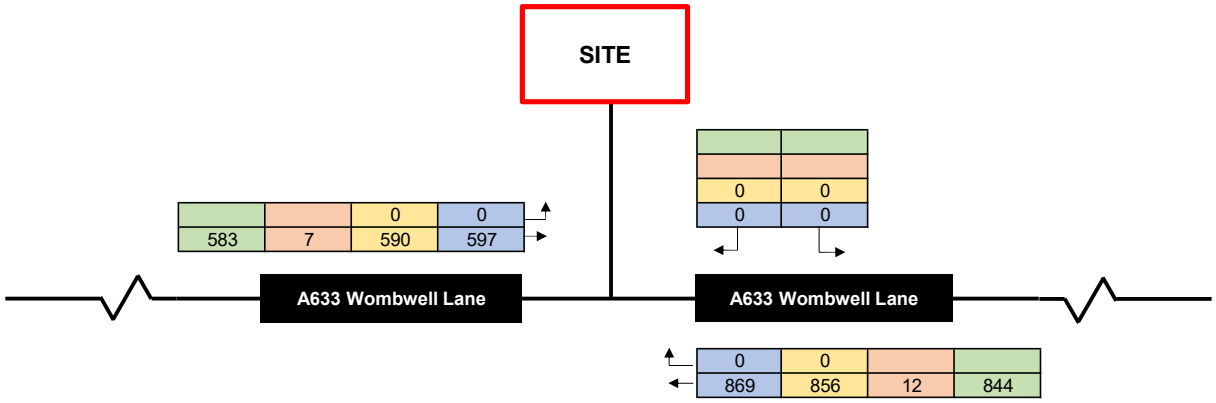


Figure: 7
Project Name: Stairfoot Brickworks Redevelopment
Project Number: 3263-01
Description: Factored 2027 Baseline Flows - Weekday AM Peak
Period: 08:00-09:00

Key

Lights
HGVs
Total Vehicles
PCU

HGV to PCU Factor: 2

TEMPRO Factor:
1.032

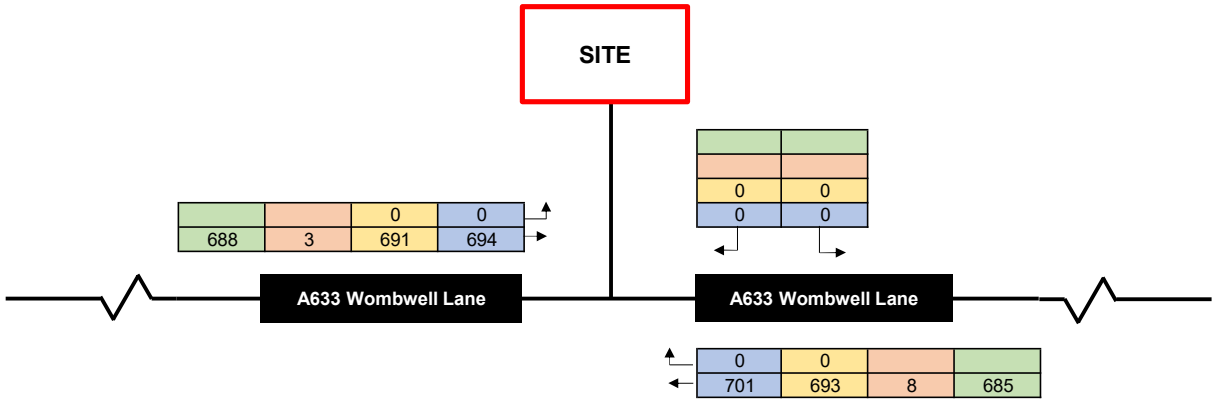


Figure: 8
Project Name: Stairfoot Brickworks Redevelopment
Project Number: 3263-01
Description: Factored 2027 Baseline Flows - Weekday PM Peak
Period: 16:00-17:00

Key

Lights
HGVs
Total Vehicles
PCU

HGV to PCU Factor: 2

TEMPRO Factor:
1.034

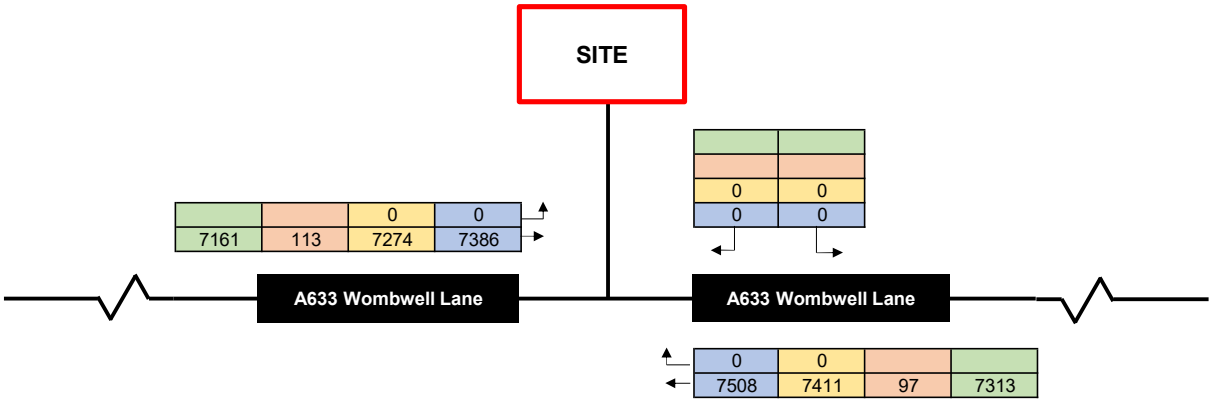


Figure: 9
Project Name: Stairfoot Brickworks Redevelopment
Project Number: 3263-01
Description: Factored 2027 Baseline Flows - 10-hour AAWT
Period: 07:00-17:00

Key

Lights
HGVs
Total Vehicles
PCU

HGV to PCU Factor: 2

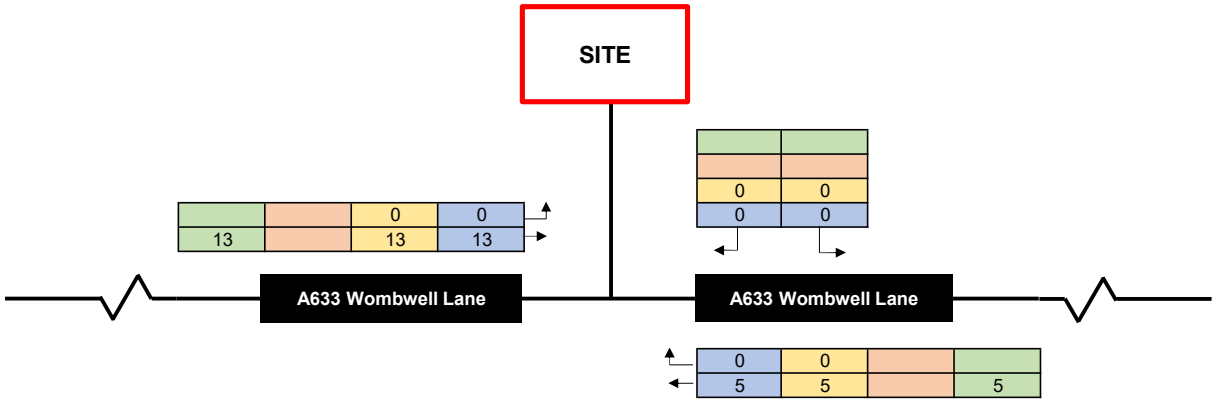


Figure: 10
Project Name: Stairfoot Brickworks Redevelopment
Project Number: 3263-01
Description: Committed Development Traffiic - 250 Dwellings off Bleachcroft Way (2021/0668)
Period: AM Peak Hour

Key

Lights
HGVs
Total Vehicles
PCU

HGV to PCU Factor: 2

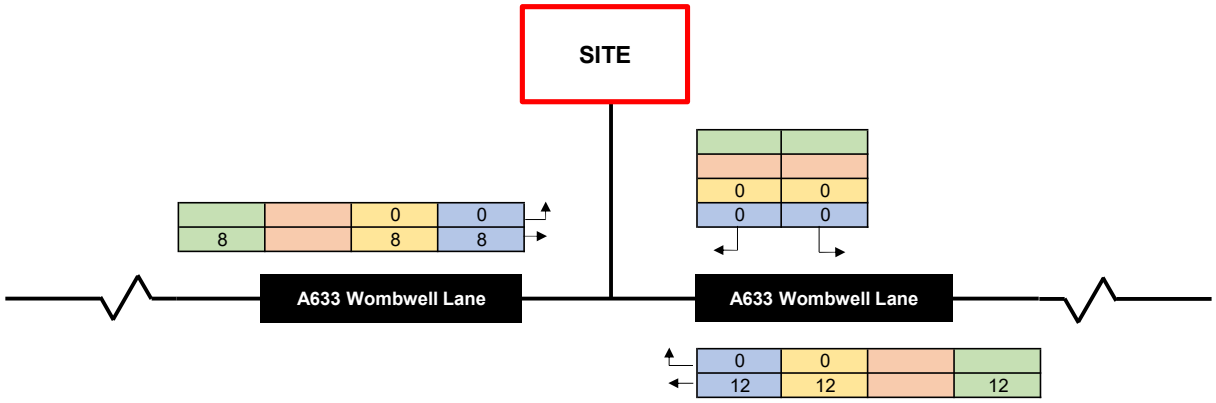


Figure: 11
Project Name: Stairfoot Brickworks Redevelopment
Project Number: 3263-01
Description: Committed Development Traffiic - 250 Dwellings off Bleachcroft Way (2021/0668)
Period: PM Peak Hour

Key

Lights
HGVs
Total Vehicles
PCU

HGV to PCU Factor: 2

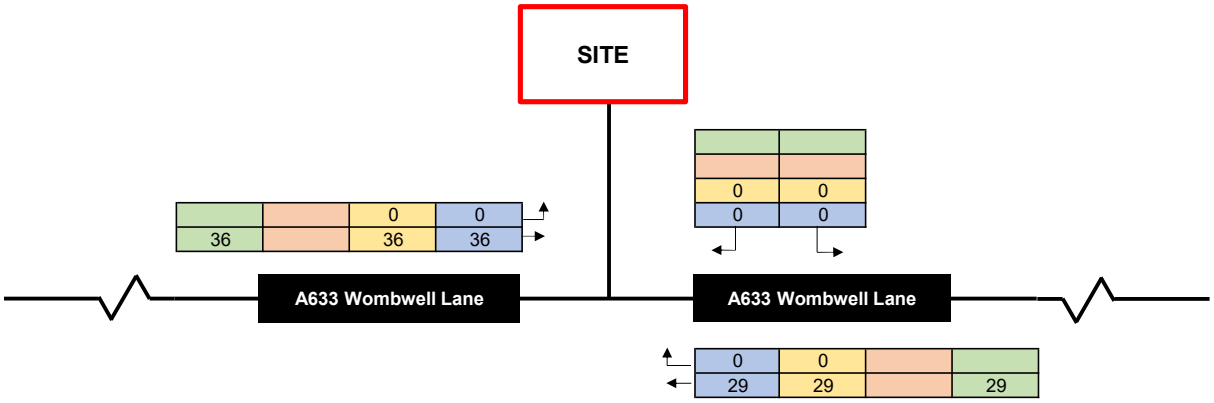


Figure: 12
Project Name: Stairfoot Brickworks Redevelopment
Project Number: 3263-01
Description: Committed Development Traffiic - 250 Dwellings off Bleachcroft Way (2021/0668)
Period: PM Peak Hour

Key

Lights
HGVs
Total Vehicles
PCU

HGV to PCU Factor: 2

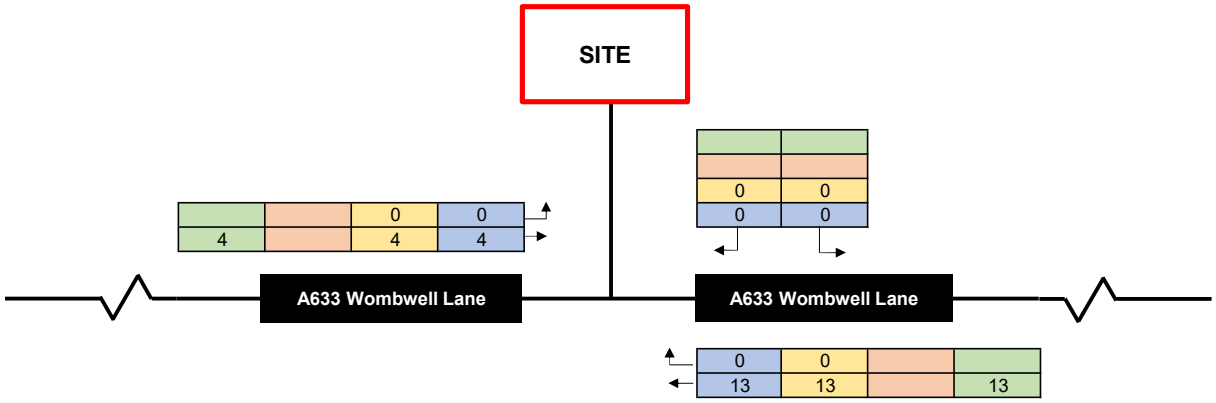


Figure: 13
Project Name: Stairfoot Brickworks Redevelopment
Project Number: 3263-01
Description: Committed Development Traffiic - 100 Dwellings at Low Valley Farm (2021-0602)
Period: AM Peak Hour (8:00am - 9:00am)

Key

Lights
HGVs
Total Vehicles
PCU

HGV to PCU Factor: 2

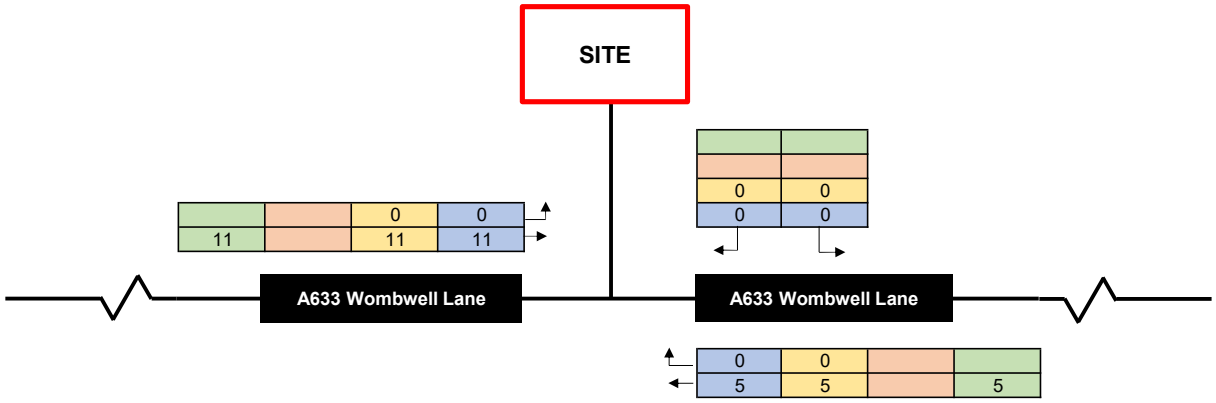


Figure: 14
Project Name: Stairfoot Brickworks Redevelopment
Project Number: 3263-01
Description: Committed Development Traffiic - 100 Dwellings at Low Valley Farm (2021-0602)
Period: PM Peak Hour (5:00pm -6:00pm)

Key

Lights
HGVs
Total Vehicles
PCU

HGV to PCU Factor: 2

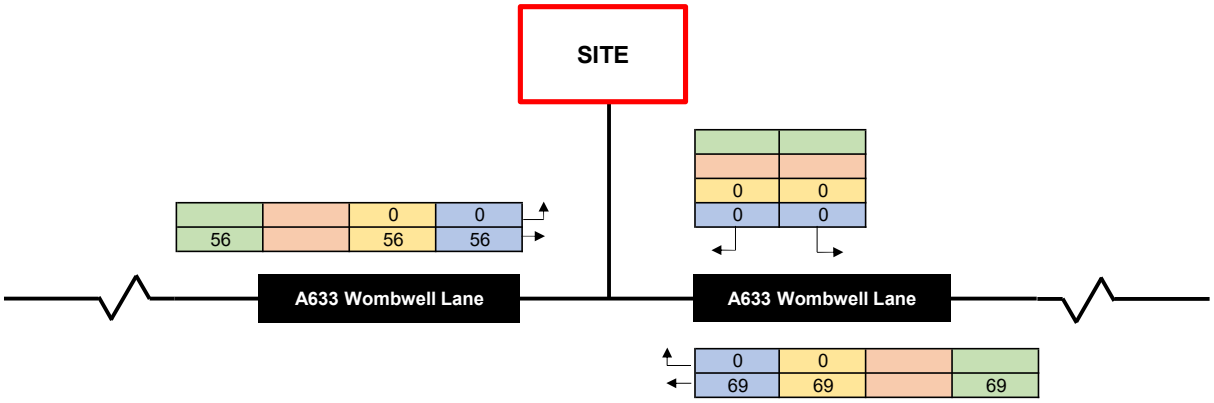


Figure: 15
Project Name: Stairfoot Brickworks Redevelopment
Project Number: 3263-01
Description: Committed Development Traffiic - 100 Dwellings at Low Valley Farm (2021-0602)
Period: 10hr AAWT (7:00am - 5:00pm)

Key

Lights
HGVs
Total Vehicles
PCU

HGV to PCU Factor: 2

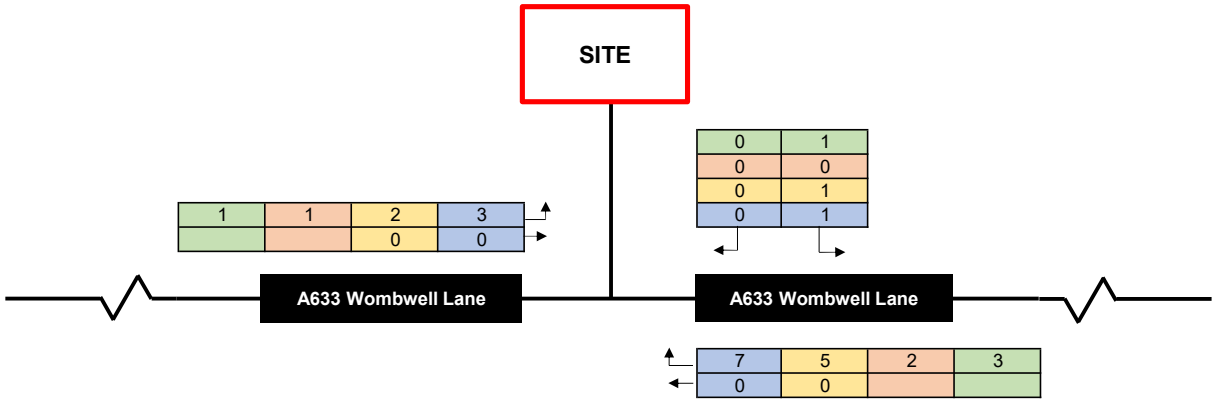


Figure: 16
Project Name: Stairfoot Brickworks Redevelopment
Project Number: 3263-01
Description: Committed Development Traffiic - Stairfoot Glassworks (2024-0373)
Period: AM Peak Hour (8:00am - 9:00am)

Key

Lights
HGVs
Total Vehicles
PCU

HGV to PCU Factor: 2

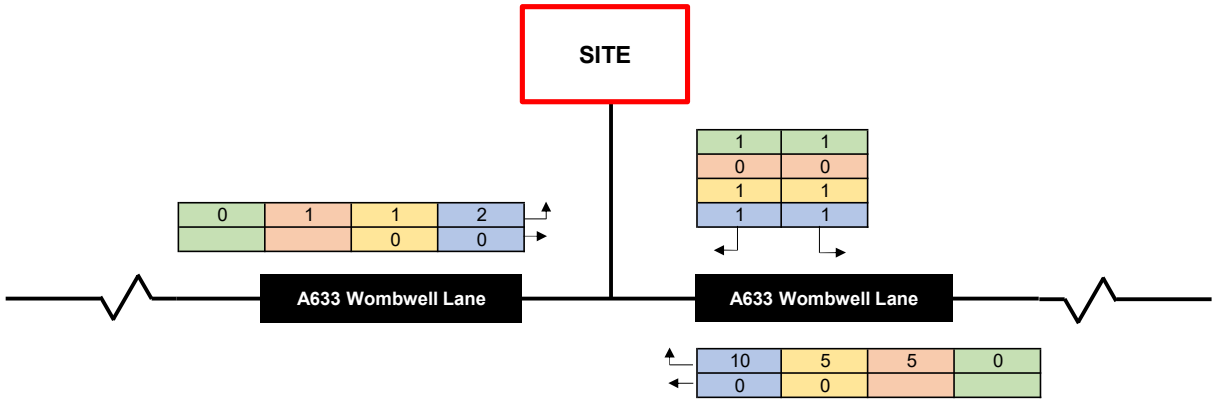


Figure: 17
Project Name: Stairfoot Brickworks Redevelopment
Project Number: 3263-01
Description: Committed Development Traffiic - Stairfoot Glassworks (2024-0373)
Period: PM Peak Hour (5:00pm -6:00pm)

Key

Lights
HGVs
Total Vehicles
PCU

HGV to PCU Factor: 2

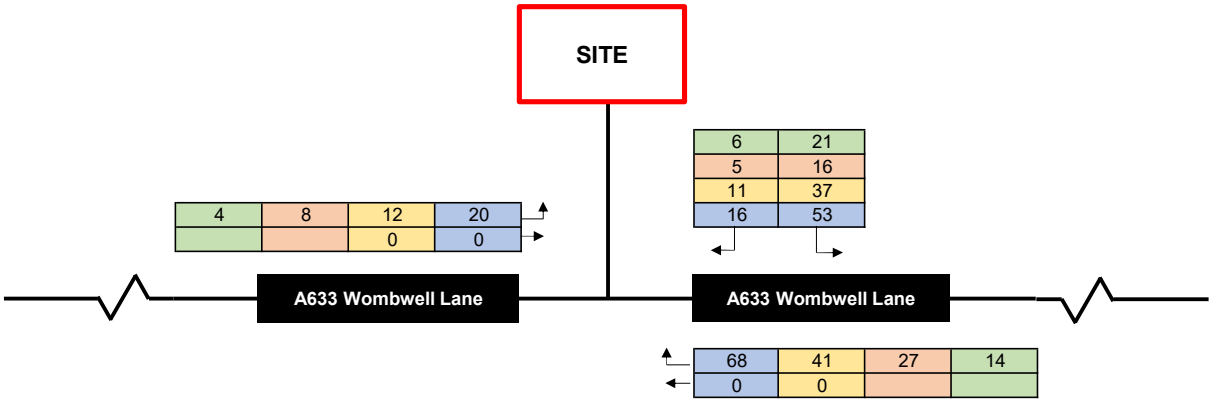


Figure: 18
Project Name: Stairfoot Brickworks Redevelopment
Project Number: 3263-01
Description: Committed Development Traffiic - Stairfoot Glassworks (2024-0373)
Period: 10hr AAWT (7:00am - 5:00pm)

Key

Lights
HGVs
Total Vehicles
PCU

HGV to PCU Factor: 2

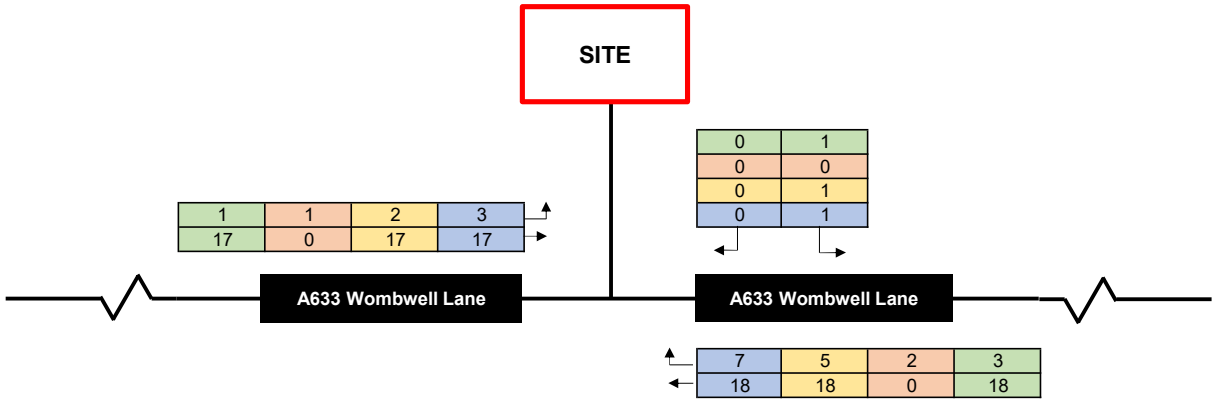


Figure: 19
Project Name: Stairfoot Brickworks Redevelopment
Project Number: 3263-01
Description: Total Committed Development Traffiic
Period: AM Peak Hour (8:00am - 9:00am)

Key

Lights
HGVs
Total Vehicles
PCU

HGV to PCU Factor: 2

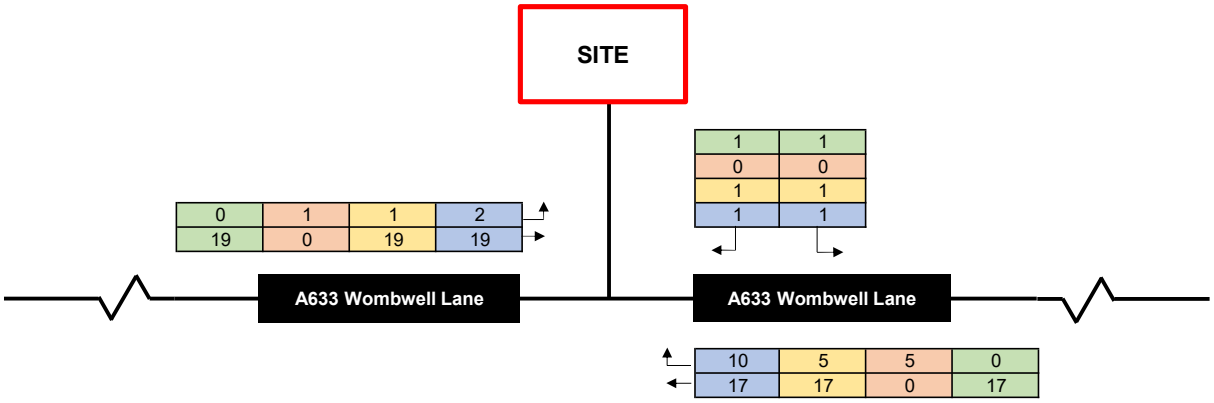


Figure: 20
Project Name: Stairfoot Brickworks Redevelopment
Project Number: 3263-01
Description: Total Committed Development Traffiic
Period: PM Peak Hour (5:00pm -6:00pm)

Key

Lights
HGVs
Total Vehicles
PCU

HGV to PCU Factor: 2

Figure: 21
Project Name: Stairfoot Brickworks Redevelopment
Project Number: 3263-01
Description: Total Committed Development Traffiic
Period: 10hr AAWT (7:00am - 5:00pm)

Appendix F – Drawing No. 3263-01-D02: Proposed Management of Public Rights of Way

SIGNAGE TO ADVISE OF TEMPORARY FOOTPATH DIVERSION ROUTE.

ROUTE OF FOOTPATH 323 TO BE FENCED OFF AT EITHER SIDE OF SITE ACCESS ROAD FOR DURATION OF RESTORATION ACTIVITY.

ROUTE OF PROPOSED TEMPORARY FOOTPATH DIVERSION.

SIGNAGE TO ADVISE OF TEMPORARY FOOTPATH DIVERSION ROUTE.

SIGNAGE TO ADVISE OF TEMPORARY FOOTPATH DIVERSION ROUTE.

GATES TO BE INSTALLED ACROSS SITE ACCESS ROAD, TO BE OPERATED BY DRIVERS OF SITE TRAFFIC OR MANNED BY A BANKSMAN AS NECESSARY.

CONTRACTOR PARKING

CONTAIN

WHEEL WASH

Path (unf)

Pond

INSET: SOUTH-EASTERN END OF FOOTPATH 324

48.4m

BM

Route of Trans Pennine Trail (TPT)

Route of Footpath 323

Route of Footpath 324

Proposed Temporary Footpath Diversion Route

Proposed Widening to Access

Application Ref. 2024/0373 Site Boundary

revision: desc: date:

0 10 20 30 40 50 100m

0344 8700 007
axis.co.uk

Client
Green Earth Group

Project
Stairfoot Quarry Restoration

Drawing Title
Proposed Management of Public Rights of Way

Scale
1:500 @A1

Status
Planning

Date
May 2025

Drawn
DC

Checked
DC

Dwg no
3263-01-D02

Rev