

TECHNICAL NOTE

Project Name : Land South of B2233 Main Road and West of B2132 Bilsham Road

Job No. : 14-111

Note Title : Response to WSCC Highways Comments

Author : TDM

Approved : RJH

Date : 06/03/2018

1.0 INTRODUCTION

1.1 Odyssey have prepared this Technical Note (TN) on behalf of Landlink Estates in respect to comments received from West Sussex County Council (WSCC) highways in relation to a planning application (Arun District Council (ADC) ref Y/92/17/OUT) for a proposed residential development of up to 300 dwellings.

1.2 This note is in response to consultee comments provided by West Sussex County Council (WSCC) and addresses two standing objections, these being:

“Insufficient information has been provided to enable an assessment of the ability of the highway network to accommodate the development without adding to the hazards of highway users to an unacceptable degree”; and

“The proposal would not achieve safe and convenient access by a choice of means of travel nor encourage and enable and increase in environmentally sustainable means of travel such as walking, cycling and public transport and thereby minimise the impact of car journeys.”

1.3 This TN also provides additional information to help WSCC make a fully informed decision about the impact of the proposed development.

1.4 The remainder of this report is set out as follows;

- **Section 2:** Additional information requested by WSCC;
- **Section 3:** Committed Development and Sensitivity Testing;



- **Section 4:** Sustainability and Yapton to Barnham Cycle Link; and
- **Section 5:** Summary and Conclusion.

2.0 ADDITIONAL INFORMATION REQUESTED BY WSCC

Trip Rates

- 2.1 As set out in the TA, trip rates taken from TRICS were submitted as part of the planning application. WSCC have commented that:

“The Transport assessment states that only sites greater than 100 dwellings were selected however Appendix G - appears to show that a number of sites under 100 dwellings have been included within the TRICS calculation.”

- 2.2 A review of the TRICS data report shows that sites including 100-1000 dwellings was selected by the user, however for reasons unknown the TRICS data set included a range of 6-805 dwellings.
- 2.3 Regardless of this, when sites under 100 dwellings are removed from the data set, the trip rates are lower than those used in the traffic assessment (See **Appendix B**). **Table 2.1** summarises.

Table 2.1 – Trip Rates

Time-Period	Arrival	Departure	Two-Way
	Trip Rates Used in TA		
AM 08:00 – 09:00	0.141	0.368	0.509
PM 17:00 – 18:00	0.313	0.165	0.478
	Trip Rates with Sites under 100 Dwellings Removed		
AM 08:00 – 09:00	0.125	0.363	0.488
PM 17:00 – 18:00	0.298	0.170	0.468

- 2.4 **Table 2.2** summarises the difference in traffic generation because of the discrepancy in the TRICS data.

**Table 2.2 – Traffic Generation for 300 Dwellings**

Time-Period	Arrival	Departure	Two-Way
	Trip Rates Used in TA		
AM 08:00 – 09:00	42	110	153
PM 17:00 – 18:00	94	50	143
	Trip Rates with Sites over 100 Dwellings		
AM 08:00 – 09:00	38	109	146
PM 17:00 – 18:00	89	51	140
	Net Difference		
AM 08:00 – 09:00	4	1	7
PM 17:00 – 18:00	5	-1	3

- 2.5 As can be seen there is very little difference in the traffic generation calculated using the two sets of trip rates. Given that the higher trip rates have been used in the TA, it is considered that the traffic generation presented remains valid and WSCC are able to complete their appraisal of the results.

Trip Distribution and Assignment

- 2.6 WSCC have also requested additional information relating to the distribution and assignment of development traffic on the local highway network.

“Within the pre-application discussions it was requested that information would be required to confirm the assumption utilised in the production of the gravity model and the subsequent distribution. This has not been provided.”

- 2.7 As stated in the TA “Development traffic has been distributed and assigned to the local highway network using a gravity model approach, ‘based’ upon the observed turning proportions. In addition, peak hour journey times to key destinations have also been considered to reflect routes car drivers will take.”



2.8 Traffic Flow diagrams were included in the TA detailing:

- 2017 Observed Base AM and PM
- 2022 Base + Committed AM and PM
- 2022 Base + Development 300 Units AM and PM
- 2031 Base AM and PM
- 2031 Base + Development 300

2.9 The distribution method adopted was to take the observed turning movements in the 2017 Base and make logic adjustments based upon the gravity of destinations in the surrounding area i.e. to key destinations such as Littlehampton, Arundel, Bognor Regis and Chichester.

2.10 The routings and observed pattern of movements were validated by checking route planning for travel in the peak hour time periods.

2.11 For simplicity additional traffic flow diagrams have been included in **Appendix B** of this TN for both the Landlink and Gleeson Sites. These show the percentage and number of development traffic vehicles assigned and distributed to the local highway network.

Impact upon the Strategic Highway Network

2.12 A separate response to Highways England (HE) was prepared and submitted addressing the impact of the development upon the A27 / Climping Lane junction. As request by HE additional committed and potentially committed developments in the local area were also considered as part of the assessment.

2.13 It was concluded that the development proposals will not result in a 'severe' impact upon the strategic highway network. No mitigation measures were considered necessary, especially given HE have already secured funds from other developments to improve the junction.



3.0 SENSITIVITY TESTING

3.1 Sensitivity testing of the local highway network has been undertaken to include additional proposed development sites in and around Yapton which were not committed at the time of the original Transport Assessment (TA) scoping. These include:

- Y/80/16/OUT – Land South of Ford Lane and East of North End Road, Yapton – 100 dwellings;
- WA/44/17/OUT – Land East of Tye Lane, Walberton – 175 dwellings;
- Y/5/17/OUT Cinders Nursery & Land R/O Cinders Lane, Yapton – 51 dwellings;
- Y/44/17/OUT – Land at Stakers Farm, North End Road, Yapton – 70 dwellings; and
- Y/49/17/OUT – Land at Street Buildings, North End Road, Yapton – 45 dwellings.

3.2 This gives an additional 441 dwellings being proposed in the local area. It should be noted that at the time of writing only the Y/80/16/OUT – 100 dwellings application has been granted planning consent.

Committed Development Traffic Flows

3.3 Traffic flow information has been taken from the respective application TAs submitted to the ADC planning portal.

3.4 Aside from the Cinders Nursery application which is located east of the B2132 Bilsham Road, the remaining application sites are north of Yapton, accessed off the B2132 North End Road or Ford Lane.

3.5 None of the TAs submitted to the planning portal have considered impact upon the local highway network in Yapton.

3.6 To that end the “committed development” traffic has been assigned and distributed using the same methodology as previously submitted in the TA’s for the Landlink and Gleeson sites.

3.7 Traffic flow diagrams contained in **Appendix C** illustrate the committed development flows.



Sensitivity Assessment

- 3.8 To ensure a robust assessment the following scenarios have been assessed:
- 2031 AM Peak “All Committed” + Development 550 Units
 - 2031 PM Peak “All Committed” + Development 550 Units
- 3.9 These scenarios ensure that the assessment takes account of all “committed development” traffic in and around Yapton up to the end of the local plan in 2031.
- 3.10 The traffic flows used already include other committed development sites in Yapton as previously scoped for the TA submitted in the planning applications for Landlink and Gleeson, these being:
- Brookworth Homes (App No: F/15/PL) - 45 dwellings;
 - Land South of Fellows Gardens (App No: Y/30/13) - 34 dwellings;
 - Land North of Burndell Road (App No: APP/C3810/A/11/2155343) - 173 dwellings; and
 - Land at North End Road (App No: Y/93/14) – 38 dwellings.
- 3.11 This means that the sensitivity tests take account of traffic associated with 731 “committed” dwellings.
- 3.12 It should also be noted that the 2031 Base + Development 550 dwellings flows used in the TAs previously submitted included background growth taken from the TEMPRO database between 2022 and 2031.
- 3.13 While this could be construed as resulting in some double counting for the “committed development” totals, it does ensure that the assessment is highly robust and therefore has been retained within the “committed” traffic flows. The assessment therefore effectively assumes a total of 981 committed dwellings in and around Yapton.

Capacity results

- 3.14 The following **Tables 3.1 – 3.8** summarise the capacity assessments for the sensitivity test. For ease of comparison the results of the future 2031 Base + 550 Dwellings submitted in the TA have also been provided. **Appendix D** contains the full ARCADY and PICADY outputs.

**Table 3.1: B2233 Burndell Road / B2132 Bilsham Road Mini-Roundabout**

	AM				PM			
	Queue (Veh)	Delay (min)	RFC	LOS	Queue (Veh)	Delay (min)	RFC	LOS
	2031 Base + Development 550 Dwellings							
B2233 Burndell Road	3	0.27	0.76	C	1	0.16	0.55	A
B2132 Bilsham Road	6	0.41	0.86	C	0	0.07	0.28	A
B2233 Main Road	1	0.14	0.51	A	6	0.43	0.87	D
	2031 Sensitivity Test							
B2233 Burndell Road	4	0.32	0.79	C	2	0.19	0.62	B
B2132 Bilsham Road	14	0.88	0.96	F	1	0.08	0.35	A
B2233 Main Road	1	0.17	0.57	A	11	0.71	0.93	E

- 3.15 As was originally reported in the TAs, the Burndell Road / Bilsham Road mini-roundabout operates within capacity during both the AM and PM peaks in the final development scenario 2031 Base + Development 550 dwellings scenario built on the Landlink and Gleeson sites.
- 3.16 The sensitivity scenario indicates that the addition of 431 dwellings could result in the junction operating very close to maximum capacity with queues starting to form during the peak of the peak hours. As this is an absolute worst-case scenario, no mitigation measures are considered necessary in association with the development on the Landlink and Gleeson sites.
- 3.17 As set out in **Tables 3.2 to 3.6** the remaining junctions within Yapton assessed in the TA will continue to operate within capacity, even with the additional committed development traffic added.

**Table 3.2: B2233 Main Road / Canal Road Mini-Roundabout**

	AM				PM			
	Queue (Veh)	Delay (min)	RFC	LOS	Queue (Veh)	Delay (min)	RFC	LOS
	2031 Base + Development 550 Dwellings							
B2233 Main Road WB	3	0.00	0.75	A	1	0.00	0.38	A
Canal Road	2	0.01	0.68	A	0	0.00	0.15	A
B2233 Main Road EB	0	0.00	0.32	A	2	0.00	0.64	A
	2031 Sensitivity Test							
B2233 Main Road WB	4	0.00	0.81	A	1	0.00	0.44	A
Canal Road	6	0.04	0.56	A	0	0.00	0.16	A
B2233 Main Road EB	1	0.00	0.36	A	2	0.00	0.69	A

Table 3.3: B2233 Main Road / B2132 North End Road Mini-Roundabout

	AM				PM			
	Queue (Veh)	Delay (min)	RFC	LOS	Queue (Veh)	Delay (min)	RFC	LOS
	2031 Base + Development 550 Dwellings							
B2233 Yapton Road	0	0.00	0.28	A	1	0.00	0.37	A
B2132 North End Road	0	0.00	0.22	A	5	0.01	0.83	A
B2233 Main Road	4	0.00	0.82	A	1	0.00	0.34	A
	2031 Sensitivity Test							
B2233 Yapton Road	2	0.00	0.60	A	3	0.00	0.73	A
B2132 North End Road	0	0.00	0.23	A	9	0.02	0.90	A
B2233 Main Road	7	0.00	0.88	A	1	0.00	0.41	A

**Table 3.4: B2132 Bilsham Road / Loveys Road**

	AM			PM		
	Queue (PCU)	Delay (min)	RFC	Queue (PCU)	Delay (min)	RFC
	2031 Base + Dev 550 Dwellings					
Loveys Road	0	0.18	0.071	0	0.13	0.044
B2132 Bilsham Road	0	0.14	0.033	0	0.11	0.043
	2031 Sensitivity Test					
Loveys Road	0	0.20	0.79	0	0.14	0.47
B2132 Bilsham Road	0	0.15	0.36	0	0.11	0.44

Table 3.5: B2132 Bilsham Road / Mill View / West View Drive

	AM			PM		
	Queue (PCU)	Delay (min)	RFC	Queue (PCU)	Delay (min)	RFC
	2031 Base + Dev 550 Dwellings					
B2132 Bilsham Road NB	0	0.18	0.147	0	0.13	0.028
Mill View	0	0.21	0.131	0	0.18	0.061
B2132 Bilsham Road SB	0	0.13	0.016	0	0.11	0.071
West View Drive	0	0.09	0.003	0	0.10	0.021
	2031 Sensitivity Test					
B2132 Bilsham Road NB	0	0.19	0.154	0	0.14	0.027
Mill View	0	0.22	0.139	0	0.19	0.064
B2132 Bilsham Road SB	0	0.13	0.017	0	0.11	0.073
West View Drive	0	0.10	0.004	0	0.10	0.022

Table 3.6: B2132 Bilsham Road / Graham Road

	AM			PM		
	Queue (PCU)	Delay (min)	RFC	Queue (PCU)	Delay (min)	RFC
	2031 Base + Dev 550 Dwellings					
Loveys Road	0	0.19	0.030	0	0.14	0.005
B2132 Bilsham Road	0	0.13	0.009	0	0.00	0.000
	2031 Sensitivity Test					
Loveys Road	0	0.20	0.032	0	0.14	0.005
B2132 Bilsham Road	0	0.13	0.010	0	0.00	0.000



3.18 **Tables 3.7 and 3.8** show the sensitivity test results for the proposed junction improvements at the Comet Corner and Oystercatcher junctions on the A259.

Table 3.7: Comet Corner Improvement Scheme

Arm	AM				PM			
	Queue (Veh)	Delay (min)	RFC	LOS	Queue (Veh)	Delay (min)	RFC	LOS
	2031 Base + 550 Dwellings No Thru Link							
A259 East	0	0.0		A	0	0.0		A
B2132 Yapton Road N	1	0.2		B	0	0.2		B
A259 West	0	0.0		A	0	0.0		A
B2132 Yapton Road S	0	0.3		C	1	0.5		D
2031 Sensitivity Test								
A259 East	0	0.0		A	0	0.0		A
B2132 Yapton Road N	2	0.6		D	4	0.9		F
A259 West	0	0.0		A	0	0.0		A
B2132 Yapton Road S	1	0.7		E	1	0.6		E

Table 3.8: Oystercatcher Improvement Scheme

Arm	AM				PM			
	Queue (Veh)	Delay (min)	RFC	LOS	Queue (Veh)	Delay (min)	RFC	LOS
	2031 Base + 550 Dwellings No Thru Link							
A259 East	1	0.1		A	2	0.1		A
Climping Street	0	0.2		B	1	0.6		E
A259 West	1	0.1		A	2	0.1		A
B2233 Yapton Road	1	0.2		B	3	0.4		C
2031 Sensitivity Test								
A259 East	1	0.1		A	3	0.1		A
Climping Street	0	0.2		B	1	0.8		E
A259 West	0	0		A	2	0.1		A
B2233 Yapton Road	1	0.2		B	3	0.4		C

3.19 As can be seen most of the junctions assessed as part of the sensitivity tests will continue to operate well within functional capacity with the proposed development in place.



3.20 Given that there are several major infrastructure improvements (A27/ A259 improvements) to be delivered by the end of the local plan in 2031 and based upon existing evidence that traffic through the village has reduced since the opening of the Felpham relief road it is considered that traffic traveling through Yapton will significantly reduce by 2031.

3.21 It is therefore considered that no additional improvements are required as part of the proposed development.

4.0 SUSTAINABILITY

4.1 One of the objections raised by WSCC was *“The proposal would not achieve safe and convenient access by a choice of means of travel nor encourage and enable and increase in environmentally sustainable means of travel such as walking, cycling and public transport and thereby minimise the impact of car journeys.”*

4.2 The local plan describes development in Yapton as follows:

“The significant benefits arise against the social objectives, as a result of the improved housing supply, creating a mixed and more inclusive community. Through the reduced distance to where employment is, it would be expected there will be a positive impact and so this has been appraised as having a neutral or no effect with the potential to positively affect the economic objectives. However, it would not be expected that there would be a significant change to any of the environmental criteria and so this has been assessed as neutral.”

4.3 **Appendix E** also contains extracts from the emerging Local Plan detailing the spatial options appraisal of development in Yapton, further illustrating the sites sustainability.

4.4 Given that the proposed development sites are allocated within the emerging local plan as being suitable for residential development and that WSCC agreed in principle that the site was sustainable at the pre-app stage, this confirms that the site is in fact sustainable.



Review of Existing Walking and Cycle Links

- 4.5 Figure 2 of the submitted TA's illustrated the accessibility of both development sites (See **Appendix F**). As previously identified there are several points of access for pedestrians and cyclists.
- 4.6 The proposed accesses into the two sites will be from the B2132 Bilsham Road and the B2233 Main Road respectively and both accesses provide direct connections with the existing footways.
- 4.7 The B2132 Bilsham Road features 1.5 – 2m footway along both sides of the carriageway leading into the centre of Yapton, while the B2233 Main Road features a 1.5m – 2m footway along the northern site, to which connections will be available via an uncontrolled crossing.
- 4.8 The estate roads of the existing residential development to the north of the development site feature an extensive footway network leading to main roads and subsequently into the centre of Yapton
- 4.9 Other non-motorised user accesses are also proposed as part of both developments and will allow for access into Yapton via existing footways and footpaths.
- 4.10 The condition of these links is average to good, with the surfacing being in a reasonable state of repair and street lighting provided in most instances.
- 4.11 The proposed layouts will be designed according to Manual for Streets (MfS) allowing for a high-level of permeability for residents, as well as an appropriate level of connectivity with the existing pedestrian and cycle network.
- 4.12 The Public Right of Way (PRoW) leading from Tack Lee Road to the B2233 Main Road to which the development will provide connection is currently a narrow track with wide verge along both sides. Where this PRoW crosses the site, improvements will be provided to encourage walking and cycling.



- 4.13 Given that there are several equally convenient lit routes leading into the village centre, where the route continues north of the site to the B2233 Main Road no additional improvements are proposed

Cycle Link Between Yapton and Barnham

- 4.14 As part of the pre-application discussions WSCC asked for thoughtful consideration to be given towards the provision of a cycle link between Yapton and Barnham railway station. This was also requested by the Parish Council, who prefer an off-road route.
- 4.15 WSCC's policy direction on the matter stems from the current adopted Walking and Cycling Strategy policy document, under which the route is listed as item 82 (see **Appendix G**).
- 4.16 As such several potential routes were considered these being:
- Option 1 – A new shared footway / cycle link from Drove Lane along the southern side of the B2233 Yapton Road. The link would be separated from the carriageway by the existing hedge and verge, reconnecting with the B2233 c.575m from west of Drove Lane before continuing to Barham.
 - Option 2 – Follows the existing PRoW 200-1 from Drove Lane along the route of the old canal. This can then either continue to Church Lane to the south of Barnham or divert north to the B2233 Yapton Road.
 - Option 3 – Follows Drove Lane south of the site and then proceeds north west along PRoW 158 at Drove Lane Farm. This would then continue towards PRoW 200-1 allowing access to Church Lane or the B2233 Yapton Road.
 - Option 4 – Also follows Drove Lane southwards to the Solar Farm, where a new link would need to be provided to connect with the existing permitted cycle route along PRoW 146, leading directly to Church Lane. This route is the preference of the Parish Council and is within the applicants control.
- 4.17 The four options are illustrated in **Appendix H**. Unfortunately, it is not known if options 2 and 3 are deliverable without the involvement of 3rd party land. Options 1 and 4 can be delivered on land in the applicant's control



- 4.18 It is also noted that WSCC have calculated contributions of up to £110,000 (See **Appendix I**) as part of a Section 106 (S106) agreement for the development on land at Stakers Farm (70 dwellings) to be used for the provision of a new cycle link between Yapton and Barnham.
- 4.19 £25,000 was also secured as part of S106 agreements for the development on Land North of Burndell Road (also see **Appendix I**), for which construction of the development is already well underway.
- 4.20 Landlink are able offer land as a benefit in kind, in lieu of s106 contribution if necessary to mitigate the impact of the development. WSCC will therefore need to provide clarification as to how the applicant can assist with the provision of a cycle link to Barnham Station
- 4.21 Given that funds are already being gathered for a cycle link scheme, it is considered appropriate that these could be used towards a preferred route.

S106 Contribution for Yapton to Barnham Cycle Link

- 4.22 The route between Yapton and Barnham railway station is 2km in length. According to the latest SPONS construction estimate book the average cost of a 3m cycle link is c.£150 per linear meter. Therefore, the cycle link at most will cost in the region of £300,000.
- 4.23 Given that funds for £135,000 towards the cycle link are anticipated by WSCC from S106 agreements, the remaining cost required for a cycle link would in the region of £165,000.
- 4.24 Landlink's contribution of the land could be given as a benefit in kind and this would be in lieu of a contribution. The distance of new cycleway to be provided to the north of the solar farm in Option 4 is c.600m
- 4.25 Given that WSCC objection to the development appears to hinge upon the delivery of a cycle route between Yapton and Barnham. The agreement of a S106 contribution or benefit in kind in lieu of a contribution towards such a scheme is the simplest solution. As such this can be secured through the S106 agreement as part of any planning permission granted.



5.0 SUMMARY AND CONCLUSION

- 5.1 This Technical Note has been prepared to provide additional information to WSCC to enable the highway authority to make an informed decision regarding the proposed developments on land in Yapton.
- 5.2 In addition, this report has also provided sensitivity assessments of the local highway network within Yapton to accommodate the proposed developments together with the cumulative impact of several other committed and potentially committed development sites. The Sensitivity Test has therefore taken account of 981 additional dwellings in and around Yapton.
- 5.3 As shown in **Section 3.0**, the sensitivity assessments reveal that most local junctions will continue to operate with, plenty of spare capacity.
- 5.4 The B2233 Burndell Road / B2132 Bilsham Road mini-roundabout has been identified as operating very close to maximum capacity at the peak of the peak hour in the 2031 Sensitivity tests. This is not however considered to warrant mitigation works.
- 5.5 Furthermore, the applicants Landlink and Gleeson have proposed significant improvements to the Oystercatcher and Comet Corner junctions on the A259 as part of mitigation works. As such these other “committed sites” will benefit significantly from capacity and safety improvements that these works will bring.
- 5.6 In addition, this report has provided additional information with respects a potential cycle link between Yapton and Barnham railway station. As the local highway authority has already started collecting S106 contributions from other development sites it is considered that the most appropriate solution would be for contributions to be discussed and agreed between the applications and WSCC.
- 5.7 It is therefore the conclusion of the report that the development proposals are suitable and in keeping with local planning policy.

APPENDIX A

TRICS Outputs

Calculation Reference: AUDIT-138301-170907-0902

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	1 days
	HC HAMPSHIRE	1 days
	SC SURREY	1 days
	WS WEST SUSSEX	3 days
03	SOUTH WEST	
	DC DORSET	1 days
	DV DEVON	3 days
	SM SOMERSET	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
	NF NORFOLK	3 days
	SF SUFFOLK	2 days
05	EAST MIDLANDS	
	LN LINCOLNSHIRE	2 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	4 days
	ST STAFFORDSHIRE	1 days
	WK WARWICKSHIRE	2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NE NORTH EAST LINCOLNSHIRE	2 days
	NY NORTH YORKSHIRE	7 days
	SY SOUTH YORKSHIRE	1 days
	WY WEST YORKSHIRE	1 days
08	NORTH WEST	
	CH CHESHIRE	2 days
	GM GREATER MANCHESTER	1 days
	LC LANCASHIRE	1 days
	MS MERSEYSIDE	1 days
09	NORTH	
	CB CUMBRIA	1 days
	DH DURHAM	2 days
	TW TYNE & WEAR	2 days
10	WALES	
	PS POWYS	2 days
11	SCOTLAND	
	AG ANGUS	1 days
	FA FALKIRK	2 days
	HI HIGHLAND	2 days
	PK PERTH & KINROSS	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Secondary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of dwellings
 Actual Range: 6 to 805 (units:)
 Range Selected by User: 100 to 1000 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/09 to 28/03/17

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	12 days
Tuesday	12 days
Wednesday	11 days
Thursday	10 days
Friday	10 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	55 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Edge of Town Centre	6
Suburban Area (PPS6 Out of Centre)	26
Edge of Town	20
Neighbourhood Centre (PPS6 Local Centre)	3

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	47
Village	1
No Sub Category	7

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C1	1 days
C3	53 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	8 days
5,001 to 10,000	15 days
10,001 to 15,000	12 days
15,001 to 20,000	7 days
20,001 to 25,000	5 days
25,001 to 50,000	8 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	10 days
25,001 to 50,000	7 days
50,001 to 75,000	5 days
75,001 to 100,000	14 days
100,001 to 125,000	3 days
125,001 to 250,000	8 days
250,001 to 500,000	7 days
500,001 or More	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	19 days
1.1 to 1.5	35 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	5 days
No	50 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	55 days
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This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	AG-03-A-01	BUNGALOWS / DET.		ANGUS
	KEPTIE ROAD			
	ARBROATH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	7		
	Survey date: TUESDAY	22/05/12		Survey Type: MANUAL
2	CA-03-A-04	DETACHED		CAMBRIDGESHIRE
	THORPE PARK ROAD			
	PETERBOROUGH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	9		
	Survey date: TUESDAY	18/10/11		Survey Type: MANUAL
3	CB-03-A-04	SEMI DETACHED		CUMBRIA
	MOORCLOSE ROAD			
	SALTERBACK			
	WORKINGTON			
	Edge of Town			
	No Sub Category			
	Total Number of dwellings:	82		
	Survey date: FRIDAY	24/04/09		Survey Type: MANUAL
4	CH-03-A-08	DETACHED		CHESHIRE
	WHITCHURCH ROAD			
	BOUGHTON HEATH			
	CHESTER			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	11		
	Survey date: TUESDAY	22/05/12		Survey Type: MANUAL
5	CH-03-A-09	TERRACED HOUSES		CHESHIRE
	GREYSTOKE ROAD			
	HURDSFIELD			
	MACCLESFIELD			
	Edge of Town			
	Residential Zone			
	Total Number of dwellings:	24		
	Survey date: MONDAY	24/11/14		Survey Type: MANUAL
6	DC-03-A-08	BUNGALOWS		DORSET
	HURSTDENE ROAD			
	CASTLE LANE WEST			
	BOURNEMOUTH			
	Edge of Town			
	Residential Zone			
	Total Number of dwellings:	28		
	Survey date: MONDAY	24/03/14		Survey Type: MANUAL
7	DH-03-A-01	SEMI DETACHED		DURHAM
	GREENFIELDS ROAD			
	BISHOP AUCKLAND			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	50		
	Survey date: TUESDAY	28/03/17		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8	DH-03-A-02	MIXED HOUSES	DURHAM
	LEAZES LANE		
	ST HELEN AUCKLAND		
	BISHOP AUCKLAND		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total Number of dwellings:	125	
	Survey date: MONDAY	27/03/17	Survey Type: MANUAL
9	DV-03-A-01	TERRACED HOUSES	DEVON
	BRONSHILL ROAD		
	TORQUAY		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	37	
	Survey date: WEDNESDAY	30/09/15	Survey Type: MANUAL
10	DV-03-A-02	HOUSES & BUNGALOWS	DEVON
	MILLHEAD ROAD		
	HONITON		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	116	
	Survey date: FRIDAY	25/09/15	Survey Type: MANUAL
11	DV-03-A-03	TERRACED & SEMI DETACHED	DEVON
	LOWER BRAND LANE		
	HONITON		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	70	
	Survey date: MONDAY	28/09/15	Survey Type: MANUAL
12	ES-03-A-02	PRIVATE HOUSING	EAST SUSSEX
	SOUTH COAST ROAD		
	PEACEHAVEN		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	37	
	Survey date: FRIDAY	18/11/11	Survey Type: MANUAL
13	FA-03-A-01	SEMI-DETACHED/TERRACED	FALKIRK
	MANDELA AVENUE		
	FALKIRK		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	37	
	Survey date: THURSDAY	30/05/13	Survey Type: MANUAL
14	FA-03-A-02	MIXED HOUSES	FALKIRK
	ROSEBANK AVENUE & SPRINGFIELD DRIVE		
	FALKIRK		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	161	
	Survey date: WEDNESDAY	29/05/13	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

15	GM-03-A-10	DETACHED / SEMI		GREATER MANCHESTER
	BUTT HILL DRIVE			
	PRESTWICH			
	MANCHESTER			
	Edge of Town			
	Residential Zone			
	Total Number of dwellings:		29	
	Survey date: WEDNESDAY		12/10/11	Survey Type: MANUAL
16	HC-03-A-18	HOUSES & FLATS		HAMPSHIRE
	CANADA WAY			
	LIPHOOK			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:		62	
	Survey date: TUESDAY		29/11/16	Survey Type: MANUAL
17	HI-03-A-13	HOUSING		HIGHLAND
	KINGSMILLS ROAD			
	INVERNESS			
	Edge of Town			
	Residential Zone			
	Total Number of dwellings:		9	
	Survey date: THURSDAY		21/05/09	Survey Type: MANUAL
18	HI-03-A-14	SEMI-DETACHED & TERRACED		HIGHLAND
	KING BRUDE ROAD			
	SCORGUIE			
	INVERNESS			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:		40	
	Survey date: WEDNESDAY		23/03/16	Survey Type: MANUAL
19	LC-03-A-30	SEMI-DETACHED		LANCASHIRE
	WATSON ROAD			
	BLACKPOOL			
	Edge of Town Centre			
	Residential Zone			
	Total Number of dwellings:		24	
	Survey date: FRIDAY		14/06/13	Survey Type: MANUAL
20	LN-03-A-03	SEMI DETACHED		LINCOLNSHIRE
	ROOKERY LANE			
	BOULTHAM			
	LINCOLN			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:		22	
	Survey date: TUESDAY		18/09/12	Survey Type: MANUAL
21	LN-03-A-04	DETACHED & SEMI-DETACHED		LINCOLNSHIRE
	EGERTON ROAD			
	LINCOLN			
	Edge of Town Centre			
	Residential Zone			
	Total Number of dwellings:		30	
	Survey date: MONDAY		29/06/15	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

22	MS-03-A-03	DETACHED		MERSEYSIDE
	BEMPTON ROAD			
	OTTERSPOOL			
	LIVERPOOL			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	15		
	Survey date: FRIDAY	21/06/13		Survey Type: MANUAL
23	NE-03-A-02	SEMI DETACHED & DETACHED		NORTH EAST LINCOLNSHIRE
	HANOVER WALK			
	SCUNTHORPE			
	Edge of Town			
	No Sub Category			
	Total Number of dwellings:	432		
	Survey date: MONDAY	12/05/14		Survey Type: MANUAL
24	NE-03-A-03	PRIVATE HOUSES		NORTH EAST LINCOLNSHIRE
	STATION ROAD			
	SCUNTHORPE			
	Edge of Town Centre			
	Residential Zone			
	Total Number of dwellings:	180		
	Survey date: TUESDAY	20/05/14		Survey Type: MANUAL
25	NF-03-A-01	SEMI DET. & BUNGALOWS		NORFOLK
	YARMOUTH ROAD			
	CAISTER-ON-SEA			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	27		
	Survey date: TUESDAY	16/10/12		Survey Type: MANUAL
26	NF-03-A-02	HOUSES & FLATS		NORFOLK
	DEREHAM ROAD			
	NORWICH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	98		
	Survey date: MONDAY	22/10/12		Survey Type: MANUAL
27	NF-03-A-03	DETACHED HOUSES		NORFOLK
	HALING WAY			
	THETFORD			
	Edge of Town			
	Residential Zone			
	Total Number of dwellings:	10		
	Survey date: WEDNESDAY	16/09/15		Survey Type: MANUAL
28	NY-03-A-06	BUNGALOWS & SEMI DET.		NORTH YORKSHIRE
	HORSEFAIR			
	BOROUGHBRIDGE			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	115		
	Survey date: FRIDAY	14/10/11		Survey Type: MANUAL
29	NY-03-A-07	DETACHED & SEMI DET.		NORTH YORKSHIRE
	CRAVEN WAY			
	BOROUGHBRIDGE			
	Edge of Town			
	No Sub Category			
	Total Number of dwellings:	23		
	Survey date: TUESDAY	18/10/11		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

30	NY-03-A-08	TERRACED HOUSES		NORTH YORKSHIRE
	NICHOLAS STREET			
	YORK			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	21		
	Survey date: MONDAY	16/09/13		Survey Type: MANUAL
31	NY-03-A-09	MIXED HOUSING		NORTH YORKSHIRE
	GRAMMAR SCHOOL LANE			
	NORTHALLERTON			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	52		
	Survey date: MONDAY	16/09/13		Survey Type: MANUAL
32	NY-03-A-10	HOUSES AND FLATS		NORTH YORKSHIRE
	BOROUGHBRIDGE ROAD			
	RIPON			
	Edge of Town			
	No Sub Category			
	Total Number of dwellings:	71		
	Survey date: TUESDAY	17/09/13		Survey Type: MANUAL
33	NY-03-A-11	PRIVATE HOUSING		NORTH YORKSHIRE
	HORSEFAIR			
	BOROUGHBRIDGE			
	Edge of Town			
	Residential Zone			
	Total Number of dwellings:	23		
	Survey date: WEDNESDAY	18/09/13		Survey Type: MANUAL
34	NY-03-A-12	TOWN HOUSES		NORTH YORKSHIRE
	RACECOURSE LANE			
	NORTHALLERTON			
	Edge of Town Centre			
	Residential Zone			
	Total Number of dwellings:	47		
	Survey date: TUESDAY	27/09/16		Survey Type: MANUAL
35	PK-03-A-01	DETAC. & BUNGALOWS		PERTH & KINROSS
	TULLYLUMB TERRACE			
	GORNHILL			
	PERTH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	36		
	Survey date: WEDNESDAY	11/05/11		Survey Type: MANUAL
36	PS-03-A-01	MIXED HOUSES		POWYS
	BRYN GLAS			
	WELSHPOOL			
	Edge of Town Centre			
	Residential Zone			
	Total Number of dwellings:	16		
	Survey date: MONDAY	11/05/15		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

37	PS-03-A-02 GUNROG ROAD	DETACHED / SEMI-DETACHED	POWYS
	WELSHPOOL Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 28 Survey date: MONDAY 11/05/15		Survey Type: MANUAL
38	SC-03-A-04 HIGH ROAD	DETACHED & TERRACED	SURREY
	BYFLEET Edge of Town Residential Zone Total Number of dwellings: 71 Survey date: THURSDAY 23/01/14		Survey Type: MANUAL
39	SF-03-A-04 NORMANSTON DRIVE	DETACHED & BUNGALOWS	SUFFOLK
	LOWESTOFT Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 7 Survey date: TUESDAY 23/10/12		Survey Type: MANUAL
40	SF-03-A-05 VALE LANE	DETACHED HOUSES	SUFFOLK
	BURY ST EDMUNDS Edge of Town Residential Zone Total Number of dwellings: 18 Survey date: WEDNESDAY 09/09/15		Survey Type: MANUAL
41	SH-03-A-03 SOMERBY DRIVE BICTON HEATH SHREWSBURY Edge of Town No Sub Category Total Number of dwellings: 10 Survey date: FRIDAY 26/06/09	DETACHED	SHROPSHIRE
42	SH-03-A-04 ST MICHAEL'S STREET	TERRACED	SHROPSHIRE
	SHREWSBURY Suburban Area (PPS6 Out of Centre) No Sub Category Total Number of dwellings: 108 Survey date: THURSDAY 11/06/09		Survey Type: MANUAL
43	SH-03-A-05 SANDCROFT SUTTON HILL TELFORD Edge of Town Residential Zone Total Number of dwellings: 54 Survey date: THURSDAY 24/10/13	SEMI-DETACHED / TERRACED	SHROPSHIRE
			Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

44	SH-03-A-06 ELLESMERE ROAD	BUNGALOWS		SHROPSHIRE
	SHREWSBURY Edge of Town Residential Zone			
	Total Number of dwellings:	16		
	Survey date: THURSDAY	22/05/14		Survey Type: MANUAL
45	SM-03-A-01 WEMBDON ROAD	DETACHED & SEMI		SOMERSET
	NORTHFIELD BRIDGWATER Edge of Town Residential Zone			
	Total Number of dwellings:	33		
	Survey date: THURSDAY	24/09/15		Survey Type: MANUAL
46	ST-03-A-06 STANFORD ROAD	SEMI-DET. & TERRACED		STAFFORDSHIRE
	BLAKENHALL WOLVERHAMPTON Edge of Town Centre No Sub Category			
	Total Number of dwellings:	17		
	Survey date: FRIDAY	09/05/14		Survey Type: MANUAL
47	SY-03-A-01 A19 BENTLEY ROAD	SEMI DETACHED HOUSES		SOUTH YORKSHIRE
	BENTLEY RISE DONCASTER Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total Number of dwellings:	54		
	Survey date: WEDNESDAY	18/09/13		Survey Type: MANUAL
48	TW-03-A-02 WEST PARK ROAD	SEMI-DETACHED		TYNE & WEAR
	GATESHEAD Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total Number of dwellings:	16		
	Survey date: MONDAY	07/10/13		Survey Type: MANUAL
49	TW-03-A-03 STATION ROAD	MIXED HOUSES		TYNE & WEAR
	BACKWORTH NEAR NEWCASTLE Neighbourhood Centre (PPS6 Local Centre) Village			
	Total Number of dwellings:	33		
	Survey date: FRIDAY	13/11/15		Survey Type: MANUAL
50	WK-03-A-01 ARLINGTON AVENUE	TERRACED / SEMI / DET.		WARWICKSHIRE
	LEAMINGTON SPA Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total Number of dwellings:	6		
	Survey date: FRIDAY	21/10/11		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

51	WK-03-A-02	BUNGALOWS		WARWICKSHIRE
	NARBERTH WAY			
	POTTERS GREEN			
	COVENTRY			
	Edge of Town			
	Residential Zone			
	Total Number of dwellings:	17		
	Survey date: THURSDAY	17/10/13		Survey Type: MANUAL
52	WS-03-A-04	MIXED HOUSES		WEST SUSSEX
	HILLS FARM LANE			
	BROADBRIDGE HEATH			
	HORSHAM			
	Edge of Town			
	Residential Zone			
	Total Number of dwellings:	151		
	Survey date: THURSDAY	11/12/14		Survey Type: MANUAL
53	WS-03-A-05	TERRACED & FLATS		WEST SUSSEX
	UPPER SHOREHAM ROAD			
	SHOREHAM BY SEA			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	48		
	Survey date: WEDNESDAY	18/04/12		Survey Type: MANUAL
54	WS-03-A-06	MIXED HOUSES		WEST SUSSEX
	ELLIS ROAD			
	S BROADBRIDGE HEATH			
	WEST HORSHAM			
	Edge of Town			
	Residential Zone			
	Total Number of dwellings:	805		
	Survey date: THURSDAY	02/03/17		Survey Type: MANUAL
55	WY-03-A-01	MIXED HOUSING		WEST YORKSHIRE
	SPRING VALLEY CRESCENT			
	BRAMLEY			
	LEEDS			
	Neighbourhood Centre (PPS6 Local Centre)			
	Residential Zone			
	Total Number of dwellings:	46		
	Survey date: WEDNESDAY	21/09/16		Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	55	68	0.069	55	68	0.270	55	68	0.339
08:00 - 09:00	55	68	0.141	55	68	0.368	55	68	0.509
09:00 - 10:00	55	68	0.146	55	68	0.162	55	68	0.308
10:00 - 11:00	55	68	0.128	55	68	0.151	55	68	0.279
11:00 - 12:00	55	68	0.137	55	68	0.151	55	68	0.288
12:00 - 13:00	55	68	0.153	55	68	0.151	55	68	0.304
13:00 - 14:00	55	68	0.153	55	68	0.156	55	68	0.309
14:00 - 15:00	55	68	0.146	55	68	0.178	55	68	0.324
15:00 - 16:00	55	68	0.240	55	68	0.169	55	68	0.409
16:00 - 17:00	55	68	0.262	55	68	0.161	55	68	0.423
17:00 - 18:00	55	68	0.313	55	68	0.165	55	68	0.478
18:00 - 19:00	55	68	0.246	55	68	0.160	55	68	0.406
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.134			2.242			4.376

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected: 6 - 805 (units:)
 Survey date date range: 01/01/09 - 28/03/17
 Number of weekdays (Monday-Friday): 55
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 1
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Calculation Reference: AUDIT-138301-180115-0118

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : A - HOUSES PRIVATELY OWNED
 VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	WS WEST SUSSEX	2 days
03	SOUTH WEST	
	DV DEVON	1 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NE NORTH EAST LINCOLNSHIRE	2 days
	NY NORTH YORKSHIRE	1 days
09	NORTH	
	DH DURHAM	1 days
11	SCOTLAND	
	FA FALKIRK	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Secondary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of dwellings
 Actual Range: 108 to 805 (units:)
 Range Selected by User: 100 to 1000 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/09 to 28/03/17

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	2 days
Tuesday	1 days
Wednesday	1 days
Thursday	3 days
Friday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	9 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Edge of Town Centre	1
Suburban Area (PPS6 Out of Centre)	4
Edge of Town	3
Neighbourhood Centre (PPS6 Local Centre)	1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	7
No Sub Category	2

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C3 9 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,001 to 5,000	3 days
5,001 to 10,000	1 days
10,001 to 15,000	3 days
20,001 to 25,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	4 days
50,001 to 75,000	1 days
75,001 to 100,000	3 days
100,001 to 125,000	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	6 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	2 days
No	7 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	9 days
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This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	DH-03-A-02	MIXED HOUSES	DURHAM
	LEAZES LANE		
	ST HELEN AUCKLAND		
	BISHOP AUCKLAND		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total Number of dwellings:	125	
	Survey date: MONDAY	27/03/17	Survey Type: MANUAL
2	DV-03-A-02	HOUSES & BUNGALOWS	DEVON
	MILLHEAD ROAD		
	HONITON		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	116	
	Survey date: FRIDAY	25/09/15	Survey Type: MANUAL
3	FA-03-A-02	MIXED HOUSES	FALKIRK
	ROSEBANK AVENUE & SPRINGFIELD DRIVE		
	FALKIRK		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	161	
	Survey date: WEDNESDAY	29/05/13	Survey Type: MANUAL
4	NE-03-A-02	SEMI DETACHED & DETACHED	NORTH EAST LINCOLNSHIRE
	HANOVER WALK		
	SCUNTHORPE		
	Edge of Town		
	No Sub Category		
	Total Number of dwellings:	432	
	Survey date: MONDAY	12/05/14	Survey Type: MANUAL
5	NE-03-A-03	PRIVATE HOUSES	NORTH EAST LINCOLNSHIRE
	STATION ROAD		
	SCUNTHORPE		
	Edge of Town Centre		
	Residential Zone		
	Total Number of dwellings:	180	
	Survey date: TUESDAY	20/05/14	Survey Type: MANUAL
6	NY-03-A-06	BUNGALOWS & SEMI DET.	NORTH YORKSHIRE
	HORSEFAIR		
	BOROUGHBRIDGE		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	115	
	Survey date: FRIDAY	14/10/11	Survey Type: MANUAL
7	SH-03-A-04	TERRACED	SHROPSHIRE
	ST MICHAEL'S STREET		
	SHREWSBURY		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total Number of dwellings:	108	
	Survey date: THURSDAY	11/06/09	Survey Type: MANUAL
8	WS-03-A-04	MIXED HOUSES	WEST SUSSEX
	HILLS FARM LANE		
	BROADBRIDGE HEATH		
	HORSHAM		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	151	
	Survey date: THURSDAY	11/12/14	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	WS-03-A-06	MIXED HOUSES	WEST SUSSEX
	ELLIS ROAD		
	S BROADBRIDGE HEATH		
	WEST HORSHAM		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:		805
	Survey date: THURSDAY		02/03/17
	Survey Type: MANUAL		

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
 VEHICLES
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

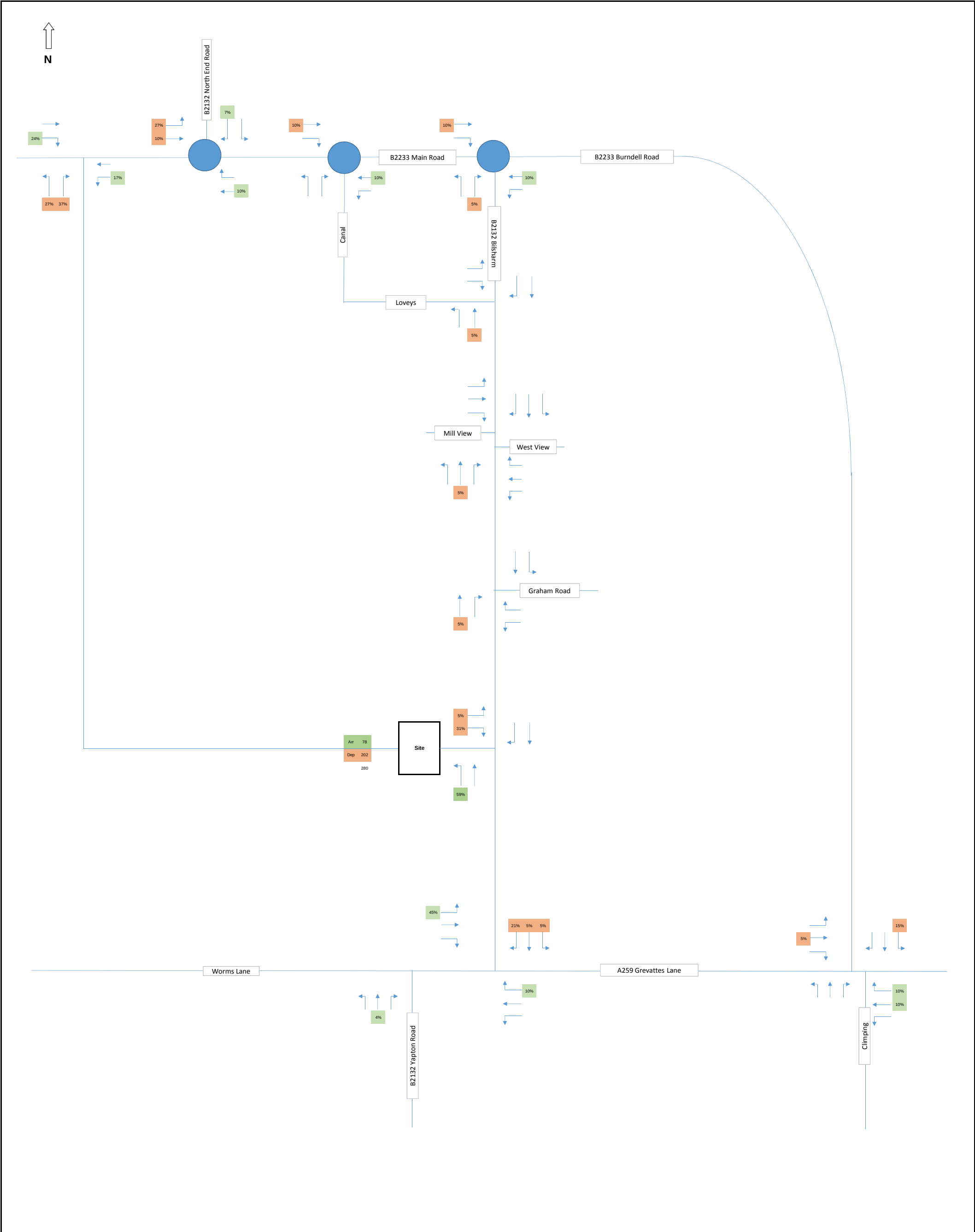
Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	244	0.063	9	244	0.263	9	244	0.326
08:00 - 09:00	9	244	0.125	9	244	0.363	9	244	0.488
09:00 - 10:00	9	244	0.146	9	244	0.151	9	244	0.297
10:00 - 11:00	9	244	0.123	9	244	0.152	9	244	0.275
11:00 - 12:00	9	244	0.128	9	244	0.144	9	244	0.272
12:00 - 13:00	9	244	0.147	9	244	0.144	9	244	0.291
13:00 - 14:00	9	244	0.145	9	244	0.148	9	244	0.293
14:00 - 15:00	9	244	0.136	9	244	0.172	9	244	0.308
15:00 - 16:00	9	244	0.245	9	244	0.171	9	244	0.416
16:00 - 17:00	9	244	0.245	9	244	0.154	9	244	0.399
17:00 - 18:00	9	244	0.298	9	244	0.170	9	244	0.468
18:00 - 19:00	9	244	0.259	9	244	0.168	9	244	0.427
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.060			2.200			4.260

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

APPENDIX B

Development Traffic Distribution and Assignment



Notes ### Total Vehicle ### HGV's	Land Link / Gleeson Strategic	-
	Job Title: Land West of Bilsham Road, Yapton	Job No: 14-111
	Drawing Title: AM Development % Distribution (07:45-08:45) 550 Units	Date: -

ODYSSEY

DEVELOPING JOURNEYS

Tuscany House - White Hart Lane

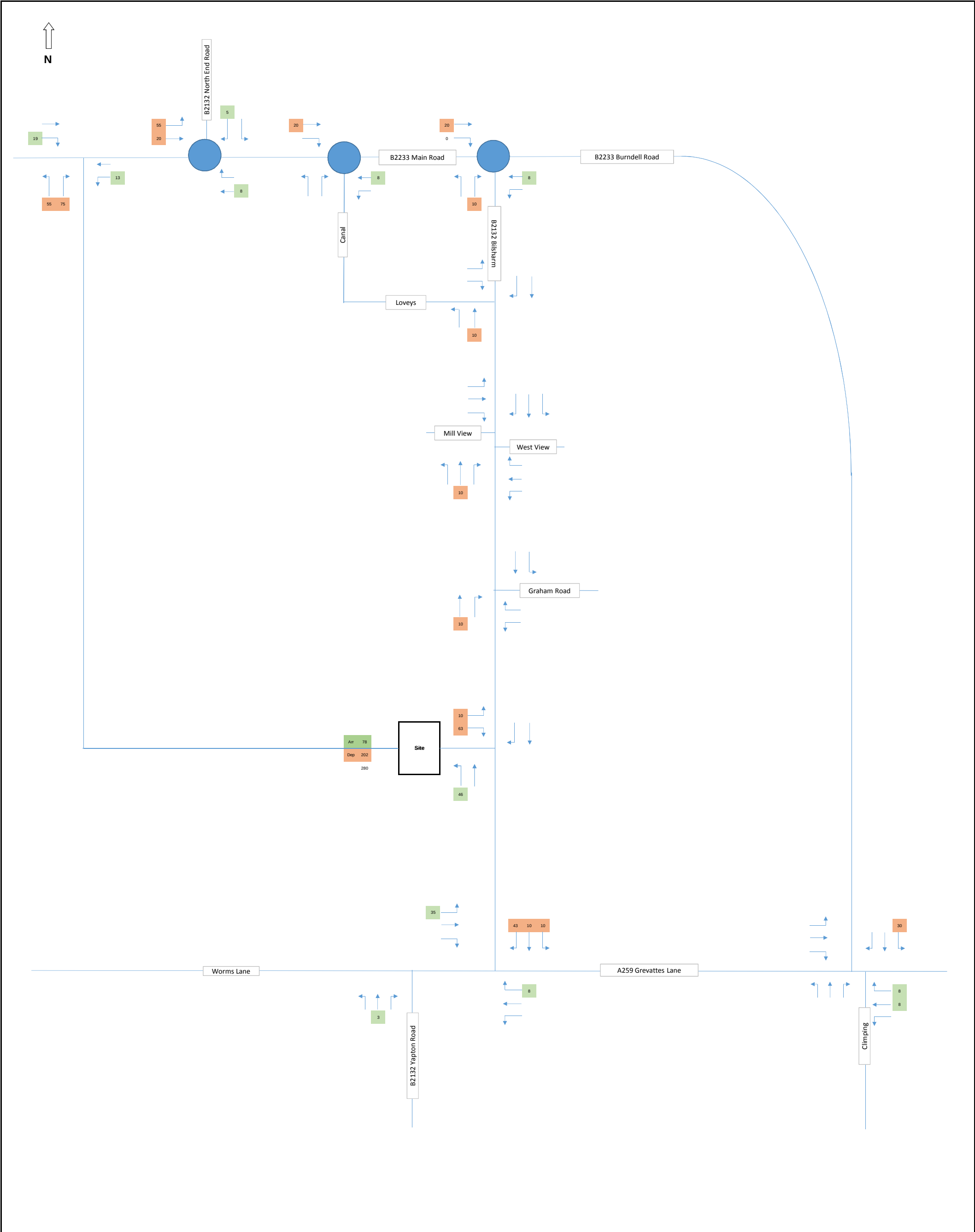
Basingstoke - Hampshire - RG21 4AF

T:01256 331144

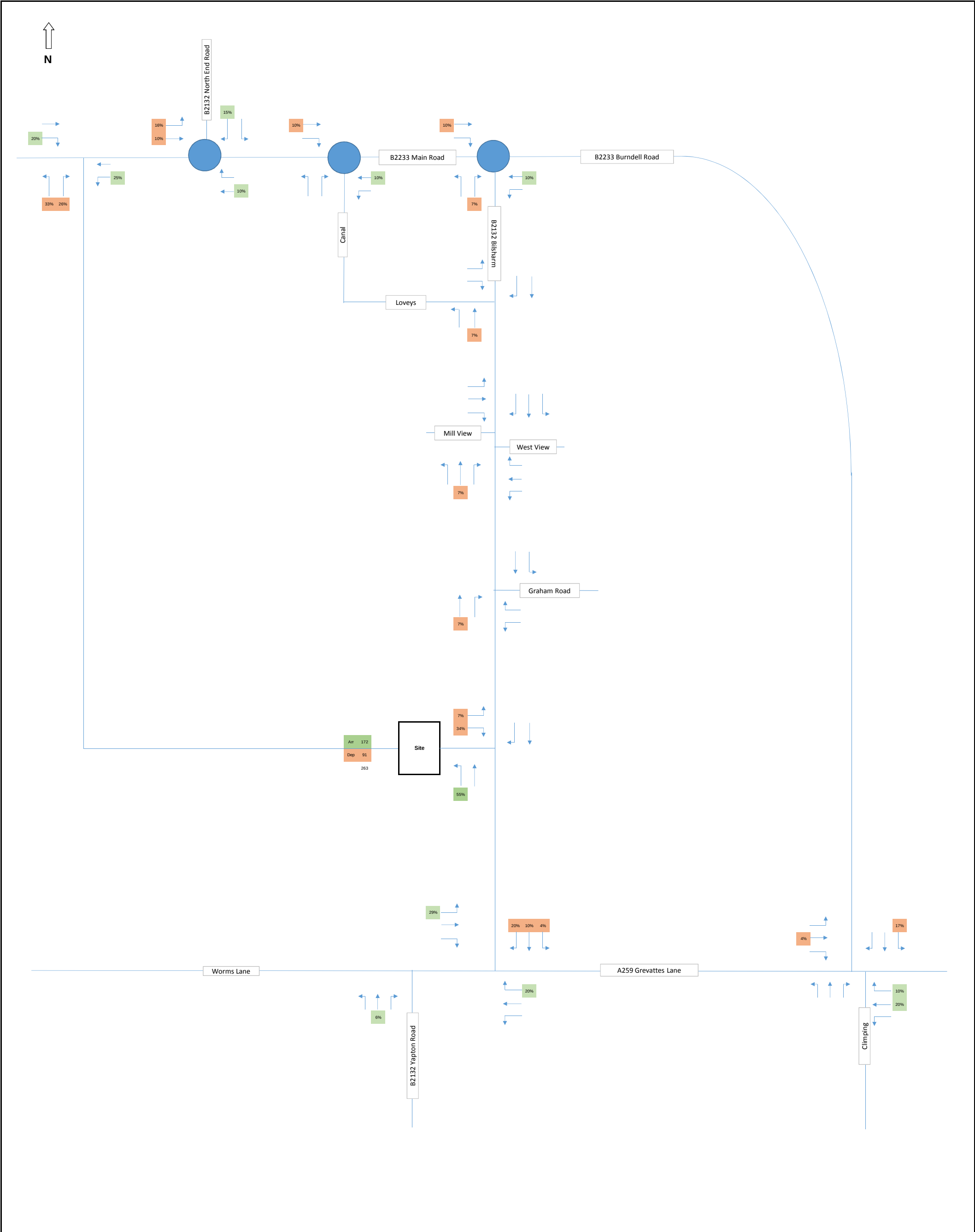
F:01256 331134

E:enquiries@odysseymarkides.com

W:www.odysseymarkides.com



Notes ### Total Vehicle ### HGV's	Land Link / Gleeson Strategic	-
	Job Title: Land West of Bilsham Road, Yapton	Job No: 14-111
	Drawing Title: AM Development Assignment (07:45-08:45) 550 Units	Date: -
 ODYSSEY DEVELOPING JOURNEYS Tuscany House - White Hart Lane Basingstoke - Hampshire - RG21 4AF T:01256 331144 F:01256 331134 E:enquiries@odysseymarkides.com W:www.odysseymarkides.com		



Notes ### Total Vehicle ### HGV's	Land Link / Gleeson Strategic	-
	Job Title: Land West of Bilsham Road, Yapton	Job No: 14-111
	Drawing Title: PM Development % Distribution (16:45-17:45) 550 Units	Date: -



ODYSSEY

DEVELOPING JOURNEYS

Tuscany House - White Hart Lane

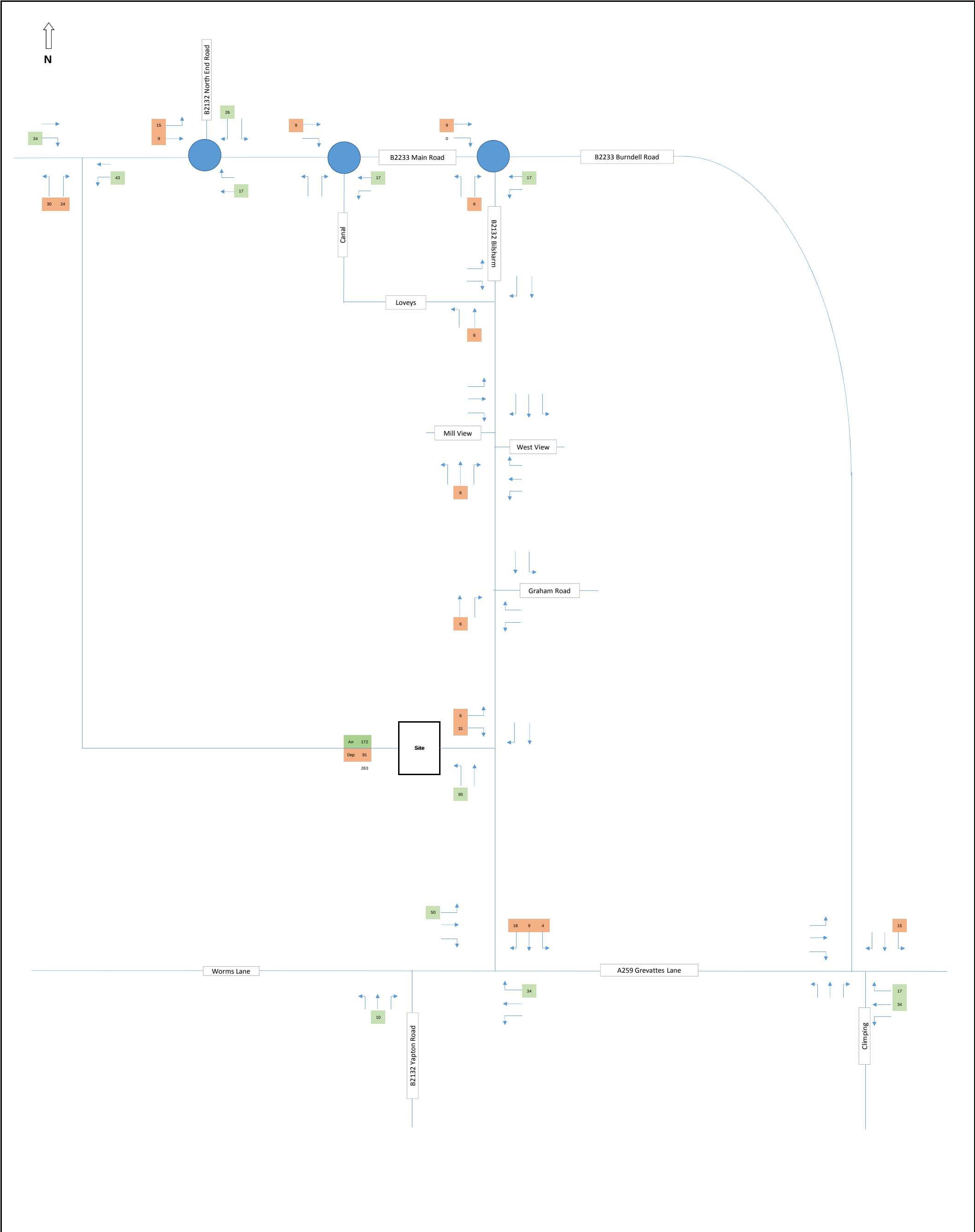
Basingstoke - Hampshire - RG21 4AF

T:01256 331144

F:01256 331134

E:enquiries@odysseymarkides.com

W:www.odysseymarkides.com



Notes ### Total Vehicle ### HGV's	Land Link / Gleeson Strategic	-
	Job Title: Land West of Bilsham Road, Yapton	Job No: 14-111
	Drawing Title: PM Development Assignment (16:45-17:45) 550 Units	Date: -

Tuscany House - White Hart Lane

Basingstoke - Hampshire - RG21 4AF

T:01256 331144

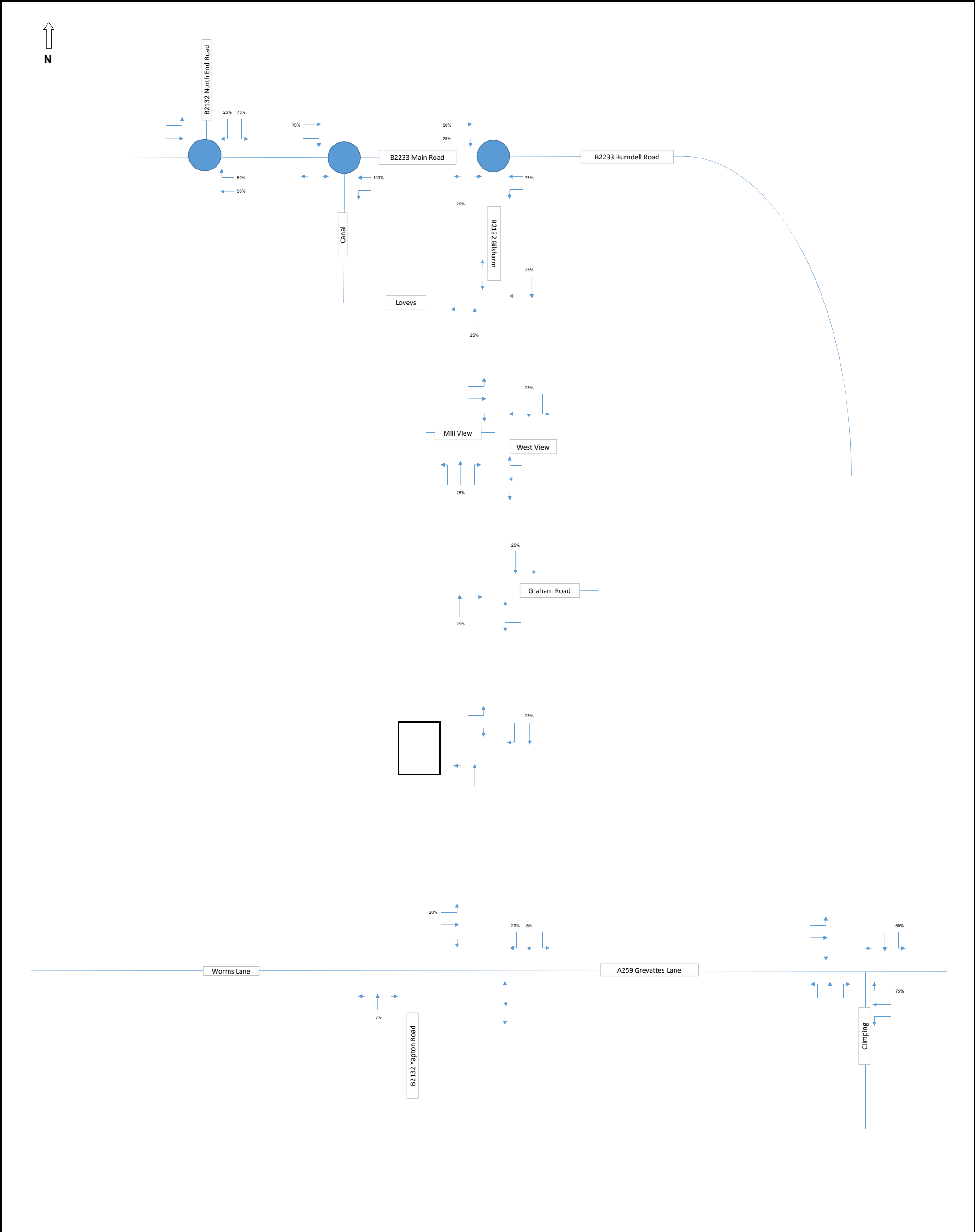
F:01256 331134

E:enquiries@odysseymarkides.com

W:www.odysseymarkides.com

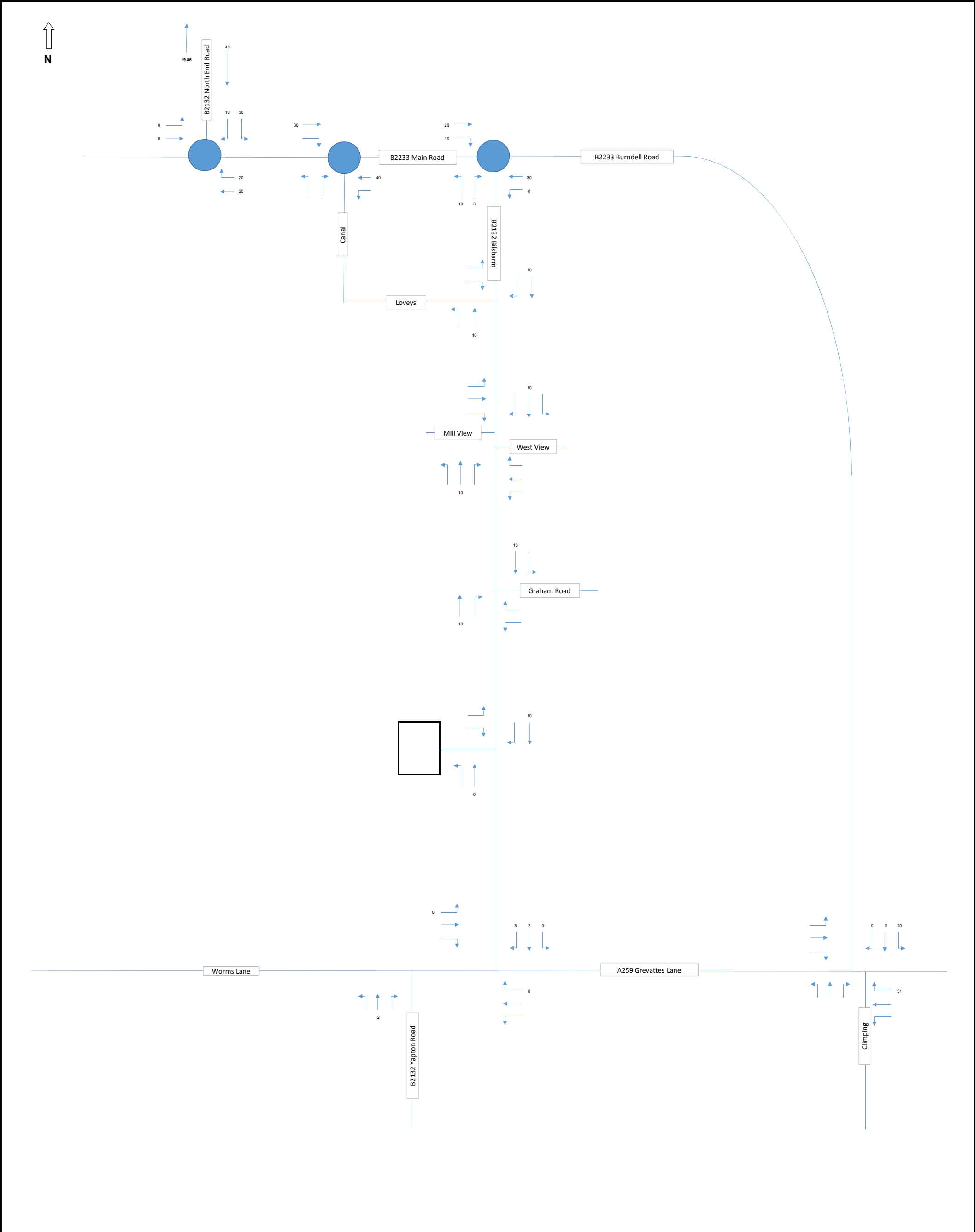
APPENDIX C

Committed Development Traffic Flows



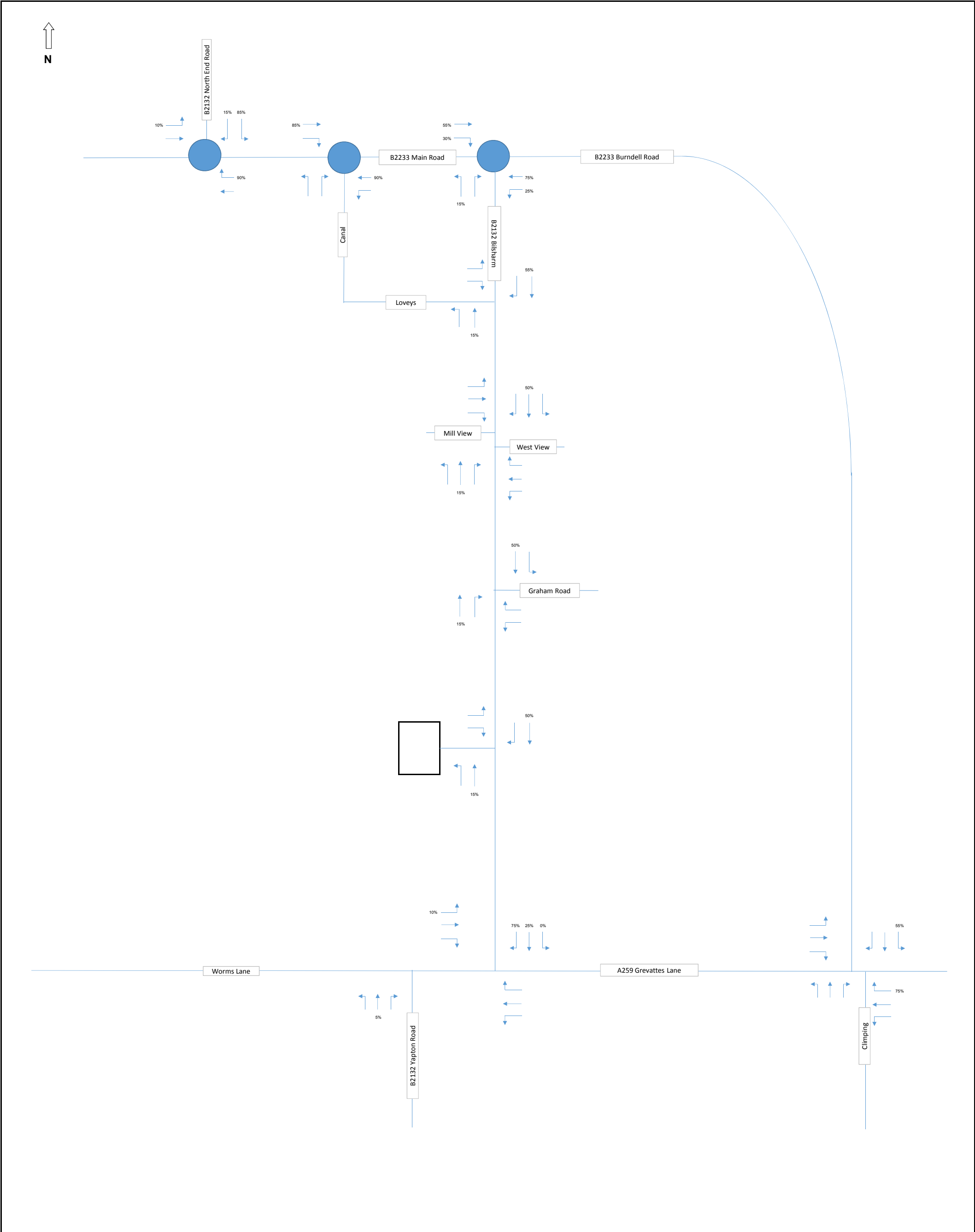
Notes ### Total Vehicle ### HGV's	Gleeson Strategic Land	-
	Job Title: Land West of Bilsham Road, Yapton	Job No: 14-111
	Drawing Title: Committed Development % Distribution AM (07:45-08:45)	Date: -

 **ODYSSEY**
DEVELOPING JOURNEYS

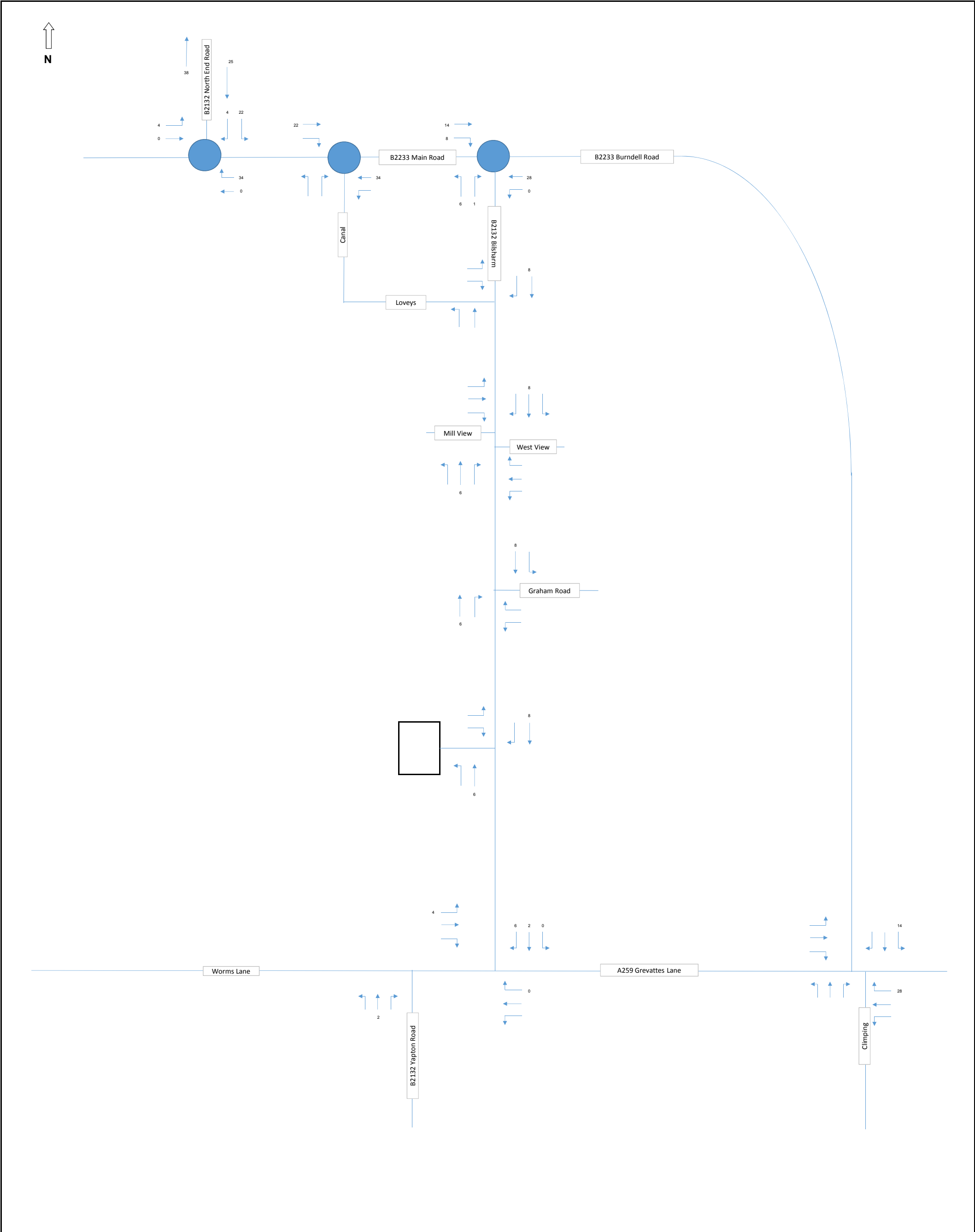


Notes ### Total Vehicle ### HGV's	Gleeson Strategic Land	-
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	Drawing Title: Committed Development Traffic Flows AM (07:45-08:45)	Date: -



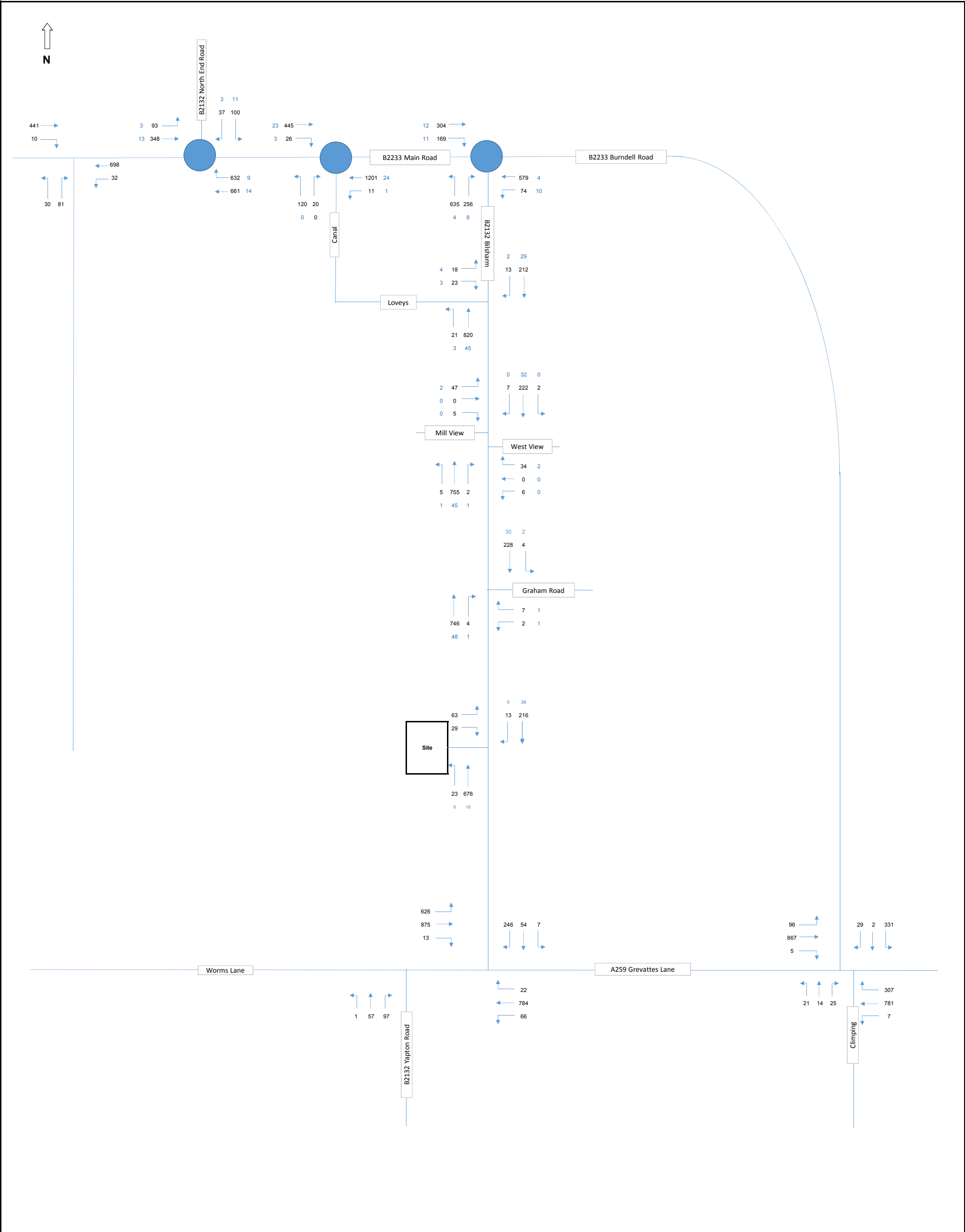


Notes ### Total Vehicle ### HGV's	Gleeson Strategic Land	-	 ODYSSEY DEVELOPING JOURNEYS
	Job Title: Land West of Bilsham Road, Yapton	Job No: 14-111	
	Drawing Title: Committed Development % Distribution PM (07:45-08:45)	Date: -	



Notes ### Total Vehicle ### HGV's	Gleeson Strategic Land		-
	Job Title:	Land West of Bilsham Road, Yapton	Job No: 14-111
	Drawing Title:	Committed Development Traffic Flows PM (07:45-08:45)	Date: -

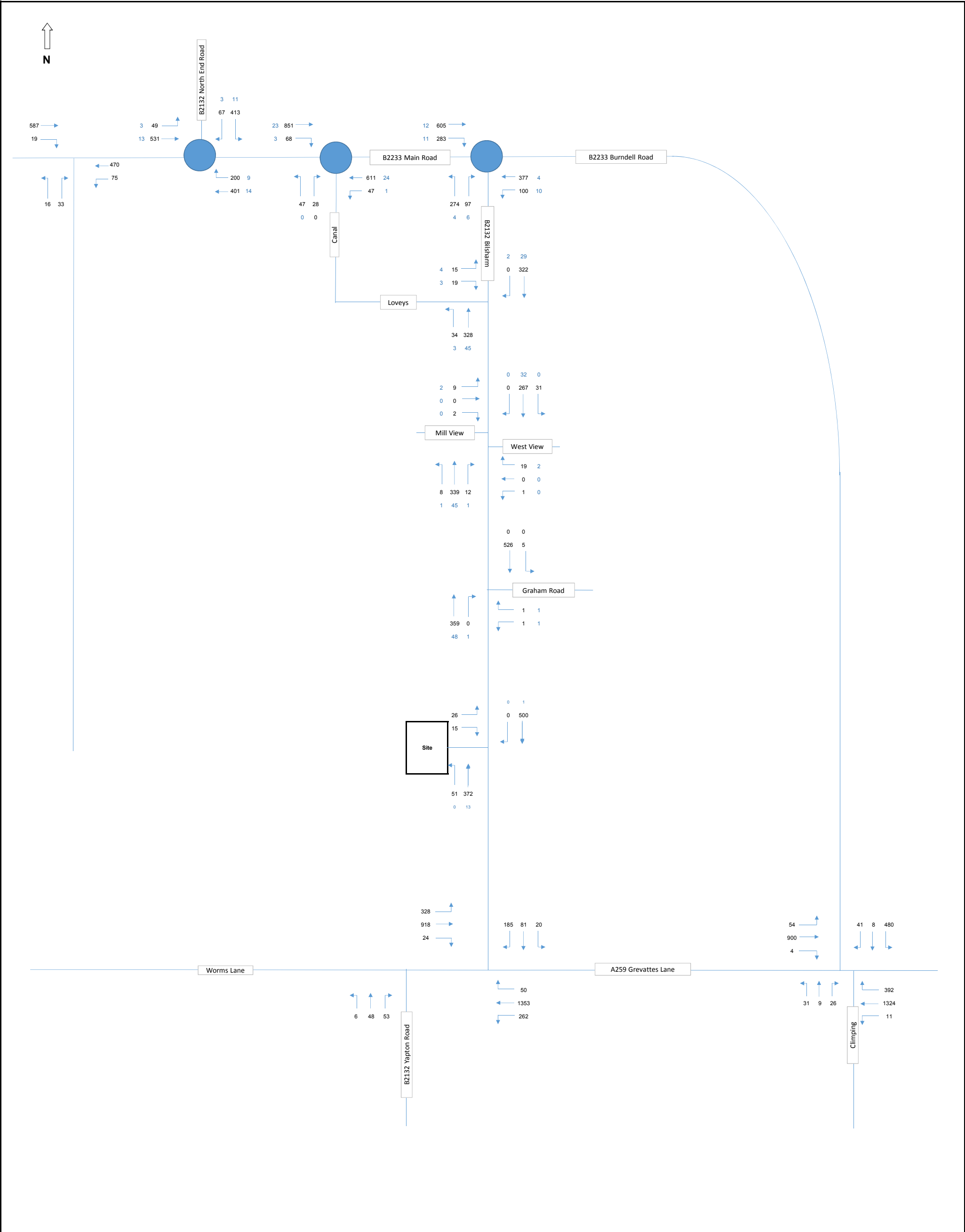




Notes ### Total Vehicle ### HGV's	Land Link / Gleeson Strategic	-
	Job Title: Land West of Bilsham Road, Yapton	Job No: 14-111
	Drawing Title: 2031 AM Base + Committed + Development AM (07:45-08:45) 550 Units No Thru-Link	Date: -



ODYSSEY
DEVELOPING JOURNEYS



Notes ### Total Vehicle ### HGV's	Land Link / Gleeson Strategic	-
	Job Title: Land West of Bilsham Road, Yapton	Job No: 14-111
	Drawing Title: 2031 AM Base + Committed + Development PM (07:45-08:45) 550 Units No Thru-Link	Date: -

 **ODYSSEY**
DEVELOPING JOURNEYS

APPENDIX D

Junction Capacity Assessment Outputs

APPENDIX E

Spatial Options Appraisal Extract

Table xxxx: Detailed Appraisal Matrix for Climping/Yapton

Policy	SA Sub-objective	Scoring	Reasoning	Overall summary and any recommendations
Climping/ Yapton	Social Cohesion	++	Through the inclusion of a mix of housing plus good access to existing community facilities it would be expected that there would be a contribution towards this criteria	Mixed housing provision will have a positive effect and there would be a high level of access to green space, encouraging healthy lifestyles but there would be no improvement to community facilities and so to community engagement and so lessened impact on reducing social isolation
	Healthy Lifestyle	++	As there is a large area of open space that is in close proximity to the Yapton location and in reasonable proximity to the Climping location there would be a positive impact on achieving this criteria	
	Balanced Communities	++	Though small in scale, due to the intended mix of homes to be provided and the uses it would be expected that there would be an increased mix of the community on the site.	
	Community Engagement		As it would not be expected that any new provision of community facilities or services will be required it is not expected that there would be a change to this criteria	
	Crime		There is no data at a local level but it would not be expected that this would change significantly	
	Educational Achievement	0/+	There would be increased demand on existing educational facilities but this would not be considered to be significant enough to result in any increase in provision	
	Social Isolation	+	Though small in scale, due to the intended mix of homes to be provided and the uses it would be expected that there would be an increased mix of the community on the site helping to reduce this as well as the proximity of existing facilities	
	Housing Supply	++	Housing in this location would reduce one of the main barriers to housing and meaning people can locate closer to transport routes, as well as key goods and services	Though this would provide additional mixed housing there would be no change to the situation in
	Affordable Housing	++	This would help in terms of addressing barriers to housing and will increase the housing stock as well as and so significantly to this criteria	

	Mix of Housing	++	The SHMA Update (GL Hearn, Nov 2012) identified the types of housing needed and any scheme would need to include a mix, meaning that there would be a significant impact on the housing stock both locally and at a District level	terms of key services and facilities or increasing access to these
	High Quality Housing	++	Build standards and some specific characteristics of this area will mean that all buildings will be required to meet high standards and recognising the higher proportion of older residents will need to be adaptable for different occupiers	
	Access to Employment Opportunities		Due to a lack of employment within the immediate vicinity there would be no impact on this aspect, although there may be a reduction in distance to work overall from these locations	
	Access with capacity to Education		There will be increased demand placed on existing services although it would not be expected that there would be any change to the existing level of provision	
	Access with capacity to Health Care		Though there would be increased demand on existing facilities there would be insufficient increase to result in any additional provision	
	Access with capacity to Community Facilities		Though there would be increased demand on existing facilities there would be insufficient increase to result in any additional provision	
	Access to Green Infrastructure		There is a high level of open space and so access to green infrastructure is already high and this would not be expected to change	
	Access with capacity to Emergency and Essential Services		This is currently served from Littlehampton and this would not be expected to change	
	Access to Local Retail Facilities		There is no existing local retail in these areas and though there would be increased demand this would not be expected to result in any additional provision in the immediate vicinity	
	Access with capacity to Leisure, Entertainment and Cultural Facilities		Though there would be a slight increase in demand this would not be expected to be sufficient to require any additional provision and so there would be no real change	
	Employment Opportunities		The closest employment in the immediate vicinity is around the Ford Airfield or a greater choice around Littlehampton and this	It would not be

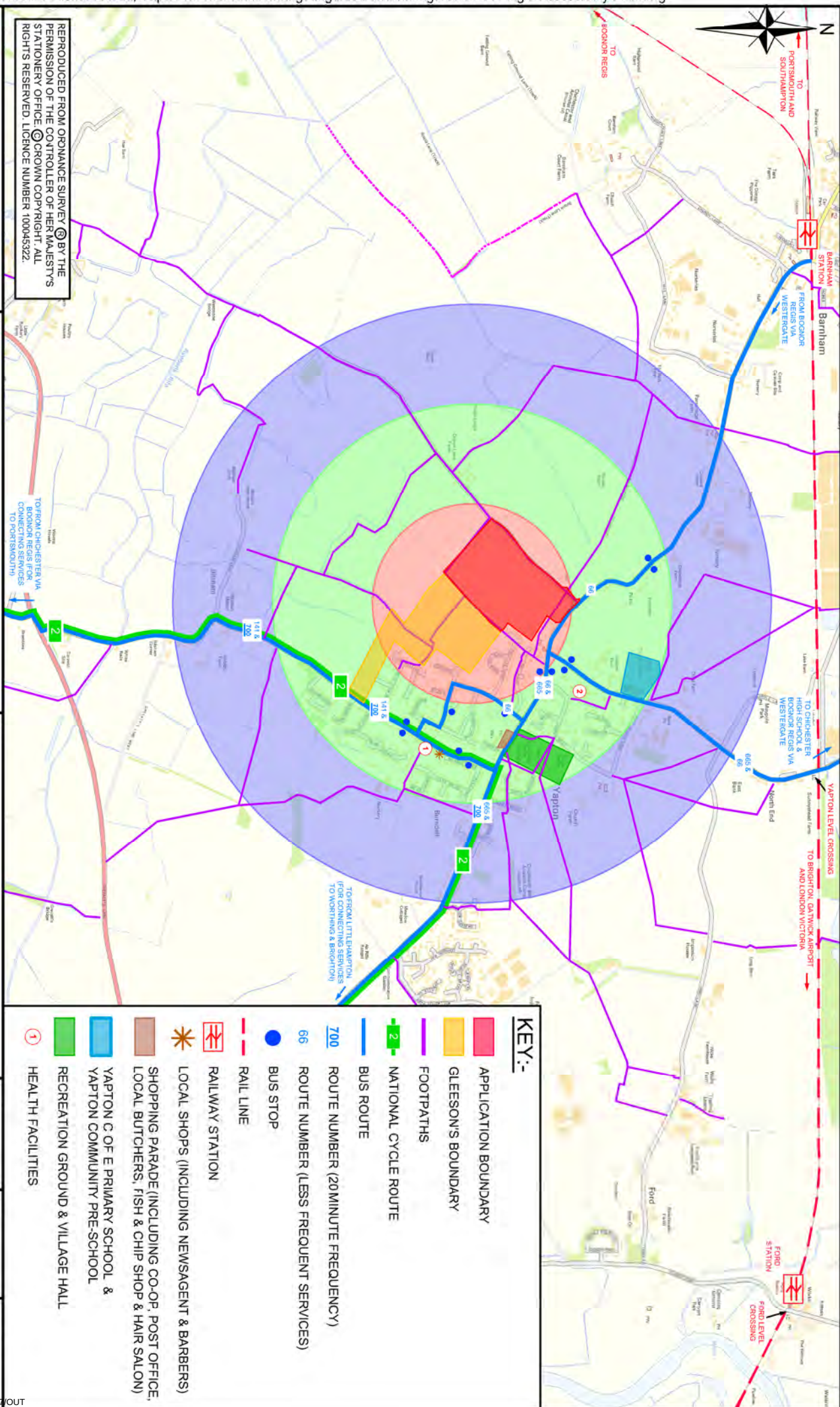
			would not be expected to change	expected there would be a significant impact on employment opportunities, skills or average wages, but would help retain local businesses and possibly to the visitor economy
	Skills		Due to the situation in terms of employment and education there would not be expected to be any impact on this objective	
	Income		Due to the locations for employment and the sectors that these are within it is not expected that there would be a significant change to average wages	
	Inward Investment		The small scale and locations do not have significant business interest and so it would not be expected that this would be affected	
	Visitor Economy	+	Due to the rural nature of these locations there might be a slight impact on this through being a suitable location for visitor accommodation or supporting aspects to this sector	
	Local Business Enterprise	+	There would not be expected to be a significant impact but potentially there might be slight encouragement for local small business start-ups.	
	Regeneration	+	There would be no direct impact in terms of regeneration but there may be increased custom to the town centres	Through the increased population there could be increased custom to the town centre and so potential for positive impact on regeneration and town centre retail
	Night-time Economy in Town Centres		Though the increase in population might result in increased custom in the town centres this would not be expected to be significant and so there would be no real change	
	Town Centre Retail	+	There would be a slight positive impact through the increase in population correlating to an increase in custom to the town centres	
	Leisure, Entertainment and Culture		Though there would be an increase in demand due to the increase in population this would not be expected to result in any increase in provision	
	Traffic Congestion		As shown in the Arun Transport Study (WSP, 2013) there would be an expected increase if vehicle flows to the junction with the B2233 although this would not be expected to be sufficient to have a detrimental impact	It would not be expected that there would be any significant change to movement, although if improvements to junctions were
	Road Safety	0/+	Due to the increase in flows from Littlehampton to the B2233 junction there would be an increased risk of road accidents although this is not expected to be significant	
	Public Transport		Though there would be an increased demand placed on the existing bus service this would not be expected to be significant	

	Walking and Cycling	+	These locations would not make a significant improvement to walking and cycling although it might allow for contributions towards delivering the aspirational cycle route along the A259	included there may be a small possibility of reduced road accidents, as well as potential improvements to pedestrian and cycling routes
	Local Distinctiveness		Due to the position of the Yapton location there would not be a significant impact on the conservation areas and although there would be a slight reduction in the space around the village this would not have a significant impact on the openness of the area and so local distinctiveness	There would not be an impact on the setting of the Conservation Area and though there would be a minor reduction in space this would not be significant to affect openness and local distinctiveness. Though the Climping area is in proximity to a designated site this would not be expected to be affected by disturbance, which could not be mitigated
	Historic Environment		Due to the position of the Yapton location there would not be a significant impact on the conservation areas and so the historic environment	
	Designated Environmental Sites		Only the Climping location is in proximity to a designated site and although there would be a slight increase in disturbance through the increased population, this could be mitigated through contributions	
	Biodiversity		Though there will be a slight impact the area is not recognised in terms of biodiversity and so there would be no real change	
	Water Quality			
	Flood Risk		These locations are within Flood Zone 1 and so this aspect would not be affected and has not therefore been appraised	
	Air Quality		Through the increased number of vehicles there would be an increase in NOx and particulate levels although this would not be expected to be significant	
	Noise Pollution		The introduction of vehicles into the area would increase noise levels generally although this would not be significant enough to affect the high tranquillity level of these locations	
	Coastal Erosion		The distance to the seafront means that these areas will not be affected by coastal erosion	

	Beach Quality		The distance of these locations from the beach mean that there is not expected to be any impact on beach quality	These would represent an efficient use of land being on the edge of existing settlements and would incorporate a higher level of reused materials. However, as the existing soil quality has been classified on as being Grade 1 and 2 there would be a detrimental impact
	Land Contamination		There are no known issues at these locations so this is not expected to change	
	Energy Supply and Demand		There will be an increase in demand but there are no known issues in terms of capacity and so this is not expected to significantly change	
	Waste		There would be an increase in waste although this would be mitigated through the extension of existing household collections	
	Water Resources		Though there would be an increase in demand on water resources this would not be above existing expected capacities in the Water Resource Management Plans	
	Efficient Use of Land	+	These locations are small in scale and on the edge of existing built up areas and so though greenfield would ensure a high level remains and so positively towards the achievement of this criteria	
	Embodied Impact of Materials	+	Through requirement of levels of recycled materials to be used through the application of the Code for Sustainable Homes and other national standards there will be an improvement in the amounts of reused materials	
	Locally Produced Food		As these areas do not contribute toward local food production there will be no impact on this criteria	
	Soil Quality	-	The Climping location is arable land and the Yapton location is Grade 2 agricultural land to the south and Grade 1 agricultural and other uses to the north, so there could be a slight detrimental impact dependent on exact implementation	
Conclusion	As can be seen in the main there would not be expected to be any significant benefits to these locations. There would be increased demand on existing services and facilities but this would be insufficient to warrant any change to the existing provision. The main benefit that would result from these locations would be against the social aspects through the additional and mix of higher quality housing that consequently would mean that there would be more inclusive and balanced communities created with reduced levels of social isolation. There could also be the potential for some slight benefits to the visitor economy and local businesses, as well as significantly in terms of efficient use of land. The only detrimental impact that may occur dependent on implementation would be in respect to soil quality.			

APPENDIX F

Figure 2 from TA



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W: www.odysseycounsell.co.uk

Job Title

LAND SOUTH OF MAIN ROAD,
YAPTON

Client

LANDLINK ESTATES

KEY:-

- | | |
|---|---|
|  | APPLICATION BOUNDARY |
|  | GLEESON'S BOUNDARY |
|  | FOOTPATHS |
|  | NATIONAL CYCLE ROUTE |
|  | BUS ROUTE |
|  | ROUTE NUMBER (20 MINUTE FREQUENCY) |
|  | ROUTE NUMBER (LESS FREQUENT SERVICES) |
|  | BUS STOP |
|  | RAIL LINE |
|  | RAILWAY STATION |
|  | LOCAL SHOPS (INCLUDING NEWSAGENT & BARBERS) |
|  | SHOPPING PARADE (INCLUDING CO-OP, POST OFFICE
LOCAL BUTCHERS, FISH & CHIP SHOP & HAIR SALON) |
|  | YAPTON C OF E PRIMARY SCHOOL &
YAPTON COMMUNITY PRE-SCHOOL |
|  | RECREATION GROUND & VILLAGE HALL |
|  | HEALTH FACILITIES |

Scale 1:20,000 @A4	Date DEC 17	Designed MS
Drawing MS	Checked TDM	Approved RJJ
Job No 14-111	Drawing No FIGURE 2	Rev

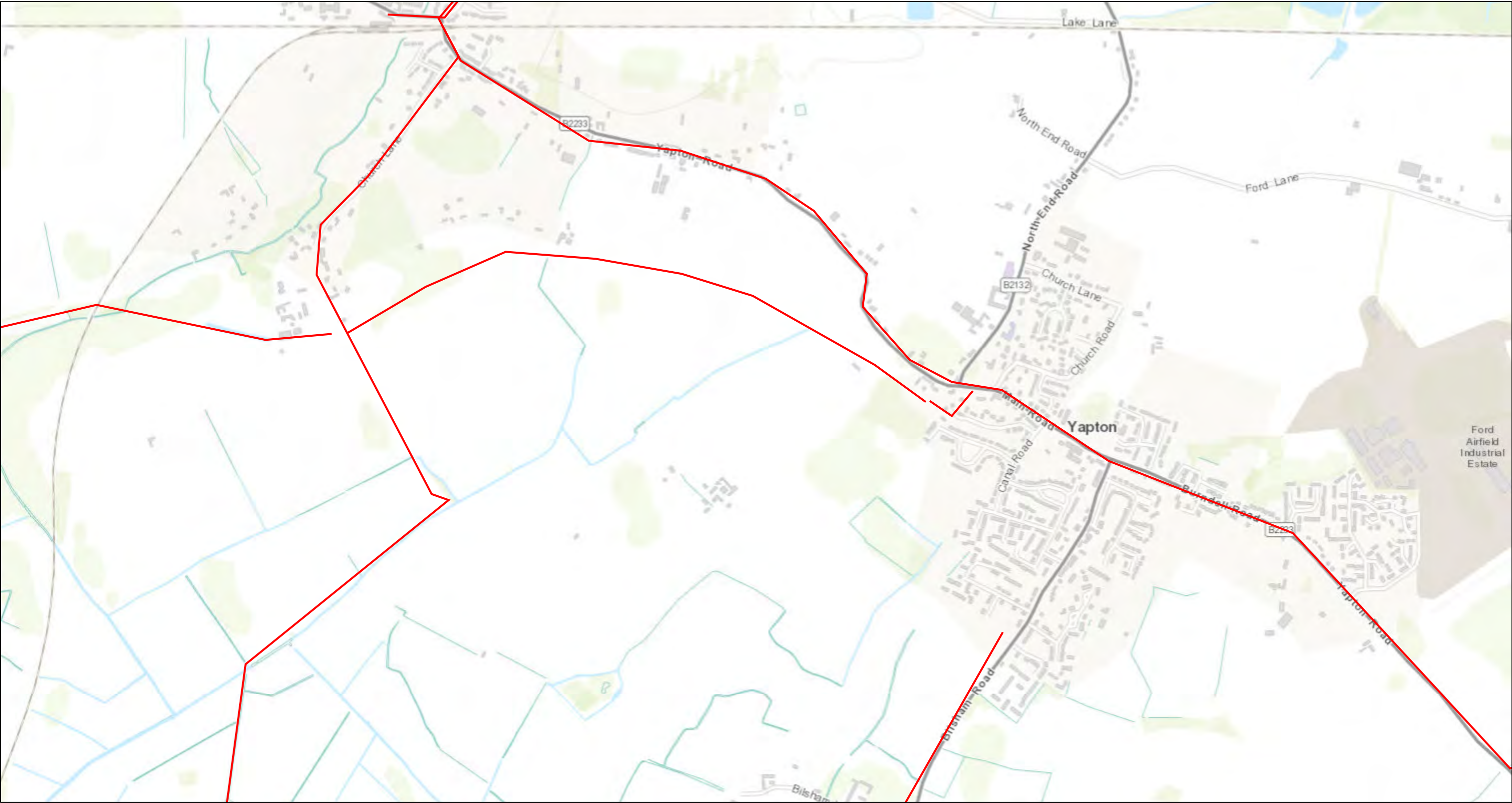
APPENDIX G

WSCC Walking and Cycling Policy Extracts

348	Manor Royal to Lowfield Heath Cycle Route	An off road walking and cycling route adjacent to London Road
196	NCN2 coastal alternative diversion	Seaview route
126	NCN2 feeder link to Yapton	Currently there is no safe cycle route from Yapton to NCN 2 and onwards to Littlehampton or Felpham /Bognor this proposed route will create a cycle path alongside the existing from the outskirts of the village
341	A264 crossing Horsham	Crossing along this stretch for cycles and walking (Riverside Walk)
44	Shoreham to Lancing	No description entered
85	A27 Arundel Bypass	The new Arundel Bypass motorway
42	A280 Long Furlong	An extremely dangerous road but a potentially highly useful cycle route.
82	Yapton to Climping	Littlehampton to Barnham
45	Lancing to Shoreham	Shoreham Airport to Grinstead Lane
288	NCN2 North Mundham to Chichester	Alternative route offering a route to the East side of Chichester
39	Angmering to Arundel	No description entered
345	NCN21 Spur to Felbridge	Upgrade surface and signage to existing Bridleway to connect Felbridge to the NCN21
67	Linking Lancing and Shoreham	No description entered
96	Hassocks to Lower Beeding	No description entered
229	Path from Hassocks to Burgess Hill east side of railway line	Aspiration to create a new shared use off road route
145	Chichester - Tangmere/Aldingbourne Route	Provides a better link between Portfield and A27 cycle path to Tangmere/Aldingbourne
272	Parish Lane roundabout by-pass	Provision of a two way off road path avoiding the high speed and busy roundabout at this point
374	Horsham Road Pease Pottage Cycle Lane	At the Western End an off road Cycle and Walking Route and Improved Traffic Calming at the Eastern End to provide continuous good cycle provision
19	Westergate Link	Surveyed off road route by WSCC 2014/5
231	New link from Hassocks to Hurstpierpoint	Aspiration to upgrade surfaces of 3C & 8C to link into HPP 65hu and local road network
369	West Chiltington Common to Primary School	Safer Route to School
53	Littlehampton to Arundel	No description entered
59	Worthing Cycle Network	No description entered
122	NCN 2 missing section V DANGEROUS SECTION	Missing link from North Mundham to off road cycle route to Chichester canal
175	East Preston to Ferring	Field route - currently footpath

Continued overleaf ...

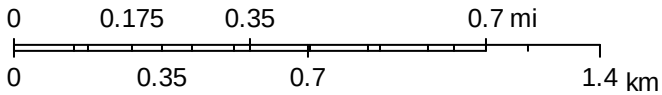
Suggested Cycle Routes



November 29, 2017

- Suggested Cycle Routes
- County
- District

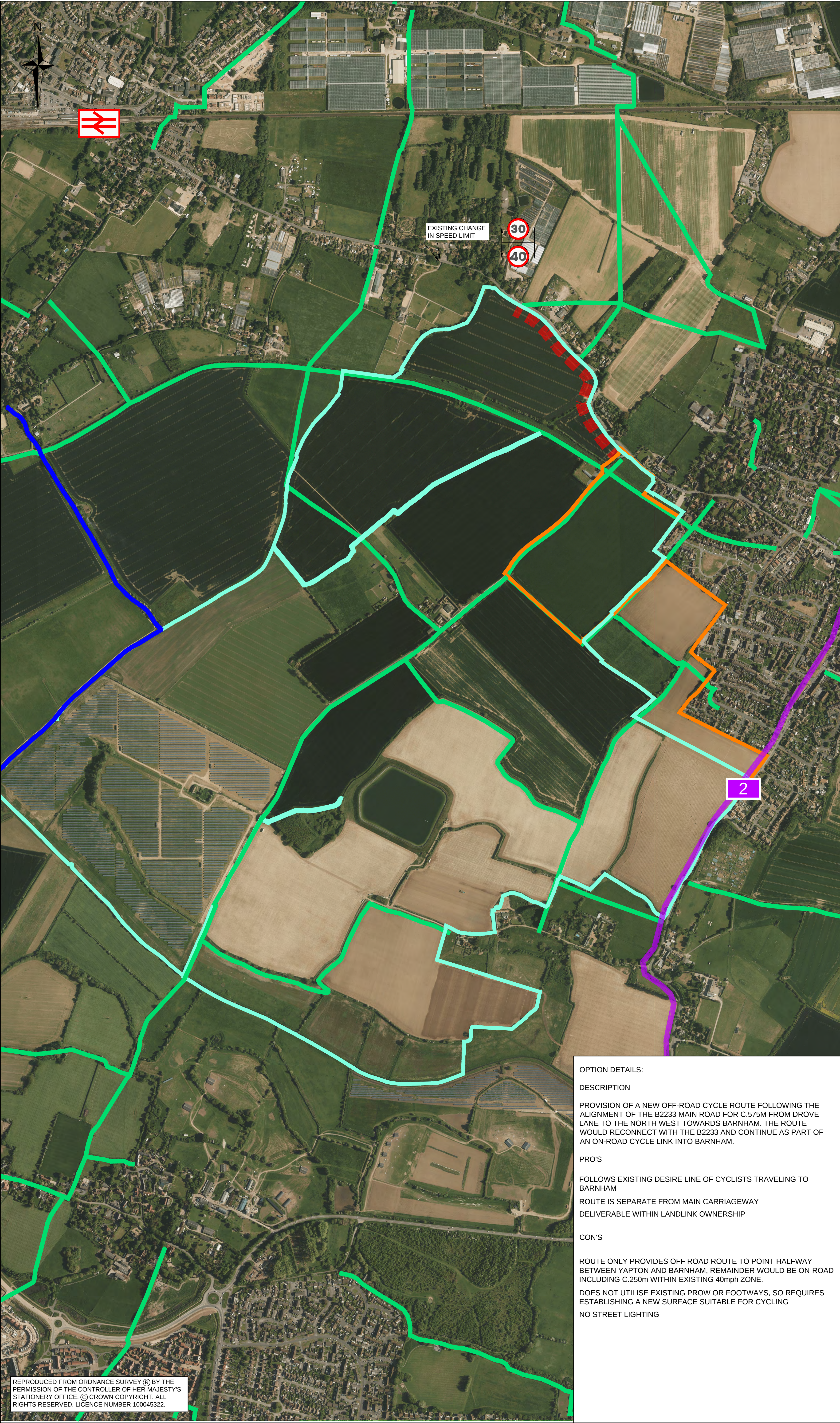
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Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS

APPENDIX H

Cycle Link Options



NOTES

KEY

EXISTING PUBLIC RIGHTS OF WAY (FOOTPATHS)

EXISTING NATIONAL CYCLE ROUTE

POTENTIAL CONNECTION TO BARNHAM STATION

SITE BOUNDARY

LAND WITHIN LANDLINK OWNERSHIP

PROW 146 - PERMITTED CYCLE ROUTE

OPTION DETAILS:

DESCRIPTION

PROVISION OF A NEW OFF-ROAD CYCLE ROUTE FOLLOWING THE ALIGNMENT OF THE B2233 MAIN ROAD FOR C.575M FROM DROVE LANE TO THE NORTH WEST TOWARDS BARNHAM. THE ROUTE WOULD RECONNECT WITH THE B2233 AND CONTINUE AS PART OF AN ON-ROAD CYCLE LINK INTO BARNHAM.

PRO'S

FOLLOWS EXISTING DESIRE LINE OF CYCLISTS TRAVELING TO BARNHAM
ROUTE IS SEPARATE FROM MAIN CARRIAGEWAY
DELIVERABLE WITHIN LANDLINK OWNERSHIP

CON'S

ROUTE ONLY PROVIDES OFF ROAD ROUTE TO POINT HALFWAY BETWEEN YAPTON AND BARNHAM, REMAINDER WOULD BE ON-ROAD INCLUDING C.250m WITHIN EXISTING 40mph ZONE.
DOES NOT UTILISE EXISTING PROW OR FOOTWAYS, SO REQUIRES ESTABLISHING A NEW SURFACE SUITABLE FOR CYCLING
NO STREET LIGHTING

Rev

Amendments

Drn

Chk

App

Date

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Hampshire RG21 4AF

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Fax: 01256 331134
E: info@odysseyconsult.co.uk
W: www.odysseyconsult.co.uk

Job Title

LAND SOUTH WEST OF YAPTON

Drawing Title

POTENTIAL CYCLE LINKAGES TO BARNHAM - OPTION 1

Client

LANDLINK ESTATES/
GLEESON STRATEGIC

Scale

1:5000 @A1

Date

NOV 17

Designed

MS

Drawn

MS

Checked

TDM

Approved

RJH

Job No

14-111

Drawing No

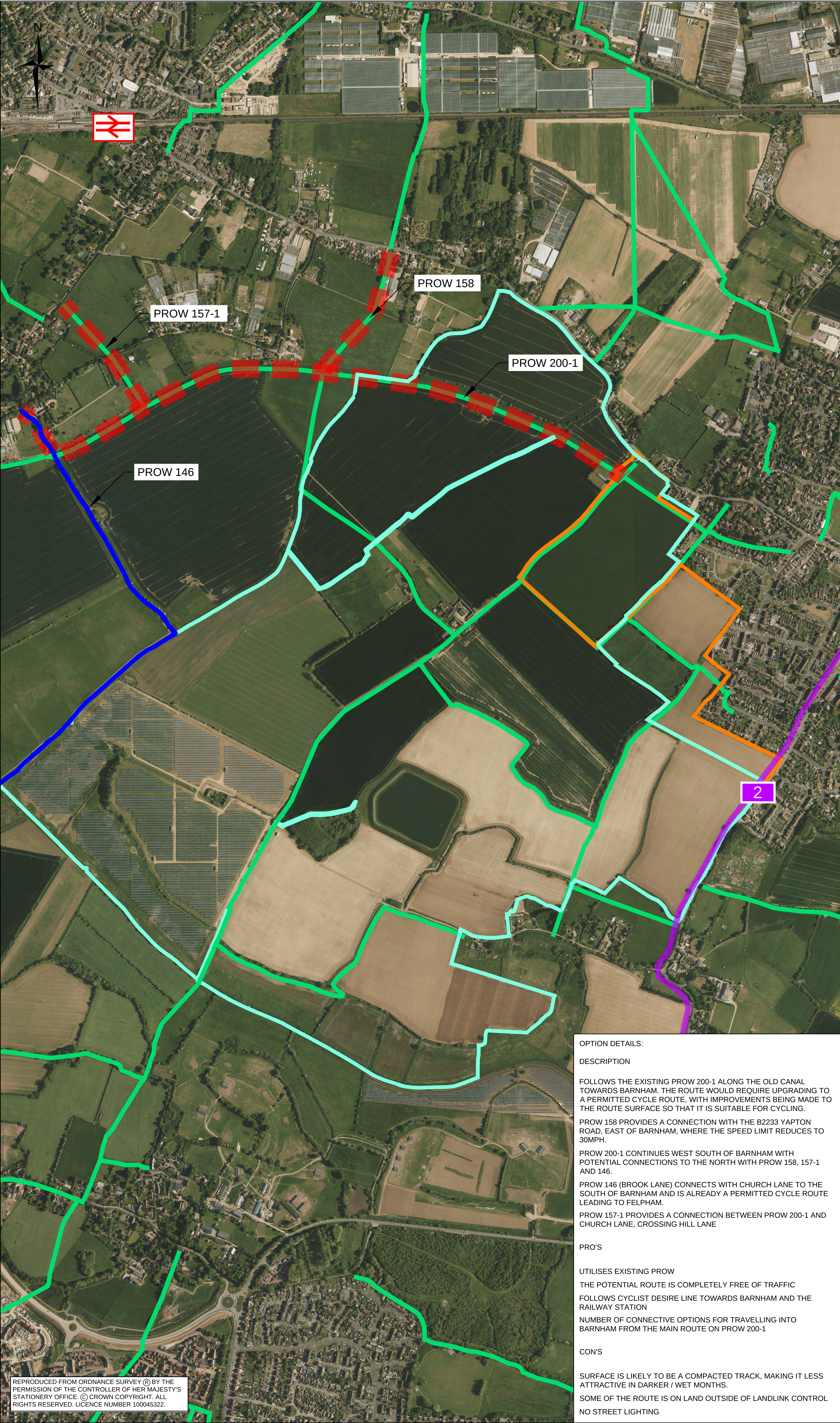
FIGURE 1

Rev

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P:\14-111 - Land West of Bisham Road, Yaptan\Tech\Acad\Drawings\Figures\Footway Connections\14-111 Fig 1 Potential Footway Connections.dwg

ARUN DISTRICT COUNCIL V182170UT



NOTES

KEY

EXISTING PUBLIC RIGHTS OF WAY (FOOTPATHS)

EXISTING NATIONAL CYCLE ROUTE

POTENTIAL CONNECTION TO BARNHAM STATION

SITE BOUNDARY

LAND WITHIN LANDLINK OWNERSHIP

PROW 146 - PERMITTED CYCLE ROUTE

OPTION DETAILS:

DESCRIPTION

FOLLOWS THE EXISTING PROW 200-1 ALONG THE OLD CANAL TOWARDS BARNHAM. THE ROUTE WOULD REQUIRE UPGRADING TO A PERMITTED CYCLE ROUTE, WITH IMPROVEMENTS BEING MADE TO THE ROUTE SURFACE SO THAT IT IS SUITABLE FOR CYCLING.

PROW 158 PROVIDES A CONNECTION WITH THE B2233 YAPTON ROAD, EAST OF BARNHAM, WHERE THE SPEED LIMIT REDUCES TO 30MPH.

PROW 200-1 CONTINUES WEST SOUTH OF BARNHAM WITH POTENTIAL CONNECTIONS TO THE NORTH WITH PROW 158, 157-1 AND 146.

PROW 146 (BROOK LANE) CONNECTS WITH CHURCH LANE TO THE SOUTH OF BARNHAM AND IS ALREADY A PERMITTED CYCLE ROUTE LEADING TO FELPHAM.

PROW 157-1 PROVIDES A CONNECTION BETWEEN PROW 200-1 AND CHURCH LANE, CROSSING HILL LANE

PRO'S

UTILISES EXISTING PROW

THE POTENTIAL ROUTE IS COMPLETELY FREE OF TRAFFIC

FOLLOWS CYCLIST DESIRE LINE TOWARDS BARNHAM AND THE RAILWAY STATION

NUMBER OF CONNECTIVE OPTIONS FOR TRAVELLING INTO BARNHAM FROM THE MAIN ROUTE ON PROW 200-1

CON'S

SURFACE IS LIKELY TO BE A COMPACTED TRACK, MAKING IT LESS ATTRACTIVE IN DARKER / WET MONTHS.

SOME OF THE ROUTE IS ON LAND OUTSIDE OF LANDLINK CONTROL

NO STREET LIGHTING

Rev

Amendments

Drn

Chk

App

Date

Scale

Date

Designed

MS

Drawn

Checked

Approved

RJH

Job No

Drawing No

Rev

ODYSSEY

Tuscany House
White Hart Lane
Basingstoke
Hampshire RG21 4AF

Telephone: 01256 331144
Fax: 01256 331134
E: info@odysseyconsult.co.uk
W: www.odysseyconsult.co.uk

Job Title

LAND SOUTH WEST OF YAPTON

Drawing Title

POTENTIAL CYCLE LINKAGES TO BARNHAM - OPTION 2

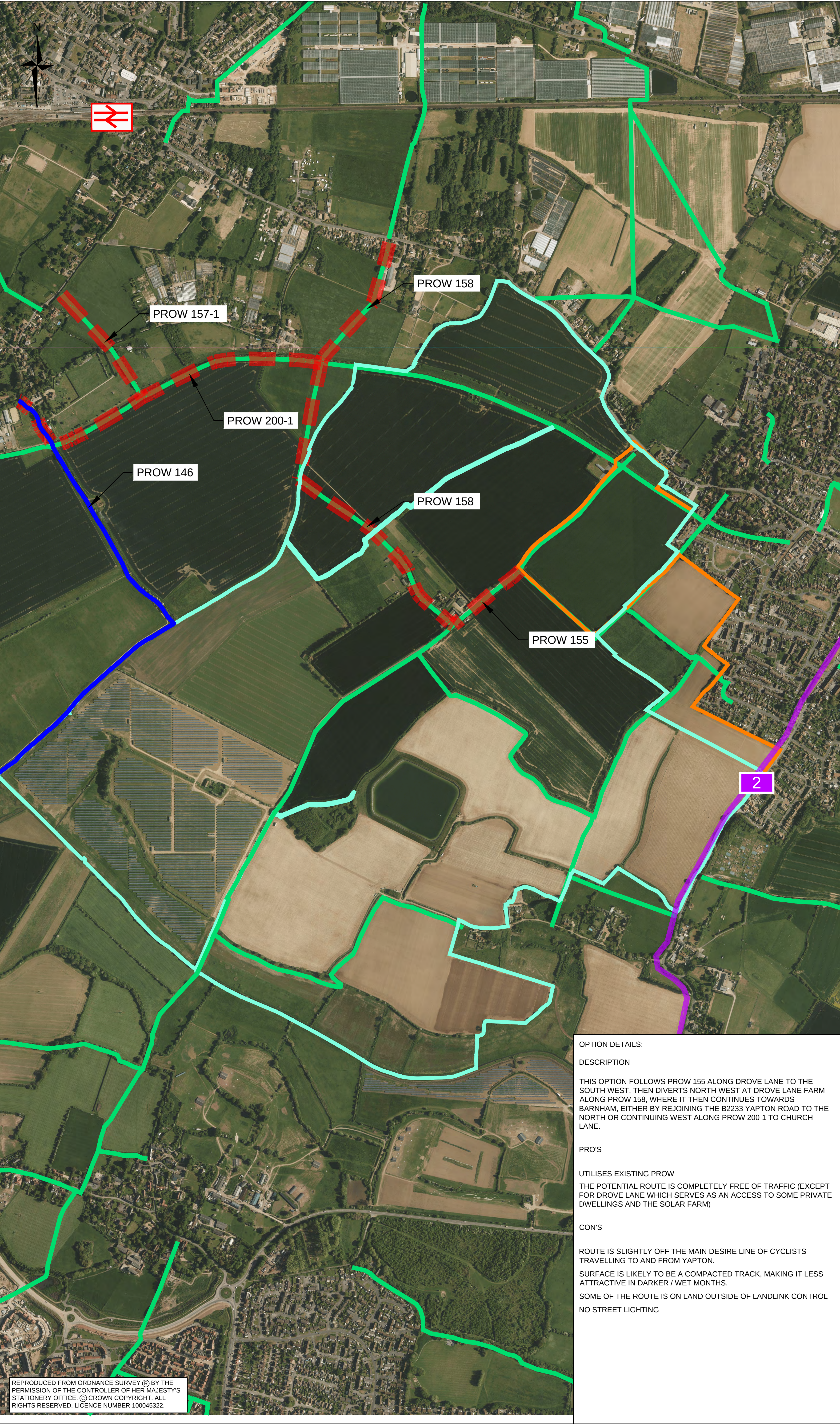
Client

LANDLINK ESTATES/
GLEESON STRATEGIC

14-111

FIGURE 2

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NOTES

KEY

EXISTING PUBLIC RIGHTS OF WAY (FOOTPATHS)

EXISTING NATIONAL CYCLE ROUTE

POTENTIAL CONNECTION TO BARNHAM STATION

SITE BOUNDARY

LAND WITHIN LANDLINK OWNERSHIP

PROW 146 - PERMITTED CYCLE ROUTE

OPTION DETAILS:

DESCRIPTION

THIS OPTION FOLLOWS PROW 155 ALONG DROVE LANE TO THE SOUTH WEST, THEN DIVERTS NORTH WEST AT DROVE LANE FARM ALONG PROW 158, WHERE IT THEN CONTINUES TOWARDS BARNHAM, EITHER BY REJOINING THE B2233 YAPTON ROAD TO THE NORTH OR CONTINUING WEST ALONG PROW 200-1 TO CHURCH LANE.

PRO'S

UTILISES EXISTING PROW
THE POTENTIAL ROUTE IS COMPLETELY FREE OF TRAFFIC (EXCEPT FOR DROVE LANE WHICH SERVES AS AN ACCESS TO SOME PRIVATE DWELLINGS AND THE SOLAR FARM)

CON'S

ROUTE IS SLIGHTLY OFF THE MAIN DESIRE LINE OF CYCLISTS TRAVELLING TO AND FROM YAPTON.
SURFACE IS LIKELY TO BE A COMPACTED TRACK, MAKING IT LESS ATTRACTIVE IN DARKER / WET MONTHS.
SOME OF THE ROUTE IS ON LAND OUTSIDE OF LANDLINK CONTROL
NO STREET LIGHTING

Rev

Amendments

Drn

Chk

App

Date

Telephone: 01256 331144
Fax: 01256 331134
E: info@odysseyconsult.co.uk
W: www.odysseyconsult.co.uk

Job Title

LAND SOUTH WEST OF YAPTON

Drawing Title

POTENTIAL CYCLE LINKAGES TO BARNHAM - OPTION 3

Client

LANDLINK ESTATES/
GLEESON STRATEGIC

Scale

1:5000 @A1

Date

NOV 17

Designed

MS

Drawn

MS

Checked

TDM

Approved

RJH

Job No

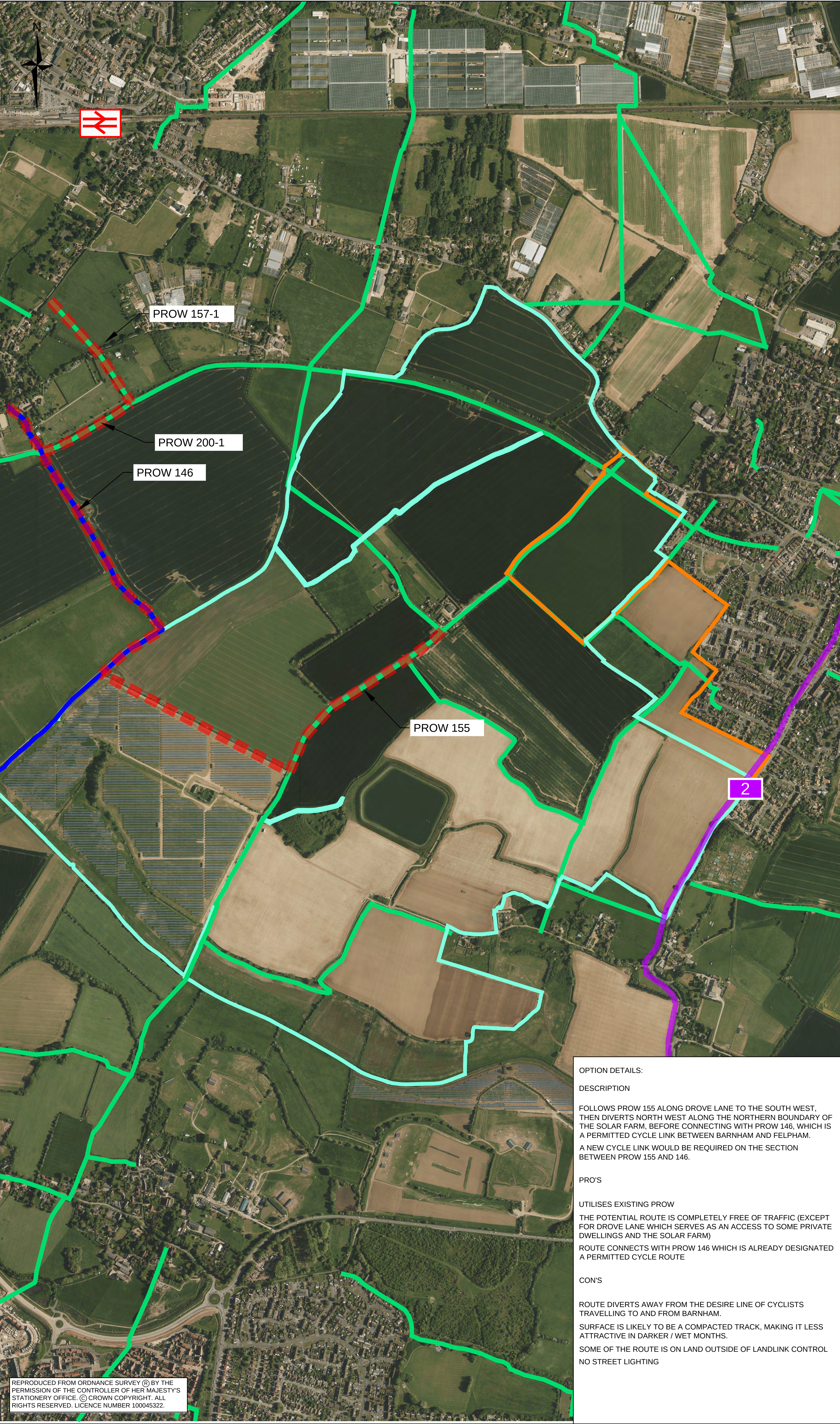
14-111

Drawing No

FIGURE 3

Rev

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NOTES

KEY

EXISTING PUBLIC RIGHTS OF WAY (FOOTPATHS)

EXISTING NATIONAL CYCLE ROUTE

POTENTIAL CONNECTION TO BARNHAM STATION

SITE BOUNDARY

LAND WITHIN LANDLINK OWNERSHIP

PROW 146 - PERMITTED CYCLE ROUTE

OPTION DETAILS:

DESCRIPTION

FOLLOWS PROW 155 ALONG DROVE LANE TO THE SOUTH WEST, THEN DIVERTS NORTH WEST ALONG THE NORTHERN BOUNDARY OF THE SOLAR FARM, BEFORE CONNECTING WITH PROW 146, WHICH IS A PERMITTED CYCLE LINK BETWEEN BARNHAM AND FELPHAM.
A NEW CYCLE LINK WOULD BE REQUIRED ON THE SECTION BETWEEN PROW 155 AND 146.

PRO'S

UTILISES EXISTING PROW
THE POTENTIAL ROUTE IS COMPLETELY FREE OF TRAFFIC (EXCEPT FOR DROVE LANE WHICH SERVES AS AN ACCESS TO SOME PRIVATE DWELLINGS AND THE SOLAR FARM)
ROUTE CONNECTS WITH PROW 146 WHICH IS ALREADY DESIGNATED A PERMITTED CYCLE ROUTE

CON'S

ROUTE DIVERTS AWAY FROM THE DESIRE LINE OF CYCLISTS TRAVELLING TO AND FROM BARNHAM.
SURFACE IS LIKELY TO BE A COMPACTED TRACK, MAKING IT LESS ATTRACTIVE IN DARKER / WET MONTHS.
SOME OF THE ROUTE IS ON LAND OUTSIDE OF LANDLINK CONTROL
NO STREET LIGHTING

Rev	Amendments	Drm	Chk	App	Date

ODYSSEY

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Job Title

LAND SOUTH WEST OF YAPTON

Drawing Title

POTENTIAL CYCLE LINKAGES TO BARNHAM - OPTION 4

Client

LANDLINK ESTATES/
GLEESON STRATEGIC

Scale	Date	Designed
1:5000 @A1	NOV 17	MS
Drawn	Checked	Approved
MS	TDM	RJH
Job No	Drawing No	Rev
14-111	FIGURE 4	

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APPENDIX I

S106 Extracts

Planning Application Reference:	Y/81/10/
Document Type:	Section 106 agreement
Date of Agreement:	17th November 2011

NB: Above text in bold to be included in free text field.

Check thoroughly for **telephone numbers/email addresses & signatures** and block.
Check **maps** for signatures and block.

Please return original to s106 Monitoring Officer

- 4.3 The planning obligations specified within this Deed shall only bind the Applicant or the Owners if and to the extent that the Secretary of State or his Inspector decides that the obligation complies with the requirements of the provisions of Regulation 122 of the Community Infrastructure Regulations 2010 such that the said obligation may lawfully be taken into account in considering whether to grant planning permission.
- 4.3 Subject to clause 4.3 above, the parties have agreed to enter into this Deed with the intention that the obligations contained herein are planning obligations and may be enforced by the ADC and/or the WSCC against the Owners, the Applicant and their respective successors in title.

5. CONTRIBUTIONS PAYABLE

- 5.1 Subject as aforesaid, the Owner and the Applicant undertake with the ADC and WSCC to make to WSCC the payments specified in the table below, for the purpose therein specified on the Due Date:

<u>Payee</u>	<u>Payment Due Date (the "Due Date")</u>	<u>Amount</u>	<u>Statutory Function/Purpose</u>
<u>The "Libraries Contribution"</u>			
WSCC	Before occupation of the 85 th dwelling	£32,301	To meet the increase in need for library facilities arising from the development
<u>The "Fire Service Contribution"</u>			
WSCC	Before occupation of the first dwelling	£3,943	To meet the increase in need for fire service facilities arising from the development
<u>The "Highway Contributions"</u>			
WSCC	Before Commencement of the Development	£10,000	For the provision of two new bus shelters at two locations on Bumdell Road, as indicated on drawing number 2009/1082/015
	Before first occupation	£20,000	For the provision of real time information systems at the locations of two bus stops on Bumdell Road, as indicated on drawing number 2009/1082/015
	Before first occupation	£25,000	To provide on-carriageway cycle improvements on the B2233 between Yapton village centre and Barnham railway station.
	Before first occupation	£15,000	For monitoring of the Travel plan.

From: Simon Davis
Sent: 31 August 2017 11:14
To: Planning.Responses
Subject: FW: Y/44/17 Land at Stakers Farm, North End Road, Yapton, Arundel, West Sussex

Further WSCC Comments. Copy pls.

Kind Regards

Simon J.Davis MRTPI | Principal Planning Officer, Planning Department, Directorate of Place, Arun District Council |
Location: 1st Floor, Arun Civic Centre, Maitravers Road, Littlehampton, BN17 5LF
Internal: 37874 | External: +44 (0) 1903 737874 | E-mail: simon.davis@arun.gov.uk

Visit Arun's web site at www.arun.gov.uk



Save the environment - think before you print.

From: Stephen Gee [REDACTED]
Sent: 25 August 2017 10:15
To: Simon Davis
Subject: RE: Y/44/17 Land at Stakers Farm, North End Road, Yapton, Arundel, West Sussex

Simon,

The level of contribution has been calculated as £110,530* to be put towards the implementation of a cycling improvements between Barnham and Littlehampton (scheme ID 82). Whilst Arun hasn't adopted TAD the methodology has been developed to comply with CIL tests.

This would provide a valuable link from the development site via Yapton Road to Barnham station and Main Road, Burndell Road and Yapton Road towards Littlehampton and facilitate sustainable transport.

The contribution is requested in line with the Yapton Neighbourhood Plan, Emerging Arun Local Plan and the NPPF.

*This has been calculated using the pro rata rate for the adjoining application Y/93/14 in which a £60,000 was sought for 38 homes giving a total of £1579 per dwelling.

Regards

Stephen

From: Simon Davis [<mailto:Simon.Davis@arun.gov.uk>]
Sent: 22 August 2017 17:24

To: Stephen Gee

Subject: FW: Y/44/17 Land at Stakers Farm, North End Road, Yapton, Arundel, West Sussex

Hi Stephen,

I see that you were copied in. Can you respond to me re their comment on the cycle improvements.

Kind Regards

Simon J Davis MRTPI | Principal Planning Officer, Planning Department, Directorate of Place, Arun District Council |
Location: 1st Floor, Arun Civic Centre, Maitravers Road, Littlehampton, BN17 5LF
Internal: 37874 | External: +44 (0) 1903 737874 | E-mail: simon.davis@arun.gov.uk

Visit Arun's web site at www.arun.gov.uk



Save the environment - think before you print.

From: Chris Barker [REDACTED]

Sent: 22 August 2017 15:28

To: Simon Davis

Cc: [REDACTED]

Subject: RE: Y/44/17 Land at Stakers Farm, North End Road, Yapton, Arundel, West Sussex

Simon

Following on from your email and our subsequent telephone conversation I can confirm that we would agreeable to the WSCC contributions as set out on 24 July, subject to confirmation from WSCC that they meet the relevant tests of The CIL Regulations 2010.

We would also positively review the requirements for contributions towards 'cycling improvements between Barnham and Littlehampton', however until WSCC provide the details of such works and indeed the level of contribution sought we cannot comment further.

We would also be happy to review potential pedestrian access provision through the site to the adjoining land through the Reserved Matters submissions, subject to any legal issues that may result.

I hope that we can move these matters forward, so you can instruct your legal team to commence drafting of the S.106 Agreement as discussed.

Any queries please contact me.

Kind Regards

Chris Barker MATP MRTPI

Managing Director

ECE Planning

Collaboration with Sandy Rendel Architects scoops two RIBA regional awards. Click [here](#) to read more.



Brooklyn Chambers 11 Goring Road Worthing West Sussex BN12 4AP

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From: Simon Davis [mailto:Simon.Davis@arun.gov.uk]
Sent: 22 August 2017 14:42
To: Chris Barker [REDACTED]
Subject: FW: Y/44/17 Land at Stakers Farm, North End Road, Yapton, Arundel, West Sussex

Chris,

Please see below.

Kind Regards

From: Simon Davis
Sent: 22 August 2017 14:41
To: Sam Sykes [REDACTED]
Subject: FW: Y/44/17 Land at Stakers Farm, North End Road, Yapton, Arundel, West Sussex

Dear Sam,

Please see attached comments from WSCC Highways & Strategic Development.

You will see that Highways request a contribution towards the provision of cycling improvements between Barnham and Littlehampton (scheme ID 82). I understand that your submitted TS (section 8.18) acknowledges that such a contribution is likely.

WSCC haven't specified an amount as apparently you are still to reply to the rights of way officer at WSCC (Jonathan Perks) and that any RoW improvements here could be taken of the amount, WSCC would ask for (whilst not directly applied using TAD as a starting point for the calculation).

Please advise whether you will contribute to the cycle improvements and also how much the contribution will be. Please also advise whether you agree to the other education/library/fire contributions.

Kind Regards

Simon J Davis MRTPI | Principal Planning Officer, Planning Department, Directorate of Place, Arundel District Council |
Location: 1st Floor, Arundel Civic Centre, Maitravers Road, Littlehampton, BN17 5LF
Internal: 37874 | External: +44 (0) 1903 737874 | E-mail: simon.davis@arun.gov.uk

Visit Arundel's web site at www.arundel.gov.uk



Save the environment - think before you print.

From: Stephen Gee [REDACTED]
Sent: 22 August 2017 11:54
To: Planning.Responses; Simon Davis; Simon Davis
Subject: Y/44/17 Land at Stakers Farm, North End Road, Yapton, Arundel, West Sussex

Simon,
Please find attached comments on planning application ref Y/44/17/OUT.

Regards

Stephen

Stephen Gee|Consultant (Senior Planner) County Highways (Development Management),
Planning Services, West Sussex County Council | Location: Ground Floor, Northleigh, County
Hall, Chichester, PO19 1RH | [REDACTED]

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NLPG UPRN 100062237016

DX 57406 Littlehampton

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