



Cockley Hill Lane, Kirkheaton

Transport Statement

May 2021

Project number 702C

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Quality Management

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Contents

1.0	Introduction	4
2.0	Existing Situation	5
3.0	Development Proposals	8
4.0	Transport Policy.....	9
5.0	Transport Sustainability.....	12
6.0	Traffic Impact	15
7.0	Conclusion	23

Appendices

Appendix A	Site Location Plan
Appendix B	Cycle and Pedestrian Catchment Plan
Appendix C	Proposed Site Layout
Appendix D	TRICs Data for the current application
Appendix E	Traffic Flow Figures

1.0 Introduction

- 1.1.1 Paragon Highways have been appointed to prepare this Transport Statement relating to the proposed development on land off the Cockley Hill Lane, Kirkheaton in the district of Kirklees. Appendix A shows the site location in relation to the local highway network.
- 1.1.2 The proposals are now to construct a new residential development of 95no. new dwellings, with the majority being served from a new access point off the Cockley Hill Lane. A private drive arrangement will be provided to the east on Cockley Hill Lane to serve 3no. dwellings. Drainage, highway layout, street lighting and highway construction will be provided generally in accordance with the Kirklees Councils current Highway Design Guidance.
- 1.1.3 Parking and turning spaces within the site are proposed to allow vehicles to enter and leave in a forward gear.
- 1.1.4 The site is currently open land and is situated on the southern side of Cockley Hill Lane opposite the Cockley Hill Meadows development. The land generally falls away from the highway and also east to west.

2.0 Existing Situation

2.1.1 Site Description

2.1.2 The site is currently used as grazing land by a local farmer and uses an existing access off Cockley Hill Lane to gain access to same. The site lies about 300m to the south east of the centre retail area of Kirkheaton which is located about 4 km east of Huddersfield.

2.1.3 The site is a bounded by Cockley Hill Lane to the north east, open fields to the south and the rear of the properties on Town Road and Knowle Road to the north and west respectively. Present access to the site is located on the outside of a sweeping bend on Cockley Hill Lane.



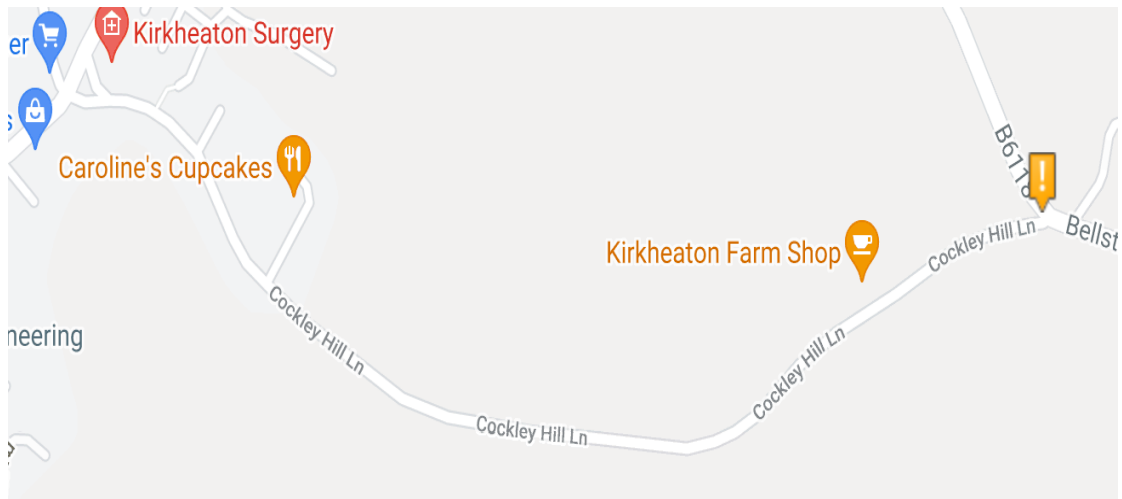
2.1.4 There are several public rights of way in and around the site, as shown the map above, and any routes within the site will be acknowledged within the overall design.

2.1.5 Local Highway Network

- 2.1.6 The site will gain access from Cockley Hill Lane which is a quiet road linking the centre of Kirkheaton and Town Road to the west with the B6118 to the east. It also provides access to a number of dwellings and farm buildings / fields which front it as well as several residential culs-de-sac.
- 2.1.7 Cockley Hill Lane when travelling north eastwards (towards the B6118) past the main built-up frontage becomes more of a rural route with a footway on its northern flank only which terminates some 400 metres or so beyond the application site. From this point Cockley Hill Lane has grass verges to both sides up its junction with the B6118. The speed limit on the site frontage is 30mph, however, this changes to 40mph approximately 200 metres or so to the east of the application site.
- 2.1.8 On the site frontage Cockley Hill Lane is lit to side road standards and is lightly trafficked even at the recognised peak times. The footway on this side of Cockley Hill Lane terminates at the built-up frontage to the west.
- 2.1.9 Town Road is a main route through Kirkheaton and is a bus route with traffic calming along its length (in the form of speed ramps) and footways and street lighting to both sides. There are several minor residential estate roads served by Town Road (and Heaton Moor Road). All these roads have footways and street lighting to modern standards and are subject to a 30-mph speed limit.
- 2.1.10 Heaton Moor Road joins the B6118 at a signal-controlled crossroads. The B6118 provides links to the primary road network of the A62 at Cooper Bridge and the A642 at Grange Moor.
- 2.1.11 The A62 provides access to the motorway network and the centres of Huddersfield and Leeds although traffic from the development site travelling to Huddersfield will more likely head along Town Road and Shop Lane towards Waterloo and Dalton. The A642 provides a link to Horbury and Wakefield and the A637 through Flockton allows access to the M1 at West Bretton.

2.1.12 Road Traffic Accidents

2.1.13 The personal injury accident records for the five-year period up to December 2020 within the search area along Cockley Hill Lane and its junctions with the B6118 and Town Road have been obtained from the Crashmap website and are included at Appendix B. The study area is shown below:



2.1.14 As can be noted from the above, within this substantial search area, there has only been 1no. recorded injury accident and this was close to the junction of Cockley Hill Lane with the B6118. This incident involved a private car and a light goods vehicle. This accident occurred in May 2017 during daylight hours and with dry road surface conditions. The car driver was in the act of turning left when the lgv collided with same resulting in slight injuries to the driver of the car.

2.1.15 Given the good injury accident record within the search area there would appear to be no indication of a road safety problem that would warrant treatment or be a cause for concern at any particular junction as a result of the increase peak hour flows as a result of the development proposals.

3.0 Development Proposals

3.1.1 Proposed Development

3.1.2 The proposals are to erect 95no. dwellings with the majority being served from a simple priority junction which will be located to the west of the Cockley Hill Meadows cul-de-sac located opposite the site. There will also be a separate private drive serving just 3no. dwellings situated to the east.

3.1.3 The development will comprise of detached, semi-detached and terrace properties with 2 - 4 bedrooms.

3.1.4 The internal road layout, drainage, street lighting and highway construction will be provided in general accordance with Kirklees Councils current Highway Guide.

3.1.5 Secure cycle storage facilities will be provided within the site, the actual type of provision is to be agreed with the LPA through the Travel Plan.

3.1.6 Access

3.1.7 The main site will be accessed as mentioned above and will be formed off the Cockley Hill Lane in the form of a simple priority junction with 2.4 x tangential visibility splays in both directions due to the sites location on the outside of a sweeping bend. This will equate to a minimum of 2.4 x 48.5 metres to the north east and 2.4 x 46.6 metres to the south east for emerging drivers.

3.1.8 A private drive arrangement will be formed to the east of the main site entrance to serve just 3no. dwellings.

3.1.9 Parking Provision

3.1.10 The proposals are to provide a minimum of 2no. parking spaces per dwelling.

3.1.11 The applicant / developer is also committed to provide charging points for electric vehicles on all properties to ensure that if private car journeys are necessary then they have the opportunity to be made by electric vehicles. The location of the EVC points is shown on the layout drawing prepared by JRP.

4.0 Transport Policy

4.1.1 The revised National Planning Policy Framework was published in February 2019 and sets out the Government's planning policies for England and how these are expected to be applied. It recommends 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. Within this context, applications for development, with regards to Transport, should:

Considerations	Proposals
Consider the potential impacts of the development on the transport network	This matter will be dealt with as part of Section 3 – Development Proposals and Section 6 – Traffic Impact
Provide opportunities to promote cycling, walking and public transport use are identified	The layout of the site will allow access for all potential users
Patterns of movement, streets, parking and other transport considerations are integral to the design of schemes and contribute to making high quality places	On-site parking will be provided as part of the development proposals
Allow for the efficient delivery of goods, and access by service and emergency vehicles	The site access and internal circulation area will allow for safe access within the site and suitable access and egress onto the major road
Include within the design for the charging of plug-in and ultra-low emission vehicles in safe and convenient locations	Charging points for plug-in vehicles will be provided as part of the overall parking scheme

4.1.2 Paragraph 110 of the NPPF states that applications for development should:

- Give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas.
- Second, so far as possible, to facilitating access to high quality public transport with layouts that maximise the catchment area for bus or other public transport services and appropriate facilities that encourage public transport use.

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- Address the needs of people with disabilities and reduced mobility in relation to all modes of transport.
 - Create places that are safe, secure and attractive which minimise the scope for conflicts between pedestrians, cyclists and vehicles; avoid unnecessary street clutter and respond to local character and design standards.
 - Allow for the efficient delivery of goods, and access by service and emergency vehicles.
 - Be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.

4.1.3 When considering transport policy compliance for planning applications, the main thrust of local, regional and national policy is that new development should be conveniently accessible by a range of sustainable transport modes, including public transport, cycling and walking. This policy therefore sets out the framework for this Transport Statement and the project's compliance with the policy objectives. Further details of the relevant policy documents are set out below.

4.1.4 Also, the former guidance within PPG 13 is still useful as a reference in relation to cycling and walking distances relative to commuting.

4.1.5 Local Transport Plan

4.1.6 The current Local Transport Plan is the third West Yorkshire Local Transport Plan (LTP3) which covers the period of 2011 to 2026. The key objectives of the LTP3 include:

- To improve access to jobs, education and other key services for everyone.
- To reduce delays to the movement of people and goods.
- To improve safety for all highway users.
- To limit transport emissions of air pollutants, greenhouse gases and noise.
- To improve the condition of the transport infrastructure.

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- 4.1.7 The LTP sets out the walking and cycling strategy for West Yorkshire to encourage more people to use these modes of travel to help reduce the dependency on private cars. With regards to cycling provision within development proposals, the WYCS seeks to ensure that new development proposals are located and designed to be cycle friendly and adopt guidelines for cycle parking standards. With regards to walking, the LTP seeks to improve the local environment to make walking more attractive by enhancing safety, security and environmental quality.
- 4.1.8 The LTP also sets out a bus strategy and seeks to increase patronage for all category of bus passenger and modal shift towards the bus and away from the private car.
- 4.1.9 Kirklees Local Plan**
- 4.1.10 Local transport policy is set out in the Kirklees Council’s Local Plan covering the period of 2013 to 2031.
- 4.1.11 Policies relating to Transport are contained within Section 10 of the Local Plan.
- 4.1.12 Policy LP20 of Sustainable Travel states, “New development will be located in accordance with the spatial development strategy to ensure the need to travel is reduced and that essential travel needs can be met by forms of sustainable transport other than the private car.”
- 4.1.13 Policy LP21 of Highways and Access states, “Proposals shall demonstrate that they can accommodate sustainable modes of transport and be accessed effectively and safely by all users.”
- 4.1.14 Policies LP22 and LP24 relate to parking provision and design for new developments.
- 4.1.15 The location of the development is in a sustainable central position close to good bus routes and rail links, provides a suitable access arrangement and design. Therefore, the proposals generally meet the requirement of the Local and National Policy.

5.0 Transport Sustainability

5.1.1 Walking

5.1.2 The catchment areas for the preferred maximum walking distance of 2km is shown on the plan at Appendix B. The site is well placed for residents to walk to the numerous facilities placed in and around the centre of Kirkheaton, along with public transport facilities.

5.1.3 There is a library, vehicle repair shop, GP surgery and schools for children ranging in age from 3-11. There are also numerous places of worship, two community centres, a doctor's surgery and a pharmacy. Additionally, there are public houses, takeaways, a mini supermarket and hair and beauty salons within walking distance of the site. The settlements of Gawthorpe, Tandem and Hillside are also within walking distance of the proposed development.

5.1.4 Footways and street lighting within the local built-up area are to a standard commensurate with the sites semi-rural location. Assessment of the local pedestrian routes is included within a separate document – The Pedestrian Qualitative Audit that accompanies this report.

5.1.5 Cycling

5.1.6 With regards to cycling, the former guidance in PPG 13: Transport states that, "Cycling also has the potential to substitute for short car trips, particularly those under 5km and to form part of a longer journey by public transport." The plan at Appendix B shows the 5km cycle catchment area from the site. Within the cycle catchment are the additional areas of Lepton, Grange Moor, Fenay Bridge, Almondbury, Huddersfield town centre, Mirfield, Hartshead, Bradley, Brackenhall and Moldgreen. Employment opportunities exist within cycling distance of the site at Tandem, the significant commercial development fronting the Leeds Road (A62) and the industrial sites at Lower Hopton.

5.1.7 It is acknowledged that the terrain in the area is quite steep in places, however, this would not prevent the experienced cyclist from accessing their places of work by this form of transport.

5.1.8 Public Transport

5.1.9 The site is well located in terms of access to public transport. There are two railway stations within cycling distance and bus stops less than 200 metres from the site access. The stop at Kirkheaton Terminus has the benefit of a passenger shelter, and both the westbound Shop Lane stop and northbound Moor Side Road stop have the benefit of flagpole and timetable cases. Further information regarding the bus services in the vicinity of the development site are provided below.

Stop No.	Stop Location	Route	Frequency Mon – Sat	Frequency Sundays & Lates
261	Moor Side Road, Kirkheaton Terminus, Shop Lane	Huddersfield, Dalton, Upper Heaton, Mirfield, Norristhorpe, Heckmondwike, Liversedge, Cleckheaton Bus Station	60 mins	Last service at 19.31 4 x services at 10.46, 12.46, 14.46, 16.46
262	Moor Side Road, Kirkheaton Terminus, Shop Lane	Huddersfield Bus Station, Dalton, Kirkheaton, Upper Heaton, Kirkheaton Terminus, Dalton, Huddersfield	2 x services at 20.14, 22.14	Last service at 22.14 2 x services at 19.31, 20.26

Table 1: Bus Services

5.1.10 As can be identified from the table above, there is a regular bus service that provides access to many local settlements and to the bus stations at both Cleckheaton and Huddersfield. Therefore, it is considered that these bus services will generally provide a suitable alternative to the private car in line with current Government directives. The main service (261) provides access to the Huddersfield bus station which is less than 400 metres from the Huddersfield Rail station. This provides the opportunity to extend multi modal travel throughout the local area and beyond.

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- 5.1.11 The railway station at Deighton is approximately 2.2km to the north west of the development site and provides regular services to local towns and cities plus Scarborough and Manchester Piccadilly. It has the benefit of 4 cycle stands which are covered by CCTV.
- 5.1.12 As can be identified from the train services summarised above, there are good train links available with frequent services to Huddersfield, Manchester, Scarborough, Wigan and Leeds. It is evident that the site benefits from being in close proximity to a good frequency of public transport links for travelling around the area with opportunities for multi-modal travel.

6.0 Traffic Impact

6.1.1 Existing Traffic

6.1.2 The sites current use generates a very low number of traffic movements; therefore, these trips will not be used in any determination of future traffic movements associated with the sites proposed use.

6.1.3 Proposed Traffic

6.1.4 The proposed development is for 95no. new dwellings. To determine the anticipated traffic generation from the new development, it has been necessary to interrogate data from the national TRICS database.

6.1.5 Table 4A provides the typical peak hour trip rates (morning peak 0800-0900 hours and evening peak 1700-1800 hours) and likely traffic generation of the proposed 95 no. new houses has been assessed. The TRICS data is shown at Appendix E.

	<u>Morning Peak</u>			<u>Evening Peak</u>		
	<u>ARRIVE</u>	<u>DEPART</u>	<u>TOTAL</u>	<u>ARRIVE</u>	<u>DEPART</u>	<u>TOTAL</u>
<u>Trip Rate</u>	0.114	0.327	0.441	0.270	0.156	0.426
<u>Generated Trips</u>	10.83	31.06	41.89	25.65	14.82	40.47

6.1.6 As can be identified from the trip rates and generation above, a development of 95no. dwellings would generate 42 trips in the am peak and 41 trips in the pm peak hours, respectively. It should be noted that given the sites sustainable merits in relation to public transport, with the bus stops being available within a short walking distance of the site, the actual trip rate for the proposed development could be less than that predicated by TRICS.

6.1.7 The developments access proposes suitable visibility splays, as required by the sites previous planning approval, in both directions at the point of access onto Cockley Hill Lane. It is therefore considered that the proposed junction layout of the site access will provide a safe arrangement and will not cause any delays to through traffic, given the increase in traffic onto the local network.

6.1.8 Committed Development

6.1.9 The Local Highway Authority have requested that the cumulative traffic impact of two other separate residential developments in the Dalton and Kirkheaton areas of Huddersfield be assessed in relation to trip rates. These are all subject of two separate planning applications by the same developer.

6.1.10 The development proposals referred to above are as follows:

6.1.11 Ref: 2015 / 90430 – Land at Crossley Lane, Dalton – 126 dwellings

6.1.12 Ref: 2014 / 92535 – Land at Shop Lane, Kirkheaton – 48 dwellings

6.1.13 This Company has previously prepared the Transport Assessments / Statements for these developments. This Statement draws upon the data submitted in these documents and provides further information and analyses to inform the Officers of the Highway Authority (Kirklees Metropolitan Council – KMC) of the details of the predicted cumulative impact of the developments on the local road network.

6.1.14 Impact of Individual Developments

6.1.15 In this section of the report the details of the separate developments and the individual impact of the proposals on the local highway network are outlined.

6.1.16 The development proposals referred to above are as follows:

Ref: 2015 / 90430 – Land at Crossley Lane, Dalton – 126 dwellings

Ref: 2014 / 92535 – Land at Shop Lane, Kirkheaton – 48 dwellings

Plus the current development proposals.

6.1.17 Crossley Lane, Dalton - The proposed residential development is two areas of land off Crossley Lane in Dalton near Huddersfield.

6.1.18 The proposals were to demolish the existing industrial buildings on the land and construct circa 126 dwellings served from several access points off Crossley Lane and Cold Royd Lane.

6.1.19 The site comprises two areas of land to the north and south of Crossley Lane both with several access points on to the highway. The land was previously occupied by several industrial / commercial buildings amounting to a total of 15,785sqm.

6.1.20 The uses of these buildings ranged from offices, manufacturing to warehousing. For the purposes of this assessment, we have only considered the uses of B1c / B2 industrial and B8 warehousing to determine the potential traffic generated by existing permitted uses on the site.

6.1.21 Table 5 of that transport assessment (TA) submitted with the application showed that the total traffic generated by the existing land uses is as shown below:

B1 / B2 / B8	Total Existing Traffic		
	Arrive	Departure	Two Way
AM Peak	38	10	48
PM Peak	9	33	42

6.1.22 Table 6 of the transport assessment submitted with the application showed that the total traffic generated by the proposed development of 126 dwellings would be as below:

Residential Dwellings	Proposed Traffic – 126 Houses		
	Arrive	Departure	Two Way
AM Peak	20	53	73
PM Peak	49	29	78

6.1.23 The net impact of the development is therefore given below:

	Net traffic Flows		
	Arrive	Departure	Two Way
AM Peak	-18	+43	+25
PM Peak	+40	-4	+36

6.1.24 The transport assessment concluded that whilst there is a predicted slight increase in traffic flows on the local road network when compared to the current use on the site, there will be no material impact on the operation of the site access junctions and the adjacent road network. This increase would also be offset by the removal of the large goods vehicles generated by the present use of the site.

6.1.25 Land at Shop Lane, Kirkheaton. The proposals are to construct a new residential development of circa 48 dwellings, with 42 new dwellings served off a new access point off Shop Lane on the former textile mill site, and the remaining 6 new dwellings located on land off Orchard Road, served from a new access.

6.1.26 Table 4A of the transport statement (TS) submitted with this application showed that the total traffic generated by the proposed development of 48 dwellings would be as below:

Residential Development	Proposed Traffic – 48 Houses		
	Arrive	Departure	Two Way
AM Peak	7	20	27
PM Peak	19	11	30

6.1.27 The transport statement concluded that the anticipated increase in the level of traffic generated by the proposed development would not be discernible from the daily fluctuations in flows that could be expected on the highway network. The increase in traffic as a result of the development can be offset by the previous use of the main site as a large textile mill.

6.1.28 Current application at Cockley Hill Lane, Kirkheaton. The proposals are to construct a residential development of 95no. dwellings on land to the south western side of Cockley Hill Lane.

6.1.29 The estimated rounded up trip rates for the 95no.dwellings is shown below:

Residential Development	Proposed Traffic – 95 Houses		
	Arrive	Departure	Two Way
AM Peak	11	31	42
PM Peak	26	15	41

6.1.30 This transport statement concluded that the anticipated increase in the level of traffic generated by the proposed development would not be discernible from the daily fluctuations in flows that could be expected on the highway network.

6.1.31 Further information was provided to Officers at the time of the 2014 application showed that the two-way traffic flows during the AM and PM peak hours along Cockley Hill Lane were 171 and 203 vehicles respectively. This demonstrates that the level of traffic using this road is low and would remain low even with the addition of traffic from the proposed development.

6.1.32 Cumulative Impact Assessment

6.1.33 In this section the distribution of traffic from each of the developments is determined and then added together to show the cumulative impact of the proposals in the separate applications include the current proposals.

6.1.34 Land at Crossley Lane, Dalton. The transport assessment (TA) submitted with this application outlined that from previous surveys carried out on Crossley Lane it has been shown that 78% and 35% of traffic in the AM and PM peak periods respectively travels towards the Sutton Avenue junction and of this traffic some 25% has been found to use Sutton Avenue.

6.1.35 Using the above figures, the distribution of the existing traffic from the site in the AM and PM peak periods are shown in Figures 2 and 3 respectively in Appendix E. Figures 4 and 5 respectively show the similar predicted flows for the proposed residential development and the net impact of the proposals are shown in Figures 6 and 7.

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- 6.1.36 The highest net increase in traffic predicted is in on Long Lane with 21 and 20 vehicles in the AM and PM peak hours respectively. It is known from examination of previous applications in the area that a proportion of this traffic will use Broad Lane to access the A629 Wakefield Road but some will also use Ridgeway to access the northern areas of Huddersfield.
- 6.1.37 The predicted net changes in traffic flows are considered to be low (less than 2% even if all traffic is assumed to use Broad Lane – surveys in reports prepared for previous applications in the vicinity show two-way flows of 1083 and 1165 vehicles in AM and PM peak hours respectively on Broad Lane) and no more than could be reasonably expected from day-to-day fluctuations in traffic flows on the network. In addition, any increases would be primarily cars whereas these would be offset by the removal of the heavy goods vehicle movements that occur at present.
- 6.1.38 Land at Shop Lane, Kirkheaton. Use has been made of the 2011 Census for the location of residence and place of work to determine the potential distribution of traffic from the development site. Any local authorities or lower output areas with nil trips were discounted.
- 6.1.39 Using the above methodology, the distribution of the predicted traffic from the site in the AM and PM peak periods are shown in Figures 8 and 9 respectively in Appendix E to this report.
- 6.1.40 The predicted increase in traffic flows is considered to be low and no more than could be reasonably expected from day-to-day fluctuations in traffic flows on the network. In addition, any increases would be primarily cars whereas these would be offset by the previous use of the main site as a large textile mill.
- 6.1.41 Current development proposals at Cockley Hill Lane, Kirkheaton. Again, use has been made of the 2011 Census for the location of residence and place of work to determine the potential distribution of traffic from the development site. Any local authorities or lower output areas with nil trips were discounted. These journeys have then been allocated to the routes shown in the table in Appendix E with some local interpretation based on current surveyed directional split of movements at junctions.
- 6.1.42 Using the above methodology, the distribution of the predicted traffic from the site in the AM and PM peak periods are shown in Figures 10 and 11 respectively in Appendix E to this report.

6.1.43 The predicted increase in traffic flows is considered to be low and no more than could be reasonably expected from day-to-day fluctuations in traffic flows on the network.

6.1.44 Cumulative Impact of the Three Applications

6.1.45 The traffic flows in Figures 6 to 11 can be added together to give the predicted cumulative net increase in traffic in the AM and PM peak hours as shown in Figures 12 and 13 respectively.

6.1.46 The highest cumulative net increase in traffic predicted is on Long Lane with a worst-case scenario of 44 and 45 vehicles (using the old data) in the AM and PM peak hours respectively. It is known from examination of previous applications in the area that a proportion of this traffic will use Broad Lane to access the A629 Wakefield Road, but some will also use Ridgeway to access the northern areas of Huddersfield.

6.1.47 The predicted cumulative net changes in traffic flows are considered to be low (about 4% or so even if all traffic is assumed to use Broad Lane – surveys in reports prepared for previous applications in the vicinity show two-way flows of circa 1003 and 1160 vehicles in AM and PM peak hours respectively on Broad Lane) and no more than could be reasonably expected from day-to-day fluctuations in traffic flows on the network. In addition, any increases would be primarily cars whereas these would be offset by the removal of the heavy goods vehicle movements that occur or could occur at present from two of the sites.

6.1.48 The other road that will see some increase in traffic is Waterloo Road with an extra 11 and 25 vehicles in the AM and PM peak hours respectively. Using information from previous applications in the area shows that these flows are less than 2% and 4% of the present flows on Waterloo Road (surveys in reports prepared for previous applications in the vicinity show two-way flows of 715 and 723 vehicles in AM and PM peak hours respectively on Waterloo Road). In addition, any increases would be primarily cars whereas these would be offset by the removal of the heavy goods vehicle movements that occur or could occur at present from two of the sites.

6.1.49 This analysis demonstrates that the anticipated increase in the level of traffic generated by any one of the three developments would not be discernible from the daily fluctuations in flows that could be expected on the strategic highway network. The same can be said of the cumulative impact of all three developments.

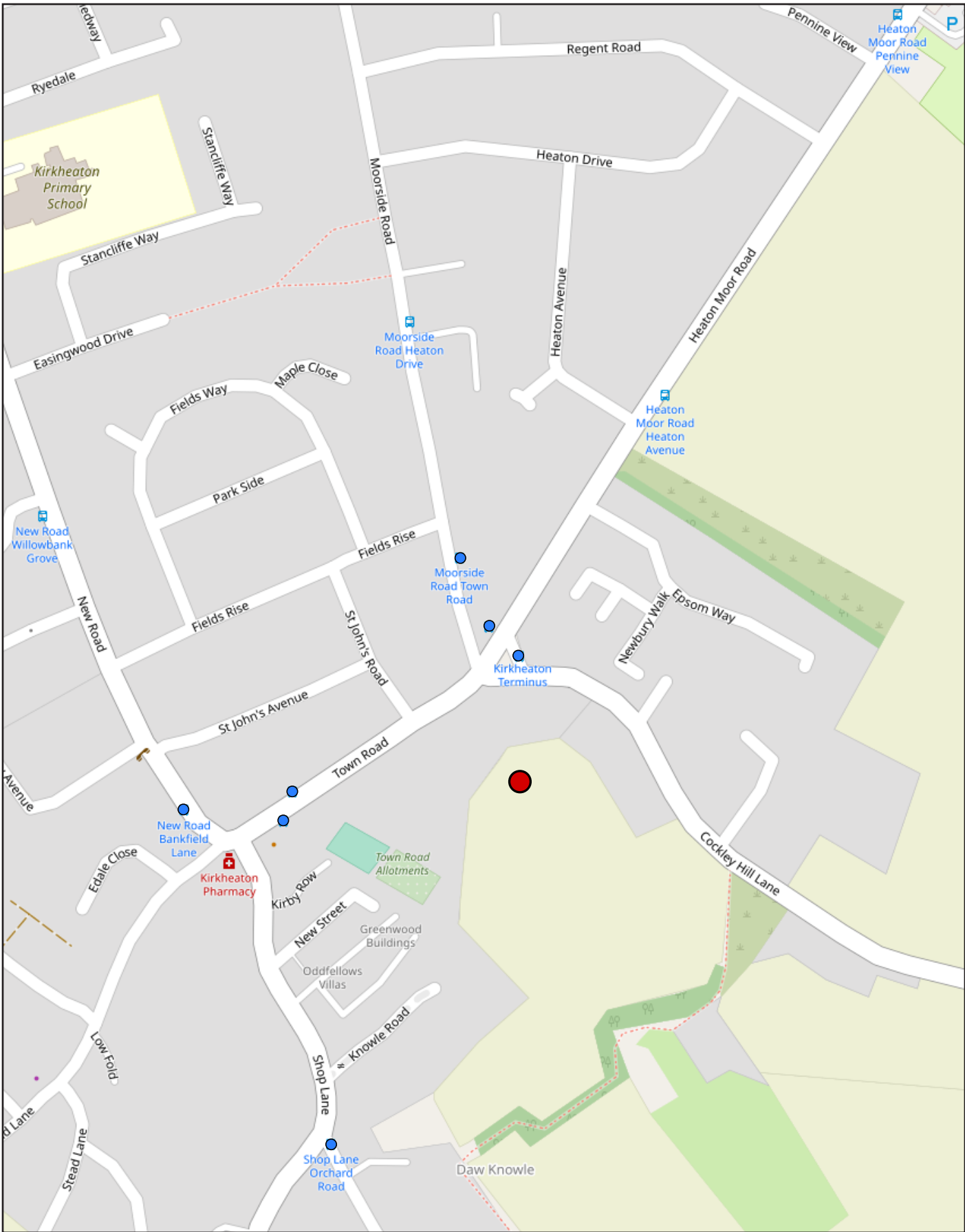
- 6.1.50 Therefore, it is considered that the level of traffic generated by all three proposals can be accommodated and will have no material impact on the safe operation of the local highway and will not significantly add to any congestion at the peak times on the local network.

7.0 Conclusion

- 7.1.1 The proposals are now to construct a new residential development of 95no. new dwellings, with the majority being served from a new access point off the Cockley Hill Lane. A private drive arrangement will be provided to the east on Cockley Hill Lane to serve 3no. dwellings. Drainage, highway layout, street lighting and highway construction will be provided generally in accordance with the Kirklees Councils current Highway Design Guidance.
- 7.1.2 The analyses demonstrate that the anticipated increase in the level of traffic generated by any one of the three developments would not be discernible from the daily fluctuations in flows that could be expected on the strategic highway network. Similarly, the cumulative impact of all three developments would have the same effect. Therefore, the level of traffic generated by all three proposals can be accommodated and will have no material impact on the safe operation of the local highway and will not significantly add to any congestion at the peak times on the local network.
- 7.1.3 It is therefore concluded that the traffic impact from any one of the three developments referred to in this report and the cumulative impact from them all together are considered acceptable. Therefore, there are no highway safety or efficiency reasons why planning consent for the proposed developments should not be granted.

Appendix A

Site Location Plan



Legend:

- Site Location
- Closest Unique Bus Stops



Unit 6 The Office Campus
 Paragon Business Park
 Wakefield Wf1 2uy

Appendix B

Cycle & Pedestrian Catchment Plan



Legend:

- 5km Cycle Catchment
- 2km Walking Catchment
- Site Location

Appendix C

Proposed Site Layout



- PLANNING LAYOUT LAYERS KEY:**
- 1800mm BRICK WALL
 - 1800mm BRICK WALL & FENCE
 - - - 1800mm TIMBER FENCE
 - ~ 600mm KNEE HIGH RAIL
 - RETAINING WALLS (LOCATIONS AND DESIGN TO BE CONFIRMED BY CONSULTING ENGINEER)
 - ELECTRIC VEHICLE CHARGING POINT
 - G REAR ACCESS GATE
 - BIN COLLECTION POINTS
 - * AFFORDABLE DENOTATION
 - GRASSED AREAS (FRONT GARDEN)
 - GRASSED AREAS (REAR GARDEN)
 - BLOCK PAVING
 - EXISTING TREES RETAINED
 - EXISTING TREES REMOVED
 - ▨ DRAINAGE EASEMENT
 - - - EXISTING PUBLIC RIGHT OF WAY KIR/8/40
 - - - PROPOSED DIVERSION OF PUBLIC RIGHT OF WAY KIR/8/40
 - - - SITE BOUNDARY

SCHEDULE OF ACCOMMODATION:

AFFORDABLE UNITS	HOUSETYPE	AMOUNT
	TYPE C2 2 Storey Semi/Ter 2 Bed	6 No.
	TYPE R 2 Storey Semi/Ter 3 Bed	5 No.
	TOTAL	11 No.
OPEN MARKET UNITS	HOUSETYPE	AMOUNT
	TYPE C2 2 Storey Semi/Ter 2 Bed	2 No.
	TYPE R 2 Storey Semi/Ter 3 Bed	4 No.
	TYPE S 2 Storey Semi/Det 3 Bed	6 No.
	TYPE F 2 Storey Semi 3 Bed	14 No.
	TYPE Q 2 Storey Det 3 Bed	6 No.
	TYPE J 2.5 Storey Semi 4 Bed	2 No.
	TYPE G 2 Storey Det 4 Bed	2 No.
	TYPE P 2 Storey Det 4 Bed	4 No.
	TYPE E 2 Storey Det 4 Bed	6 No.
	TOTAL	45 No.
	COMBINED TOTAL	57 No.

REV A 15.04.21 ADDITIONAL INFORMATION ADDED TO SITE LAYOUT AND SITE LAYOUT KEY AND ACCOMMODATION SCHEDULES UPDATED SD LM

REV	DATE	DESCRIPTION	BY	CHECK



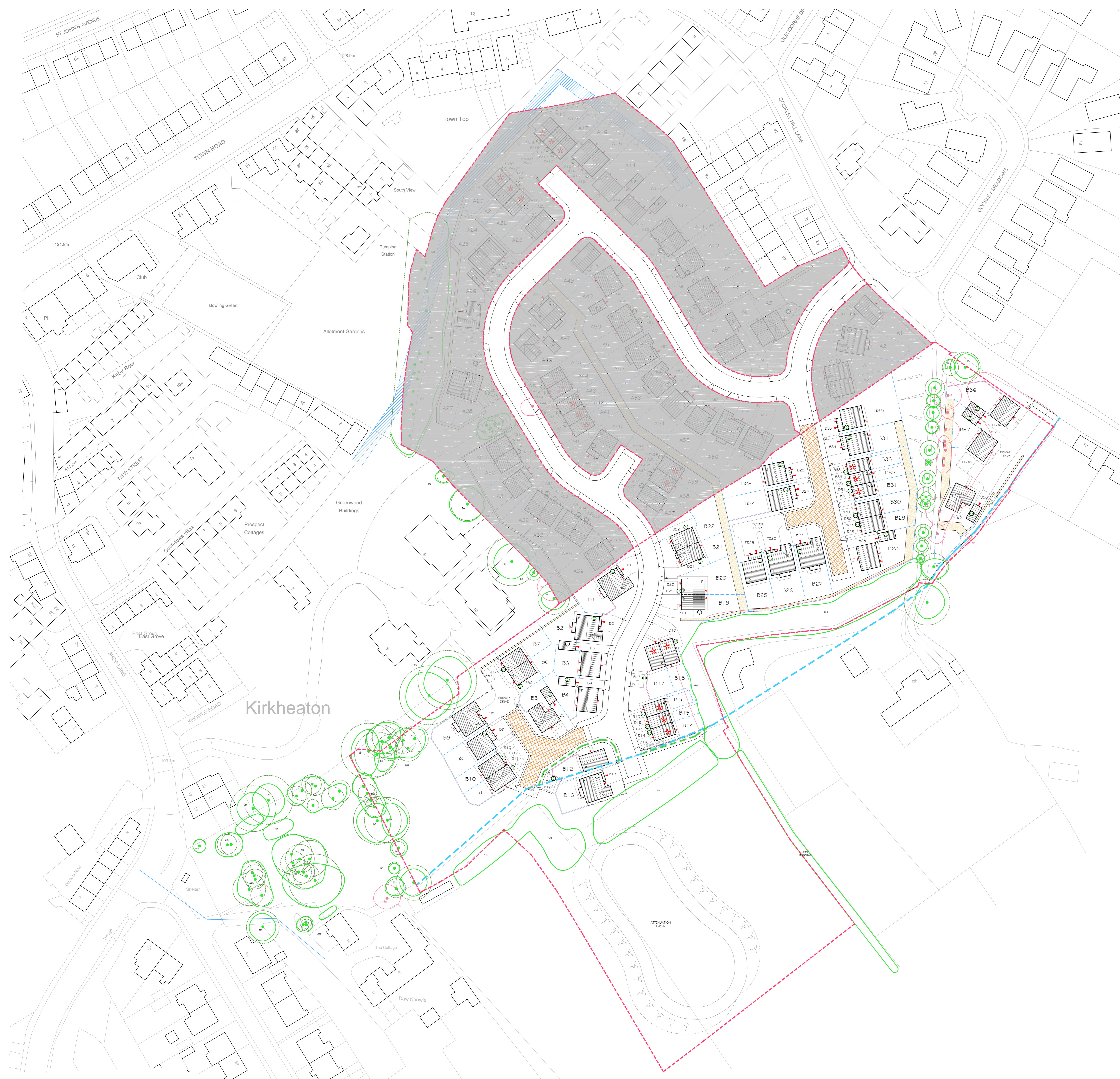
CLIENT: HARTLEY PROPERTIES
 PROJECT: PROPOSED RESIDENTIAL DEVELOPMENT @ COCKLEY HILL LANE, KIRKHEATON
 DRAWING: PROPOSED SITE LAYOUT

DRAWING NUMBER: P19-5336.01 A
 SCALE @ A1: 1:500
 DATE: FEB 21



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01 / PROPOSED SITE LAYOUT



PLANNING LAYOUT LAYERS KEY:

- 1800mm BRICK WALL
- 1800mm BRICK WALL & FENCE
- - - 1800mm TIMBER FENCE
- - - 600mm KNEE HIGH RAIL
- RETAINING WALLS (LOCATIONS AND DESIGN TO BE CONFIRMED BY CONSULTING ENGINEER)
- ELECTRIC VEHICLE CHARGING POINT
- G REAR ACCESS GATE
- BIN COLLECTION POINTS
- ✱ AFFORDABLE DENOTATION
- GRASSED AREAS (FRONT GARDEN)
- GRASSED AREAS (REAR GARDEN)
- BLOCK PAVING
- EXISTING TREES RETAINED
- EXISTING TREES REMOVED
- DRAINAGE EASEMENT
- - - EXISTING PUBLIC RIGHT OF WAY KIR/8/40
- - - PROPOSED DIVERSION OF PUBLIC RIGHT OF WAY KIR/8/40
- - - SITE BOUNDARY

SCHEDULE OF ACCOMMODATION:

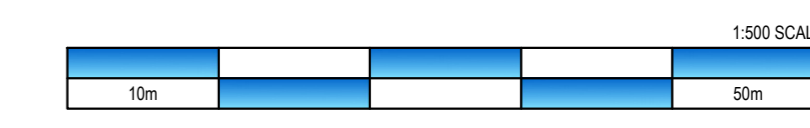
AFFORDABLE UNITS		HOUSETYPE	AMOUNT
	TYPE C2	2 Storey Semi/Ter 2 Bed	6 No.
	TYPE R	2 Storey Semi/Ter 3 Bed	2 No.
TOTAL			8 No.
OPEN MARKET UNITS		HOUSETYPE	AMOUNT
	TYPE R	2 Storey Semi/Ter 3 Bed	1 No.
	TYPE S	2 Storey Semi/Ter/Det 3 Bed	2 No.
	TYPE F	2 Storey Semi 3 Bed	6 No.
	TYPE Q	2 Storey Det 3 Bed	6 No.
	TYPE J	2.5 Storey Semi 4 Bed	2 No.
	TYPE G	2 Storey Det 4 Bed	2 No.
	TYPE P	2 Storey Det 4 Bed	5 No.
	TYPE E	2 Storey Det 4 Bed	6 No.
TOTAL			30 No.
COMBINED TOTAL			38 No.

01 / PROPOSED SITE LAYOUT



CLIENT: HARTLEY PROPERTIES
 PROJECT: PROPOSED RESIDENTIAL DEVELOPMENT @ COCKLEY HILL LANE, KIRKHEATON
 DRAWING: PROPOSED SITE LAYOUT

DRAWING NUMBER: P19-5336-03
 SCALE @ A1: 1:500
 DATE: FEB 21



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Appendix D

TRICs Data for the current application

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
	NF NORFOLK	2 days
	SF SUFFOLK	2 days
05	EAST MIDLANDS	
	LN LINCOLNSHIRE	1 days
	NR NORTHAMPTONSHIRE	1 days
06	WEST MIDLANDS	
	WK WARWICKSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	3 days
	SY SOUTH YORKSHIRE	1 days
08	NORTH WEST	
	CH CHESHIRE	2 days
	MS MERSEYSIDE	1 days
09	NORTH	
	DH DURHAM	1 days
	TW TYNE & WEAR	1 days

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

Primary 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: No of Dwellings
 Actual Range: 7 to 102 (units:)
 Range Selected by User: 6 to 250 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 25/09/19

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	5 days
Tuesday	5 days
Wednesday	3 days
Thursday	2 days
Friday	1 days
Saturday	1 days

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

Selected survey types:

Manual count	17 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:

Suburban Area (PPS6 Out of Centre)	17
------------------------------------	----

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	17
------------------	----

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 17 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	1 days
5,001 to 10,000	6 days
10,001 to 15,000	2 days
15,001 to 20,000	3 days
20,001 to 25,000	3 days
25,001 to 50,000	2 days

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

Population within 5 miles:

50,001 to 75,000	3 days
75,001 to 100,000	4 days
100,001 to 125,000	1 days
125,001 to 250,000	5 days
250,001 to 500,000	4 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	9 days
1.1 to 1.5	8 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	15 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	17 days
-----------------	---------

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	CA-03-A-05 EASTFIELD ROAD PETERBOROUGH	DETACHED HOUSES		CAMBRI D G E S H I R E
	Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total No of Dwellings:		28	
	<i>Survey date: MONDAY</i>		<i>17/10/16</i>	<i>Survey Type: MANUAL</i>
2	CH-03-A-08 WHITCHURCH ROAD CHESTER	DETACHED		C H E S H I R E
	BOUGHTON HEATH Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total No of Dwellings:		11	
	<i>Survey date: TUESDAY</i>		<i>22/05/12</i>	<i>Survey Type: MANUAL</i>
3	CH-03-A-11 LONDON ROAD NORTHWICH	TOWN HOUSES		C H E S H I R E
	LEFTWICH Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total No of Dwellings:		24	
	<i>Survey date: THURSDAY</i>		<i>06/06/19</i>	<i>Survey Type: MANUAL</i>
4	DH-03-A-01 GREENFIELDS ROAD BISHOP AUCKLAND	SEMI DETACHED		D U R H A M
	Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total No of Dwellings:		50	
	<i>Survey date: TUESDAY</i>		<i>28/03/17</i>	<i>Survey Type: MANUAL</i>
5	LN-03-A-03 ROOKERY LANE LINCOLN	SEMI DETACHED		L I N C O L N S H I R E
	BOULTHAM Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total No of Dwellings:		22	
	<i>Survey date: TUESDAY</i>		<i>18/09/12</i>	<i>Survey Type: MANUAL</i>
6	MS-03-A-03 BEMPTON ROAD LIVERPOOL	DETACHED		M E R S E Y S I D E
	OTTERSPOOL Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total No of Dwellings:		15	
	<i>Survey date: FRIDAY</i>		<i>21/06/13</i>	<i>Survey Type: MANUAL</i>
7	NF-03-A-01 YARMOUTH ROAD CAISTER-ON-SEA	SEMI DET. & BUNGALOWS		N O R F O L K
	Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total No of Dwellings:		27	
	<i>Survey date: TUESDAY</i>		<i>16/10/12</i>	<i>Survey Type: MANUAL</i>
8	NF-03-A-02 DEREHAM ROAD NORWICH	HOUSES & FLATS		N O R F O L K
	Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total No of Dwellings:		98	
	<i>Survey date: MONDAY</i>		<i>22/10/12</i>	<i>Survey Type: MANUAL</i>
9	NR-03-A-01 BOUGHTON GREEN ROAD NORTHAMPTON	HOUSES		N O R T H A M P T O N S H I R E
	KINGSTHORPE Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total No of Dwellings:		102	
	<i>Survey date: SATURDAY</i>		<i>22/09/12</i>	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

10	NY-03-A-08 NICHOLAS STREET YORK	TERRACED HOUSES		NORTH YORKSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 21 <i>Survey date: MONDAY 16/09/13</i>			
11	NY-03-A-09 GRAMMAR SCHOOL LANE NORTHALLERTON	MIXED HOUSING		NORTH YORKSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 52 <i>Survey date: MONDAY 16/09/13</i>			
12	NY-03-A-13 CATTERICK ROAD CATTERICK GARRISON OLD HOSPITAL COMPOUND	TERRACED HOUSES		NORTH YORKSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 10 <i>Survey date: WEDNESDAY 10/05/17</i>			
13	SF-03-A-04 NORMANSTON DRIVE LOWESTOFT	DETACHED & BUNGALOWS		SUFFOLK
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 7 <i>Survey date: TUESDAY 23/10/12</i>			
14	SF-03-A-07 FOXHALL ROAD IPSWICH	MIXED HOUSES		SUFFOLK
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 73 <i>Survey date: THURSDAY 09/05/19</i>			
15	SY-03-A-01 A19 BENTLEY ROAD DONCASTER BENTLEY RISE	SEMI DETACHED HOUSES		SOUTH YORKSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 54 <i>Survey date: WEDNESDAY 18/09/13</i>			
16	TW-03-A-02 WEST PARK ROAD GATESHEAD	SEMI-DETACHED		TYNE & WEAR
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 16 <i>Survey date: MONDAY 07/10/13</i>			
17	WK-03-A-03 BRESE AVENUE WARWICK GUYS CLIFFE	DETACHED HOUSES		WARWICKSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 23 <i>Survey date: WEDNESDAY 25/09/19</i>			

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	17	37	0.051	17	37	0.213	17	37	0.264
08:00 - 09:00	17	37	0.114	17	37	0.327	17	37	0.441
09:00 - 10:00	17	37	0.120	17	37	0.160	17	37	0.280
10:00 - 11:00	17	37	0.109	17	37	0.125	17	37	0.234
11:00 - 12:00	17	37	0.117	17	37	0.141	17	37	0.258
12:00 - 13:00	17	37	0.153	17	37	0.139	17	37	0.292
13:00 - 14:00	17	37	0.136	17	37	0.141	17	37	0.277
14:00 - 15:00	17	37	0.148	17	37	0.188	17	37	0.336
15:00 - 16:00	17	37	0.224	17	37	0.155	17	37	0.379
16:00 - 17:00	17	37	0.234	17	37	0.156	17	37	0.390
17:00 - 18:00	17	37	0.270	17	37	0.156	17	37	0.426
18:00 - 19:00	17	37	0.216	17	37	0.142	17	37	0.358
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.892			2.043			3.935

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.

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Parameter summary

Trip rate parameter range selected: 7 - 102 (units:)
Survey date range: 01/01/12 - 25/09/19
Number of weekdays (Monday-Friday): 16
Number of Saturdays: 1
Number of Sundays: 0
Surveys automatically removed from selection: 0
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.

Appendix E

Traffic Flows

FIG 2 AM CROSSLEY LANE EXISTING COMMERCIAL

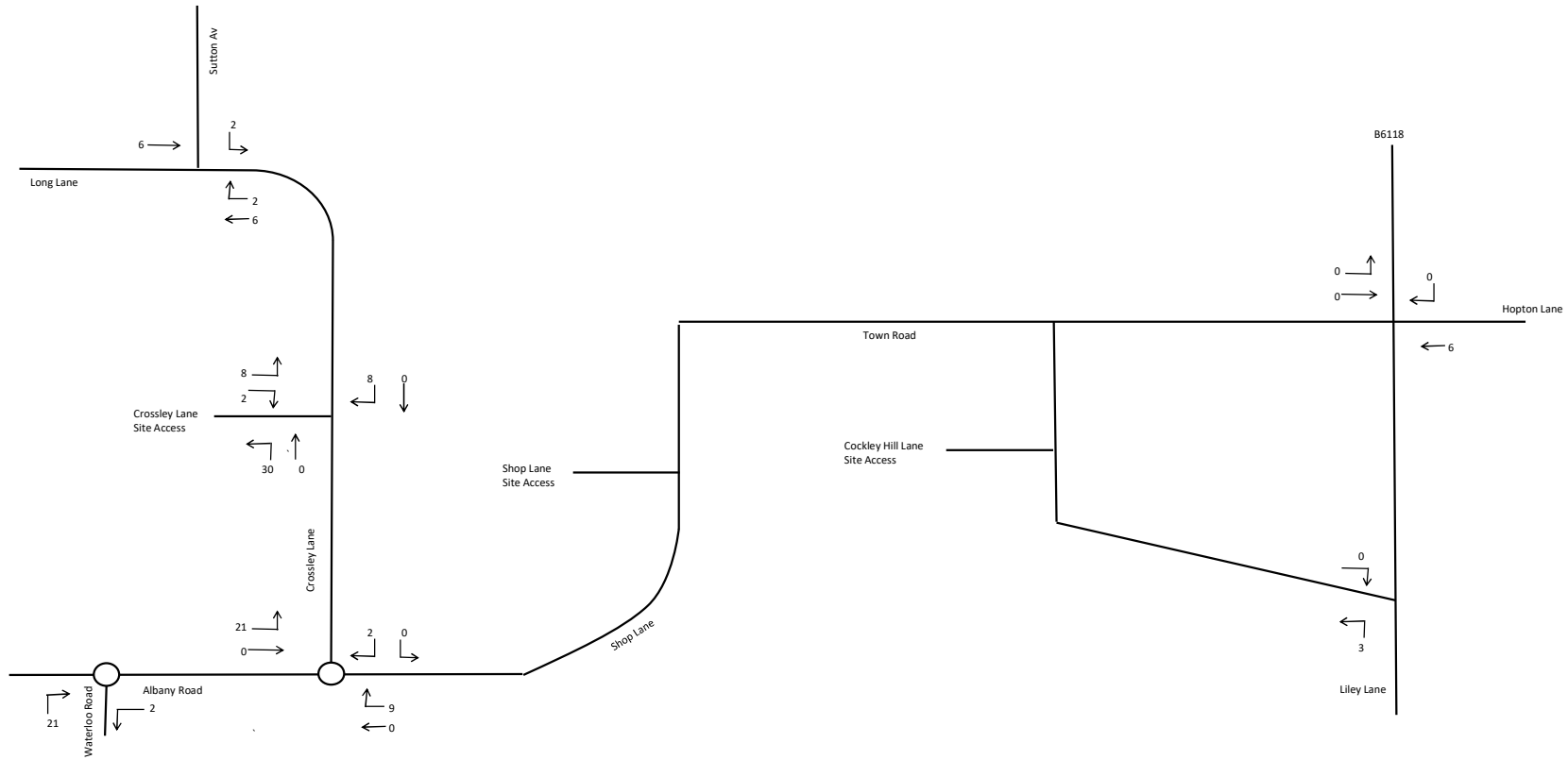


FIG 3 PM CROSSLEY LANE EXISTING COMMERCIAL

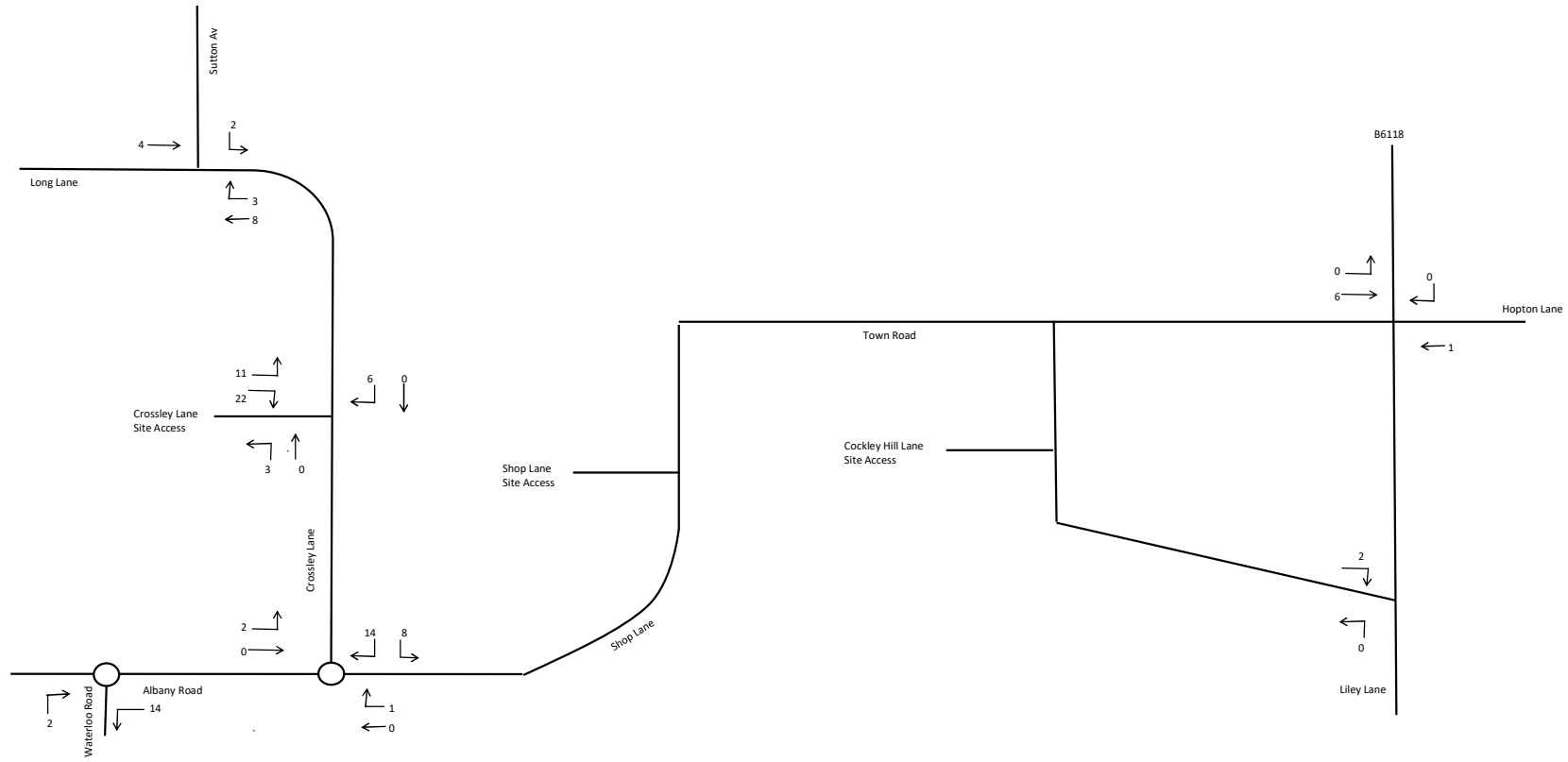


FIG 4 AM CROSSLEY LANE PROPOSED RESIDENTIAL

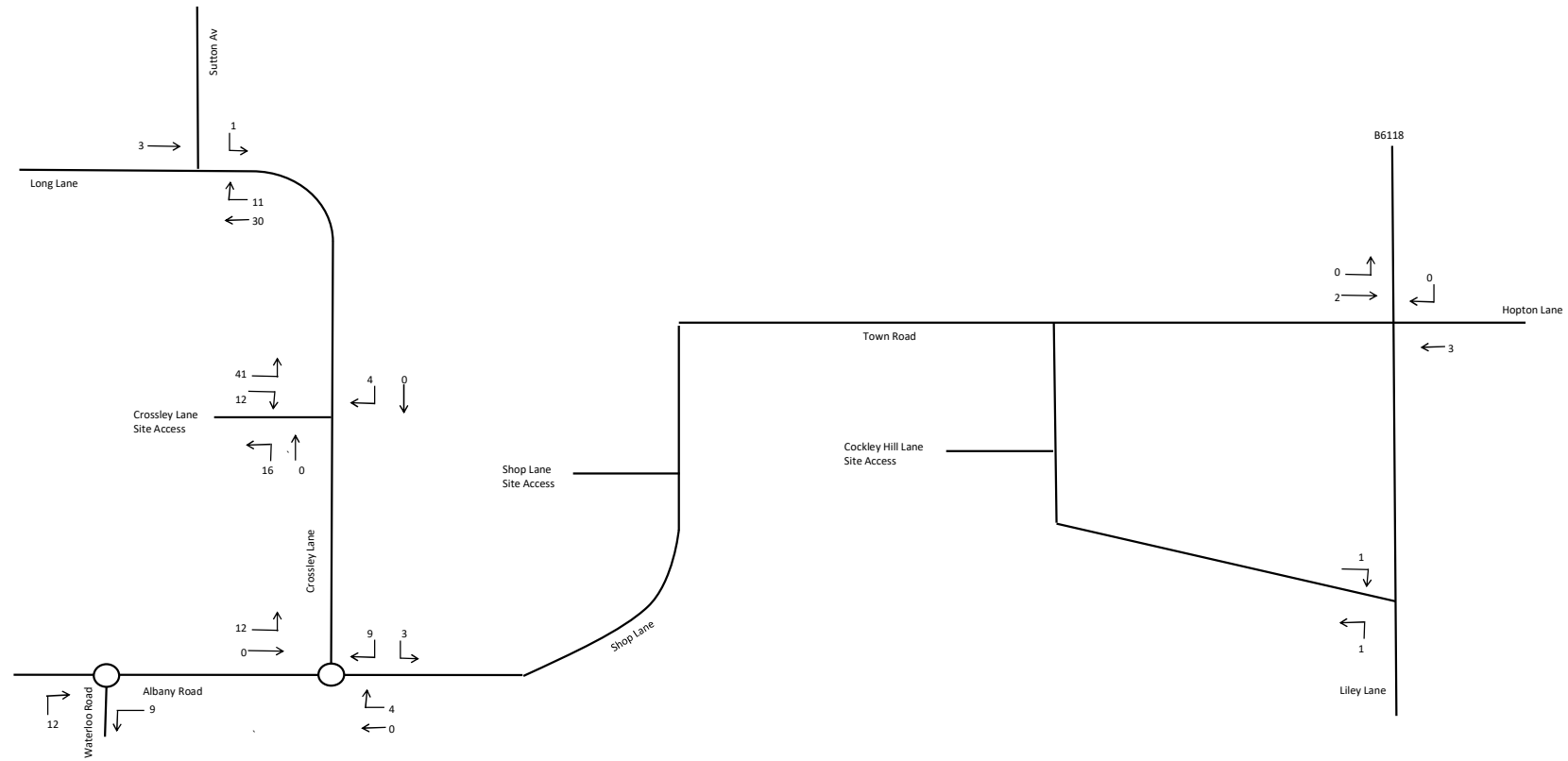


FIG 5 PM CROSSLEY LANE PROPOSED RESIDENTIAL

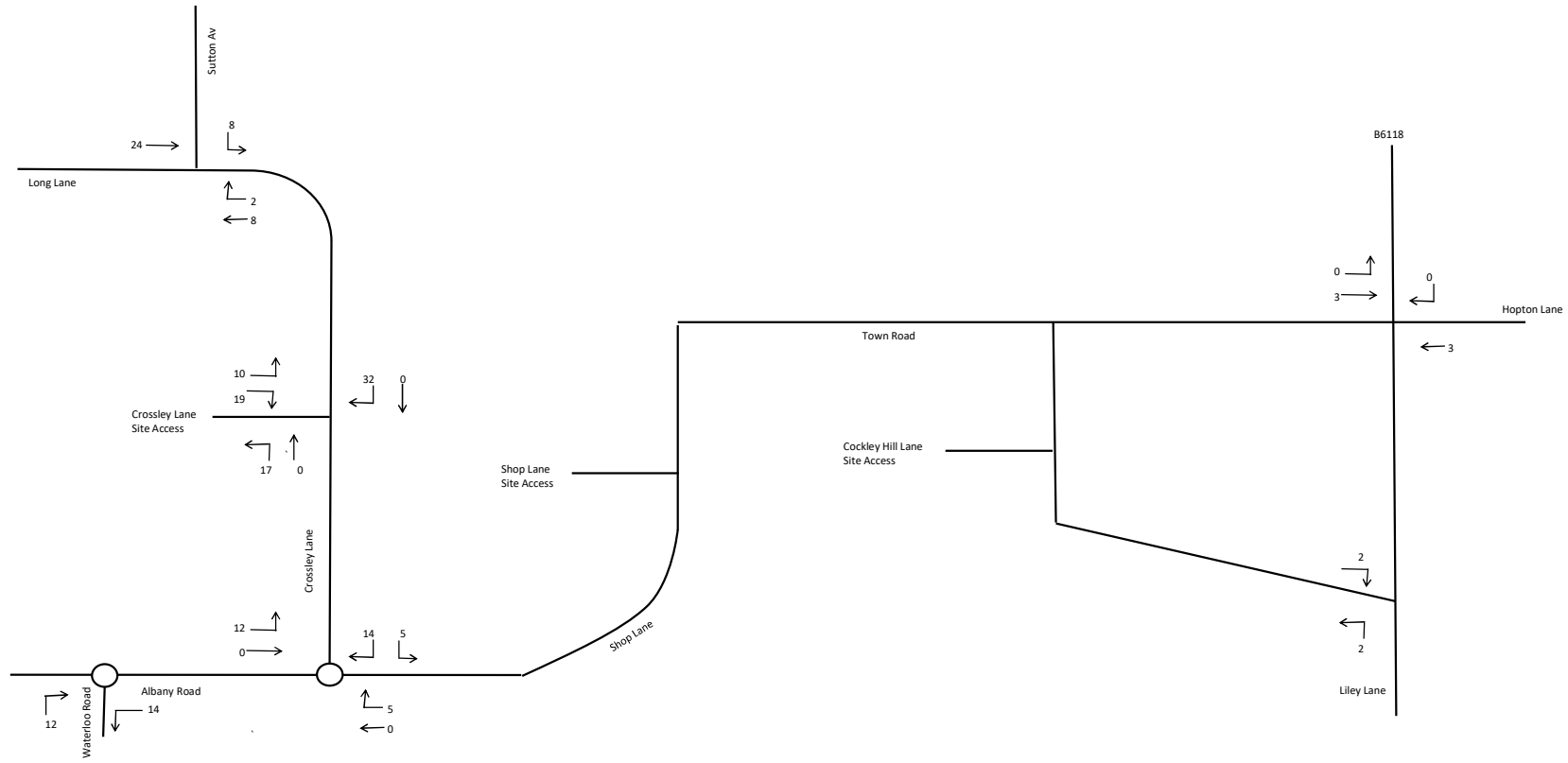


FIG 6 AM CROSSLEY LANE NET TRAFFIC IMPACT

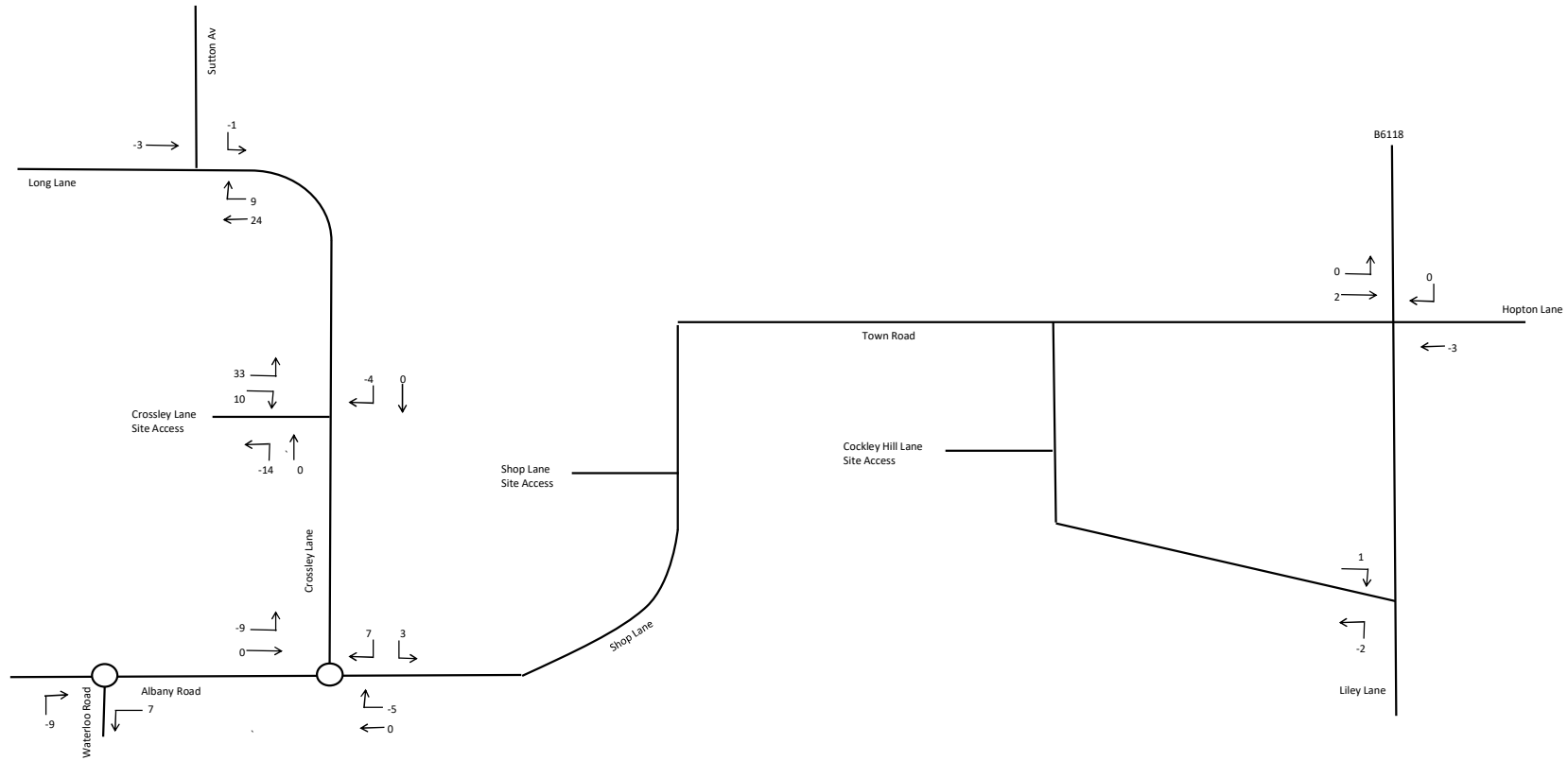


FIG 7 PM CROSSLEY LANE NET TRAFFIC IMPACT

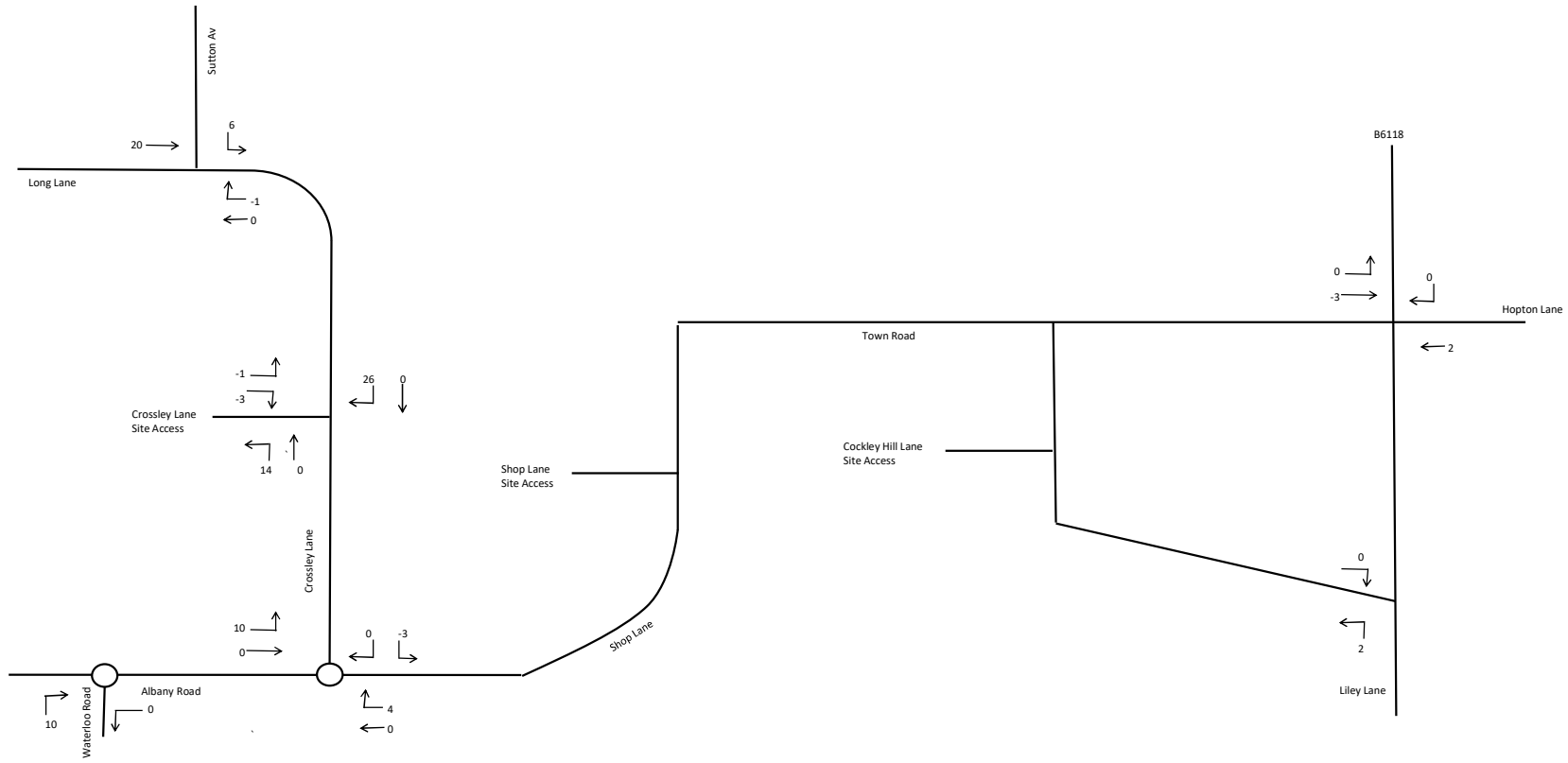


FIG 8 AM SHOP LANE PROPOSED RESIDENTIAL

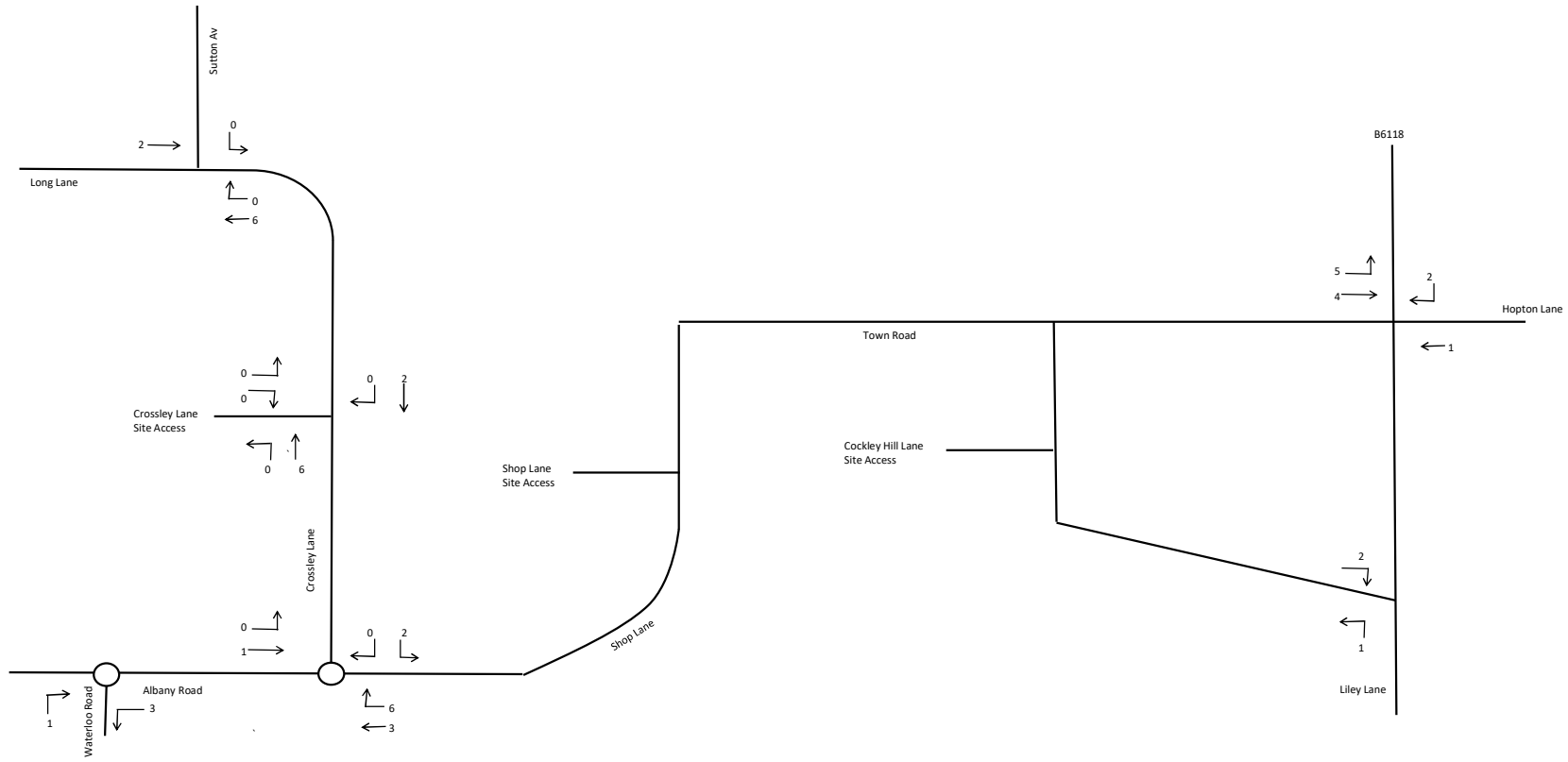


FIG 9 PM SHOP LANE PROPOSED RESIDENTIAL

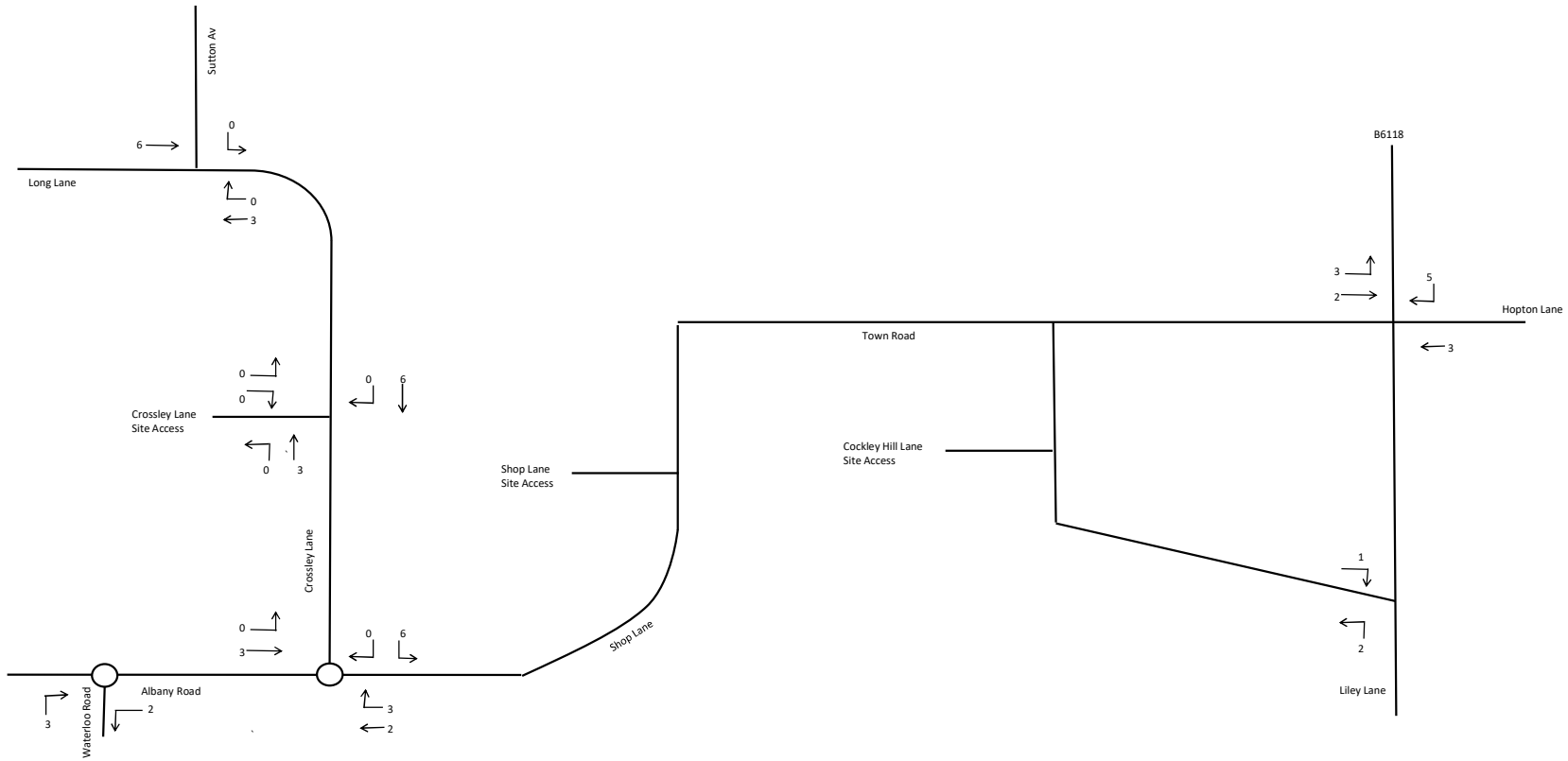


FIG 10 AM COCKLEY HILL LANE PROPOSED RESIDENTIAL

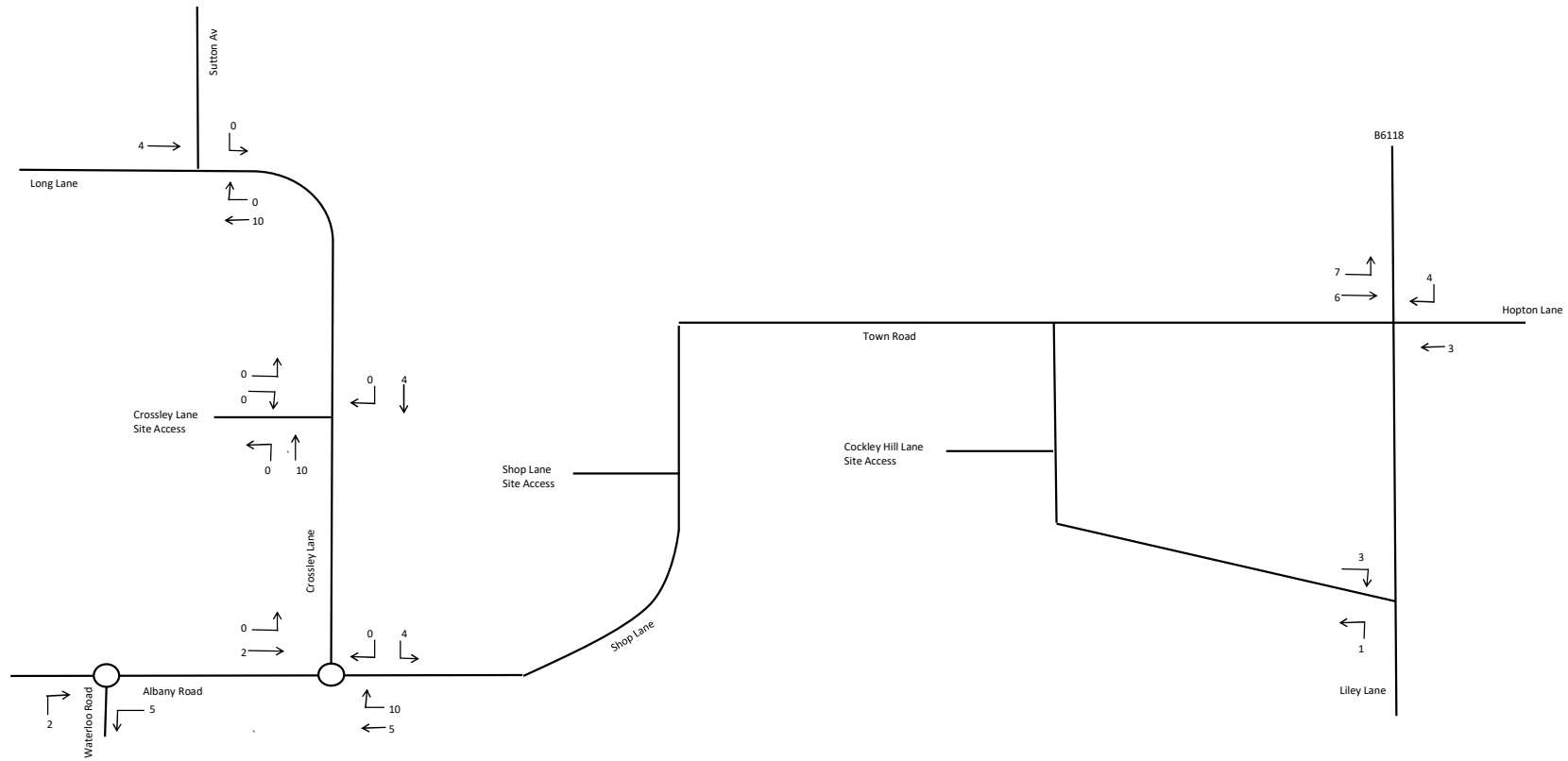


FIG 11 PM COCKLEY HILL LANE PROPOSED RESIDENTIAL

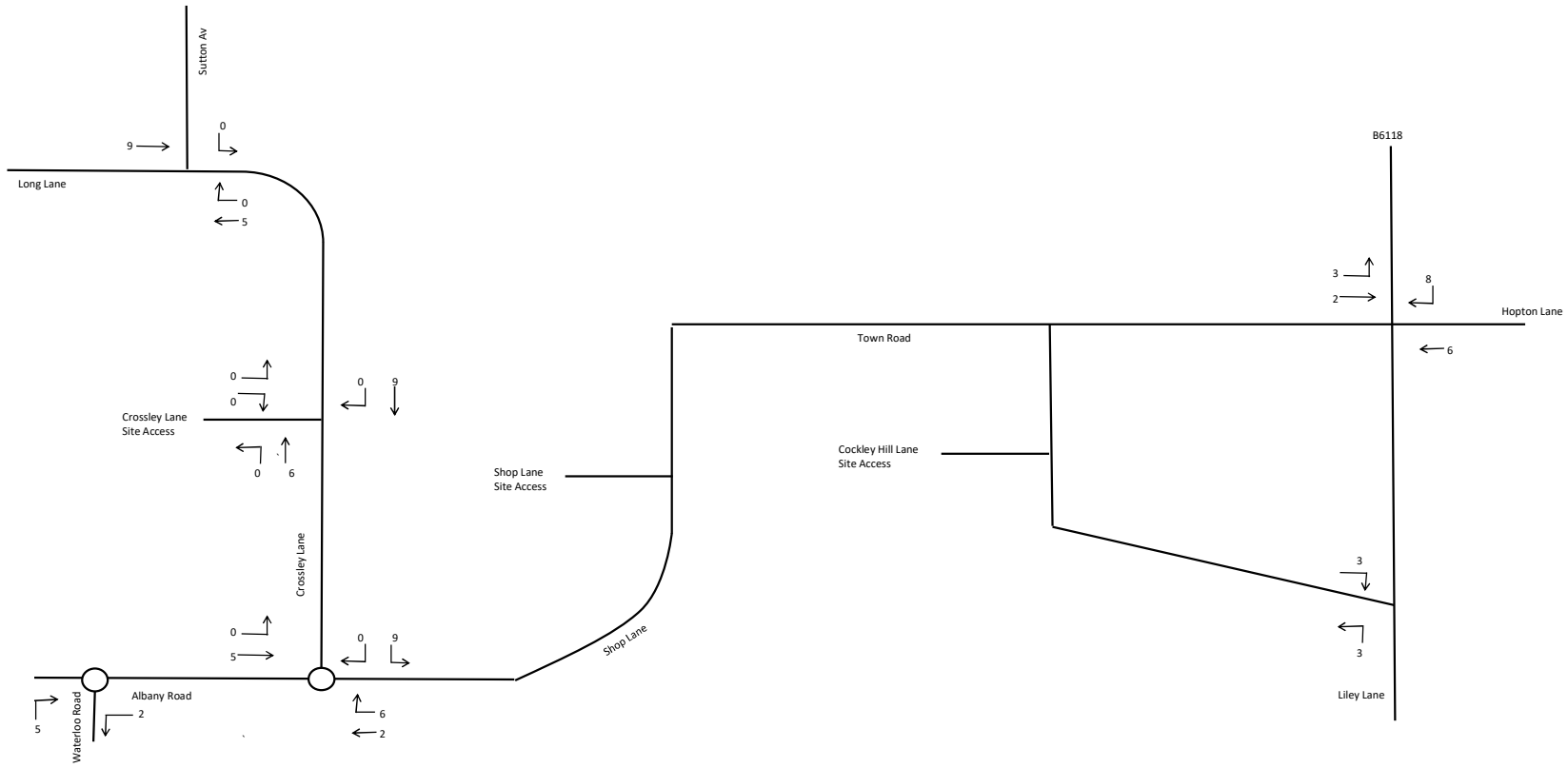


FIG 12 AM TOTAL NET IMPACT

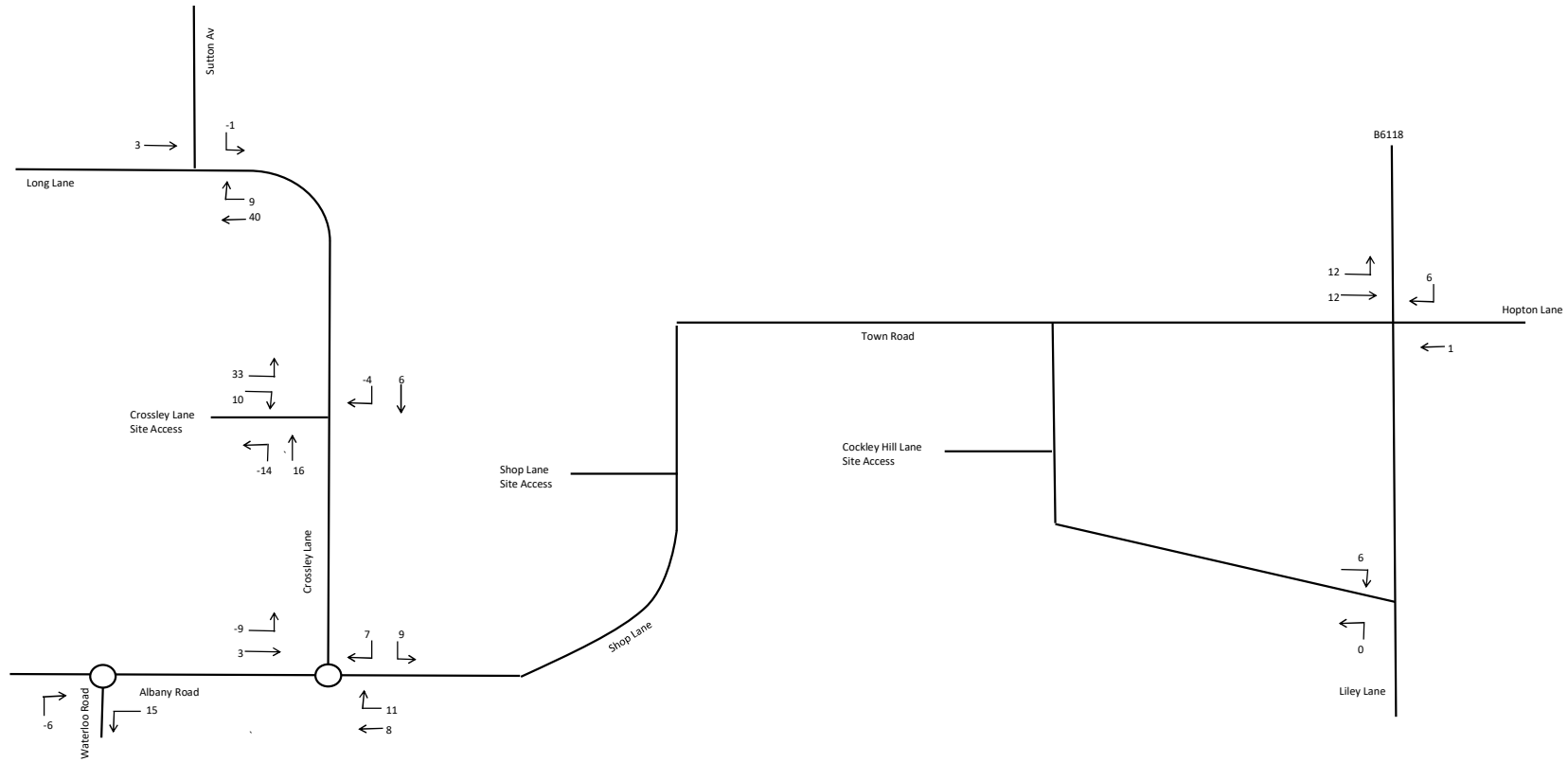


FIG 13 PM TOTAL NET IMPACT

