South Somerset District Council

Public Document Pack

Informal Discussion by Members of Regulation Committee

Tuesday 1st June 2021

2.00 pm

A virtual consultative meeting via Zoom meeting software

The following members are requested to attend this virtual consultation meeting:

Jason Baker	Sarah Dyke	David Recardo
Neil Bloomfield	Tony Lock	Paul Rowsell
Malcolm Cavill	Sue Osborne	Linda Vijeh
Adam Dance	Crispin Raikes	William Wallace
Peter Gubbins	Andy Soughton	

Any members of the public wishing to view or address the virtual consultative meeting during either Public Question Time or regarding a Planning Application, must email democracy@southsomerset.gov.uk by 9.00am on Monday 31 May 2021. The meeting will be viewable online by selecting the meeting on YouTube at:
https://www.youtube.com/channel/UCSDst3IHGj9WoGnwJGF_soA

For further information on the item to be discussed, please contact: democracy@southsomerset.gov.uk

This Agenda was issued on 20th May 2021.

Alex Parmley, *Chief Executive Officer*

This information is also available on our website www.southsomerset.gov.uk or via the Modern.gov app

Information for the Public

At the meeting of Full Council on Friday 15th April 2021 it was agreed to extend the delegation of all Executive and Quasi Judicial decisions listed in the Constitution to the Chief Executive and to the relevant Director in the Chief Executive's absence where not already delegated, in consultation with the Leader of the Council (or Deputy) and the relevant Portfolio Holder, Ward Member and Committee Member if practicable to ensure that the Council can continue to operate on-line meetings.

Councillors will continue to receive decision-making reports and meet using virtual meeting teleconferencing technology and debate the reports. They will form a view which will be communicated to the Chief Executive. The decision will be formally made by the Chief Executive (or relevant Director). This is an interim measure to 31 July 2021 when we hope to return to in-person meetings.

Regulation Committee

Meetings of the Regulation Committee are usually held monthly, at 10.00am, on the third Tuesday of the month (unless advised otherwise). However during the coronavirus pandemic these meetings will be held remotely via Zoom.

Agendas and minutes of meetings are published on the council's website:
Browse Meetings, 2000 (southsomerset.gov.uk)

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Public participation at meetings (held via Zoom)

Public question time

We recognise that these are challenging times but we still value the public's contribution to our virtual consultative meetings. If you would like to participate and contribute in the meeting, please email democracy@southsomerset.gov.uk for the details to join the meeting.

If you would like to view the meeting without participating, please see:
https://www.youtube.com/channel/UCSDst3lHGj9WoGnwJGF_soA

The period allowed for participation in Public Question Time shall not exceed 15 minutes except with the consent of the Chairman and members of the Committee. Each individual speaker shall be restricted to a total of three minutes.

If you would like to address the virtual consultative meeting during either Public Question Time or regarding a Planning Application, please email democracy@southsomerset.gov.uk by 9.00am on 31 May 2021. When you have registered, the Chairman will invite you to speak at the appropriate time during the virtual meeting.

Virtual meeting etiquette:

- Consider joining the meeting early to ensure your technology is working correctly.
- Please note that we will mute all public attendees to minimise background noise. If you have registered to speak during the virtual meeting, the Chairman will invite you to un-mute your microphone at the appropriate time.
- Each individual speaker shall be restricted to a total of three minutes.
- When speaking, keep your points clear and concise.
- Please speak clearly – the Councillors are interested in your comments.

Planning Applications

It is important that you register your request to speak at the virtual meeting by emailing democracy@southsomerset.gov.uk by 9.00am on 31 May 2021. When you have registered, the Chairman will invite you to speak at the appropriate time during the virtual meeting.

Comments about planning applications will be dealt with at the time those applications are considered, rather than during the Public Question Time session.

Comments should be confined to additional information or issues, which have not been fully covered in the officer's report. Members of the public are asked to submit any additional documents to the planning officer at least 72 hours in advance and not to present them to the Committee on the day of the meeting. This will give the planning officer the opportunity to respond appropriately. Information from the public cannot be tabled at the meeting. It should also be noted that, in the interests of fairness, the use of presentational aids (e.g. PowerPoint) by the applicant/agent or those making representations will not be permitted. However, the applicant/agent or those making representations are able to ask the Planning Officer to include photographs/images within the officer's presentation subject to them being received by the officer at least 72 hours prior to the meeting. No more than 5 photographs/images either supporting or against the application to be submitted. The Planning Officer will also need to be satisfied that the photographs are appropriate in terms of planning grounds.

At the committee chairman's discretion, members of the public are permitted to speak for up to 3 minutes each and where there are a number of persons wishing to speak they should be encouraged to choose one spokesperson to speak either for the applicant or on behalf of any supporters or objectors to the application. The total period allowed for such participation on each application shall not normally exceed 15 minutes.

The order of speaking on planning items will be:

- County Council, Town or Parish Council Representative
- Objectors
- Supporters
- Applicant and/or Agent

Ward members, if not members of the Regulation Committee, will speak after the town/parish representative.

In exceptional circumstances, the Chairman of the Committee shall have discretion to vary the procedure set out to ensure fairness to all sides.

If a Councillor has declared a Disclosable Pecuniary Interest (DPI) or a personal and prejudicial interest

In relation to Disclosable Pecuniary Interests, a Councillor is prohibited by law from participating in the discussion about the business on the agenda that relates to this interest and is also required to leave the room whilst the relevant agenda item is being discussed.

Under the new Code of Conduct adopted by this Council in July 2012, a Councillor with a personal and prejudicial interest (which is not also a DPI) will be afforded the same right as a member of the public to speak in relation to the relevant business and may also answer any questions, except that once the Councillor has addressed the Committee the Councillor will leave the room and not return until after the decision has been made**.**

Regulation Committee (Informal)

Tuesday 1 June 2021

Agenda

Preliminary Items

1. **Apologies for Absence**

2. **Declarations of Interest**

3. **Public Question Time**

4. **Planning Application 16/02874/FUL Land Adjoining Holbear, Forton Road, Chard TA20 2HS** (Pages 6 - 147)

Officer Report on Planning Application: 16/02874/FUL

Proposal :	The erection of 252 No. dwellings with associated access and infrastructure
Site Address:	Land Adjoining Holbear Forton Road Chard TA20 2HS
Parish:	Tatworth and Forton
BLACKDOWN & TATWORTH Ward (SSDC Member)	Cllrs Martin Wale and Jenny Kenton
Recommending Case Officer:	Martin Lee Tel: (01935) 462452 email: martin.lee@southsomerset.gov.uk
Target date :	4th October 2016
Applicant :	Persimmon Homes SW
Agent:(no agent if blank)	
Application Type :	Major Dwlgs 10 or more or site 0.5ha+

Reason for Referral to Regulation Committee

This application is a 'major-major' development of over 200 dwellings which under the current, revised Scheme of Delegation falls to be determined by Regulation Committee.

This application is now referred back to the Regulation Committee for further consideration and determination following deferral from Regulation Committee on 20th April 2021 which resolved the following:

A. That Planning Application 16/02874/FUL be deferred for the following reason:

1. A strategic report on the safety implications for and capacity of junctions within the Chard highway network taking into account the cumulative impact of permitted and proposed developments (in accordance with a previous request from Area West Committee).

2. Further clarification on progress in delivering facilities in Chard for which educational contribution is sought.

The application had previously been deferred from Regulation Committee on 17th July 2018 which had resolved the following:

A. **That Planning Application 16/02874/FUL be deferred for the following 4 main reasons**:

1. The design of the proposed layout of the new homes and proposed distributor road is out of character with its neighbouring settlement design and its location at the southern edge of Chard town. The proposed road nether satisfies the design of an effective distributor road i.e. to carry large volumes of both access and bypass traffic, nor of an estate road, which should provide protected and calmed access to homes.

   Reason: This is contrary to Policy EQ2 and TA5 of the SSLP.

2. The design of the distributor road is not commensurate to the amenity of new occupiers. A significant number of the proposed dwellings (100 out of the total of 315 homes) are proposed to front onto the distributor road which by definition will carry large volumes of traffic. The design and layout would also require occupants to cross the distributor road to access the public open space.

   Reason: The proposal is therefore contrary to Policies EQ2 & TA5 of the SSLP.

3. The proposed development fails to take the opportunity to improve the character and quality of the local area due to the poor layout and house designs.

   Reason:Therefore, it does not constitute good design and is contrary to Policies EQ2 of the SSLP and Chapter 7 (para 64) of the NPPF (Requiring Good design).

4. The proposed development would be brought forward in an earlier phase than outlined in the Chard Regeneration Plan. Accordingly, due to the lack of the completed distributor road connecting the application site to the north with the A30, it would create a severe highway impact on the local road network, particularly causing severe congestion at the central Convent Junction.

   Reason:This is contrary to PMT1 and PMT2 of the SSLP.

B. **In addition Committee also asked the Applicant and Officers to consider and seek to resolve the following related planning matters**:

5. Need for further exploration of better pedestrian links between the proposed development and sports facilities.

6. Need to examine a phasing condition to insure the scheme is developed on good design principles and better supports the ultimate delivery of the proposed distributor road.

7. Importance of the maintenance and management condition for highways and associated infrastructure whether or not roads are to be adopted.

8. Need for an additional condition with regard to electric charging points.

9. Need for an ecology condition to safeguard wildlife.

10. Consider the options for an additional study into the traffic management optionsin Chard centre, to help deal with increased traffic over the plan period, including from “this proposed development”, as more planned homes come forward.

    Reason: To ensure that any scheme that comes forward for determination, more fully addresses all the policies in the SSLP, in particular Policies EQ2, TA5, PMT1 and 2.

C. **Ward members to be involved in discussions and timetable on any revised application**.

   Reason: To ensure that any scheme that comes forward for determination, more fully addresses all the policies in the South Somerset Local Plan.

This followed consideration by Area WestCommittee on the 20th June 2018, at which time the Area West Committee were originally minded to refuse the applicationon the following grounds:

1 The design of the proposed layout of the new homes and proposed distributor road is out of character with its neighbouring settlement design and its location at the southern edge of Chard town. The proposed road nether satisfies the design of an effective distributor road i.e. to carry largevolumes of both access and bypass traffic, nor of an estate road, which should provide protected and calmed access to homes.
Reason: This is contrary to Policy EQ2 and TA5 of the SSLP.

2 The design of the distributor road is not commensurate to the amenity of new occupiers. A significantnumber of the proposed dwellings (100 out of the total of 315 homes) are proposed to front onto the distributor road which be definition will carry large volumes of traffic. The

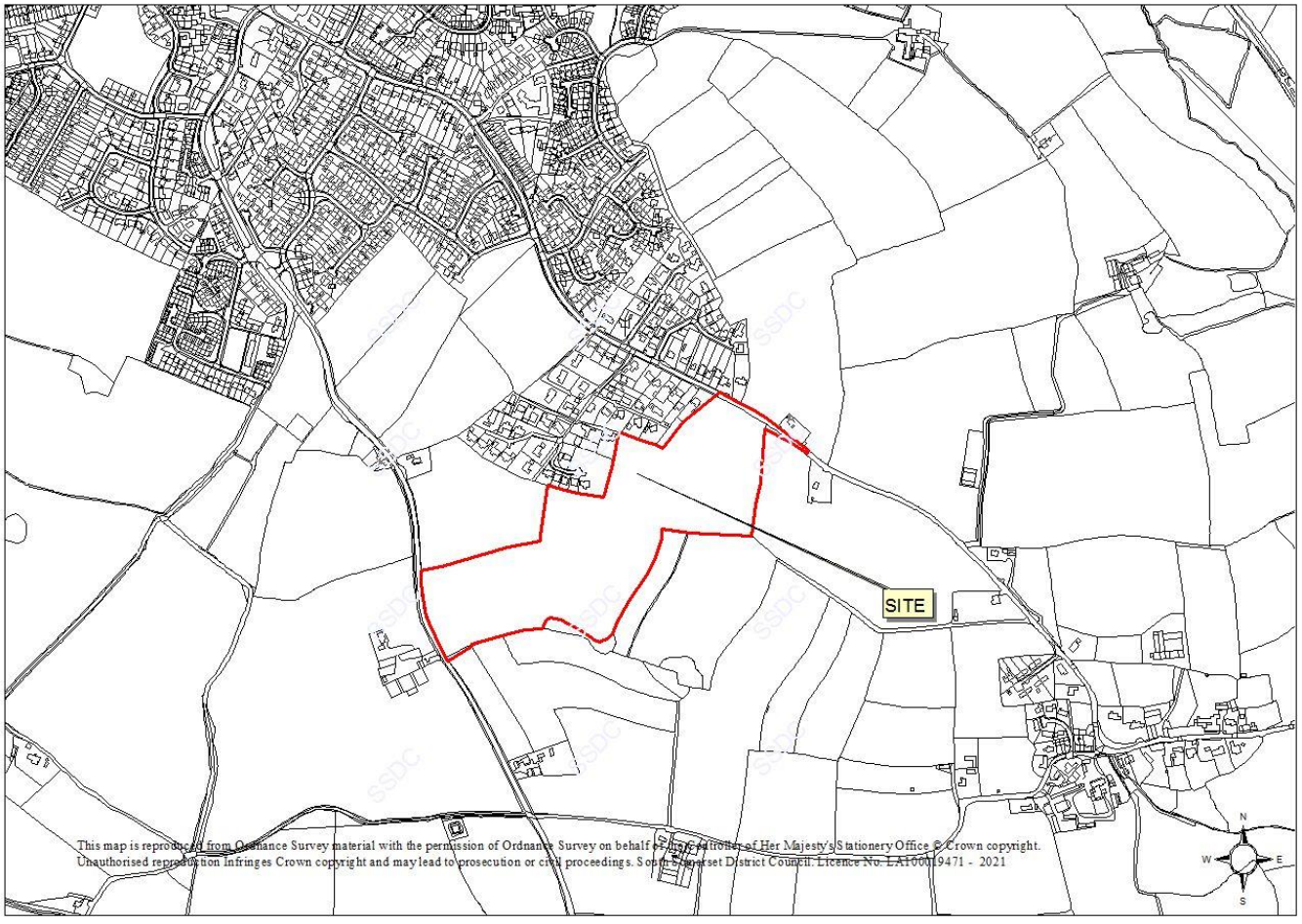
design and layout would alsorequire occupants to cross the distributor road to access the public open space. Reason: The proposal is therefore contrary to Policies EQ2, and TA5 of the SSLP.

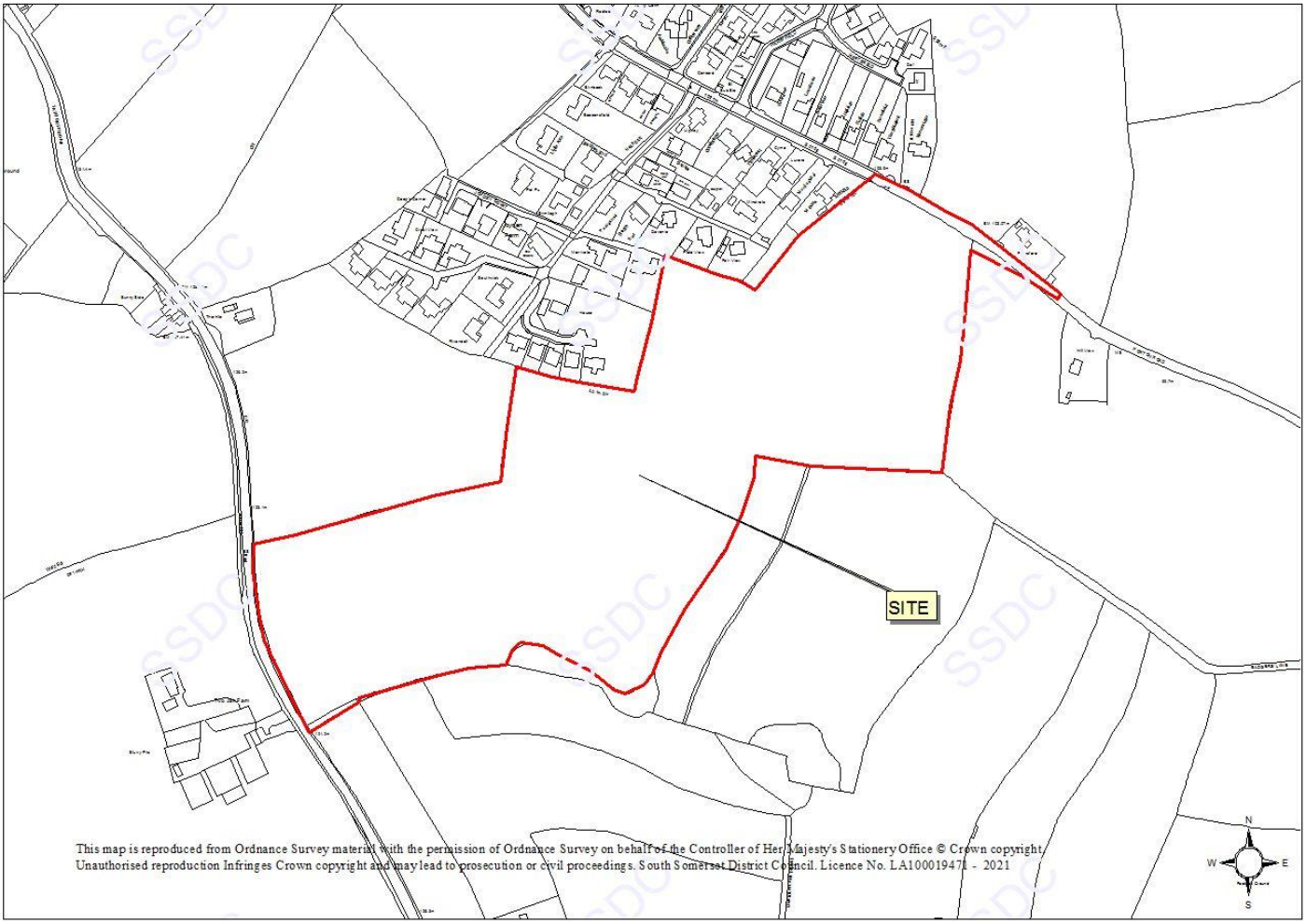
3 The proposed development fails to take the opportunity to improve the character and quality of thelocal area due to the poor layout and house designs.
Reason: Therefore, it does not constitute good design and is contrary to Policy EQ2 of the SSLP and Chapter 7 (para 64) of the NPPF (Requiring Good design).

4 The proposed development would be brought forward in an earlier phase than outlined in the ChardRegeneration Plan. Accordingly, due to the lack of the completed distributor road connecting the application site to the north with the A30, it would create a severe highway impact on the local road network, particularly causing severe congestion at the central Convent Junction. Reason: This is contrary to PMT1 and PMT2 of the SSLP.

The Minutes of the Regulation Committee from July 2018 are provided as an addendum to this report for reference purposes.

SITE DESCRIPTION





The application site is located between the A358 (Tatworth Road) and the B3162 (Forton Road) on thesouthern edge of Chard. However, the site lies wholly within the parish of Tatworth and Forton. The siteis currently a grassed field with an agricultural access from Forton Road and one from Tatworth Road. Hedgerows bound the site with a number of trees spread around the boundaries of the site. The site islargely surrounded by fields other than the residential area known as Holbear, which is located along thetop half of the north-west boundary. 3 dwellings face the site on the opposite side of Forton Road with asingle dwelling located to the east of the site. Two Ash Farm is located to the west of the site on the opposite side of Tatworth Road.

PROPOSAL

This scheme, as amended, seeks full planning permission for the erection of 252 dwellings (as opposed to the originally proposed 323 dwellings) along with vehicular access and associated infrastructure works. The site forms part of the wider Chard Regeneration Plan which seeks the delivery of 1852 houses over the current local plan period(2006-2028), employment land, 2 new primary schools, highway infrastructure and sport and play facilities.

The scheme will comprise a number of different house types with a range of dwellings sizes from 1 beddwellings through to 4 bed dwellings. The external materials will be a mix of brick, render with tiled and slate roofs.

The main access road will run northwards through the site accessed via a roundabout from Tatworth Road at its southern end leading to a turning head at the northern end of the site with land protected from future development which will provide a new junction on the Forton Road as

and when the residential development site to the north of Forton Road comes forward to provide the next link in the Eastern Chard Link Road. This protected land will also accommodate an emergency vehicle access, cycle access and pedestrian access from the estate road on to Forton Road. Dwellings have been laid out so as to sit predominantly on the north western side of the main access road with a small cluster of larger dwellings towards the northern end of the main access road sitting on its eastern side. Dwellings along the main access road present main facades to the road, many set back behind private parking courtyards.

Infiltration ponds will be provided at three points along the southern and eastern boundary as part of the surface water drainage strategy.

This scheme originally proposed 2 new access points, with one each from Tatworth Road and Forton Road. The amended proposals now have 1 access point only from Tatworth Road and emergency, cycle and pedestrian access only onto Forton Road. This approach has been followed to address previous concerns over the capacity of the Forton Road Junction with Tatworth Road to accommodate the potential traffic generated by the development and will be explained further under the highway section later inthis report.

The scheme layout has been amended several times seeking to address comments and concerns raised by local residents, Tatworth and Forton Parish Council, Chard Town Council, the case officers andvarious consultees.

The amendments have included:

- Reduction in dwelling numbers from 323 to 252
- Replacement of the single large apartment block atthe western end of the site with dwellings
- Reconfiguration of the green space in the centre of the site toprovide a LEAP as a formal play area and landscape buffer zone
- Cycle route extended to Forton Road to provide a continuous route through the whole development
- Reduction in dwelling heights and a reduction in density along the northwest boundary adjacent to Holbear.
- Placing the majority of dwellings on the Chard side of the spine road thus ensuring the removal of the previous conflict associated with crossing the future link road to access the on-site recreational space
- Inclusion and exclusion of land further to the east of the site to the south of Badger's Lane and immediately to the west of Forton to provide additional football practice pitches to augment those to be provided on adjoining land abutting Forton which the Council had been in the process of acquiring. That further land has been removed from the application site boundary but its acquisition and transfer to the Council to supplement the land the Council has now completed acquisition of is now to be secured through a Planning Obligation.

HISTORY

No relevant planning applications have previously been submitted on this site. The following was a formal requestfrom Persimmon Homes for a Screening Opinion under the Environmental Impact Assessment Regulations.

14/04444/EIASS - Screening opinion in respect of proposed residential development (335 dwellings), Land off Tatworth Road, Chard, Somerset. EIA not required.

POLICY

Section 38(6) of the Planning and Compulsory Purchase Act 2004 repeats the duty imposed under S54A of the Town and Country Planning Act 1990 and requires that decision must be made in accordance with relevant Development Plan Documents unless material considerations indicate otherwise,

Relevant Development Plan Documents

South Somerset Local Plan (Adopted 2015)SD1 - Sustainable Development
SS1 - Settlement Strategy
SS4 - District Wide Housing ProvisionSS5 - Delivering New Housing GrowthSS6 - Infrastructure Delivery
PMT1 - Chard Strategic Growth AreaPMT2 - Chard Phasing
HG3 - Provision of Affordable Housing
TA3 - Sustainable Travel at Chard and YeovilTA4 - Travel Plans
TA5 - Transport Impact of New developmentTA6 - Parking Standards
HW1 - Provision of open spaces, outdoor playing space, sports, cultural and community facilities in new development
EQ2 - General DevelopmentEQ4 - Biodiversity

Relevant Policy Material Considerations
National Planning Policy Framework Core Planning Policy Principles
Chapter 6 - Delivering a wide choice of high quality homesChapter 7 - Requiring Good Design
Chapter 8 - Promoting Healthy Communities
Chapter 10 - Meeting the challenge of climate change, flooding and coastal change.
Chapter 11- Conserving and Enhancing the Natural Environment

Chard Regeneration Plan.

Adopted Somerset County Council Parking Standards

CONSULTATIONS

Due to the number and length of some responses, most have been summarised below. The Town and Parish Council comments have been included in full. Where more than 1 response has been received,the latest comments are included first. Copies of all the responses received are available in full online viathe Council's website.

Tatworth and Forton Parish Council: (Latest Comment - 21st March 2020)
Three people present indicated that they had not been advised of any consultation meetings taking place despite the fact they were living adjoining to the proposed site. They were advised that the only indication that the parish council would have given was through the website.

Resolved that whilst the number of proposed properties had decreased it still does not enhance the site and that the matters of concern raised previously by the Parish Council appeared not to have been addressed. It was agreed that the previous reasons for refusal should be reiterated.

Tatworth and Forton Parish Council (March 2018)
The Council does not support these amended plans and wishes to re-affirm its opposition to the development per se, in light of the fact that none of Councils original concerns and objections appear to have been addressed or acknowledged by the applicant. The Council does not believe that any support can be countenanced for such piecemeal amendments whilst the overriding materials concerns remain unanswered.

Tatworth and Forton Parish Council: (September 2017) Repeated previous comments plus the

following:
The Forton road B3162 could not accommodate the volume of traffic from a total of 500 houses.
The distributer road should bypass this development and not intermingle with it as this proposal does. This development should be the last phase of the implementation of the Chard local plan so that the distributor road can be introduced at each stage.
There is concern about the impact on the small hamlet of Forton less the half a mile away and the village of Tatworth.
There is no sustainable transport provision in or adjacent to Chard. The local station Chard Junction should be re-opened (with a bus link from Chard to the station). This would provide access to more employment, educational and recreational facilities in Exeter.
The proposed site for the recreational land is some distance from the proposed development.No access is outlined on the plan and none is forthcoming from the Council.
Badgers Lane is not a public footpath and is unsuitable as pedestrian access especially considering thatto use this, pedestrians will have to use Forton Road which is totally unsuitable for pedestrians with particular reference to the fact that children could be seen to be the main users of such a facility.
The site is too remote as to be suitable for children in that it is not easily seen from any residential properties or public.
In what form are these attenuation ponds? Is there an element of risk? Is there any parking facilities to go with the football pitches?

Tatworth and Forton Parish Council: (first comments July 2016)
Recommend Refusal with the following reasons:
Traffic Assessment was done in January 16 which was poorly timed. Failed to collect correct statistical data.
Incorrectly used household data.
Walking distances involved in the development assessment are incorrect.
Infrastructure of Chard is not adequate. There are insufficient doctors' surgeries and Schools. Number of cars would be increased dramatically as there is insufficient bus services in the area. Forton Road is too narrow and hazardous.
The surrounding area is a quiet area with a large number of elderly people living there.Topography runs down towards Forton Lane which will increase the risk of flooding.
Wildlife would suffer.
There is already a large number of accidents on the A358 which may be exacerbated.Flooding issues are a major factor and should be considered.

Density of the properties is not appropriate for the land proposed. Housing should support employment in the area.
The size, scale, mass and type of houses that are proposed are not in keeping with the other houses inthe area, either in Chard or in Tatworth and Forton in a rural setting.
Social Housing square footage is larger than some of the private houses proposed and should bepeppered and not together on the site.
Infrastructure is not in place to support the new houses so is not sustainable.
Overlooking is an issue with some of the properties, particularly the three storey buildings. Apartments are not appropriate in a rural setting.
The route of the road should be moved and be much further south on the development.
Two bedroomed house size is between 50 sq. metres and 59 sq. metres. The Government guidelines state a 2 bedroomed dwelling should be 90 sq. metres, therefore these houses do not meet the government guidelines.

Chard Town Council: (Adjacent TC) (Latest Comment – 14th January 2021)
Council wishes to bring the following matters to the attention of the Planning Authority and that they be taken into consideration:
* Concern was expressed that the material amendments to the main application did not go far enough to meet the concerns of local residents;
* The proposal will have a detrimental impact on local residents;
* The proposal will inevitably place additional demand on the existing infrastructure within Chard;

* There are no proposals to improve the highway network which will be unable to cope with the additional impact of this development;
* The local schools do not have sufficient capacity to meet the additional demands this development will place on them.

Chard Town Council: (March 2018)
Resolved: That this application should be refused due to the flood risk and risk of vehicles having to reverse onto the main road.

Chard Town Council: (May 2017)
Resolved: That this application is refused for the following reasons:
Chard Town Council do not see enough difference in the amended plans to the original proposal tochange their view on this development.

Capacity of physical infrastructure
The Somerset Local Plan 20006-2028 (5.69) states that: The growth planned in the local plan needs tobe supported by infrastructure, community facilities, and services to ensure the development of sustainable places. If infrastructure and the needs of the community are not achieved alongside growth,there will be unacceptable impacts on local areas and residents and the quality of the environment will be adversely affected.

Chard Town Council does not believe that the current infrastructure of Chard is adequate to support a development of this size. In their opinion this leads the proposed development to be unsustainable.
For example, the Estates and Planning Advisor at Somerset County Council has advised that this application will further increase the need for capacity within the Chard Schools which is not forecast to be available at the time this development comes forward.

Highway issues
The number of cars would be increased dramatically by this development as there is insufficient bus services in the area; for example, Stagecoach have just curtailed services to both Taunton and to Yeovilrecently. Forton Road is too narrow and hazardous to cope with the increased traffic flow thisdevelopment will bring. Chard Town Council wish to see traffic using the A358 only until the access / egress onto Forton Road has been addressed.

Detrimental impact upon residential amenities
The Somerset Local Plan 2006-2028 states: New homes will be of the highest standard of design and locally distinctive. Therefore, proposals for development should be of good design and respect the character of the surroundings. The Local Planning Authority will have regard for i) the appearance and treatment of spaces between and around buildings ii) the amenities of neighbouring residents.
Chard Town Council believe that the density of the properties is not appropriate for the land proposed. The size, scale, mass and type of houses that are proposed are not in keeping with the other houses inthe area, either in Chard itself, or in Tatworth and Forton which is within a rural setting. It does not respect local context and street pattern or, in particular, the scale and proportions of surrounding buildings, and would be entirely out of the character of the area, to the detriment of the local environment.

The periphery of Chard is characterised by one and two storey buildings and this development, which includes three storey buildings is at odds with this characteristic, meaning these proposals therefore failto align with the Somerset Local Plan Policy EQ2.

Within EQ2 it states that there is a requirement to provide an appropriate relationship with existing residential developments; nearby, Holbear is characterised by large executive style detached

houses and bungalows set in generous grounds. The proposal of 3 storey flats and 2 storey terraced houses, with no buffer between the proposed site and the existing dwellings of Holbear offers no privacy and alsoshow a lack of respect for the existing development.

The National Planning and Policy Framework (NPPF Chapter 67, para 4) states that permission shouldbe refused for the development of poor design that fails to take the opportunities available for improvingthe character and quality of an area and the way it functions.

In addition, the topography of the site runs down towards Forton Lane which will increase the risk of flooding. Chard Town Council believe that flooding issues are a major factor and should be consideredalongside the potential impact on wildlife by employing a lifetime maintenance condition on the development.

Chard Town Council (July 2016)
Resolved: that this Council recommends refusal for the following reasons - the density of the plan is notacceptable; the green space and total site layout is not acceptable; there needs to be a transport assessment as a whole for the area and we need to know when the infrastructure to support this development will be in place. This Council do feel that given the high standard of development in Holbear this development is not in keeping with the existing properties.

Highway Authority: A detailed response is awaited at the time of this Report's writing and a verbal update will be provided at the meeting.

Highway Authority: (6th April 2020)

I have no objection to the overall surface water management strategy proposed but would make the following observations.

1. Whilst it is appreciated that the design proposals reduce the catchment of surface water run-off that would otherwise drain to the low point on Tatworth Road, coincident with the south-eastern boundary of the development site, the significance of the existing drainage ditch running along this boundary cannot be under estimated in terms of its role in accepting run-off from a County Primary road. It is requested therefore that as part of these proposals, allowance is made to ensure that the retained highway drainage system and outfall are in a serviceable condition and that the drainage ditch along this boundary effectively transfers surface water downstream to the 'dry pond' as annotated on the drainage plan. Any culverts or restrictions along the ditch should be clear of any blockages to ensure free flow.
2. The proposed alignment of the main access road runs in close proximity to the south-eastern boundary of the development site and the existing drainage ditch as referred to in item 1 above. It is possible therefore that a section of this ditch will need to be culverted to accommodate the cycleway/footway running along the southern side of this access road.
3. All infiltration basins and soakaways should be located at least 5 metres from any existing or prospective public highway area to reduce the potential for any detrimental effect upon the long-term stability of the highway.
4. The designer will need to consider the safety of all road users where the internal access roads and footways run in close proximity to the infiltration basins and retained ditches. It is possible that physical means to separate and protect the road user from any identified hazards are introduced in the design.
5. The designer will need to consider the means by which maintenance vehicles and plant access the infiltration basins, soakaways, outfalls/controls and retained ditches from the internal access roads.
6. Wherever possible highway drains should be routed under prospective public highway areas and not across private land thereby removing the need for easements and enabling all future maintenance operations to be undertaken from within the public highway.

7. Surface water running along the southern channel line of Forton Road should be intercepted immediately upstream of the proposed link path into the development.

Regarding the layout plans, the following comments have been provided;

Vehicle tracking - The refuse vehicle tracking is for a 11.4m 4 axle vehicle which is acceptable. The tracking for the turning head fronting plots 21 to 23 is tight but workable. However, the footway fronting the plots appears to be only 1.0m wide which is substandard and contrary to the Equality Act 2010 and the DfT publication Inclusive Mobility. The tracking for the turning head fronting plots 67 to 69 is tight but workable. The tracking for the road from plot 101 round to plot 147 is tight but workable. The tracking for the turning head fronting plots 176 to 181 is tight but workable as are the access manoeuvres. The tracking for the turning head fronting plots 224 to 228 is tight but acceptable as are the access manoeuvres. However, similar comments apply as above regarding the narrow footway. The tracking for the turning head adjacent to plots 249 and 254 is tight but acceptable. Refuse vehicle tracking for egress and access manoeuvres from and to the spine road are not shown and I would expect these to be considered in the design process for the spine road.

Refuse collection - Some bin walk distances appear to be excessive, in particular for plots 59, 60, 64, 109 and 248. There are other plots of concern. I recommend the refuse authority be consulted for its views.

Parking spaces - Every parking space requires a minimum 6.0m long clear manoeuvring length fronting the space. Some parking spaces have less than the required length – spaces 02, 03, 04, 62, 63 and 204 to 207 for example. Parking spaces that are difficult to access would be likely to result in on-street parking. Every parking space and driveway fronting an adoptable area requires 2m x 2m pedestrian visibility splays measured from the rear of the fronting footway or margin.

Junction and forward visibility - Junction and forward visibility splays must be provided commensurate with design speeds. Within the splays there must be no obstruction to visibility exceeding a height exceeding 300mm above adjacent carriageway level.

Highway Authority: (May 2018 – revised single vehicular access & updated Transport Assessment)
Following submission by the applicant of a Technical Highway Note to assess the traffic impacts of theproposed single access point, the Highway Authority had this independently assessed and confirmed that the conclusions of the Technical Note are robust. In conclusion, the new roundabout to serve the development onto Tatworth Road would operate well within capacity. In addition, with the removal of development traffic on Forton Road, the performance of the junction of Tatworth with Forton Road wouldimprove due to less queueing from Forton Road. The Highway Authority have sought an emergency access onto Forton Road. A condition to secure this has been recommended. Technical elements of theinternal spine road and estate roads layout will need to be revised in order to meet the Highway Authority's adoption standards, otherwise would remain in private ownership. An agreed Travel Plan will be required as previously advised - a condition will be attached accordingly.

On this basis, the Highway Authority conclude that the proposed single vehicular access is acceptable and the traffic impacts could not be considered as severe in terms of the NPPF policy approach.

Highway Authority: (April 2018 - Single access option)
The Highway Authority objected due to the lack of a revised Transport Assessment (TA) to demonstrate the traffic effects/impacts of a significantly revised proposal and lack of an agreed Travel Plan.

Highway Authority: (June 2017)

No objection subject to conditions. The Transport Assessment submitted with the application was independently reviewed for the Highway Authority - it concluded that the traffic modelling was acceptable. Following criticism of the robustness of the TA, in particular the collection of base data in January, rather than a potentially busier month, the Highway Authority asked their consultants to reviewthis again. They were satisfied that whilst seasonal variations do occur, this tends to affect overall weekly/daily flows rather than the peak hour flows. The TA did confirm that the proposed development would create additional congestion within Chard. The key issue then is whether under the NPPF policyguidance the traffic impact would be severe.

Junction modelling was undertaken for 8 different junctions including 1) Forton Road/Tatworth road/Church St Junction, 2) A358 Old Town/Holyrood St Junction, 3) High St/Crowshute Link Junction, 4) Furnham Rd/ Millfield Roundabout, 5) East street/Taptone Road/ Crewkerne road/Victoria Avenue Junction, 6) Furnham Road/East St/ Fore St, 7) Tatworth Road/site access and 8) Forton Road/site access.

The TA concluded that the traffic impact at 3 these junctions (2, 4 and 6 respectively) would result in significant queues and delays. The Highway Authority point out that these are worst case scenarios andwould be reduced by the introduction of Travel Plan measures to encourage modal shift and the construction of link road infrastructure. The Highway Authority conclude that all 3 of these junctions would be operating at or over capacity by 2023 without development traffic. Moreover, the traffic levels generated by the development are relatively low with just over 1 additional vehicle per minute. On this basis, the HA do not conclude that the highway impact would be severe and refusal on traffic impact grounds is not reasonable.

Also the Highway Authority commented on the need for changes to be made to the submitted Travel Plan, technical revisions required to the layout of the spine and estate roads in order to become adoptable, otherwise would remain in private ownership, concerned about a large number of propertieshaving their access adjacent to the main spine road, and sought a more suitable junction with Forton Road rather than a simple priority T junction, particularly given the future role of this junction/ road as part of the wider Chard spine road. A number of conditions are recommended including approval of anappropriate junction design at Forton road and Tatworth Road.

Landscape Officer:
3 responses have been received from the Landscape Officer in response to the original application andprevious amended plans. No comment is available on the latest amended plans as the Council no longer has a Landscape Officer.

Landscape Officer (September 2017) - Reduction in density along the northwest boundary is an improvement and the additional brick finish tothe material range is welcome. Still have an issue with the non-traditional dual finish to some of the units.

Landscape Officer (May 2017) - Layout more legible, coherent frontage onto the main area of open space, large areas of parking and frontage parking have now been reduced, 3 storey blocks are in less prominent areas, however densitynext to Holbear remains incongruous. Good surveillance around the open space, play area, and open space linkage along the eastern boundary. Landscape impact of the scheme can be mitigated via sympathetic landscape treatment. Still concerned about the lack of variety of materials/finishes across the development and dual finish approach unless this is constructed using a horizontal plinth or verticalquoins.

Landscape Officer (August 2016) - No objection raised on landscape grounds to the principle of development in this location. Agrees that the visual impact of development on the site would be localised and with additional planting to support the existing landscaping, the development would integrate with both the adjacent town edge and rural landscape pattern. Supports the general grain of development, but identifies the following areas for improvement: use of standard house types do not reflect local vernacular and unimaginative layouts, not agree with the reliance on two choices

for walls and roofs, nor the houses finishes of part brick part render - should bea uniform finish. Slate should be essential. Lack of characterisation within the development with too many cul-de-sacs, too much frontage parking, need details of boundary treatments, not support 3 storey apartment blocks at the highest point of the site, provides advice on use of certain tree species, and need details for the open space areas.

Council Arborist:
Originally raised an objection due to concerns about the provision of insufficient tree protection measures, landscaping proposals and a proposed access to the rear garden of Meiktila as it appears tocompromise the 13 metre radial Root Protection Areas of x 2 large oaks. However, following clarification that th access road would not run along this boundary and rear gardens will it was agreed that a condition can be imposed to ensure tree protection measuresare provided before and remain during construction.

Following initial comments and concerns about the landscape proposals, a Landscape Management and Maintenance Plan (LMMP) has been prepared which sets out the Landscape Managementprescriptions for the various green spaces within the development. The arborist supports this approachand a condition will be attached to secure its delivery.

Ecologist: (Latest Comment – 5th January 2021)
Following recent advice from Natural England you may have been notified that your planning application could require a Habitats Regulations Assessment (HRA), due to recent CJEU Dutch Nitrogen case law.

This is most likely because the application site falls within the catchment flowing into the Somerset Levels and Moors Ramsar site, designated for its rare aquatic invertebrates. There is a significant issue with nutrients entering watercourses that flow through this designated site, which adversely change environmental conditions for these species'.

Many new housing schemes (including single dwellings), visitor accommodation/attractions and some other developments, will result in an increase in phosphates contained within foul water discharge. As the designated site is in 'unfavourable' condition, any increase in nutrients (specifically Phosphates) is seen as significant.

In order to inform the initial requirement for a Habitats Regulations Assessment and to provide any subsequent quantitative and qualitative data required for the LPA to complete an Appropriate Assessment, the applicant is advised to work through the following steps. An Environmental and/or Ecological Consultant will be able to provide assistance in completing the calculation and any required mitigation strategy.

1. Calculation of Phosphate Budget

1.1 Overview: In order to assess the proposed developments phosphate budget the applicant will be required to complete a Phosphate budget calculation. In lieu of catchment specific guidelines Natural England have advised the Somerset Local Planning Authorities (LPAs) to follow the guidance and example calculations included for the Stour catchment in Kent – Advice on Nutrient Neutrality for New development in the Stour Catchment in relation to Stodmarsh Designated Sites (Natural England, July 2020) and updated. Here referred to as the Stodmarsh Guidance Somerset Local Planning Authorities have created a calculator based on the Stodmarsh guidance, which includes figures for Phosphorous kg per hectare for different land use types within Somerset, pre-development. This calculator can be provided by the LPA on request, if not otherwise supplied with this guidance document.

1.2 No mitigation required: If the Phosphate Budget Calculator results in a zero or minus nutrient loading figure, then the need for mitigation is negated. Please submit the calculations within the

provided spreadsheet for the LPA to review and confirm next steps.

1.3 Mitigation required: If the Phosphate Budget Calculator indicates a nutrient loading from the proposed development, then mitigation will be required.

1.4 Development types: The following development types are likely to need a Phosphate Budget Calculation to indicate loading levels on the Ramsar site

* New residential units.
* Commercial / industrial developments (including hosting employees from outside of the catchment, and/or overnight accommodation).
* Employment sited (including hosting employees from outside of the catchment, and/or overnight accommodation)
* Agricultural Development.
* Prior Notifications.
* Anaerobic Digesters.
* Some tourism attractions, including tourist accommodation.
* Local Development Order's.
* County planning matters (e.g. Minerals and waste)
* General Permitted Development Major infrastructure

1.5 Application types: The following application types (for the development types listed in Section 1.2) are also likely to need a Phosphate Budget Calculation to indicate loading levels on the Ramsar site

* All new full and outline planning applications.
* Section 73 applications, to amend previous conditions that lead to an increase on floor space and associated nutrient loading.
* Reserved matters applications that did not assess and mitigate nutrients loading implications out the Outline planning determination.
* Retrospective works planning applications that result in nutrient loading.
* Where class Q applications under The Town and Country Planning (General Permitted Development) (England) Order 2015 affects the Ramsar site it is no longer considered class Q development, and such, requires a calculation to inform a Habitat regulations Assessment.

1.6 Residential and other development containing foul water discharge facilities: For residential and other development containing foul water discharge facilities please confirm and enter the following details into the Phosphate calculator:

* How foul water is to be processed; this will be either through a mains wastewater treatment plant, Package Treatment Plant, septic tank or bespoke treatment methods.
* If it is via the mains wastewater network, or Sewage Treatment Works, details of the Wastewater Treatment Works and the permitted amount of phosphate in mg/litres will be requested from Wessex Water.
* Where Package Treatment Works (PTP), or bespoke treatment or storage methods (Septic tanks) are proposed information on the efficiency of the specific equipment or method of treating phosphates, such as percentage figure e.g., 90%, and information on field ground conditions will be required. On confirmation that this nutrient management option is to be adopted as part of the development the LPA will request the specified further information required to undertake the HRA screening assessment.
* Proposed plans and figures, in Hectares, showing the development's allocation between green space and urban areas, including hardstanding.
* Information of current land use and management, including figures in Hectares.
* Confirmation that the applicant is able to provide nutrient mitigation habitat creation either onsite, or offsite (through alternative owned landholdings, or through secured land purchase).

Options include the creation of specifically designed wetland or appropriate woodland planting to remove phosphates. Method are also to be presented within a Nutrient Neutrality Assessment and Mitigation Strategy.*

* For proposals feeding into mains wastewater treatment where the applicant is unable to provide the required amount of mitigation habitat creation on or offsite then the proposal will need to need to put on hold until the scheme can contribute, through financial payment, towards the Somerset Nutrient Mitigation Strategy. See Section 2 - Methodology

Please note:

* Permanent mitigation habitat creation will be required to be implemented, or secured through legal agreement, e.g. s106, prior to development commencement, or will then need to be in place before any dwelling is occupied, depending on the certainty of the scheme offered. Habitat creation on private land may not be suitable due to the inability to reasonably monitor long term efficiency of the habitat to process nutrients, notwithstanding permanent woodland.

1.7 Development not including foul water discharge facilities: For other developments, that do not include foul discharging facilities, see Section 1.2, a separate calculation for the level of Phosphate loading from the proposal will be required. The Somerset LPAs are developing a bespoke calculator with guidance from Natural England based on nutrient input for these development types, which is anticipated to be published in Spring 2021. In the interim, the applicant is advised to seek professional advice from an Environmental Consultant to assess the amount of phosphate generated from the proposed development. For agricultural development, mitigation methods, including technical specifications for septic tanks and the results of a Simple Calculation of Atmospheric Impact Limits assessment (http://www.scail.ceh.ac.uk/) will need to be included within a NNA.

2. Mitigation methods: If the Phosphate Budget Calculator indicates a nutrient loading from the proposed development, then mitigation will be required.

2.1 Calculator results and reporting: Please incorporate the input and output figures from the completed Phosphate budget calculator into the following reports, referencing the steps and stages outlined within the Stodmarsh Guidance:

* Nutrient Neutrality Assessment (NNA), appending the spreadsheet calculation figures, and submit to the LPA.

* For applicants able to provide mitigation within the red or blue boundary, or offsite though still within the same river catchment, then please incorporate the input and output figures from the completed Phosphate budget calculator and the proposed method of mitigation into a Nutrient Neutrality Assessment and Mitigation Strategy (NNAMS) report, appending the spreadsheet calculation figures, and submit to the LPA.

2.2 Somerset Nutrient Mitigation Strategy: For proposals feeding into mains wastewater treatment where the applicant is unable to provide the required amount of mitigation habitat creation on, or offsite, a strategic approach comprised of the Somerset Nutrients Strategy is being developed by the Somerset LPAs to enable developers to purchase credits through a tariff based system, including financial contributions per development, to fund habitat banking for mitigation habitat creation. However, habitat type, including their efficiencies for processing and storing Phosphorus, their locations and viability has yet to be determined. The strategy is anticipated to be completed within Spring 2021, and as such may lead to delays in determining applications.

3. Habitat Regulations Assessment completion: Once the above details have been submitted the Local Planning Authority, as the ‘competent authority’ under the Habitats Regulations 2017, we will be able to carry out the Habitats Regulations Assessment for both proposal providing mitigation

habitat and contributing towards the Somerset Nutrient Strategy. Note a response on this assessment is required from Natural England before a decision can be made on the application. For those applications unable to provide the full information, or secure the required habitat creation, as indicated above, and thus need to provide financial contributions set out in the forthcoming Somerset Nutrient Strategy, it is advised that the application is withdrawn until said information is provided, or the strategy completed and operational.

Ecological Impact Assessment of the application site carried out by Green Ecology in Nov. 2020.

Habitat: The Site comprises a single large improved grassland field, managed for silage and dominated by perennial rye-grass Lolium perenne with occasional common herb species. The field was noted to be in regular use by local dog walkers. A small area (0.17ha) of tall ruderal vegetation and scattered scrub is located near the southern boundary.

An area of semi-natural broadleaved woodland is adjacent to part of the southern boundary, located on a steep north-facing slope. Although outside the Site, the woodland is within the development's 'Zone of Influence'. The woodland is mapped as a 'stepping stone' habitat on the Somerset Ecological Networks map and is considered to be of District (i.e. South Somerset) importance. The field is bound along the majority of boundaries by species-rich hedgerows of high quality. The northeastern hedgerow along Forton Road, western hedgerow along Tatworth Road and the southern boundary between Tatworth Road and the woodland are 'Important' under the Hedgerow Regulations 1997. Hedgerows are Habitats of Principal Importance under the NERC Act 2006 and are of County importance for nature conservation. A prominent ash Fraxinus excelsior of high ecological value is present within the eastern hedgerow, close to the woodland.

Amphibians and reptiles: Five records of common amphibians were returned by the data search. No records of the European Protected Species (EPS) great crested newt Triturus cristatus were returned and there is no standing water on-Site or adjacent to the Site. The habitats on Site are of low value to amphibians and the Site is therefore considered to be of negligible importance to amphibians.

Several records of reptiles, including adder Vipera berus, grass snake Natrix helvetica and slow-worm Anguis fragilis have been recorded within 2km of the Site. No reptiles were recorded on Site during targeted surveys in 2014 (WYG, 2014). The majority of the Site is considered sub-optimal for reptiles given the habitat and management type and is of negligible importance, however small numbers of widespread species such as slow-worm in the hedgerow bases cannot be completely ruled out.

Badger: Eight records of badger Meles meles were provided by the records centre within 2km of the Site, including records of road traffic accidents on roads to the south.

An active main badger sett is located within and along the edge of the woodland at the southern Site boundary. Fresh spoil and old bedding are present within the woodland and numerous pathways lead away from the sett along the southern boundary to the west. Whilst no latrines or foraging signs were recorded within the field, it is likely to form part of this badger clan's home range. The Site is therefore of Local importance to badgers.

Bats: The following bat species have been recorded within 4km of the Site: Bechstein's bat Myotis bechsteinii, brown long-eared bat Plecotus auritus, grey long-eared bat Pl. austriacus, common pipistrelle Pipistrellus pipistrellus, soprano pipistrelle Pi. pygmaeus, Nathusius's pipistrelle Pi. nathusii, greater horseshoe bat Rhinolophus ferrumequinum, lesser horseshoe bat R. hipposideros, barbastelle Barbastella barbastellus, noctule Nyctalus noctula, Leisler's bat Nyctalus leisleri, Natterer's bat Myotis nattereri, Daubenton's bat M. daubentonii, and whiskered/Brandt's bat M. mystacinus/brandtii. A roost comprising low numbers of non-breeding common pipistrelle is

present within a proposed development site to the north (Green Ecology, 2019a).

Birds: Records for a range of notable bird species were returned by SERC within 2km of the Site. Whilst several were wetland species associated with Chard Reservoir, species that could be associated with the Site and adjacent woodland include red-listed Birds of Conservation Concern (Eaton et al., 2015) house sparrow Passer domesticus, thrushes Turdus viscivorus/ T. philomelos, yellowhammer Emberiza citrinella, linnet Linaria cannabina and spotted flycatcher Muscicapa striata and amber-listed bullfinch Pyrrhula pyrrhula, along with other common garden and farmland bird species.

During the survey amber-listed house martin and red-listed house sparrow were recorded foraging within the Site, as well widespread species wren Troglodytes troglodytes, woodpigeon Columba palumbus and blackbird Turdus merula.

Invertebrates: A wide range of invertebrates have been recorded within 2km, mainly in association with Stowell Meadow SSSI and Local Wildlife Sites. Notable species returned by SERC that could utilise the habitats on Site include Species of Principal Importance (SPI's) brown hairstreak Thecla betulae, wall butterfly Lasiommata megera and dingy skipper Erynnis tages, which may utilise woodland edges and hedgerows. The presence of a prominent ash tree within the eastern hedgerow close to the woodland may also be of value to mating brown hairstreak. The Site is considered to be of Local importance for invertebrates.

The woodland and hedgerow are likely to support common nesting bird species during the breeding season and provide roosting and feeding habitat during the rest of the year for several species including house sparrow. The Site is of Local importance to birds. The Site is considered to be sub-optimal for foraging barn owls Tyto alba, as the grassland lacks the tussocks/ thatch in which small mammals live.

Other notable species: Other notable species recorded within 2km of the Site comprise hedgehog Erinaceus europaeus (SPI), otter Lutra lutra (EPS) and water vole Arvicola amphibius (protected under Wildlife and Countryside Act 1981). There are no watercourses within or close to the Site therefore the presence of either otter or water vole is unlikely. The Site's hedgerows and woodland provide suitable cover for hedgehog, although the presence of badger which are known to predate on hedgehog somewhat limits the likelihood of a high population.

The field however, provides good foraging habitat for hedgehog and the Site is therefore considered to be of Local importance to this species.

Although outside the application site, the woodland is within the development's 'Zone of Influence' and is mapped as a 'stepping stone' habitat on the Somerset Ecological Networks map. All trees are being retained as part of the development and must be protected during construction in accordance with BS5837:2012 – Trees in relation to design, demolition and construction. Whilst the woodland is offsite, a minimum buffer of 15m will be provided to protect it from damage. To prevent recreational pressure during operation, prickly shrubs will be planted along its northern edge. This should be included in a Construction Environmental Management Plan (CEMP). PLEASE NOTE: The conditions outlined are similar to those outlined previously by Larry Burrows.

This needs to be conditioned as follows:

1. No development shall take place (including demolition, ground works, vegetation clearance) until a construction environmental management plan (CEMP: Biodiversity) has been submitted to and approved in writing by the Local Planning Authority. The CEMP (Biodiversity) shall include the following:

a) Risk assessment of potentially damaging construction activities.

b) Identification of “biodiversity protection zones”.
c) Practical measures (both physical measures and sensitive working practices) to avoid or reduce impacts during construction (may be provided as a set of method statements).
d) The location and timing of sensitive works to avoid harm to biodiversity features.
e) The times during construction when specialist ecologists need to be present on site to oversee works.
f) Responsible persons, lines of communication and written notifications of operations to the Local Planning Authority
g) The role and responsibilities on site of an ecological clerk of works (ECoW) or similarly competent person
h) Use of protective fences, exclusion barriers and warning signs.
i) Ongoing monitoring, including compliance checks by a competent person(s) during construction and immediately post-completion of construction works The approved CEMP shall be adhered to and implemented throughout the construction period strictly in accordance with the approved details, unless otherwise agreed in writing by the Local Planning Authority.

Reason: In the interests of European and UK protected species. UK priority species and habitats listed on s41 of the Natural Environment and Rural Communities Act 2006 and in accordance with policy EQ4 of the South Somerset Local Plan.

The field is bound along the majority of boundaries by species-rich hedgerows of high quality. The north-eastern hedgerow along Forton Road, western hedgerow along Tatworth Road and the southern boundary between Tatworth Road and the woodland are ‘Important’ under the Hedgerow Regulations 1997. The development will result in the loss of the entire western boundary to allow a roundabout to be constructed on Tatworth Road. This hedgerow is Important under the Hedgerow Regulations 1997. Small sections of the western and northern hedgerows will also be lost to create pedestrian access.

To compensate for these losses, new species-rich hedgerow will be planted, in excess of the amount lost. New hedgerows must contain at least five native woody species of local provenance and create connectivity to existing hedgerows. A long-term management plan will be required to ensure tall, bushy features are maintained in the future. Several trees within the boundaries have ‘Low’ to ‘Moderate’ potential to support roosting bats.

The proposed design retains all mature trees with bat roost potential within areas of public open space and therefore no impacts to roosts will occur. However, this does not take into account of disturbance from construction activity. It is illegal to ‘recklessly’ or ‘intentionally’ disturb individual bats whilst occupying a place of rest under the Wildlife and Countryside Act 1981 (as amended). Myotis species bats are reported to be disturbed at 200m distance from road construction activity and a Barbastelle maternity roost was abandoned during the construction of a housing development 200m away in Wellington. Although it is not expected all species to be as sensitive it will be necessary to determine the occupancy of potential roosts by bats in order that appropriate mitigation can be implemented. A method statement needs to be included in a Construction Environmental Management Plan as above.

Activity surveys undertaken in 2013/ 2014 found that the boundaries (hedgerows and woodland) were used regularly by low numbers of common bat species – common pipistrelle and soprano pipistrelle. Light-sensitive Myotis species were recorded on both the southern woodland edge and northern species-rich hedgerows. The rare lesser horseshoe bat was recorded irregularly along the southern boundary. During operation, no lighting is to be directed at the hedgerows and woodland along the southern boundaries, allowing a continuous corridor for bats to be maintained. Light spill to the northern boundary must also be minimised.

The following condition will be required:

2. Prior to construction above ground level, a “lighting design for bats shall be submitted to and approved in writing by the Local Planning Authority. The strategy shall: a) identify those areas/features on site that are particularly sensitive for bats and that are likely to cause disturbance in or around their resting places or along important routes used to access key areas of their territory, for example, for foraging; and b) show how and where external lighting will be installed (through the provision of lighting contour plans and technical specifications) so that it can be clearly demonstrated that areas to be lit will not disturb or prevent the above species using their territory or having access to their breeding sites and resting places. All external lighting shall be installed in accordance with the specifications and Locations set out in the design, and these shall be maintained thereafter in accordance with the design. Under no circumstances should any other external lighting be installed without prior consent from the Local Planning Authority.

Reason: In the interests of the Favourable Conservation Status of populations of European protected species and in accordance with policy EQ4 of the South Somerset Local Plan.

As a number of records of dormouse were returned as part of the desk study Green Ecology recommends a precautionary approach to hedgerow removal will be employed. This will include timing vegetation removal for when dormice are active but not breeding (autumn or spring) following a fingertip search by a suitably qualified ecologist. Alternatively, above-ground vegetation may be cut to ground level in winter to avoid the breeding bird season, followed by stump removal in spring/ summer, after hibernation. This needs to be included within the CEMP as above.

An active main badger sett is located within and along the edge of the woodland at the southern boundary. The main sett requires a 20m exclusion zone in which no construction or storage or materials takes place. This should be clearly marked during construction to prevent accidental damage or disturbance. The proposed attenuation basin is approximately 23m from the sett at its nearest point. During operation, to prevent public access and dogs to the sett, prickly shrubs such as blackthorn, hawthorn and holly are to be planted along the woodland edge. Planting within 10 – 20m of the sett entrances should be undertaken by hand to prevent disturbance. This needs to be included within the CEMP as above.

The woodland and hedgerow are likely to support common nesting bird species during the breeding season and provide roosting and feeding habitat during the rest of the year for several species including house sparrow. As hedgerow would be lost a method statement to avoid harm needs to be provided. This needs to be included within the CEMP as above. Small numbers of widespread species such as slow-worm in the hedgerow bases cannot be completely ruled out. As hedgerow would be lost a method statement to avoid harm needs to be provided. This needs to be included within the CEMP as above.

Habitat provided as mitigation and or enhancement will need to be managed for the benefit of those species affected and biodiversity generally for the duration of the development in order that any mitigation and or enhancement is effective. This needs to be conditioned as follows:

3. A Landscape and Ecological Management Plan (LEMP) shall be submitted to, and be approved in writing by, the Local Planning Authority prior to first occupation of any building in the development. The content of the LEMP shall include the following:

a) Description and evaluation of features to be managed.
b) Ecological trends and constraints on site that might influence management.
c) Aims and objectives of management.
d) Appropriate management options for achieving aims and objectives.
e) Prescriptions for management actions.
f) Preparation of a work schedule (including an annual work plan capable of being rolled forward over a five-year period). g) Details of the body or organization responsible for implementation of the plan.

h) On-going monitoring and remedial measures.

The LEMP shall also include details of the legal and funding mechanism(s) by which the long-term implementation of the plan will be secured by the developer with the management body (ies) responsible for its delivery. The plan shall also set out (where the results from monitoring show that conservation aims and objectives of the LEMP are not being met) how contingencies and/or remedial action will be identified, agreed and implemented so that the development still delivers the fully functioning biodiversity objectives of the originally approved scheme. The approved plan will be implemented in accordance with the approved details.

Reason: In the interests of the 'Favourable Conservation Status' of populations of European and UK protected species, UK priority species and habitats listed on s41 of the Natural Environment and Rural Communities Act 2006 and in accordance with policy EQ4 of the South Somerset Local Plan.

The National Planning Policy Framework (170d) requires biodiversity enhancement to be provided within development. A bee brick would contribute to the Somerset Pollinator Action Plan. Research shows that bees will live in the bricks and there is no risk associated with their installation as solitary bees do not live in hives or have a queen, and do not sting. The bricks have a solid back with the cavities placed on the outside wall. I recommend that the following is conditioned.

Timing of the hedgerow removal should avoid impacts on nesting birds. Therefore, the following shall be conditioned:

4. No removal of hedgerows, shrubs that may be used by breeding birds shall take place between 1st March and 30th September inclusive, unless a competent ecologist has undertaken a careful, detailed check for active birds' nests immediately before the vegetation is cleared or works to or demolition of buildings commences and provides written confirmation that no birds will be harmed and/or that there are appropriate measures in place to protect nesting bird interest on site. Any such written confirmation should be submitted to the Local Planning Authority by the ecologist. If vegetation removal works are undertaken between 1st March and 31st August then dated photos showing the site before and after clearance will be submitted to the local authority. In no circumstances should netting be used to exclude nesting birds.

Reason: In the interests of nesting wild birds and in accordance with policy EQ4 of the South Somerset Local Plan

5. The following will be integrated into or mounted upon buildings or otherwise implemented as appropriate:

a) A Habibat 001 bat box or similar will be built into the structure at least four metres above ground level and away from windows of the west or south facing elevation of 25 plots

b) A cluster of five Schwegler 1a swift bricks or similar built into the wall at least 60cm apart, at least 5m above ground level on the north facing elevation of 5 plots

c) Four Vivra Pro Woodstone House Martin nests or similar will be mounted directly under the eaves on the north facing elevation of 10 plots

d) Two Schwegler 1SP Sparrow terraces or similar at least one metre apart directly under the eaves and away from windows on the north elevations of 20 plots

e) A bee brick built into the wall about 1 metre above ground level on the south or southeast elevation of the dwelling on 50 plots

f) Any new fencing must have accessible hedgehog holes, measuring 13cm x 13cm to allow the movement of hedgehogs into and out of the site

g) The new hedgerow will be planted up with native species comprised of a minimum of 5 of the following species: hazel, blackthorn, hawthorn, field maple, elder, elm, dog rose, bramble, bird cherry and spindle.

Plans showing the installed features will be submitted to and agreed in writing by the Local Planning
Authority prior any construction above ground level

Reason: In accordance with Government policy for the enhancement of biodiversity within development as set out in paragraph 170(d) of the National Planning Policy Framework.

Ecologist: (Original Comment)
No objection. The Ecologist has read the submitted ecological report and doesn't raise any issues withits conclusions. 3 conditions are recommended in regard to badger mitigation and to enhance biodiversity within the site.

Natural England:
No objection.

Open Spaces Officer:
The designs provided on the 'Site Masterplan' identify 1.48 hectares of useable Public Open Space, a provision in excess of that required by SSDC. We are happy with the design and location of public open space; in particular the two areas 'centrally' located within the two halves of the site, breaking up the built form and creating community focus points.The green entrances at both ends of the site are also an encouraging feature, although we would like toconfirm whether the area around the properties to the south of the western entrance would be privatelymanaged if these are apartment blocks or would it be incorporated within the sites public open space. The inclusion of a green corridor along the southern boundary of the site is a very positive feature, linking the entrances through the basins and creating a useable buffer between the surrounding areas.Although we haven't included the basins within the POS calculation, we would still be keen to work withthe developer to create landscaped areas here that can be enjoyed by the community. Finally, we would like to clarify who the intended ownership is for the hedgerow/buffer strip along the northern boundary ofthe site. We would like the see the ownership transferred to the properties rather than with the adoptionof public open space, which we are keen to see come to SSDC.

The intended ownership of the hedgebank buffer strip has been clarified as individual property owners with the open space to be adopted by SSDC.

Housing Officer (Latest Comment)
The proposed provision is now 88 units out of 252 (not 110 out of 323) but this is still 35% and policy compliant. The mix will be as follows:

88 affordable dwellings - 70 social rented & 18 as intermediate dwellings = 80/20 split
31 x 1 bedroom
33 x 2 bedroom
20 x 3 bedroom
3 x 4 bedroom
1 x 4 bedroom parlour

Housing Officer: (Original Comment)
Confirmed that they seek 35% of this site as affordable housing. This would total 110 units. The split would be 80/20 in favour of social rent with 20% for intermediate affordable housing solutions.

The affordable dwellings should be pepper potted throughout the site and in clusters of no more than 15 units.

The following property mix has been requested although this may be subject to slight amendment:37 x 1 bed, 39 x 2 bed, 30 x 3 bed, 2 x 4 bed and 2 x 4 bed parlour

The s106 agreement should contain appropriate trigger points to guarantee that some of the affordablehousing provision is delivered in the event that the site gains permission but is only ever partially built out. The s106 should also include a schedule of approved housing association partners for delivery of the affordable units. Recommended space standards are also outlined.

The revised proposal now meets all the relevant requirements for affordable housing provision.

Environmental Health Officer: (Latest Comment – 14th December 2020)

Previous comment regarding the reporting of any pollution discovered during the development phase still stands.

Environmental Health Officer: (Original Comment)
No objection subject to a condition to deal with any contamination of the site if this is found during construction.

County Archaeologist: (Latest Comments – 20th April 2021)

The submitted geophysical survey indicates that locally significant archaeological remains are likely to be impacted by the proposal.

For this reason I recommend that the developer be required to archaeologically investigate the heritage asset and provide a report on any discoveries made as indicated in the National Planning Policy Framework (Paragraph 199). This should be secured by the use of the following conditions attached to any permission granted.

"Programme of Works in Accordance with a Written Scheme of Investigation (POW)
Before the commencement of the development hereby permitted the applicant, or their agents or successors in title, shall have secured the implementation of a programme of archaeological work in accordance with a Written Scheme of Investigation (WSI) which has been submitted and approved in writing by the Planning Authority. The WSI shall include details of the archaeological excavation, the recording of the heritage asset, the analysis of evidence recovered from the site and publication of the results. The development hereby permitted shall be carried out in accordance with the approved scheme."

County Archaeologist: (Original Comment)
An Archaeological Assessment has been submitted and considers the archaeological potential to be low. This is based on the lack of information concerning the site rather than a systematic evaluation. The report acknowledges this and the County Archaeologist has required a field evaluation to be undertakenprior to the determination of the application.

Crime Prevention Design Advisor: (Latest Comments – 22nd December 2020)
No Objection: The revised boundary treatment plan does show the use of screen walls, close board fence, railings and hedging as dwelling boundaries but does not show the location of pedestrian access gates to rear gardens or gates to shared access paths to rear gardens, these should be located as close to the front line of the building, or path as possible. Plots 3 & 4, 7 & 8, 17 & 18, 21 & 22, 148 & 149 are shown with a break in the screen wall next to their rear parking spaces – If these are shared rear access paths, they should be gated front and rear also. Each dwelling should be provided with secure cycle storage within garage where possible or rear garden.

Crime Prevention Design Advisor: (Original Comment)
Seek provision of rear or front garden access gates. A very high proportion of dwelling burglaries occur through the rear of properties. Lack of garden gates facilitates criminal activity to an area with minimal surveillance opportunities. The lack of gates creates long dark alleyways giving cover to the criminal.
Avoid blank gable ends abutting public space and parking areas
The removal of parking spaces alongside the main road is support if they are by the play area.

Wessex Water:
Wessex Water is the statutory undertaker for Chard and South of Chard for potable water supply. Wessex Water is the statutory undertaker for Chard for waste water services. The proposed development south of Chard at Land adjoining Holbear Forton Road is within South West Water's statutory area for the provision of waste water services.

Wessex Water is currently updating the water supply model for Chard to consider the implications of thissite upon the existing network. Results will be communicated in due course. There is an existing 250mm public water main which crosses the site. This main must be accurately located on site and marked on deposited drawings. There must be no building within 5 metres or tree planting within 6 metres of this main. Subject to application, engineering agreement and at the developers cost, it may be possible to divert this main to provide easements within the proposed site layout. The applicant will need to demonstrate that the existing water main will be protected with the appropriate easement or diverted in agreement with Wessex Water.

We note from the submitted Planning Statement that South West Water is modelling the impact of the development upon South West Water's foul drainage infrastructure in the Tatworth catchment. We believe South West Water will promote a pre-commencement condition on this full planning applicationto ensure a foul drainage strategy can be agreed prior to commencement on site.

The applicant has indicated that surface water will discharge via Suds arrangements and Highway Drain. Matters will require the approval of the LLFA and Highway Authority.

Officer comment: The developer has confirmed the existing water main will be diverted as required and that the developer has reached agreement with Wessex Water for all sewage disposal and subsequent treatment to be via their infrastructure within the River Axe catchment, effectively removing the issue of phosphates and its block upon development which connection to South West Water infrastructure would have generated

South West Water: (Latest Comment – 14th December 2020)
No further comments beyond those already given.

South West Water: (Original Comment)
SWW have advised that the public foul drainage network does not have capacity to support the development without causing downstream sewer flooding. In recognition of this, the applicant has funded investigations to establish the extent of improvements required to accommodate the development. As such if the scheme is approved, a condition regarding foul drainage would need to beimposed.

Officer comment: A condition in regard to foul drainage is recommended requiring the developer to submit an application to the relevant Sewerage Undertaker for a public foul sewer requisition under s98 of the Water Industry Act 1991 (which shall include the provision of public sewerage improvement worksidentified as necessary): 'No dwelling hereby approved can be occupied or brought into use until the scheme of improvement works identified by the Sewerage Undertaker as necessary to accommodate the discharge of foul sewage from the development has been installed'. SWW have advised that this is not uncommon on large developments and one Persimmon have undertaken previously. In the light of the officer comments in relation to Wessex

Water above this condition will still be imposed but will now relate to Wessex Water infrastructure.

Local Lead Flood Authority: (Latest Comment – 19th February 2021)
No objection, subject to following condition and notes being included in any decision:

Condition: No development shall be commenced until details of the surface water drainage scheme, based on sustainable drainage principles, together with details of a programme of implementation and maintenance for the lifetime of the development, have been submitted to and approved in writing by the Local Planning Authority. This scheme should aim to enhance biodiversity, amenity value, water quality and provide flood risk benefit (i.e. four pillars of SuDS) to meet wider sustainability aims, as specified by The National Planning Policy Framework (July 2018) and the Flood and Water Management Act (2010). The drainage scheme shall ensure that surface water runoff post development is attenuated on site and discharged at a rate and volume no greater than greenfield runoff rates and volumes. Such works shall be carried out in accordance with the approved details.

Reason: To ensure that the development is served by a satisfactory, sustainable system of surface water drainage and that the approved system is retained, managed and maintained throughout the lifetime of the development, in accordance with National Planning Policy Framework (July 2018) and the Technical Guidance to the National Planning Policy Framework.

We would welcome the following informative / notes to be provided outlining the information the LLFA will expect to see in order to discharge the above condition:

* Details for provision of any temporary drainage during construction. This should include details to demonstrate that during the construction phase measures will be in place to prevent unrestricted discharge, and pollution to the receiving system.
* Information about the design storm period and intensity, discharge rates and volumes (both pre and post development), temporary storage facilities, means of access for maintenance (6 metres minimum), the sustainable methods employed to delay and control surface water discharged from the site, and the measures taken to prevent flooding and pollution of the receiving groundwater and/or surface waters. The 0.1ha resulting from highways improvements must be included within the calculations.
* Details on any works required to ensure adequate discharge of surface water without causing flooding or pollution (which should include refurbishment of existing culverts and headwalls or removal of unused culverts where relevant).
* Infiltration testing, detailed design and construction in accordance with Building Research Digest 365. Infiltration features must be located more than 5m from building and road foundations and there must be a minimum of 1m between the base of any infiltration feature and maximum ground water level. If soakaways are shown as unviable after further testing, a suitable sustainable drainage scheme shall be shown
* Flood water exceedance routes both on and off site, including details on the arrangements to intercept any flow coming onto the site, note, no part of the site must be allowed to flood during any storm up to and including the 1 in 30 event, and any flooding during the 100 year +40% climate change event must be retained onsite without causing flooding or damage to properties and highway. Storm events in excess of this must be controlled within the designed exceedance routes demonstrated to prevent flooding or damage to properties and highway.
* A management and maintenance plan for the lifetime of the development which shall include the arrangements for adoption by an appropriate public body or statutory undertaker, management company or maintenance by a Residents' Management Company and / or any other arrangements to secure the operation and maintenance to an approved standard and working condition throughout the lifetime of the development. The ownership and responsibly for the dry pond should also be clarified.
* Somerset County Council is the Lead Local Flood Authority (LLFA) as defined by the Flood and Water Management Act 2010 and the Flood Risk Regulations 2009. Under section 23 of the

Land Drainage Act there is a legal requirement to seek consent from the relevant authority before piping/culverting or obstructing a watercourse, whether permanent or temporary. This may also include repairs to certain existing structures and maintenance works. This requirement still applies even if planning permission has been granted. For more information, please visit https://www.somerset.gov.uk/waste-planning-and-land/apply-for-consent-to-work-on-an-ordinary-watercourse/

Local Lead Flood Authority: (Intermediate Comment – 7th January 2021)
We have reviewed the updated Drainage statement and technical response to planning comments and have several comments below:

* Please be aware that we expect to see groundwater levels to be a minimum of 1m between the base on any infiltration feature and maximum groundwater level. The technical response to planning comments indicates that groundwater monitoring data was being awaited.
* Could the applicant clarify that the 0.1ha catchment associated with the existing highways sewers has been included within the calculations.
* There appears to be surcharging on the 1 year event, which we do not normally expect to see.
* The applicant should demonstrate that any flooding within the 100 year+40% climate change event is retained onsite
* We are struggling to locate any updated design of the bund feature, could this be provided for review
* It is not clear if or how the ditch/dry pond arrangement will be maintained as part of the development, given that the dry pond is outside of the site boundary. It is suggested that an area of 0.1ha resulting from the highway improvements has been factored into the design calculations for the infiltration basin.
* An allowance for urban creep should be included.

Please be aware that Land Drainage Consent may be required for any works to an ordinary watercourse.

Local Lead Flood Authority: (Original Comment)
The LLFA has no objection to the proposed development. They advise that the development indicates an increase in impermeable areas that will generate an increase in surface water runoff. This has the potential to increase flood risk to the adjacent properties or the highway if not adequately controlled. Theapplicant has not provided sufficient details of the proposed drainage designs for the capture and removal of surface water from the development. Due to the location of the site and the proposed increase in impermeable areas it will be necessary to provide these details and a surface water drainagecondition, to include a lifelong maintenance programme is recommended.

County Education: (Latest Comment – 8th December 2020)
I refer to the above-mentioned planning application received on 13 December 2019 and the following amended plans which have adjusted the total number of dwellings to 252. This amendment will also reduce the likely number of pupils being generated from the development, therefore I have set out the new calculations for the corresponding level of education contributions which are required.
0.09 x 252=22.68 - 23 pupils for early years
0.32 x 252=80.64 - 81 pupils for Primary
0.14 x 252=35.28 - 36 pupils for secondary
23 x 17,074=£392,702 funding for early years expansion
81 x 17,074=£1,382,994 funding for Primary school expansion across Chard or new School
36 x 24,861=£894,996 funding for expansion of Holyrood secondary

County Education: (Previous Comment)
The three primary schools in Chard have a total pupil capacity of 1049 which is made up as follows:

Avishayes Capacity 239, Redstart capacity 420, Manor Court capacity 390

The latest published forecasts indicate that by 2018 a total pupil capacity of 1050 will be required withinChard. This forecast data includes; demographic data as available, and some approved full and reserved matter planning applications. However, there are a number of approved applications in Chardthat are not included in this published forecast which will add an additional 27 pupil places to the figure of1050 - thus 1077 places will be required in Chard by 2018 to meet pupil numbers.

This application together with any others that come forward in Chard will further increase the need for capacity within the Chard schools which is not forecast to be available at the time this development comes forward. It will therefore be necessary to request education contributions. A development of 323dwellings would generally bring forward the need for an additional 65 primary school places at a notionalcost of £14,007 per place. If you are minded to approve this application SCC as education authority would wish to seek an education contribution of £910,455.

In addition to primary contributions as previously advised SCC will be seeking contributions towardsproviding additional places at Holyrood in Chard and contributions towards pre-school places in Chard.

A development of 323 dwellings would bring forward the need to provide an additional;

- 65 primary school places at a notional cost of £14,175 pre place (£921,375)
- 47 secondary school places at a notional cost of £21,359 per place (£1,003,873)
- 10 pre-school places at a notional cost of £14,175 per place (£141,750)

NHS Somerset CCG (Revised Response – 30th April 2021)
As a result of the proposed development above, Somerset CCG would like to request that Section 106 contributions are provided to offset the proposed increase in patient numbers. Any monies contributed will be utilised to ensure that the Somerset health system can continue to provide a high quality and continuity of care in Chard.

We anticipate a patient increase of approximately 562 patients. Based on our calculations, we will be seeking a contribution of £76,510.68.

NHS Somerset CCG (Original Response)
Based on an average of 3 per dwelling, this development could increase patient list size by approximately 756.

Given that the GP Provision in Chard is all closely located, it is difficult to attribute the split of patients between the practices. However based on the existing capacity in chard and the proposed increase of patients, my findings are as follows.

The practice closest to the development is Tawstock which is currently 15% undersized. The addition of 756 patients would make them 28% undersized. (I appreciate the patient list may be split around the other local practices.)
The boundary from the proposed site also includes the below 2 practices.

* Springmead = 0% undersized
* Essex house- 25% undersized

I note that the letter refers to a Draft S106 agreement sent to the council's legal representative in November 2020 and includes the following Heads of Terms.

* 35% affordable housing (88 units)
* Contribution towards education
* On-site provision of open space and Local Equipped Area of Play (LEAP) and the future maintenance
* Off-site contributions towards Youth Facilities; Playing Pitches; and Changing Rooms and

future maintenance
* Travel Plan
* Safeguarded land for extension of Eastern Relief Road

There is no mention of a contribution to health infrastructure in this document which surprises me?

Given the fact that there are other developments in the pipeline including (18/04057/OUT -295 dwellings) and the current overall undersized Infrastructure capacity already in place. Somerset CCG with be seeking contributes via s106 or CIL to mitigate the impact on the Primary Care provision in Chard.

Somerset Waste Partnership (Revised Comments – 4th February 2020)
Our main concerns are those properties who appear to be located on private drives – particularly plots 57-65 inclusive, 107,108,109; 137-141 inclusive, 172,173, 244-248 inclusive, and 255,256,257. These will need clarification as to where they should present their refuse and recycling containers.

Ideally we'd like as many properties as possible to be accessed directly from the roadside. We find that where collection points are away from a particular property, that it can become an eyesore with containers left out at all times, causing issues and complaints from fellow residents. These situations are generally much reduced when a container is put right outside someone's property for collection.

Somerset Waste Partnership (Original Comments)
No objection raised to the scheme. They did advise though that the vehicle tracking undertaken didn't cover the largest waste collection vehicle for the new internal estate roads. Their largest vehicle is 11.4mlong whereas the tracking covered vehicles up to 11.18 m long. The applicant has been informed and the Highway Authority asked for their advice. A verbal update will be given in regard to any response received.

Sport and Play Officer (21st December 2020)
A full response from the Sport and Leisure team has been received in terms ofthe planning obligations sought in regard to sport and play provision which would result in an overall level of contribution of £690,954.00 (equating to £2,742.00 per dwelling plus administration fee). A table detailing their assessment and requirements is appended to this report. Officers have been in discussion with the applicant during the course of the application in regard to securing adequate play and sport provision. This has resulted in agreement both for the contributions set out in the table attached but also the arrangements for the transfer of land to the Council to provide off-site sports pitch provision in association with land further to the east adjoining Forton which the Council has recently completed acquisition of.

Sport England: (22nd January 2021)

Sport England is responding again following discussions with the Football Foundation on behalf of the FA and Somerset FA. To avoid any confusion, this response should confirm our position on application ref 16/02874/FUL.

Whilst most sports would like an off-site contribution to sport from new housing as highlighted below (for ease). That is not the same for football.

Sport England re-confirms that the playing pitch land remains a priority for football, as there is a considerable deficit of grass pitch provision in Chard and the surrounding areas, therefore developments that can bring forward new grass pitches is crucial to allow for growth in football provision. We and football would prefer the playing pitch land remains as part of this proposal.

The Football Foundation, on behalf of The FA and Somerset FA, advise that the South Somerset PPS (April 2017) and South Somerset Local Football Facility Plan (2020), the following items remains a strategic priority for football, specific to the Chard area:

The provision of new appropriately sized football pitches in a sustainable location to address long standing and well documented deficiencies and sub-standard facilities in Chard and to meet demand generated by new housing growth. It is noted with the PPS that Chard teams – adult & junior and mini soccer are having to play outside the town because of a shortage of pitches (the nearest 9v9 pitch is at Forton). The total minimum requirement is an additional 4 adult, 3 junior and 2 mini pitches. New pitches should be provided in a sustainable location on a multi pitch site so that a range of pitch sizes can be accommodated, with requisite changing and ancillary facilities.

The priority project for football to address this considerable deficit of grass pitch provision in Chard, are projects that can bring forward new grass pitches is crucial to allow for growth in football provision. There is land next to Forton Rangers Football Club (TA20 2LZ) that should be developed and converted into sports pitches and brought under the site infrastructure.

The RFU comments remain the same to those previously submitted. Chard RFC secondary site is in significant need of infrastructure development – changing rooms, sports lighting and drainage. This is captured in the PPS. Approximate costings would be a good way forward.

* Utilities - £30k
* Sports lighting - £50k
* Changing Room Provision - £100k

For cricket, Somerset Cricket Board advise that Chard Cricket wise in the PPS is New Nets on page 44: https://www.southsomerset.gov.uk/media/1353/s-general-umbraco-content-final_strategy_and_action_plan_south_somerset_pps_sept_2017_v07.pdf
Without fully knowing what the exact design that the club would want to go for and associated specification they would be looking at approx £35k-£50K.

The LTA would suggest a three court park with gates somewhere in Chard. Built over an existing hard standing in a green space / recreation area. Costs will be approx. 3 courts £100k.

Conclusion: Sport England has no objection in principle to housing growth but we continue to OBJECT but would like to see detail of the s106 Agreement for on-site and off-site sporting provision and the principles of Active Design demonstrated to reconsider withdrawing the objection.

Officer comment: The land required to provide the desired off-site practice pitch has now been incorporated within a legal obligation requiring the transfer of the land to the Council before works commence on site on the housing development proposed.Without the proposed permission in place, there is a risk that no sporting provision is provided as the land already acquired west of Forton would be of insufficient size to provide the desired facilities without the addition/transfer of this additional land The Council will make its own subsequent application for planning permission for the change of use of that land to recreation so that the facilities may be brought on stream in tandem with the phased development of the dwellings proposed.

Sport England (May 2017)
It would appear that the application has now been revised to include the provision of playing pitches at aseparate site to the south of the application site. I understand these will form an extension of an existing playing field site and are broadly in line with the Council's aims for this area. It is my understanding that there is a Playing Pitch Strategy emerging (though not yet finalised) which would support this. The principle of this provision is therefore welcomed.

However, before I can offer Sport England's full support for this option, I require further information

about the proposed pitches - currently none is provided beyond their location. These will presumably require their own planning permission; has planning permission been applied for?

I also require more information as to what is proposed at the site - such as earthworks or any drainagerequired to make the site suitable for playing pitches, in order to better ascertain exactly what is offered,and input usefully into the pitch design with the aid of my NGB colleagues. I look forward to receiving further information in due course.

Sport England: (July 2016)
Sport England are unable to support this application due to the lack of provision for sport and lack of detail in regard to younger children and youth play provision.

REPRESENTATIONS
36 letters/emails were received objecting to the original application raising the following points:

- Increased levels of traffic in the local area
- Local roads will not be able to cope with the additional traffic
- Poor public transport provision will only add to congestion on roads.
- The baseline data collected for the Transport Assessment was collected during January - hasnot taken account of seasonal variations
- Criticism of the figures used to support the Transport Assessment
- Not appropriate to place heavy goods vehicles onto the estate road
- Insufficient parking
- Distances to services and facilities not accurate
- Site is poorly located
- Density too high
- Poor quality of layout
- Proposed dwellings not in character with existing dwellings at Holbear
- 3 storey dwellings adjacent to existing dwellings will be overbearing and cause loss of privacy
- Harmful impact on the amenity of existing dwellings
- A large number of affordable dwellings next to Holbear
- Harmful impact on local services
- Local infrastructure including schools, medical services will not be able to cope with additionalpopulation
- Lack of infrastructure provision
- Uncertain if the proposed drainage proposals will be adequate
- Surface water accumulates on site
- Green spaces not in the best locations within the development
- The scheme is not in accord with the phasing of the Chard Plan
- Lack of employment opportunities
- Loss of a large area of countryside
- Harmful impact on wildlife

One letter was received supporting the principle but seeking advice on measures to enable disabled residents to access services

Fifteen letters/emails were received in regard to the first set of amended plans making changes to the layout. All of the comments received stated that the amendments do not address the fundamental concerns originally raised about the scheme, and as outlined in summary above.

Fourteen letters/emails were received in regard to the further amendment to include the off-site sports provision and further changes to the site layout. Previous concerns were reiterated about the

scheme. Inregard to the proposed sports pitch, concerns were raised about access, location of changing facilities,noise, and that there are enough pitches.

Five letters/emails were received in regard to further amended plans in regard to the single vehicular access. Previous objections were reiterated but adding that the proposed single access won'taddress the highway problems the development will create. Criticism raised again about the collection ofthe baseline data used to inform the Transport Assessment.

Six individual have submitted further letters/emails in regard to the latest amended plans which reiterate previous concerns and objections and also echo the revised assessment and latest requirements with suggested conditions of the Ecologist.

Two further letters/emails have been received immediately prior to and since the last Regulation Committee with reiterate previous concerns and objections, including privacy and boundary issues, and raise issue with the content of the officer report.

CONSIDERATIONS

Principle of Development
The site is included as part of the wider Chard Plan Regeneration Area which seeks to provide housing,employment, education facilities, new highway infrastructure and sport and play facilities during the current Local Plan period (2006-2028) and beyond. The Chard plan includes this site for housing with areas of green infrastructure and a section of the Eastern Relief Road for Chard. The developer has indicated the following anticipated delivery timeline for the housing:

Start January 2022: 2022 completions = 20 dwellings
2023 completions = 50 dwellings
2024 completions = 50 dwellings
2025 completions = 50 dwellings
2026 completions = 50 dwellings
2027 completions = 32 dwellings

Therefore, the principle of residential development on this site is accepted.In accord with the NPPF, development should be supported provided that no significant adverse harm can be demonstrated that would warrant refusal of the scheme.

Highway issues
It is not surprising that one of, if not the biggest local concern about the proposed development, is the potential highway impact of the proposal. A Transport Assessment was undertaken and submitted with the application which has been assessed by the Highway Authority and also independently reviewed by highway consultants for the Highway Authority. Criticism has been made of the methodology for collecting and forming the base data used to inform and create the traffic modelling figures for the development. However, both the Highway Authority and independent consultant have confirmed that thebase data figures are robust.

As outlined above in this report, the Highway Authority have not raised an objection to the developmentconcluding that the traffic impact of the scheme would not be severe. The TA did conclude that 3 local junctions would be at or over capacity by 2023 but that would be the case without this development. With development traffic, additional queueing would occur at these junctions and hence additional delays. However, the Highway Authority concluded that with Travel Plan measures in place to encourage use of other modes of travel and the creation of the wider link road, the impact will not be severe. Thus, whilstthere are some technical details to agree, the Highway Authority have not objected. Whilst it is clear thatthere will be an adverse highway impact as a result of this development, on the basis that the HighwayAuthority have not objected, it would

make it unreasonable to recommend refusal on highway grounds.

As outlined earlier in this report, the application was amended to provide 1 vehicular access only from the Tatworth Road with emergency, cycle and pedestrian access only onto Forton Road. This revision arose following discussions with Persimmon about how to address the genuine concerns about the highway impact of the scheme. As confirmed by the Highway Authority, removing the proposed development's motorized traffic from Forton Roadwould assist with the functioning of the Tatworth Road and Forton Road junction.

The site, if approved, would come forward earlier than the Chard plan proposes under its phased recommendations. The Chard Plan advises that this site would come forward towards the latter end of phase 3 once the sites to the north have been implemented with their respective sections of the main spine road in place. The Chard Plan does also advise that sites can come forward out of sequence butmust not prejudice the delivery of other sites from coming forward. In this case, delivery of the current application site would not physically prevent other sites to the north from coming forward. However, if permission were to be granted for this site, there is a risk that with this and the site to the west (outline permission for 200 homes) the build out /sales would take a number of years with no other development coming forward providing the new highway infrastructure that the town needs.

One option initially suggested to the developer was to phase delivery of this site to ultimately only allow the whole site to be built and houses sold once the road was in place to the north of this site. However, thiswas not accepted for contractual reasons. Instead, a Memorandum of Understanding was beensubmitted by Persimmon which stated that they would work closely with the Council to assist with delivery of the required road infrastructure. Whilst this would not have been legally binding, it was a clear indication that the developer recognised the importance of securing the road infrastructure.

The latest discussions with officers and the Highway Authority has confirmed the legitimacy of imposing a condition to secure the provision of the extension of the spine road to create a vehicular junction onto Forton Road when the further phases of the Eastern Relief Link Road are available for connection to ensure Forton Road does not become overburdened with vehicular traffic. Persimmon has submitted an illustrative plan of the layout of that future junction which demonstrates that the land to be safeguarded in this permission is sufficient to cater for even the most onerous of junction design parameters.

The purpose of the condition is to secure public control over the delivery of an appropriately configured junction within and agreed area of land contiguous with the proposed turning head. The linkage must also ensure that relevant services that extend along that part of the link road delivered as part of this application can freely connect into any wider utility and service connections as required without ransom to ensure the junction as eventually configured will be able to enable a public and adoptable connection to be taken from the Forton Road, serving land to both the north east and south west.

A legal undertaking is also to be secured which will transfer the land and sufficient finance required to the Council in order to enable implement this northern junction to the Forton Road at the appropriate time when the sites to the north of Forton Road come forward for development once the issue of Phosphates has been resolved.

An Addendum to the Transport Assessment has been submitted following further consultation and discussion with SCC Highways which provides further updated analysis on the transport implications of the proposed development.

Residential Amenity
Objections to the scheme have been received in regard to the harmful impact that the proposed

dwellings along the northwest boundary would have upon the amenity of those existing adjacent residents in Holbear. The scheme as originally submitted included 3 storey dwellings along this boundary. These were considered unacceptable given the overbearing nature and harmful overlookingthat would occur. Those have now been removed and replaced with 2 storey units.

In addition, the original scheme also included a significant number of terrace blocks running along the northwest boundary which contributed to a significantly higher density of development compared with the large detached dwellings in Holbear development. The original scheme included a total of 49 units along this boundary which was considered to be incongruous with the form of dwellings in Holbear. The current scheme has now reduced this number to 34 with predominantly semi-detached units, 7 detached units and 1no 3 block terrace. Whilst concern remains that this density is still too high, it is considered that this has satisfactorily addressed the original concerns. Moreover, it is not reasonable to expect that the new development would replicate the form or density at Holbear. In addition, the Chard Regeneration Plan identifies that the northern part of this site to be higher density than the southern countryside edge with 40-50 dwellings per hectare. Given the revised layout and a distance of 20 metres between new and existing dwellings where they would face each other, it is considered that there would be no significant adverse harm to neighbouring amenity warranting refusal.

Density
Concern has been raised that the density of the scheme is too high for the site and not in character withadjacent development. Whilst it is accepted that the density is high, the scheme has now been reduced twice from the original 323 dwellings proposed to 252 dwellings, with green linkages running through the development which with an implemented landscaping scheme will assist with breaking up the development form across thesite. The density adjacent to existing dwellings has been reduced as outlined above. Moreover, the Chard Plan suggests a density of between 40-50 dwellings per hectare on the northern part of the site,with between 30-40 dwellings on the southern section. On this basis, and with the lack of objection from any statutory consultees on the density, it is not considered that the density is significantly adverse to warrant refusal.

Affordable housing
The scheme makes provision for 110 affordable housing units which is in accord with the Council's policy of 35% affordable housing. Separate blocks of affordable housing units will be limited to a maximum grouping number of 15 dwellings and accord with the housing mix and minimum internal space standards required by the Strategic Housing Officer. There is no national or local policy that explicitly requires pepper potting or that they should not be adjacent to existing market housing. On this basis, the proposed layout and location of the affordable units is considered acceptable.

Ecology
The Ecologist has reviewed the submitted ecological report which identified the existence of badger setts along part of the southern boundary. He supports the recommended mitigation measurescontained within that report. Subject to the imposition of conditions in regard to badger, bat, hedgehog, bird mitigation and tosecure biodiversity enhancement within the development, the proposed development would not adversely harm ecological interests and, accordingly, no objection is raised on ecology grounds.

Phosphates
Chard is located at the outer edge of the Somerset Levels and Moors Ramsar site surface water catchment. In addition, the Wessex Water sewerage treatment plant serving much of Chard also feeds back into the same river catchment. However to the south east of Chard, the surface water catchment feeds into the River Axe and in addition sewerage treatment can also feed into that treatment catchment. The Somerset Ecology Services Ecologist’s comments in relation to nutrient impact on the South West Water sensitive catchment within which the site physically sits have been addressed by additional information Persimmon has submitted demonstrating both the practicality of and their intention that the development’s entire foul sewage load is fed solely into

Wessex Water infrastructure and treatment plants which lie wholly outside of the Somerset Levels and Moors catchment and have no potential for impact upon the sensitive catchment. This is an option peculiar to this site as it lies on the cusp of the two catchment areas where the two water companies existing mains infrastructure overlaps within the public highway adjoining the site. This solution will need to be secured by condition to demonstrate that there is no inter-relationship between the application site and the European site and its interests. On this basis a Habitat Regulations Assessment is not required as the impacts are not upon the relevant protected catchment.

Flooding/Drainage
A Flood Risk Assessment was undertaken and submitted with the application. This confirmed that the site is located in Flood Zone 1 which means low probability of flooding from river or sea. Some local concern has been raised about surface water flooding on parts of the site. Site surveys undertaken by the applicant have confirmed historic flooding issues at the west part of the site and down slope on Forton Road. Infiltration studies have been undertaken to assess the potential for infiltration across thesite. There is a clay top layer with a gravel layer 3 metres below ground level - this provides sufficient infiltration to manage the runoff from the site. The strategy will therefore be to collect rainwater into infiltration ponds along the north-west part of the site and mid southern boundary allowing water to naturally soak into the ground. In regard to foul water disposal, all foul water will be disposed of to the Wessex Water infrastructure outside the sensitive catchment area thus precluding the need for consideration of potential impact of phosphates. This will be undertaken by the developer. A condition shall be attached to any consent to require that the necessary works are agreedand undertaken prior to first occupation. The LLFA is now satisfied with the proposals subject to appropriate conditions.

Play and sports facilities
A site on the western side of the site has been included as the area for a formal play area LEAP. The play officer has been involved in discussions with the developer to secure this site and to ensure that there is a sufficient buffer zone from residential properties and is not adjacent the main spine road for the development

In regard to sport provision, a Planning Obligation will provide an area of land to the east of the site, to the south of Badger's Lane and adjacent to Forton Rangers, for practice pitch provision to supplement the adjacent land recently acquired by the Council. The Council's practice pitch strategy has identified a shortage of pitches in Chard. Whilst it is acknowledged that this site is in the Tatworth and Forton parish, finding suitable land for pitches in Chard has proven to be very difficult. In the absence of any viability issues, securing monies from development through an obligationis not usually a major issue but securing land upon which to site a pitch proves extremely difficult. In this case, theopportunity to secure land was offered by the developer and in agreement with the sports officer, it wasconcluded that it would make sense being adjacent to existing football provision. Although the land will be transferred to the Council it will then be for the Council to make any necessary application for planning permission to secure the change of the use of the land (along with that it has just acquired) to recreational use. Sport England has removed their concern over pedestrian access from the development to the land in recognition of the more strategic role the practice pitch provision will make to the District-wide strategy. Their remaining concern is to ensure that the terms of the Planning Obligation are binding are currently being addressed by the Council's Solicitor. On the basis that the sports officer was supportive of this approach rather than on site provision, in this case off site provision is considered acceptable.

Open space/landscape
The development proposes areas of green space throughout the development with main areas in the northwest, three areas along the southern and eastern boundary and around the play area on the western side of the site. There is also a green link/pathway running along the whole length of the southern boundary connecting Forton Road with Tatworth Road. The Open Spaces officer is supportive of this approach, seeking that the managementof those areas are handed over to the

Council.

SECTION 106 PLANNING OBLIGATION

The application be approved subject to:

a) The prior completion of a section 106 planning obligation (in a form acceptable to the Council's Solicitor(s) before the decision notice granting planning permission is issued, the said planning permission to cover the following terms/issues:

1) The provision of 35% affordable housing with a split of 80:20 rent /intermediate product;
2) Contribution towards the provision of sport, play and strategic facilities including land for off-site sports pitch use
3) Contribution towards education provision;
4) Submission of a Travel Plan;
5) Provision and maintenance of open space;
6) Provision and maintenance of compensatory ecological habitat, and;
7) Contribution towards health provision

COMMUNITY INFRASTRUCTURE LEVY (CIL)

CIL is a fixed levy that Councils can charge on new developments to fund infrastructure needed to support development. For viability reasons, CIL is not charged on the Chard Eastern Regeneration sites.

RECOMMENDATION

Grant Permission.

01. This proposed development is located within part of the Council's designated area for growth in the Chard Plan and will provide much needed market and affordable housing. The scheme would not adversely harm residential amenity, provide a safe means of vehicular, pedestrian and cycle access andnot harm ecological interests. The development will also make contributions towards education provision, sport, play and community facilities and travel planning. The development will also provide the southern section of the crucial new strategic road link between the A30 and the A358. The site is ina sustainable location within reasonable distance of the town centre accessible by foot, and cycle. Theproposal is therefore in accord with Policies SD1, SS1, SS4, SS5, SS6, PMT1, PMT2, HG3, TA4, TA5,TA6, HW1, EQ2, and EQ4 of the South Somerset Local Plan (adopted 2015), the Core Planning principles, Chapter 6 and Chapter 7 of the NPPF and the Chard Regeneration Plan.

SUBJECT TO COMPLETION OF THE REQUISITE PLANNING OBLIGATION & THE FOLLOWING:

01. The development hereby permitted shall be begun before the expiration of three years from thedate of this permission.

Reason: To accord with the provisions of section 91(1) of the Town and Country Planning Act 1990.

02. The development hereby approved shall be carried out in accordance with the following approvedplans:

- CHD-110 P3 Site Location Plan (Nov 2020)
- Site Layout Rev F (March 2021)
- 1678-03 Rev B Affordable Housing Distribution Layout (March 2021)
- 1678-04 Rev B Storey Heights Layout (March 2021)
- 1678-05 Rev B Materials Layout (March 2021)

- 1678-06 Rev D Boundary Treatment Layout (March 2021)
- 619 Street Scene 01 (Nov 2020)
- 619 Street Scene 02 (Nov 2020)
- 619 Street Scene 03 (Nov 2020)
- 619 Street Scene A (Nov 2020)
- 619 Street Scene B (Nov 2020)
- 619 Street Scene C (Nov 2020)
- REV 04-18-03-2021_AA House type Pack (March 2021)
- LEAP Persimmon Homes Chard, Tatworth Road Playground Proposal (Nov 2020)
- ES17.76 Rev.C Drainage Statement (Nov 2020)
- ES17.76 SK02.00 P3 Highway & Site Levels Plan – Overall (Nov 2020)
- ES17.76 SK02.01 P3 Highway & Site Levels Plan – Sheet 1 (Nov 2020)
- ES17.76 SK02.02 P3 Highway & Site Levels Plan – Sheet 2 (Nov 2020)
- ES17.76 SK02.03 P2 Highway & Site Levels Plan – Sheet 3 (Nov 2020)
- ES17.76 SK02.04 P2 Highway & Site Levels Plan – Sheet 4 (Nov 2020)
- ES17.76 SK02.05 P2 Highway & Site Levels Plan – Sheet 5 (Nov 2020)
- ES17.76 SK02.06 P2 Highway & Site Levels Plan – Sheet 6 (Nov 2020)
- ES17.76 SK02.07 P2 Highway & Site Levels Plan – Sheet 7 (Nov 2020)
- ES17.76 SK03.00 P4 – Drainage Plan – Overall Strategy Sketch (March 2021)
- ES17.76 SK03.10 P2 – Drainage Ntwrk Schematic – Overall Strategy Sketch (Nov 2020)
- ES17.76 SK07.00 P3 – Vehicle Tracking Plan – Overall (Nov 2020)
- ES17.76 SK07.01 P3 – Vehicle Tracking Plan – Sheet 1 (Nov 2020)
- ES17.76 SK07.02 P3 – Vehicle Tracking Plan – Sheet 2 (Nov 2020)
- ES17.76 SK07.03 P2 – Vehicle Tracking Plan – Sheet 3 (Nov 2020)
- ES17.76 SK07.04 P2 – Vehicle Tracking Plan – Sheet 4 (Nov 2020)
- ES17.76 SK07.05 P2 – Vehicle Tracking Plan – Sheet 5 (Nov 2020)
- ES17.76 SK07.06 P2 – Vehicle Tracking Plan – Sheet 6 (Nov 2020)
- ES17.76 SK07.07 P2 – Vehicle Tracking Plan – Sheet 7 (Nov 2020)
- ES17.76 SK09.00 P3 – Overland Flow & Flood Exceedance Plan – Overall (Nov 2020)
- ES17.76 SK20.01 P2 – Highway and Longitudinal Sections – Sheet 1 (Nov 2020)
- ES17.76 SK20.02 P2 – Highway and Longitudinal Sections – Sheet 2 (Nov 2020)
- ES17.76 SK20.03 P2 – Highway and Longitudinal Sections – Sheet 3 (Nov 2020)
- ES17.76 SK20.04 P2 – Highway and Longitudinal Sections – Sheet 4 (Nov 2020)
- ES17.76 SK22.01 P1 – Site Sections – Sheet 1 (Nov 2020)
- ES17.76 SK22.02 P1 – Site Sections – Sheet 2 (Nov 2020)
- ES17.76 SK40.01 P1 – Drainage Construction Details – Sheet 1 (Nov 2020)
- ES17.76 SK40.02 P1 – Drainage Construction Details – Sheet 2 (Nov 2020)
- ES17.76 SK40.03 P1 – Drainage Construction Details – Sheet 3 (Nov 2020)
- ES17.76 SK40.04 P1 – Drainage Construction Details – Sheet 4 (Nov 2020)
- ES17.76 Technical Response to Planning Comments (Nov 2020)
- 0969-EcIA-FM – Forton Road, Chard Ecological Impact Assessment Update (Oct 2020)
- Ecological Update Statement (Nov 2020)
- 2008CHA-R-1 Archaeological Magnetometer Survey (Sept 2020)
- Archaeology and Heritage Desk-Based Assessment (Nov 2014)
- Arboricultural Constraints Report (Sept 2014)
- Travel Plan (May 2016)
- Phase 1 and 2 Ground Condition Assessment (Nov 2014)
- Transport Assessment (May 2016)
- Transport Assessment Addendum (Mar 2018)
- Landscape and Visual Appraisal (May 2015)

Reason: For the avoidance of doubt and in the interests of proper planning.

03. Unless otherwise agreed in writing by the Local Planning Authority, the development permitted by this planning permission shall not be initiated by the undertaking of any material operation as defined in Section 56 of the Town and Country Planning Act 1990 in relation to the development until (i) a planning obligation pursuant to Section 106 of the Act relating to the land has been completed and lodged with the Local Planning Authority and County Council and (ii) the Local Planning Authority has given written notification to the persons submitting the planning obligation that it is to the Local Planning Authority's approval. The said planning obligation will make provision for the purposes of securing a future highway link as part of the Eastern Relief Road by providing a mechanism to enable the:

(a) transfer of land to either Somerset County Council or South Somerset District Council, and;

(b) completion of the required highway works by either Somerset County Council or South Somerset Council.

Reason: To ensure that appropriate arrangements are secured for the future highway link of the site to accord with Policy TA5 of the South Somerset Local Plan.

04. No development shall commence on the dwellings and apartments hereby permitted until particulars of the materials (including the provision of samples where appropriate) to be used for external walls and roofs have been submitted to and approved in writing by the Local Planning Authority.

Reason: To protect the amenity of the area to accord with Policy EQ2 of the South Somerset LocalPlan.

05. Before the development hereby permitted is commenced, foul and surface water drainage detailsto serve the development, shall be submitted to and approved in writing by the Local Planning Authority and such approved drainage details shall be completed and become fully operational before the development hereby permitted is first brought into use. Following its installation such approved scheme shall be permanently retained and maintained thereafter.

Reason: To ensure that the development is properly drained to accord with the NPPF.

06. No part of the development hereby permitted shall be occupied or brought into use until an emergency access onto B3162 Forton Road has been submitted and approved in writing by the Local Planning Authority. The emergency access onto B3162 Forton Road shall be constructed in accordance with a design and specification to be approved in writing by the Local Planning Authority and to be fully implemented in accordance with the approved details, unless otherwise agreed in writing with theLocal Planning Authority.

Reason: In the interests of highway safety to accord with Policy TA5 of the South Somerset LocalPlan.

07. No part of the development hereby permitted shall be occupied or brought into use until the developer has applied for a Traffic Regulation Order (TRO) as may be determined by the Local Planning Authority as necessary to control access to B3162 Forton Road. If the TRO is confirmed as necessary, the TRO shall then beadvertised and, if successful, implemented at the developer's expense to the satisfaction of the Local Planning Authority prior to first occupation of the development, unless otherwise agreed in writing with the Local Planning Authority.

Reason: In the interests of highway safety to accord with Policy TA5 of the South Somerset

LocalPlan.

08. No part of the development hereby permitted shall be occupied or brought into use until a phasing scheme for the construction of the spine road and its junctions with the A358 Tatworth Road has been submitted and approved in writing by the Local Planning Authority. The construction works shall be carried out in accordance with a design and specification to be approved in writing by the Local Planning Authority and to be fully implemented in accordance with the approved details, unless otherwise agreed in writing with the Local Planning Authority.

Reason: In the interests of highway safety to accord with Policy TA5 of the South Somerset LocalPlan.

09. The applicant shall ensure that all vehicles leaving the site are in such condition as not to emit dustor deposit mud, slurry or other debris on the highway. In particular (but without prejudice to the foregoing), efficient means shall be installed, maintained and employed for cleaning the wheels ofall lorries leaving the site, details of which shall have been agreed in advance in writing by the Local Planning Authority and fully implemented prior to the commencement of works, and thereafter maintained until the completion of construction works.

Reason: In the interests of highway safety to accord with Policy TA5 of the South Somerset Local Plan.

10. No development shall commence unless a Construction Traffic Management Plan has been submitted to and approved in writing by the Local Planning Authority. The works shall be carriedout strictly in accordance with the approved plan. The plan shall include:
Construction vehicle movements;
Construction operation hours;
Construction vehicular routes to and from site;Construction delivery hours;
Expected number of construction vehicles per day;Car parking for contractors;
Specific measures to be adopted to mitigate construction impacts in pursuance of the Environmental Code of Construction Practice;
A scheme to encourage the use of Public Transport amongst contactors; and Measures to avoid traffic congestion impacting upon the Strategic Road Network.

Reason: In the interests of highway safety and residential amenity to accord with Policy TA5 andEQ2 of the South Somerset Local Plan.

10. No work shall commence on the development site until an appropriate right of discharge for surface water has been obtained before being submitted to and approved in writing by the Local Planning Authority. A drainage scheme for the site showing details of gullies, connections, soakaways and means of attenuation on site shall be submitted to and approved in writing by theLocal Planning Authority. The drainage works shall be carried out in accordance with the approved details, unless otherwise agreed in writing with the Local Planning Authority.

Reason: In the interests of highway safety to accord with Policy TA5 of the South Somerset Local Plan.

11. The proposed estate roads, footways, footpaths, tactile paving, cycleways, bus stops/bus lay-bys,verges, junctions, street lighting, sewers, drains, retaining walls, service routes, surface water outfall, vehicle overhang margins, embankments, visibility splays, accesses, carriageway gradients, drive gradients, car, motorcycle and cycle parking, and street furniture shall beconstructed and laid out in accordance with details to be approved by the

Local Planning Authorityin writing before their construction begins. For this purpose, plans and sections, indicating as appropriate, the design, layout, levels, gradients, materials and method of construction shall be submitted to the Local Planning Authority.

Reason: in the interests of highway safety to accord with Policy TA5 of the South Somerset Local Plan.

12. The proposed roads, including footpaths and turning spaces where applicable, shall be constructed in such a manner as to ensure that each dwelling before it is occupied shall be servedby a properly consolidated and surfaced footpath and carriageway to at least base course level between the dwelling and existing highway.

Reason: In the interests of highway safety to accord with Policy TA5 of the South Somerset Local Plan.

13. In the interests of sustainable development none of the dwellings hereby permitted shall be occupied until a phasing scheme for the network of cycleway and footpath connections has been submitted to and approved in writing by the Local Planning Authority. The cycle and footpath connections shall be constructed in accordance with the approved details.

Reason: To promote sustainable modes of transport to accord with the NPPF and Policy TA3 ofthe SSLP.

14. No part of the new development shall beoccupied prior to implementation of those parts identified in the Approved Travel Plan as capableof being implemented prior to occupation. Those parts of the Approved Travel Plan that are identified therein as capable of implementation after occupation shall be implemented in accordance with the timetable contained therein and shall continue to be implemented as long as any part of the development is occupied.

Reason: To promote sustainable modes of transport in accord with Policy TA3 of the SouthSomerset Local Plan.

15. Before the new development is brought into use, the new pedestrian and cycle arrangements to include cycling and walking accesses through the boundary of the site where deemed necessaryshall be laid out, constructed and drained in accordance with a detailed scheme to be submitted toand approved in writing by the Local Planning Authority.

Reason: To promote sustainable modes of transport in accord with Policy TA3 of the SouthSomerset Local Plan.

16. In the event that any signs of pollution such as poor plant growth, odour, staining of the soil, unusual colouration or soil conditions, or remains from the past industrial use, are found in the soilat any time when carrying out the approved development it must be reported in writing within 14 days to the Local Planning Authority (LPA). The LPA will then consider if the findings have any impact upon the development and development must be halted on that part of the site. If the LPAconsiders it necessary then an assessment of the site must be undertaken in accordance with BS10175. Where remediation is deemed necessary by the LPA a remediation scheme must be submitted to and approved in writing by the LPA and then implemented in accordance with the submitted details.

Reason: To protect the health of future occupiers of the site from any possible effects ofcontaminated land, in accordance with Policy EQ2.

17. No development shall take place (including demolition, ground works, vegetation

clearance) until a construction environmental management plan (CEMP: Biodiversity) has been submitted to and approved in writing by the Local Planning Authority. The CEMP (Biodiversity) shall include the following:

a) Risk assessment of potentially damaging construction activities.
b) Identification of "biodiversity protection zones".
c) Practical measures (both physical measures and sensitive working practices) to avoid or reduce impacts during construction (may be provided as a set of method statements).
d) The location and timing of sensitive works to avoid harm to biodiversity features.
e) The times during construction when specialist ecologists need to be present on site to oversee works.
f) Responsible persons, lines of communication and written notifications of operations to the Local Planning Authority
g) The role and responsibilities on site of an ecological clerk of works (ECoW) or similarly competent person
h) Use of protective fences, exclusion barriers and warning signs.
i) Ongoing monitoring, including compliance checks by a competent person(s) during construction and immediately post-completion of construction works The approved CEMP shall be adhered to and implemented throughout the construction period strictly in accordance with the approved details, unless otherwise agreed in writing by the Local Planning Authority.

Reason: In the interests of European and UK protected species. UK priority species and habitats listed on s41 of the Natural Environment and Rural Communities Act 2006 and in accordance with policy EQ4 of the South Somerset Local Plan.

18. Prior to construction above ground level, a "lighting design for bats shall be submitted to and approved in writing by the Local Planning Authority. The strategy shall: a) identify those areas/features on site that are particularly sensitive for bats and that are likely to cause disturbance in or around their resting places or along important routes used to access key areas of their territory, for example, for foraging; and b) show how and where external lighting will be installed (through the provision of lighting contour plans and technical specifications) so that it can be clearly demonstrated that areas to be lit will not disturb or prevent the above species using their territory or having access to their breeding sites and resting places. All external lighting shall be installed in accordance with the specifications and Locations set out in the design, and these shall be maintained thereafter in accordance with the design. Under no circumstances should any other external lighting be installed without prior consent from the Local Planning Authority.

Reason: In the interests of the Favourable Conservation Status of populations of European protected species and in accordance with policy EQ4 of the South Somerset Local Plan.

19. A Landscape and Ecological Management Plan (LEMP) shall be submitted to, and be approved in writing by, the Local Planning Authority prior to first occupation of any building in the development. The content of the LEMP shall include the following:

a) Description and evaluation of features to be managed.
b) Ecological trends and constraints on site that might influence management.
c) Aims and objectives of management.
d) Appropriate management options for achieving aims and objectives.
e) Prescriptions for management actions.
f) Preparation of a work schedule (including an annual work plan capable of being rolled forward over a five-year period).
g) Details of the body or organization responsible for implementation of the plan.

h) On-going monitoring and remedial measures.

The LEMP shall also include details of the legal and funding mechanism(s) by which the long-term implementation of the plan will be secured by the developer with the management body (ies) responsible for its delivery. The plan shall also set out (where the results from monitoring show that conservation aims and objectives of the LEMP are not being met) how contingencies and/or remedial action will be identified, agreed and implemented so that the development still delivers the fully functioning biodiversity objectives of the originally approved scheme. The approved plan will be implemented in accordance with the approved details.

Reason: In the interests of the 'Favourable Conservation Status' of populations of European and UK protected species, UK priority species and habitats listed on s41 of the Natural Environment and Rural Communities Act 2006 and in accordance with policy EQ4 of the South Somerset Local Plan.

20. No removal of hedgerows, shrubs that may be used by breeding birds shall take place between 1st March and 30th September inclusive, unless a competent ecologist has undertaken a careful, detailed check for active birds' nests immediately before the vegetation is cleared or works to or demolition of buildings commences and provides written confirmation that no birds will be harmed and/or that there are appropriate measures in place to protect nesting bird interest on site. Any such written confirmation should be submitted to the Local Planning Authority by the ecologist. If vegetation removal works are undertaken between 1st March and 31st August then dated photos showing the site before and after clearance will be submitted to the local authority. In no circumstances should netting be used to exclude nesting birds.

Reason: In the interests of nesting wild birds and in accordance with policy EQ4 of the South Somerset Local Plan

21. Plans showing the following installed features integrated into or mounted upon buildings or otherwise implemented as appropriate shall be submitted to and agreed in writing by the Local Planning Authority prior any construction above ground level:

a) A Habibat 001 bat box or similar will be built into the structure at least four metres above ground level and away from windows of the west or south facing elevation of 25 plots.

b) A cluster of five Schwegler 1a swift bricks or similar built into the wall at least 60cm apart, at least 5m above ground level on the north facing elevation of 5 plots.

c) Four Vivra Pro Woodstone House Martin nests or similar will be mounted directly under the eaves on the north facing elevation of 10 plots.

d) Two Schwegler 1SP Sparrow terraces or similar at least one metre apart directly under the eaves and away from windows on the north elevations of 20 plots.

e) A bee brick built into the wall about 1 metre above ground level on the south or southeast elevation of the dwelling on 50 plots.

f) Any new fencing must have accessible hedgehog holes, measuring 13cm x 13cm to allow the movement of hedgehogs into and out of the site.

g) The new hedgerow will be planted up with native species comprised of a minimum of 5 of the following species: hazel, blackthorn, hawthorn, field maple, elder, elm, dog rose, bramble, bird cherry and spindle.

Reason: In accordance with Government policy for the enhancement of biodiversity within development as set out in paragraph 170(d) of the National Planning Policy Framework.

22. Prior to, (and within 2 months of), commencement of each significant stage of ground works, an update survey for badger setts will be undertaken by a competent person, and if any are present within 30 metres (including on adjoining land) of the area of activity, the works shall not commenceuntil a method statement for the protection of badgers has been produced and any necessary Natural England licences have be obtained. The method statement shall be implemented in full.

Reason: For the conservation and protection of legally protected species and to ensure compliance with the Wildlife and Countryside Act 1981, and The Protection of Badgers Act 1992.

23. No development shall be commenced until details of the surface water drainage scheme, based on sustainable drainage principles, together with details of a programme of implementation and maintenance for the lifetime of the development, have been submitted to and approved in writing by the Local Planning Authority. This scheme should aim to enhance biodiversity, amenity value, water quality and provide flood risk benefit (i.e. four pillars of SuDS) to meet wider sustainability aims, as specified by The National Planning Policy Framework (July 2018) and the Flood and Water Management Act (2010). The drainage scheme shall ensure that surface water runoff post development is attenuated on site and discharged at a rate and volume no greater than greenfield runoff rates and volumes. Such works shall be carried out in accordance with the approved details.

Reason: To ensure that the development is served by a satisfactory, sustainable system of surface water drainage and that the approved system is retained, managed and maintained throughout the lifetime of the development, in accordance with National Planning Policy Framework (July 2018) and the Technical Guidance to the National Planning Policy Framework.

24. The development hereby permitted shall not be commenced until there has been submitted to andapproved in writing by the Local Planning Authority a scheme of landscaping, which shall includeindications of all existing trees and hedgerows on the land, and details of any to be retained, together with measures for their protection in the course of the development, as well as details ofany changes proposed in existing ground levels; all planting, seeding, turfing or earth moulding comprised in the approved details of landscaping shall be carried out in the first planting and seeding season following the occupation of the building or the completion of the development, whichever is the sooner; and any trees or plants which within a period of five years from the completion of the development die, are removed or become seriously damaged or diseased shall be replaced in the next planting season with others of similar size and species, unless the Local Planning Authority gives written consent to any variation.

Reason: In the interests of the amenity of the area to accord with Policy EQ2 of the South Somerset Local Plan.

25. Prior to commencement of the development, site vegetation clearance, demolition of existing structures, ground-works, heavy machinery entering site or the on-site storage of materials, a scheme to protect trees during construction shall be submitted to and approved in writing by the Local Planning Authority. The approved tree protection requirements shall remain implemented intheir entirety for the duration of the construction of the approved development (inclusive of hard and soft landscaping operations) and the protective fencing and signage may only be moved or dismantled with the prior consent

of the Council in-writing.

Reason: To preserve the health, structure and amenity value of existing landscape features (trees)in accordance with the following policies of The South Somerset Local Plan (2006 - 2028); EQ2: General Development, EQ4: Bio-Diversity & EQ5: Green Infrastructure.

26. Prior to the commencement of the development hereby permitted the applicant, or their agents or successors in title, shall have secured the implementation of a programme of archaeological work in accordance with a Written Scheme of Investigation (WSI) which has been submitted and approved in writing by the Planning Authority. The WSI shall include details of the archaeological excavation, the recording of the heritage asset, the analysis of evidence recovered from the site and publication of the results. The development hereby permitted shall be carried out in accordance with the approved scheme.

Reason: To safeguard and record heritage assets in accordance with the following policy of The South Somerset Local Plan (2006-2028): EQ3 - Historic Environment

27. Prior to first occupation of any dwellinghouse hereby permitted, a phased scheme for the installation of a network of electric charging points (of a minimum 16amps) for electric vehicles shall be submitted to and approved by the Local Planning Authority. The charging points for each phase of the development shall be fully installed and brought in to commission prior to the first occupation of any dwelling on each phase. Once installed such charging points shall be retained thereafter and maintained in working order, unless otherwise agreed in writing with the Local Planning Authority.

Reason: To ensure that the development is resilient and sustainable in accordance with Policy TA1 (Low Carbon Travel) of the adopted South Somerset Local Plan and the provisions of the NPPF.

28. The first floor gable end landing window of Plots 134 and 171 shall be of fixed, non-opening construction and fitted with obscured glazing prior to first occupation and maintained as such thereafter.

Reason: To protect the living conditions of the occupants of existing neighbouring property in accordance with Policy SD1 of the adopted Somerset Local Plan.

Informatives:

01. In relation to conditions 6 and 7, the provision of these works will require a legal agreement and contact should be made with the Highway Authority well in advance of commencing the works sothat the agreement is complete prior to starting the highway works.

02. The Highway Authority have advised the following: The applicant should be aware that it is likely that the internal layout of the site will result in the laying outof a private street, and as such, under Sections 219 to 225 of the Highway Act 1980, will be subject to the Advance Payment Code (APC). Given the constraints of the existing access, it will not be possible toconstruct an estate road to a standard suitable for adoption. Therefore, in order to qualify for an exemption under the APC, the road should be built and maintained to a level that the Highway Authorityconsiders will be of sufficient integrity to ensure that it does not deteriorate to such a condition as to warrant the use of the powers under the Private Streetworks Code. The applicant will be required to secure an agreement under Section 278 of the Highways Act 1980 forthe highway works necessary as part of this development, and they are advised to contact Somerset County Council well in advance of the development starting.

03. In relation to condition 19, the Lead Local Flood Authority have advised the following will need to be included in the details submitted in order to secure discharge of the condition:

* Details for provision of any temporary drainage during construction. This should include details to demonstrate that during the construction phase measures will be in place to prevent unrestricted discharge, and pollution to the receiving system.
* Information about the design storm period and intensity, discharge rates and volumes (both pre and post development), temporary storage facilities, means of access for maintenance (6 metres minimum), the sustainable methods employed to delay and control surface water discharged from the site, and the measures taken to prevent flooding and pollution of the receiving groundwater and/or surface waters. The 0.1ha resulting from highways improvements must be included within the calculations.
* Details on any works required to ensure adequate discharge of surface water without causing flooding or pollution (which should include refurbishment of existing culverts and headwalls or removal of unused culverts where relevant).
* Infiltration testing, detailed design and construction in accordance with Building Research Digest 365. Infiltration features must be located more than 5m from building and road foundations and there must be a minimum of 1m between the base of any infiltration feature and maximum ground water level. If soakaways are shown as unviable after further testing, a suitable sustainable drainage scheme shall be shown
* Flood water exceedance routes both on and off site, including details on the arrangements to intercept any flow coming onto the site, note, no part of the site must be allowed to flood during any storm up to and including the 1 in 30 event, and any flooding during the 100 year +40% climate change event must be retained onsite without causing flooding or damage to properties and highway. Storm events in excess of this must be controlled within the designed exceedance routes demonstrated to prevent flooding or damage to properties and highway.
* A management and maintenance plan for the lifetime of the development which shall include the arrangements for adoption by an appropriate public body or statutory undertaker, management company or maintenance by a Residents' Management Company and / or any other arrangements to secure the operation and maintenance to an approved standard and working condition throughout the lifetime of the development. The ownership and responsibly for the dry pond should also be clarified.
* Somerset County Council is the Lead Local Flood Authority (LLFA) as defined by the Flood and Water Management Act 2010 and the Flood Risk Regulations 2009. Under section 23 of the Land Drainage Act there is a legal requirement to seek consent from the relevant authority before piping/culverting or obstructing a watercourse, whether permanent or temporary. This may also include repairs to certain existing structures and maintenance works. This requirement still applies even if planning permission has been granted. For more information, please visit https://www.somerset.gov.uk/waste-planning-and-land/apply-for-consent-to-work-on-an-ordinary-watercourse/

Appendix A

Minute from the Regulation Committee held on 17th July 2018.

Planning Application 16/02874/FUL - Land Adjoining Holbear, Forton Road, Chard (Agenda Item 6)

Application Proposal: The erection of 315 No. dwellings with associated access and infrastructure and provision of off site playing pitches.

The Area Lead Planner presented the application as detailed in the agenda and with the aid of a power point presentation showed the site and proposed plans. He reminded members that the principle was supported by the Chard local plan to provide homes within the area and associated infrastructure.

He explained the concept of the distributor road and of individual development sites within Chard each bringing forward a section of the road at various stages, with this development providing an element of this highway structure. He noted the central junction in Chard is at capacity in terms of road use, and therefore to alleviate these issues, this scheme would help to provide alternative highway infrastructure. He also noted that the application had been amended to provide only one vehicular access from Tatworth Road which addressed concerns about the highway impact of the scheme.

The Area Lead Planner acknowledged this development had come forward earlier than outlined in the Chard local plan. He recognised the Chard central junction is at overcapacity and that this will clearly add to the overall traffic, however the Highways authority had undertaken a transport assessment and do not consider this development would have a severe impact, and on this basis, find the scheme acceptable.

He highlighted the key considerations explaining the site is within Chard Local plan, that highway concerns have been fully assessed and considered acceptable and amendments have been made to the proposed dwellings situated at the boundary edgein relationship to the existing houses at Holbear. He said the overall density of the site does not exceed policy guidelines and that the proposed distributor road running throughthe site, although debatable, was considered acceptable. He noted the site was located within flood zone 1 which was classed as low risk and although the site suffered from some surface water the appropriate drainage system would be included and the Environment Agency and Lead Flood authority had raised no objections.

The Area Lead Planner explained that provision for an offsite playing pitch had been identified and that the Sport & Leisure team considered this option acceptable and that for viability reasons CIL (Community Infrastructure Levy) would not be charged on Chard Regeneration sites.

He therefore concluded that after considering all of the responses and advice, as outlined in the agenda report, his proposal was to approve the application subject to the conditions as set out in the agenda report.

The Senior Planning Advisor then proceeded in detail to explain to members the four main reasons for refusal as resolved by the Area West Committee and set out in the agenda report.

The Area Lead Planner, Senior Planning Advisor and Highways consultant responded to members' questions on points of detail which included the following:

- The internal space of the garages was in accordance with the car parking standards set by the County Council.
- Confirmed the location of the emergency access and the turning head to the north of the site.
- Clarified the information given regarding road tolerances including the acceptable movements of refuse vehicles.
- Confirmed a travel assessment had been carried out by the developer and that the Highway authority had independently assessed and confirmed that these conclusions are robust.
- Acknowledged the concerns regarding the traffic impact and that whilst this development would create additional congestion within Chard this development was not wholly responsible for the increase in traffic and therefore not severe enough to warrant refusal on traffic impact grounds.
- Elements of the internal road layout still need to be revised in order to meet the Highway authority's adoption standards.
- This application provides a provision for offsite playing pitch located at the adjacent Forton Rangers Football Club, and given that finding suitable land for pitches proves very difficult in this area this is considered acceptable.
- The scheme although located on the edge of the town centre is considered to be in sustainable location and provide the necessary affordable homes to maintain and encourage regeneration of the town.
- There was a condition to cover flooding, drainage, sewerage and impact from rainwater. If members were minded to approve the application the condition could be amended to ensure all issues were covered.
- If members were minded to approve the application a condition could be imposed to ensure appropriate phasing of the development of the site and road network.
- Confirmed pedestrian access links into the site would be made via the main Forton Road entrance for existing local residents. There were no other access links into the site.
- Explained a 'memorandum of understanding' with the developer to discuss and maintain the overall phasing of the distributor road. However there was no legal agreement in place to ensure the rest of the road network would come forward.

Councillor Andrew Turpin, Ward member then addressed the committee and raised a number of concerns and felt that a decision on this application should not be made until further information was presented on a number of issues. These included:

- The relief road was very important to the town and felt this should be completed before any development takes place.
- Concern regarding the lack of travel plan and highway safety for pedestrians and cyclists to and from the site.
- The sewerage and flooding problems already in the area would only be exacerbated by this development.
- Endorsed the reasons for referral as agreed by the Area West Committee.

Councillor Dave Bulmer, adjacent Ward member also raised concerns regarding the existing traffic congestion at the main Chard junction which was already over capacity.

He felt this development was well ahead of time and accordingly, due to the lack of the completed distributor road, this development would have a severe impact on the existing road network within the area. He believed this development could be vastly improved both by design and layout and was fundamentally flawed. He welcomed the provision of the playing pitch but considered the lack of adequate pathway links from the site to be extremely dangerous to pedestrian users wishing to access these pitches.

One member of the Tatworth & Forton Parish Council and three members of the public spoke in objection to the application. Their comments included:

- Concern regarding the proposed drainage scheme and whether this was adequate.
- This proposal would only exacerbate the flooding issues in the area.
- Should learn from previous developments and make sure the same issues do not reoccur.
- Lack of employment opportunities.
- Site is poorly located and concern for local children accessing the proposed play areas.
- Significantly increase the levels of traffic in the area with local roads unable to cope.
- Not appropriate to place heavy goods vehicles on the estate roads.
- Site is poorly located.
- Density too high.
- Poor quality of layout and design and have a harmful impact on the amenity of existing dwellings.
- Insufficient parking.
- Severe impact on local services including schools and doctors surgery unable to cope.
- Development out of character with the area.
- The scheme is not in accordance with the phasing of the Chard local plan.
- Not against development but this proposal does not enhance the area or provide high quality housing.
- A number of concerns still unanswered and that a decision on this application should not be made until further information was presented on a number of issues.

The agent then addressed the committee and referred to changes that have been madeto this application following comments received. These included:

- Number of plots decreased from 323 to 315.
- Parking layout has been changed to break up the block parking within the street scene, adding more character.
- Entrance access has been altered.
- LEAP now being provided.
- Less proposed dwellings backing onto Holbear Grange.

She confirmed the financial contributions toward local facilities and the transfer of land for the provision for the off-site sports pitch. She said the drainage scheme wasacceptable and would provide an effective water management strategy and controlled surface water and therefore believed that significant amendments had been made to this application.

During the discussion, members raised several comments with regard to the application. These included:

- Believed there were many issues still outstanding and could not make aninformed decision on the application until all information had been presented.
- Disappointed that the developer had not taken into account the issues of the local community.
- Concern with regard to the phasing of the works in particular the reassurance that the distributor road would be completed.
- The lack of adequate pathway links from the site deemed to be extremely dangerous to pedestrian users wishing to access proposed play areas.
- Poor neighbourhood links to local facilities and sports pitches.
- Poor quality layout and design not in keeping with the character of the area.
- Density too high.
- Appreciate Chard is in need of housing.
- Believe the proposed road is neither an estate road nor distributor road.
- Questioned the benefits of the relief road running through the estate compared to it being located around the outskirts of the development.
- Traffic in this location is already severe and questioned the Highway authority's basis for approval to the scheme.
- Concern whether the drainage provision has been designed in accordance with best practice and local authority requirements.

The Senior Planning Advisor responded to members' questions and confirmed that:

- Condition 19 would ensure an appropriate sustainable drainage scheme would need to be approved before any development commenced on site.
- Should members be minded to approve the application an additional condition could be imposed:

  "No development approved by this permission shall be occupied or brought into use until a scheme for the future responsibility and maintenance of the estate roads, footways, and associated highway works and infrastructure, has been submitted to and approved in writing by the Local Planning Authority. The approved highway works shall be completed and maintained in accordance with the details and timetable agreed.

  Reason: To ensure adequate management and maintenance of the highway network, whether or not the highway network is adopted, in the interests of highway safety, in accordance with policy TA5 of the South Somerset Local Plan (2006-2028) and the provisions of chapter 4 of the National Planning Policy Framework"

Following a further short debate, members believed there were a number of issues still outstanding before any informed decision could be made and supported a deferral of the application for the reasons as read out by the Senior Planning Advisor as follows:

1. Noted and supported in principle, the four main reasons of concern already established by the Area West Committee as set out in the agenda report.

   In addition the Committee had concerns about the following issues, which it requested the applicant and officers examined further:

2. Need for further exploration of better pedestrian links between the proposed development and sports facilities.
3. Need to examine a phasing condition to insure the scheme is developed on good design principles and better supported the ultimate delivery of the distributor road.
4. Importance of the maintenance and management of highways whether or not roads are to be adopted
5. Need for an additional condition with regard to electric charging points.
6. Need for an ecology condition to safeguard wildlife.
7. Consider the further exploration of a study into the traffic management options in Chard centre, to help deal with increased traffic over the plan period, including from the proposed development, as more planned homes come forward.

The Senior Planning Advisor also explained to members that the applicant does retain their rights for appeal and should negotiations not be acceptable they still have the right for non-determination of the application.

He also noted the request that ward members be fully consulted on these discussions and that when the application is brought back to committee all issues raised are fully explained and can easily identifiable for comparison.

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Members were also advised that should they be minded to defer this application it wouldthen go back to the Area West Committee for determination.

It was then proposed and subsequently seconded that the application be deferred for the reasons previously stated by the Senior Planning Advisor. On being put to the vote this was carried unanimously.

RESOLVED:

A. **That Planning Application 16/02874/FUL be deferred for the following 4main reasons**:

1. The design of the proposed layout of the new homes and proposed distributor road is out of character with its neighbouring settlement design and its location at the southern edge of Chard town. The proposed road nether satisfies the design of an effective distributor road i.e. to carry large volumes of both access and bypass traffic, nor of an estate road, which should provide protected and calmed access to homes. REASON: This is contrary to Policy EQ2 and TA5 of the South Somerset Local Plan.

2. The design of the distributor road is not commensurate to the amenity of new occupiers. A significant number of the proposed dwellings (100 out of the total of 315 homes) are proposed to front onto the distributor road which by definition will carry large volumes of traffic. The design and layout would also require occupants to cross the distributor road to access the public open space. REASON: The proposal is therefore contrary to Policies EQ2, and TA5 of the South Somerset Local Plan.

3. The proposed development fails to take the opportunity to improve the character and quality of the local area due to the poor layout and house designs. REASON: Therefore, it does not constitute good design and is contrary to Policies EQ2 and Chapter 7 (para 64) of the NPPF (Requiring Good design).

4. The proposed development would be brought forward in an earlier phase than outlined in the Chard Regeneration Plan. Accordingly, due to the lack of the completed distributor road connecting the application site to the north with the A30, it would create a severe highway impact on the local road network, particularly causing severe congestion at the central Convent Junction. REASON: This is contrary to PMT1 and PMT2 of the South Somerset Local Plan.

B. **In addition Committee also asked the Applicant and Officers to considerand seek to resolve the following related planning matters**:

5. Need for further exploration of better pedestrian links between the proposed development and sports facilities.

6. Need to examine a phasing condition to insure the scheme is developed on good design principles and better supports the ultimate delivery of the proposed distributor road.

7. Importance of the maintenance and management condition for highways and associated infrastructure whether or not roads are to be adopted

8. Need for an additional condition with regard to electric charging points.

9. Need for an ecology condition to safeguard wildlife.

10. Consider the options for an additional study into the traffic management optionsin Chard centre, to help deal with increased traffic over the plan period, including from “this proposed development”, as more planned homes come forward.

REASON: To ensure that any scheme that comes forward for determination, more fully addresses all the policies in the South Somerset Local Plan, in particular EQ2, TA5, PMT1 and 2.

C. **Ward members to be involved in discussions and timetable on any revised application**.

REASON: To ensure that any scheme that comes forward for determination, more fully addresses all the policies in the South Somerset Local Plan.

(voting: unanimous)

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Appendix B

ADDENDUM TRANSPORT ASSESSMENT

Persimmon Homes South West

Tatworth Road, Chard

April 2021

Application Reference 16/02874/FUL

Addendum Transport Assessment

Report control

Document:	Addendum Transport Assessment
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3			

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Appendix B – 2018 Traffic Counts
Appendix C – 2017 Traffic Counts
Appendix D – TRICS Output
Appendix E – 2018 + Committed Development Flows
Appendix F – 2023 Junction Capacity Results
Appendix G – 2024 Junction Capacity Results
Appendix H – 2028 Junction Capacity Results

1 Introduction

Background

1.1 Vectos has been commissioned by Persimmon Homes South West to produce an Addendum Transport Assessment (ATA) considering the traffic impact associated with proposals for 252 dwellings on land at Tatworth Road, Chard. The site sits entirely within the Chard Eastern Development Area (CEDA) which is a strategic land allocation in the adopted South Somerset District Council (SSDC) Local Plan 2002-2028.

1.2 This TA Addendum considers the historic work undertaken by Peter Brett's Associates (now Stantec) in support of planning application 16/02874/FUL, which was submitted in 2016 and only recently considered at Planning Committee in April 2021.

1.3 At committee the application was deferred, as Members sought further information in relation to transport matters, including surety that the original 2015 TA was sufficiently robust and demonstrating that the cumulative impact of the proposals had been considered in light of recent development proposals within Chard.

1.4 Vectos has drafted this ATA to consider the key data and assumptions included within the original 2015 Transport Assessment (TA), specifically whether the original TA can still be considered sufficiently robust in terms of its assessment of the proposed development and the cumulative impacts of other committed development on the surrounding highway network. On this basis, this report should be read alongside the previous Transport Assessment where the relevant analysis is contained.

Planning History

1.5 It is noteworthy that Somerset County Council as the local highway authority (LHA), raised no objection to the proposals on the basis of the 2015 PBA TA. Of specific note are the following comments with respect to traffic impact:

'Junction modelling was undertaken for 8 different junctions including 1) Forton Road/Tatworth Road/Church St Junction, 2) A358 Old Town/Holyrood St Junction, 3) High St/Crowshute Link Junction, 4) Furnham Road/Millfield Roundabout, 5) East Street/Tapstone Road/Crewkerne Road/Victoria Avenue Junction, 6) Furnham Road/East St/Fore St, 7) Tatworth Road/Site Access and 8) Forton Road/Site Access.

The TA concluded that the traffic impact at 3 of these junctions, (2,4 and 6 respectively) would result in significant delays. The Highway Authority point out that these are worst case scenarios and would be reduced by the introduction of Travel Plan measures to encourage modal shift and the construction of link road infrastructure. The Highway Authority conclude that all three of these junctions would be operating at or over capacity by 2023 without development traffic. Moreover, the traffic levels generated by the development are relatively low with just over 1 additional vehicle per minute. On this basis, the HA do not conclude that the highway impact would be severe and refusal on traffic impact grounds is not reasonable'.

Report Structure

1.6 To allow the LHA to report to the Planning Committee on the concerns raised, this report has been set out using the following sections:

- **Section 2 – Baseline Traffic Condition** – Due to the time which has elapsed, this section provides a comparison of the original 2015 base flows with more recent 2017 and 2018 base flows. It also provides a review of any recent works to the neighbouring public highway during the intervening period. Alongside this, this section also considers changes to personal injury accident statistics during the intervening period;
- **Section 3 – Trip Generation Review** – Consideration of the original Total Person trip rate assumptions applied in 2015, along with the level of development assessed;
- **Section 4 – Trip Distribution and Assignment** – Consideration of the original distribution and assignment assumptions and how this is impacted by trip internalisation and localisation;
- **Section 5 – Traffic Growth & Committed Development Assumptions** – A comparison of the original committed development and growth rate assumptions applied in the PBA TA. Providing a comparison of the historic estimates with actual levels of development;
- **Section 6 – Traffic Impact** – A review of the traffic impact identified in the original PBA today along with sensitivity tests comprising junction capacity assessments from neighbouring developments that include both recent traffic count data and traffic generation and assignments taking account of application 16/02874/FUL;
- **Section 7 – Travel Plan** – A high level commentary on the Travel Plan targets and measures; and
- **Section 8 – Summary & Conclusions.**

1.7 This ATA concludes that the data, assumptions and methodology used in key areas of the original TA represent a robust assessment of the impact of the proposed and cumulative development on the local highway network. It also concludes that traffic impact analysis undertaken alongside more recent development includes for the assignment of traffic from land at Tatworth Road for both 2024 and 2028 assessment years which have been agreed by the LHA. These provide a robust sensitivity assessment of the proposal, for both the projected year of first occupation (2023) and occupation + 5 years (2028). Based on the original PBA TA and more recent assessments, it is concluded that the impact of the proposal falls within the traffic impact thresholds already considered and agreed by the LHA.

2 Baseline Traffic Conditions

2.1 To establish the validity of historic 2015 traffic data a review has been undertaken comparing the original 2015 data with recent surveys undertaken in 2017/18 and submitted alongside neighbouring developments within Chard.

2.2 The baseline traffic data used in the PBA TA was based on traffic surveys undertaken in January and February 2015 at the following locations, with a copy included in **Appendix A**:

- Forton Road / Church Street;
- Church Street / Holyrood Street / Old Town;
- Crowshute Link / High Street;
- Furnham Road / East Street / Fore Street (Convent Signals);
- Tapstone Road / Victoria Avenue / Crewkerne Road / East Street (Victoria Roundabout);
- Millfield / Old Town / Furnham Road (Millfield Roundabout); and
- Link counts on Tatworth Road and Forton Road.

2.3 A comparison of traffic flows has been undertaken with more recent 2018 traffic count surveys submitted as part of planning application 19/01053/FUL (94 dwellings at Land at Thorhild), located to the north of the site on Tatworth Road. The 2018 surveys can be considered relevant as they are no more than 3 years old and due to Covid restrictions, surveys could not be undertaken since March 2020. A copy of the traffic flows diagrams submitted alongside application 19/01053/FUL are included at **Appendix B**.

2.4 The Transport Assessment associated with the planning application for Land at Thorhild included surveys at four of the above junction locations. These junction locations were:

- Church Street / Holyrood Street / Old Town;
- Furnham Road / East Street / Fore Street (Convent Signals);
- Millfield / Old Town / Furnham Road (Millfield Roundabout); and
- Forton Road / Church Street;

2.5 A summary of the traffic count comparison is shown below which identifies total traffic turning movements in passenger car units (pcus) at each junction in both the AM and PM peak periods.

Table 2.1: Traffic Flows Comparison at Church Street / Holyrood Street / Old Town

	PBA 2015 Flows	2018 Flows	Difference	% Difference
AM	1092	1141	49	4%
PM	1336	1233	-103	-8%

Table 2.2: Traffic Flows Comparison at Furnham Road / East Street / Fore Street (Convent Signals)

	PBA 2015 Flows	2018 Flows	Difference	% Difference
AM	1431	1539	108	8%
PM	1836	1661	-175	-10%

Table 2.3: Traffic Flows Comparison at A358 Furnham Road / Millfield

	PBA 2015 Flows	2018 Flows	Difference	% Difference
AM	936	951	15	2%
PM	1194	1079	-115	-11%

Table 2.4: Traffic Flows Comparison at A358 Tatworth Road / Church Street / Forton Road

	PBA 2015 Flows	2018 Flows	Difference	% Difference
AM	1040	1081	41	4%
PM	1200	1070	-130	-12%

2.6 In the AM peak, the 2018 traffic counts are shown to be between 2 - 8% higher than the 2015 traffic counts although it is noteworthy that traffic flows can vary by up to 10% on any day and the observed differences are within this typical daily variation.

2.7 During the PM peak, where all junction counts are highest, the 2018 traffic counts are lower than the 2015 traffic counts by between 8% and 12%, and this includes the Convent signals raised as a particular point of concern by the LPA. On this basis it can be concluded that the 2015 traffic counts are still sufficiently robust as a proxy for more recent 2018 traffic surveys.

2.8 It is notable that the Land at Thorhild Transport Assessment did not include the assessment of either the Tapstone Road / Victoria Avenue / Crewkerne Road / East Street (Victoria Roundabout) or the Crowshute Link / High Street junctions. In the absence of suitable 2018 data a comparison of the

2015 traffic flows has been undertaken with 2017 traffic surveys undertaken as part of the Land East Of Mount Hindrance planning application (Ref: 18_04057_OUT), being the most recent data available for these two junctions. A copy of the traffic flow diagrams are included at **Appendix C**.

2.9 A summary of the traffic count comparison is shown below which shows total traffic turning movements in passenger car units (pcus) at each junction in both the AM and PM peak periods.

Table 2.5: Traffic Flows Comparison at A30 / Victoria Avenue / Tapstone Road / Crewkerne Road (Victoria Roundabout)

	PBA 2015 Flows	2017 Flows	Difference	% Difference
AM	1245	1313	68	5%
PM	1511	1665	154	10%

2.10 At the Victoria Roundabout, the 2017 traffic counts are shown to be higher than the 2015 traffic counts by 5% in the AM peak and 10% in the PM peak although these differences are within the typical variation in traffic flows.

Table 2.6: Traffic Flows Comparison at High Street / Crowshute Link

	PBA 2015 Flows	2017 Flows	Difference	% Difference
AM	1057	1116	59	6%
PM	1390	1296	-94	-7%

2.11 At the High Street / Crowshute Link junction, the 2017 traffic counts are higher than the 2015 traffic counts by 6% in the AM peak but lower by 7% in the PM where traffic flows are shown to be highest.

Personal Injury Accidents

2.12 Alongside the original PBA TA a review of the personal injury accidents was completed to identify an inherent safety issues with the surrounding highway network. Due to the time which has elapsed a high level review has been undertaken to establish if the number of accidents has increased over the last three years which may be an indication of a material change in the frequency and severity of accidents.

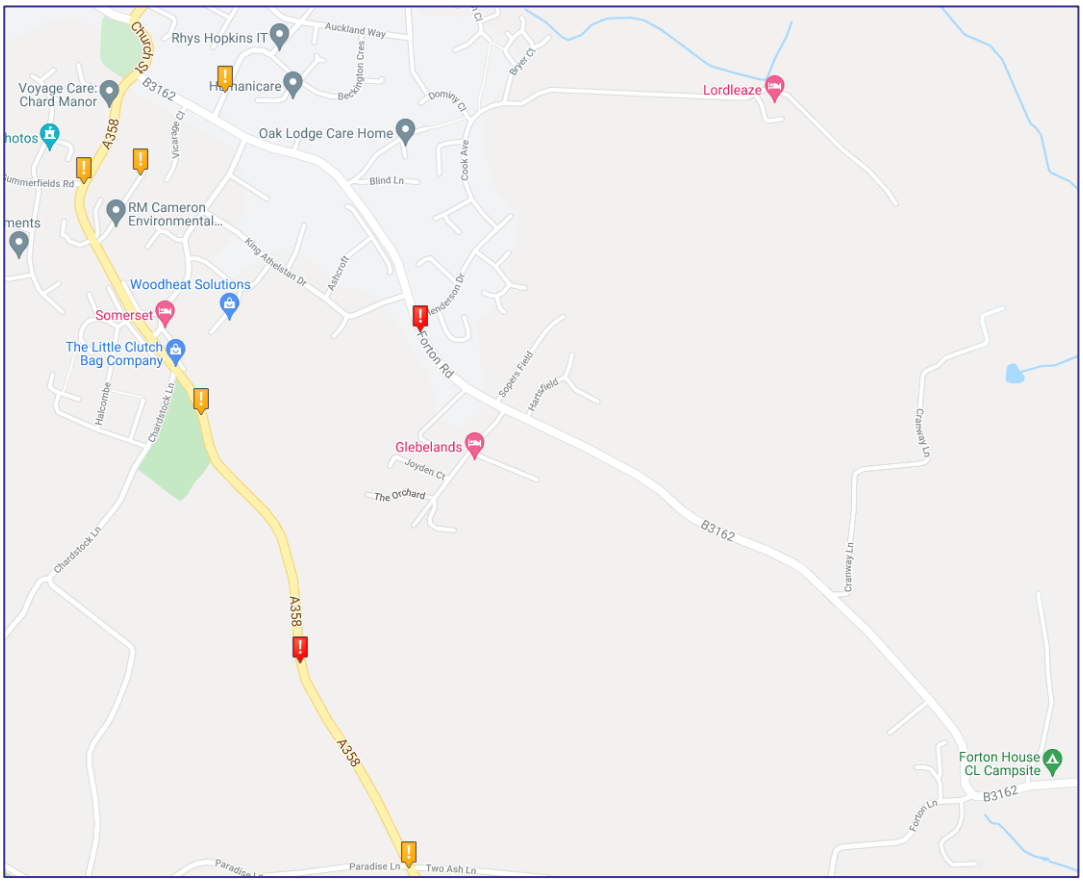
2.13 The 2015 PBA TA identified that there were 10 personal injury accidents (PIA) within the study area for the 2008 – 2013 period and this included two serious accidents. We have reviewed PIA data for the same study area for the most recent five year period (2016 – 2020) using the Crashmap website and this shows that there were 5 PIA including 2 serious PIA within the study area.

2.14 A comparison of the 2015 PBA TA (2008 – 2013) and 2016 -2020 PIA data is shown below in **Table 2.7** and an extract from the Crashmap website showing PIA locations is shown in **Figure 2.1**.

Table 2.7: Comparison of Personal Injury Accidents

	2015 PBA TA (2008 – 2013)	2016 - 2020
Tatworth Road between Two Ash Lane and Chardstock Lane	4	3
Tatworth Road between Chardstock Lane and Summerfields Road	1	1
Tatworth Road between Summerfield Road and Old Town	3	0
Forton Road between Church Street and Forton Lane	2	1
Total	10	5

Figure 2.1: Extract from Crashmap Website



2.15 Therefore, based on the above analysis, the number of PIAs within the study areas has reduced since the 2015 PBA TA and therefore the 2015 PBA PIA analysis is considered robust.

3 Trip Generation Review

3.1 This section considers the original Total Person trip rate assumptions applied in the original PBA TA on a high-level basis, along with the level of development assessed in the original PBA TA for the site. It identifies that the original trip rate assumptions were suitably robust and when undertaking a similar exercise based on recent data provided within the TRICS data, the level of total person trips generated per unit has been reducing over time. This is further demonstrated by trends within the National Travel Survey 2019 which identifies that the average number of trips made per person per year has reduced by 11% between 2002 and 2019.

3.2 Prior to undertaking a revised trip rate assessment it is important to note that the 2015 PBA TA, overestimated the original quantum of development by 73 dwellings, assessing 325 units as opposed to the 252 included in the final proposal. This represents an overestimation of 29% even before an updated trip rate calculation has been conducted.

3.3 Vectos has undertaken a trip rate assessment review using the latest TRICS surveys to calculate total person trips for private houses. The parameters used in the TRICS assessment were as follows:

- Land use: Residential;
- Sub Land Use: Houses Privately Owned;
- Survey Days: Weekday Only;
- Type: Multi-modal;
- Regions: England excluding Greater London;
- Number of Dwellings: 120 to 520 units;
- Location Types: Suburban area, edge of town and neighbourhood centre; and
- Date Range: 01/01/13 – 23/09/19

3.4 Person trip rates of 0.903 and 0.852 for the AM and PM peak were calculated from TRICS and based on the 325 dwellings considered in the 2015 PBA TA, 293 and 277 person trips are forecast for the AM and PM peak periods. A comparison of the 2015 PBA TA and the trip assessment review is shown in **Table 3.1** below, with a copy of the TRICS Report included at **Appendix D**.

Table 3.1: Total Person Trip Comparison

	PBA 2015 TA	Trip Assessment Review	Difference	% Difference
AM	328	293	-35	-10.6%
PM	315	277	-38	-12%

3.5 As shown in **Table 3.1** above, the total person trips calculated in the 2015 PBA TA are higher than those calculated as part of this trip assessment review. Therefore, the forecast development trip assessment included in the 2015 PBA TA is considered sufficiently robust when compared with surveys contained within the nationally recognised TRICS database.

3.6 Considering the overage in the number of dwellings assessed within the PBA TA and the potential difference in total person trips set out in **Table 3.1** above, the total person traffic generation may have been overestimated by as much as 100 trips in both the morning and evening peaks, amounting to as much as 30%. A summary of this calculation is provided in **Table 3.2** below.

Table 3.2: Total Person Trip Comparison – Adjustment to 252 Dwellings

	PBA 2015 TA 325 Units	PBA 2015 TA Adjusted to 252 Units (22% reduction)	Trip Assessment Review Adjusted to 252 Units (22% Reduction)	Difference	
				Trips	%
AM	328	256	229	-99	-30%
PM	315	246	216	-99	-31%

3.7 On the basis of the above, it can be concluded that even without further exploration of the journey purpose proportions, on the basis of the total person trips alone the level of development traffic identified within the 2015 PBA TA can be considered to be an overestimation of the likely impact on the transportation network and should therefore be considered robust should this assessment be submitted alongside an application in 2021.

4 Trip Distribution & Assignment

4.1 It is noteworthy that the PBA TA distributes all development traffic based on 2011 Census Journey to Work data. Whilst this still remains the most current data currently available, it is notable that education, retail and personal business journey purposes make up a sizable proportion of home-based trips during the peak periods. These types of trips are much more likely to be undertaken to more local destination within Chard rather than the disbursed distribution of journey to work trips, particularly during the peak hours.

4.2 The PBA TA distributes 44% of all trips to destinations outside Chard and therefore the application of a journey to work distribution to all development vehicle trips would overestimate the impact of the development on the junctions included within the study area as local trips, which do not impact on the study area to the same degree, have not been considered explicitly.

4.3 It is notable that no consideration has been given to trip internalisation within the wider Chard Eastern Development Area. At a basic level, the development would create a new population density around key areas of commerce that may previously have depended on wider catchments to realise their success. This includes support for local shops, community facilities and the ongoing vibrancy of the town centre and wider services and facilities within Chard.

4.4 Vectos have developed the concept of the 20-minute town, which identifies the typical mix of destinations that you might typically expect to be within a 20-minute walk of the site to support local living, establishing clearly that the site is in the right location for growth. Clearly the site benefits from its proximity to the existing town centre which can encourage sustainable forms of transport and encourage the localisation of trips within the town centre in addition to the internalisation of trips within the development area. This reduction of trips not only applies to the development site but the neighbouring residential areas.

4.5 Vectos has been working with the RTPI on specific research around place-based solutions to net-zero carbon transport, drawing on our EU research and future strategies around urban extensions and garden villages. When considering local travel and local living and the interactions of on-site provision and movements within local districts, this suggests traditional trip rates applied to development are often twice those typically observed post implementation when you consider the complexities of movement.

4.6 The key factor is considering what the external trip rates are after applying containment factors and breaking down the reasons for travel rather than applying typical trip rate assignments based on travel to work alone, being an approach, all too often wrongly applied with travel to work making up only 40% of the reasons to travel during the morning peak. COVID, has been a catalyst for flexibility in living patterns which will make the peak period less relevant in the future.

4.7 It is notable that the TA applied TEMPro growth rates to existing base flows where no growth has been observed during the same period, notably the Convent Junction during its busiest afternoon period. It is therefore conceivable that the junction capacity analysis undertaken, utilised over inflated flows.

5 Traffic Growth & Committed Development Assumptions

5.1 The following section provides a comparison of the original committed development and growth rate assumptions applied to the PBA TA. It compares historic estimates with actual levels of development to establish whether the original predictions can be considered sufficiently robust.

5.2 The 2015 PBA TA included two committed development sites, namely:

- Application 12/03419/OUT (Land at Avishayes Road, Chard) for 88 dwellings; and
- Application 15/04772/OUT (Land between Tatworth and Forton Road) for up to 200 dwellings.

5.3 It should be noted that the committed development considered within the 2015 PBA TA was agreed with Somerset County Council (SCC) Highways at the time. Also, the Ministry of Housing, Communities & Local Government provides guidance on Transport Assessment and what they should contain. In terms of committed development, this is identified as development that is consented or allocated where there is a reasonable degree of certainty it will proceed within the next 3 years.

5.4 The 2015 PBA assessment included both 2018 and 2023 traffic assessments representing the year of first occupation and the design year, 5 years post occupation. With reference to the Highways England document 'The Strategic Road Network – Planning for the Future – A guide to working with Highways England on Planning Matters', it is clearly states that for the purpose of determining the level of mitigation required, an assessment at the time of first occupation should be conducted, assuming full build out of the site.

5.5 It is therefore surmised that the TA, in assessing a 2023 scenario will establish the impact at the year of first occupation in this respect and can therefore be considered for the purpose of agreeing a suitable package of mitigation.

5.6 To demonstrate that the assessment during the 2023 year of occupation is sufficiently robust, a review has been undertaken of both the committed and traffic growth assumptions applied to the proposal and also the actual build out rate within Chard.

TEMPro Assumptions

5.7 With reference to the TA, the following build rates identified in Table 5.1 were estimated between the period 2014/15 – 2023, with the TEMPro parameters amended to reflect these assumptions:

Table 5.1 – TEMPRO Build Rate Assumptions

2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
46	44	99	185	149	149	149	149	149

5.8 The actual build rates up to 2021, have been identified in Table 5.2 below, being sources from the Local Planning Authority:

Table 5.2: Actual Local Authority Buildout Rate

2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
97	66	34	23	12	75	45	11*	-

Note: * First quarter 2021 only

5.9 It is evident that the assumptions used within TEMPro have overestimated the rate of development across this period, the net differences identified in Table 5.3.

Table 5.3: Net Difference 2014/15 - 2021

2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
51	22	-65	-162	-137	-74	-104	-	-

5.10 On the basis of the calculations set out above, there is currently an under provision in the housing trajectory of 469 dwellings up to the beginning of 2021.

Committed Development (Manually Applied)

5.11 In addition to applying TEMPro growth to the network flows, committed development flows have been applied. With reference to the TA, the following committed development was applied:

- Application 12/03419/OUT - Land at Avishayes Road – 88 Dwellings; and
- Application 15/04772/OUT - Land between Tatworth and Forton Road – 200 dwellings.

5.12 On the basis of that set out above, 288 additional dwellings have also been manually applied to the network based on the traffic impact assessments completed for the above sites.

5.13 Concerns have been raised by the LPA with respect to the potential shortfall in committed development considered within the original TA. On the basis of the definition for committed development contained within the governments Planning Practice Guidance, being any development

likely to come forward in the next three years, the following additional committed development sites have been identified as potentially coming forward in the three year period from 2021:

- Application 19/01053/FUL – Land at Thorhild Tatworth Road – 94 dwellings;
- Application 19/00074/FUL – Land East of Crimchard – 142 dwellings; and
- Application 18/04057/OUT – Land East of Mount Hindrance Farm – 295 Dwellings.

5.14 A review of the latest committed development sites, indicates that a further 531 dwellings would fall within the category for committed development up to the year 2023, that weren't considered separately alongside the original TA.

5.15 Notwithstanding, whilst the above committed development was not applied, it is notable that a further 287 dwellings had been applied through the TEMPro calculations, up to 2023 being the (new) year of occupation, a shortfall of 244 dwellings when additional committed development assumptions have been taken into account.

Traffic Impact Comparison (Dwellings)

5.16 It is noteworthy that in calculating the additional number of dwellings assigned onto the network, the original TA for the application site assessed the impact of 325 dwellings whilst the final proposal is for 252, a reduction of 73 dwellings.

5.17 Taking into account the overestimation of the TEMPro development, the underestimation in terms of committed sites, and the overestimation in terms of the TA and actual quantum of development proposed it is clear that the original assessment overestimated the level of development on the local network by 830 dwellings up to the beginning of 2021 and by 586 dwellings to 2023, being the year of mitigation. A summary is provided below in Table 5.4.

Table 5.4 – Summary – Committed Development and Growth Rate Assumptions

	2014/15-2021	2014/15-2023
Original Transport Assessment		
TEMPro Prediction	821	1,119
Committed Prediction	288	288
TA Overage	73	73
Total	1,182	1,480
Actual & Revised Committed Prediction		
Actual Buildout	352	363*

Committed Prediction	-	531
Total	352	894
Net	-830	-586

Note: Includes 11 units constructed early 2021*

5.18 On the basis of the calculations completed above, it is evident that the original 2015 TA undertook a robust assessment with respect to committed development and background traffic growth, overestimating the level of development by 830 dwellings for 2021 and 586 dwellings in 2023. In establishing the impact of the proposal at the year of occupation (2023), the existing TA is considered overly robust. This is tested further in the following section using traffic data and junction capacity testing submitted alongside recent applications within Chard.

6 Traffic Impact

Assessment Years

6.1 The 2015 PBA TA included two assessment years, these being 2018 (year of occupation) and 2023 (year of occupation + 5 years).

2018 Predicted & Actual 2018 Base Flow Comparison

6.2 Due to original 2015 base flows being out of date, it is possible to undertake a comparison of the PBA predicted 2018 base + committed flows (**Appendix E**), with 2018 surveyed flows from the neighbouring Land at Thorhild development (Planning Application 19_01053), included at **Appendix B**.

6.3 Surveyed 2018 flows are considered suitable as they are three years old and this comparison provides a robust assessment of whether the robust assumptions set out above have overestimated the level of traffic on the local road network.

6.4 A summary of the traffic count comparison is shown below which shows total traffic turning movements in passenger car units (pcus) at each junction in both the AM and PM peak periods.

Table 6.1: Traffic Flows Comparison at Church Street / Holyrood Street / Old Town

	PBA 2018 Flows with Committed Development	Actual 2018 Flows	Difference	% Difference
AM	1244	1141	-103	-9%
PM	1509	1233	-276	-22%

Table 6.2: Traffic Flows Comparison at Furnham Road / East Street / Fore Street (Convent Signals)

	PBA 2018 Flows with Committed Development	Actual 2018 Flows	Difference	% Difference
AM	1577	1539	-38	-2%
PM	2008	1661	-347	-17%

Table 6.3: Traffic Flows Comparison at A358 Furnham Road / Millfield

	PBA 2018 Flows with Committed Development	Actual 2018 Flows	Difference	% Difference
AM	1056	951	-105	-11%
PM	1335	1079	-256	-24%

Table 6.4: Traffic Flows Comparison at A358 Tatworth Road / Church Street / Forton Road

	PBA 2018 Flows with Committed Development	Actual 2018 Flows	Difference	% Difference
AM	1189	1081	-108	-10%
PM	1368	1070	-298	-28%

6.5 It is evident that in all instances, estimations of traffic conditions in 2018 significantly overestimated the volume of traffic through the above junctions. On this basis the original flows for 2018 included in the PBA TA provide an unnecessarily robust proxy for a 2018 base network scenario, i.e. instead of a 2018 traffic survey.

6.6 As the Land at Thorhild Transport Assessment didn't include the assessment of the Tapstone Road / Victoria Avenue / Crewkerne Road / East Street (Victoria Roundabout) and the Crowshute Link / High Street junctions, a comparison of the 2018 base + committed flows has been undertaken with 2017 traffic surveys undertaken as part of the Land East Of Mount Hindrance planning application (Ref: 18_04057_OUT)

6.7 A summary of the traffic count comparison is shown below which shows total traffic turning movements in passenger car units (pcus) at each junction in both the AM and PM peak periods.

Table 6.5: Traffic Flows Comparison at A30 / Victoria Avenue / Tapstone Road / Crewkerne Road (Victoria Roundabout)

	PBA 2018 Flows with Committed Development	Actual 2017 Flows	Difference	% Difference
AM	1344	1313	-31	-2%
PM	1630	1665	35	2%

Table 6.6: Traffic Flows Comparison at High Street / Crowshute Link

	PBA 2018 Flows with Committed Development	Actual 2017 Flows	Difference	% Difference
AM	1144	1116	-28	-2%
PM	1489	1296	-193	-13%

6.8 It can be seen that, with the exception of one scenario, at all junctions and in both peak periods the 2018 with committed development traffic flows used in the traffic assessment are clearly higher than the actual traffic flows observed in 2017/2018. This clearly demonstrates that the 2018 with committed development traffic flows used in the traffic assessment can be considered robust.

PBA 2023 Assessment Result (Revised Year of Occupation)

6.9 On the basis that the 2018 assessment year provides an overly robust estimate of the impact on the neighbouring network, because these results were agreed with SCC at the time, the impact of the proposals in 2023 can be considered to be a suitably robust estimate of the impact of the site at the revised first occupation date of 2022/23. The results agreed with SCC at the time are shown below for each junction assessed for the 2023 with committed and proposed development traffic. A copy of the results are included at **Appendix F**.

Table 6.7: 2023 B3162 Forton Road / A358 Tatworth Road / A358 Church Street Junction Capacity Results

	Forton Road		Tatworth Road	
	RFC	Q (pcu)	RFC	Q (pcu)
2023 Without Development				
AM	0.760	3	0.020	0
PM	0.680	2	0.040	0
2023 With Development				
AM	0.900	7	0.020	0
PM	0.800	4	0.040	0

Table 6.8: 2023 A358 Old Town / Holyrood Street Junction Capacity Results

	Holyrood Street		Old Town	
	RFC	Q (pcu)	RFC	Q (pcu)
2023 Without Development				
AM	0.500	1	0.220	0
PM	0.950	8	0.350	1
2023 With Development				
AM	0.570	1	0.230	0
PM	1.090	20	0.360	1

Table 6.9: 2023 A30 High Street / B3162 Crowshute Link Junction Capacity Results

	Crowshute Link		High Street	
	RFC	Q (pcu)	RFC	Q (pcu)
2023 Without Development				
AM	0.630	2	0.480	1
PM	0.750	3	0.650	3
2023 With Development				
AM	0.680	2	0.520	1
PM	0.800	4	0.660	3

Table 6.10: 2023 A358 Furnham Road / Millfield Junction Capacity Results

	Millfield (East)		A358 Millfield (West)		A358 Furnham Road	
	RFC	Q (pcu)	RFC	Q (pcu)	RFC	Q (pcu)
2023 Without Development						
AM	0.230	0	0.440	1	0.690	2
PM	0.580	1	0.460	1	0.890	7
2023 With Development						
AM	0.240	0	0.500	1	0.720	3
PM	0.630	2	0.490	1	0.960	13

Table 6.11: 2023 A30 East Street / Tapstone Road / A30 Crewkerne Road / Victoria Avenue Junction Capacity Results

	A30 Crewkerne Road		Tapstone Road		A30 East Street		Victoria Avenue	
	RFC	Q (pcu)	RFC	Q (pcu)	RFC	Q (pcu)	RFC	Q (pcu)
2023 Without Development								
AM	0.420	1	0.140	0	0.430	1	0.260	0
PM	0.410	1	0.360	1	0.540	1	0.290	0
2023 With Development								
AM	0.420	1	0.140	0	0.450	1	0.260	0
PM	0.420	1	0.360	1	0.540	1	0.290	0

Table 6.12: 2023 A358 Furnham Road / A30 East Street / A30 Fore Street (Convent Junction) Capacity Results

	A358 Furnham Rd (North)		A30 East Street		A358 Furnham Rd (South)		A30 Fore Street	
	DoS (%)	Q (pcu)	DoS (%)	Q (pcu)	DoS (%)	Q (pcu)	DoS (%)	Q (pcu)
2023 Without Development								
AM	89.7	19	90.8	19	90.9	21	74.8	13
PRC = -1.0%								
PM	110.1	52	108.7	57	108.7	58	101.8	37
PRC = -22.3%								
2023 With Development								
AM	95.0	22	95.2	23	96.3	26	77.0	14
PRC = -7.0%								
PM	113.4	63	114.5	73	113.8	78	104.9	43
PRC = -27.2%								

6.10 In establishing the relative robustness of the 2023 junction capacity analysis included within the PBA TA the following should be noted:

- The Total Person trip rate may be overestimated by as much as 12%;
- The level of development has been overestimated by 29%;
- The level of background development has been overestimated by 586 dwellings;
- Traffic has been assigned from the development using Travel to Work Data which ignores other trip purposes which collectively make up a higher proportion of trips during the network peak hours; and
- The level of internalisation resulting from a mix of land uses has not been considered which will lead to a greater level of trips residing within the vicinity of the site.

6.11 As such this impact presented for the 2023 revised year of occupation can be considered unnecessarily robust. It is therefore noteworthy that whilst the LHA agreed the impact attributed to proposals at Tatworth Road above, in reality this is likely to be much lower than that identified.

6.12 With respect to the Convent Junction, it is noteworthy that during the PM peak, when the junction is busiest, the proposals will only result in 76 additional movements across the hour, amounting to approximately one vehicle every minute which cannot be considered severe in terms of the NPPF test. Indeed, with the original analysis potentially overestimating the level of trips by as much as 30%, this may be closer to 53 vehicles during the peak hour, and should consideration of trip internalisation and localisation apply in addition to further detailed consideration of trip purpose, this is likely to be even lower.

Sensitivity Assessments

2024 Assessment – Land at Thorhild

6.13 Whilst it has been demonstrated that the 2023 assessment included within the original PBA TA is sufficiently robust, it should be noted that land at Tatworth Road has also been considered as committed development alongside more recent proposals, notably Land at Thorhild, located to north (application 19_01053) which was approved in August 2020. The TA submitted alongside that application manually applied the traffic flows included within the PBA TA and as such considers the impact of both the latest committed development flows agreed with the LHA and also land at Tatworth Road. This therefore provides a useful sensitivity test, albeit for a slightly higher assessment year of 2024 providing additional surety for the LHA that the PBA TA is still sufficiently robust.

6.14 The results agreed with SCC at the time are shown below for each junction assessed for the 2024 with committed and proposed development traffic. A copy of the results are included at **Appendix G**.

Table 6.13: 2024 B3162 Forton Road / A358 Tatworth Road / A358 Church Street Junction Capacity Results

	Forton Road		Tatworth Road	
	RFC	Q (pcu)	RFC	Q (pcu)
AM	0.89	5.9	0.03	0
PM	0.59	1.4	0.03	0

Table 6.14: 2024 A358 Old Town / Holyrood Street Junction Capacity Results

	Holyrood Street		Old Town	
	RFC	Q (pcu)	RFC	Q (pcu)
AM	0.33	0.5	0.22	0.4
PM	0.91	6.7	0.25	0.4

Table 6.15: 2024 A358 Furnham Road / Millfield Junction Capacity Results

	Millfield (East)		A358 Millfield (West)		A358 Furnham Road	
	RFC	Q (pcu)	RFC	Q (pcu)	RFC	Q (pcu)
AM	0.56	1.3	0.19	0.2	0.93	9.5
PM	0.72	2.5	0.35	0.5	0.78	3.3

Table 6.16: 2024 A358 Furnham Road / A30 East Street / A30 Fore Street (Convent Junction) Capacity Results

	A358 Furnham Rd (North)		A30 East Street		A358 Furnham Rd (South)		A30 Fore Street	
	DoS (%)	Q (pcu)	DoS (%)	Q (pcu)	DoS (%)	Q (pcu)	DoS (%)	Q (pcu)
AM	95.8	23.5	95.7	22.0	96.3	26.2	44.0	6.1
PRC = -7.0%								
PM	105.9	45.6	106.9	42.3	107.3	56.7	93.3	19.8
PRC = -19.2%								

6.15 The Convent Junction was shown to be operating above its practical reserve capacity with a PRC of -7.0% and -19.3% for the AM and PM peaks respectively. It is noteworthy that with respect to the Convent Junction, the PBA TA overestimated the impact based on that presented in the 2024 assessment for land at Thorhild. The PBA TA identifies the same PRC for 2023 as shown above for 2024, and more importantly it significantly overestimated the impact in the PM peak, with the PBA TA estimating a PRC of -27.2% for 2018 compared with the recently consented scheme for Thorhild that identified a PRC of -19.2% for 2024. It should be noted that the Thorhild TA is based on more recent traffic surveys (2018) and the latest committed development assumptions including the PBA TA flows. This should provide sufficient confidence that the previously agreed PBA TA is still sufficiently robust, indeed it has significantly overestimated the impact of the proposals at the year of occupation.

6.16 All other junctions were shown to be operating within capacity in the AM and PM peak periods, including the Old Town/Holyrood Street Junction which was shown in the PBA TA to be just over capacity in 2023 during the PM peak, a marked improvement.

2028 Assessment Year – Land East of Mount Hindrance

6.17 It is notable that in utilising the 2023 PBA assessment year as the revised year of first occupation, a subsequent design year of 2023 + 5 years is no longer accounted for. On reviewing recent committed development it is noted that application 18_04057_OUT (Land East Of Mount Hindrance) includes a 2028 assessment year for many of the neighbouring junctions and can be utilised as a sensitivity for this future design year having included for committed development on the road network within Chard through the TEMPro growth forecast.

6.18 The junction assessments set out below have been agreed with the LHA alongside application 18_04057_OUT. A copy of the results are included at **Appendix H**.

Table 6.17: 2028 A30 High Street / B3162 Crowshute Link Junction Capacity Results

	Crowshute Link		High Street	
	RFC	Q (pcu)	RFC	Q (pcu)
AM	0.65	2	0.49	1
PM	0.82	4	0.67	2

Table 6.18: 2028 A30 East Street / Tapstone Road / A30 Crewkerne Road / Victoria Avenue Junction Capacity Results

	A30 Crewkerne Road		Tapstone Road		A30 East Street		Victoria Avenue	
	RFC	Q (pcu)	RFC	Q (pcu)	RFC	Q (pcu)	RFC	Q (pcu)
AM	0.38	1	0.17	0	0.5	1	0.31	0
PM	0.46	1	0.44	1	0.6	1	0.36	1

Table 6.19: 2028 A358 Furnham Road / A30 East Street / A30 Fore Street (Convent Junction) Capacity Results

	A358 Furnham Rd (North)		A30 East Street		A358 Furnham Rd (South)		A30 Fore Street	
	DoS (%)	Q (pcu)	DoS (%)	Q (pcu)	DoS (%)	Q (pcu)	DoS (%)	Q (pcu)
AM	104.9	37.0	105.3	33.0	107.3	48.0	104.3	30.0
PRC = -19.3%								
PM	114.4	60.0	115.2	64.0	116.5	67.0	93.0	20.0
PRC = -29.4%								

Table 6.21: 2028 A358 Old Town / Holyrood Street Junction Capacity Results

	Holyrood Street		Old Town	
	RFC	Q (pcu)	RFC	Q (pcu)
AM	0.91	6	0.52	2
PM	1.28	22	0.59	3

6.19 With reference to the above junction capacity testing, the Convent Junction was shown to be operating above its practical reserve capacity with a PRC of -19.3% and -29.4% for the AM and PM peaks respectively.

6.20 As described above, with respect to the Convent Junction, it is noteworthy that during the PM peak, when the junction is busiest, the proposals will only result in 76 additional movements across the hour, amounting to approximately one vehicle every minute which cannot be considered severe in terms of the NPPF test. Indeed, with the original analysis potentially overestimating the level of trips by as much as 30%, this may be closer to 53 vehicles during the peak hour, and should consideration of trip internalisation and localisation apply in addition to further detailed consideration of trip purpose, this is likely to be even lower.

6.21 All other junctions were shown to be operating within capacity in the AM and PM peak periods apart from the A358 Old Town / Holyrood Street junction where the Holyrood Street approach to the junction was shown to be operating above capacity in the PM peak.

7 Travel Plan

7.1 A Travel Plan (TP) has been submitted alongside the application which seeks to reduce reliance on single occupancy car use. This includes a range of measures to ensure that sustainable travel opportunities are available at the outset which includes:

- Infrastructure improvements including shared footway/cycleway link between Tatworth Road and Forton Road;
- Green Travel Vouchers to allow purchase of walking, cycling and motorcycling equipment, items that will facilitate home-working and subsidised public transport tickets;
- Cycle parking;
- New bus waiting facilities close to the site on Tatworth Road and Forton Road;
- Promotion of car sharing
- High speed broadband to facilitate home working; and
- Appointment of a Travel Plan Coordinator.

7.2 Travel Plan targets have been proposed which seek to reduce the number of single occupancy car trips by a minimum of 10% over the minimum 5-year TP monitoring period, with ongoing monitoring which is likely to include the installation of Automatic Traffic Counters to establish the impact on car trips over time.

7.3 The TP includes enforcement measures should targets not be met, including the implementation of additional TP measures if required which could include:

- More active marketing incorporating a shift of focus;
- Further promotional support for non-car modes of transport;
- Additional on-site infrastructure for walking and cycling;
- Additional parking management on-site including signing and lining for example; and
- Personalised Travel Planning, providing tailored information for each household.

7.4 In accordance with the SCC Travel Plan guidance a safeguarding sum will be available in the event enforcement measures are required to be implemented.

7.5 For further information, reference should be made to the Travel Plan document by Peter Brett Associates, submitted alongside the application.

8 Summary & Conclusions

Summary

8.1 Vectos has been commissioned by Persimmon Homes South West to produce an Addendum Transport Assessment, reviewing the validity of the traffic impact analysis contained within the Transport Assessment produced by Peter Brett Associates in 2015 (2015 PBA TA). This was submitted in support of planning application 16/02874/FUL for 252 dwellings and associated employment, community and leisure uses, and accompanying infrastructure.

8.2 The review of the 2015 PBA TA has been undertaken to consider if the TA still presents a robust assessment of the proposed development and the cumulative impacts of other committed development on the local highway network.

8.3 The review has considered baseline traffic data, highway safety, committed development and traffic growth assumptions, proposed development trips, proposed development traffic levels and development impacts. These are considered to be the key areas which identify the traffic impact of the development proposals.

8.4 The review has identified that the data, assumptions and methodology used in these key areas still represent a robust assessment of the impact of the proposed and cumulative development on the local highway network.

8.5 In the AM peak, more recent 2018 traffic counts are shown to be between 2 - 8% higher than the 2015 traffic counts although it is noteworthy that traffic flows can vary by up to 10% on any day and the observed differences are within this typical daily variation.

8.6 During the PM peak, where all junction counts are highest, the 2018 traffic counts are lower than the 2015 traffic counts by between 8% and 12%, including the Convent Signals raised as a particular point of concern by the LPA. On this basis it can be concluded that the 2015 traffic counts are still sufficiently robust as a proxy for more recent 2018 traffic surveys particularly during the PM peak period.

8.7 The number of PIAs within the study areas has reduced since the 2015 PBA TA and therefore the 2015 PBA PIA analysis is considered robust.

8.8 The 2015 PBA TA assumed that the proposed level of development on the site would be 325 dwellings, whilst the actual quantum of development is 252 units. The 2015 PBA TA overestimates the level of development by 73 dwellings, representing a 29% uplift in traffic. The latest TRICS surveys indicate a lower level of total person trips, in the order of 11-12% less during the network peak hours, it is clear that the impact of the 252 units proposed has been further overestimated in this regard, by as much as 30% or 100 total person trips in the AM and PM peaks.

8.9 The 2015 PBA TA distributes 44% of all trips to destinations outside Chard. The application of a journey to work distribution to all development vehicle trips would overestimate the impact of the development on the junctions included within the study area as local trips which do not impact on the study area to the same degree as journey to works trips have not been considered explicitly.

8.10 Therefore, based on the issues identified above, the level of development traffic identified within the 2015 PBA TA can be considered to be an overestimation of the likely impact on the transportation network and should therefore be considered to be robust.

8.11 Current travel trends demonstrate that trips per person are reducing and the National Travel Survey 2019 identifies that the average trips made per person per year has reduced 11% between 2002 and 2019.

8.12 It is evident that the original 2015 TA undertook a robust assessment with respect to committed development and background traffic growth, overestimating the level of development by 830 dwellings for 2021 and 586 dwellings in 2023. In establishing the impact of the proposal at the year of occupation (2023), the existing TA is considered sufficiently robust.

8.13 When considering the level of impact, it is therefore important to consider the following:

- The Total Person trip rate may be overestimated by as much as 12%;
- The level of development has been overestimated by 29%;
- The level of background development has been overestimated by 586 dwellings;
- Traffic has been assigned from the development using Travel to Work Data which ignores other trip purposes which collectively make up a higher proportion of trips during the network peak hours; and
- The level of internalisation resulting from a mix of land uses has not been considered which will lead to a greater level of trips residing within the vicinity of the site.

8.14 It is evident that in all instances, estimations of traffic conditions in 2018 significantly overestimated the volume of traffic through the above junctions. On this basis the original flows for 2018 included in the PBA TA provide an unnecessarily robust proxy for a 2018 base network scenario, i.e. instead of a 2018 traffic survey.

8.15 Considering a 2024 sensitivity test extracted from the TA for land at Thorhild (granted August 2020), it is noteworthy that with respect to the Convent Junction, the PBA TA overestimated the impact based on that presented in the 2024 assessment. The PBA TA identifies the same AM peak PRC for 2023 as shown above for 2024, and more importantly it significantly overestimated the impact in the PM peak, with the PBA TA estimating a PRC of -27.2% for 2018 compared with the recently consented scheme for Thorhild that identified a PRC of -19.2% for 2024.

8.16 The proposals will only result in 76 additional movements across the hour, amounting to approximately one vehicle every minute which cannot be considered severe in terms of the NPPF test. Indeed, with the original analysis potentially overestimating the level of trips by as much as 30%, this may be closer to 53 vehicles during the peak hour, and should consideration of trip internalisation and localisation apply in addition to further detailed consideration of trip purpose, this is likely to be even lower.

8.17 Travel Plan targets have been proposed which seek to reduce the number of single occupancy car trips by a minimum of 10% over the minimum 5-year TP monitoring period, with ongoing monitoring which is likely to include the installation of Automatic Traffic Counters to establish the impact on car trips over time.

Conclusions

8.18 The review of the 2015 PBA TA has been undertaken to consider if the TA still presents a robust assessment of the proposed development and the cumulative impacts of other committed development on the local highway network.

8.19 The review has considered baseline traffic data, highway safety, committed development and traffic growth assumptions, proposed development trips, proposed development traffic levels and development impacts. These are considered to be the key areas which identify the traffic impact of the development proposals.

8.20 The review has identified that the data, assumptions and methodology used in these key areas still represents a robust assessment of the impact of the proposed and cumulative development on the local highway network.

Appendices

Appendix A

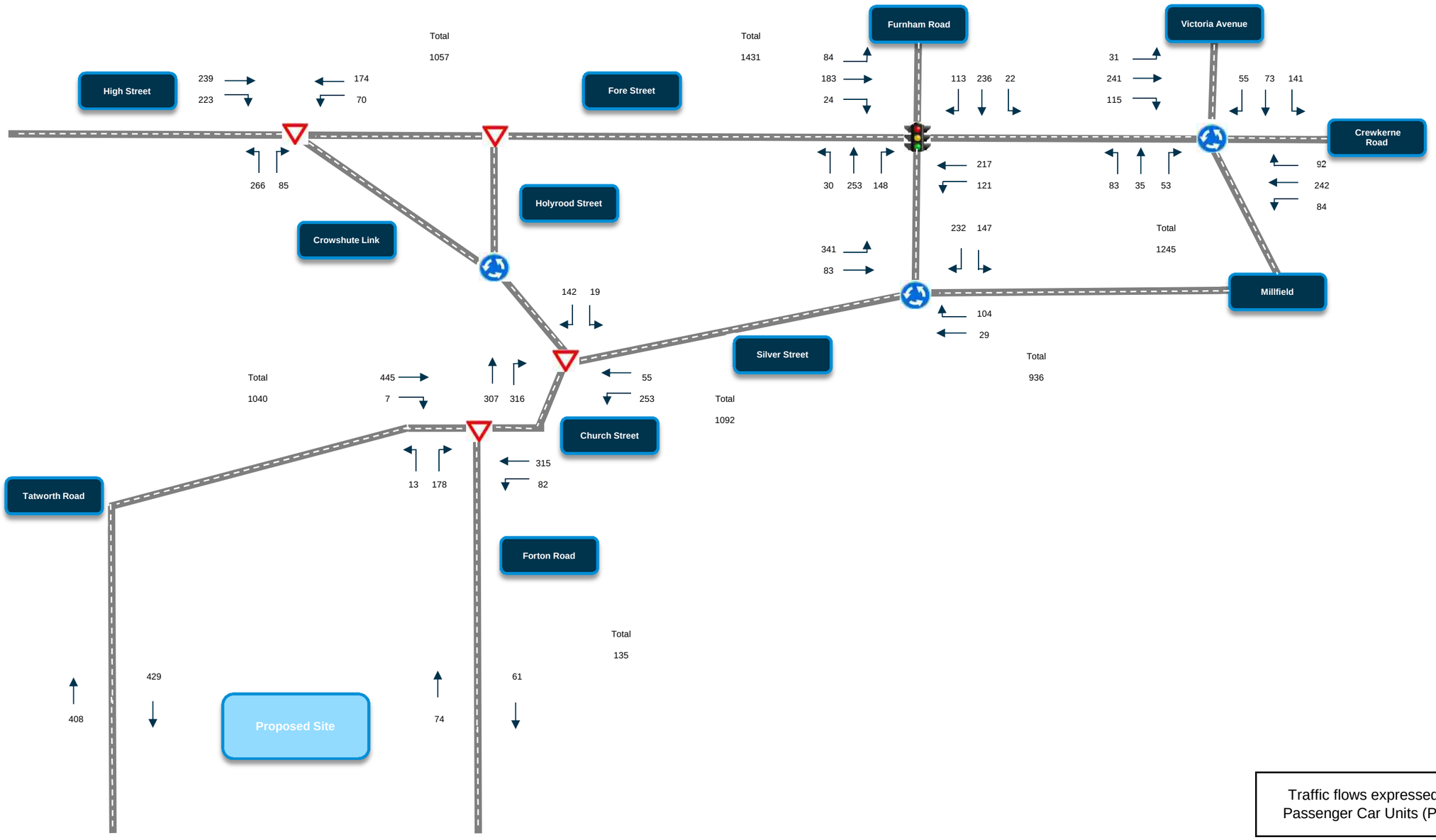
2015 Traffic Counts

Source: Peter Brett Associates Transport Assessment dated May 2016

Planning Application: 16/02874/FUL

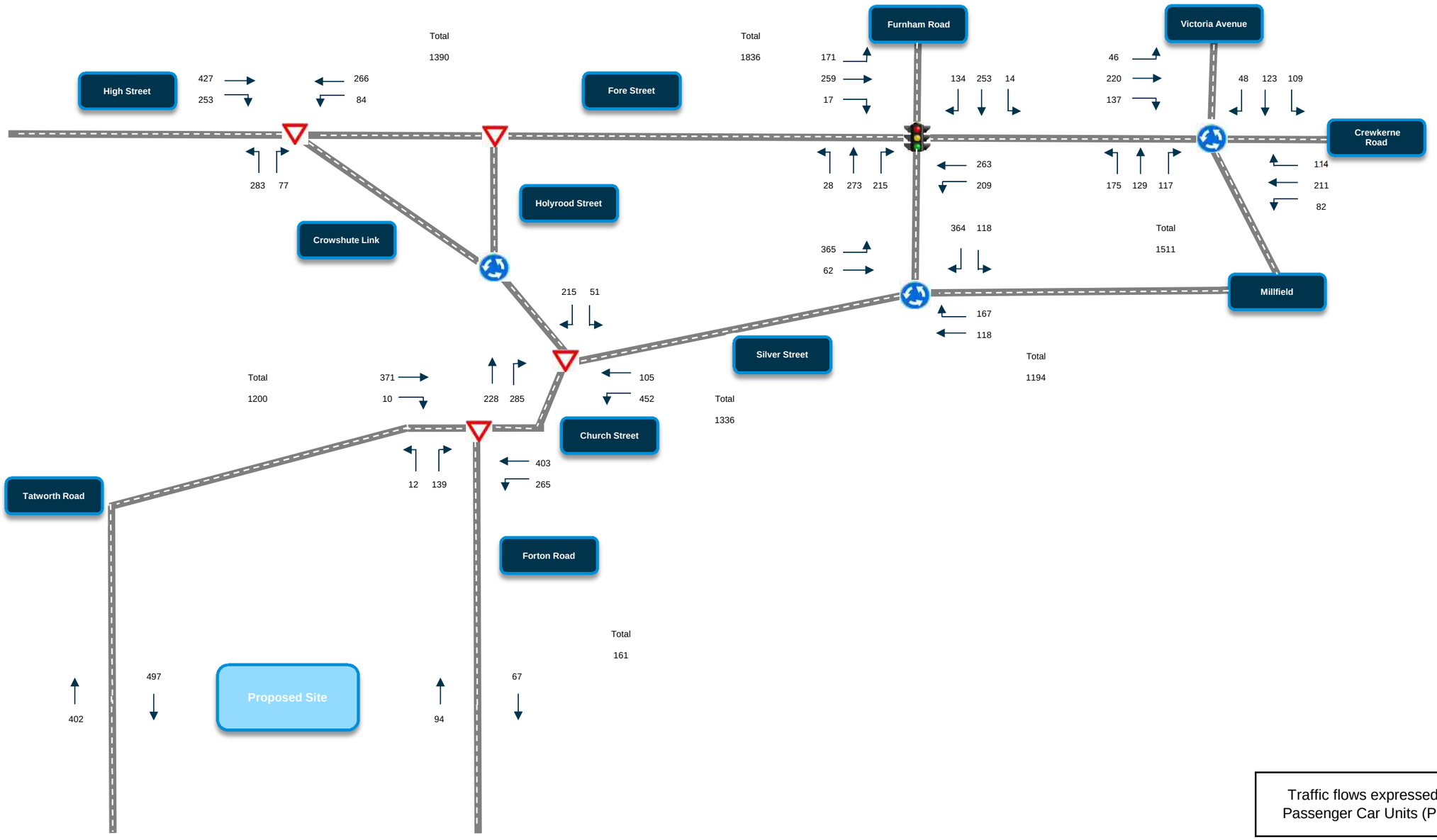
Hyperlink to Document:

https://www.southsomerset.gov.uk/civica/Resource/Civica/Handler.ashx/Doc/pagestream?cd=inline&pdf=true&docno=7888665



Traffic flows expressed as Passenger Car Units (PCU)

peterbrett	**Client:** Persimmon Homes South West Ltd	**Figure Title:** Surveyed Traffic - AM Peak	
		Project Number: 29372	**Project Name:** Land between Forton Road and Tatworth Road, Chard
		Date: May-16	**Figure Number:** Figure 6-1 / **Revision**
		Scale: NTS	
Lakeside House, Blackbrook Park Avenue, Taunton, TA1 2PX © Peter Brett Associates LLP		**Drawn:** CM	
Telephone (01823) 44510 Email: taunton@peterbrett.com Web: www.peterbrett.com		**Checked:** AS	



Traffic flows expressed as Passenger Car Units (PCU)

peterbrett	**Client:** Persimmon Homes South West Ltd	**Figure Title:** Surveyed Traffic - PM Peak	
		Project Number: 29372	**Project Name:** Land between Forton Road and Tatworth Road, Chard
		Date: May-16	**Figure Number:** Figure 6-2 / **Revision**
		Scale: NTS	
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Appendix B

2018 Traffic Counts

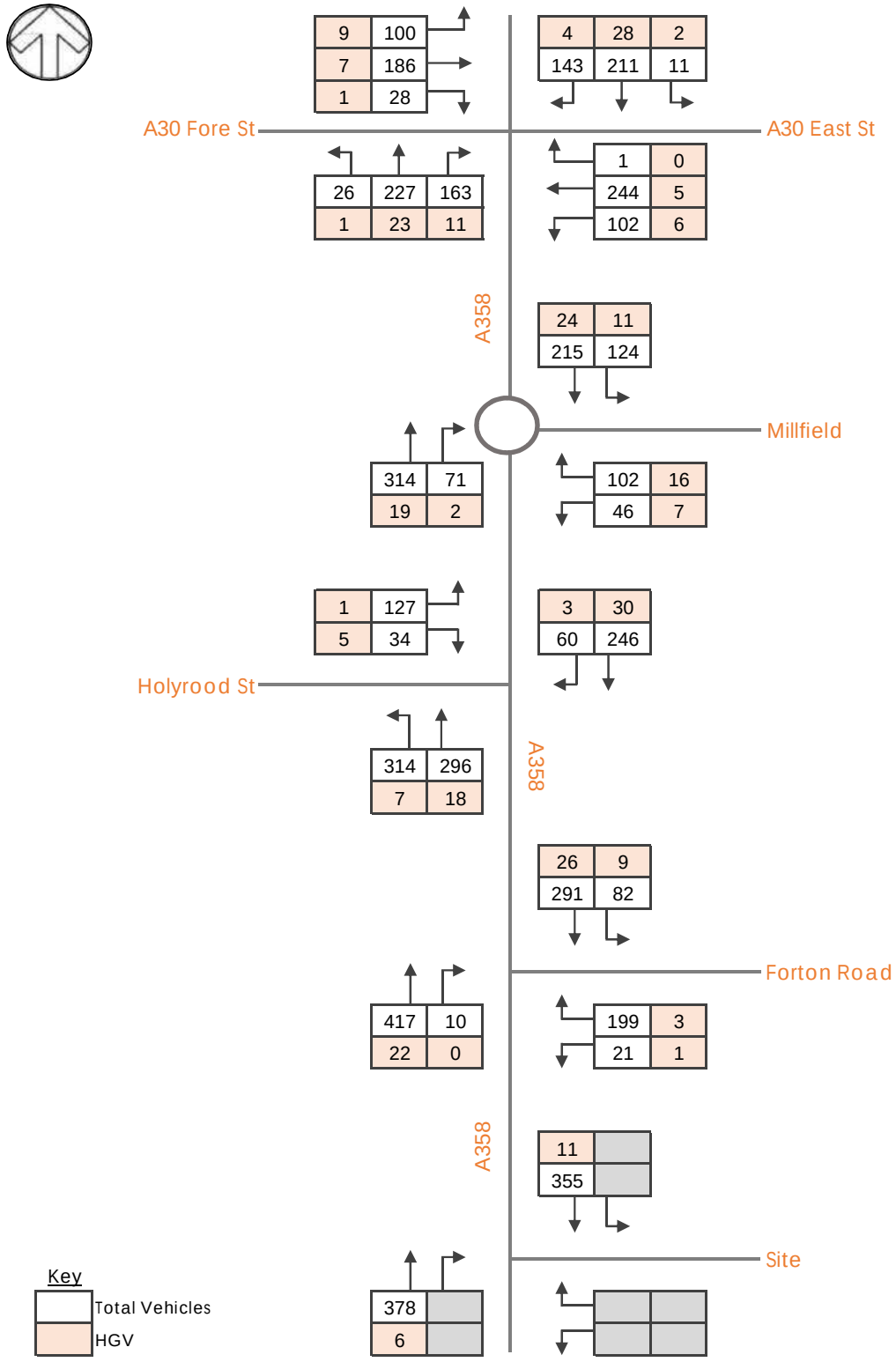
Source: AWP Transport Assessment dated March 2019

Planning Application: 19/01053/FUL

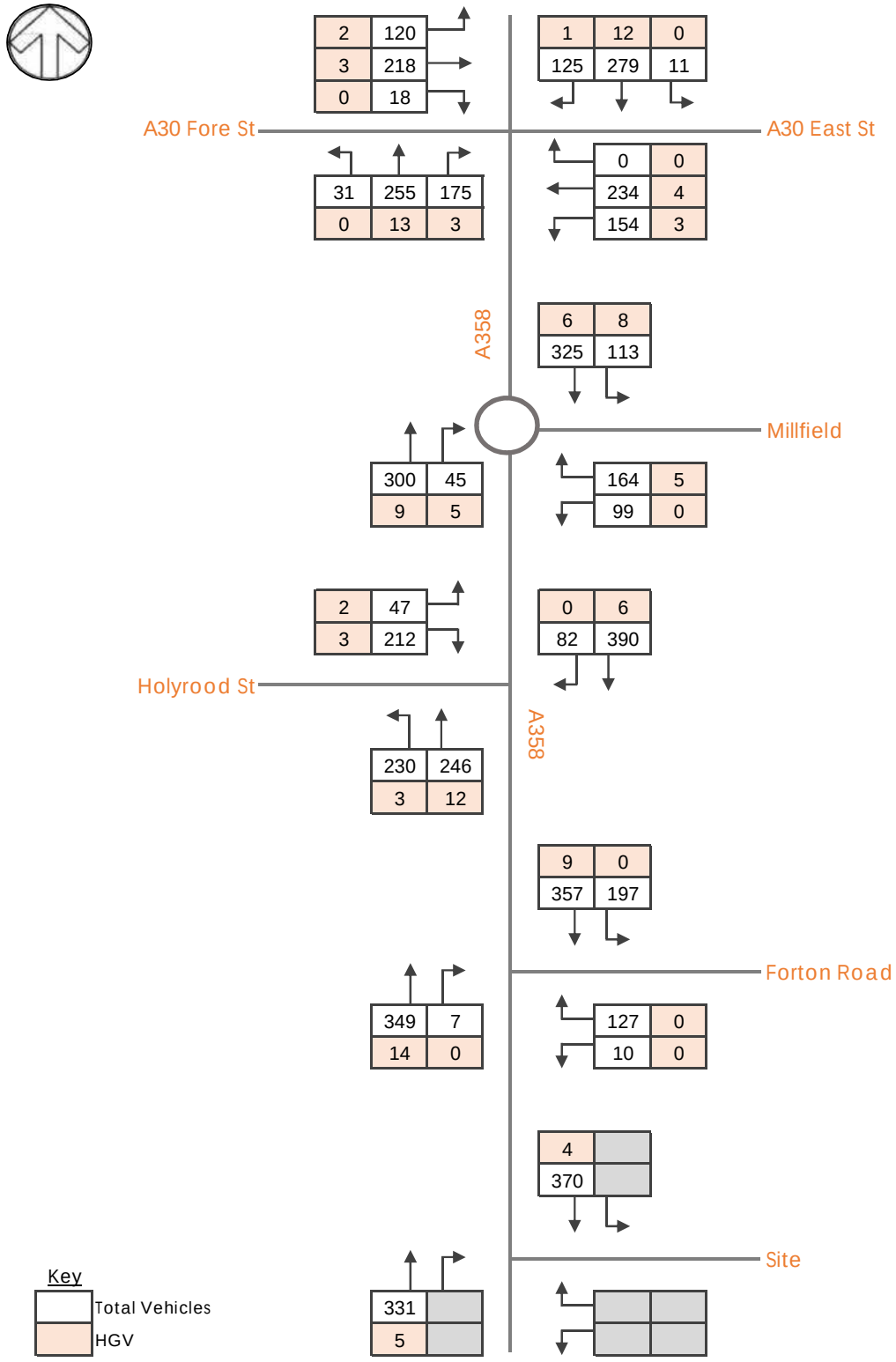
Hyperlinks to Document:

TA Vol.1:
https://www.southsomerset.gov.uk/civica/Resource/Civica/Handler.ashx/Doc/pagestream?cd=inline&pdf=true&docno=8923438

TA Vol 2:
https://www.southsomerset.gov.uk/civica/Resource/Civica/Handler.ashx/Doc/pagestream?cd=inline&pdf=true&docno=8923442



awcockward partnership	TITLE	FIGURE
	2018 Traffic Survey AM	7A
	PROJECT	
	0797 Thorhild, Chard	



awcockward partnership	TITLE	FIGURE
	2018 Traffic Survey PM	7B
	PROJECT	
	0797 Thorhild, Chard	

Appendix C

2017 Traffic Counts

Source: Key Transport Consultants Ltd Transport Assessment dated May 2018

Planning Application: 18/04057/OUT

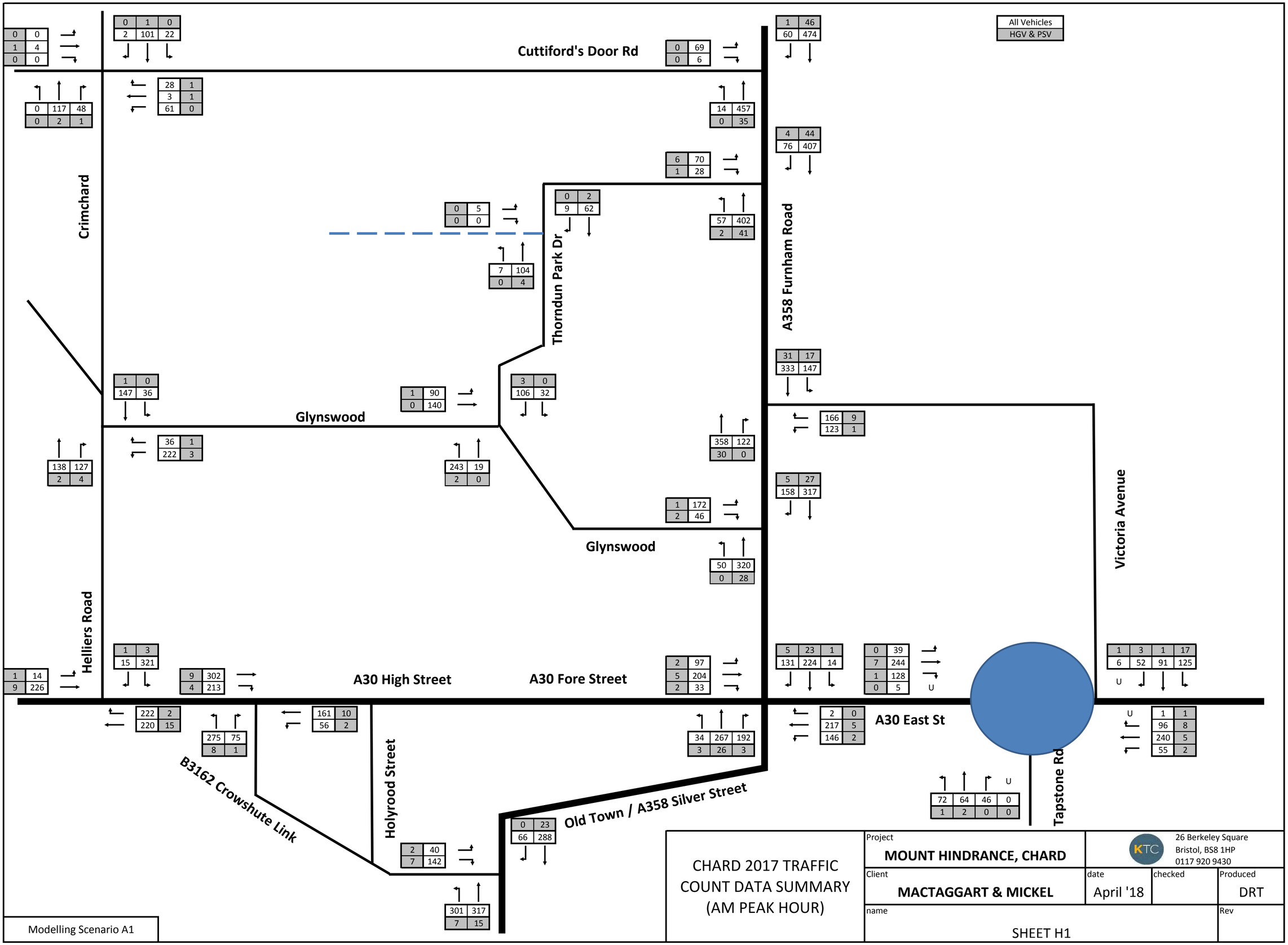
Hyperlinks to Document:

TA Pt 1:
https://www.southsomerset.gov.uk/civica/Resource/Civica/Handler.ashx/Doc/pagestream?cd=inline&pdf=true&docno=8908643

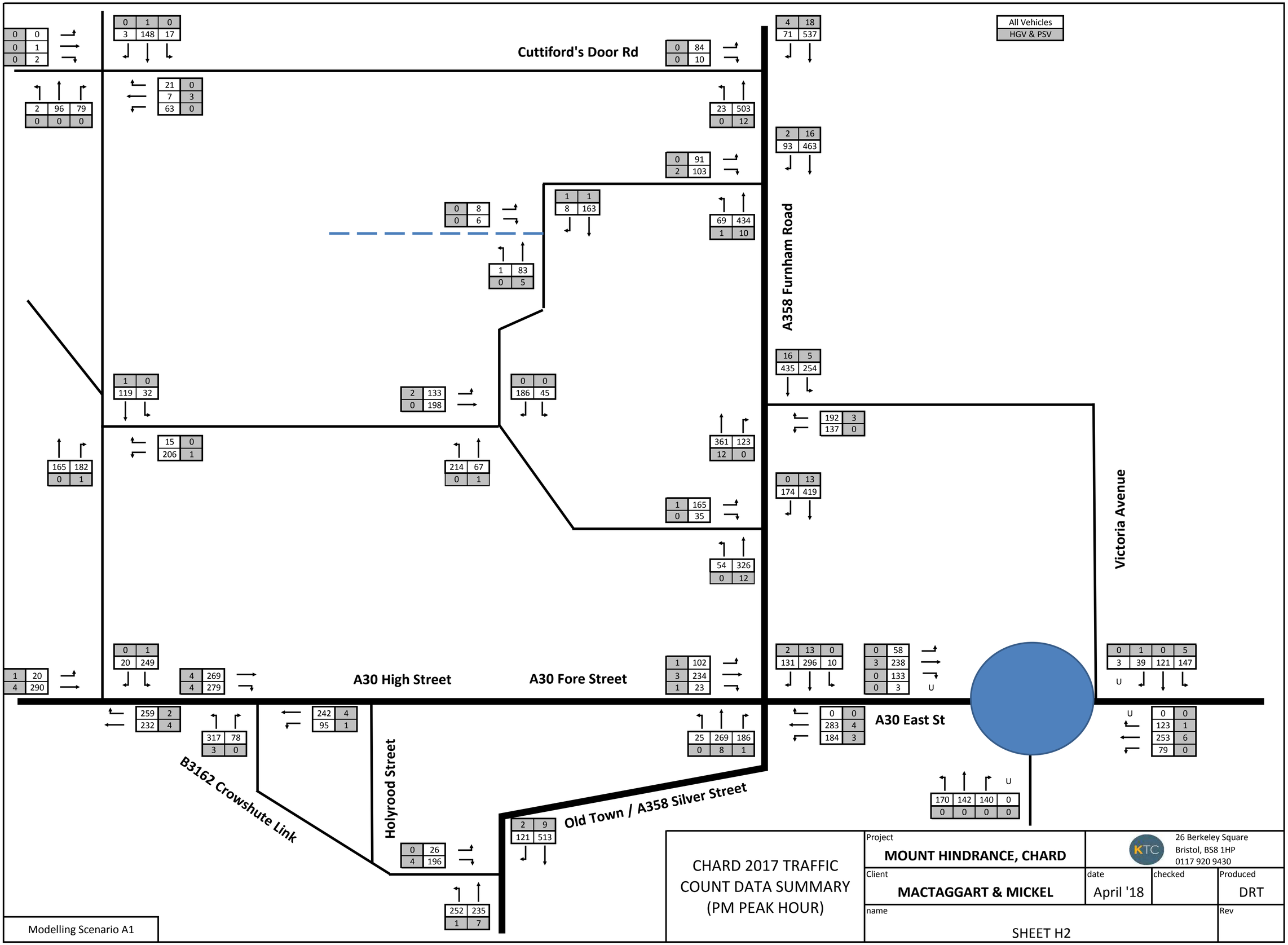
TA Pt 2:
https://www.southsomerset.gov.uk/civica/Resource/Civica/Handler.ashx/Doc/pagestream?cd=inline&pdf=true&docno=8908644

Appendices A – N:
https://www.southsomerset.gov.uk/civica/Resource/Civica/Handler.ashx/Doc/pagestream?cd=inline&pdf=true&docno=8908645

Appendices N – Q:
https://www.southsomerset.gov.uk/civica/Resource/Civica/Handler.ashx/Doc/pagestream?cd=inline&pdf=true&docno=8908646



F:\DATA\Jobs\0359 Mount Hindrance, Chard\2017\Traffic Modelling E temp



F:\DATA\Jobs\0359 Mount Hindrance, Chard\2017\Traffic Modelling E temp

Appendix D

TRICS Output

Calculation Reference: AUDIT-152304-210422-0427

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	2 days
	HF	HERTFORDSHIRE	1 days
	KC	KENT	3 days
	SC	SURREY	1 days
	WS	WEST SUSSEX	3 days
04	EAST ANGLIA		
	NF	NORFOLK	1 days
05	EAST MIDLANDS		
	DS	DERBYSHIRE	1 days
06	WEST MIDLANDS		
	ST	STAFFORDSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NE	NORTH EAST LINCOLNSHIRE	1 days
09	NORTH		
	DH	DURHAM	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: 125 to 432 (units:)
Range Selected by User: 120 to 520 (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: 01/01/13 to 23/09/19

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

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

Selected survey types:

Manual count	15 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 undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
Edge of Town	12
Neighbourhood Centre (PPS6 Local Centre)	2

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	13
Village	1

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	15 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 500m Range:

All Surveys Included

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	2 days
5,001 to 10,000	4 days
10,001 to 15,000	6 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	3 days
25,001 to 50,000	1 days
50,001 to 75,000	3 days
75,001 to 100,000	3 days
125,001 to 250,000	5 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	4 days
1.1 to 1.5	9 days
1.6 to 2.0	2 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	6 days
No	9 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	15 days

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
BISHOP AUCKLAND
ST HELEN AUCKLAND
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total No of Dwellings: 125
Survey date: MONDAY *27/03/17* *Survey Type: MANUAL*

2 DS-03-A-02 MIXED HOUSES DERBYSHIRE
RADBOURNE LANE
DERBY

Edge of Town
Residential Zone
Total No of Dwellings: 371
Survey date: TUESDAY *10/07/18* *Survey Type: MANUAL*

3 ES-03-A-03 MIXED HOUSES & FLATS EAST SUSSEX
SHEPHAM LANE
POLEGATE

Edge of Town
Residential Zone
Total No of Dwellings: 212
Survey date: MONDAY *11/07/16* *Survey Type: MANUAL*

4 ES-03-A-04 MIXED HOUSES & FLATS EAST SUSSEX
NEW LYDD ROAD
CAMBER

Edge of Town
Residential Zone
Total No of Dwellings: 134
Survey date: FRIDAY *15/07/16* *Survey Type: MANUAL*

5 HF-03-A-03 MIXED HOUSES HERTFORDSHIRE
HARE STREET ROAD
BUNTINGFORD

Edge of Town
Residential Zone
Total No of Dwellings: 160
Survey date: MONDAY *08/07/19* *Survey Type: MANUAL*

6 KC-03-A-06 MIXED HOUSES & FLATS KENT
MARGATE ROAD
HERNE BAY

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 363
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

7 KC-03-A-07 MIXED HOUSES KENT
RECULVER ROAD
HERNE BAY

Edge of Town
Residential Zone
Total No of Dwellings: 288
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

8 KC-03-A-08 MIXED HOUSES KENT
MAIDSTONE ROAD
CHARING

Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 159
Survey date: TUESDAY *22/05/18* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

9	NE-03-A-02 HANOVER WALK SCUNTHORPE	SEMI DETACHED & DETACHED	NORTH EAST LINCOLNSHIRE
	Edge of Town No Sub Category Total No of Dwellings:	432	
	Survey date: MONDAY	*12/05/14*	*Survey Type: MANUAL*
10	NF-03-A-06 BEAUFORT WAY GREAT YARMOUTH BRADWELL	MIXED HOUSES	NORFOLK
	Edge of Town Residential Zone Total No of Dwellings:	275	
	Survey date: MONDAY	*23/09/19*	*Survey Type: MANUAL*
11	SC-03-A-05 REIGATE ROAD HORLEY	MIXED HOUSES	SURREY
	Edge of Town Residential Zone Total No of Dwellings:	207	
	Survey date: MONDAY	*01/04/19*	*Survey Type: MANUAL*
12	ST-03-A-07 BEACONSIDE STAFFORD MARSTON GATE	DETACHED & SEMI-DETACHED	STAFFORDSHIRE
	Edge of Town Residential Zone Total No of Dwellings:	248	
	Survey date: WEDNESDAY	*22/11/17*	*Survey Type: MANUAL*
13	WS-03-A-04 HILLS FARM LANE HORSHAM BROADBRIDGE HEATH	MIXED HOUSES	WEST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings:	151	
	Survey date: THURSDAY	*11/12/14*	*Survey Type: MANUAL*
14	WS-03-A-08 ROUNDSTONE LANE ANGMERING	MIXED HOUSES	WEST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings:	180	
	Survey date: THURSDAY	*19/04/18*	*Survey Type: MANUAL*
15	WS-03-A-09 LITTLEHAMPTON ROAD WORTHING WEST DURRINGTON	MIXED HOUSES & FLATS	WEST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings:	197	
	Survey date: THURSDAY	*05/07/18*	*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
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	15	233	0.074	15	233	0.300	15	233	0.374
08:00 - 09:00	15	233	0.117	15	233	0.360	15	233	0.477
09:00 - 10:00	15	233	0.133	15	233	0.161	15	233	0.294
10:00 - 11:00	15	233	0.119	15	233	0.149	15	233	0.268
11:00 - 12:00	15	233	0.122	15	233	0.136	15	233	0.258
12:00 - 13:00	15	233	0.147	15	233	0.141	15	233	0.288
13:00 - 14:00	15	233	0.149	15	233	0.139	15	233	0.288
14:00 - 15:00	15	233	0.162	15	233	0.181	15	233	0.343
15:00 - 16:00	15	233	0.255	15	233	0.166	15	233	0.421
16:00 - 17:00	15	233	0.268	15	233	0.160	15	233	0.428
17:00 - 18:00	15	233	0.330	15	233	0.144	15	233	0.474
18:00 - 19:00	15	233	0.296	15	233	0.172	15	233	0.468
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.172			2.209			4.381

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:	125 - 432 (units:)
Survey date date range:	01/01/13 - 23/09/19
Number of weekdays (Monday-Friday):	15
Number of Saturdays:	0
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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	15	233	0.109	15	233	0.510	15	233	0.619
08:00 - 09:00	15	233	0.178	15	233	0.725	15	233	0.903
09:00 - 10:00	15	233	0.204	15	233	0.293	15	233	0.497
10:00 - 11:00	15	233	0.191	15	233	0.265	15	233	0.456
11:00 - 12:00	15	233	0.196	15	233	0.246	15	233	0.442
12:00 - 13:00	15	233	0.252	15	233	0.237	15	233	0.489
13:00 - 14:00	15	233	0.254	15	233	0.237	15	233	0.491
14:00 - 15:00	15	233	0.266	15	233	0.303	15	233	0.569
15:00 - 16:00	15	233	0.521	15	233	0.287	15	233	0.808
16:00 - 17:00	15	233	0.546	15	233	0.287	15	233	0.833
17:00 - 18:00	15	233	0.608	15	233	0.244	15	233	0.852
18:00 - 19:00	15	233	0.533	15	233	0.326	15	233	0.859
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.858			3.960			7.818

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 E

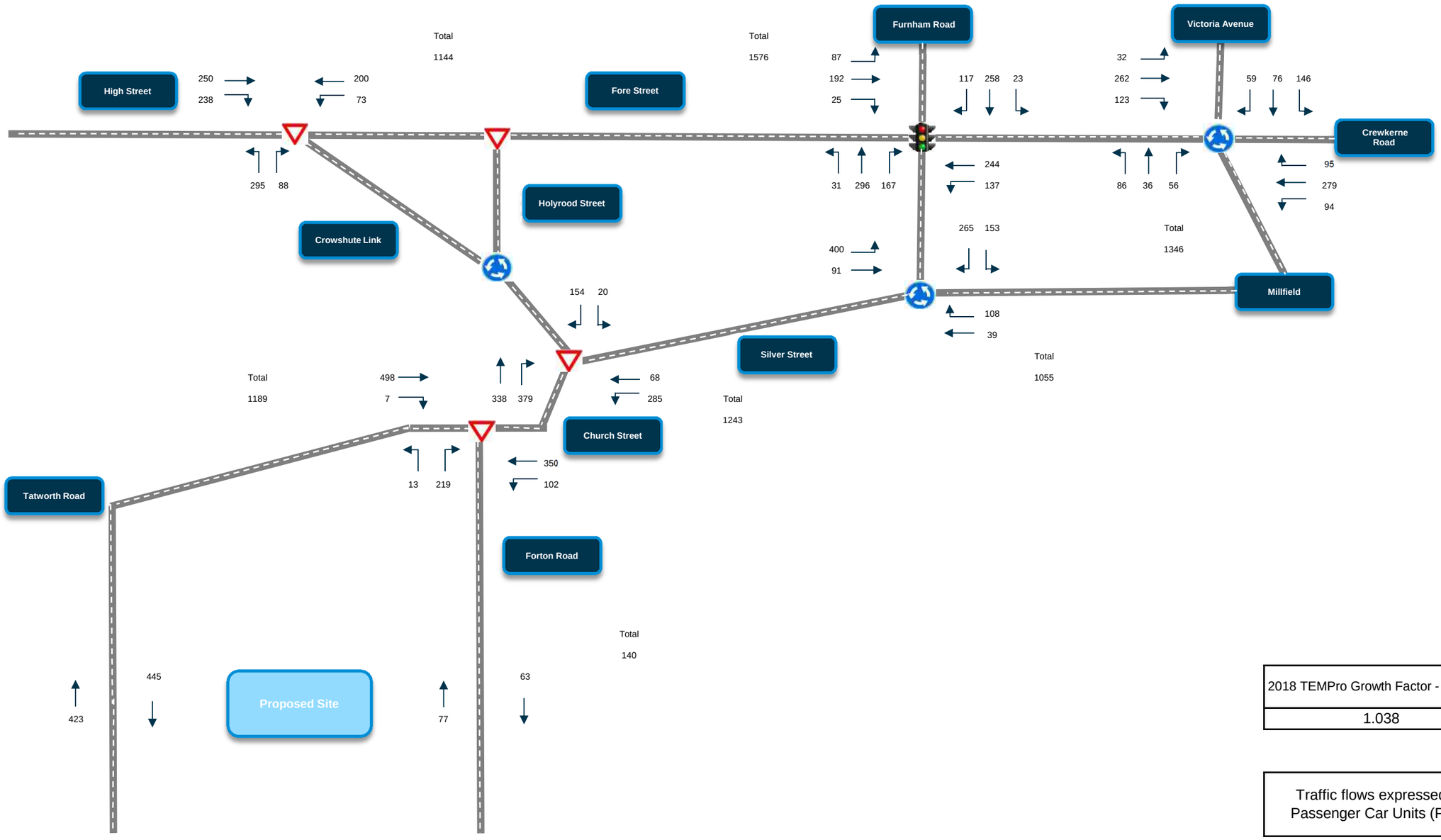
2018 + Committed Development Traffic Flows

Source: Peter Brett Associates Transport Assessment dated May 2016

Planning Application: 16/02874/FUL

Hyperlink to Document:

https://www.southsomerset.gov.uk/civica/Resource/Civica/Handler.ashx/Doc/pagestream?cd=inline&pdf=true&docno=7888665



2018 TEMPro Growth Factor - AM Peak
1.038

Traffic flows expressed as Passenger Car Units (PCU)

peterbrett

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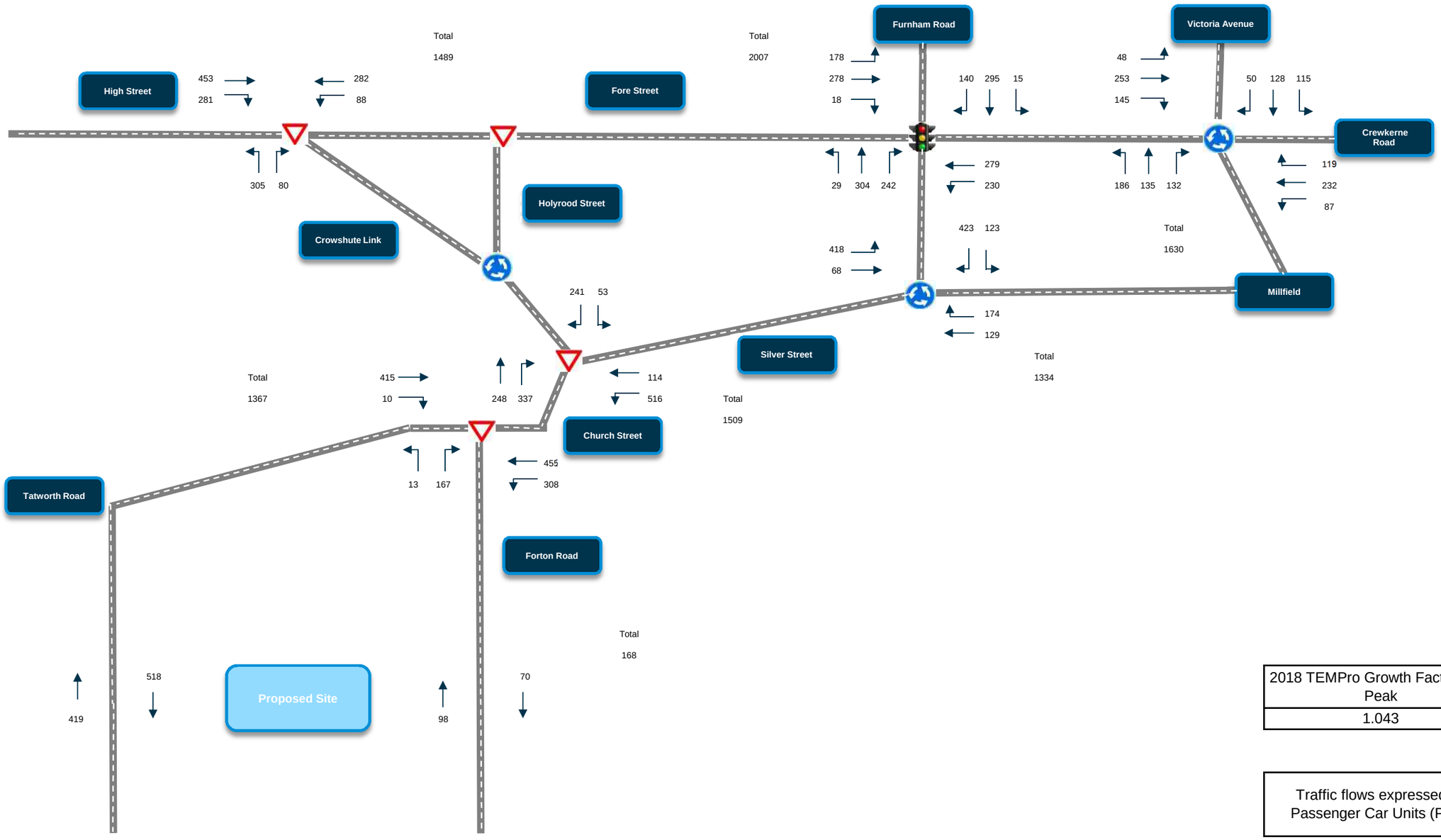
Telephone (01823) 44510 Email: taunton@peterbrett.com Web: www.peterbrett.com

Client: Persimmon Homes South West Ltd

Figure Title: 2018 Base + Committed Development Traffic - AM Peak

Project Number:	29372	**Project Name:**	Land between Forton Road and Tatworth Road, Chard
Date:	May-16	**Figure Number:**	Figure 6-11
Scale:	NTS	**Revision**	
Drawn:	CM		
Checked:	AS		



2018 TEMPro Growth Factor - PM Peak
1.043

Traffic flows expressed as Passenger Car Units (PCU)

peterbrett

Lakeside House, Blackbrook Park Avenue, Taunton, TA1 2PX © Peter Brett Associates LLP
Telephone (01823) 44510 Email: taunton@peterbrett.com Web: www.peterbrett.com

Client: Persimmon Homes South West Ltd

Figure Title: 2018 Base + Committed Development Traffic - PM Peak

Project Number:	29372	**Project Name:**	Land between Forton Road and Tatworth Road, Chard
Date:	May-16	**Figure Number:**	**Revision**
Scale:	NTS	Figure 6-12	
Drawn:	CM		
Checked:	AS		

Appendix F

2023 Junction Capacity Results

Source: Peter Brett Associates Transport Assessment dated May 2016

Planning Application: 16/02874/FUL

Hyperlink to Document:

https://www.southsomerset.gov.uk/civica/Resource/Civica/Handler.ashx/Doc/pagestream?cd=inline&pdf=true&docno=7888665

6.5.3 It has also been identified that planning application 15/04772/OUT was submitted in October 2015 for the development of up to 200 dwellings on land between Tatworth and Forton Road, located to the north of this site. The development is considered likely to come forward given that the land forms part of the Growth Area so it has also been accounted for as committed development.

6.5.4 The vehicle trips generated by this development have been included using trip generation figures obtained from the supporting TA produced by Ashley Helme, dated October 2015.

6.5.5 The resulting total committed development traffic flows are shown in **Figures 6-7** and **6-8**.

6.6 Development Traffic Assignment

6.6.1 **Chapter 5** presented the likely distribution of vehicle trips associated with the proposed development based on an analysis of 2011 Census data relating to existing commuting patterns in Chard.

6.6.2 An online route planner has been used to determine the most likely direction of travel between the site and each identified employment zone. However, there are often multiple assignment routes available to any particular destination, and it is not possible from the Census data to ascertain the route taken. The assumed assignment has therefore, where appropriate, split the proportion of trips between routes whilst ensuring that the correct totals for each destination are achieved.

6.6.3 The resulting assignment of vehicle trips is shown in **Figures 6-9** and **6-10**.

6.7 Junction Capacity Assessment

6.7.1 The assessment of traffic signal controlled junctions has been undertaken using LINSIG 3 which is an industry standard traffic modelling software package. For signalised junctions, a Degree of Saturation (DoS - %) value of less than 90% typically demonstrates that a junction arm or turning movement is operating 'within capacity' and is therefore unlikely to experience excessive congestion.

6.7.2 The LINSIG results also include Practical Reserve Capacity (PRC) which provides a summary statistic for the entire junction. A negative PRC value typically indicates that the junction will be over the capacity threshold on one arm or more.

6.7.3 The assessment of priority controlled junctions has been undertaken using the PICADY and ARCADY modules of JUNCTIONS 9 which is also standard traffic modelling software. For priority junctions, it is generally considered that a junction is operating within capacity where the Ratio of Flow to Capacity (RFC) is less than 85%. A junction is said to be operating at capacity between 90%-100% RFC. All RFC values above 100% mean that a junction is operating above capacity and vehicle queues will begin to accumulate.

6.7.4 The following traffic flow scenarios have been modelled for the 2018 and 2023 future years, for the weekday AM and PM peak hours:

- 2018 base (**Figures 6-11** and **6-12**)
- 2018 base + committed development (**Figures 6-13** and **6-14**)
- 2018 base + committed development + proposed development (**Figures 6-15** and **6-16**)
- 2023 base (**Figures 6-17** and **6-18**)
- 2023 base + committed development (**Figures 6-19** and **6-20**)

- 2023 base + committed development + proposed development (**Figures 6-21** to **6-22**)

B3162 Forton Road / A358 Tatworth Road / A358 Church Street Junction

6.7.5 This junction has been modelled using PICADY and the results are shown in **Table 6-5**.

	Forton Road		Tatworth Road	
AM Peak	**RFC**	**Q (pcu)**	**RFC**	**Q (pcu)**
2018 base	0.510	1	0.020	0
2018 base + committed	0.630	2	0.020	0
2018 base + committed + proposed development	0.760	3	0.020	0
2023 base	0.620	2	0.020	0
2023 base + committed	0.760	3	0.020	0
2023 base + committed + proposed development	0.900	7	0.020	0

PM Peak	**RFC**	**Q (pcu)**	**RFC**	**Q (pcu)**
2018 base	0.450	1	0.030	0
2018 base + committed	0.540	1	0.030	0
2018 base + committed + proposed development	0.640	2	0.030	0
2023 base	0.570	1	0.030	0
2023 base + committed	0.680	2	0.040	0
2023 base + committed + proposed development	0.800	4	0.040	0

Table 6-5 Summary results for B3162 Forton Road / A358 Tatworth Road / A358 Church Street junction

6.7.6 The analysis shows that the junction is forecast to operate within capacity in both peak hours and with minimal queuing predicted to occur on any approach.

6.7.7 In the 2023 'with development' scenario in the AM peak, the junction is forecast to be approaching capacity with a maximum RFC of 0.900 and maximum queue of just 7 vehicles on the Forton Road approach. It can also be seen that the development itself will only extend the queue on Forton Road by 4 pcu's in this scenario. This level of impact is not considered to be significant at this junction.

6.7.8 The capacity results are provided in full in **Appendix F**.

A358 Old Town / Holyrood Street Junction

6.7.9 This junction has been modelled using PICADY and the results are shown in **Table 6-6**.

	Holyrood Street		Old Town	
AM Peak	**RFC**	**Q (pcu)**	**RFC**	**Q (pcu)**
2018 base	0.370	1	0.150	0
2018 base + committed	0.410	1	0.190	0
2018 base + committed + proposed development	0.470	1	0.200	0
2023 base	0.450	1	0.180	0
2023 base + committed	0.500	1	0.220	0
2023 base + committed + proposed development	0.570	1	0.230	0

PM Peak	**RFC**	**Q (pcu)**	**RFC**	**Q (pcu)**
2018 base	0.640	2	0.270	1
2018 base + committed	0.730	3	0.290	1
2018 base + committed + proposed development	0.850	5	0.300	1
2023 base	0.810	4	0.320	1
2023 base + committed	0.950	8	0.350	1
2023 base + committed + proposed development	1.090	20	0.360	1

Table 6-6 Summary results for A358 Church Street / A358 Old Town / Holyrood Street Junction

6.7.10 The analysis shows that the junction is forecast to operate within capacity in both peak hours and with minor queuing predicted to occur on any approach in all but one traffic scenario.

6.7.11 In the 2023 'with development' scenario in the PM peak, the junction operates just over capacity with a maximum RFC of 1.090 and maximum queue of 20 pcu's on the Holyrood Street approach. It is however important to understand that the junction is shown to be very close to capacity on Holyrood Street in the 2023 baseline scenario before the development traffic is included. Hence it is not the development traffic that is the main determinate for this impact.

6.7.12 Whilst the modelling forecasts that the addition of development traffic is forecast to extend the maximum queue at this location by 12 pcu's, the development is only forecast to generate an additional 20 vehicles on the Holyrood Street approach over the course of the PM peak hour.

This equates to an average of 1 additional vehicle every 3 minutes and is therefore not considered to represent a significant impact.

6.7.13 The 2023 'with development' scenario should also be regarded as a 'worst case' impact because in reality it will be diluted as a result of the modal shift that should be achieved by implementing the package of measures and initiatives proposed in the site Travel Plan. It is also possible that the wider growth area development and link road infrastructure could be substantially completed by 2023, meaning that traffic flows through the centre of Chard, including at this junction, may be significantly reduced.

6.7.14 The capacity results are provided in full in **Appendix G**.

A30 High Street / B3162 Crowshute Link Junction

6.7.15 This junction has been modelled using PICADY and the results are shown in **Table 6-7**.

	Crowshute Link		High Street	
AM Peak	**RFC**	**Q (pcu)**	**RFC**	**Q (pcu)**
2018 base	0.500	1	0.430	1
2018 base + committed	0.540	1	0.450	1
2018 base + committed + proposed development	0.570	1	0.450	1
2023 base	0.590	1	0.500	1
2023 base + committed	0.630	2	0.480	1
2023 base + committed + proposed development	0.680	2	0.520	1

PM Peak	**RFC**	**Q (pcu)**	**RFC**	**Q (pcu)**
2018 base	0.570	1	0.520	1
2018 base + committed	0.590	2	0.560	1
2018 base + committed + proposed development	0.620	2	0.570	2
2023 base	0.710	2	0.610	2
2023 base + committed	0.750	3	0.650	3
2023 base + committed + proposed development	0.800	4	0.660	3

Table 6-7 Summary results for A30 High Street / B3162 Crowshute Link Junction

6.7.16 The analysis shows that the junction is forecast to operate within capacity in both peak hours and with minor queuing predicted to occur on any approach for all traffic scenarios.

6.7.17 The capacity results are provided in full in **Appendix H**.

A358 Furnham Road / Millfield Junction

6.7.18 This junction has been modelled using ARCADY and the results are shown in **Table 6-8**.

	A358 Millfield (East)		A358 Millfield (West)		A358 Furnham Road	
AM Peak	**RFC**	**Q (pcu)**	**RFC**	**Q (pcu)**	**RFC**	**Q (pcu)**
2018 base	0.180	0	0.350	1	0.570	1
2018 base + committed	0.200	0	0.390	1	0.610	2
2018 base + committed + proposed development	0.210	0	0.450	1	0.640	2
2023 base	0.210	0	0.400	1	0.650	2
2023 base + committed	0.230	0	0.440	1	0.690	2
2023 base + committed + proposed development	0.240	0	0.500	1	0.720	3

PM Peak	**RFC**	**Q (pcu)**	**RFC**	**Q (pcu)**	**RFC**	**Q (pcu)**
2018 base	0.450	1	0.370	1	0.720	3
2018 base + committed	0.480	1	0.400	1	0.780	3
2018 base + committed + proposed development	0.520	1	0.430	1	0.850	5
2023 base	0.550	1	0.420	1	0.830	4
2023 base + committed	0.580	1	0.460	1	0.890	7
2023 base + committed + proposed development	0.630	2	0.490	1	0.960	13

Table 6-8 Summary results for A358 Furnham Road / Millfield Junction

6.7.19 The analysis demonstrates that the junction is forecast to operate within capacity and with minimal queuing during the AM peak hour in all scenarios, but at capacity during the PM peak hour in the 2023 'with development' scenario. It is however important to understand that the junction is shown to be approaching capacity on the Furnham Road approach in the 2023 PM peak hour baseline scenarios before the development traffic is included.

6.7.20 Whilst the modelling forecasts that the addition of development traffic is forecast to extend the maximum queue at this location by 6 pcu's, the development is only forecast to generate an additional 75 vehicles on the Furnham Road approach over the course of the PM peak hour. This equates to an average of approximately 1 additional vehicle every minute and is therefore not considered to represent a significant impact.

6.7.21 The 2023 'with development' scenario should also be regarded as a 'worst case' impact because in reality it will be diluted as a result of the modal shift that should be achieved by implementing the package of measures and initiatives proposed in the site Travel Plan. It is also possible that the wider growth area development and link road infrastructure could be substantially completed by 2023, meaning that traffic flows through the centre of Chard, including at this junction, might be significantly reduced.

6.7.22 The capacity results are provided in full in **Appendix I.**

A30 East Street / Tapstone Road / A30 Crewkerne Road / Victoria Avenue Junction

6.7.23 This junction has been modelled using ARCADY and the results are shown in **Table 6-10**.

	A30 Crewkerne Road		Tapstone Road		A30 East Street		Victoria Avenue	
AM Peak	**RFC**	**Q (pcu)**	**RFC**	**Q (pcu)**	**RFC**	**Q (pcu)**	**RFC**	**Q (pcu)**
2018 base	0.340	1	0.120	0	0.360	1	0.220	0
2018 base + committed	0.370	1	0.120	0	0.380	1	0.220	0
2018 base + committed + proposed development	0.370	1	0.120	0	0.390	1	0.220	0
2023 base	0.390	1	0.140	0	0.420	1	0.250	0
2023 base + committed	0.420	1	0.140	0	0.430	1	0.260	0
2023 base + committed + proposed development	0.420	1	0.140	0	0.450	1	0.260	0

PM Peak	RFC	Q (pcu)	RFC	Q (pcu)	RFC	Q (pcu)	RFC	Q (pcu)
2018 base	0.340	1	0.290	0	0.420	1	0.240	0
2018 base + committed	0.350	1	0.300	0	0.450	1	0.240	0
2018 base + committed + proposed development	0.360	1	0.310	0	0.460	1	0.240	0
2023 base	0.400	1	0.340	1	0.500	1	0.280	0
2023 base + committed	0.410	1	0.360	1	0.540	1	0.290	0
2023 base + committed + proposed development	0.420	1	0.360	1	0.540	1	0.290	0

Table 6-10 Summary results for A30 East Street / Tapstone Road / A30 Crewkerne Road / Victoria Avenue Junction

6.7.24 The analysis shows that the junction is forecast to operate within capacity in both peak hours and with minor queuing predicted to occur on any approach for all traffic scenarios.

6.7.25 The capacity results are provided in full in **Appendix J**.

A358 Furnham Road / A30 East Street / A30 Fore Street (Convent Junction)

6.7.26 The Chard Regeneration Framework identifies this junction as being the principle capacity constraint in the town.

6.7.27 A Microprocessor Optimised Vehicle Actuation (MOVA) system has been installed at the junction to improve its operation and capacity. MOVA is a well-established strategy for the control of traffic light signals at isolated junctions. It acts before congestion occurs by switching to a capacity maximising mode if any approach becomes overloaded helping to minimise delays experienced by drivers.

6.7.28 The operation of the junction under pre-MOVA conditions was considered as part of the Chard Regeneration Framework. The junction was modelled using 2008 base traffic flows and was shown to be operating over capacity at peak times (with DoS values exceeding 100%).

6.7.29 This model has been constructed in accordance with controller data relating specifically to this junction that was obtained from SCC's Traffic Signal team. This is in terms of the intergreens, phasing and staging at the junction. The model has also been set up to generally run the pedestrian stages every other cycle. The only exception is the pedestrian phase for the southern arm which we have assumed will run every cycle.

6.7.30 **Table 6-12** compares the volume of peak hour traffic using the junction as recorded during the 2008 and 2015 traffic surveys.

Year	MOVA System Present	AM Peak	PM Peak
2008	No	1,543	1,596
2015	Yes	1,431	1,836
Change	-	*-112 (7.3%)*	*+240 (15.0%)*

Table 6-12 Comparison of traffic flows using the A358 Furnham Road / A30 East Street / A30 Fore Street Junction

6.7.31 The analysis demonstrates that total traffic flows using the junction have decreased between 2008 and 2015 by 7.3% in the AM peak, but have increased by 15.0% over the same time period in the PM peak.

6.7.32 This junction has been modelled using LINSIG and the results are shown in **Table 6-13**.

	A358 Furnham Rd (North)		A30 East Street		A358 Furnham Rd (South)		A30 Fore Street	
AM Peak	**DoS**	**Q (pcu)**	**DoS**	**Q (pcu)**	**DoS**	**Q (pcu)**	**DoS**	**Q (pcu)**
2018 base	74.5%	14	74.7%	13	75.5%	13	65.3%	11
PRC	19.2%							
2018 base + committed	80.6%	15	81.1%	14	80.1%	16	65.8%	10
PRC	11.0%							
2018 base + committed + proposed development	85.7%	16	84.9%	16	85.9%	18	68.2%	11
PRC	4.7%							
2023 base	84.5%	16	84.4%	16	85.4%	17	74.1%	12
PRC	5.3%							
2023 base + committed	89.7%	19	90.8%	19	90.9%	21	74.8%	13
PRC	-1.0%							
2023 base + committed + proposed development	95.0%	22	95.2%	23	96.3%	26	77.0%	14
PRC	-7.0%							

PM Peak	DoS	Q (pcu)	DoS	Q (pcu)	DoS	Q (pcu)	DoS	Q (pcu)
2018 base	90.5%	18	90.6%	21	91.0%	19	86.5%	19
PRC	-1.2%							
2018 base + committed	95.4%	22	96.6%	26	95.7%	24	90.6%	21
PRC	-7.4%							
2018 base + committed + proposed development	100.9%	30	100.6%	33	100.9%	33	91.3%	22
PRC	-12.1%							
2023 base	103.5%	35	103.9%	42	104.2%	42	96.9%	30
PRC	-15.8%							
2023 base + committed	110.1%	52	108.7%	57	108.7%	58	101.8%	37
PRC	-22.3%							
2023 base + committed + proposed development	113.4%	63	114.5%	73	113.8%	78	104.9%	43
PRC	-27.2%							

Table 6-13 Summary results for A358 Furnham Road / A30 East Street / A30 Fore Street Junction

6.7.33 The analysis demonstrates that the junction is forecast to operate within capacity in all 2018 AM scenarios assessed. The 2023 AM scenarios all remain below 100% DoS but some of the arms are over 90% DoS and therefore approaching capacity.

6.7.34 The 2018 PM base forecasts the junction will already be near to capacity with a PRC of -1.2%. This means that both of the forecast scenarios in 2018 are over 90% DoS with the development model reaching a maximum of just over 100% DoS (100.9%). The 2023 PM scenarios are all operating at over 100% DoS with significant queues forecasted. This is the case however with the 2023 base as well as the 'with development' scenarios.

6.7.35 It is important to understand that the junction is near to capacity even before the proposed development traffic is included in the assessment, demonstrating that there are existing capacity issues at this location. Logically, the addition of development traffic exacerbates the capacity issue at the junction during both peak hours. This effectively means that the additional development traffic will be forced to join the back of the existing queues at the junction.

6.7.36 It should be noted that the addition of the development traffic is predicted to reduce the PRC of the junction by just 4.9% in the most critical PM peak in the 2023 forecast year. This is equivalent to an additional 76 two-way trips passing through the junction, which is in turn an

approximate increase of just 1 additional trip per minute throughout the hour. Considered in this context, it can be concluded that the development is not considered to have a significant impact on the junction.

6.7.37 This should also be regarded as a 'worst case' impact because in reality it will be diluted as a result of the modal shift that should be achieved by implementing the package of measures and initiatives proposed in the site Travel Plan. It is also possible that the wider growth area development and link road infrastructure could be substantially completed by 2023, meaning that traffic flows through the centre of Chard, including at this junction, might be significantly reduced.

6.7.38 The capacity results are provided in full in **Appendix K**.

A358 Tatworth Road / Site Access Junction

6.7.39 The proposed roundabout on Tatworth Road has been assessed using ARCADY and the results are provided in **Table 6-14**.

	Site Access		A358 Tatworth Road (South)		A358 Tatworth Road (North)	
AM Peak	**RFC**	**Q (pcu)**	**RFC**	**Q (pcu)**	**RFC**	**Q (pcu)**
2023 base + committed + proposed development	0.100	0	0.330	1	0.330	1
PM Peak	**RFC**	**Q (pcu)**	**RFC**	**Q (pcu)**	**RFC**	**Q (pcu)**
2023 base + committed + proposed development	0.050	0	0.330	1	0.420	1

Table 6-14 Summary results for A358 Tatworth Road / Site Access Junction

6.7.40 The analysis shows that the proposed site access junction is forecast to operate within capacity in both peak hours and with minor queuing predicted to occur on any approach.

6.7.41 The capacity results are provided in full in **Appendix L**.

Forton Road / Site Access Junction

6.7.42 The proposed roundabout on Tatworth Road has been assessed using ARCADY and the results are provided in **Table 6-15**.

	Site Access		Forton Road	
AM Peak	**RFC**	**Q (pcu)**	**RFC**	**Q (pcu)**
2023 base + committed + proposed development	0.050	0	0.020	0
PM Peak	**RFC**	**Q (pcu)**	**RFC**	**Q (pcu)**
2023 base + committed + proposed development	0.020	0	0.040	0

Table 6-15 Summary results for Forton Road / Site Access Junction

6.7.43 The analysis shows that the proposed site access junction is forecast to operate within capacity in both peak hours and with minor queuing predicted to occur on any approach. The capacity results do not suggest that a right turn ghost lane is required on the eastbound approach for vehicles entering the site.

6.7.44 The capacity results are provided in full in **Appendix M**.

6.8 Summary

6.8.1 This chapter has determined the base conditions on the local highway network and established the forecast distribution and assignment of the development traffic across the network to enable an assessment of the potential impact of the development in the future.

6.8.2 The proposed site access junctions on Tatworth Road and Forton Road are forecast to operate well within capacity in the 2023 'with development' scenarios. The capacity assessment has also demonstrated that the Forton Road access junction does not require a right turn ghost lane for eastbound vehicles entering the site.

6.8.3 The Forton Road / Tatworth Road priority T junction is forecast to be approaching capacity in the 2023 'with development' scenario in the AM peak, however the development itself will only extend the queue on Forton Road by 4 pcu's in this scenario. This level of impact is not considered to be significant.

6.8.4 The Old Town / Holyrood Street priority T junction is forecast to operate just over capacity in the 2023 'with development' scenario in the PM peak with a maximum RFC of 1.090 and maximum queue of 20 pcu's on the Holyrood Street approach. It is however important to understand that the junction is shown to be very close to capacity on Holyrood Street in the 2023 baseline scenario before the development traffic is included.

6.8.5 Whilst the modelling forecasts that the addition of development traffic is forecast to extend the maximum queue at this location by 12 pcu's, the development is only forecast to generate an additional 20 vehicles on the Holyrood Street approach over the course of the PM peak hour. This equates to an average of 1 additional vehicle every 3 minutes and is therefore not considered to be a significant impact.

6.8.6 The analysis has demonstrated that congestion is unlikely to be experienced at the High Street / Crowshute Link priority junction and the Victoria roundabout junction.

6.8.7 The analysis demonstrates that the Millfield / Furnham Road junction is forecast to operate within capacity and with minimal queuing during the AM peak hour in all scenarios, but at capacity during the PM peak hour in the 2023 'with development' scenario. It is however

important to understand that the junction is shown to be approaching capacity on the Furnham Road approach in the 2023 PM peak hour baseline scenarios before the development traffic is included.

6.8.8 Whilst the modelling forecasts that the addition of development traffic is forecast to extend the maximum queue at this location by 6 pcu's, the development is only forecast to generate an additional 75 vehicles on the Furnham Road approach over the course of the PM peak hour. This equates to an average of approximately 1 additional vehicle every minute and is therefore not considered to be a significant impact.

6.8.9 The Convent junction in the centre of Chard operates under the MOVA system but currently operates over capacity during the PM peak. The assessment undertaken demonstrates that the junction is forecast to operate within capacity in all 2018 AM scenarios assessed. The 2023 AM scenarios all remain below 100% DoS but some of the arms are over 90% DoS and therefore approaching capacity.

6.8.10 The 2018 PM base forecasts the junction will already be near to capacity with a PRC of -1.2%. This means that both of the forecast scenarios in 2018 are over 90% DoS with the development model reaching a maximum of just over 100% DoS (100.9%). The 2023 PM scenarios are all operating at over 100% DoS with significant queues forecasted. This is the case however with the 2023 base as well as the 'with development' scenarios.

6.8.11 It is important to understand that the junction is near to capacity even before the proposed development traffic is included in the assessment, demonstrating that there are existing capacity issues at this location. Logically, the addition of development traffic exacerbates the capacity issue at the junction during both peak hours. This effectively means that the additional development traffic will be forced to join the back of the existing queues at the junction.

6.8.12 It should be noted that the addition of the development traffic is predicted to reduce the PRC of the junction by just 4.9% in the most critical PM peak in the 2023 forecast year. This is equivalent to an additional 76 two-way trips passing through the junction, which is in turn an approximate increase of just 1 additional trip per minute throughout the hour. Considered in this context, it can be concluded that the development is not considered to have a significant impact on the junction.

6.8.13 Although the capacity assessments undertaken suggests that some congestion is likely to be experienced within the study area, this situation should be considered in the following context:

- The capacity results should be regarded as a 'worst case' impact because in reality the vehicle trips generated by the proposed site will be diluted as a result of the modal shift that should be achieved through implementing the Travel Plan.

- Where junctions are shown to operate in excess of 100% DoS or RFC, the models can become unstable and the performance results generated can be considerably less reliable. Therefore, in such circumstances, the output results need to be treated with a certain degree of caution as the model is likely to be showing exaggerated capacity and queue results.

- It is possible that the wider growth area development and link road infrastructure could be substantially completed by 2023, meaning that traffic flows through the centre of Chard, might be significantly reduced.

Appendix G

2024 Junction Capacity Results

Source: AWP Transport Assessment dated March 2019

Planning Application: 19/01053/FUL

Hyperlinks to Document

TA Vol.1:
https://www.southsomerset.gov.uk/civica/Resource/Civica/Handler.ashx/Doc/pagestream?cd=inline&pdf=true&docno=8923438

TA Vol 2:
https://www.southsomerset.gov.uk/civica/Resource/Civica/Handler.ashx/Doc/pagestream?cd=inline&pdf=true&docno=8923442

7 Traffic Impact Assessment

7.1 This chapter of the TA assesses the traffic impact at key junctions on the local road network. The scope of assessment has been carried out following the detailed scoping process with the Local Highway Authority.

Junctions

7.2 Somerset County Council have requested that the following junctions be assessed with regards to the impact of traffic which might be expected to arise from the proposed development:

- Site Access / A358 Tatworth Road
- Tatworth Road / Forton Road junction
- Church Street / Holyrood Street junction
- Millfield mini roundabout junction
- Convent signalised junction

7.3 Industry standard software Junctions 9 (PICADY & ARCADY modules) and LinSig3 have been used for the assessment.

7.4 2018 baseline data has been obtained at all junctions by way of undertaking manual classified turning counts.

Traffic Flows

7.5 Following scoping discussions with the Local Highway Authority, the traffic impact assessment has been completed for 2019 (potential year of opening) and 2024 (five-years post opening). It therefore considers the following scenarios:

- 2019 base
- 2019 base + committed
- 2019 base + committed + development
- 2024 base
- 2024 base + committed
- 2024 base + committed + development

Future Traffic Flows

7.6 In order to establish baseline traffic conditions at 2019 and 2024, growth rates for MSOA Levels South Somerset 022 and 023 have been obtained from the TEMPRO database (v7.2).

7.7 Table 7.1 below summarises the TEMPRO growth rates used in the traffic impact assessment that follows:

Table 7.1 - TEMPRO (v7.2) Growth Rates

MSOA Levels South Somerset 022 and 023 (averaged)

	AM Peak	PM Peak
2018-2019	1.0209	1.1312
2019-2024	1.0204	1.1314

7.8 In addition to the TEMPRO growth rates, committed development flows have been included from the proposed development sites immediately north and south of the development (planning refs: 15/04772 & 16/02874). These sites directly impact the flow of traffic on the links and junctions being assessed, and therefore it is considered appropriate to include these as committed developments.

7.9 The TEMPRO growth rates have not had alternative assumptions applied to them, and therefore it is anticipated that an element of double counting will occur in considering both the background traffic growth and the committed development flows. This provides a particularly robust assessment

A358 / Site Access Junction

7.10 The site access junction onto Tatworth Road has been assessed using Junctions 9 software. The model has been constructed using the PICADY module. Table 7.2 sets out the summary of the PICADY capacity model for the junction. The full PICADY outputs can be found in Appendix I.

Table 7.2 – A358 / Site Access Junction Priority Junction

Arm	AM Peak			PM Peak		
	RFC	Queue (Veh)	Delay (secs)	RFC	Queue (Veh)	Delay (secs)
2019 Base + Committed + Development:						
Site Access to A358 North & South	0.12	0.1	12.51	0.05	0.0	11.64
A358 South to Site Access	0.00	0.0	4.50	0.01	0.0	4.88
2024 Base + Committed + Development:						
Site Access to A358 North & South	0.12	0.1	13.30	0.05	0.1	12.29
A358 South to Site Access	0.00	0.0	4.41	0.01	0.0	4.80

7.11 The results summarised in Table 7.2 demonstrate that the proposed site access junction operates well within theoretical capacity. In the 2024 base + development scenario, the junction continues to operate well within capacity, with a maximum RFC of 0.12.

A358 / Forton Road Junction

7.12 The junction of the A358 Tatworth Road and Forton Road has been assessed using Junctions 9 software. The model has been constructed using the PICADY module. Table 7.3 sets out the summary of the PICADY capacity model for the junction. The full PICADY outputs can be found in Appendix I.

Table 7.3 – A358 / Forton Road Priority Junction

Arm	AM Peak			PM Peak		
	RFC	Queue (Veh)	Delay (secs)	RFC	Queue (Veh)	Delay (secs)
2019 Base + Committed:						
Forton Road to A358 South	0.09	0.1	14.85	0.03	0.0	9.62
Forton Road to A358 North	0.74	2.6	38.51	0.49	0.9	20.87
A358 South to Forton Road	0.02	0.0	7.76	0.02	0.0	8.95
2024 Base + Committed:						
Forton Road to A358 South	0.20	0.2	34.10	0.04	0.0	10.87
Forton Road to A358 North	0.86	5.0	67.85	0.57	1.3	26.79
A358 South to Forton Road	0.03	0.0	7.91	0.02	0.0	9.28

Arm	AM Peak			PM Peak		
	RFC	Queue (Veh)	Delay (secs)	RFC	Queue (Veh)	Delay (secs)
2019 Base + Committed + Development:						
Forton Road to A358 South	0.10	0.1	16.41	0.04	0.0	9.96
Forton Road to A358 North	0.76	2.9	43.19	0.50	1.0	22.33
A358 South to Forton Road	0.03	0.0	7.77	0.02	0.0	9.09
2024 Base + Committed + Development:						
Forton Road to A358 South	0.31	0.4	57.82	0.05	0.0	11.43
Forton Road to A358 North	0.89	5.9	80.58	0.59	1.4	29.21
A358 South to Forton Road	0.03	0.0	7.92	0.03	0.0	9.42

7.13 The results summarised in Table 7.3 demonstrate that the junction operates within theoretical capacity in both the 2019 Base + Committed + Development and 2024 Base + Committed + Development. The addition of the development traffic to the committed traffic scenarios adds just 3% to the RFC in the AM peak and 2% to the RFC in the PM peak.

7.14 The results for queuing on Forton Road indicates an increase of just one vehicle in the 2024 base + committed + development AM peak. There is no change in the queue lengths in the PM peaks.

7.15 It is therefore concluded that the impact of the proposed development could not be considered severe at this location.

A358 Church Street / Holyrood Street Junction

7.16 The junction of the A358 Church Street and Holyrood Street has been assessed using Junctions 9 software. The model has been constructed using the PICADY module. Table 7.4 sets out the summary of the PICADY capacity model for the junction. The full PICADY outputs can be found in Appendix I.

Table 7.4 – A358 / Holyrood Street Priority Junction

Arm	AM Peak			PM Peak		
	RFC	Queue (Veh)	Delay (secs)	RFC	Queue (Veh)	Delay (secs)
2019 Base + Committed:						
Holyrood Street to A358 North	0.28	0.4	9.80	0.21	0.3	18.05
Holyrood Street to A358 South	0.20	0.3	17.16	0.74	2.6	35.37
A358 North to Holyrood	0.19	0.3	10.51	0.21	0.3	8.34
2024 Base + Committed:						
Holyrood Street to A358 North	0.32	0.5	10.79	0.41	0.7	42.45
Holyrood Street to A358 South	0.24	0.3	19.33	0.86	5.1	65.05
A358 North to Holyrood	0.22	0.3	10.91	0.24	0.4	8.45
2019 Base + Committed + Development:						
Holyrood Street to A358 North	0.29	0.4	10.14	0.24	0.3	21.05
Holyrood Street to A358 South	0.22	0.3	17.78	0.77	3.1	41.29
A358 North to Holyrood	0.19	0.3	10.67	0.21	0.3	8.32
2024 Base + Committed + Development:						
Holyrood Street to A358 North	0.33	0.5	11.20	0.65	1.5	96.78
Holyrood Street to A358 South	0.26	0.3	20.16	0.91	6.7	82.74
A358 North to Holyrood	0.22	0.4	11.07	0.25	0.4	8.43

7.17 The results summarised in Table 7.4 demonstrate that the existing junction operates within theoretical capacity both in 2019 and 2024. The PM peak has the highest RFC on the Holyrood Street arm; however this does not exceed the theoretical capacity of the junction or arm. The development traffic adds just 9 vehicles to this arm in the PM peak, or approximately one vehicle every 6-7 minutes.

7.18 The modelling suggests that this results in a minor increase of 5% to the RFC in the PM peak between the base + committed and base + committed + development scenarios for 2024. This translates as just one additional queuing vehicle in both the 2019 and 2024 scenarios.

A358 / Millfield Mini Roundabout

7.19 The Millfield mini roundabout has been assessed using Junctions 9 software. The model has been constructed using the ARCADY module. Table 7.5 sets out the summary of the ARCADY capacity

model for the junction. The full ARCADY outputs can be found in Appendix J.

Table 7.5 – A358 Old Town / Millfield Mini Roundabout Junction

Arm	AM Peak			PM Peak		
	RFC	Queue (Veh)	Delay (secs)	RFC	Queue (Veh)	Delay (secs)
2019 Base + Committed:						
Millfield	0.50	1.0	8.61	0.64	1.7	10.82
A358 South	0.16	0.2	4.06	0.30	0.4	4.88
A358 North	0.82	4.2	27.99	0.69	2.1	17.34
2024 Base + Committed:						
Millfield	0.55	1.2	9.72	0.70	2.3	13.11
A358 South	0.18	0.2	4.26	0.34	0.5	5.38
A358 North	0.90	7.3	45.46	0.77	3.1	23.39
2019 Base + Committed + Development:						
Millfield	0.51	1.0	8.76	0.66	1.9	11.44
A358 South	0.16	0.2	4.09	0.30	0.4	5.00
A358 North	0.85	5.2	33.12	0.70	2.3	18.07
2024 Base + Committed + Development:						
Millfield	0.56	1.3	9.90	0.72	2.5	14.02
A358 South	0.19	0.2	4.29	0.35	0.5	5.53
A358 North	0.93	9.5	57.18	0.78	3.3	24.72

7.20 The results summarised in Table 7.5 demonstrate that the existing junction continues to operate within its theoretical capacity in both the base + committed and base + committed + development scenarios. The proposed development increases the RFC by approximately 3% in the AM peak on the A358 North arm from the base + committed scenarios, which could not be considered severe in terms of cumulative impact from the proposed development.

Convent Junction (A30/A358 Signalised Junction)

7.21 The Convent junction, where the A30 and A358 form a signalised crossroads in the centre of Chard, has been assessed using the industry standard LinSig3 software package. The model has been

built using the same parameters set out in the agreed Transport Assessment produced by PBA in association with the Gladman development to the north of the site.

7.22 The Practical Reserve Capacity (PRC) of a signalised junction is reported from an arbitrary threshold of 90%. When the modelling reports a PRC of 0%, there is therefore a further 10% buffer before a junction can be considered truly operating 'at capacity', or at 100%. The PRC percentages set out in the LinSig results therefore are based on a 90% operational capacity – ie. a -2% PRC would in reality be a junction operating at 92% capacity, with 8% 'spare' before the junction is operating at full capacity.

7.23 Table 7.6 sets out the junction capacity results. The signal timings have been optimised to provide the best possible capacity through the junction, and these are set out in the full LinSig3 output reports in Appendix K.

Table 7.6 – LinSig3 Results – Convent Junction

2019 Baseline + Committed				
Approach	**AM Peak**		**PM Peak**	
	PRC (%)	**Delay (PCUHr)**	**PRC (%)**	**Delay (PCUHr)**
Over All Lanes	4.6	24.78	-2.7	38.15
Approach	**Degree of Saturation (%)**	**Mean Max Queue (PCU)**	**Degree of Saturation (%)**	**Mean Max Queue (PCU)**
A358 North Ahead Left Right	86.0%	16.6	92.2%	21.8
A30 East Street Left Ahead	85.9%	15.4	92.4%	19.7
A358 South Right Left Ahead	86.0 : 86.0%	18.1	92.1 : 92.1%	20.7
A30 Fore Street Right Ahead Left	14.6%	1.8	81.0%	14.6
2024 Baseline + Committed				
Approach	**AM Peak**		**PM Peak**	
	PRC (%)	**Delay (PCUHr)**	**PRC (%)**	**Delay (PCUHr)**
Over All Lanes	-5.4	37.97	-13.4	71.10
Approach	**Degree of Saturation (%)**	**Mean Max Queue (PCU)**	**Degree of Saturation (%)**	**Mean Max Queue (PCU)**
A358 North Ahead Left Right	94.8%	22.6	100.9%	33.1
A30 East Street Left Ahead	93.4%	20.3	102.0%	32.5
A358 South Right Left Ahead	94.6 : 94.6%	24.3	101.0 : 101.0%	31.8

A30 Fore Street Right Ahead Left	43.2%	6.0	89.8%	18.8
2019 Baseline + Committed + Development				
Approach	**AM Peak**		**PM Peak**	
	PRC (%)	**Delay (PCUHr)**	**PRC (%)**	**Delay (PCUHr)**
Over All Lanes	2.2	27.67	-4.7	40.91
Approach	**Degree of Saturation (%)**	**Mean Max Queue (PCU)**	**Degree of Saturation (%)**	**Mean Max Queue (PCU)**
A358 North Ahead Left Right	86.8%	16.9	94.2%	23.3
A30 East Street Left Ahead	88.1%	16.3	93.6%	20.9
A358 South Right Left Ahead	87.9 : 87.9%	19.6	93.3 : 93.3%	20.9
A30 Fore Street Right Ahead Left	40.5%	5.2	81.3%	15.0
2024 Baseline + Committed + Development				
Approach	**AM Peak**		**PM Peak**	
	PRC (%)	**Delay (PCUHr)**	**PRC (%)**	**Delay (PCUHr)**
Over All Lanes	-7.0	41.79	-19.2	117.71
Approach	**Degree of Saturation (%)**	**Mean Max Queue (PCU)**	**Degree of Saturation (%)**	**Mean Max Queue (PCU)**
A358 North Ahead Left Right	95.8%	23.5	105.9%	45.6
A30 East Street Left Ahead	95.7%	22.0	106.9%	42.3
A358 South Right Left Ahead	96.3 : 96.3%	26.2	107.3 : 107.3%	56.7
A30 Fore Street Right Ahead Left	44.0%	6.1	93.3%	19.8

7.24 Table 7.6 shows the full junction capacity across all arms of the junction. This shows that the junction is operating with each arm within capacity for both the 2019 base + committed and base + committed + development scenarios.

7.25 In the 2024 PM peak, in both the base + committed and base + committed + development scenarios, the modelling suggests that the junction is operating over capacity with the addition of further general growth in background traffic. As stated previously, however, the application of the TEMPRO growth factors from 2019 – 2024 in addition to the committed development is likely to result in an element of double counting in traffic flows and this would be reflected in these higher RFCs.

7.26 As illustrated in Table 7.7, the additional traffic associated with the proposed development results in a negligible overall decrease in junction performance.

Table 7.7 – Difference Between Base + Committed and Base + Committed + Development in 2019 and 2024

Year	AM Peak	PM Peak
	PRC Δ%	PRC Δ%
2019	-2.4	-2
2024	-1.6	-5.8

7.27 Table 7.7 shows that the addition of the development traffic to the base + committed scenarios in both 2019 and 2024 results in a capacity decrease of approximately -2% in the AM peaks, and -2% (2019) and -5.8% (2024) in the PM peaks.

7.28 In terms of traffic movements, it is anticipated that approximately 26 trips will be using the junction in the AM peak, and approximately 24 trips using the junction in the PM peak. This equates to approximately one additional movement every 2-3 minutes.

7.29 Overall, the development traffic represents an increase in peak traffic through the junction of just 1.6% on average in 2019 and 1.4% in 2024. As set out in Section 6 of this TA, the total trip generation is well within the natural daily variation in traffic flow along the A358, and therefore the proposed development is unlikely to result in any noticeable change in conditions to drivers using the junction.

7.30 It is anticipated that much of the traffic travelling north-south across Chard would be mitigated over the Local Plan period through the development of the new link road as part of Policy PMT1. The development parcel to the north of the site, which has Outline planning permission, proposes to provide part of this link. Further developments which will be coming forward under the PMT1 policy will provide further sections to this link, which when complete will remove much of the traffic using the Convent junction.

7.31 In its responses to the adjacent Gladman and Persimmon application sites, the Highway Authority accepted that neither scheme will have a severe impact on the local road network. The

Gladman scheme includes up to 200 dwellings, whilst the Persimmon site proposes 315 dwellings. The proposed Summerfield development site proposes just 94 dwellings – half that of the Gladman scheme and a third of the Persimmon scheme - and therefore in line with the previous conclusions reached by SCC it cannot be considered to have a severe impact on the local highway network.

Conclusion

7.32 The traffic impact assessments completed in connection with this Transport Assessment have been scoped with Local Highway Authority officers.

7.33 2018 survey data has been used to derive baseline conditions for the junctions which have been assessed as part of this report. TEMPRO growth factors and known committed development which impacts the modelled network has been included to determine the overall impact of the proposed development traffic on the local highway network.

7.34 The results of the capacity modelling demonstrate that the majority of junctions will continue to operate within their theoretical capacity with the addition of the development traffic, in both the 2019 and 2024 base + committed + development scenarios.

7.35 The modelling suggests that the Convent junction could operate over theoretical capacity in the 2024 base + committed + development scenario; although this is a reflection of additional growth in general background traffic.

7.36 The proposed development contributes a small amount of traffic to the Convent junction overall, which is well within the natural day to day variation in traffic along the A358. The impact of the proposed development at this location cannot, therefore, be considered severe. In addition, the capacity of this junction is set to be substantially improved through the new link road associated with the housing allocation which will remove much of the north-south traffic presently using the junction.

7.37 In its responses to the adjacent Gladman and Persimmon application sites, the Highway Authority accepted that neither scheme will have a severe impact on the local road network. The proposed Summerfield development site proposes just 94 dwellings

– half that of the adjacent Gladman scheme and a third of the Persimmon scheme - and therefore in line with the previous conclusions reached by SCC it cannot be considered to have a severe impact on the local highway network.

7.38 It is therefore concluded that overall the local highway network would satisfactorily accommodate the additional traffic arising from the proposed development without resulting in any severe impacts. The traffic impact of the scheme therefore is considered to be acceptable at this location given the requirements of paragraph 108 of the NPPF.

Appendix H

2028 Junction Capacity Results

Source: Key Transport Consultants Ltd Transport Assessment dated May 2018

Planning Application: 18/04057/OUT

Hyperlinks to Document:

TA Pt 1:
https://www.southsomerset.gov.uk/civica/Resource/Civica/Handler.ashx/Doc/pagestream?cd=inline&pdf=true&docno=8908643

TA Pt 2:
https://www.southsomerset.gov.uk/civica/Resource/Civica/Handler.ashx/Doc/pagestream?cd=inline&pdf=true&docno=8908644

Appendices A – N:
https://www.southsomerset.gov.uk/civica/Resource/Civica/Handler.ashx/Doc/pagestream?cd=inline&pdf=true&docno=8908645

Appendices N – Q:
https://www.southsomerset.gov.uk/civica/Resource/Civica/Handler.ashx/Doc/pagestream?cd=inline&pdf=true&docno=8908646

7. TRAFFIC IMPACT

7.1 The methodology for the traffic assessment was agreed with Somerset County Council and correspondence regarding the scope is provided in **Appendix D**.

Base Traffic Flows

7.2 Manual classified counts were undertaken at 12 junctions on Tuesday 25th April 2017 and Automatic Traffic Counts (ATC's) were undertaken at 5 locations for 7 days commencing 25th April. The locations of the 2017 traffic counts are shown on **Figure 15** and the survey data is provided as **Appendix G**. Following discussions with Somerset County Council a further turning count was undertaken at the junction of Thorndun Park Drive and Glynswood on the 24th April 2018, again the data is provided in **Appendix G**.

Committed Development

7.3 The TEMPRO growth factors include allocated development in the Local Plan to the year 2028 and it was agreed with Somerset County Council that no further allowance was required for Local Plan allocations.

7.4 It was agreed that the assessment should make allowance for a proposed development site on Crimchard, immediately south of the Mount Hindrance site, which was previously promoted by David Wilson Homes and which is currently being considered for allocation in the current Local Plan review.

7.5 Confirmation was obtained from South Somerset Council that there was no non-allocated committed development that should be included in the analysis and the confirmation is provided as **Appendix H**.

Trip Generation

7.6 The trip generation rates used for housing and the local centre are derived from TRICS and are provided in Table 7.1 below. Output from TRICS is provided in **Appendix I**.

Table 7.1 – Trip Rates

	AM Peak Hour			PM Peak Hour		
	Arrival	Departure	Two-way	Arrival	Departure	Two-way
Housing (per dwelling)	0.118	0.402	0.520	0.364	0.213	0.577
Local Centre (per 100m2)	5.346	5.018	10.364	7.220	7.811	15.031

7.7 From these rates the trip generation can be derived as follows.

Table 7.2 – Trip Generation						
	AM Peak Hour			PM Peak Hour		
	Arrival	Departure	Two-way	Arrival	Departure	Two-way
Housing (295 Houses)	35	119	154	107	63	170
Local Centre (1100m2)	59	55	114	79	86	165

7.8 Although the development proposals include the relocation of Chard Football Club it is not anticipated that the football club will generate a material number of weekday peak hour trips. A programme of proposed activity at the football club is provided as **Appendix J**.

Assignment

7.9 For the assignment of trip generation from the housing Census 2011 journey to work data has been used to determine destinations for residential development. The census data and derived assignment is provided in **Appendix K**.

7.10 As there is no local convenience shop it is considered that the shop would result in a reduction of existing trips. The local centre would attract trips from the development, passing traffic and from the local area. The trip generation was therefore assigned as follows

- 50% internal trips
- 25% passing trips on Thorndun Park Drive
- 25% of trips from residential area north of Glynswood

Design Year

7.11 It is anticipated that the development would be complete by 2023 and two assessment years have been considered 2023 being year of opening and 2028 being 5 years after year of opening. 2028 coincides with the end of the current South Somerset Local Plan when all allocated development should have been completed.

7.12 Traffic Flow Diagrams are provided in **Appendix L**.

Junction Capacity Assessments

7.13 For the manual assessment junction capacity assessments were undertaken at all 13 junctions at which Manual Classified Counts were taken. The computer programs ARCADY, PICADY and LINSIG have been used to undertake the analysis.

7.14 The performance of a signal controlled junction is indicated by the degree of saturation on each approach arm. A signal controlled junction is at capacity when the degree of saturation on any

arm reaches 100%. However to allow for inaccuracies in data and daily variation of traffic flows it is normal practice to design for a maximum degree of saturation of 90% (practical capacity).

7.15 The primary indicator of performance of a priority junction or roundabout is given by the ratio of demand flow to capacity (RFC) for each arm of the junction. Capacity is reached when the demand flow at entry is sufficient to cause a continuous queue of vehicles to wait in the approach; this is reached when the RFC reached 1.0. For new junction design, where it is not possible to validate the results, it is common practice to design to a maximum RFC of 0.85. This provides a factor of safety for inaccuracies in the data and the capacity formulae. It also allows for variation in traffic flows.

7.16 Thirteen junctions were considered for the manual assessment as follows:

1. Convent traffic signals (A30/A358)
2. East Street/Victoria Ave/Crewkerne Road/Tapstone Road roundabout junction
3. Helliers Road/ A30 High Street priority junction
4. A358 Furnham Road/Thorndun Park Drive priority junction
5. A358 Furnham Road/Victoria Ave priority junction
6. A30 High Street/Crowchute Link priority junction
7. B3162 Holyrood Street/ A358 Old Town priority junction
8. A358/Cuttifords Door Road priority junction
9. Cuttiford Door Road/Crimchard priority junction
10. The Glynswood/Crimchard priority junction
11. The Glynswood/Furnham Road priority junction
12. The site access with Thorndun Park Drive priority junction
13. The Thorndun Park Drive/Glynswood priority junction

7.17 The results of the capacity assessments undertaken for the assessment are summarised in **Appendix M** and full outputs are provided as **Appendix N**.

7.18 It can be seen from the results summary that all but the following junctions operate below capacity for all scenarios.

- Convent Traffic Signals (A30/A358)
- A358 Furnham Road/Victoria Avenue Junction
- B3162 Holyrood Street/ A358 Old Town priority junction

Convent Traffic Signals (A30/A358)

7.19 As stated earlier in the report the Convent Signals junction was upgraded with MOVA –

Microprocessor Optimised Vehicle Actuation a few years ago which allows the controller to adjust stage lengths, stage sequences and timing plans based on information it receives about the volume of traffic and queuing on each arm of the junction. In some cases this can deliver an increase in capacity of 10 – 15%, however, given the simple 4 stage operation of the junction and the need to maintain an all-red stage the increase in capacity in this case may be less than 10%. It is not possible to model the effects of MOVA and therefore the performance of the junction should be better than the analysis suggests.

7.20 Surveyed 2017 traffic flows were tested on the existing layout. The results are set out in Table 7.3 below.

Table 7.3: A30 Fore Street/ A358 Furnham Road (north)/ A30 East Street/ A358 Furnham Road (south): 2017

Arm No.	Arm Name	AM			PM		
		% Sat	MMQ	Delay (s/pcu)	% Sat	MMQ	Delay (s/pcu)
1/1	A30 Fore St Left Ahead Right	84.6%	13.4	71.1	75.2%	12.6	55.0
2/1	A358 Furnham Road (north) Right Left Ahead	84.9%	15.3	66.3	92.3%	19.4	81.5
3/1	A30 East Street Ahead Left	87.3%	14.9	74.8	94.0%	21.1	86.3
4/1 + 4/2	A358 Furnham Road (south) Left Ahead Right	86.0%	16.4	58.8	93.3%	18.1	83.0
Total	Cycle Time = 120 sec	PRC	3.1%		PRC	-4.4%	

7.21 It can be seen from Table 7.3 that the existing junction operates within capacity in the AM peak and PM peak hours although the practical design capacity of 90% is exceeded in the PM peak hour and hence the Practical Reserve Capacity (PRC) is -4.4%. All four of the approach arms of the junction are within capacity.

7.22 The analysis for 2023 considers scenarios with and without development. The results of the without development scenario are set out in Table 7.4.

Table 7.4: A30 Fore Street/ A358 Furnham Road (north)/ A30 East Street/ A358 Furnham Road (south): 2023

Arm No.	Arm Name	AM			PM		
		% Sat	MMQ	Delay (s/pcu)	% Sat	MMQ	Delay (s/pcu)
1/1	A30 Fore St Left Ahead Right	97.4%	20.7	115.7	82.9%	15.2	60.9
2/1	A358 Furnham Road (north) Right Left Ahead	97.2%	23.0	106.9	103.3%	31.5	167.4
3/1	A30 East Street Ahead Left	98.8%	22.9	123.6	104.4%	37.5	175.9
4/1 + 4/2	A358 Furnham Road (south) Left Ahead Right	97.1%	25.2	92.8	102.9%	32.5	154.3
Total	Cycle Time = 120 sec	PRC	-9.7%		PRC	-16.0%	

7.23 It can be seen from Table 7.4 that the junction is predicted to be in excess of 90% saturation

(practical design capacity) in the AM and in excess of capacity in the PM peak hours in 2023 without development. In the AM peak the junction is predicted to have a PRC of -9.7%. All four of the approach arms of the junction are in excess of 90% saturation: A30 Fore Street (97.4%), A358 Furnham Road (north) (97.2%); A30 East Street (98.8%) and A358 Furnham Road (south) (97.1%).

7.24 In the PM peak the junction exceeds theoretical capacity (i.e. in excess of 100% saturation) and is predicted to have a PRC value of -16.0%. The A358 Furnham Road (north), the A30 East Street and the A358 Furnham Road (south) approaches are all in excess of 100% saturation, at 103.3%, 104.4% and 102.9%, respectively.

7.25 The 2023 analysis with development results are set out in Table 7.5.

Table 7.5: A30 Fore Street/ A358 Furnham Road (north)/ A30 East Street/ A358 Furnham Road (south): 2023 + Development

Arm No.	Arm Name	AM			PM		
		% Sat	MMQ	Delay (s/pcu)	% Sat	MMQ	Delay (s/pcu)
1/1	A30 Fore St Left Ahead Right	97.9%	21.3	119.5	87.0%	16.4	68.2
2/1	A358 Furnham Road (north) Right Left Ahead	98.4%	25.0	112.8	106.9%	41.2	211.4
3/1	A30 East Street Ahead Left	98.8%	22.9	123.6	107.6%	44.1	223.0
4/1 + 4/2	A358 Furnham Road (south) Left Ahead Right	100.7%	30.6	123.4	109.0%	46.7	238.4
Total	Cycle Time = 120 sec	PRC	-11.9%		PRC	-21.2%	

7.26 With the addition of the development traffic to the model, the PRC of the AM scenario is predicted to decrease from -9.7% to -11.9%. The PM PRC is predicted to reduce from -16.0% to -21.2%.

7.27 The longest MMQ in the 2023 AM scenario is predicted to increase from 25.2 pcus without development to 30.6 pcus with development on the A358 Furnham Road (south) approach.

7.28 In the PM peak, the longest predicted MMQ of 37.5 pcus on the A30 East Street arm without development, is predicted to increase to 44.1 pcus with the addition of the development traffic. The MMQ on the A358 Furnham Road (south) arm is predicted to increase from 32.5 pcus to 46.7 pcus with the addition of the development traffic.

7.29 The model is run again with the 2028 traffic flows. The 2028 without development flows are set out in Table 1.4, below.

Table 7.6: A30 Fore Street/ A358 Furnham Road (north)/ A30 East Street/ A358 Furnham Road (south): 2028							
Arm No.	**Arm Name**	**AM**			**PM**		
		% Sat	MMQ	Delay (s/pcu)	% Sat	MMQ	Delay (s/pcu)
1/1	A30 Fore St Left Ahead Right	103.5%	29.0	177.7	91.5%	18.7	78.6
2/1	A358 Furnham Road (north) Right Left Ahead	103.8%	33.3	171.9	112.0%	53.7	282.8
3/1	A30 East Street Ahead Left	105.3%	33.4	199.7	115.2%	63.6	330.6
4/1 + 4/2	A358 Furnham Road (south) Left Ahead Right	103.8%	39.6	159.5	113.6%	59.2	301.1
Total	Cycle Time = 120 sec	PRC	-17.1%		PRC	-28.0%	

7.30 It can be seen from Table 7.6, that the junction is predicted to be in excess of 100% saturation in the both the AM and PM peak hours in 2028. In the AM peak the junction is predicted to have a PRC of -17.1%. All four of the approach arms of the junction are in excess of 100% saturation: A30 Fore Street (103.5%); A358 Furnham Road (north) (103.8%); A30 East Street (105.3%) and A358 Furnham Road (south) (103.8%).

7.31 In the PM peak the junction is predicted to have a PRC value of -28.0%. The A30 Fore Street approach is in excess of its design capacity and the A358 Furnham Road (north), the A30 East Street and the A358 Furnham Road (south) approaches are all in excess of their saturation capacities, at 112.0%, 115.2% and 113.6%, respectively.

7.32 The model is rerun with the 2028 + Development scenario flows. The results are set out in Table 7.7.

Table 7.7: A30 Fore Street/ A358 Furnham Road (north)/ A30 East Street/ A358 Furnham Road (south): 2028 + Development							
Arm No.	**Arm Name**	**AM**			**PM**		
		% Sat	MMQ	Delay (s/pcu)	% Sat	MMQ	Delay (s/pcu)
1/1	A30 Fore St Left Ahead Right	104.3%	30.2	187.3	93.0%	19.7	83.9
2/1	A358 Furnham Road (north) Right Left Ahead	104.9%	36.7	185.3	114.4%	60.0	316.8
3/1	A30 East Street Ahead Left	105.3%	33.4	199.7	115.2%	63.6	330.6
4/1 + 4/2	A358 Furnham Road (south) Left Ahead Right	107.3%	48.3	208.4	116.5%	67.3	341.8
Total	Cycle Time = 120 sec	PRC	-19.3%		PRC	-29.4%	

7.33 With the addition of the development traffic to the model, the PRC of the AM scenario is predicted to decrease from -17.1% to -19.3%. The PM PRC is predicted to reduce from -28.0% to -29.4%.

7.34 The longest MMQ in the 2028 AM scenario is predicted to increase from 39.6 pcus without

development to 48.3 pcus with development on the A358 Furnham Road (south) approach.

7.35 In the PM peak, the longest predicted MMQ of 63.6 pcus on the A30 East Street arm without development, is predicted to stay the same with the addition of the development traffic. The MMQ on the A358 Furnham Road (south) arm is predicted to increase from 59.2 pcus to 67.3 pcus with the addition of the development traffic.

7.36 It can be seen that the proposed development would have an impact on the Convent Signals but the impact is modest and certainly shouldn't be considered severe. There are a number of important points to note regarding the analysis at the Convent Signals as follows.

- The proposed development would only increase flows through the Convent Signals by 28 vehicles in the AM peak hour and 31 vehicles in the PM peak hour representing increases of 1.6% in both peak hours in 2028.
- It is not possible to model the improvement in performance at the junction provided by the installation of MOVA so performance is likely to be better than predicted.
- The 2028 scenarios include all development included in the South Somerset Local Plan together with a 110 home site on Crimchard currently being considered for allocation. No allowance has been made for a reduction in traffic through the junction as a result of the proposed new route to the east of the junction between the A358 Tatworth Road to the A358 Furnham Road which is required as part of the strategic allocation and will provide a by-pass to the junction and reduce flows through the junction.
- The impact is considered no worse than other recent planning applications which have been permitted.

A358 Furnham Road/Victoria Avenue Junction

7.37 The capacity analysis indicates that the A358 Furnham Road/Victoria Avenue junction currently (2017) operates below capacity with a maximum RFC of 0.6 in the AM peak hour and 0.76 in the PM peak hour (results summarised in **Appendix M** and full output in **Appendix N**).

7.38 The analysis does indicate that the A358 Furnham Road/Victoria Avenue Junction would be over capacity in 2023 without the proposed Mount Hindrance development (max RFC of 1.01 in the PM peak Hour). With the Mount Hindrance development the maximum RFC would increase to 1.09 in the PM peak hour and the maximum queue would increase from 11 to 16.

7.39 In 2028 without development the junction would be operating above capacity with a maximum RFC of 1.2 in the PM peak hour. With the Mount Hindrance development the maximum RFC would increase to 1.28. The maximum queue would increase from 24 to 33 vehicles.

7.40 The analysis shows that the proposed development would have an impact on the A358/Victoria Avenue junction but again the impact is modest and not severe. There are a number of important points to note regarding the analysis at the A358/Victoria Avenue Junction as follows.

- The proposed development would only increase flows through the Furnham Road/Victoria Avenue by 25 vehicles in the AM peak hour and 27 vehicles in the PM peak hour representing increases of 1.6% in the AM peak hour and 1.5% in the PM peak hour in 2028.
- The 2028 scenarios include all development included in the South Somerset Local Plan together with a 110 home site on Crimchard currently being considered for allocation. No allowance has been made for a reduction in traffic through the junction as a result of the proposed new route to the east of the junction between the A358 Tatworth Road to the A358 Furnham Road which is required as part of the strategic allocation and will provide a by-pass to the junction and reduce flows through the junction.

7.41 It would be possible to improve the performance of this junction by the installation of traffic signals linked to the existing traffic signals at Coker Way as shown on **Figure 16** Any requirement to improve this junction would be as a consequence of significant development in Chard and not be as a consequence of the Mount Hindrance development but the applicant would be willing to contribute a proportion of the cost based on the relative impact of the development.

7.42 In order to assess the operation of the junction a peak hour traffic counts undertaken at the Furnham Road/Coker Way junction on Wednesday 12th September 2012 was used to obtain flows on Coker Way. Traffic growth has not been applied to flows on Coker Way as this is a contained development. A summary of the count is provided in **Appendix O**.

7.43 2023 traffic flows were tested on the possible signal controlled layout. The results are set out in Table 7.8 below. The junction is run on a 120 second cycle time with every pedestrian crossing running at least once each cycle.

Table 7.8: A358/Victoria Avenue Possible Introduction of Signal Control: 2023

Arm No.	Arm Name	AM			PM		
		% Sat	MMQ	Delay (s/pcu)	% Sat	MMQ	Delay (s/pcu)
1/1	A358 Furnham Road (south, northbound) Ahead Right	55.5%	13.3	21.1	64.4%	15.4	27.2
2/1	A358 Furnham Road (central, southbound) Left	14.3%	0.2	0.8	22.3	0.3	0.8

2/2	A358 Furnham Road (central, southbound) Ahead	34.0%	3.5	2.8	41.9%	3.5	2.5
3/1	Victoria Avenue Right Left	55.5%	9.8	39.4	63.2%	11.3	42.6
4/1	A358 Furnham Road (north, southbound) Ahead Left	46.3%	10.2	14.6	62.8%	16.5	17.3
5/1	Coker Way Left	28.3%	1.8	63.9	28.3%	1.8	63.9
5/2	Coker Way Right	6.7%	0.4	59.8	6.7%	0.4	59.8
8/1	A358 Furnham Road (central, northbound) Ahead	38.9%	2.2	1.5	38.8%	3.2	2.4
8/2	A358 Furnham Road (central, northbound) Right	3.3%	0.1	6.7	4.2%	0.2	13.4
Total	Cycle Time = 120 sec	PRC	62.1%		PRC	39.7%	

7.44 It can be seen from Table 7.8 that the junction is predicted to operate well within capacity in the AM and PM peak hours in 2023 without development. In the AM peak the junction is predicted to have a PRC of 62.1%. In the PM peak the junction is predicted to have a PRC value of 39.7%.

7.45 The signal control junction was also tested for the year 2023 with the Mount Hindrance development. The results are set out in Table 7.9.

Table 7.9: A358/Victoria Avenue Possible Introduction of Signal Control: 2023 + Development

Arm No.	Arm Name	AM			PM		
		% Sat	MMQ	Delay (s/pcu)	% Sat	MMQ	Delay (s/pcu)
1/1	A358 Furnham Road (south, northbound) Ahead Right	56.4%	13.6	21.6	65.0%	15.5	27.7
2/1	A358 Furnham Road (central, southbound) Left	15.8%	0.2	0.8	23.1%	0.3	0.8
2/2	A358 Furnham Road (central, southbound) Ahead	34.0%	3.4	2.8	41.9%	3.4	2.5
3/1	Victoria Avenue Right Left	56.3%	9.9	39.6	66.0%	12.1	43.7
4/1	A358 Furnham Road (north, southbound) Ahead Left	47.9%	10.8	14.9	63.7%	16.8	17.5
5/1	Coker Way Left	30.9%	1.8	66.7	30.9%	1.8	66.7
5/2	Coker Way Right	7.3%	0.4	61.7	7.3%	0.4	61.7
8/1	A358 Furnham Road (central, northbound) Ahead	39.2%	2.3	1.6	39.9%	3.7	2.7
8/2	A358 Furnham Road (central, northbound) Right	3.4%	0.1	7.2	4.3%	0.2	14.2
Total	Cycle Time = 120 sec	PRC	59.7%		PRC	36.3%	

7.46 With the addition of the development traffic the PRC of the AM scenario is predicted to decrease from 62.1% to 59.7%. The PM PRC is predicted to reduce from 39.7% to 36.3%.

7.47 The longest MMQ in the 2023 AM scenario is predicted to increase from 13.3 pcus without development to 13.6 pcus with development on the A358 Furnham Road (south, northbound) approach.

7.48 In the PM peak, the longest predicted MMQ of 16.5 pcus on the A358 Furnham Road (north, southbound) arm without development, is predicted to increase to 16.8 pcus with the addition of the development traffic.

7.49 The results for the analysis for 2028 without development are set out in Table 7.10 below.

Table 7.10: A358/Victoria Avenue Possible Introduction of Signal Control: 2028

Arm No.	Arm Name	AM			PM		
		% Sat	MMQ	Delay (s/pcu)	% Sat	MMQ	Delay (s/pcu)
1/1	A358 Furnham Road (south, northbound) Ahead Right	59.4%	14.8	22.0	69.7%	17.2	29.3
2/1	A358 Furnham Road (central, southbound) Left	15.1%	0.2	0.8	23.4%	0.3	0.8
2/2	A358 Furnham Road (central, southbound) Ahead	35.8%	3.5	2.7	43.6%	3.5	2.4
3/1	Victoria Avenue Right Left	61.0%	10.9	41.9	71.4%	13.0	47.9
4/1	A358 Furnham Road (north, southbound) Ahead Left	49.0%	11.0	14.6	65.7%	17.8	17.0
5/1	Coker Way Left	30.9%	1.8	66.7	30.9%	1.8	66.7
5/2	Coker Way Right	7.3%	0.4	61.7	7.3%	0.4	61.7
8/1	A358 Furnham Road (central, northbound) Ahead	41.5%	3.0	2.0	41.7%	4.3	3.0
8/2	A358 Furnham Road (central, northbound) Right	3.5%	0.2	8.7	4.7%	0.2	16.7
Total	Cycle Time = 120 sec	PRC	47.6%		PRC	26.0%	

7.50 It can be seen from Table 7.10, that the junction is predicted to be within its design and saturation capacities in the both the AM and PM peak hours in 2028. In the AM peak the junction is predicted to have a PRC of 47.6%. In the PM peak the junction is predicted to have a PRC value of 26.0%.

7.51 The results from the analysis for the year 2028 with the Mount Hindrance development are set out in Table 7.11.

Table 7.11 : A358/Victoria Avenue Possible Introduction of Signal Control: 2028 + Development

Arm No.	Arm Name	AM			PM		
		% Sat	MMQ	Delay (s/pcu)	% Sat	MMQ	Delay (s/pcu)

1/1	A358 Furnham Road (south, northbound) Ahead Right	60.4%	15.1	22.5	73.1%	18.1	32.2
2/1	A358 Furnham Road (central, southbound) Left	16.6%	0.2	0.8	24.4%	0.3	0.8
2/2	A358 Furnham Road (central, southbound) Ahead	35.8%	3.5	2.7	44.2%	3.5	2.5
3/1	Victoria Avenue Right Left	61.8%	11.0	42.2	72.6%	13.6	47.6
4/1	A358 Furnham Road (north, southbound) Ahead Left	50.6%	11.6	14.8	67.4%	18.5	18.0
5/1	Coker Way Left	30.9%	1.8	66.7	30.9%	1.8	66.7
5/2	Coker Way Right	7.3%	0.4	61.7	7.3%	0.4	61.7
8/1	A358 Furnham Road (central, northbound) Ahead	41.9%	3.1	2.1	42.8%	4.5	3.1
8/2	A358 Furnham Road (central, northbound) Right	3.5%	0.2	9.2	4.7%	0.2	16.9
Total	Cycle Time = 120 sec	PRC	45.5%		PRC	23.0%	

7.52 With the addition of the development traffic the PRC in the AM scenario is predicted to decrease from 47.6% to 45.5%. The PM PRC is predicted to reduce from 26.0% to 23.0%.

7.53 The longest MMQ in the 2028 AM scenario on A358 Furnham Road (south, northbound) is predicted to remain the same at 14.8 pcus. In the PM peak, the longest predicted MMQ of 17.8 pcus on A358 Furnham Road (north, southbound) is predicted to increase to 18.5 pcus.

7.54 With the installation of traffic signal control the junction would operate well below capacity in all scenarios tested.

A358 Old Town/ Holyrood Road Priority Junction

7.55 The analysis (results summarised in **Appendix M** and full output in **Appendix N**) indicates that the A358 Old Town/A358 Junction would be operating above capacity in 2023 in the PM peak hour without development with queuing on Holyrood Street. The maximum RFC without development is 1.02 this increases to 1.09 with development.

7.56 In 2028 without development the maximum RFC in the PM peak hour is 1.2 and this increases to 1.28 with development.

7.57 The Mount Hindrance development only puts 10 vehicles on the A358 in the PM peak hour and none on Holyrood Street. This represents an increase in total flow through the junction in the PM peak hour in 2028 of 0.7%.

7.58 It is considered that the proposed development at Mount Hindrance, Chard would not have a material impact at this junction.

Link Road Analysis

7.59 Llink flows are provided as Appendix P with flow locations marked on Figure 17.

7.60 Peak hour link road capacities are provided in the Department for Transport's Design Manual for Roads and Bridges in Technical Advice Note TA 79/99 Determination of Urban Road Capacity (Extracts provided as **Appendix Q**). Capacities are related to road classification and road width. The assessed classification and capacity for each link, which are considered conservative, is provided within the table provided as **Appendix P**. This shows that no links are operating near capacity in any scenario. Queues and delays within the study area are therefore attributable to junction capacity and not link capacity.

7.61 During public consultation events for the previous planning application on the site concern was expressed previously about junction capacity particularly junctions on the A358 Furnham Road. However concern was also expressed regarding traffic flow on Thorndun Park Drive and Crimchard.

Thorndun Park Drive

7.62 Thorndun Park Drive is typically 7m wide with limited frontage access. Just south of the cul-de sac access to the Mount Hindrance site peak hour two-way traffic flows on Thorndun Park Drive in 2017 were 166 vehicles in the morning peak hour and 246 vehicles in the PM peak hour.

7.63 The proposed development would add 71 vehicles two-way in the AM peak hour and 87 vehicles in the PM peak hour.

7.64 In 2028 the resultant two-way flows would be 278 in the AM Peak Hour and 391 in the PM peak hour which would not be anywhere near the hourly capacity of the road which is approximately 1500 two-way vehicles (from DMRB TA 79/99).

Crimchard

7.65 Crimchard is typically 7.0m wide south of Glynswood with significant on-street parking. Again the peak hour capacity of the road is approximately 1500 vehicles two-way. The peak hour two-way traffic flow on Crimchard in 2028 would be 936 in the AM peak hour and 973 vehicles two-way in the PM peak hour, well below the capacity of the road.

7.66 The Mount Hindrance development would increase two-way flows on Crimchard, south of Glynswood, by only 19 vehicles two-way in the AM peak hour and 22 vehicles two-way in the PM peak hour. These increases would be barely perceptible.

Summary

7.67 The analysis has indicated potential traffic capacity issues at the following junctions

- The convent traffic signals (A30/A358)
- The A358 Furnham Road/Victoria Avenue Junction
- The A358/Holyrood Street Junction

7.68 The impact at these junctions from traffic generated by the proposed development at Mount Hindrance is not considered significant and certainly not severe with only a small increase in traffic associated with the development.

7.69 The assessments at the Convent Signals and A358/Victoria Avenue junctions make no allowance for a reduction in traffic on the A358 which will happen when the eastern relief road, to be provided as part of existing allocations in the South Somerset Local Plan, is constructed. The junctions would operate significantly better than analysed on the relief road is implemented.

Summary

7.70 The analysis shows that the proposed development would not have a significant impact on any junctions or links in Chard.

APPENDIX M
Junction Capacity Results Summary Tables

Mount Hindrance, Chard

Junction Modelling Results Summary

Crimchard/Cuttisford's Door Road

	Crimchard (N)		Cuttisford Door (E)		Crimchard (S)		Cuttisford Door (W)	
	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue
AM 2017	0	0	0.22	0	0.1	0	0	0
AM 2023	0	0	0.24	0	0.11	0	0	0
AM 2023 + Development	0	0	0.27	0	0.11	0	0	0
AM 2028	0	0	0.27	0	0.12	0	0.02	0
AM 2028 + Development	0	0	0.29	0	0.12	0	0.02	0
PM 2017	0.01	0	0.22	0	0.16	0	0	0
PM 2023	0.01	0	0.25	0	0.19	0	0	0
PM 2023 + Development	0.01	0	0.26	0	0.19	0	0	0
PM 2028	0.01	0	0.27	0	0.2	0	0	0
PM 2028 + Development	0.01	0	0.28	0	0.2	0	0	0

Crimchard/Glynswood

	Glynswood		Crimchard	
	RFC	Queue	RFC	Queue
AM 2017	0.49	1	0.25	0
AM 2023	0.59	1	0.29	1
AM 2023 + Development	0.62	2	0.3	1
AM 2028	0.64	2	0.32	1
AM 2028 + Development	0.66	2	0.33	1
PM 2017	0.4	1	0.35	1
PM 2023	0.5	1	0.42	1
PM 2023 + Development	0.52	1	0.44	1
PM 2028	0.54	1	0.45	1
PM 2028 + Development	0.56	1	0.48	1

High Street/Crowshute Link

	Crowshute – High Street W		Crowshute – High Street E		High Street W	
	RFC	Queue	RFC	Queue	RFC	Queue
AM 2017	0.5	1	0.28	0	0.38	1
AM 2023	0.59	1	0.35	1	0.46	1
AM 2023 + Development	0.59	1	0.35	1	0.46	1
AM 2028	0.65	2	0.4	1	0.49	1
AM 2028 + Development	0.65	2	0.41	1	0.49	1
PM 2017	0.6	1	0.34	1	0.52	1
PM 2023	0.74	3	0.47	1	0.61	2
PM 2023 + Development	0.74	3	0.47	1	0.62	2
PM 2028	0.82	4	0.6	1	0.66	2
PM 2028 + Development	0.82	4	0.6	1	0.67	2

Furnham Road/Cuttisford's Door Road

	Cuttisford Door		Furnham Rd	
	RFC	Queue	RFC	Queue
AM 2017	0.18	0	0.17	0
AM 2023	0.22	0	0.25	1
AM 2023 + Development	0.23	0	0.22	1
AM 2028	0.24	0	0.24	1
AM 2028 + Development	0.25	0	0.25	1
PM 2017	0.24	0	0.22	1
PM 2023	0.28	0	0.29	1
PM 2023 + Development	0.32	0	0.3	1
PM 2028	0.31	0	0.32	1
PM 2028 + Development	0.36	1	0.34	1

Furnham Road/Glynswood

	Glynswood		Furnham Rd	
	RFC	Queue	RFC	Queue
AM 2017	0.49	1	0.4	1
AM 2023	0.62	2	0.49	1
AM 2023 + Development	0.71	2	0.49	1
AM 2028	0.68	2	0.53	2
AM 2028 + Development	0.77	3	0.54	2
PM 2017	0.44	1	0.46	1
PM 2023	0.54	1	0.58	2
PM 2023 + Development	0.59	1	0.59	2
PM 2028	0.6	1	0.65	3
PM 2028 + Development	0.65	2	0.66	3

High Street/Helliers Road

	Helliers Rd – High St E		Helliers Rd – High St W		High Street E	
	RFC	Queue	RFC	Queue	RFC	Queue
AM 2017	0.57	1	0.07	0	0.5	1
AM 2023	0.7	2	0.16	0	0.62	2
AM 2023 + Development	0.72	2	0.21	0	0.62	2
AM 2028	0.76	3	0.2	0	0.67	3
AM 2028 + Development	0.78	3	0.26	0	0.68	3
PM 2017	0.46	1	0.09	0	0.62	2
PM 2023	0.55	1	0.14	0	0.79	5
PM 2023 + Development	0.56	1	0.16	0	0.8	5
PM 2028	0.6	1	0.17	0	0.86	7
PM 2028 + Development	0.61	2	0.2	0	0.88	8

Furnham Road/Thorndun Park Drive

	Thorndun Prk – Furnham Rd N		Thorndun Prk – Furnham Rd S		Furnham Rd N	
	RFC	Queue	RFC	Queue	RFC	Queue
AM 2017	0.13	0	0.1	0	0.15	0
AM 2023	0.16	0	0.12	0	0.18	0
AM 2023 + Development	0.26	0	0.23	0	0.21	0
AM 2028	0.17	0	0.15	0	0.19	0
AM 2028 + Development	0.28	0	0.26	0	0.22	0
PM 2017	0.19	0	0.34	1	0.18	0
PM 2023	0.23	0	0.44	1	0.21	0
PM 2023 + Development	0.31	0	0.54	1	0.31	0
PM 2028	0.26	0	0.5	1	0.23	0
PM 2028 + Development	0.37	1	0.63	2	0.33	0

Thorndun Park Drive/Site Access

	Site Access		Thorndun Prk	
	RFC	Queue	RFC	Queue
AM 2017	0.01	0	0.01	0
AM 2023	0.01	0	0.02	0
AM 2023 + Development	0.28	0	0.07	0
AM 2028	0.01	0	0.02	0
AM 2028 + Development	0.28	0	0.07	0
PM 2017	0.03	0	0.01	0
PM 2023	0.03	0	0.02	0
PM 2023 + Development	0.24	0	0.16	0
PM 2028	0.03	0	0.02	0
PM 2028 + Development	0.24	0	0.16	0

Furnham Road/Victoria Ave

	Victoria Ave – Furnham Rd S		Victoria Ave – Furnham Rd N		Furnham Rd S	
	RFC	Queue	RFC	Queue	RFC	Queue
AM 2017	0.31	0	0.6	1	0.37	1
AM 2023	0.45	1	0.76	3	0.45	1
AM 2023 + Development	0.48	1	0.79	3	0.46	2
AM 2028	0.74	2	0.88	5	0.51	2
AM 2028 + Development	0.91	5	0.91	6	0.52	2
PM 2017	0.46	1	0.76	3	0.41	1
PM 2023	1.02	9	1.01	11	0.51	2
PM 2023 + Development	1.09	12	1.08	16	0.52	2
PM 2028	1.2	18	1.19	24	0.59	3
PM 2028 + Development	1.28	22	1.26	33	0.59	3

Mount Hindrance, Chard

Junction Modelling Results Summary

Furnham Road/Victoria Ave - Signal Controlled Opton

	Furnham Rd S		Link Rd - Southbound		Victoria Ave		Furnham Rd N		Coker Way (B&Q)		Link Road Northbound	
	% Sat	MMQ	% Sat	MMQ	% Sat	MMQ	% Sat	MMQ	% Sat	MMQ	% Sat	MMQ
AM 2028 +Development	60.4	15	35.8	4	61.8	11	50.6	12	30.9	2	41.9	3
PM 2028 +Development	73.1	18	44.2	4	72.6	14	67.4	19	30.9	1.8	42.8	5

Church Street/Holyrood Street

	Holyrood St - Church St N		Holyrood St - Church St S		Church St N	
	RFC	Queue	RFC	Queue	RFC	Queue
AM 2017	0.31	0	0.6	2	0.37	1
AM 2023	0.45	1	0.76	3	0.45	1
AM 2023 + Development	0.48	1	0.79	3	0.46	2
AM 2028	0.74	2	0.88	5	0.51	2
AM 2028 + Development	0.91	5	0.91	6	0.52	2
PM 2017	0.46	1	0.76	3	0.41	1
PM 2023	1.02	9	1.01	11	0.51	2
PM 2023 + Development	1.09	12	1.08	16	0.52	2
PM 2028	1.2	18	1.19	25	0.59	3
PM 2028 + Development	1.28	22	1.26	33	0.59	3

A30 Roundabout

	Victoria Ave		Crewkerne Rd		Tapstone Rd		East Street	
	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue
AM 2017	0.23	0	0.3	0	0.14	0	0.4	1
AM 2023	0.27	0	0.35	1	0.16	0	0.46	1
AM 2023 + Development	0.29	0	0.35	1	0.16	0	0.48	1
AM 2028	0.29	0	0.38	1	0.17	0	0.5	1
AM 2028 + Development	0.31	0	0.38	1	0.17	0	0.5	1
PM 2017	0.27	0	0.36	1	0.34	1	0.46	1
PM 2023	0.32	0	0.41	1	0.39	1	0.54	1
PM 2023 + Development	0.33	0	0.42	1	0.4	1	0.54	1
PM 2028	0.35	1	0.43	1	0.43	1	0.59	1
PM 2028 + Development	0.36	1	0.46	1	0.44	1	0.6	1

Convent Road Signals

	Fore Street		Furnham Road		East Street		Silver Street	
	% Sat	MMQ	% Sat	MMQ	% Sat	MMQ	% Sat	MMQ
AM 2017	84.6	13.0	84.9	15.0	87.3	15.0	86.0	16.0
AM 2023	97.4	21.0	97.2	23.0	98.8	23.0	97.1	25.0
AM 2023+ Development	97.9	21.0	98.4	25.0	98.8	23.0	100.7	31.0
AM 2028	103.5	29.0	103.8	33.0	105.3	33.0	103.8	40.0
AM 2028 +Development	104.3	30.0	104.9	37.0	105.3	33.0	107.3	48.0
PM 2017	75.2	13.0	92.3	19.0	94.0	21.0	93.3	18.0
PM 2023	82.9	15.0	103.3	32.0	104.4	38.0	102.9	33.0
PM 2023+ Development	87.0	16.0	106.9	41.0	107.6	44.0	109.0	47.0
PM 2028	91.5	19.0	112.0	54.0	115.2	64.0	113.6	59.0
PM 2028 +Development	93.0	20.0	114.4	60.0	115.2	64.0	116.5	67.0

Thorndun Park Drive/Glynswood

	Thorndun Prk		Glynswood	
	RFC	Queue	RFC	Queue
AM 2017	0.34	1	0.04	0
AM 2023	0.4	1	0.05	0
AM 2023 + Development	0.48	1	0.05	0
AM 2028	0.43	1	0.06	0
AM 2028 + Development	0.51	1	0.07	0
PM 2017	0.6	1	0.16	0
PM 2023	0.71	2	0.18	0
PM 2023 + Development	0.77	3	0.23	0
PM 2028	0.78	3	0.2	0
PM 2028 + Development	0.84	5	0.26	1

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