



COTSWOLD  
TRANSPORT  
PLANNING

Terra Strategic

Upthorpe, Cam, Stroud

Transport Accessibility and Access  
Technical Note

July 2021



Upthorpe, Cam, Stroud

*Transport Accessibility and Access*

*Technical Note*

CTP-21-0361

July 2021



## **1. Introduction**

- 1.1 Cotswold Transport Planning Ltd (CTP) have been instructed by Terra Strategic to prepare a Transport Accessibility and Access Technical Note (TN) in support of the promotion of Land off Upthorpe, Cam (the Site) for residential development through the emerging Stroud District Local Plan as part of the Regulation 19 consultation on the Stroud District Pre-Submission Draft Local Plan open between 27 May and 21 July 2021.
- 1.2 The Site both forms part of and lies immediately adjacent to the Strategic Site Allocation PS25 – Cam North East extension. Access to the Strategic Site Allocation PS25 is currently proposed via a single point of access from the north, via the Northeast Cam strategic site allocated in the 2015 Local Plan.

## **2. Site Context and Adjacent Highway Network**

### *Site Location*

- 2.1 The Site currently comprises undeveloped land and is located to the northwest of Upthorpe and the northeast of Cam village centre. The Site fronts directly onto Upthorpe.

### *Local Highway Network*

- 2.2 Upthorpe is a single carriageway two-way road with direct residential frontage and is subject to a 30mph speed limit. It extends in a north-easterly direction across the Site frontage from its junction with Station Road / Hopton Road in the south. Towards its southern end there is a footway on the eastern side of the carriageway which links directly to the existing provision on Station Road / Hopton Road. There is currently no footway provision on the western side of the carriageway in the vicinity of the Site.
- 2.3 Approximately 130m north of the Station Road junction on Upthorpe, there is an existing traffic calming feature in the form of priority working. Beyond this, the road becomes more rural in nature and there is no existing footway provision, therefore it currently operates as a shared surface road for all users. There is still residential

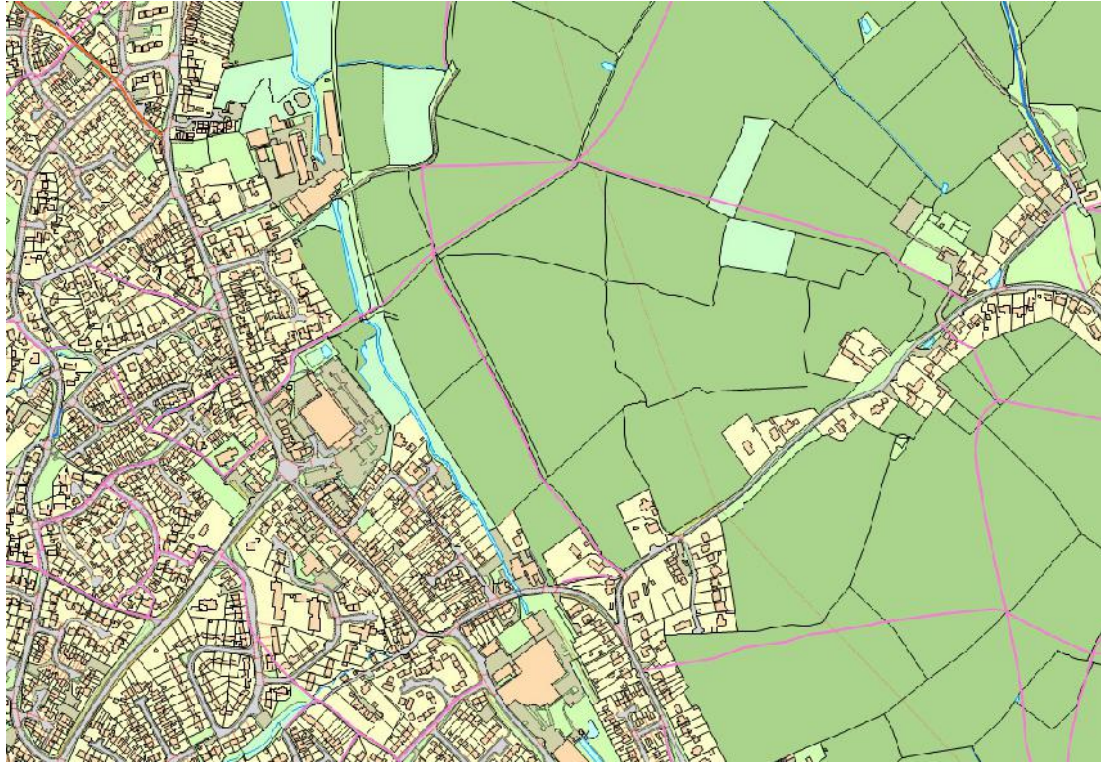


frontage along this northern section and therefore pedestrians walking in the carriageway is likely to be a regular occurrence, as was noted on a site visit.

- 2.4 The scope for improvements to the existing pedestrian infrastructure on Upthorpe has been investigated, as part of the access arrangements for the development proposals, as this would both serve the new development and improve connectivity for existing residents. This is discussed later in this report.
- 2.5 Station Road, via Chapel Street, provides access to the village centre. Hopton Road provides access to further facilities, including Cam Hopton C of E Primary School.
- 2.6 An indicative site location plan is provided at **Appendix A**.
- 2.7 The internal site layout will be designed to provide pedestrian and cycle priority throughout the development, with active travel routes within the Site to connect into the local highway infrastructure to ensure permeability is maximised by sustainable modes.

#### *Public Rights of Way (PROW)*

- 2.8 There are Public Rights of Way (PROW) directly crossing the Site, including Cam Footpath 37, which meets Upthorpe towards the southern extent of the site boundary and routes northwest across the Site. Cam Footpath 36 crosses Footpath 37 towards the northern boundary of the Site and routes on a generally northeast – southwest axis towards the western site boundary, where it continues as Cam Footpath 38 across the River Cam, to the north of Tesco, providing a direct link to the High Street.
- 2.9 These routes will be suitably incorporated within the internal site layout to maintain and enhance the rights of way across the Site.
- 2.10 In addition, Cam Footpath 59 routes generally east-west from the southern end of Upthorpe, just south of where Cam Footpath 37 meets Upthorpe and provides an alternative link to Station Road.
- 2.11 A map demonstrating the surrounding PROW network is provided at **Figure 2.1**.

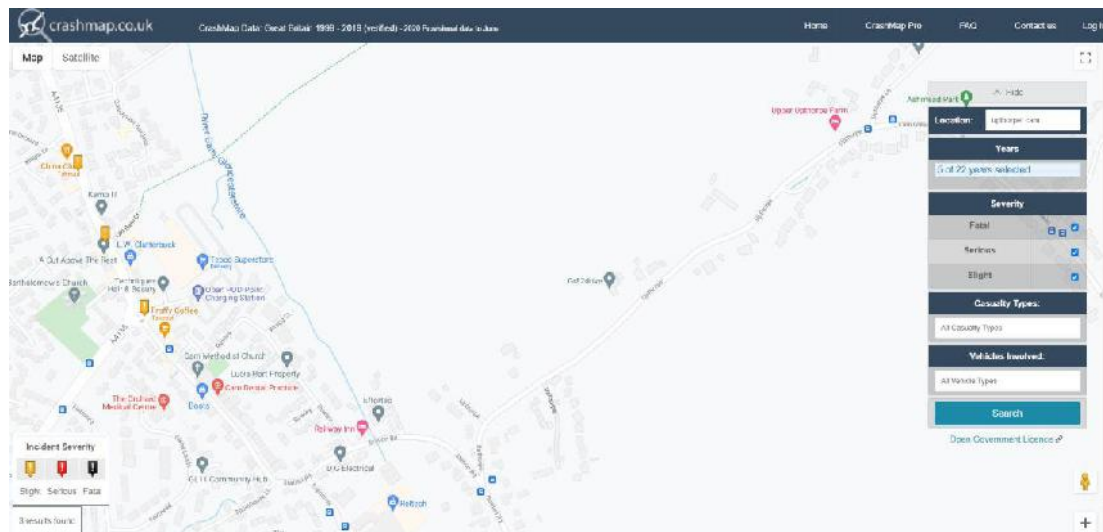


**Figure 2.1: PROW Map (Source: Gloucestershire County Council PROW Online Map)**

- 2.12 The wider network of PROWs surrounding the Site provide access generally in all directions to the existing built up area as well as the wider countryside surrounding Cam.

#### *Highway Safety*

- 2.13 To assess the safety of the existing highway network in the vicinity of the Site, in particular Upthorpe from which a new vehicular access is proposed, Personal Injury Collision (PIC) data has been collected via CrashMap, an online tool which maps the location of vehicle collisions.
- 2.14 The search area includes Upthorpe along the entirety of the Site frontage and its junction with Station Road / Hopton Road to the south. The assessment covers the most recently available five-year period until June 2020.
- 2.15 The CrashMap extract is included at **Figure 2.2**.



**Figure 2.2: CrashMap Extract**

2.16 The assessment concludes that no PICs have occurred within the search area during the most recently available five-year period. It is therefore concluded that there are no existing highway safety issues in the vicinity of the Site.

2.17 It is considered that the increase in vehicle trips arising from the proposed residential development of the Site will not result in a direct highway safety issue on the surrounding highway network.

### 3. Access Strategy

3.1 To determine that the Site is suitable to accommodate residential development, it must be demonstrated that safe and suitable access can be achieved, in accordance with the National Planning Policy Framework (NPPF).

3.2 The Site forms part of the Strategic Site Allocation PS25 – Cam North East extension, access to which is currently proposed via the Northeast Cam strategic site, located to the north and allocated in the 2015 Local Plan. As a minimum, pedestrian and cycle access connections will be promoted between the land parcels.

3.3 Existing PROW routes across the Site provide good permeability and the potential for enhanced connections. Cam Footpath 37 crosses the Site on a generally southeast - northwest axis and provides a direct connection to Upthorpe at the southern extent of the Site's frontage onto Upthorpe. To the northwest, Cam Footpath 37 links with Cam Footpath 36 and Cam Footpath 38, which in turn provide a direct connection to Cam High Street. There is potential to upgrade this route to provide for both pedestrians and cyclists, thus further enhancing the connectivity of the Site.





- 3.4 Direct vehicular access to the Site from the existing highway is proposed from Upthorpe along the Site's south-eastern boundary. Preliminary site access arrangement drawings have been prepared to demonstrate that a suitable form of access onto Upthorpe can be achieved.
- 3.5 Two potential options for vehicular access are proposed from Upthorpe to serve the Site, both in the form of a simple priority junction arrangement. These are shown on drawings SK02 and SK03 included at **Appendix B** and **Appendix C**, respectively. The first option is located towards the southern extent of the Site's Upthorpe frontage (Southern Access) and the second option is located further north (Northern Access). In addition, an emergency access arrangement is proposed towards the northern extent of the Site's frontage onto Upthorpe. The emergency access arrangements are shown on the drawing included at **Appendix D**. The emergency access would also provide an additional pedestrian and cyclist access point, further increasing the Site's permeability with the wider network.
- 3.6 To demonstrate that the proposed access points are safe and suitable, a visibility assessment has been undertaken. Visibility splays have been determined based on the recorded speeds from a ATC speed survey undertaken by an independent specialist survey company in May 2021. The ATC survey is included at **Appendix E**. The ATC was located north of the traffic calming feature, where speeds are likely to be higher than further south on Upthorpe and therefore considered to be robust. Recorded 85<sup>th</sup> percentile speeds were found to be 33.5mph northbound and 32.9mph southbound. In accordance with Manual for Streets, visibility splays of 2.4m x 53m to the south and 2.4m x 51.5m to the north have been considered, together with forward visibility requirements of 55.4m northbound and 53.9m southbound.
- 3.7 The provision of suitable forward visibility splays ensures that a vehicle approaching the site access can see a vehicle accessing the Site or egressing onto Upthorpe and can brake appropriately on approach. The forward visibility splays therefore ensure that conflicting vehicle manoeuvres are avoided without drivers being required to undertake an emergency stop manoeuvre.
- 3.8 Forward visibility at the southern access is slightly restricted; however the access arrangements include a traffic calming feature in the form of a priority narrowing, which will slow traffic speeds. The priority narrowing arrangement is discussed further below. Therefore the achievable visibility is deemed appropriate.



- 3.9 The access arrangement drawings, provided at **Appendix B** and **Appendix C**, demonstrate that suitable junction and forward visibility can be achieved in each direction.
- 3.10 As part of the access arrangements for the Site, the scope for improvements to the existing pedestrian infrastructure on Upthorpe has been investigated. There is potential for a traffic calming feature in the form of a priority narrowing arrangement to be located towards the southern end of Upthorpe, generally in the vicinity of the Site's southern access option. The traffic calming feature does not rely on the southern access option and could be provided as part of the development proposals generally. The drawing provided at **Appendix F**, shows the general arrangement for the potential priority narrowing arrangement. One of the key benefits of the proposals is the potential to widen the existing footway, which is currently circa 1.0 – 1.2m in width. By reducing the carriageway width to 3.7m for a short section, it is possible to provide a 2m footway on the eastern side of Upthorpe within the existing public highway. This traffic calming feature would slow vehicular speeds further and provide pedestrian priority on Upthorpe.

#### *Summary*

- 3.11 It has been demonstrated that safe and suitable access to the Site is achievable, in accordance with paragraph 108 of the NPPF.

## **4. Site Accessibility**

### *Proximity to Local Facilities and Amenities*

- 4.1 The Site is conveniently located within reasonable walking and cycling distance of a range of facilities and amenities in Cam, as demonstrated in **Table 4.1**.

Service / Amenity	Approx. Distance	Approx. Walking Time	Approx. Cycling Time
'Station Road' Bus Stops	400m	5 mins	2 mins
Cam High Street	500m	6 mins	2 mins
'Jubilee Tree' Bus Stops	640m	8 mins	3 mins
Cam Sports Club	650m	8 mins	3 mins
Tesco Superstore	670m	8 mins	3 mins
Cam Hopton C of E Primary School	750m	9 mins	3 mins

**Table 4.1: Facilities and Amenities Within Walking and Cycling Distance**



- 4.2 The distances and their corresponding journey times have been measured from the centre of the Site in accordance with the Institution of Highways and Transportation and 'Road Bike' guidelines for walking speed (1.4m/s) and cycling speed (4m/s), respectively.
- 4.3 For the purpose of this assessment, it has been assumed and cyclists will utilise either the public right of way route, which is proposed to be upgraded as part of the development proposals to allow use by cyclists, or the proposed vehicle access location on Upthorpe to egress the site, depending on the location of the facilities and amenities. However, journey times to facilities and amenities may change depending on which access is used.

#### *Public Transport*

- 4.4 The nearest operational bus stops to the Site are the 'Station Road' bus stops at the junction of Upthorpe with Station Road / Hopton Road. These stops provide access to the 65 and 65A bus routes, which operate a weekday service between Cam and Stroud.
- 4.5 Access to further bus services is available from the 'Jubilee Tree' bus stops on Cam High Street, which are served by bus routes 60, 61, 62, 65, 346, X3 and X11A. The existing bus services operating within Cam offer the potential for residents to travel by bus for commuting and other purposes, to destinations including Dursley, Stroud and Woodmancote. The bus services also provide access to Dursley Bus Station and Cam & Dursley Rail Station for onward travel by public transport to destinations further afield.
- 4.6 The provision of additional housing in the area will ultimately increase the resident population and consequently the potential for improved public transport services in the area. This will ultimately fall to the responsibility of the public transport operator; however, it is more likely that investments will be made in areas with larger housing populations.





## 5. Conclusions

5.1 This TN has demonstrated the following:

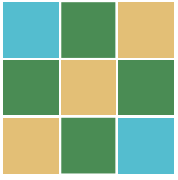
- i) Existing infrastructure in the area surrounding the Site, including footways and PROW, with the potential for improvements and upgrades, and access to bus services, offer the opportunity for residents to travel by sustainable modes;
- ii) There are a range of facilities and amenities in Cam within the vicinity of the Site, which residents can make use of on a daily basis;
- iii) The proposed indicative site access arrangements are suitable based on vehicle speeds on Upthorpe, in accordance with Manual for Streets; and
- iv) There is scope for improvements to the existing pedestrian infrastructure on Upthorpe as part of the new site access arrangements, which would benefit existing residents and pedestrians using Upthorpe in addition to the future residents of the proposed development.

5.2 Overall, it is considered that the Site and the surrounding highway network is suitable to accommodate additional dwellings without resulting in a significant impact on highway safety or a severe impact on the operation of the surrounding highway network, as per paragraph 109 of the NPPF. As such, it is concluded that the Site is suitable for inclusion as an allocation for residential development in the Stroud District Local Plan.



## Appendices

- Appendix A Site Location Plan
- Appendix B Southern Access Visibility Assessment Drawing
- Appendix C Northern Access Visibility Assessment Drawing
- Appendix D Emergency Access Arrangement Drawing
- Appendix E ATC Speed Survey
- Appendix F Priority Narrowing Arrangement Drawing



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## Appendix A

Site Location Plan





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## Appendix B

Southern Access Visibility  
Assessment Drawing





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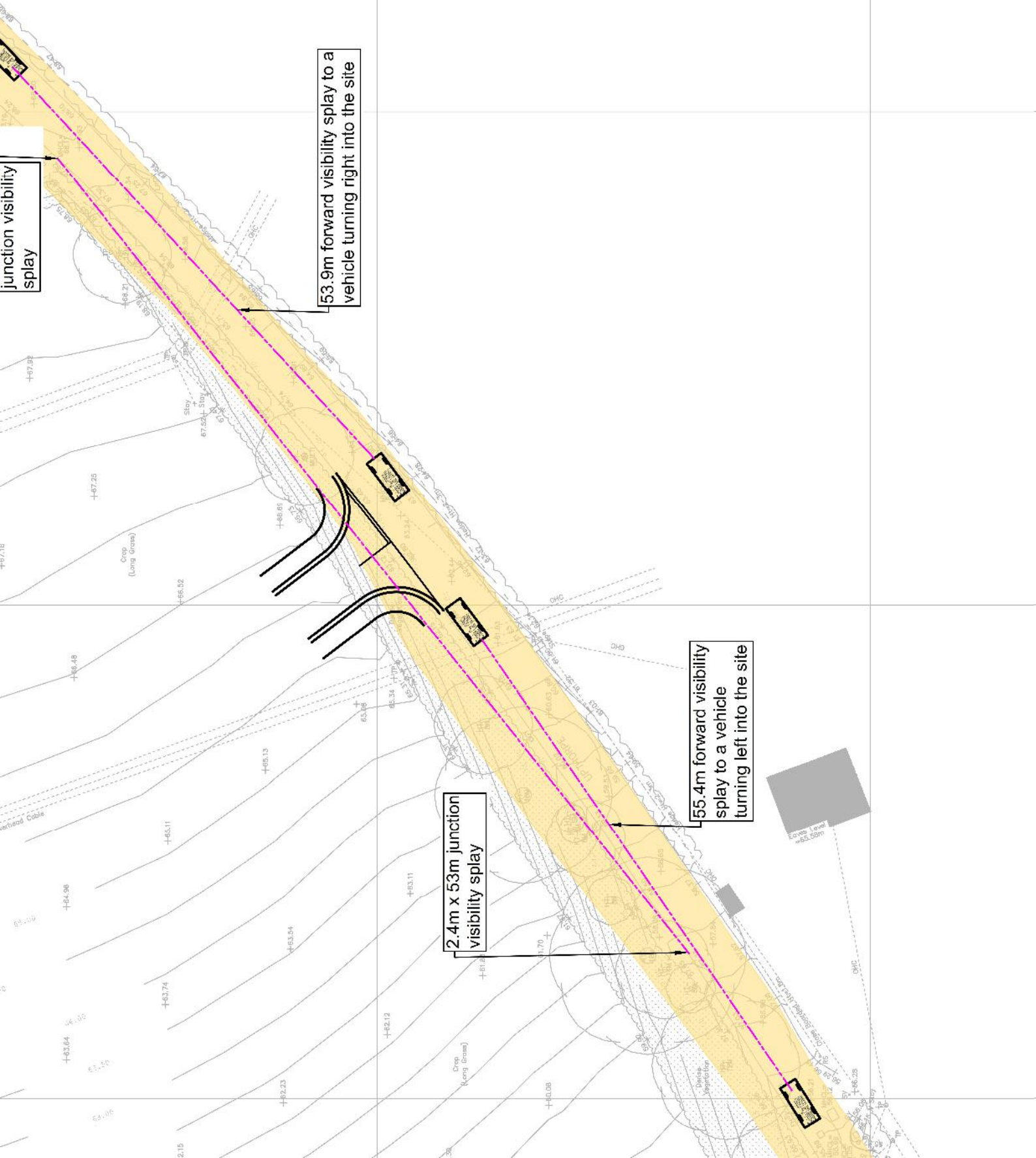
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## Appendix C

Northern Access Visibility  
Assessment Drawing



junction visibility splay

53.9m forward visibility splay to a vehicle turning right into the site

2.4m x 53m junction visibility splay

55.4m forward visibility splay to a vehicle turning left into the site

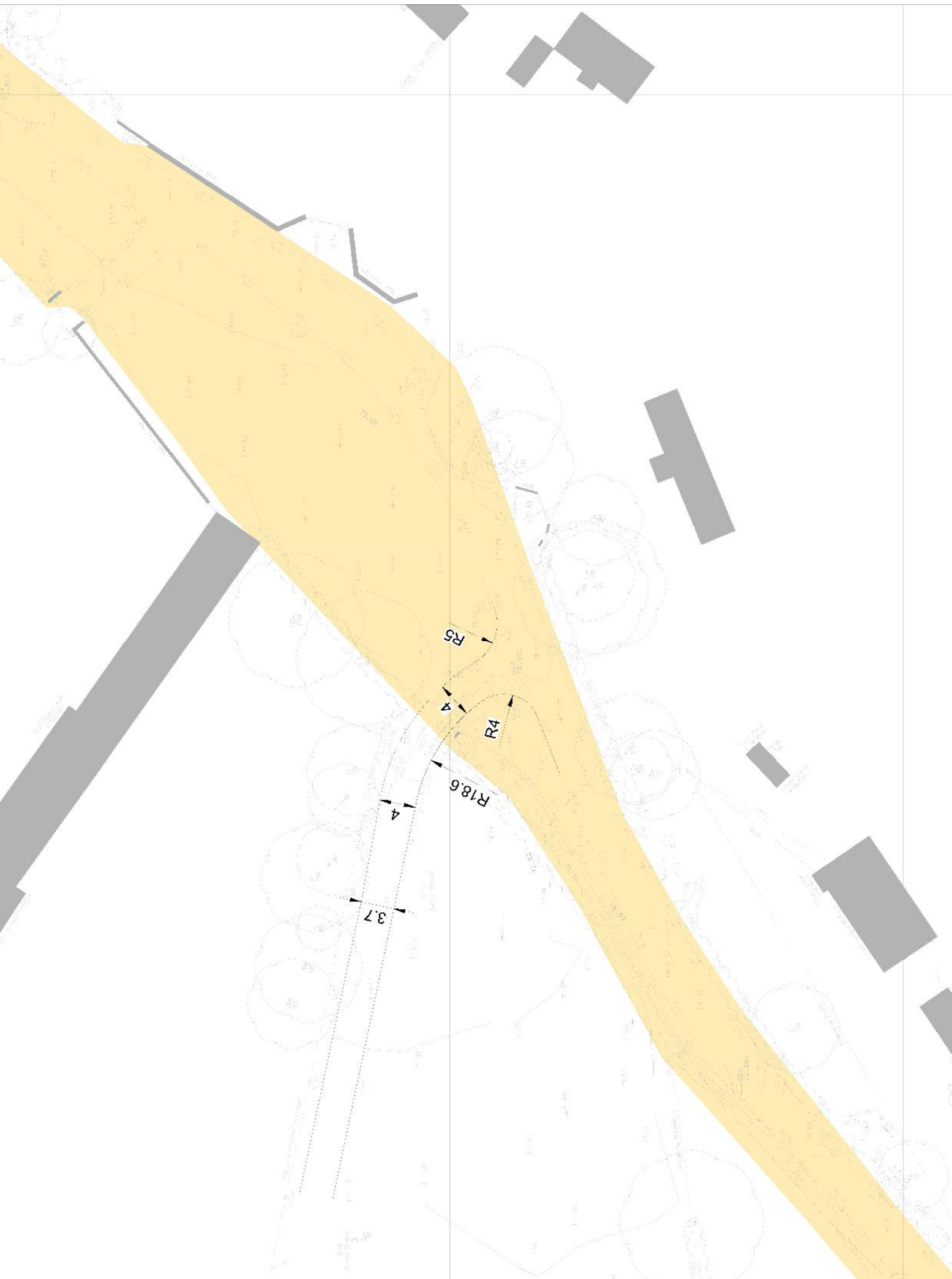
Lower Level w/65.50m



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## Appendix D

Emergency Access Arrangement  
Drawing



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## Appendix E

ATC Speed Survey

# Cam ATC, Upthorpe

Direction: Northeastbound

Hour Beginning	Tue May 18	Wed May 19	Thu May 20	Fri May 21	Sat May 22	Sun May 23	Mon May 24	5-Day Ave.	7-Day Ave.
00:00	1	0	0	1	2	1	0	0	1
01:00	1	1	0	0	2	1	0	0	1
02:00	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	2	0	0	0
04:00	0	0	0	0	0	0	0	0	0
05:00	4	1	3	1	2	0	2	2	2
06:00	1	4	1	3	0	0	5	3	2
07:00	25	26	20	16	4	1	24	22	17
08:00	33	28	29	26	13	6	25	28	23
09:00	28	25	30	33	26	16	26	28	26
10:00	31	35	40	17	35	23	24	29	29
11:00	24	26	44	24	21	39	27	29	29
12:00	31	40	36	43	37	32	37	37	37
13:00	41	23	37	30	24	22	30	32	30
14:00	35	30	26	37	33	21	30	32	30
15:00	51	38	48	40	32	27	38	43	39
16:00	37	39	41	31	37	23	39	37	35
17:00	38	57	44	48	31	17	45	46	40
18:00	16	46	30	35	23	10	27	31	27
19:00	24	23	16	15	12	12	20	20	17
20:00	19	16	7	9	12	7	8	12	11
21:00	9	8	9	5	4	6	11	8	7
22:00	5	6	4	6	7	1	1	4	4
23:00	0	3	1	6	6	1	3	3	3
<b>Total</b>									
12H(7-19)	390	413	425	380	316	237	372	396	362
16H(6-22)	443	464	458	412	344	262	416	439	400
18H(6-24)	448	473	463	424	357	264	420	446	407
24H(0-24)	454	475	466	426	363	268	422	449	411
<b>AM Peak</b>	08:00 <b>33</b>	10:00 <b>35</b>	11:00 <b>44</b>	09:00 <b>33</b>	10:00 <b>35</b>	11:00 <b>39</b>	11:00 <b>27</b>	10:00 <b>29</b>	10:00 <b>29</b>
<b>PM Peak</b>	15:00 <b>51</b>	17:00 <b>57</b>	15:00 <b>48</b>	17:00 <b>48</b>	12:00 <b>37</b>	12:00 <b>32</b>	17:00 <b>45</b>	17:00 <b>46</b>	17:00 <b>40</b>

Direction: Southwestbound

Hour Beginning	Tue May 18	Wed May 19	Thu May 20	Fri May 21	Sat May 22	Sun May 23	Mon May 24	5-Day Ave.	7-Day Ave.
00:00	1	0	0	0	1	1	0	0	0
01:00	1	0	0	0	2	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	1	0	0	0
05:00	2	2	2	3	2	0	3	2	2
06:00	8	5	5	7	0	0	7	6	5
07:00	28	36	35	27	5	4	35	32	24
08:00	53	55	41	38	17	8	47	47	37
09:00	41	49	35	28	33	31	35	38	36
10:00	32	37	43	41	37	45	35	38	39
11:00	29	27	37	33	21	23	34	32	29
12:00	34	36	40	35	23	34	35	36	34
13:00	24	26	34	33	38	30	34	30	31
14:00	33	40	24	55	30	20	36	38	34
15:00	31	33	29	17	23	25	30	28	27
16:00	36	25	38	33	41	19	29	32	32
17:00	43	40	40	35	24	13	41	40	34
18:00	19	38	25	20	24	20	22	25	24
19:00	14	34	11	20	5	5	14	19	15
20:00	15	10	6	8	10	5	9	10	9
21:00	0	7	4	3	6	2	8	4	4
22:00	5	5	6	4	2	1	3	5	4
23:00	1	3	0	3	4	0	2	2	2
<b>Total</b>									
12H(7-19)	403	442	421	395	316	272	413	415	380
16H(6-22)	440	498	447	433	337	284	451	454	413
18H(6-24)	446	506	453	440	343	285	456	460	418
24H(0-24)	450	508	455	443	348	287	459	463	421
<b>AM Peak</b>	08:00 <b>53</b>	08:00 <b>55</b>	10:00 <b>43</b>	10:00 <b>41</b>	10:00 <b>37</b>	10:00 <b>45</b>	08:00 <b>47</b>	08:00 <b>47</b>	10:00 <b>39</b>
<b>PM Peak</b>	17:00 <b>43</b>	14:00 <b>40</b>	12:00 <b>40</b>	14:00 <b>55</b>	16:00 <b>41</b>	12:00 <b>34</b>	17:00 <b>41</b>	17:00 <b>40</b>	14:00 <b>34</b>



Direction: Total Flow

Hour Beginning	Tue May 18	Wed May 19	Thu May 20	Fri May 21	Sat May 22	Sun May 23	Mon May 24	5-Day Ave.	7-Day Ave.
00:00	2	0	0	1	3	2	0	1	1
01:00	2	1	0	0	4	1	0	1	1
02:00	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	2	0	0	0
04:00	0	0	0	0	0	1	0	0	0
05:00	6	3	5	4	4	0	5	5	4
06:00	9	9	6	10	0	0	12	9	7
07:00	53	62	55	43	9	5	59	54	41
08:00	86	83	70	64	30	14	72	75	60
09:00	69	74	65	61	59	47	61	66	62
10:00	63	72	83	58	72	68	59	67	68
11:00	53	53	81	57	42	62	61	61	58
12:00	65	76	76	78	60	66	72	73	70
13:00	65	49	71	63	62	52	64	62	61
14:00	68	70	50	92	63	41	66	69	64
15:00	82	71	77	57	55	52	68	71	66
16:00	73	64	79	64	78	42	68	70	67
17:00	81	97	84	83	55	30	86	86	74
18:00	35	84	55	55	47	30	49	56	51
19:00	38	57	27	35	17	17	34	38	32
20:00	34	26	13	17	22	12	17	21	20
21:00	9	15	13	8	10	8	19	13	12
22:00	10	11	10	10	9	2	4	9	8
23:00	1	6	1	9	10	1	5	4	5
<b>Total</b>									
<b>12H(7-19)</b>	793	855	846	775	632	509	785	811	742
<b>16H(6-22)</b>	883	962	905	845	681	546	867	892	813
<b>18H(6-24)</b>	894	979	916	864	700	549	876	906	825
<b>24H(0-24)</b>	904	983	921	869	711	555	881	912	832
<b>AM Peak</b>	08:00 <b>86</b>	08:00 <b>83</b>	10:00 <b>83</b>	08:00 <b>64</b>	10:00 <b>72</b>	10:00 <b>68</b>	08:00 <b>72</b>	08:00 <b>75</b>	10:00 <b>68</b>
<b>PM Peak</b>	15:00 <b>82</b>	17:00 <b>97</b>	17:00 <b>84</b>	14:00 <b>92</b>	16:00 <b>78</b>	12:00 <b>66</b>	17:00 <b>86</b>	17:00 <b>86</b>	17:00 <b>74</b>

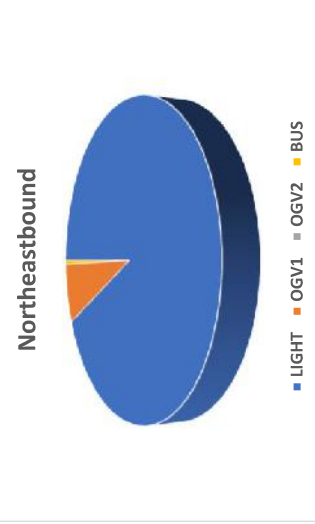
# Cam ATC, Upthorpe

Direction: Northeastbound

	Total Volume	LIGHT	OGV1	OGV2	BUS
Tue 18 May	454	414	38	0	2
Wed 19 May	475	440	33	0	2
Thu 20 May	466	433	32	0	1
Fri 21 May	426	390	33	0	3
Sat 22 May	363	345	16	0	2
Sun 23 May	268	257	10	0	1
Mon 24 May	422	386	33	1	2
5 Day Ave.	449	413	34	0	2
7 Day Ave.	411	381	28	0	2

	Total Volume	LIGHT	OGV1	OGV2	BUS
Tue 18 May	100.0%	91.2%	8.4%	0.0%	0.4%
Wed 19 May	100.0%	92.6%	6.9%	0.0%	0.4%
Thu 20 May	100.0%	92.9%	6.9%	0.0%	0.2%
Fri 21 May	100.0%	91.5%	7.7%	0.0%	0.7%
Sat 22 May	100.0%	95.0%	4.4%	0.0%	0.6%
Sun 23 May	100.0%	95.9%	3.7%	0.0%	0.4%
Mon 24 May	100.0%	91.5%	7.8%	0.2%	0.5%
5 Day Ave.	100.0%	92.0%	7.5%	0.0%	0.4%
7 Day Ave.	100.0%	92.7%	6.8%	0.0%	0.5%

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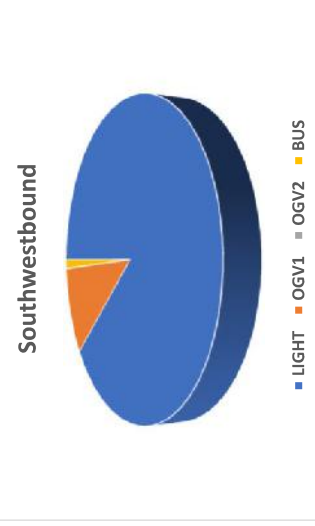


Direction: Southwestbound

	Total Volume	LIGHT	OGV1	OGV2	BUS
Tue 18 May	450	387	58	1	4
Wed 19 May	508	449	52	1	6
Thu 20 May	455	399	51	0	5
Fri 21 May	443	388	47	0	8
Sat 22 May	348	321	25	0	2
Sun 23 May	287	269	18	0	0
Mon 24 May	459	410	44	0	5
5 Day Ave.	463	407	50	0	6
7 Day Ave.	421	375	42	0	4

	Total Volume	LIGHT	OGV1	OGV2	BUS
Tue 18 May	100.0%	86.0%	12.9%	0.2%	0.9%
Wed 19 May	100.0%	88.4%	10.2%	0.2%	1.2%
Thu 20 May	100.0%	87.7%	11.2%	0.0%	1.1%
Fri 21 May	100.0%	87.6%	10.6%	0.0%	1.8%
Sat 22 May	100.0%	92.2%	7.2%	0.0%	0.6%
Sun 23 May	100.0%	93.7%	6.3%	0.0%	0.0%
Mon 24 May	100.0%	89.3%	9.6%	0.0%	1.1%
5 Day Ave.	100.0%	87.8%	10.9%	0.1%	1.2%
7 Day Ave.	100.0%	88.9%	10.0%	0.1%	1.0%

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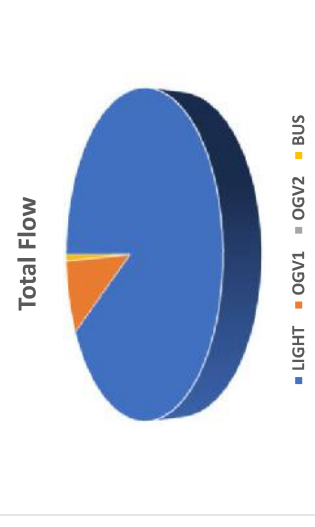


Direction: Total Flow

	Total Volume	LIGHT	OGV1	OGV2	BUS
Tue 18 May	904	801	96	1	6
Wed 19 May	983	889	85	1	8
Thu 20 May	921	832	83	0	6
Fri 21 May	869	778	80	0	11
Sat 22 May	711	666	41	0	4
Sun 23 May	555	526	28	0	1
Mon 24 May	881	796	77	1	7
5 Day Ave.	912	819	84	1	8
7 Day Ave.	832	755	70	0	6

	Total Volume	LIGHT	OGV1	OGV2	BUS
Tue 18 May	100.0%	88.6%	10.6%	0.1%	0.7%
Wed 19 May	100.0%	90.4%	8.6%	0.1%	0.8%
Thu 20 May	100.0%	90.3%	9.0%	0.0%	0.7%
Fri 21 May	100.0%	89.5%	9.2%	0.0%	1.3%
Sat 22 May	100.0%	93.7%	5.8%	0.0%	0.6%
Sun 23 May	100.0%	94.8%	5.0%	0.0%	0.2%
Mon 24 May	100.0%	90.4%	8.7%	0.1%	0.8%
5 Day Ave.	100.0%	89.9%	9.2%	0.1%	0.8%
7 Day Ave.	100.0%	90.8%	8.4%	0.1%	0.7%

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### Cam ATC, Upthorpe

Direction: Northeastbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Tue 18 May	454	33.5	27.5	5.8	6	6	23	91	189	106	29	3	0	1	0	0
Wed 19 May	475	33.8	28.0	5.5	1	8	8	99	219	99	36	0	3	0	2	0
Thu 20 May	466	34.0	28.1	5.7	3	19	94	94	190	118	27	9	2	1	0	0
Fri 21 May	426	33.4	28.1	5.2	0	2	14	95	173	116	20	3	2	0	1	0
Sat 22 May	363	32.6	26.9	5.5	4	5	23	84	152	77	15	3	0	0	0	0
Sun 23 May	268	33.7	27.7	5.8	3	2	9	57	121	56	15	2	2	0	1	0
Mon 24 May	422	33.3	28.0	5.0	4	4	19	72	194	105	23	4	1	0	0	0
5 Day Ave.	449	33.6	28.0	5.4	2	5	17	90	193	109	27	4	2	0	1	0
7 Day Ave.	411	33.5	27.8	5.5	2	4	16	85	177	97	24	3	1	0	1	0

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Direction: Southwestbound

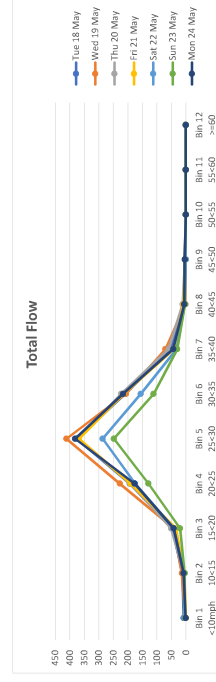
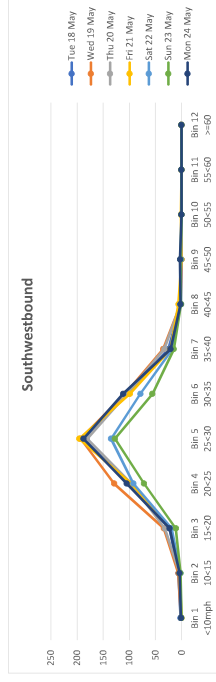
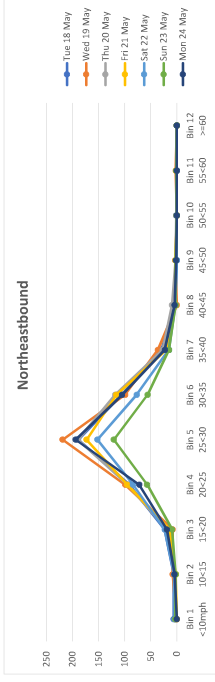
	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Tue 18 May	450	32.7	27.3	5.2	2	6	23	102	187	104	25	1	0	0	0	0
Wed 19 May	508	32.8	27.2	5.4	1	6	34	129	193	108	35	2	0	0	0	0
Thu 20 May	455	33.2	27.6	5.5	1	4	32	96	181	105	33	2	1	0	0	0
Fri 21 May	443	33.0	27.7	5.2	0	4	20	96	196	99	21	6	0	1	0	0
Sat 22 May	348	32.7	27.3	5.2	1	2	19	92	135	79	17	2	1	0	0	0
Sun 23 May	287	32.7	27.4	5.0	0	2	11	72	128	56	15	1	2	0	0	0
Mon 24 May	459	33.0	27.6	5.3	1	4	23	105	188	112	21	2	3	0	0	0
5 Day Ave.	463	33.0	27.5	5.3	1	5	26	106	189	106	27	3	1	0	0	0
7 Day Ave.	421	32.9	27.4	5.3	1	4	23	99	173	95	24	2	1	0	0	0

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Direction: Total Flow

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Tue 18 May	904	33.1	27.4	5.5	8	12	46	193	376	210	54	4	0	1	0	0
Wed 19 May	983	33.3	27.6	5.2	2	14	42	228	412	207	71	3	3	0	2	0
Thu 20 May	921	33.6	27.8	5.6	4	7	51	190	371	223	60	11	3	1	0	0
Fri 21 May	869	33.2	27.9	5.2	0	6	34	191	369	215	41	9	2	1	1	0
Sat 22 May	711	32.6	27.1	5.4	5	7	42	176	287	156	32	5	1	0	0	0
Sun 23 May	555	33.2	27.6	5.4	3	4	20	129	249	112	30	3	4	0	1	0
Mon 24 May	881	33.1	27.8	5.2	1	8	42	177	382	212	44	6	4	0	0	0
5 Day Ave.	912	33.3	27.7	5.4	3	9	43	196	382	214	54	6	2	1	1	0
7 Day Ave.	832	33.2	27.6	5.4	3	8	40	183	349	191	47	6	2	0	1	0

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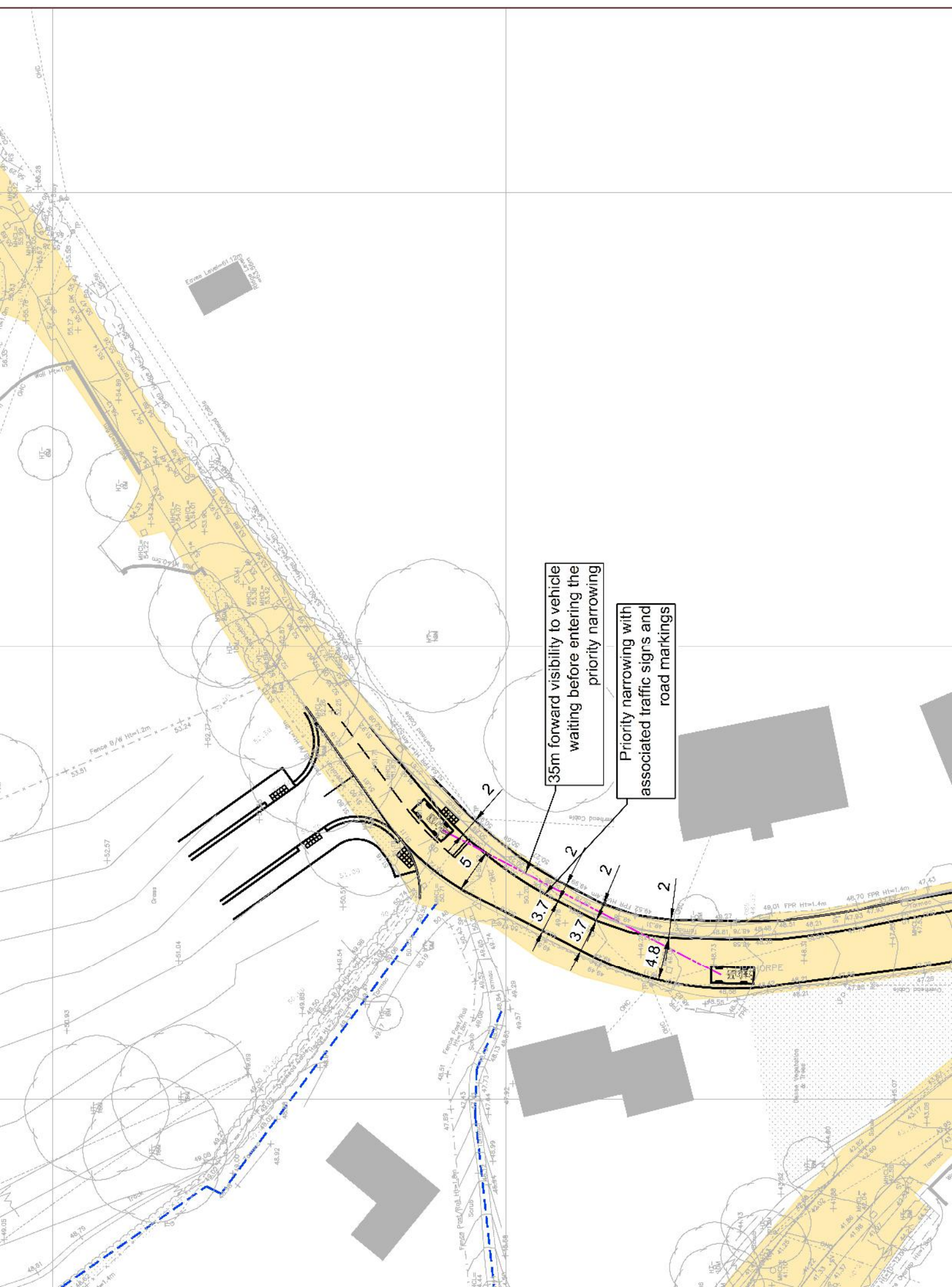


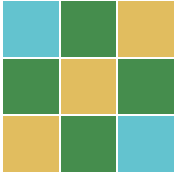


COTSWOLD  
TRANSPORT  
PLANNING

## Appendix F

Priority Narrowing Arrangement  
Drawing





COTSWOLD  
TRANSPORT  
PLANNING

## Cotswold Transport Planning Ltd

Please visit our website at:  
[www.cotswoldtp.co.uk](http://www.cotswoldtp.co.uk)

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