From: Mark Kirby
Sent: Wednesday, May 31, 2023 1:53 PM
To: Patrick Moss
Cc: Thomas Webster; Caroline Ford; Hannah Leary ; Rob Bolton
Subject: NW Bicester - Charlotte Avenue Info

# Afternoon Patrick,

Many thanks for your time on the MS Teams call we had yesterday morning. I had hoped to get this information back to you sooner, but it has been a busy couple of days, and I needed my colleague to update the PICADY assessment(s) for the Charlotte Avenue junction with the B4100 in line with our discussion. In addition, we discussed the Possible One-Way Priority arrangement on Charlotte Avenue that I tabled at our meeting, and now attach for info.

## 4600-1100-T-080 Rev A – Possible One-Way Priority Along Charlotte Avenue:

- This is the option that you generally refer to within your PoE.
- It is an alternative option to that which we presented as part of the submission, which proposed to reduce the footway width on the eastern side of the Charlotte Avenue carriageway, which is considered may have an impact on the existing trees (VTP Drawing 4600-1100-T-073 Rev A).
- As there are no physical works proposed for this priority arrangement option, with the exception of the potential kerb build out, it is not expected that there would be any impact on the trees.
- The available carriageway width at the kerb build out ensures that this is no less than 3.1m, which is the minimum width required for an emergency services vehicle.
- I considered locating the give way junction at the northern end of this stretch of Charlotte Avenue but felt that due to the fact that the give-way arrangement would be located between the junction with Rosemary Gardens and the existing bridge, it would be confusing for drivers wishing to join Charlotte Avenue from Rosemary Gardens.
- I accept that the give-way arrangement is very close to the bus stop but considering that OCC intend to ensure that a frequent bus service is provided along this stretch of Charlotte Avenue, we both agreed that the bus would not be required to stop for extended periods and therefore would have a limited impact on vehicles that are located at the give-way arrangement.
- Whilst I appreciate that you may want to review this option in more detail now that you have a copy of the drawing, if you are happy with this alternative option, might I suggest that we seek to update the SoCG between the Appellant and CDC with a view to identifying that this element can be adequately dealt with? This should provide the Inspector with confidence that this matter can be addressed by the agreed financial contribution that the Appellant has agreed to the Local Highway Improvements, which will include the works that OCC deem necessary to this part of Charlotte Avenue.

In addition to the Charlotte Avenue proposals and the potential impact on existing trees, we also discussed the traffic impact analysis at the existing priority junction of Charlotte Avenue with the B4100 Banbury Road. To this extent, I set out below a number of scenarios for clarity:

#### **Assessment Scenarios:**

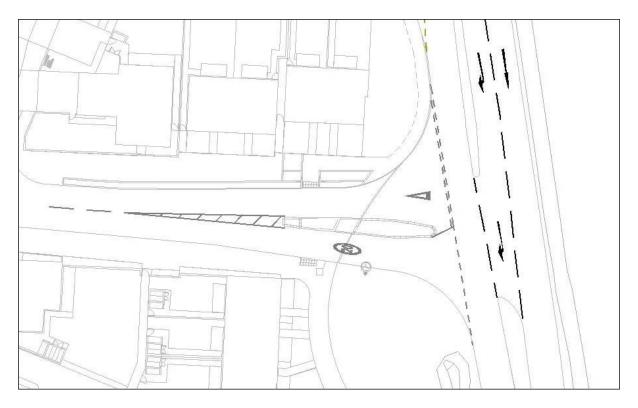
- Scenario 1 550 Dwellings @ 40% Car Share
  - This is the scenario that is included within the planning application, as agreed with OCC.

- 70% Private Dwellings
- 30% Affordable Dwellings
- Total Traffic Flows through the Charlotte Avenue/B4100 Junction:
  - AM 112
  - PM 100
- Attached are the Traffic Flow Diagrams for this Scenario (550 Dwellings @ 40% Car Share)
- Diagrams 4 & 5 present the Proposed Development Traffic Flows for the AM and PM peak hours respectively.
- Diagrams 8 & 9 present the 2031 Base + Proposed Development Traffic Flows for the AM and PM peak hours respectively.
- Scenario 2 530 Dwellings @ 50% Car Share
  - This is the scenario that you have suggested we should consider as a robust sensitivity test as it assesses a 50% car share, rather than 40% car share, as identified in the NW Bicester SPD.
  - Please note that due to the Viability Assessment, we now understand that 10% of the dwellings will be identified as affordable, which is therefore reflected within the revised traffic analysis associated with the Proposed Development.
    - 90% Private Dwellings
    - 10% Affordable Dwellings
    - Total Traffic Flows through the Charlotte Avenue/B4100 Junction:
      - AM 140
      - PM 126

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- Attached are the Traffic Flow Diagrams for this Scenario (530 Dwellings @ 50% Car Share)
- Scenario 3 530 Dwellings @ 40% Car Share
  - This is the scenario that we are actually applying for.
    - 90% Private Dwellings
    - 10% Affordable Dwellings
  - Total Traffic Flows through the Charlotte Avenue/B4100 Junction:
    - AM 112
    - PM 101
  - Attached are the Traffic Flow Diagrams for this Scenario (530 Dwellings @ 40% Car Share)

For ease of reference, the existing priority junction is presented in the extract set out below:



#### **Results:**

	АМ					РМ				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2031 DM									
Stream B-C	D1	0.0	8.73	0.01	Α	D2	0.0	9.79	0.01	Α
Stream B-A		1.1	23.08	0.53	С		1.2	24.37	0.54	С
Stream C-AB		0.1	7.22	0.08	Α		0.0	7.11	0.01	Α
	2031 DS									
Stream B-C	D3	0.1	32.77	0.13	D	D4	0.1	16.94	0.05	С
Stream B-A		5.2	79.67	0.87	F		3.1	56.10	0.77	F
Stream C-AB		0.1	7.61	0.09	Α		0.0	7.89	0.03	Α
	2031 Sensitivity Test 1									
Stream B-C	D5	0.5	98.92	0.37	F	D6	0.1	20.55	0.07	С
Stream B-A		6.6	95.33	0.91	F		3.7	65.13	0.81	F
Stream C-AB		0.1	7.59	0.10	Α		0.0	8.10	0.04	Α
	2031 Sensitivity Test 2									
Stream B-C	D7	0.1	17.94	0.08	С	D8	0.0	14.49	0.04	В
Stream B-A		3.9	59.79	0.81	F		2.6	47.50	0.73	E
Stream C-AB		0.1	7.50	0.09	Α		0.0	7.87	0.03	Α

The full results of the PICADY Assessment of the existing priority junction arrangement are attached for info. The table above summarises these results for ease of reference:

- As agreed with OCC through the scoping process, a future year of 2031 has been assessed, which coincides with the end of the Local Plan period.
- The 2031 DM (Do Minimum) results are effectively the Baseline assessments for the AM and PM period, i.e. with no Proposed Development traffic, but including all of the predicted

development that is identified within the Local Plan and is expected to be delivered by 2031. This data is from the BTM.

- The 2031 DS (Do Something) results include the Proposed Development Traffic Scenario 1 (550 @ 40% with 70/30)
- The 2031 Sensitivity Test 1 results include the Proposed Development Traffic Scenario 2 (530 @ 50% with 90/10)
- The 2031 Sensitivity Test 2 results include the Proposed Development Traffic Scenario 3 (530 @ 40% with 90/10)
- In summary, the higher traffic flows associated with Scenario 2 do result in a slight increase in the RFC in the AM and PM peak hours. In the AM, the RFC increases to 0.91 RFC, which is in excess of the magic number of 0.85 RFC and higher than the 0.87 RFC identified for Scenario 1.
- However, the Scenario 3 assessment, which is what we have actually applied for, shows that the RFC in the AM is actually below the magic number of 0.85 RFC at 0.81 RFC.

I appreciate that the current position set out within the Transport Assessment identifies that the AM peak hour RFC would exceed 0.85 RFC. As such, in order to mitigate the impact of the traffic flows associated with the Proposed Development, we have acknowledged OCC's request for a proportionate financial contribution to be made towards the improvement of this junction. This improvement will take the form of a traffic signal junction, which in turn is expected to be linked to the recently consented signal junction of the B4100/A4095 junction. As we discussed, I appreciate that the signal arrangement is not of much relevance to the current concerns raised on CDC's behalf at this junction, but for completeness, I have attached the results of the updated LINSIG assessment, if you did want to review these.

### Summary:

In summary, I trust that we have been able to demonstrate that an alternative solution to the stretch of Charlotte Avenue where concerns were raised over the potential loss of trees, could be achieved. I would just reiterate that the final solution to this stretch of Charlotte Avenue will rest with OCC as the highway authority, but the Appellant has agreed to make a financial contribution to OCC to facilitate the final scheme that OCC decides would best address the concerns and will not result in the loss of any trees.

With regards to the capacity assessment of the existing priority junction, we have demonstrated that whilst the assessment contained within the originally submitted TA considered a total of 550 dwellings, a 40% car share, and a 70/30 split between private and affordable houses, following the in-depth Viability Assessment, 10% of the dwellings are proposed to be affordable. As the agreed trip rates that were provided by OCC for the assessment of the Proposed Development differ between private and affordable dwellings, we have adjusted the traffic flows associated with the Proposed Development to reflect the two scenarios identified.

I trust that the above and the attached information are clear and provides you with the information we discussed on our call, and I agreed to circulate for your review and comment. Please feel free to come back with any comments that you may have.

Subject to your view, I would ideally like to be able to update the SoCG this week, so any comments at your earliest convenience would be greatly appreciated.

Mark Kirby -