

Response to Highways Comments.

Project name: Wykham Park Farm, Banbury
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Project number: P21 – 2662
Reference: Response to Highways Comments

Persimmon (South Midlands) are progressing a reserved matters application at Wykham Park Farm, Banbury for 237 dwelling, Ref: 22/O2068/REM for OS parcel 7400 adjoining and south of Salt Way, Bodicote, Banbury. Following submission of an initial internal layout, comments were received from Oxfordshire County Council (OCC) Highways Officer on 5th December 2022 by email relating to the proposed layout.

With consideration of these comments, and comments from other stakeholders, the proposed layout has been updated where appropriate with a view to presenting a layout which can be agreed with highways.

This Note considers each of these comments in turn and provides our response against each one with cognisance of relevant guidance and provides further information as appropriate. For ease of reference the comments from OCC highways have been replicated with our response to each immediately below.

This response considers the highways related matters only with items such as highway drainage covered elsewhere within the reserved matters application. Similarly, it is considered some comments consider very detailed aspects of the proposal and are more appropriate to address in due course, however these comments have been noted and will be taken into consideration at the appropriate stage.

OCC Comment

Spine Road has been designed not including dropped kerbs for driveway access from the front, if this is proposed it would require further technical review on the section 38.

Pegasus Response

Detailed information regarding the kerbing strategy will be provided through the Section 38 process and further technical review obtained where necessary.

OCC Comment

1 meter flat landing area required behind the highway before any ditch/ balancing pond. A stage 1&2 road safety audit will need to be undertaken to take a view of the ditch being close to the highway. The depths of the ditches are of concern due to how close they are to the carriageway.

Pegasus Response

A minimum of 1m service strip is proposed between all highways and drainage ditches or balancing ponds that are proposed to be adopted.

Persimmon have confirmed that it is not proposed for OCC to adopt any of the drainage ditch/swales or attenuation basins, these will be part of the S104 agreement and adopted by Thames Water. Similarly private drives will be conveyed to dwellings and so not adopted.

A Road Safety Audit Stage 1 is currently being commissioned by Persimmon and will be submitted in advance of planning. A Road Safety Audit Stage 2 will be undertaken at the appropriate stage of detailed design and therefore we request this is conditioned until such time.

OCC Comment

OCC require a swept path analysis for an 11.6m in length refuse vehicle passing an on-coming or parked family car throughout the layout. The carriageway will require widening on the bends to enable this manoeuvre.

Pegasus Response

Persimmon drawings PHSM-SK01A, SK02A and SK03A provides swept path analysis for a 11.6m refuse vehicle throughout the layout. Drawing PHSM-SK03A demonstrates that a refuse vehicle can manoeuvre safely at each turning head and can therefore enter and exit each cul de sac in a forward gear. A 11.6m refuse vehicle is the largest and most onerous vehicle anticipated to access the site regularly, this therefore represents a robust assessment and was the vehicle requested within OCCs comments.

Drawing PHSM-SK01A and SK02A demonstrate a refuse vehicle travelling throughout the site with an MPV travelling in the opposite direction. This demonstrates that a refuse vehicle would be able to pass an on-coming or parked car throughout the majority of the layout. The MPV is a 4.86m long and 1.86m wide minivan however in reality it is anticipated most cars will be smaller and pass with ease. Likewise, a car would be able to pass with ease a second parked car or car travelling in the opposite direction. The use of the MPV and refuse vehicle therefore provides a robust assessment. It should also be noted that there will be a limited number of refuse vehicles utilising the site each week. Based on the current Cherwell District Council bin collection calendar¹ this could comprise up to three refuse vehicles per week.

Carriageways have been widened on the bends as requested to allow two-way movements throughout the layout with the exception of two of the focal junctions where a refuse vehicle will utilise the full width of the carriageway to manoeuvre. These focal junctions are the junction between plots 158, 196, 226 and 211 and the junction between plots 30, 07 and 13 where a refuse vehicle would be unable to pass a parked vehicle. It is however noted that given the proximity to a junction, private drives and/ or bends these should be considered inappropriate locations for a vehicle to park. A refuse vehicle can manoeuvre through the junction, without overrunning the kerb or footway if unopposed.

Taking into consideration the low frequency of refuse vehicles and low trip generation at the junctions, the probability of vehicles passing around the bend or junction is minimal. Increasing the geometry to accommodate such movements is considered excessive and not in keeping with the Manual for Streets guidance which states:

¹ <https://www.cherwell.gov.uk/info/10/rubbish-and-recycling> accessed 21/12/2022

6.8.1: *"The design of local roads should accommodate service vehicles without allowing their requirements to dominate the layout. On streets with low traffic flows and speeds, it may be assumed that they will be able to use the full width of the carriageway to manoeuvre. Larger vehicles which are only expected to use a street infrequently, such as pantechnicons, need not be fully accommodated – designers could assume that they will have to reverse or undertake multipoint turns to turn around for the relatively small number of times they will require access."*

Manual for Streets also states:

6.3.12: *"Pedestrian desire lines should be kept as straight as possible at side-road junctions unless site-specific reasons preclude it. Small corner radii minimise the need for pedestrians to deviate from their desire line (Fig. 6.3)."*

6.3.13: *"With small corner radii, large vehicles may need to use the full carriageway width to turn. Swept-path analysis can be used to determine the minimum dimensions required. The footway may need to be strengthened locally in order to allow for larger vehicles occasionally overrunning the corner."*

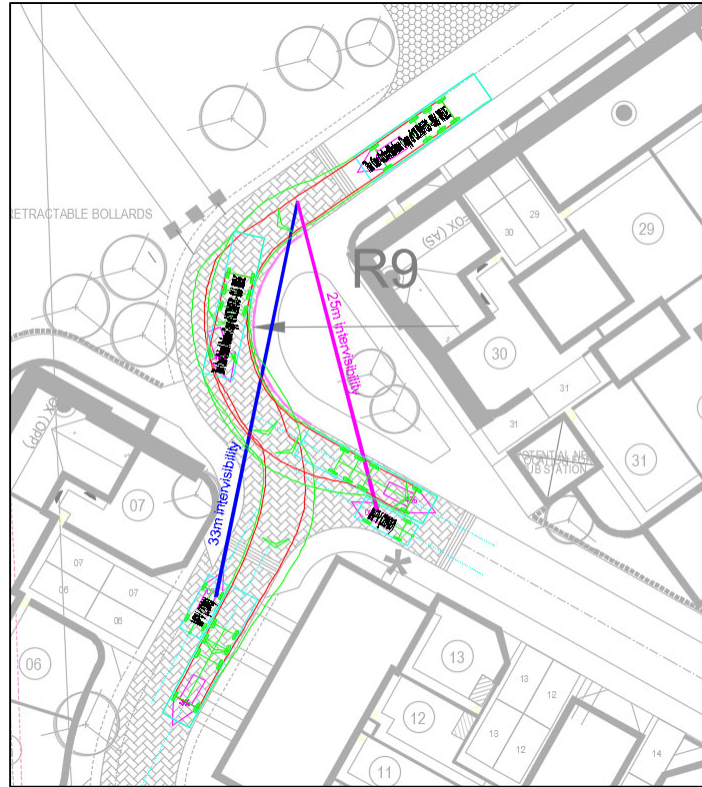
Similarly, Oxfordshire County Council Street Design Guide (referred to herein as OCC Street Design Guide), which references Manual for Streets throughout, states within section 1.2 that:

"Oxfordshire County Council believe, however, that more can be done to further reduce 'tarmac' and space taken by cars."

"Oxfordshire County Council is keen to work with designers and developers on this concept when designing new developments. We anticipate that solutions will require developers to be more flexible and innovative with their design solutions. As such, we appreciate that we too, need to have a degree of flexibility in how we enforce 'standards'. For example, for a design solution which positively promotes our vision we may need to be more flexible on what we are willing to adopt."

At the focal junction between plots 30, 07 and 11 intervisibility is achieved between a car and refuse vehicle approaching the bend or junction allowing vehicles to stop and wait if a vehicle is oncoming. The northern arm of the junction serves only six dwellings and therefore is anticipated to be associated with very low trip generations. Extract 1 below demonstrates that a car/ refuse vehicle can wait at a point where vehicles can pass one another with visibility to the next point where vehicles can return to the correct side of the carriageway. The intervisibility distance shown are 33m to the southern arm and 25m to the eastern arm which are equal to or greater than the visibility requirement of 25m for a 20mph residential layout such as this (Manual for Streets guidance). The land on the inside of the bends within the intervisibility splay and within the junction visibility splay will be kept free from obstruction and will be dedicated as highway to ensure highways have control of the land such the visibility can be maintained.

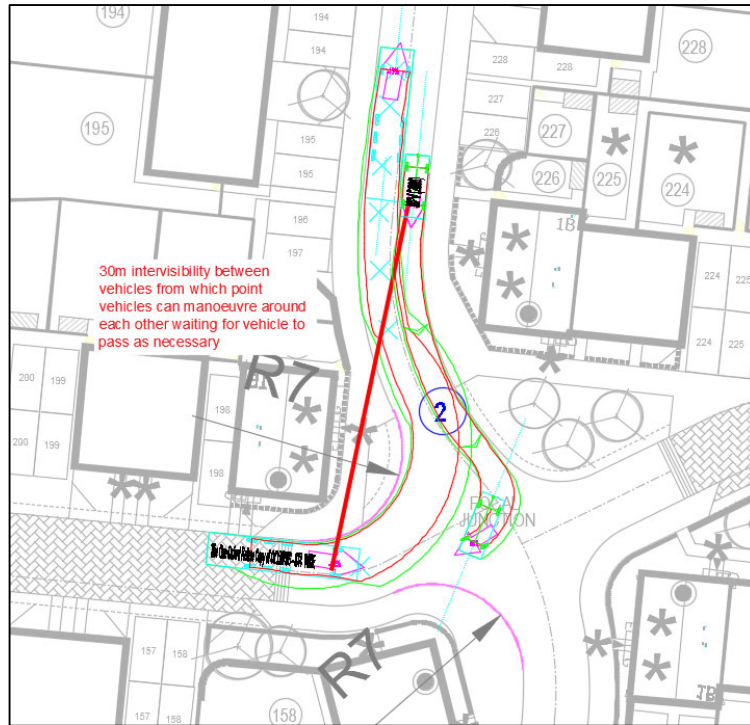
Extract 1



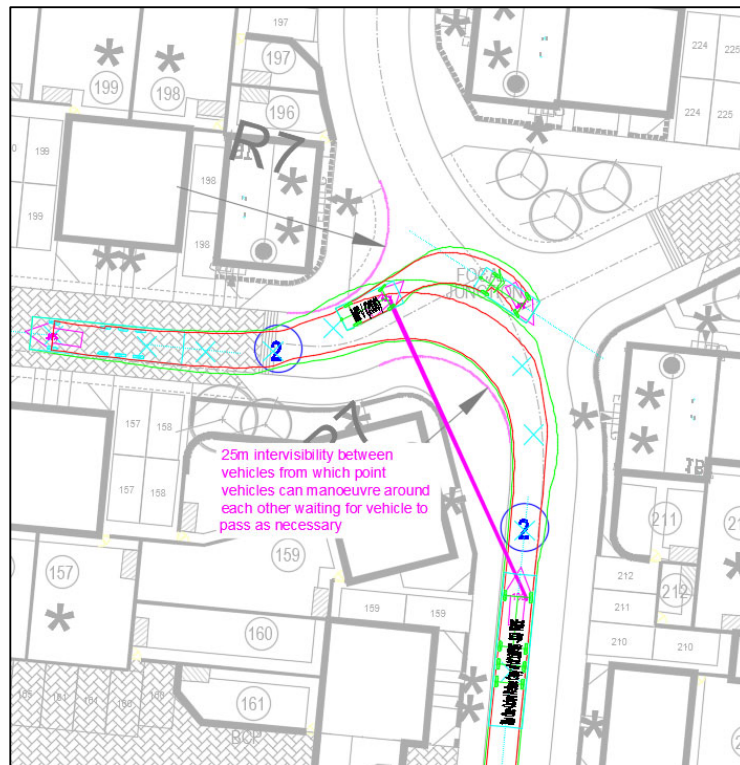
At the focal junction between plots 158, 196, 226 and 211 footways have been widened to maximise intervisibility between vehicles travelling through the junction. Extract 2 below indicates that a refuse vehicle approaching the junction from the west would have intervisibility to a car travelling southbound through the junction allowing the car to continue south on the major arm or if turning right it can wait within the junction allowing the refuse vehicle to exit the junction without conflict before the car proceeds to the west. An intervisibility in excess of 30m is achieved which exceeds the 25m visibility associated with a 20mph carriageway. Extract 3 below shows a refuse vehicle approaching from the south seeking to turn left to the west between plots 196 and 158 would have intervisibility of 25m with a car exiting the western arm. The car would be able to turn right and wait within the junction allowing the refuse vehicle to turn left without conflict before both vehicles proceed.

The land on the inside of the bends within the intervisibility splay and within the junction visibility splay will be kept free from obstruction and will be dedicated as highway to ensure highways have control of the land such the visibility can be maintained.

Extract 2



Extract 3



We consider the proposed focal junctions to be an example of areas where it should be considered acceptable to use reduced radii at the junction, and omit over widening on bends in order to improve the overall street scene, improving pedestrian connectivity and reducing vehicle speeds. It is reiterated that a refuse vehicle can manoeuvre through the junction, without overrunning the kerb or footway if unopposed but does require the full width of the carriageway to undertake the manoeuvre for a small section of carriageway. This approach is in accordance with Manual for Streets principles.

OCC Comment

A long section has not been provided and will be required to ensure compliance with the Equalities Act 2010. This must include details of the vertical alignment to determine appropriate carriageway and footway gradients. They will need to be DDA compliant i.e. maximum 1:21 or 5%.

Pegasus Response

The detailed design of the highway layout will be subject to a S38 agreement. Long sections and gradients of all roads and footways will be dictated through the technical audit at this stage. All roads will adhere to DDA and be compliant i.e. max 1:21 or 5% gradient.

OCC Comment

Forward visibility and visibility splays would be required to be dedicated as highway and free from obstruction.

Pegasus Response

Pegasus drawing P21-2662_DE_031-01 Rev E, Planning Layout, demonstrates forward visibility at pertinent bends of 25m and junction visibility at all junctions of 2.4 x 25m. OCC Street Design Guide states: "Vision splays need to be shown but refer to standards in Manual for Streets". Manual for streets table 7.1 guidance on stopping sight distances recommends a visibility of 25m is provided for highways with a 20mph design speed.

All visibility splays are free from obstruction and will be dedicated as highway to ensure highways have control of the land such the visibility can be maintained.

OCC Comment

Trees should not be present in traffic build outs as this reduces visibility of oncoming vehicles.

Pegasus Response

The previously proposed build outs throughout the layout have been removed. The revised layout does not propose any trees within the highway which would obstruct forward or junction visibility. The removal of build out also provides for two-way movement of vehicles where single file traffic was previously proposed.

OCC Comment

Im not sure if this hatching is indicating a rumble strip or not, however we would not recommend the use of a rumble strip

Pegasus Response

Persimmon have confirmed that the horizontal lines across the carriageway represent a change in surfacing or start of a raised table feature. No rumble strips are proposed within the masterplan.

OCC Comment

The application will need to comply with OCC Street Design Guide.

All new developments will need a 20mph speed limit and supporting Traffic Regulation Order and self-enforcing measures.

Pegasus Comment

The masterplan has been developed with reference to the OCC Street Design Guide and the site-specific Design Code as agreed, based on a 20 mph design speed.

The site-specific design code suggested that for primary streets, residential streets, edge of parcel streets and private drives, traffic calming should include 'change of materials' and 'shared surface treatments'. Additionally vertical features and horizontal changes of direction of travel are proposed to encourage traffic speed reduction as recommended within the OCC Street Design Guide. Reduced junction geometry and reduction in geometry radii and limiting widening on bends are also proposed to help reduce vehicle speeds. Together these features are considered to self-enforce vehicle speeds of 20mph or lower throughout the layout.

OCC Comment

Provide a Stage 1 Road Safety Audit in accordance with GG119 (5.46.1). This will be required in advance of planning permission being granted as the findings may result in the red line boundary having to change due to road safety remedial measures being required.

Pegasus Response

A Road Safety Audit Stage 1 is currently being commissioned by Persimmon and will be submitted in advance of planning.

OCC Comment

No private drainage is to discharge onto any area of existing or proposed adoptable highway. The drainage proposals will be agreed at the Section 38 Agreement stage once the drainage calculations and detailed design are presented. Oxfordshire County Council have published the "Local Standards and Guidance for Surface Water Drainage on Major Development in Oxfordshire" to assist developers in the design of all surface water drainage systems, and to support Local Planning Authorities in considering drainage proposals for new development in Oxfordshire. The guide sets out the standards that we apply in assessing all surface water drainage proposals to ensure they are in line with National legislation and guidance, as well as local requirements.

Foul and surface water manholes should not be placed within the middle of the carriageway, at junctions, tyre tracks and where informal crossing points are located.

Pegasus Response

Matters relating to highways drainage will be subject to S104 and S38 agreement in due course. OCCs comments will be taken into consideration when progressing the highways drainage proposals.

No private drainage will discharge onto adopted carriageway. Sewers will be subject to a S104 with Thames Water and will go through a technical audit with Thames Water prior to technical approval.

OCC Comment

Trees must not conflict with streetlights and must be a minimum 10 metres away and a minimum 1.5m from the carriageway. Trees that are within 5m of the carriageway or footway will require root protection.

Trees within the highway will need to be approved by OCC and will carry a commuted sum. No private planting to overhang or encroach the proposed adoptable areas.

Pegasus Response

Matters relating to the street lighting and highway trees are included within the landscape drawings provided elsewhere within the submission pack. It is noted that highways trees will accrue a commuted sum and that no private planting is to overhang or encroach on the proposed adoptable areas.

OCC Comment

The visitor parking bays parallel to the carriageway, can be adopted but accrue a commuted sum. Any other bays (echelon or perpendicular) or private bays will not be considered for adoption.

Pegasus Response

All visitor parking proposed within the carriageway will be provided within parallel bays which we note will accrue a commuted sum. No echelon or perpendicular bays are proposed for adoption. It is noted that private parking bays will not be adopted.

OCC Comment

No property including balconies should be within 500mm to the proposed highway. No doors, gates, windows, garage doors or gas/electric cupboards must open over the proposed highway.

Pegasus Response

It is understood from Persimmon that adequate spacing is provided between all properties and the adoptable highway. The minimum spacing will be adhered to as per the planning layout.

OCC Comment

No Highway materials, construction methods, adoptable layouts and technical details have been approved at this stage. The detailed design and acceptable adoption standards will be subject to a full technical audit.

OCC require saturated CBR laboratory tests on the sub-soil likely to be used as the sub-formation layer. This would be best done alongside the main ground investigation for the site, but the location of the samples must relate to the proposed location of the carriageway/footway.

Pegasus Response

Any outstanding matters of detail will be addressed within the S38 application for the site, or relevant phase of the site.

A detailed ground investigation has been carried out for the site along with a Remediation Method Statement. Further CBRs will be carried out on sub soil to be used for sub formation layer.