

HAVANT BOROUGH COUNCIL

Town & Country Planning Act 1990

Consultation on Planning Application

MEMORANDUM

From:	Environmental Health	To:	Development Control
Our Ref:	CONS/18/00932	Your Ref:	APP/18/00450
EH Case Officer Extn:	44 6677	Date:	07 June 2018
DC Case Officer:	Lewis Oliver		
DC Case Officer Extn:	44 6263		
Application Number:	APP/18/00450		
Site Address:	Land at Forty Acre Farm, Havant Road, Havant		
Proposed Development:	Erection of 320 dwellings (including a 30% provision of affordable homes), 66 bed care home, provision of public open space, habitat mitigation zone, allotments, closure of existing access and creation of 2 new access points and associated infrastructure following demolition of existing buildings.		

Observations / Comments:

I have reviewed the documentation submitted in support of this application, which is notably extensive. I am aware that this development faces some local opposition, and that some consultees have already been challenged for offering no comments. For this reason, it may be beneficial to provide a rationale for accepting documentation even where we have no material objections to make (i.e. for the benefit of the public record).

To this end, I would like to provide brief comment on a number of areas - I will be as brief as possible, but there are a number of related areas to cover, so I appreciate you bearing with me.

Public Objections

I have reviewed a small sample of public objections, and note some common themes, namely; pressure on local services (GP's / schools / public transport), the ecological impact, traffic / travel (especially to school), safety (crossing the A3, passage via the rusty cutter roundabout to services & facilities in Bedhampton), Parking, and the separation of settlements.

Only a handful of these matters are relevant to the remit of Environmental Health. Those that are comprise matters related to the demand for travel (access to services, public transport, walking / cycling, road safety for active travel, parking). Ecological impacts, capacity of services, and separation of settlements are matters for other consultees. The objections are acknowledged, and some of the issues arising will be touched on under the following sections- largely within the context of air quality.

Gas Pipeline

I note that the HSE concur with my assessment that development near the gas pipeline is acceptable, subject to observance of the SGN procedures. This is considered to address the principle of development.

Flood Risk Assessment and Drainage Strategy

Environmental Health has previously provided comments at pre-application stage, highlighting an apparent disparity in consideration of flood zones relative to the position of proposed residential units.

This disparity appears to remain within the submitted report, which appears to take the Risk Zone definition from the surface water map. Tidal Risk Zoning is acknowledged in Figure 2, but the text insists throughout that no units coincide with either FZ2 or FZ3.

Whilst this is the apparently definitive position of the report, a consideration is nevertheless given to the exception test on the basis that the development red-line includes FZ2 & FZ3 areas. The exception test is described, but a structured argument is not presented to describe how & why it is considered that the proposals should be regarded as having met that test.

The statement that the *"residential portion of development is wholly within FZ1"* relies upon the Tidal FZ2 & FZ3 areas being redefined around the ground raising proposals, and maintenance of finished floor levels (FFL's) at a minimum of +300mm of the modelled tide levels under a 200 yr + climate change.

This is implicit by the paragraph at 4.2 which states that *"...extending the development further south from the Flood Zone 1 area into Flood Zone 2 and 3...was deemed acceptable by the EA [for this reason]"*

Interpretation in this regard would appear to be a material planning matter, hinging on whether the applicant has adequately demonstrated that it is not possible to locate development elsewhere (NPPF requirement interpreted as the second bullet point at 4.4 of the RCP report).

Whilst it appears that the first and third bullet points have been met, given the apparent controversy of development the LPA may wish to be clearer of this, as it is a potential point of challenge of its determination.

As regards surface water drainage strategy, I am satisfied that the extensive use of surface-conveyance & storage SuDS will provide more than the minimum required pollution attenuation & treatment capacity. I also note that the detailed maintenance plan (landscape) includes comprehensive provision for SuDS. On this basis I have no material concerns.

I expect the LLFA to comment on matters relating to runoff rate and downstream flooding. I have not reviewed this aspect of the report.

Transport Assessment;

I have read the transport assessment in full.

- **Public Transport:** It is noted that the public transport provision on the A2030 is within recommended distances from site centre, and that the nearest rail station is both reasonably accessible and provides adequate opportunity for commuters. Services which connect to the Havant bus station hub are also noted to be provided at a good frequency, over a reasonable operating hours.
- **Traffic Generation:** Noted to be 1584 AADT (estimated), representing around 14% of the estimated 11,000 AADT traffic flow on the A2030. The development traffic estimate is broadly in line with expectation, though I would note that the origin of the 11K AADT base flow estimate is unclear. This value does not appear to be coincident with the presented speed data (recording 15K, as a 24 hr value calculated as a 5-day average), or DfT estimates (22K as AADT). Against the figure presented (and considering current guidance),

the development will have a material impact on local traffic on the A2030, and could present a material adverse impact on local air quality. An air quality assessment has been undertaken (as is required under current guidance for a traffic impact of this magnitude), and is discussed below.

- *Site Access:* I agree that overspill parking would not be anticipated given scheme layout & the provision for visitors & residents (and employees of the care facility). Overspill parking outside of the curtilage of the proposed development is considered very unlikely to occur. Given the context of the location, SPD compliant provision (as proposed) is supported, and I would be wary of accepting a <SPD parking allocation without additional demand management measures.
- *Vehicle Parking:* I agree that overspill parking would not be anticipated given scheme layout & the provision for visitors & residents (and employees of the care facility). Overspill parking outside of the curtilage of the proposed development is considered very unlikely to occur. Given the context of the location, SPD compliant provision (as proposed) is supported, and I would be wary of accepting a <SPD parking allocation without additional demand management measures.
- *Cycle Parking:* I note that SPD compliant provision is to be made, and that the design ensures rear access to gardens where houses do not have side access (i.e. accessibility of cycle storage is maintained for terrace property). This appears a little cumbersome in design terms, but is functional - convenient access to cycle storage is considered to be an essential to encourage adoption of cycling as a viable travel choice, being of equal importance to the provision of a cycle storage space.
- *Traffic Model:* route assignment has been pragmatically defined, and well justified. The derivation of traffic flow estimates is a little opaque as source data is not presented, but values presented do not differ substantially from those expected from other sources, excepting the DfT estimates discussed above for the A2030. The selection of key junctions is agreed to be appropriate, and I note that the capacity assessment identifies no capacity issues at those junctions the exception of the Rusty Cutter & Teardrop (discussed below).
- *Rusty Cutter Roundabout:* The report identifies intrinsic capacity issues which would be exacerbated by the introduction of a more formal signalised crossing at the northbound A3 on-slip. I note that the model envisages the purposeful constraining of traffic on A2030 in order to maintain flow within the junction. Highway works (the addition of a new circulatory lane) aim to compensate for adverse impacts, and provide betterment to junction circulation. This strategy risks causing a net negative impact on local air quality on the A2030 approach to the Rusty Cutter Roundabout, but this is preferable to allowing the impact to impair flows on the junction circulations (which, if allowed to occur would likely have a greater negative impact on local air quality than would allowing queues to develop on the A2030). It is acknowledged that modelling showed capacity issues to exist even in the absence of the proposed development, and in this sense, the junction improvements proposed are supported as being likely to represent an overall net positive impact on air quality around this junction.
- *Teardrop Junction:* Modelling indicates that this junction is operating >85%, but <100% of its Saturation point. It is understood that HBC led improvements are planned, and are scheduled for implementation. There are no receptors at / around this junction which are relevant to standards for ambient air quality, and so these issues are considered to be strictly Highways matters.
- *Off-site improvements:* Improvements are noted to comprise alterations to Rust Cutter Roundabout (additional circulatory lane, legibility improvements to pedestrian and cycle crossings on the route around the northern circulation) and a new pedestrian/cycle shared surface on South side of the A2030, linked / connected to existing routes. I note that local the Highways Authority agree that the new (upgraded) crossing facility on the A2030 to improve access to this pedestrian/cycling route & bus stops does not need to be signalised. I defer to their expertise in this regard. I assume that this judgement is one which aims to balance driver delay, pedestrian / cycle demand, and safety - and would further assume that

the demand / safety concerns are sufficiently low as to be able to prioritise maintaining free-flowing traffic on the A2030. In air quality terms, this is the solution that is likely to have the minimum impact on direct emissions from the carriageway. The package of measures proposed is considered sufficient as to support active travel choices towards Bedhampton without disproportionate discouragement of such modes as a result of safety concerns. It is noted that the route to be improved is on the travel-to-school route, and that improvements appear to have sought to improve facilities for this key source of travel demand - this is agreed to be a pragmatic targeting of measures, and is supported

It is agreed that the "development + mitigation proposals" scenario does not represent a severe highway impact (i.e. not being one qualitatively likely to lead to disproportionate air quality impacts)

Travel Plan

The plan sets a modest modal shift target of -5% single occupancy trips by private motor car (PCU) from a baseline of 68% (of all trips), to be shifted to PSV & Cycle

I have no reason to dispute the TRICS data sample indicating a far lower percentage of similar trips for care home, returning an estimate of around 45%. No specific modal shift targets have been applied to the care home, probably due to the small no of associated trips over which the operator has direct control, and to the risk that monitoring progress against modest targets could be made difficult by the small number respondents skewing results between surveys. I would agree that setting of targets could be challenging for these reasons.

The plan itself is fairly generic at this stage, and proposes no specific 'remedial measures' in the event that it appears targets may be missed. A generic requirement is placed upon the plan coordinator to work with HCC to identify appropriate strategies and measures to bring plan back on track if it is shown to be falling short. In this respect, Havant BC are reliant upon the oversight of HCC to ensure success of the scheme, particularly as provision is made for HCC to implement measures unilaterally should the fail to achieve objectives.

I note that the development makes specific commitment to fund the plan. This will need to be included in s106 as suggested.

The plan recognises that hard measures are required, and should be implemented early. I agree that these are essential, and even in the absence of a travel plan could be capable of achieving the plans modest target simply by facilitating sustainable travel choices (by overcoming safety concerns). The hard measures also have the potential to encourage sustainable travel choices to be made by residents of existing dwellings.

As the hard measures proposed (in the transport assessment) are so integral to the success of the travel plan, the mitigation of the impacts of travel, and the associated air quality impact - these should be secured by condition, or as part of the s106 package as appropriate.

Solid Fuel Burning

I note that a Chimney Location plan has been provided. This plan includes a schematic which appears to show a pre-fabricated chimney unit is proposed. It is entirely unclear whether it is intended for these to be functional (i.e. flued for connection to solid fuel or gas appliance), or entirely decorative.

Use for gas appliance or ventilation is uncontroversial, however solid fuel has potential for negative air quality impacts, and local nuisance issues. Whilst it is usually possible to operate solid fuel appliances without causing nuisance, a site-wide provision (albeit not including all units) may warrant specific consideration as part of the air quality assessment, particularly given

the vulnerability of the customers of the 66 bed care facility, who would have increased sensitivity to fine particulates.

Air Quality (assessment of impact)

The Air Quality report seeks to assess both the exposure of future residents of the proposed development, and the air quality impact of the (post completion) development traffic (described by the transport assessment). The Modelling is comprehensive in both scale and scope, assessing receptors on all transport routes that could be reasonably be expected to be impacted by development traffic.

The assessment is verified against Havant Borough Councils own data, and is 'ground truthed' by a 4 month monitoring campaign within the development site itself.

The model tests a scenario using National emissions factors which account for changes in the vehicle fleet emissions which are expected to result from i) penetration of low & ultra-low emission-, and electric- vehicles (LEV, ULEV & EV) in to the fleet, ii) a reduction in the proportion of diesel vehicles on the road, and iii) an increase in the proportion of vehicles with EuroV engine emissions standards (or higher).

Due to a number of factors (including, but not limited to- real-world driving emissions not reflecting controlled conditions ratings, and the emissions benefit of hybrid vehicles being 'limited-to-negative' when used on national trunk roads / for travel at national speed limit); the 'national emissions factors scenario' (scenario 1) is expected to broadly 'optimistic'

In recognition of this, the model also tests a scenario which ignores the package of assumptions encompassed by the national factors, and assumes instead that emissions remain consistent with the baseline emissions (scenario 2, assuming no reductions in average emissions on a per-vehicle-mile basis).

Scenario 2 is conservative - where no significant impacts are identified there is a high degree of confidence in the results of the assessment and the conclusions drawn from them.

The assessment shows starkly different results under these two scenario's - concluding;

- *Scenario 1*; no exceedances at any receptors, and negligible development impact under , and;
- *Scenario 2*; both exceedance of relevant air quality standards, and a substantial development impact at existing dwellings.

Whilst I agree that scenario 2 should not be regarded as being 'more likely to be correct', the true impact is expected to fall between the two results, and is not regarded as being necessarily likely to correspond closely with scenario 1.

It should also be noted that the assessment identifies exceedances of the relevant National Air Quality Strategy Objective (the "NAQS Objective" or "the Objective", 40 ug/m3 for Nitrogen Dioxide) at existing receptors in the baseline year - indicating an existing air quality problem in the area. The report acknowledges a degree of likely 'over-prediction', but does not attempt to refine the verification (which for selected monitoring results indicates good model performance).

I would agree that there are good reasons to question the accuracy of the model results presented, briefly;

- Diffusion tube positions DT2, DT6, and DT9 can be regarded as being conceptually representative of the receptors modelled to exceed air quality standards (R1, R6 & R7) relative to their distance from trunk roads, and in terms of orientation relative to the strategic road network and prevailing winds. These tubes identified concentrations less than

published background levels, and <50% of the NAQS objective.

- Receptor R7 was modelled to exceed the NAQS objective, whereas HBC monitoring within 60m of this point returned a long-term average concentration <75% of the objective (traffic growth over period between last measurement & model baseline year, 6.5%).
- There are no good reasons to expect that conditions at R1 & R6 should be materially different from those at DT2. DT2 is 30m from the kerb, and 55m from the centre of the A27 (estimated 108K AADT, tube down-prevailing-wind of road). By Comparison,
 - i) R6 is 17m from the kerb, and 57m from the centre of the A3(M), down-prevailing-wind of both the Rusty Cutter junction and the A27, with the adjacent carriageway carrying an estimated 94K AADT), and;
 - ii) R1 is elevated from the carriageway, 37m from the kerb and 60m from the centre of the A3(M), where concentrations would be expected to be lower than at DT2.
- DT3 returns the greatest concentration, at 26.96 ug/m³ NO₂, yet is up-prevailing wind of the local road sources (A27, A3(M)), located 39m/53m* from the kerb, and 52m/62m* from the centre of the carriageway, carrying 66K/75K AADT* (* - A27/A3(M) respectively).
- Comparison of DT2 & DT3 monitoring yields results which are conceptually inconsistent with the model assumptions, indicating that local conditions do not closely accord to the idealised associations between traffic volume and meteorological conditions (which are embedded within the model).
- The model was verified using HBC monitoring tube position DT19, which is thought to be measuring direct emissions from public transport vehicles, and not to be representative of roadside emissions. In this way, DT19 is thought to significantly overstate the ambient concentrations. That the model accords with concentrations at this point is an indication of significant positive estimate bias.

Based on the above, I would conclude that were the WYG model verified against points DT2 & DT3, a correction would likely have been needed to reconcile estimates, and as a result, all baseline estimates are likely to have been revised downwards.

The report acknowledges some of these discrepancies, postulating that the low concentrations monitored are likely to be a result of effectiveness of the green buffer in intercepting and absorbing pollutants. Both the WYG model, and published background estimates exclude the local effects of vegetation. The WYG monitoring results returned concentrations lower than published background estimates, which is not typical. This is considered to support the conclusion that the degree of vegetation is significant, but I do not accept that it is likely to be the only factor causing disparity between the modelled and monitored results. The degree of disparity between background estimates and measured results could be explained by the positive effects of vegetation, but the degree of disparity between modelled and measured concentrations at Pennant Hills (R7, 42.72 ug/m³ modelled, 25.36 ug/m³ last monitored) is too high to be explained by the documented capability of vegetative buffers to reduce ambient concentrations. For this reason, I would caution over-application of this conclusion.

Given the uncertainties with the model (illustrated by the conceptual discrepancies described above); the magnitude of impact remains to an extent uncertain.

It is clear that new dwellings are unlikely to be located in a region where air quality can be expected to be poor (in breach of NAQS objectives), and it is probably reasonable to conclude on balance that the 'real world' impact of the development will be somewhere between 'negligible' and 'slight adverse' at existing sensitive receptors (e.g. at Glebe Park, Bedhampton Hill, and Portsdown Hill).

Air Quality (mitigating impact)

The NPPF Requires (local policies) to aim to *sustain compliance with and contribute towards EU limit values or national objectives for pollutants*.

In this respect, it is relevant that the applicant has proposed a package of mitigation measures (mitigating the impact of travel, but equally-, and in some cases more- relevant to air quality).

In addition to those summarised under the Transport Assessment (TA) / Travel Plan (TP) sections above, I would highlight in particular the plan shown in Appendix L of the T, which shows cycle parking provision, but also identifies "*indicative Electric Charging point*"(s). A comprehensive provision is shown, but I note the word "indicative", which could be taken to mean "*provision of which is uncertain*", or it could be taken to mean "*position of which is uncertain*". This is considered to be firmly an air quality measure (the charging points are for ULEV/LEV/EV private vehicles, which have the same highway impact as a conventionally fuelled motor car). Given the national policy driver above, and the uncertainty in magnitude of impact identified in the WYG study; I would be keen to secure surety of delivery of the EV charging element. This is particularly important for parking spaces non-proximal to dwellings (across shared driveways and in visitor spaces).

If at all possible, I would recommend that a suitable condition be applied to ensure delivery of a suitable EV charging provision, or that this be included in the associated legal agreements.

I note that the Boundary Treatment Plan shows predominantly green treatments adjacent A2030. In line with the discussion above with respect to the air quality benefit of a vegetated boundary, this landscape feature is considered to be very positive, and is supported by Environmental Health.

Taken together with the 'hard' transport measures proposed to mitigate the impacts of travel, the packages of measures proposed can be taken to be sufficient mitigation / offsetting of the likely impacts identified.

As proposed (i.e. assuming that proposed mitigation package is implemented), I have no adverse comments to make as regards the principle of the development (in terms of type / layout / quantum).

Contamination

It is noted that the applicant has not chosen to respond to prior comment of Environmental Health as regards the assessment of contamination. I also note that some geotechnical assessment has been undertaken which involved the advancing of trial holes (presented within the FRA). It is possible that a contamination assessment is currently being authored, but was not completed in time to be submitted in support of this application.

I confirm, as previously, that risks are expected to be low-moderate, and limited to particular areas of the site. In this respect, it is perfectly acceptable to defer assessment until consent status is certain, and I am happy to secure investigation by means of a suitable condition.

To this end, if you are minded to grant consent, I would request the following conditions be included:

Contamination (Standard) [1]

Prior to the commencement of any specific phase of development approved by this planning permission (or such other date or stage in development as may be agreed in writing with the Local Planning Authority), an assessment of the nature and extent of contamination at the site, whether originating from within or outside the curtilage, shall be submitted to and approved in writing by the Local Planning Authority. The assessment shall be undertaken by competent persons, and the findings presented as a written report.

The assessment may comprise separate reports as appropriate, but unless specifically excluded in writing by the Local Planning Authority, shall include;

- 1) A site walk-over survey &/or sufficient desk-based research to identify;*
 - All relevant previous uses of the site*
 - Potentially significant contaminants associated with those uses*
 - Uncertainties relating to previous use or associated potential contaminants*
 - A conceptual site model identifying all relevant sources, exposure pathways and receptors, and;*
 - A summary of potentially unacceptable risks arising from contamination at the site.*
- 2) Site investigation based on (1), to provide sufficient data and information to adequately identify & characterise any physical contamination on or affecting the site, and to inform an appropriate assessment of the risks to all receptors that may be affected, including those off site.*
- 3) The results of an appropriate risk assessment based upon (1) & (2), and where unacceptable risks are identified, a Remediation Strategy that includes;*
 - appropriately considered remedial objectives,*
 - an appraisal of remedial &/or risk mitigation options, having due regard to sustainability, and;*
 - clearly defined proposals for mitigation of the identified risks.*
- 4) A verification plan providing details of the data that will be collected in order to demonstrate that the works set out in the Remediation Strategy (3) are complete, identifying any requirements for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action.*

All elements shall be adhered to unless agreed in writing by the Local Planning Authority

Reason: *Having due regard to policies DM10 of the Havant Borough Adopted Core Strategy [2011] and DM17 of the Havant Borough Local Plan (Allocations) [2014], Contamination may be present within brownfield areas of the site that could pose a risk to future occupants.*

Verification (Standard) [2]

*Prior to the occupation of any relevant part of the permitted development, any verification report required in accordance with **condition [1]** shall be submitted to and approved in writing by the Local Planning Authority.*

The report shall include results of sampling and monitoring carried out in accordance with the approved verification plan, and must demonstrate that site remediation criteria have been met. Where longer-term monitoring of pollutant linkages is identified as being necessary, the report shall clearly set out plans for monitoring, provision for maintenance, relevant triggers and contingency actions (a “long-term monitoring and maintenance plan”).

The long-term monitoring and maintenance plan shall be implemented as approved.

Reason: *Having due regard to policies DM10 of the Havant Borough Adopted Core Strategy [2011] and DM17 of the Havant Borough Local Plan (Allocations) [2014], Contamination may be present within brownfield areas of the site that could pose a risk to future occupants.*

I note from the FRA that ground level raising is proposed. It is not clear whether the mass balance of materials movements required to create the SuDS features is sufficient for the placement of material to raise minimum FFLs' to +300mm '200yr+climate change' tidal flood levels.

It is expected that the Contamination assessment will cover this matter, and seek to verify that the placed material will be suitable for this purpose (whether site-won, or imported).

Mr. Jonathan Driver
Environmental Control Officer