

Town and Country Planning Act 1990 (as amended)  
Appeal by: Avant Homes Central

An Appeal Against the refusal of  
Full Planning Permission for 72 no. dwellings (as amended)  
at land off Moorthorpe Way, Sheffield.

PINS reference APP/J4423/W/20/32558555  
Planning Application Reference: 19/03143/FUL

# Rebuttal Proof of Evidence

(in response to the OAG Rule 6 Party Proof of Evidence)

**Client:**

Avant Homes (Central)

**Project:**

n1276 Land off Moorthorpe Way, Owlthorpe, Sheffield

**Report Title:**

Rebuttal Proof of Evidence

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# 1 Introduction

1.1 This rebuttal evidence is provided in response to the OAG/Rule 6 party's evidence and sets out the Appellant's position on some of the matters raised by the OAG/Rule 6 party that relates to my area of evidence. The evidence in my proof addressed the reasons for refusal but additional response to certain elements of design has been provided within this rebuttal. I have not sought to address every area of disagreement between my evidence and that of the Council and failure to do so in this rebuttal to address any particular areas should not be taken as an acceptance of the Council's or indeed the Rule 6's position.

1.2 The scope of my Rebuttal Evidence is as follows:

- Design Evidence – focused on specific design principles.
- The Illustrative Design Exercise

## 2 OAG Rule 6 Party – Design Evidence

### Open Space

- 2.1 Section 7 of Mr Wood’s evidence attempts to build a case that there is insufficient open space provision. My proof of evidence deals with this point for Site E, highlighting that the scheme provides over double the amount of open space required by policy and explains this in detail.
- 2.2 The purpose of the Design Brief is to facilitate comprehensive development which includes the delivery of various elements of green infrastructure on a phased basis. Therefore, the fact that Site E delivers the equipped play and that future phases will deliver other elements such as the MUGA is an entirely logical and normal approach. The Appeal site delivers what is needed for itself and extra provision to the benefit of the rest of the development in due course.
- 2.3 It is noted that the masterplan prepared by Avant for Sites C-E, which is consistent with the Design Brief (see Appendix 15) identifies an overall gross developable area for the site, and a subsequent figure for green infrastructure. The plan at Appendix 32 updates the masterplan to reflect the revised arrangements for Site C due to the relationship with the woodland. This plan identifies a gross developable area of 7.8ha within the same total site area of 12.2ha including the Council’s proposed park layout as shown on the overlay plan below. This illustrates that the proposals for Sites C-E will leave almost 40% of the site undeveloped.



- 2.4 Assuming the 7.8ha of developable area this would create a requirement of approximately 0.5ha of play space, alongside 1.2ha of informal open space (10% of site area) to accord with adopted policy, making a total requirement of 1.7ha. The total undeveloped area is 4.4ha, excluding the illustrative surface water attenuation areas (Site E pond and those on the proposed park layout) it is 3.9ha, over double the requirement. This open space is part of a clear strategy and contrary to Mr Wood's evidence it is difficult to see how the green infrastructure strategy for the site is anything but substantial and comprehensive.
- 2.5 Turning to Mr Wood's point at paragraph 7.15-7.16 the northern boundary of the site includes a low impact footpath in place of the existing desire line path. This will now be set within a well-managed area of new woodland planting. It is clearly intended for recreational use and therefore is quite rightly included as informal open space.
- 2.6 Secondly, the location of the equipped play area is agreed between the Council and the Appellant as a suitable location. It is a logical and obvious position given that it will be naturally surveyed by proposed dwellings of Site E fronting Moorthorpe Rise. Whilst this is 6 dwellings currently, which is sufficient in itself, the proposal needs to be viewed in the context of Site C as future outward looking properties will come forward enclosing this area. In addition, properties to the south along Moorthorpe Dell do face this area, so the orientation is correct and a degree of surveillance is contributed from these plots as well, albeit behind a well established hedgerow.

### Connected Streets / Cul-de-sac Layout

- 2.7 The notion of the scheme being a cul-de-sac layout similar to those found in residential developments of the late 20<sup>th</sup> century is false. The notion of cul-de-sacs relates to a network of long, meandering 'dead end' streets which lack any pedestrian permeability and therefore encourage car use and make local journeys on foot longer. The majority of streets within the layout are open ended, often with development on one side only, and they connect to footpath links which ensure permeability, are naturally surveyed by the active fronts of new dwellings and therefore promote walking and cycling. It is easy and straightforward to access one of the local footpaths, including those incorporated within the site. One private drive, serving plots 45-50, does not lead anywhere, but this is a short and straight section which links directly back onto the main street.
- 2.8 It is noted that the OAG/Rule 6 Illustrative Masterplan includes cul-de-sacs designed in a similar fashion to the appeal scheme on the northern and southern edges of the north eastern perimeter block and south of the medical centre.
- 2.9 Within the South Yorkshire Design Guide Section N5.7 'Connected Streets' sets out provisions for when cul-de-sacs are acceptable, this is achieved by the appeal proposal in that: -
1. Pedestrian permeability is maintained

2. The scheme achieves safety and security (secure by design)
3. The 'non-connected' private drive (plot 45-50) is straight and short;
4. The layout makes a positive contribution to the character – the private drives allow the highway to be downgraded (narrowed) close to the woodland edge;
5. Whilst not the only appropriate design solution, the layout is an appropriate.

### Solar Orientation

- 2.10 The OAG/Rule 6 masterplan seems to pursue an east-west orientation above all other design considerations, attempting to shoe-horn in two perimeter blocks that are in fact too shallow to secure suitable back to back distances. The principle of solar gain is considered on the appeal scheme alongside all other competing priorities and an appropriate balance struck, as demonstrated by Appendix 25 which illustrates some of the other important priorities.
- 2.11 Within section N3.2 'Solar' of the South Yorkshire Residential Design Guide (page 68) the final point states "Achieving good solar orientation should not be at the expense of other design considerations such as creating active frontages, providing inclusive access, maintaining existing natural features or achieving slow traffic speeds". The appeal scheme heeds this advice, the OAG illustrative masterplan does not.

### Community Focal Point

- 2.12 The vision for the masterplan and its associated green infrastructure is articulated in the plans within the Design Brief which highlight the principle of built form at the core and green space around the edges. The idea is to create a series of community focal points as part of the green rim around sites C, D and E which will provide a positive feature for the community. This vision is illustrated by Appendix 22 which shows equipped play, an embankment for informal play and seating, free standing stones, a multi-use games area and a network of swales feeding through to Ochre Dyke, set against the backdrop of the woodland setting. This is supported by the Council and there is no need to depart from this strategy.

### Topography/Plot Series and Slopes

- 2.13 Turning to the issue of topography, my proof of evidence demonstrates a clear understanding of topography, following the necessary earthworks, and importantly the retaining features which Mr Wood's evidence fails to grasp.

2.14 The appeal scheme proposes a diagonal route to the north west corner of the site as this is/was a planning requirement to facilitate a future highway link across to Moorthorpe Way (west). The diagonal route proposed reflects the Design Brief masterplan and urban design framework plan. The proposed layout works with the topography as much as possible but balances this alongside other priorities.

### Perimeter Blocks

2.15 My proof of evidence explains the approach to the development of perimeter blocks for the site, as illustrated at Appendix 25.

2.16 The overlay at Appendix 34 demonstrates why changes to the perimeter block structure of the Design Brief are required. Development is set back further from the northern edge further than anticipated when the brief was prepared. Therefore, the perimeter blocks drawn in the Brief do not fit.

2.17 The diagonal alignment of the road linking between the medical centre and the NW corner needed adjusting, moving it further south but following the same direction. This means only two perimeter blocks are possible, with plots then backing onto the southern boundary.

2.18 The necessary retaining structures along the southern boundary would not make an appealing frontage for outward looking plots in any case, so backing on is considered to be the correct response. A point which the Rule 6 Party and SCC fail to understand.

2.19 There are no arbitrary curves. The curves are for design reasons, to preserve a sensitive area (e.g. plot 9-11), to control speed and create end stops/buildings terminating vistas (e.g. in front of plots 45-46). Completely straight routes would not be advocated/acceptable to highways and would result in vertical traffic calming (speed bumps) as opposed to other design-led measures (junctions, bends etc)

2.20 The key principles in the Residential Design Guide under B1.2 Perimeter Blocks state that: -

1. *"The design of blocks should not be uniform but should reflect the character of the different surrounding streets that make up the block"* – therefore softer curved edges on the periphery and straighter alignments in central areas is an acceptable approach.
2. *"Variation in blocks that comes about from the differences between surrounding streets should be used as the basis for introducing variety in building type within a block and street"* – therefore curved streets with wider frontaged plots create softer edges and then straighter routes are formed centrally, included terraced forms within courtyards.

3. *“Special corner buildings or arrangements of plots should be used in corner zones to front both sides of the corner, in particular at the junction of higher order streets and in higher density areas”* – the use of landmark buildings and corner turning buildings is highlighted in Appendix 18 (Building for a Healthy Life Assessment) demonstrating deliberate changes in orientation to address key corners and focal points (e.g. plots 19-22).

### 3 OAG Rule 6 Party – Illustrative Design Exercise

#### General Points

- 3.1 Illustrative or not, a design exercise intended to compare and contrast with our design approach must be prepared on the basis of proper planning, design and highway standards otherwise it is not deliverable in an acceptable way. The OAG illustrative masterplan fails to do this.
- 3.2 The OAG masterplan proposes grossly deficient parking provision for a site earmarked for family housing. The plan seems to illustrate only parallel parking to the front of properties. Based on bays 6m in width it is estimated that only 50-60 spaces are designed, for 55 dwellings, only 1 space per dwelling and with a complete lack of visitor parking. Based on the size of each house footprint it is assumed that the houses are mainly 3 bedroom properties. A minimum of 2 spaces per dwelling is therefore required for every 3 bedroom property. The OAG plan therefore shows half the necessary parking. Parking represents a land take that impacts on the number of houses proposed and therefore density. Another 50 spaces are required, at the cost of between 5-10 dwellings within the same developable area. The density would be much lower as a result.
- 3.3 The back to back distances shown on for the OAG illustrative masterplan fail to achieve 21m back to back, as specified in the South Yorkshire Residential Design Guide. More developable area would be required to satisfy this requirement. Again, lowering density. It is noted this would potentially require development moving closer to the woodland.
- 3.4 Garden sizes are generally 6.5m in length, with some as small as 5m. These are severely lacking for a family dwelling and contrary to the minimum sizes specified within the South Yorkshire Residential Design Guide of 60 square metres for a 3 bedroom house with the gardens on the OAG Illustrative Masterplan measuring approximately 45 square metres.
- 3.5 The OAG masterplan does not accord with highway standards, lacking turning facilities if roads are to be adopted, or excessively long private drives which do not meet standards, serving more than 5 dwellings and/or being too long for a fire appliance/waste collection. Designing these properly will either increase developable area, and impinge on open spaces and/or proximity to the woodland or result in the loss of plots, again lowering density either way.
- 3.6 In addition to these points the scheme is designed without consideration of external works, site engineering and the required level of retaining. It is noted that retaining walls between plots are required, no indication is given of where these would be positioned. Logically this would be between the perimeter blocks where the east-west walkway is proposed, which already lacks surveillance from the front elevations of properties and would therefore resulting in a very poor quality route, and the impact of such structures combined with very small gardens would lead to a very poor level of amenity for new residents.

- 3.7 The OAG illustrative masterplan highlights an alternative location for an equipped play area. This is positioned around the back of houses, with no natural surveillance at the ground floor, instead rear boundary fences. This will only serve to encourage anti-social behavior and is completely at odds with the principles of designing out crime. In addition, the required 400 square metre play area is only just accommodated, but the required 20m buffer from the equipped play zone to any residential property is not provided and would eliminate every property which is plotted around the play area.
- 3.8 Based on the above the illustrative design exercise is not credible and therefore claims of being more compliant with the Design Brief and achieving greater density are at best questionable, and lacking in substance.

### Assessment of the 'Design Principles'

- 3.9 Mr Wood's evidence sets out the 'design principles' of the illustrative design exercise which I set out and respond to in turn below: -
- 3.10 The "*design is based on the award winning Goldsmith Street housing scheme but with enlarged dwelling sizes and gardens with similar plot sizes to the appeal scheme*".

**Response:** The OAG masterplan lifts a scheme from an urban area near Norwich City Centre, one of the flattest parts of the UK, and places this in an edge of settlement location, on a hillside, close to open land. The image below illustrates the precedent scheme in its flat and urban context, not on sloping land at the edge of the settlement.



Image courtesy of Mikhail Riches/ John Fielding aerial photography

The houses on the OAG masterplan are mostly the same size, equating to the footprint of a 3 bedroom house, with the exception of the corner buildings, and therefore lacking in mix and the gardens are too small for family housing. Mr Wood states that plot sizes are similar to those of the appeal scheme, this is simply inaccurate, they are much smaller, with a plot ratio of above 50% (compared to an average of 32% for the appeal proposal). In comparison the appeal scheme provides family housing which offers a full range of choice in the following forms: -

- 3 bed semi-detached
- 3 bed detached
- 3 bed townhouses
- Small 4 bed detached
- 4 bed detached (2 storey) with integral garages
- 4 bed detached (2.5 storey) with two living rooms and 2<sup>nd</sup> floor master bedroom
- 4 bed detached (2 storey) with detached garage
- A handful of 5 bed detached houses.

3.11 *"A series of long, linear blocks with flat green roofs"*

**Response:** This is a design choice, but not something required by policy or the Council for this site, or other new developments in the local area (e.g. Taylor Wimpey at Halfway or Miller Homes at Westfield/Mosborough).

3.12 *"A predominant east-west alignment to optimize passive solar gain"*

**Response:** The layout seems to have been designed to optimize solar gain at the expense of every other design priority creating a sterile layout with: -

1. no buildings to terminate views/vistas along streets,
2. a very poor frontage to the existing public right of way along the eastern boundary.
3. a poor focal point to the scheme at the junction with the medical centre, seemingly comprising some trees and a bench, due to a lack of enclosure and where buildings exist, a poor orientation (which is too rigid).

The South Yorkshire Residential Design Guide states that: -

**"Achieving good solar orientation should not be at the expense of other design considerations** such as creating active frontages, providing inclusive access, maintaining existing natural features or achieving slow traffic speeds".

3.13 *"Streets which are broadly either aligned or perpendicular to the land contours"*

**Response:** The layout ignores the diagonal alignment of the road from the medical centre to the north west corner of the scheme which was required by the Council to facilitate a future link. It also seems to ignore any external works or retaining structures required and highway standards.

3.14 *"A linear street layout with vehicular routes around the perimeter and an east/west play street running through the site. Parking is to the front of the plot, the play street is vehicle free"*.

**Response:**

- Parking provision is completely sub-standard, estimated to be 1 space per dwelling for a development of family homes. This is completely unrealistic for an edge of settlement location, as evidenced by the number of vehicles parked across the surrounding estates.
- The lack of parking and the associated land take raises significant doubts as to the realistic density that can be achieved when this is properly designed in.
- There is a significantly increased amount of wider, adoptable standard road wrapping round the scheme, particularly near to more sensitive areas such as the woodland (northern) edge where incursion to the stand off to the woodland occurs (see paragraph 3.17).
- The proposed 'play street' runs to the back of proposed dwellings, therefore lacking natural surveillance and creating secure by design issues, the precedent for this is pictured below. This might be suitable in an urban scheme, but not within the context of the appeal site where alternative routes exist, fronted by dwellings, which take advantage of the woodland setting.



- The likely need for retaining walls in this area also adds further questions to the quality and validity of such a route as the retaining structures would create a significantly different space which would be even less appropriate. The inclusion of this feature itself demonstrates how the OAG masterplan is a cut and paste exercise which lacks an understanding of topography and the wider context of the site.

3.15 *"A substantial, focal public space in the centre of the site"*

**Response:** This feature is not illustrated in the masterplan accompanying the design brief. The proposal appears to be an area of green space with some trees and seating area which lacks enclosure by focal buildings, with no change in orientation to present towards the junction with the medical centre. I do not consider this to be substantial. The focal point within the appeal site is designed as a hard landscaped space to contrast between the urban heart and woodland edge.

3.16 *"A convenience store next door to the medical centre"*

**Response:** The evidence of my colleague Roland Bolton deals with the principle of this matter. In design terms: -

- the size of this unit is smaller than a convenience store;
- it seems to assume parking can occupy that of the medical centre which seems unlikely;
- no provision appears to be made for servicing;
- more developable area would be required meaning the 55 dwellings output suggested by OAG would not be achievable if this was to be delivered;
- From the visualizations the orientation of the building appears to face the medical centre, generally the frontages of these buildings are not active on all sides, therefore a blank/rear elevation is likely to face Moorthorpe Rise creating a poor outlook in design terms.

3.17 *"NW-SE hedgerow is retained alongside semi-natural green spaces and an enlarged northern buffer".*

**Response** – Semi-natural green spaces are not illustrated or shown as a requirement of the design brief and are not considered to be required. The northern buffer on the OAG illustrative masterplan is larger in some areas; however, there would be encroachment in others based on the proposed 15m buffer zone and proximity to veteran tree 200603. The incursions are illustrated on the drawing on the next page which can be found in Mr Toppings evidence (Drawing No: 51371\_SK\_ARB\_104).



The appeal proposal creates a swathe of new woodland along the northern edge in a similar fashion, which draws it towards the proposed new houses in an attractive and appropriate manner as illustrated in my proof of evidence. The evidence of my colleagues Mark Topping (Arboriculture/Landscape) and Andrew Baker (Ecology) provides further evidence on this subject.

3.18 *"Over half of the site is retained as accessible green space".*

**Response** – the appeal site provides almost double the amount of open space as required by policy and the approach to the northern boundary creates an attractive woodland edge. The overlay at Appendix 34 demonstrates the significant reduction in developable area in comparison to the Development Brief.

3.19 *"The density shows 55 dwellings at a net density of 39 dph".*

**Response:** the illustrative exercise undertaken by the Rule 6 party demonstrates that even with unacceptable back to back distances, sub-standard small gardens and deficient parking a density of 40 dph cannot be achieved.

The overriding purpose of increasing density is to maximise the number of houses on a given piece of land. It is to use the land efficiently. It is the dwelling output overall from any given site that is the key. The outcome of the OAG exercise is surely to build more than 72 dwellings on the site, otherwise it has missed the whole point of increased density. It has evidently failed.

Paragraphs 3.2 to 3.5 of this rebuttal proof cast doubt over whether the level of density quoted to achieve the 55 dwellings is achievable. Even if the amenity and garden size issues were ignored, providing sufficient parking to meet standards would likely result in the loss of between 5 and 10 plots across the scheme to accommodate the parking. This would reduce the density of the scheme to 32-36 dph. Taking that a step further, ensuring acceptable amenity distances and garden sizes would lower the density even further, back towards 30 dph.

The realities of applying design and technical standards, which have not been considered with the illustrative masterplan, demonstrate the impact on density and the challenges of developing at a higher density. This is without factoring in other important considerations for this site such as topography and mitigating the impact of retaining structures through good design which naturally reduce density if more acceptable living spaces are to be created.

## Comparison with the Appeal Scheme and compliance with the Design Brief

3.20 The OAG illustrative design exercise is intended to show an alternative means of developing the site. Instead, it shows a significant departure from the design brief and in addition: -

1. Demonstrates an inappropriate and out of context form of development for an edge of settlement location.
2. Fails to demonstrate how an increase in density and more importantly overall dwelling output could be created despite setting out to do so. This is because the illustrative exercise ignores design and amenity standards found in the South Yorkshire Design Guide and parking requirements and highway standards.
3. Fails to provide a mix of family housing and instead provides predominantly 3 bed dwellings with very small gardens, contrary to the South Yorkshire Residential Guide minimum standards of 60 square metres.
4. The developable area is at odds with the design brief.
5. The diagonal vehicular link to the north west advocated in the brief is not considered.
6. The existing hard surfaced public right of way is not addressed.
7. A poorly conceived east-west route through the back of houses is proposed.
8. A play area around the back of houses, lacking natural surveillance, facilitating anti-social behaviour and with sub-standard buffers to residential properties is proposed.

9. A poor frontage to Moorthorpe Rise, south of the medical centre is proposed.
10. The built form fails to create interest, terminate vistas and address frontages due to its rigid form in the pursuit of solar orientation at the expense of all other design priorities.

3.21 In contrast the appeal scheme meets all design and technical standards and: -

1. Provides a form of development which responds to the prevailing character of the area through a mix of predominantly detached forms but also townhouses, semis and terraces.
2. Proposes a density with a more urban heart (34dph) and a lower density towards the woodland edge (25dph). This density is carefully designed so as not to intensify development in areas with significant retaining structures, resulting in poor amenity, something not considered by the Rule 6 Illustrative Masterplan.
3. Provides a broad mix of family housing ranging from 3 bed semis/detached and townhouses through to different types of 4 bed properties to suit a variety of lifestyle choices, plus a small number of 5 bed houses.
4. Follows the established developable area within the design brief and the principle of an urban core and green space around the periphery. At the same time the proposals factor in the new information to pull the development back from the woodland edge.
5. Provides a primary route that facilitates a link to the north west corner of the site, following the diagonal route specified on the plans within the design brief.
6. The layout and building orientations are carefully positioned to address key frontages such as the hard surfaced public right of way, the node at the junction with the medical centre and in other locations where changes in the path of the road allows for buildings to terminate vistas along streets.
7. The existing desire line path along the northern edge of the scheme is retained and enhanced with a low impact path, set amongst new woodland which is carefully planted and managed to preserve the existing woodland and draw this character towards the houses, which overlook this area and provide natural surveillance.

8. The equipped play area is positioned in a suitable location as part of the wider green infrastructure strategy, overlooked by outward looking existing dwellings on Moorthorpe Dell (partially screened by existing vegetation) and nos 22 and 24 Moorthorpe Rise and new dwellings which will face the play area (plots 69-72), ensuring natural surveillance. The 20m stand-off requirement from the equipped play zone will also be achieved.
  9. The dwellings overlooking the play area will also screen the medical centre parking/fencing and create an active frontage to Moorthorpe Rise.
  10. The building layout is carefully designed to frame and/or terminate key views, soften sensitive edges and create legibility.
- 3.22 Overall, the OAG illustrative design exercise serves to reinforce the quality of the appeal scheme which follows the design brief and responds to the more detailed site conditions/constraints in a sympathetic manner.

## 4 Conclusion

- 4.1 In conclusion, this rebuttal evidence demonstrates that the appeal scheme closely aligns with the Design Brief to create a considered response which understands and responds to the context of the site, in particular the topography, and meets a more comprehensive set of design principles and priorities as set out within the South Yorkshire Residential Guide. The appeal scheme is a considered response to the Design Brief and the principles of good urban design and delivers an appropriate quantum of development and green space for the site, creating new homes and gardens which are appropriate to the setting and provide a good level of amenity. The serious shortcomings of the OAG scheme that attempts to "do better", but fails on several fronts, merely serves to demonstrate the suitability of the Appeal proposals.