Design Evolution Statement

Land off Dinting Vale, Glossop

Created on behalf of Wain Homes February 2023









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Original Proposed Layout 01

01

1.1 Original Layout

The Original Layout (right) was submitted to High Peak Council. FPCR have also received a copy of the documentation and have submitted their own response. A meeting took place in which the council voiced their opinions and raised concerns regarding the following issues:

- Each side of the site contains a heavy woodland which would need an ecological link connecting them throughout the site, ideally in multiple locations.
- There is a need for above-ground surface water drainage, ideally in the form of a swale, or an attenuation basin in the form of a pond somewhere on the site. A suggestion was made to provide tree pits which would solve the ecological corridor issue as well as partially contributing to this solution.
- There was a significant concern regarding the north side of the site, with regards to site access. The concerns being that in order to achieve this sweeping road that ascends the steep slope at an acceptable gradient, this would entail removing a large amount of the existing woodland. This was originally partially mitigated by re-planting on the green space and towards the back gardens of plots 1-8. However, this was not enough to accommodate the tree loss so more planting will be required.
- The north parcel, containing plots 1-8, also showed some concern with the back gardens facing the site entrance from both the council and FPCR (point E3, 13 and F10), as there was no scope to flip the houses as the standoff to the medium pressure gas main under the PROW also needs to be fronted, there was a request for a solution to be found regarding facing the site entrance and accompanying green space so as to not promote anti-social behaviour and provide passive surveillance across the site. A comment from FPCR (point E8) mentioning that Plot 2 should have side windows to face the Public Right of Way was also taken on board.
- The west side of the site also requires a 10m ecological buffer as the existing tree belt would need to be pruned and cut back in order to provide plots 82-92 with acceptable rear gardens.
- There were concerns raised with the spine road, focused on the overall speed of the road. Due to its straight nature, there is a large opportunity for drivers to reach higher speeds which would be unsafe for the local residents, so a road with extra turns was requested to reduce car speeds throughout the site.
- Provision for a LEAP (Local Equiped Area of Play), should be allocated somewhere on the site to allow for a safe play space for the local children in and around the site and Glossop itself.
- The existing Public Right of Way and sub-surface medium pressure gas main concerns were raised regarding the amount of use of the path itself, potentially to remove the turning head and move plots 99-100 access to another point on the main accessway. FPCR have also commented on this area on point E7 saying that the junction crossing is 'very convoluted' and 'tarmac dominated' and that it doesn't sit well with the current PRoW. A potential solution was offered in the form of alternative finishes or a shared surface with a better blending of the street.
- FPCR point E9 states that 'There are a few areas that have numerous frontal parking spaces in a row without adequate breaks for landscaping and tree planting' and suggested the use of tree pits to mitigate this.



Original Colour Layout of Dinting Vale, Glosson

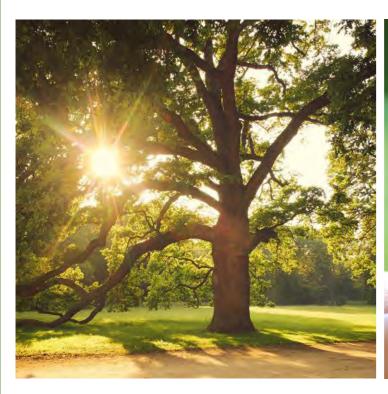
Proposed Amendments 02

02

2.1 Ecology

The ecological issues that were raised in the meeting were among some of the larger issues. They also influenced the majority of the site re-design as outlined below:

- The 10m ecological buffer standoff labelled by point 1 has been added to the western boundary which now gives the existing tree belt ample room without the need to prune or cut back any foliage. In addition to this, as to use the space more efficiently, a swale (which will be discussed later in this document) and a 3m footway/cycleway has been added to better utilise the newly aquired public open space.
- There have been 3 ecological corridors added in the form of street trees at points 2, 3 and 4. The footpaths have been widened to 3m to accommodate the additional trees, with the added benefit of installing tree pits in order to add to the surface water drainage values. These corridors connect the east and west woodlands allowing a safe passage for birds, bats and other wildlife to travel from area to area.
- Planting has been applied to the north of the northernmost parcel and on either sides of the sloping site access. This was done to mitigate the tree loss and to also provide a support to the rear gardens of the adjacent plots using the tree roots as part of the embankment.
- Extra trees and hedges have been added throughout the site to further augment the ecological benefits, providing safe spaces for the local wildlife, enhancing biodiversity.







Dinting Vale Colour Layout depicting ecological links and planting

2.2 Drainage

A provision for surface water drainage was requested as well as a place for adequate storage (SUDS). This could be either in the form of a pond, attenuation basin, tree pits, swales, or all of the above. Below is the outline of what design decisions were made and how they were applied to the new proposed Dinting Vale scheme:

- The 10m ecological buffer has allowed us to provide accommodation for a swale to run up the western boundary of the site as shown by points 1 and 2. The swale has been placed relatively close to the tree belt as to maximise the excess green space which would add to the public open space for the site as a whole.
- Points 3 and 4 are highlighting the connections of the swales to each other, and to the pond feature that will be explained below. The connection cannot be above ground due to the cycleway at point 3, and the main estate road at point 4 which are unable to accommodate any form of surface water drainage. In order to address this, two culverts have been added which will take the water below the surface of the road and exit on the other side.
- There is a provision to have an attenuation basin in the form of a pond for both adequate storage for the drainage, as well as providing an ecological benefit for the local wildlife. Point 5 shows our solution to this problem. This is an above ground, cascading water feature with multiple pools of water which slowly decrease in size, all connected by a small waterfall-like aspect leading to a final culvert which feeds out to the outfall at point 6. This also provides a visual focal point for the residents of Dinting Vale, as well as anyone using the public right of way. FPCR has raised several comments mentioning the frontage of the dwellings on the south side of the Public Right of Way (points E13 and F10). This was not possible due to the addition of this attentuation basin water feature. However, there have been two dual-aspect plots added on either side which provide active elevations facing this area which was also partly mentioned under FPCR comment F10.







Dinting Vale Colour Layout depicting surface water drainage elements

2.3 Site Access

There was a significant concern regarding the north side of the site, namely the site access. The concerns being that in order to achieve this sweeping road that ascends the steep slope at an acceptable gradient, this would entail removing a large amount of the existing woodland.

- This was originally partially mitigated by re-planting on the green space and towards the back gardens of plots 1-8. However, this was not enough to accommodate the amount of tree loss so more planting is required.
- The road gradient is set to its absolute minimum. There was ongoing consultation with the highways engineers to try to reduce the length of the road, unfortunately this was not possible. This is due to the gradient of the existing land from where the site is to be accessed (point 1) and subsequently where the medium pressure gas main sits at the top of the slope (point 2), which cannot be built upon.
- With the road position fixed, the removal of trees is still an issue. As mentioned earlier in the document, there is a need to replant any trees that have been removed to mitigate the ecological impact. Therefore a replanting scheme has been implemented which is demonstrated at point 3. Here we have introduced a number of trees onto the site access road, as well as replanting as much woodland as close as possible up to the road in order to maximise the amount of trees regained.
- There is an emphasis of replanting to the rear gardens of the northermost parcel as to reduce the visual impact of the rear fences from the site access as well as contributing to the a reinforcement of the steep embankment.

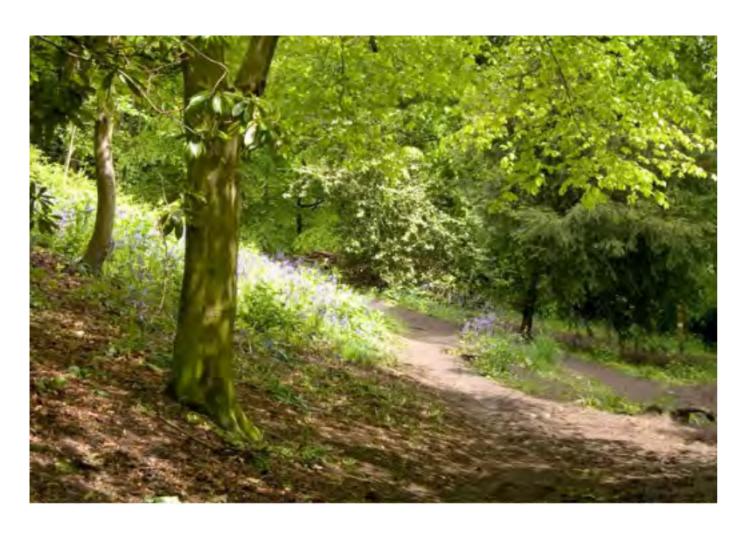




2.4 North Parcel

The northernmost parcel containing plots 1-8 has been amended and improved regarding the orientation and outlook to the site access and how it fits into the site from an urban design perspective.

- Point 1 illustrates the most significant element of the design choice: The existing public right of way which houses a medium pressure gas main below it. From an urban design perspective, the public right of way would need to be fronted by the north parcel which forces the rear gardens to address the site access. There was an inital thought to also front the site access. However due to the aforementioned level issues and site gradient, this was not possible.
- Point 2 indicates the need to mitigate and reduce the site access view to the rear gardens as much as possible. This is done, as discussed previously, through adding planting to the rear gardens which also reinforces the enbankment, additionally providing a screen to the back of the fences.
- Passive surveillance and frontage is still a concern, regardless of the design choices we have made. So in order to address this, plot 1 (indicated by point 3) is a bespoke type with side access to the north facing wall which provides passive surveillance, increases activity and usage of the north side of the site as well as providing the users of the site access an active streetscene. Plot 2 will also have side windows added in to face the Public Right of Way as per the recommendation from FPCR.





Dinting Vale Colour Layout depicting the northern parce

2.5 Highways

Due to concerns regarding the spine road, traffic calming measures and a more tortuous design have been implemented to reduce traffic speeds.

- The main spine road of the site has had a curve implemented at point 1 in order to reduce the overall speed. Across the site there are no straights longer than 70m with perpendicular, 90 degree corners at strategic points to reduce driver visibility causing them to slow down and take more care whilst traversing the site. This would generate a traffic movement of less than 20mph required by residential estates.
- There has also been a sinuous road added to the eastern boundary to help contribute to reducing overall speed levels. Originally this also included a 3m footway/cycleway which provided pedestrian access from the south west public right of way up to point 3. However, this then impacted the root protection areas present on the eastern boundary, this was then moved into the 10m ecological buffer mentioned earlier in the document.
- The existing Public Right of Way and sub-surface medium pressure gas main, concerns were raised regarding the level of traffic on the track, potentially to remove the turning head and move the access to plots 99-100 to another point on the main estate road. Point 3 illustrates how this was achieved by removing the turning head and implementing a raised table of block paving. Plots 99-100 have now been changed to an apartment block. This enables the design to incorporate a rear parking court connected by a private drive served from the existing track, which also allows for some hedged planting to further divide the private drive and existing track. As per FPCR recommendation F11, this also contributes to the amount of usable POS that better relates to the Public Right of Way.
- FPCR comment F5 recommended that the secondary streets are to be straightened as to be more characteristic of the High Peak which is a style that is also found in the nearby eastern streets such as Simmondley Lane and Primrose Lane. This was taken on board and applied to the layout accordingly to emphasise the 'more linear grid block' structure.





2.6 Play area provision

Provision for a local equiped area of play (LEAP), should be allocated on the site to allow for a safe play space for the local children in and around the site and Glossop itself.

- There is provision for a play area, however, due to site constraints, it was not feasible to provide this all in one location. The required coverage will therefore be divided into multiple areas distributed around the site in appropriate locations. In addition to spreading the locations, trim-trail features will be applied rather than the traditional LEAP equipment. This also lends itself to the wooded nature of the site as well as the location close to the trees, meaning a trim-trail style would be appropriate here.
- The primary location of the play area is situated at point 1 along the public right of way and along the eastern boundary on the opposite side. This provides a pleasant track for families to walk down and allows the children to move from obstacle to obstacle along the route providing transitional play or play-on-the-go.
- This is also the case towards the southern area of the sinuous road that goes from point 1 to point 2. This area is a prime location for a trim-trail, being near the top of the gradual slope, this route provides views over the southern woodland that leads down to the brook south of the site boundary.
- Point 3 highlights the 10m ecological buffer that has been added in this iteration of the design. Concepts for the play area trim-trail have been included in the design of this public open space, offering ample opportunity for children to use these natural-looking obstacles along the 3m public footpath/cycleway. This, however, was removed due to concerns raised by the ecological consultant over the disturbance of local fauna in this area.







Dinting Vale Colour Layout depicting play area provision

Conclusion SECTION 03

03

3.1 Conclusion

Summary and Conclusion

This Design Evolution Statement is a document to support the current amended iteration of Dinting Vale, Glossop. It outlines the design changes implemented following the High Peak Council meeting and to address the feedback received by the various consultees.

The site has still been designed to complement and respond to the surrounding area, create local identity and a cohesive sense of place.

Ecology

Ecological corridors have been added in the form of street trees connecting the east and west boundary woodlands. This is present on all east-west roads including the public right of way.

There is also a tree replanting scheme put in place to help mitigate the tree loss from the site acess and any other trees that have been removed throughout the site. The layout now allows for a 10m standoff to the Local Wildlife Site to the west.

Drainage

Adequate surface water drainage has been added to the site in the form of two swales that have been connected through culverts, which also connect to the japanese garden style attenuation basin feature which also serves as a pond for ecological benefits. This also then feeds into the existing outfall to the east of the site which suits the location and direction of water flow for this feature.

Site Access

The site access road unfortunately cannot change due to the site topography. However, we have introduced more planting in the public open space as close as possible to the road itself and up to the rear gardens of plots 1-8 to mitigate this.

North Parcel

The northern most parcel containing plots 1-8 has been designed to front the public right of way and a side aspect bespoke house type has been applied to plot 1 to provide activity and passive surveillance towards the site access.

Highways

The overall speed of the road has been reduced by adding in more turns and corners on the main estate road without any straight road exceeding 70m.

Play Area Provision

The play area provision has been distributed througout the site to accommodate trim-trail features in appropriate locations around the site.

In conclusion, it has been demonstrated through this statement and the amended drawings, that the design feedback received from the council and the various consultees has been taken on board and sufficiently rectified.



