

5.0 Development Strategy

The factors which have been carefully considered and have influenced the siting of the polytunnels include the following:

- Landform/topography;
- Vegetation cover and type;
- Seasonality;
- Public views and visual impacts;
- AONB, unregistered parkland, landscape character and residential boundaries.
- Guidance contained in Herefordshire Council SPD Polytunnels 2008.

The development proposals are split into two distinct areas of Cobrey Farms, which have no visual links.

5.1 Frogmore Application Site A

5.1.1 Existing buildings

The assessed polytunnel application site selected at Frogmore contains no existing buildings. However, there are a small number of residential dwellings close to the boundaries of growing area. The polytunnels SPD gives guidance on the appropriate distances from residential boundaries and from dwellings. In the case of the Frogmore the following residential constraints have been identified. However, there is no impact on the settings or curtilages of listed buildings and no impact on designated conservation areas:

Wallow Farm Bungalow is the closest dwelling to the polytunnels at a distance of 30m. This is closer than the Polytunnel SPD recommends; however, the bungalow is tied to Cobrey Farms and is occupied by the farm foreman. Therefore a 50m stand-off is not a requirement in this case. The water tank and closest polytunnels are separated from the bungalow by mature hedging which can be enhanced to

further reduce any impacts on residents, although it is barely visible from public viewpoints.

5.1.2 Landform/topography/landuse.

Currently Application Site A is in production for blueberries. The surrounding land is mixed arable and pasture with woodland dominating to the north west and residential curtilages abutting the development areas. Site A is located on the eastern side of a shallow valley, with a stream running along the valley floor. Site A is on a north west facing slope, surrounded by the gently undulating lowland landscape of the Principal Settled Farmlands. It is well-contained within a distinct landform, which forms a discreet valley floor landscape zone.

5.1.3 Vegetation cover and type

The vegetation on and in close vicinity to the Application Site A is predominantly deciduous in nature; therefore seasonality is an important factor in determining the mitigation effects of existing and proposed planting. The site visits were undertaken during the winter months when leaf cover was at a minimum, thus providing a worst case scenario.

Site A exhibits traditional broadleaf hedgerow boundaries which contain some standard trees. The valley floor contains riparian trees dominated by a row of black poplar hybrids which separates the two fields and acts to reduce intervisibility. A small copse close to the valley floor on the northern western edge of the site is an important feature in reducing the impact of the polytunnels from the PRoWs and countryside to the north. The woodland of Penyard Park forms a dominant feature of the landscape and filters views of the polytunnels from the PRoWs which run along its edge. Extensive broadleaf tree cover in the vicinity of Frogmore and Parkfields and along the valley floor to the south of the site are effective in filtering all views from that direction.

5.1.4 Building Design and Site Layout

The development proposal comprises approximately 2.72ha of standard polytunnels (see Appendix 3) and attendant infrastructure. Application Site A contains unsurfaced access tracks and site features as shown in the table below:

Area number	Location	Approx. field area hectares	Ancillary features
A	Frogmore	3.03 ha	Water storage tank and pond

Application Site A can be located within the field in compliance with the Herefordshire Council SPD Polytunnels 2008. The water tank has been located in an elevated part of the field close to Wallow Farm Bungalow. However, it is a low key structure which is largely screened from view by the field hedging. The tank has a black non-reflective roof and the galvanised elevations can be given a dark, non-reflective (merlin grey) coating to further reduce their impact. The pond is sensitively located on the lowest part of the field, next to the existing pond and the stream. Construction should ensure that there is no damage to the retained vegetation in the vicinity. Spoil should be spread and not stock-piled. A comprehensive landscape scheme, will further mitigate any identified detrimental impacts, and will follow the enhancement priorities of the Herefordshire Landscape Character Assessment 2004 (updated 2009).

5.2 Coleraine Application Sites B and C

5.2.1 Existing Buildings

The two proposed polytunnel development areas selected at Coleraine contain no existing buildings and there are no residential dwellings close to the boundaries of the growing areas. The proposed developments radiate from the existing farm development at Coleraine Buildings, and from many viewpoints are seen in the context of that development.

Application Site C abuts Coleraine Buildings at its western end and shares a stream boundary with the nursery and propagation area to the north. Therefore, the cumulative impacts will be considered in the landscape strategy.

Application Site B is located to the north west of Coleraine Buildings and does not directly abut the farm buildings. However, it shares the stream boundary with the seasonal workers caravan site, with intervisibility between the two, meaning that cumulative effects will need careful consideration. The top section of the site, although not abutting any residential properties, is visible from a number of properties to the south west along Coughton Lane.

5.2.2 Landform/topography/landuse.

At the time of the initial (2009) site visits, Application Site C was ploughed with asparagus production proposed and Application Site B was in arable production. The surrounding land close to the valley floor is predominantly in arable and asparagus production, with some areas of pasture on the more accessible areas. Woodland dominates the scarp slopes and hill tops surrounding the development areas.

Site C is located on a gentle south to north down-slope close to the valley floor and is bordered by a stream on its northern side. To the north and south of the narrow, sinuous valley floor, the valley sides are steep and wooded rising to around 200m AOD.

Site B is located to the north of the stream on the valley floor close to where a dry valley joins the stream valley. The field in which Site B is located is on the north east side of the junction on an area of land which rises gently for about 150m to the north, before rising much more steeply for a further 150m to the base of the steep valley side of Penyard Park. The upper part of the field exhibits a complex landform with additional slopes to the west and east, which increase its visual prominence significantly. The wider topography is of a narrow sinuous valley constrained by steeply wooded hillsides, which prevent long views into the site.

5.2.3 Vegetation cover and type

The landscape and visual impacts of the application sites are variable due to the landform and topographic features discussed above, but also as a result of differing vegetation cover. The vegetation on and in close vicinity to the application

sites is predominantly deciduous in nature; therefore seasonality is an important factor in determining the mitigation effects of existing and proposed planting. The site visits were undertaken during the winter months when leaf cover was at a minimum, thus providing a worst case scenario.

Application Site C is hedged on its southern boundary with Coughton Lane with a traditional mixed broadleaf hedge dominated by hawthorn. The stream side to the north of the area contains sporadic indigenous riparian trees, dominated by common alder. The roadside hedge is effective, in conjunction with the landform of the site, in restricting views from the lane. The densely vegetated valley sides, in combination with the topography of the valley, effectively restrict any long views into the site.

Application Site B is located on an open area of arable land which develops into a visually prominent spur towards its elevated northern end. There is a mixed riparian tree belt of variable density along the southern stream boundary but the western side of the site is open. The northern boundary abuts the mixed woodland of Penyard Park, which is currently undergoing significant management and replanting. The current vegetation close to the site, apart from the riparian treebelt, has a limited mitigating effect. Further afield the densely wooded valley sides, hilltops and trees and hedges on the valley floor, in combination with the topography of the valley, effectively restrict long views into the site.

5.2.4 Building Design and site layout

The development proposal comprises approximately 4.76ha of standard polytunnels (see Appendix 3) and attendant infrastructure. Each of the Areas contain unsurfaced access tracks and site features as shown in the table below:

Area number	Location	Approx. total field area hectares	Ancillary features
C	Coleraine	3.78 ha	Pond
B	Coleraine	4.55 ha (only lower half to be used for planning application)	Pond

Construction of Application Site C should present no significant problems in respect of landscape and visual impacts. The site proposals comply with the requirements of the Herefordshire Council SPD Polytunnels 2008. There are no distant views of the site and it will have no impact on sensitive receptors apart from users of Coughton Lane passing the site. Enhancement of the roadside hedge has recently been undertaken and the enhancement of the riparian tree belt along the stream will provide a visual break between Site C and the Nursery to ameliorate cumulative effects identified where both sites are visible in the same view. The pond is sensitively located on the lowest part of the site and close to the existing farm buildings.

There are a number of issues relating to the impact of the construction of Application Site B which will potentially cause significant impacts on the character and appearance of the landscape and in particular on sensitive visual receptors. The issues which need to be resolved are: a) impacts on the AONB, Penyard Park and landscape character; b) the cumulative impacts with the seasonal workers caravan site. The caravan site has been reprofiled and landscaped thus significantly reducing the potential cumulative impacts of a swathe of development extending across the valley floor from close to Coughton Lane to the edge of Penyard Park. It is clear from the viewpoint findings that it is the upper (northern) part of the field which is most visible and results in the most significant detrimental impacts. Therefore, Application Site B has been restricted to the lower part of the field.

6.0 Landscape Strategies and Mitigation proposals

The landscape strategies described in this section have been designed to mitigate potential detrimental impacts resulting from the development. The proposals have been developed in accordance with the guidance offered in the Herefordshire Landscape Character Assessment 2004 (updated 2009). The Strategy will address the following management guidelines and environmental mitigation targets for the Principal Settled Farmlands:

- Conserve and enhance the hedgerow pattern.
- Conserve and enhance tree cover and wetland habitat along watercourses.

The potential for enhancing the existing riparian woodland along watercourses is given a priority and provides an opportunity for mitigating the visual effects of proposed tunnels as well as providing an enhanced structure to the landscape where this has been eroded. The siting will reflect the existing field pattern, and will connect in with existing treed areas and hedgerows which reflect the historic field pattern. The conservation and enhancement of hedgerows is a priority target and will also be achieved through the proposed landscape strategies.

6.1 Frogmore Application Site A (Figure 9)

6.1.1 Detailed proposals

1. The existing hedges on the Coughton Lane and footpath WP11 boundaries should be increased to a minimum of 2.5m. The gaps should be infilled with a traditional native hedging species planted in a double staggered row at 45cm centres. The plants will be 60 -90cm in height at planting and comprise a mix similar to the following: 70% hawthorn (*Crataegus monogyna*), 10% hazel (*Corylus avellana*), 10% field maple (*Acer campestre*), 5% Guelder rose (*Viburnum opulus*), 5% holly (*Ilex aquifolium*) which will be pot grown. Trees will be added to these hedgelines using the species and locations shown in Figure 9, and will be planted as 1.75 – 2.0m feathered whips and staked.

2. The open section of boundary with Frogmore should be hedged with a typical native mix. The planting specification will be as follows: The plants will be 45 - 60cm in height at planting and comprise: 70% hawthorn (*Crataegus monogyna*), 10% hazel (*Corylus avellana*), 10% field maple (*Acer campestre*), 5% Guelder rose (*Viburnum opulus*), and 5% holly (*Ilex aquifolium*) which will be pot grown. The hedge will be planted as a double staggered row at 45cm centres and will be staked and guarded with bamboo and clear spiral guards until established. The hedge will be grown to a minimum of 2.5m in height. Trees will be added to the Frogmore boundary as shown in Figure 9 and will be planted as 1.5m feathered whips and staked as illustrated unless otherwise stated.
3. The existing poplar trees along the western boundary of Area 3(A), along the course of the stream provide a high level of mitigation and will be retained and managed, with additional riparian species added to the north to complete the row of trees on the eastern side of the stream. Locations are shown on Figure 10 and will be planted as 1.5m feathered whips. The species will include: alder (*Alnus glutinosa*) and crack willow (*Salix fragilis*).
4. A location has been identified in Application Site A for a small area of woodland planting. This will be located at the eastern end of the Coughton Lane boundary, and will tie in with the existing boundary hedges. Figure 10 shows the locations of the woodland block. Species to be used in the woodland block will comprise: field maple (*Acer campestre*), birch (*Betula pendula*), ash (*Fraxinus excelsior*), crab apple (*Malus sylvestris*), wild cherry (*Prunus avium*), English oak (*Quercus robur*). All will be planted as 1.5m feathered whips. As far as possible trees should be from rootballed or pot grown stock. Trees will be planted at 3m centres.
5. All trees, hedges and shrubs will be appropriately staked, guarded and kept weed free until established.

6.1.2 The illustrative landscape strategy (Figure 9) demonstrate in plan form the locations of the proposed planting areas and indicative planting detail. A fully detailed landscape plan can be a condition of any planning approval granted by the LPA.

6.2 Coleraine Application sites C & B (Figure 10a, 10b & 11)

6.2.1 Detailed proposals Application Site C

1. The existing hedging on the southern side of Coughton Lane boundary should be increased to a minimum of 2m in height. The gaps have recently been infilled with hawthorn (*Crataegus monogyna*) based traditional native hedging species planted in a double staggered rows at 45 cm centres.
2. To the north of the stream on the valley floor, the existing riparian tree cover will be enhanced to further contain the site in views from Coughton Lane, and provide a visual break between the Nursery and Application Site C. The existing trees provide a level of mitigation and will be retained and managed. A detailed landscape strategy for this boundary has already been submitted with the Nursery application and has been undertaken. Further to the east the existing riparian trees and self-sown saplings on the northern side of the stream will be retained and managed to complete the riparian woodland boundary. Large gaps will be planted with typical riparian species comprising: alder (*Alnus glutinosa*), crack willow (*Salix fragilis*) and goat willow (*Salix caprea*). These will be planted as 1.5m feathered whips at 3m centres, suitably staked and guarded.
3. The new hedge and specimen trees at the eastern end of Application Site C will help to filter views from Coughton Lane into the site. The trees will be planted as 1.5m whips, and comprise field maple (*Acer campestre*) and crack willow (*Salix fragilis*) (see figure 10b). The new hedging adjacent to the tree group will have the following specification: The plants will be 45 - 60cm in height at planting and comprise: 70% hawthorn (*Crataegus*

monogyna), 10% hazel (*Corylus avellana*), 10% field maple (*Acer campestre*), 5% Guelder rose (*Viburnum opulus*), and 5% holly (*Ilex aquifolium*) which will be pot grown. The hedge will be planted as a double staggered row at 45cm centres and will be staked and guarded with bamboo and clear spiral guards until established. The hedge will be grown to a minimum of 2.5m in height.

4. All trees and shrubs will be appropriately staked, guarded and kept weed free until established. It is anticipated that within five years of planting, the roadside hedge will have effectively screened the majority of views of the site for car drivers, and that the tree planting will be adding to the filtering of views of the tunnels.

6.2.2 Detailed proposals for Application Site B

The landscape strategy for Application Site B will be directly linked to, and make use of, that proposed for the seasonal workers caravan site. Therefore, there is an overlap with the landscape proposals for that development which are attached at Appendix 4 to this document.

1. The existing hedging on the Coughton Lane boundary should be increased to a minimum of 2m in height. The gaps have been infilled with hawthorn (*Crataegus monogyna*) planted in a double staggered row at 45cm centres.
2. The open boundaries and significant impacts along footpath WA19 have been identified and traditional broadleaf hedging has been planted along the exposed southern boundary of the footpath, as shown in Figure 12. The hedge will be grown to a minimum of 2m in height. The hedge will continue along the south western boundary of Application Site B to ensure that there is a visual break between the arable field and the polytunnels, where it will be grown to a height of 2.5m. The planting specification will be as follows: The plants will be 45 - 60cm in height at planting and comprise: 70% hawthorn (*Crataegus monogyna*), 15% hazel (*Corylus*

avellana), 10% field maple (*Acer campestre*), 5% Guelder rose (*Viburnum opulus*), and 5% holly (*Ilex aquifolium*) which will be pot grown. The hedge will be planted as a double staggered row at 45cm centres and will be staked and guarded with bamboo and clear spiral guards until established.

3. Tree planting will be required to further break up views into the site, in particular from WA19. It has been decided that the most appropriate location for the trees will be at either end of the south west boundary in the hedge detailed above. Trees will be planted randomly but at an average of 8m centres. The species will include the following and will be planted as 1.5 – 2.0 m feathered whips: field maple (*Acer campestre*), ash (*Fraxinus excelsior*), crab apple (*Malus sylvestris*), wild cherry (*Prunus avium*), English oak (*Quercus robur*).
4. To the north of the stream which forms the southern boundary of Application Site B, the tree belt will be enhanced to form a visual break between the caravans and the site. The existing trees provide a level of screening. These will be supplemented with additional riparian and fast growing species and an enhanced understorey in the existing tree belt, but still allowing access for the maintenance of the stream. The tree species will be planted on a 3m grid using 1.5m whips in gaps in the existing tree belt. The species will include in equal proportions: alder (*Alnus glutinosa*), white poplar (*Populus alba*), grey poplar (*Populus canescens*), crack willow (*Salix fragilis*) and goat willow (*Salix caprea*). The shrub layer will comprise equal proportions of 60cm transplants planted between the trees on a 1m grid. The species will comprise: dogwood (*Cornus sanguinea*), hazel (*Corylus avellana*), hawthorn (*Crataegus monogyna*), guelder rose (*Viburnum opulus*) and blackthorn (*Prunus spinosa*).
5. A woodland block will extend from the pumping station to the stream and will leave the open wet/pond area free from planting. Detail of this has been agreed as part of the seasonal workers caravan site planning permission.

6. All trees and shrubs will be appropriately staked, guarded and kept weed free until established.

6.2.3 The illustrative landscape strategies (Figures 10,10b and 11) demonstrate in plan form the locations of the proposed planting areas and planting details. A fully detailed landscape plan can be a condition of any planning approval granted by the LPA.

7.0 Residual Impacts

7.1 Residual impacts in this case relate to the impacts of the proposed development post construction and mitigation. In many developments they can also be related to impacts during construction, but are not relevant in the construction of polytunnels where the construction is a low key operation not requiring heavy machinery, equipment or significant material storage facilities.

7.2 Cobrey Farms is located in the Herefordshire Wye Valley, just outside the boundary of the Wye Valley Area of Outstanding Natural Beauty, an area which, along with Kent, has been one of the UK's major hop, soft fruit and orchard fruit producers for many years. The use of small fields for soft fruit production has meant that the traditional hedgerow structure and field boundaries largely remain in place; unlike much of the country where hedgerows and copses have been removed to enable the enlargement of fields for arable production.

7.3 The planning applications relate to providing polytunnel cover for asparagus and blueberry crops which, unlike most soft fruit crops, require the permanent covering of the tunnels. Therefore, only small sites where the impact of the tunnels is not significant have been selected for this growing regime. It is an important part of the existing and future management of the Cobrey Farms application sites that the hedgerow, field margin and woodland network should be retained and enhanced for the purposes of biodiversity, landscape conservation and polytunnel mitigation. None of the features above will be adversely affected by the polytunnel proposals, and no trees or hedges will be lost.

7.4 The LVIA has comprehensively assessed the impacts of polytunnels on the character and appearance of the landscape within the three application sites and from outside them. The appraisal has looked at seasonality and assessed the worst case scenario, i.e. when there is no leaf cover on the trees and hedges. It has also analysed the potential cumulative impacts when more than one application area may be visible from certain viewpoints, or where other components of the farm operation are visible along with the proposed polytunnels.

It has been established that the proposed use of polytunnels on the application sites will not have an adverse impact on any of the key characteristics of the Principal Settled Farmlands Landscape Character Type. If the use of polytunnels should cease completely, they can easily be removed and all traces of their previous use removed without affecting the mitigation measures, thus resulting in an overall positive benefit to the character and appearance of the farm and wider countryside.

7.5 When covered, the tunnels will have an average moderate/minor negative significance on the overall character of the landscape. However, on other landscape features the impacts will be generally neutral, although this will fall to moderate negative where PRow WA19 runs close to Application Site B boundaries. The maturing enhancement and mitigation features will result in a positive impact on boundary hedges and trees groups, thus enhancing the key characteristics of the landscape character area.

In terms of residual visual impacts, when covered the tunnels will exhibit a variable negative significance of impact, although the maturing of the landscape enhancement and mitigation planting will reduce the negative impact to minor negative/none in all cases.

In no views are all the application sites visible from a single viewpoint, thus removing the potential inter-field cumulative impacts. The potential cumulative impact of Application Site B and the seasonal workers caravan site has been reduced considerably by the replanning, reprofiling and landscaping of the caravan site; the introduction of a strong riparian tree belt along the valley floor; and locating Application Site B in the lower, better contained, part of the field.

8.0 Conclusions

8.1 The Landscape and Visual analysis of the potential asparagus and blueberry polytunnel sites at Cobrey Farms has critically appraised the selected application sites in terms of their potential impacts on the Landscape and Visual resources of the proposed growing areas and surrounding countryside, and in terms of the policy and supplementary planning documents offered by Herefordshire Unitary Council and nationally in PPS 7 'Sustainable Development and Rural Communities'.

8.2 The application sites have been split into two sections; Frogmore and Coleraine which, although physically close together, have differing visual receptors. It was clear that, although the application sites are contained close to the floor of a steep sided valley, the local impacts on the character and appearance of the landscape and other receptors, such as the Wye Valley AONB and Penyard Park, designated park and garden of local historic importance, would be such that high levels of mitigation would be required. The potential viewpoint of the Coleraine Application Site B from Goodrich Castle, to the west, was tested and it was found that the site was not visible due to the intervening topography and woodland. However, there are more significant cumulative impacts with the caravan site in close views, which have resulted in a restriction on the area proposed for polytunnels. Application Site C consistently has a limited significance of impact. There are views towards the Frogmore Application Site A from the footpaths and A40 to the east. The site is predominantly seen in glimpsed views.

8.3 Cumulative and seasonal effects have been considered in the LVIA and, in order to mitigate potential detrimental impacts, mitigation is proposed in the form of hedge and tree planting. The proposed landscape strategy addresses the following management guidelines and environmental mitigation targets for the Principal Settled Farmlands:

- Conserve and enhance the hedgerow pattern.
- Conserve and enhance tree cover and wetland habitat along watercourses.

In all cases emphasis has been put on mitigating possible cumulative impacts. A riparian tree belt has been planted along the valley floor between Application Site C and the Plant Nursery; and a riparian woodland belt, hedge planting, and other planted features between Application Site B and the seasonal workers caravan site. Hedgerow restoration, enhancement and replanting, and careful use of topography and the existing farm buildings, complete the mitigation measures to limit the detrimental impacts of the proposed development and additionally enhance the landscape in compliance with the targets for the Principal Settled Farmlands.

8.4 All proposed ponds are to be located at low points on the valley floor to give a natural appearance. Ancillary buildings will generally be located in the vicinity of the Coleraine farm buildings and will make use of matt, muted colours to minimise reflectivity and impact on the wider landscape. The nature of the planting must be commensurate with that found in the area. Therefore, recommendations have been made to achieve adequate mitigation of impact and wider landscape enhancement.

8.5 By careful assessment of the impacts of the proposed polytunnel sites, and the flexibility to relocate those found to be unacceptably detrimental to the character and appearance of the area, a development scheme has been devised which follows the policy and guidance offered by both Herefordshire Unitary Council and nationally. Mitigation will take the form of targeted boundary planting and enhancement following the guidelines contained within the Herefordshire Landscape Character Assessment. It is recommended that the execution of the proposed landscape strategies is completed within the planting season following the granting of any planning permission for the development.

REFERENCES:

- Guidelines for Landscape and Visual Impact Assessment 2nd edition – The Landscape Institute and Institute of Environmental Management and Assessment (SPON Press 2002)
- Landscape Character Assessment: Guidance for England and Scotland – The Countryside Agency and Scottish Natural Heritage (2002)
- Character Map of England (Joint Character Maps) – Countryside Commission and English Nature (now Natural England) 1996
- Herefordshire Unitary Development Plan 2007
- Herefordshire Landscape Character Assessment 2004 (updated 2009)
- Herefordshire Council Polytunnels SPD 2008
- PPS7 Sustainable Development and Rural Communities – ODPM 2004