

## **Pipe Connection over Bridleway To enable the connection of a Combined Heat and Power (CHP) System at**

Donaldsons Nursery, Marsh Farm, Vinnetrow Road, Chichester, PO20 1QD

### *1. Objectives*

- To make the best use of natural resources and existing infrastructure.
- To reduce the carbon footprint of the business
- To achieve *the above* in a way that is not significantly harmful to the landscape or the local community.
- To build upon the existing successful soft fruit enterprise, meet customer demands and ensure long term viability.
- To continue to produce soft fruit using the highly sustainable method of harnessing energy from the sun.

### *2. Socio-Economic Context*

#### *Success of British Soft Fruit Farming*

Britain has the perfect climate to grow and produce the best-flavoured soft and stone fruits in the world.

The flavour and unique quality of British soft fruits makes them eagerly awaited by consumers. Each year, as more and more consumers turn to home-grown fruits, demand has been rising.

While fruits such as strawberries and raspberries were once associated with the height of summer, modern growing methods have enabled an extended season from April to December.

To meet supermarket and consumer demands soft fruit has to be grown to very precise quality specifications and The Summer Berry Company (TSBC) have pioneered techniques of combining glasshouse, polytunnels and open field production to propagate and grow new varieties and cultivars and extend fruiting seasons for raspberries, strawberries and other soft fruits.

The use of glasshouses, polytunnels, combined with the development of early and late fruiting varieties, also offer British customers an alternative to imports from Spain and California and allows TSBC to grow produce to meet UK demands throughout the year.

Consumers are familiar with the concepts of food miles, freshness, sourcing locally and are becoming resistant to the need to import food from overseas when it can be produced around Chichester in our unique micro-climate.

As demand for consumer strawberries and raspberries has increased, the demand for the applicant's has increased with fruit grown on the Chichester plain being judged as some of the best quality available in the UK.

#### *The Importance and Benefits of integrated soft-fruit production*

The British soft fruit industry is one of the major agricultural success stories.

British-grown soft fruits, such as strawberries and raspberries, have become an important and successful rural business. Berries now represent the most important market in which UK fruit growers are involved. Sales in UK supermarkets of home-grown berries have increased significantly in the last four years.

TSBC has pioneered the use of glasshouses and polytunnels, together with the development of new varieties and cultivars allowing UK farmers to guarantee continuity of supply throughout an extended season to the extent that strawberries and raspberries are now regarded as a standard shopping basket fruit along with bananas, apples and citrus.



Growing a soft fruit crop requires high level farming skills, management and equipment with an integrated system of propagation, indoor, protected and outdoor growing conditions, working together to provide crops to meet consumer demands.

Retailers (mostly the large supermarket chains) demand high levels of continuity of supply even when weather conditions change. Retailers need to be confident in the reliability of supply for their operating regimes. Supermarkets represent 85% of the British soft fruit retail business so demands for high quality fruit and prompt, consistent deliveries throughout an extended season must be met if a fruit farmer is to have a viable business.

*Need for facilities.*

The Summer Berry Company (TSBC) has become established as one of the leading soft fruit growers in the South of England with sites at; Groves Farm, Colworth; Donaldsons Nursery and Leythorne Nursery on Vinnetrow Road and; Kives Farm, producing the highest quality Strawberries, Raspberries, Blackberries, Blueberries, Gooseberries and Redcurrants attracting the custom of the leading high quality retailers in the UK.

TSBC are committed to the creation and development of a high quality soft fruit production business on the Chichester Plain and have worked over the years to secure land and glasshouse assets that it requires to achieve this. The purchase of the majority of the glasshouses at Leythorne and Donaldsons Nurseries on Vinnetrow Road demonstrates this commitment.

The applicants operate 16.8Ha of glasshouses at Donaldsons Nursery producing Strawberries, blackberries, raspberries and blueberries for supermarket customers.

The applicant's facilities are spread across two sites with a packhouse and ancillary buildings around a loading yard (Donaldson's Unit 1) serving Blocks A, H, J and K 8.3Ha of glasshouses on the West side and a packhouse and vernalising store at a loading yard (Donaldson's Unit 2) serving Blocks B and C 8.5Ha of glasshouses on the East side.

In operating glasshouses, the applicants are familiar with harnessing the power of the sun to grow their crops and the glasshouse structures are used to extend the soft-fruit season to compliment the produce grown at the applicant's open field sites using existing established UK supply chains to supply UK customers, supplanting imports of soft fruits from other countries, reducing food miles and thus the carbon impact of food production.

Crops are sown in the glasshouses in late December with harvests in March-June and then September to early December, at each end of the traditional UK soft-fruit season. To achieve the optimum growing regime glasshouses are heated, humidity carefully managed and specialist fans employed to provide the optimum growing environment.

The applicant's current conventional heating system, while efficient has been affected by increases in the cost of gas and the fans, automated vents and other glasshouse operations are reliant on the electrical power from the National Grid with supply failures disrupting business productivity.

To make their facilities more sustainable, the applicants have identified potential cost and carbon benefits from generating Power and Heat using a Combined Heat and Power (CHP) system incorporating Heat Pump and CO<sup>2</sup> capture technology for the 8.5Ha of glasshouses on their Donaldson's Unit 2 site to the East side of the Bridleway (subject to a separate application).

The provision of piped connections over the Bridleway will enable the applicant to extend the CHP system to serve the 8.3Ha of glasshouses at Donaldson's Unit 1 site on the West side of the bridleway.

In addition, to the heating main, the piped connection enables the use of CO<sup>2</sup> captured from the generators to supply a CO<sup>2</sup> enriched atmosphere within the glasshouse that improves crop growth and further reduces the CO<sup>2</sup> emissions to the atmosphere and carbon footprint of the glasshouse heating system.

### 3. Site Context

The applicants operate 16.8Ha of glasshouses at Donaldsons Nursery producing Strawberries, blackberries, raspberries and blueberries for supermarket customers.

The applicant's facilities are spread across two sites:-

- 8.3 Ha of glasshouses (Blocks A, H, J and K) at Donaldson's Unit 1 on the West side of Public Bridleway 2972\_1 and
- 8.5Ha of glasshouses (Blocks B and C) at Donaldson's Unit Unit 2 on the East side of Public Bridleway 297\_1

It is proposed to locate the majority of the equipment required for the CHP system within an existing building on the Donaldson's Unit 2 site to the East side of bridleway 2972\_1 (subject to a separate application).

The existing building is an ideal location for the CHP plant, being centrally located between the Unit 1 and Unit 2 glasshouses and have been sized with the intent of supplying heat and power to the glasshouse blocks within Donaldson's Unit 1 and Unit 2.

When the applicant explored installing the heating pipes under the Public Bridleway, the applicant found that there are underground services running North-South under or near the public bridleway at unknown depths.

### 4. Proposals

In order to provide Hot Water (for Heating) and CO<sup>2</sup> (for fertilising) the plants within the 8.3Ha of glasshouses on the Donaldson's Unit 1 to the East of the Bridleway, it is necessary to install pipes that cross the bridleway East – West.

The applicant explored different options for the pipe crossing, including raising the level of Bridleway 2972\_1 to install the pipes above the existing services believed to be running under the Bridleway North-South.

However, this option requires a significantly longer period of closure and temporary diversion of the Bridleway while the trenches are dug and ramp constructed.

Therefore it is proposed to construct a 'pipe bridge' between the Glasshouse Structures, approximately 4m above the level of the Bridleway 2972\_1 at a point where the glasshouses are closest on either side of the Bridleway.

The pipes crossing the pipe bridge would consist of:-

- 2no 315mm pre-insulated heating main pipes carrying Hot Water for the glasshouse heating feed and return.
- 1no 500mm pipe carrying CO<sup>2</sup> captured from the CHP Plant to fertilise the plants in an enriched environment within the glasshouse structures to improve crop yields and significantly reduce the CO<sup>2</sup> released to the outside atmosphere and further reduce the carbon footprint of the glasshouse operations.
- 2no 180mm pipes used as ducts for existing data and future service connections between the two sites

The pipe bridge will be pre-fabricated with pipe sections running in-line with the structure to provide a slim profile and enable the bridge to be installed over the bridleway during a short temporary closure period.

The height of the pipe bridge allows for a minimum 3.75m clear height to be maintained over the bridleway to meet statutory requirements.

## 5. Layout

The 'pipe bridge' will be located at the North end of the existing reservoir, between the Glasshouse Structures, approximately 4m above the level of the Bridleway 2972\_1 at a point where the glasshouses are closest on either side of the Bridleway

The Pipe Bridge has been designed to extend over the existing hedge with pipes returning to ground level and connected to the new hot water Buffer Tank and CHP Plant (subject to a separate application) to serve the glasshouses on either side.

## 6. Amount & Scale

The size and number of the pipes is dictated by the heating requirements of the existing glasshouse structures and the co-location of the CHP Plant for the Unit 1 and Unit 2 Glasshouses enables a more efficient design with greater noise containment and lower maintenance requirements than providing CHP Plant on either side of the Bridleway.

The pipe bridge has been located between the Glasshouse Structures, approximately 4m above the level of the Bridleway 2972\_1 to meet statutory requirements at a point where the glasshouses are closest on either side of the Bridleway.

The pipe bridge has been designed to span above the existing hedgerows to avoid any potential impact on existing wildlife habitat and ensure that the pipes can be easily maintained from within the applicant's site as and when required.

## 7. Appearance and Landscape Considerations

The location is well screened from the wider landscape with the Bridleway located between the 8.3Ha of glasshouses at Donaldson's Unit1 and 8.5Ha of glasshouses at Unit 2 that provide an agri-industrial character to the landscape.

The pipe bridge is sized to accommodate the diameters of pipes required for the CHP system to serve the glasshouse and to span the existing retained hedges, located on each side of and approximately 4m above the level of the Bridleway 2972\_1 to provide the clear height to meet statutory requirements.

It is also considered that the local plan allocation of the application site as a HDA is a material consideration and whilst it is acknowledged that the pipe bridge will be visible from the footpath, the structure will be seen in context with the adjacent tanks, glasshouses and other horticultural structures and agricultural buildings, having a comparatively minor impact on the experience of walkers using the path.

## 8. Biodiversity, Ecology and Wildlife Statement

The installation of the pipe bridge and associated pipe connections does not require the removal of any existing structures or buildings or any planting likely to provide roosting opportunities for birds or mammals.

It is considered very unlikely that the proposed installation in the locations and to the design proposed would result in the loss of or harm to any protected species or habitat.

## 9. Habitats Regulations Assessment Information

The proposals are unlikely to affect any protected species, are in excess of 3km from the nearest European designated site (Paghams Harbour RAMSAR) and do not involve any development that involve; Combustion processes greater than 50MW, waste or composting discharges or foul waste treatment giving rise to a nitrate discharge.

Due to the nature of the development it is considered that the proposals would not give rise to a relevant adverse or cumulative impact within the impact risk zones of; or risks having a significant effect on; a European protected site.

## *10. Access and Highway Considerations*

After installation, the pipe bridge will only require access for inspection and maintenance that in most cases can be undertaken from ground level and should not require the temporary closure of the bridleway.

There are no known environmental constraints on this site to restrict or impede accessibility and the pre-fabricated design of the proposed pipe bridge minimises the disruption to users of the Bridleway.

## *11. Flood Risk and Drainage Assessment*

The existing site is not in areas identified as being at risk of flooding (Zone 1) and the area of the development is significantly less than 1Ha.

No change is proposed to the existing surface water drainage system, no foul water drainage is required.

## *12. Sustainable Construction and Design Statement*

The proposed Combined Heat and Power (CHP) installation falls within the definition of renewable technology and forms part of the applicant's strategy to improve the sustainability and climate change resilience of their existing horticultural operations to reduce the carbon footprint of the crops they produce and the proposed pipe bridge enables the connection of the centralised CHP units to the 8.3Ha of existing glasshouses on the West side of the Bridleway.

### *Resource and energy efficiency Water Efficiency*

Providing a robust and reliable power source and taking opportunities to maximize efficiency of existing infrastructure is part of the applicant's strategy that led to the identification of a suitable CHP unit to meet their needs and reduce the carbon footprint of their glasshouse operations, the pipe bridge extends these carbon reductions to the 8.3Ha of glasshouses on the West side of the site.

### *On Site Renewable Energy*

The CHP units will provide around a 30% reduction in CO<sup>2</sup> emissions, further reduced by using the captured CO<sup>2</sup> to fertilise the crops in the glasshouse.

Hot water is stored in a buffer tank to serve the glasshouse heating with the pipe bridge enabling the heating main and CO<sub>2</sub> fertilising system to be extended to serve the 8.3Ha of existing glasshouses on the West side of the site.

### *Reducing the need to travel*

The applicant's horticultural enterprise produces quality fruit at times of year when soft fruit cannot be grown in open fields. Without crop protection imported soft fruit would dominate our supermarket shelves, with the potential for higher prices following Brexit and the increase in transport costs.

### *Adapting to climate change*

Making provision for a diverse range of power supplies is part of the applicant's strategy for increasing their resilience to climate change and while powered by mains Gas, the CHP Units are ready to be adapted to Hydrogen with minimal alteration, ensuring that their horticultural enterprise has an increased level of power security so they may continue to contribute towards national food security.

### 13. Planning Context

#### National Planning Policy Framework, updated December 2023

It is considered that proposals constitute sustainable development which accords with current policy. Sustainable development is understood to be identified as follows;

*7. The purpose of the planning system is to contribute to the achievement of sustainable development. At a very high level, the objective of sustainable development can be summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs<sup>4</sup>. At a similarly high level, members of the United Nations – including the United Kingdom – have agreed to pursue the 17 Global Goals for Sustainable Development in the period to 2030. These address social progress, economic well-being and environmental protection<sup>5</sup>.*

In the NPPF the Government have identified the following as important;

*8. ...the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways...*

*a) an economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;*

*b) a social objective – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering well-designed, beautiful and safe places, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and*

*c) an environmental objective – to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.*

It is considered that extending the proposed CHP to serve the existing glasshouses on the West side of the site meets many of these objectives in particular making prudent use of natural resources, minimising waste and pollution and mitigating and adapting to climate change, by providing a low carbon heating source that provides a reliable and robust electrical power source and reducing the carbon footprint of glasshouse operations.

*10. So that sustainable development is pursued in a positive way, at the heart of the Framework is a presumption in favour of sustainable development*

*11. Plans and decisions should apply a presumption in favour of sustainable development*

*For decision-taking this means:*

*c) approving development proposals that accord with an up-to-date development plan without delay; or*

*d) where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless:*

*i. the application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or*

*ii any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole;*

The proposals accord with the development plan and the presumption in favour of the development applies.

#### **Building a strong, competitive economy**

*85. Planning policies and decisions should help create the conditions in which businesses can invest, expand and adapt. Significant weight should be placed on the need*

*to support economic growth and productivity, taking into account both local business needs and wider opportunities for development. The approach taken should allow each area to build on its strengths, counter any weaknesses and address the challenges of the future...*

**Supporting a prosperous rural economy**

88. *Planning policies and decisions should enable:*

- a) the sustainable growth and expansion of all types of business in rural areas ...*
- b) the development and diversification of agricultural and other land-based rural business...*

85. *Planning policies and decisions should recognise that sites to meet local business and community needs in rural areas may have to be found adjacent to or beyond existing settlements .....*

The proposed pipe bridge serves to extend the benefits of the proposed CHP unit (subject to a separate application) to provide for the glasshouse operations undertaken within the existing glasshouses on the West side of the site using a robust diversified and adaptable low-carbon power source to support the existing horticultural businesses making efficient use of good quality agricultural land for the efficient production of food.

**Planning for climate change**

163. *When determining applications for renewable and low carbon development, local planning authorities should:*

- a) not require applicants to demonstrate the overall need for renewable or low carbon energy, and recognize that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions; and*
- b) approve the application if its impacts are (or can be made) acceptable <sup>54</sup> ...*

164. *In determining planning applications, local planning authorities should give significant weight to the need to support energy efficiency and low carbon heating improvements to existing buildings, both domestic and non-domestic (including through installation of heat pumps and solar panels where these do not already benefit from permitted development rights)....*

The proposed pipe bridge extends the benefits obtained through co-generation and CO<sub>2</sub> capture/fertilization, utilizing Heat Pumps and low carbon energy close to the energy use and contribute directly to a reduction in the production of greenhouse gasses involved in the efficient production of horticultural produce from the West side of the site.

### Chichester Local Plan Key Policies 2014-2029

The Chichester Local Plan was adopted in 2015 and forms part of the statutory 'development plan' for the area in relation to the requirement of Section 70(2) of the Town and Country Planning Act 1990 as amended by Section 38(6) of the Planning and Compulsory Purchase Act 2004 that *"if regard is to be had to the development plan for the purpose of any determination to be made under the planning Acts the determination must be made in accordance with the plan unless material considerations indicate otherwise."*

**Policy 1** repeats the definition of the presumption in favour of sustainable development at paragraph 14 of the NPPF where applications that accord with policy will be approved, unless material considerations indicate otherwise but also provides a commitment that *"When considering development proposals the Council will take a positive approach that reflects the presumption in favour of sustainable development.... It will always work proactively with applicants jointly to find solutions which mean that proposals can be approved wherever possible"*

**Policy 2** defines a settlement hierarchy and development strategy favouring development within towns and large villages in sustainable locations and notes that *"Development in the Rest of the Plan Area outside the settlements listed above is restricted to that which requires a countryside location or meets an essential local rural need or supports rural diversification in accordance with Policies 45-46"*

Donaldsons Nursery is located within the Runcton Horticultural Development Area (HDA) and the proposals conform to policies 32 and 45.

**Policy 3** sets out the strategy for how *"Sustainable growth of the local economy will be supported through the provision of a flexible supply of employment land and premises to meet the varying needs of different sectors....Planning to accommodate the development needs of key local employment sectors, including the horticultural industry (see Policy 32)"*

The proposed pipe bridge extends the benefits of the CHP system (subject to a separate application) to the 8.3Ha of glasshouses on the West side of the site to provide low carbon power and heat to meet the specific operational needs of an existing horticultural business, conforming to Policy 32.

**Policy 9** requires development to *"Make effective use of existing infrastructure, facilities and services, including opportunities for co-location and multi-functional use of facilities"*

The proposed pipe bridge extends the improvements in efficiency and reductions in carbon emissions available from the CHP Units to the West side of the site to make efficient use of specialist facilities already at the nursery.

**Policy 32** sets out 7 criteria for Horticultural Development within Horticultural Development Areas (HDAs) and an additional 4 criteria for development outside these allocated zones.

#### ***"Within HDAs***

*Large scale horticultural glasshouses will continue to be focused within the existing Horticultural Development Areas at Tangmere and Runcton. The Sidlesham and Almodington Horticultural Development Areas will continue to be the focus for smaller scale horticultural glasshouses.*

*Within designated Horticultural Development Areas, as shown on the Policies Map, planning permission will be granted for new glasshouse, packhouse and polytunnel development where it can be **demonstrated that the following criteria (1-7) have been met:**"*

- 1 *"There is no significant adverse increase in noise levels resulting from machinery usage, vehicle movement, or other activity on the site, which would be likely to unacceptably disturb occupants of nearby noise sensitive properties or be likely to cause unacceptable harm to the enjoyment of the countryside;"*

The proposed pipe bridge does not involve any moving parts and is unlikely to increase noise levels on the site or significantly affect the enjoyment of the countryside.

- 2 *The proposal does not generate unacceptable levels of soil, water, odour or air pollution and there is no significant adverse impact resulting from artificial lighting on the occupants of nearby sensitive properties or on the appearance of the site in the landscape;*



The proposed pipe bridge will extend the reduction in CO<sup>2</sup> generation from the site and does not generate unacceptable levels of soil, water, odour or air pollution at the site.

- 3 *New planting is sufficient to benefit an improvement to the landscape and increases the potential for screening;*  
Existing planting is retained and new planting would be inappropriate for the proposals.
- 4 *Adequate vehicular access arrangements exist or will be provided from the site to the road network to safely accommodate vehicle movements without detriment to highway safety or result in unacceptable harm to residential amenity;*  
Adequate vehicular access to Donaldsons Nursery already exists, once installed the pipe bridge will only require periodic inspection for maintenance and repair purposes.
- 5 *The height and bulk of development, either individually or cumulatively, does not damage the character or appearance of the surrounding countryside, and mitigation measures are included to address any detrimental effects e.g. in order to mitigate the height and bulk of new horticultural structures;*  
The proposed pipe bridge has been located at a point over the bridleway where the glasshouses are closest on either side to minimise the impact on the landscape character that is characterised by extensive horticultural glasshouses on both sides of the bridleway.
- 6 *It can be demonstrated that adequate water resources are available or can be provided and appropriate water efficiency measures are included; and*  
The proposed Pipe Bridge does not require any water resources beyond those already on site.
- 7 *Acceptable surface water drainage capacity exists or can be provided as part of the development including sustainable drainage systems or water retention areas.*  
The existing surface water drainage arrangements are unaffected by the proposals.

The proposed pipe bridge will extend the benefits of the CHP system to serve the existing glasshouses on the West side of the site for an existing established horticultural enterprise and comply with all 7 criteria for development within HDAs .

#### **Policy 40: Sustainability Statement**

Policy 40 gives 10 criteria to meet:-

1. *How the proposal aims to protect and enhance the environment, both built and natural. Where this is not possible, how any harm will be mitigated;*
2. *The proposal achieves a minimum of 110 litres per person per day including external water use;*
3. *New development complies with Building for Life Standards or equivalent replacement national minimum standards, whichever are higher by ensuring it is accessible to all, flexible towards future adaptation in response to changing life needs, easily accessible to facilities and services; and takes into account the need for on-site waste reduction and recycling;*
4. *Where appropriate, the proposals apply sound sustainable design, good environmental practices, sustainable building techniques and technology, including the use of materials that reduce the embodied carbon of construction and the use of re-used or recycled materials;*
5. *Energy consumption will be minimised and the amount of energy supplied from renewable resources will be maximised to meet the remaining requirement, including the use of energy efficient passive solar design principles where possible;*
6. *The proposals include measures to adapt to climate change, such as the provision of green infrastructure, sustainable urban drainage systems, suitable shading of pedestrian routes and open spaces and drought resistant planting/landscaping;*
7. *The historic and built environment, open space, and landscape character will be protected and enhanced;*

8. The natural environment and biodiversity will be protected and/or where appropriate provision will be made for improvements to biodiversity areas and green infrastructure;
9. The development is appropriate and sympathetic in terms of scale, height, appearance, form, siting and layout and is sensitively designed to maintain the tranquillity and local character and identity of the area; and
10. The reduction of the impacts associated with traffic or pollution (including air, water, noise and light pollution) will be achieved, including but not limited to the promotion of car clubs and facilities for charging electric vehicles.

While the majority of these criteria are only applicable to housing development, the proposed pipe bridge extends the sound sustainable design principles of the CHP system to serve the existing glasshouses on the West side of the site to minimize energy consumption and maximize renewable resources to enable an existing, established land-based horticultural business to operate in an improved and more sustainable way, providing a robust and reliable power supply and reduce by around 30% the carbon footprint of providing home grown food for the UK market cutting down on imported food, reducing 'food miles' and assisting with the move to a low carbon economy.

**Policy 45** states that *“Within the countryside, outside Settlement Boundaries, development will be granted where it requires a countryside location and meets the essential, small scale, and local need which cannot be met within or immediately adjacent to existing settlements.*

The proposed CHP units, Heat Pumps and Buffer Tanks will serve an existing established horticultural enterprise within a designated Horticultural Development Area.

*Planning permission will be granted for sustainable development in the countryside where it can be **demonstrated that all the following criteria have been met:***”

1. *“The proposal is well related to an existing farmstead or group of buildings, or located close to an established settlement;”*  
The proposed pipe bridge is located at a point over the bridleway where the glasshouses are closest to each side close to the centre of an established horticultural site surrounded by glasshouse structures
2. *“The proposal is complementary to and does not prejudice any viable agricultural operations on a farm and other existing viable uses; and”*  
The proposed pipe bridge extends the provision of low carbon power and heating for horticultural activities within the existing glasshouses and do not prejudice horticultural operations on the site.
3. *“Proposals requiring a countryside setting, for example agricultural buildings, ensure that their scale, siting, design and materials would have minimal impact on the landscape and rural character of the area.”*  
The proposed pipe bridge meets statutory requirements for crossing a bridleway and are sized to meet the heating requirements of the existing glasshouses and are situated close to the centre of an established horticultural site surrounded by glasshouse structures



## 14. Conclusion

Since converting the Nursery from the production of cut flowers to soft fruit production to meet UK demand for soft fruit early and late in the season, this Horticultural Enterprise has proved very successful and expanded to occupy most of the glasshouses on the site.

The applicants are at the fore-front of soft-fruit production and seek innovations and practices that will improve the efficiency and sustainability of their horticultural enterprise.

In operating glasshouses, the applicants are familiar with harnessing the power of the sun to grow their crops. However, to make their facilities more sustainable, the applicants have identified potential cost and carbon benefits from generating power through the heating of their Glasshouse with a Combined Heat and Power (CHP) unit.

The CHP Units will provide a lower carbon means of providing heating for the glasshouse growing environment and generate electrical power that when no used for the glasshouse operations will be available for export to the national grid

In addition to the benefits of co-generation and microgeneration close to the point of use, Heat Pumps are used to improve the efficiency of the glasshouse heating and the CO<sup>2</sup> from the flue gas will be used to fertilize plants in an enriched environment within the glasshouse structures to improve crop yields and significantly reduce the CO<sup>2</sup> released to the outside atmosphere and thereby the carbon footprint of the food produce grown at the nursery.

The proposed pipe bridge over the bridleway meets the statutory requirements for crossing the bridleway, while minimising disruption to bridleway users during construction and serves to extend the significant benefits of the CHP system (subject to a separate application) to the 8.3Ha of existing glasshouses on the West side of the site, providing an essential connection between the two halves of the applicants horticultural glasshouse.

In view of the compliance with planning policies outlined above and the significant reductions in the carbon footprint of the food production provided by the glasshouse operations on the site that will result from the connection of the West Glasshouses to the CHP installation on the East side (subject to a separate application), these application proposals represent sustainable development and should be supported.

**Appendix A  
Local List**

1. Affordable housing statement – not applicable
2. Air Quality Assessment – not applicable
3. Area of Outstanding Natural Beauty (AONB) Statement – not applicable
4. Biodiversity and Ecological Assessments – **See Statement**
5. CIL / S106 terms – CIL Form\_1 included - not CIL Liable development
6. Flood Risk Assessment – Not applicable (under 1Ha Flood Zone 1)
7. Flood Risk Sequential and Exception Tests – Not applicable
8. Drainage Assessments – Not applicable (no change to drainage proposed)
9. Heritage Statement – not applicable
10. Interim Policy Statement Justification – not applicable
11. Land contamination assessment – not applicable
12. Lighting assessment – not required (No external lighting proposed)
13. Mineral Infrastructure Statement – not applicable (Not Major Application)
14. Noise assessment – not applicable
15. Overheating Ventilation Assessment – Not applicable
16. Odour Assessment – Not applicable
17. Plans and drawings – included with application
18. Planning Statement – **See Statement**
19. Retail Sequential Test and Impact Assessment – not applicable
20. Structural Survey & Conversion Method Statement – not applicable
21. Sustainable Construction and Design Statement - **See Statement**
22. Transport Assessment, Statement and Road Safety Audit – not applicable
23. Travel Plan – not applicable
24. Parking Assessment – not applicable
25. Tree survey & Method Statement – not applicable
26. Ventilation/Extraction statement – not applicable