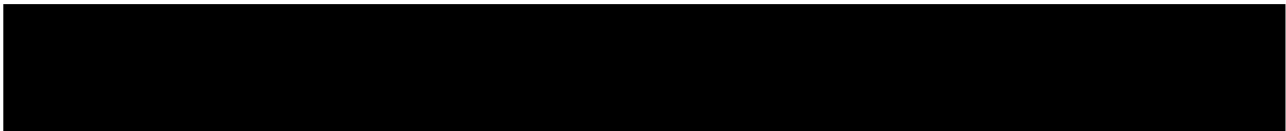
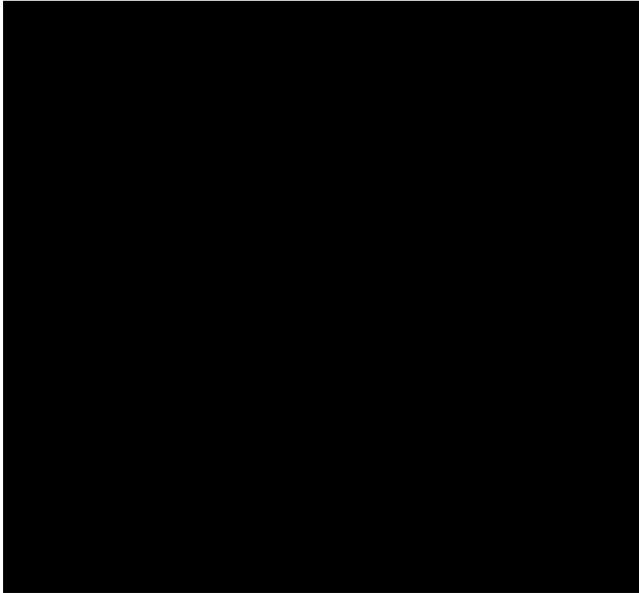


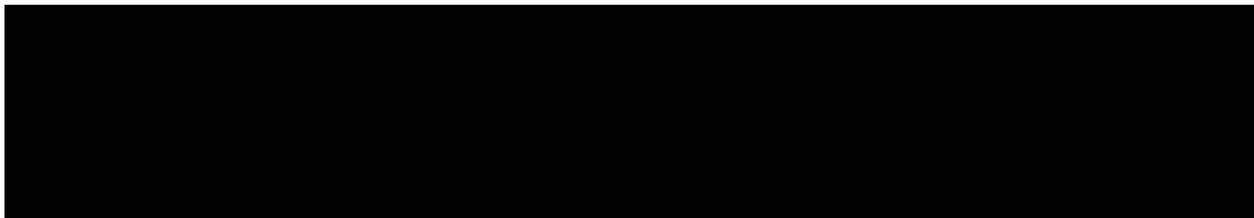


Business Plan

This business plan is for Greenark Woodland Nursery Ltd an Agroforestry/Tree Seed Nursery and Flower Farm, which we are starting on the land that we have purchased at Tithe Barn Lane, Scorton.



We are all keen conservationists and have a love for the natural environment and what we can do to make, much needed changes to help our environment and the species in our habitat.



The Arboricultural Association
Woodland Trust
Forestry England
CIEEM
Soil Association
Flowers from the Farm
Royal Horticultural Society
NFU National Farmers Union
The Wildlife Trust for Lancashire, Manchester & Merseyside
RSPB

The business

Greenark Woodland Nursery Ltd (GA) has three pillars.

1. Environmental Land Management.
2. Tree Seed Stands/Tree Seed Nursery
3. Flower Farm

Rationale

Rationale behind the business.

We have real concerns about climate change and how important it is that we all make changes.

“What humans do over the next 50 years will determine the fate of all life on our planet”
David Attenborough.

“There is an amazing amount that can be done. It is a combined responsibility of all of us, the public sector, private sector and civil society” Prince Charles HRH.

The government are introducing schemes like the Sustainable Farming Incentive, nature recovery and landscape recovery, encouraging regenerative farms and biodiversity.

In these plans, we will look to incorporate the government incentives with everything we are wanting to do.

Regenerative farming is all about locking away carbon and rebuilding soil levels which can absolutely mitigate climate change.

What is regenerative agriculture? Regenerative agriculture is a collection of farming practises that help sequester carbon, improve soil quality, reduce erosion and runoff, and generally offer a more sustainable way of crop growing.

The government has introduced incentives to land owners to plant trees, this is attached to a government target to plant 30,000 hectares by the end of 2024, which will help mitigate the changes to climate.

We are concerned about the future supply of trees in particular the genetic quality and provenance. Many trees are grown from cutting material from the parent which, creates a clone of the parent. This process of cloning has been practiced for many years and there are many clones and even clones of clones.

The diversity of tree genetics will be under pressure in the near future as the demand pushes for supply. It is possible that tree can be imported to the UK, however the risk of

disease is becoming more apparent and biosecurity has become paramount. The spread of disease within cloned woodland would be a disaster.

The UK is already experiencing Climate changes. Summers will become hotter and drier with drought being a problem to trees, stressed trees are more susceptible to disease. Winters will become wetter with heavier storms, management plans for existing woodland will need to be in place so trees survive such extremes.

Our land has a mixed woodland that is, precious to us, it has mature trees that are surveyed and with a tree hazard assessment and tree policy. We plan to harvest the trees annually (seed stand) to supplement production of our own seed grown trees.

However, the woodland is currently under attack from invasive rhododendron that, has more than likely, escaped from the nearby garden and has colonised. This aggressive weed can rapidly occupy the entire understorey.

We can provide information on our site survey prioritising areas for treatment selecting the most effective control techniques and monitoring of treated areas.

We have referred to the Forestry Commissions Practice Guide Author Collin Edwards Managing and controlling invasive rhododendron. Defra Pesticides: Code of practice for using plant protection products. The woodland is separate to the other areas and Biosecurity employed.

The Forestry Commission states : Invasive rhododendron present a unique problem to managers of habitats it colonises. If left untreated, this aggressive weed can rapidly occupy the entire understory of a range of woodland types, open spaces within woodlands and heathland habitats. The practice guidance on managing and controlling rhododendron in invaded habitats, including information on site survey, prioritising area for treatment, selecting the most effective control techniques, and monitoring of treated areas.

Training and CPD in forestry management is key for the future of our woodlands, to ensure they are helped to survive the oncoming threats, for the public and future generations to enjoy.

Our training is backed by the Forestry Commissions Government scheme 2023 and training provider Myrecough College Burscough. Our site will provide unique woodland terrain for field training and it is through collaboration with them, volunteers from the Woodland Trust and Tree Wardens that this project will prove successfully managed for the future.

Flower Farm

Our other passion is the field growing of flowers for the cut flower market for example Floristry and events. The UK Cut Flower market in 2019 was worth £121m with only 14% produced in the UK.

Consumers are becoming more environmentally aware of the importing of millions of flowers from Africa, South America, Asia, and the carbon footprint created. Grown not Flown without the lengthy transportation, British stems are said to have better scent and

stay fresher for longer. Supermarkets remain the largest outlet for cut flowers in the UK however just representing half of all sales. Florists remain strong in the market.

We will be planting a shrubbery to provide foliage for flower arranging along with around 500 varieties of cut flowers. Perennial, Biannual, Hardy Annual and Annuals.

GA is a member of the Soil Association and understands the urgent need to protect the soil. It is our policy that only minimal machinery is used in our no-till production, ensuring that carbon remains locked in the ground. We ensure that compaction does not create run off and that seasonal wet conditions are managed correctly. The additional hedgerow, tree, and shrubbery project will create extra water movement through Transpiration. Including earthworm and micro-organisms surveys, we will continue to research and develop our soil health.

Water is a precious resource. The droughts of 2022, especially in the south of the UK, have proven that everyone should make a conscious effort to conserve water. Seasonal flood waters are also becoming more frequent. GA will harvest water wherever possible on temporary structures throughout the farm. Collection, Storage and Hygiene a best practice proper usage policy will remain with research and development into reservoir, site ponds and irrigation.

██████████ the Royal Horticultural Society xxx Agricultural Association xxxx with CIEEM Plant ID and Botanical Keys.

Flowers and well-being.

It is almost impossible that a human does not feel happy in the presence of flowers that is why they have been the preferred gift since ancient times. Though there are numerous attractive presents available in the market we still see people buying flowers to express love. Meanwhile they provide solace to the hearts of people facing difficult times. Flowers have the ability to convey our complex emotions they can divert the human mind and fill it with pleasant memories as the colours make us happy. Studies have shown they can certainly work as mood boosters.

Experts have found that flowers help relieve stress and improve emotional health while leaving a positive impact on your behaviour and everyday activities. People who are easily overwhelmed or depressed by the problems of life can try buying flowers for themselves. Subsequently, they will see a change in the ways their mind reacts to situations daily. Flowers are good for emotionally depressed people because they have immediate results where the receiver will have a sense of satisfaction and security. It reduces anxiety, passive thoughts, and agitation replacing these emotions with gratitude, delight, and excitement, regardless of the age of the recipient.

In today's highly advanced world having nature around us is almost a privilege that very few people experience. Fortunately, flowers are the most easily available resource that can change the mood of a person as they trigger our senses. The bright colours and sweet fragrance of flowers send signals to the brain that something special is coming your way.

Also, flowers create a feeling of trust, love, and support among human beings while they can change the emotions of people depending on the things you are feeling currently. Moreover, you might have seen that we use flowers on every occasion of life whether it's a wedding or festival. Since flowers have a natural way to create a healthy environment around us, they can give you a feeling of excitement and happiness. For instance, flowers help bring confidence whenever you are gifting or receiving them as they make you feel important without even harming you in any way. The brain releases chemicals like oxytocin, dopamine, and serotonin when humans are surrounded by flowers.

There have been several studies about the effects of fresh flowers on humans. A study taken by Lane DeVries, the president of The Sun Valley Group Inc., showed that flowers have the power to share the feeling of comfort and happiness.

"Flowers are the unifying symbol of joy, beauty, cheerfulness, and healing. Flowers have a positive effect on overall health, they are a mood booster and a stress reducer," stated the chief executive.

According to another study by Harvard Research, flowers are the best way to uplift a person's mood especially if we start the day with the fragrance of blooms. The participants of the research were noted to have more energetic and happy mornings as the first thing their eyes captured were the flowers. It is evident that flowers relieve depression, inspire social networks, and refresh the functioning of our brains.

Agroforestry

Agroforestry is the growing of both trees and agricultural / horticultural crops of the same piece of land designed to provide tree and other crop products and at the same time protect, conserve, diversify and sustain vital economic, environmental, human and natural resources.

Agroforestry differs from traditional methods of agriculture and its focus on the interactions and components rather than on the components themselves. Research over the last 20 years has confirmed that this way of farming can be more productive, more profitable and be more sustainable than forestry, or agricultural monocultures.

Many other benefits have been shown, temperate agroforestry systems are already widespread in other parts of the world and are central to production in some regions.

Benefits

Research has also confirmed that Agroforestry systems can include the following benefits:

They can control runoff and soil erosion, thereby reducing losses of water, soil material, organic matter and nutrients.

They can maintain soil organic material and biological activity at levels satisfactory for soil fertility. This depends on an adequate proportion of trees in the system- normally at least 20% crown cover of trees to maintain organic matter over system as a whole.

They can maintain more favourable soil physical properties than agriculture, though organ matter maintenance and the effects of tree roots.

They can lead to more closed nutrient cycling than agriculture and hence more efficient use of nutrients. This is true to an impressive degree for forest garden/farming systems.

They can check the development the development of soil toxicities, or reduce existing toxicities – both soil acidification and salinization can be checked, and trees can be employed in the reclamation of polluted soils.

They utilise solar energy more efficiently than monocultural systems- different height plants, leaf shape and alignments all contribute.

They can lead to reduced insect pest and associated diseases.

They can be employed to reclaim eroded and degraded land.

They can create a healthy environment – interactions from agroforestry practices can enhance soil, water, air, animal and human resources of the farm. Agroforestry practises may use only 5% of the farming land area yet account for over 50% of biodiversity, improving wildlife habitat and harbouring birds and beneficial insects which feed on crop pests. Tree biodiversity adds variety to the landscape and improves aesthetics.

They can moderate microclimates. Shelter given by trees improves yields of nearby crops and livestock. Shade in summer can be beneficial for livestock, reducing stress.

Agroforestry can augment soil water available to land use systems. In dry regions, though competitions between trees and crops is a major problem.

Nitrogen-fixing trees & shrubs can substantially increase nitrogen inputs to agroforestry systems.

Trees can probably increase nutrient inputs to agroforestry systems by retrieval from lower soil horizons and weathering rock. (Mining minerals and trace elements)

The decomposition of tree litter and pruning can substantially contribute to maintenance of soil fertility. The addition of high quality tree pruning (i.e. high in nitrogen but which decay rapidly) leads to large increases in crop yields.

In the maintenance of soil fertility under agroforestry, the role of roots is at least as important as that above ground biomass.

Agroforestry can provide a more diverse farm economy, leading to more stable farms and communities. Economic risks are reduced when systems produce multiple products.

Our plan

Our aim is to promote the importance of trees and the need to look after them via the public footpath through the woodland. We will promote biosecurity whilst visiting on our land and other. We will grow from seed (No Clones) trees raised in modular root systems, from accredited seed source and from our own seed stand at GA. Two year saplings will then be released for sale through an online presence.

Field flowers and foliage from the shrubbery

will be grown to sell to Florists in Preston, Blackpool, Lancaster, Morecambe, and the surrounding areas. We will offer British Flowers, locally grown with sustainable practices, free from chemicals and pesticides.

Organic farming has been one of the economy best performing industries over the last half a decade. There is a high demand for organic farm flowers and foliage as consumers become more environmentally aware. The government are introducing schemes like the sustainable farming incentive, nature recovery and landscape recovery encouraging regenerative farms and biodiversity. Grants for woodland maintenance and creation.

The Main Objectives, in no particular order

To create a sustainable mixed farm business, to conserve manage and enhance the environmental quality of the land.

Increase the sites biodiversity, landscape, and bring benefits to the wider landscape.

Forming part of sustainable land management system that provides genetically diverse quality saplings, a diverse range of foliage and flowers locally grown while benefiting other aspects of the environment in a completely holistic and pesticide free (Woodland exception)

To build soil, organic matter and storing carbon, whilst increasing populations of pollinating insects and creating animal and bird habitats.

Increase the adaption of the natural environment to climate change.

Rain water harvest and water conservation in the form of ponds.

The Holding

Approximately 7 acres of land and 3 Acres of woodland ideal for the proposed enterprise.

The land benefits from a gentle sloping aspect with full sun. The site has an elevation of 164ft above sea level with a more exposed position, the plants we offer are well established, stronger and hardier than those grown at lower altitude nurseries.

As we have a focus on growing cell grown trees from seed, it means we can provide customers with well established, healthy whips which they're able to plant year round, and means too these hardy young tree sapling have the very best rates of establishment.

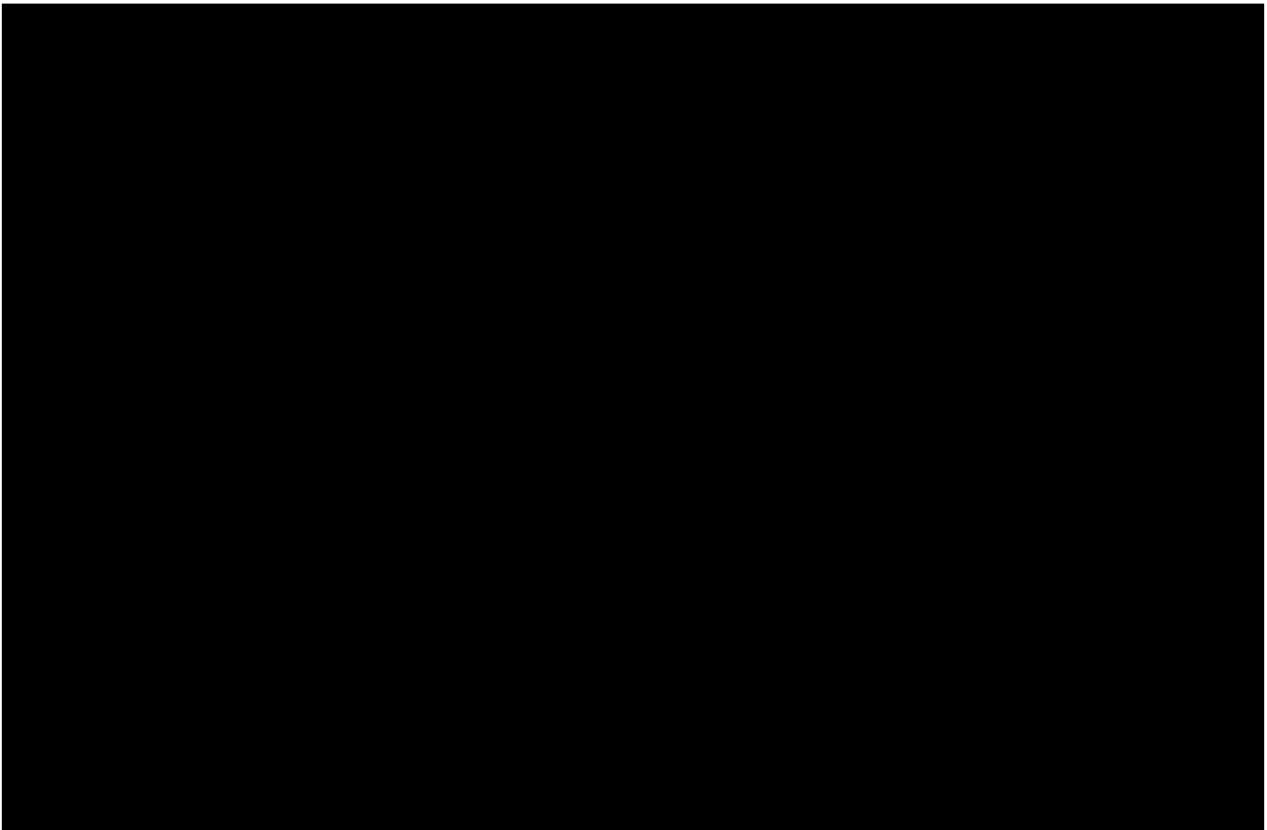
We have invested ██████ in the land, with the aim of creating an Agroforestry agricultural business. IPCC report contains a number of stark warnings about what we need to do to avoid catastrophic climate change, changing cultivation practices, keeping soils covered, water conservation is more important than ever, as well as preparing adequate stocks for weather shocks.

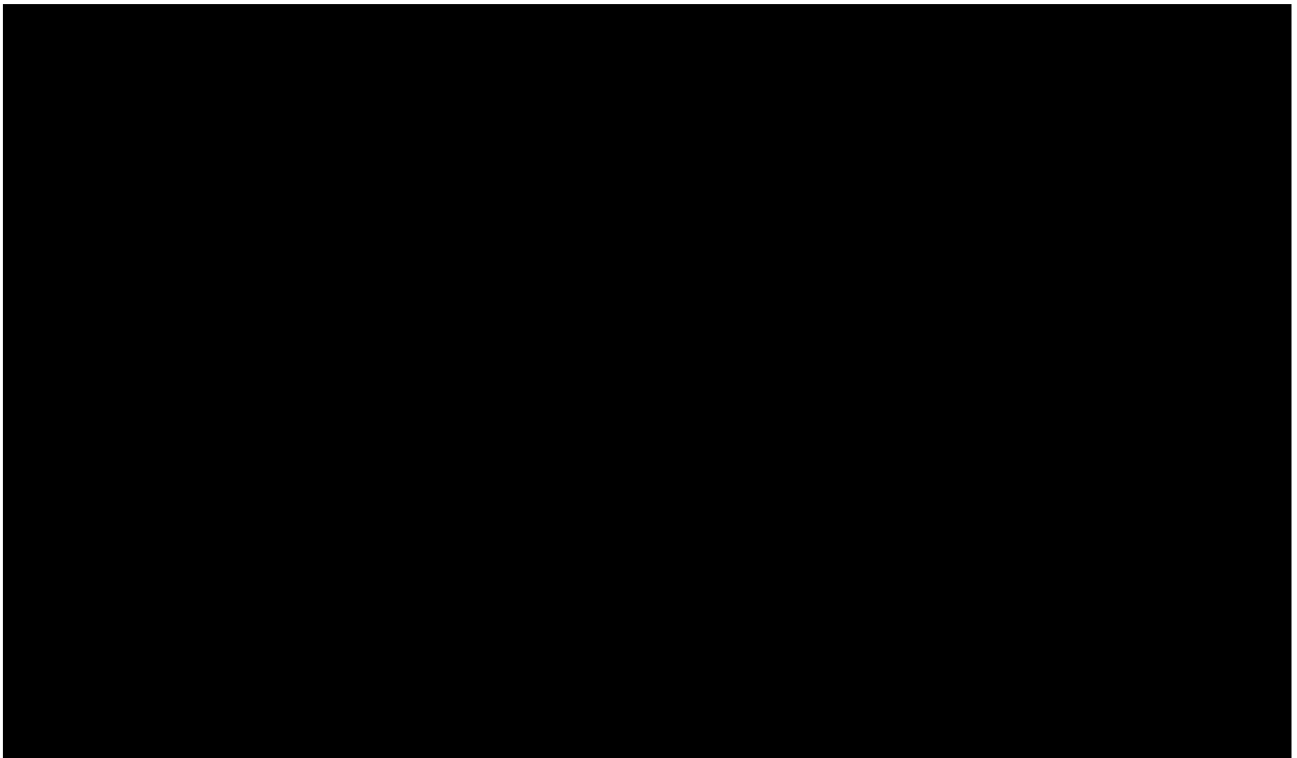
Proposal

[REDACTED] We propose to:

1. Build a barn, which will be used for storage of equipment and machinery necessary for the business.
2. Have a farm office will include, a preparation area for order fulfilment and packaging.
3. Create infrastructure of track to facilitate the operation of this enterprise.
4. Erect two polytunnels.
5. Erect a compost building.
6. Excavate areas for ponds (as the land runs downhill east to west) this gravity will irrigate the site.
7. To have electric from Solar. [REDACTED]
8. Erect new fencing and gates to adapt the layout to facilitate the proposed enterprise [REDACTED]
9. Plant 200 meters of new hedgerow, plant additional trees.
10. Manage the existing woodland and surrounding boundary trees for the future survival of climate change.
11. Harvest precious seeds from the existing seed stands for future saplings

Financial details





Strengths



Carbon Sequestration/ Absorption

Plants absorb carbon dioxide, release oxygen, and store the carbon. This helps off-set carbon emission, preserves the environment, encourages biodiversity, and mitigates climate change.

Guides on the storage and planting are:

Small shrubs Absorb and store 5-50kg over a lifetime.

Large shrubs Absorb and store 50-500kg over a lifetime.

Trees Absorb and store 500-2000kg over a lifetime.

Weaknesses

Reliance on third party contracts to follow the same value.

Opportunity

Existing relationships with associations and collaborations through local business and Myerscough College.

Threats

Pests and disease current and future. Common pests for example slugs, snail and insect whilst not using pesticides. By planting the right blend of species, this risk will mitigate. We will ensure our Biosecurity policy is followed at all times.

Drought – So the importance of water harvesting from the Barn, Polytunnels and from ponds will be paramount.

Flooding – The land becomes seasonally wet in winter, additional planting of shrubs, hedging and trees and the pond creation will mitigate this.

What have we done so far.

We have started to get the planting beds ready 80% of the beds are no till ensuring we do not disturb the soil and release carbon. We have planted a mix of two hundred shrubs / roses and Peonies along with four thousand crated Narcissus and Tulips.

We have started with this to coincide with seasonal planting and we have been able to do this without planning permission. However, we are limited as to what we can do without the barn, as we have nowhere to store the Tractor, fencing stock, Quad and loading equipment. The tunnels are required to germinated seedlings in large quantities for planting and harvesting to create sales in 2023.

Tree seeds will need to be stored at the correct temperature it is our intention to provide suitable storage through shipping containers, seeds will be harvested cleaned and tested for viability in the Autumn and stored until spring. Batches will arrive from a registered forestry supplier Forestart and stored in a separate container as there is no power on site, solar energy will be used to power the AC units attached to the containers.

Tree saplings germinated from the seed will take two years to grow before sale, should our production go to plan we would envisage sales from the cultivated stock in 2025 as our saplings are modular grown it will be possible to plant them year round with the correct management in place. Trees are often supplied as bare root stock this means planting can only take place successfully in Autumn or Spring, but face cold winter or hot summer with very little root system. Modular trees have an established root system and grow happily in a module for two years. The saplings soon establish once placed in the ground.

Income and Enterprise

Our farm produce will be free from artificial chemicals, pesticides and fertilizers. Organic farming has been one of the economy's best performing industries over the last decade. There is a high demand for organic produce as consumers become more aware of environmental issues and are searching for alternatives. Advertising Campaigns such as "Farm to Fork" have been a success. Consumers are now looking at other items for example Coffee, Fashion and indeed flowers which are a luxury item. We will start seed in February in our polytunnels planting out succession crops. The flower are "Grown not Flown" Locally Grown" " No Foam" There can be 10x more carbon in imported flowers than British Grown.

Consumers are looking to purchase organic, wellbeing mood boosting flowers, and immerse themselves in bygone nostalgia.

We have a number of enquiries from Wedding Couples and event planners and florists. The movement is growing now at speed through social media. It is our intention to promote the business on social media to make this farm viable and with an approach to regenerative agriculture, we will advocate to find the shortest route between farm and local customers a vital to the overall efficiency and economy of the operation. We will use social media to tell our story and show people why we farm this way and WHY that motivates us to do what we do to offer great product. We will presell from the farm over the internet and also from what we refer to as hubs e.g., Independent Shops, Coffee Shops and Cafe, farmer market and farm shops. We will look to offer an experience of Booking only Pick your Own and Arrange your own Bouquet Workshops and Christmas wreath making Workshops.

Using these methods, we will look to promote the importance of trees in our world. The importance of Arboriculture and Arbor Day, the Carbon sequestration of Trees and Shrubs and the locking carbon into the ground with no till production.

We will look to have flower subscription and flower prescription local drop off points will ensure that we will avoid unnecessary traveling, we will look at electric power vehicles in the future.

Being in a rural location farm pickups will never be a significant mode of selling for us we do envisage customers visiting our local village purchasing from existing businesses.

In the first two years we will be focussing on getting the infrastructure in and focus on the following

Land Management

Habitat Creation

Woodland Management

Wildflower Margins

Replanting Hedgerows to include Trees.

Fruit Orchard

Tree Nursery

Germinating 50,000 seed in year one.

Germinating 100,000 seed in year two

Setting up seed harvesting and viable test germination facilities.

Nursery Stand

Wind Break Shelter

Learning Station

Flower Field

Establish 160 Roses

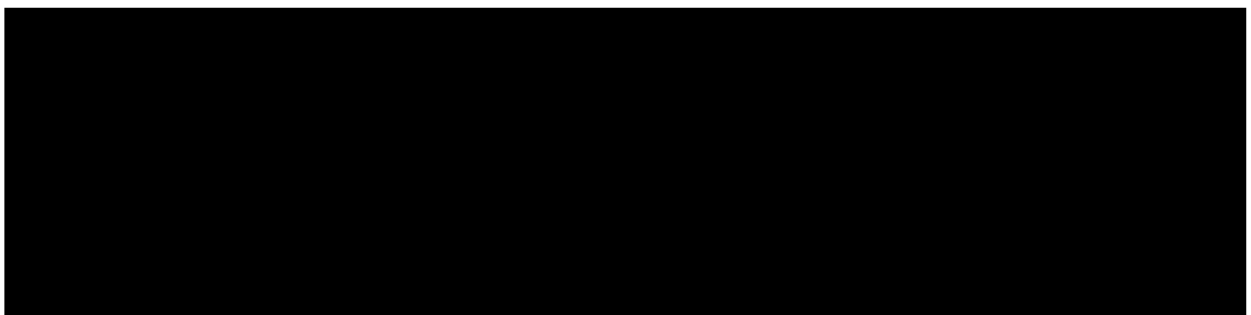
Establish 60 Peonies
Establish 40 Hydrangeas
Establish Shrubbery for Foliage
Plant 1000 perennial plants
Plant 2500 annuals plants
Plant 4000 Bulbs
Plant 600 Biannual Plants
Plant 50 Grasses

Establish Polytunnels
Establish Flower Conditioning Area and chiller.
Establish Flower Packing Area
Photograph Area
Workbenches
Compost Covered Shelter

Once Established will venture into
Bee Keeping
Honey Production
Wormery

Tree Production Capital Grants available applications at next round 2023.
50% of Initial private investments for Infrastructure, tools and equipment to produce Tree from seed.

Flower Farm Enterprise at a glance.



Basic Components

140 x No till beds (30m x 1m)
10m, 20m and 30m caterpillar tunnels
2 x polytunnels
500 Variety Crops

Bed Spacing: 30m (L) x 100cm (W)

Cutting Paths: 30m (L) x 100cm (W)

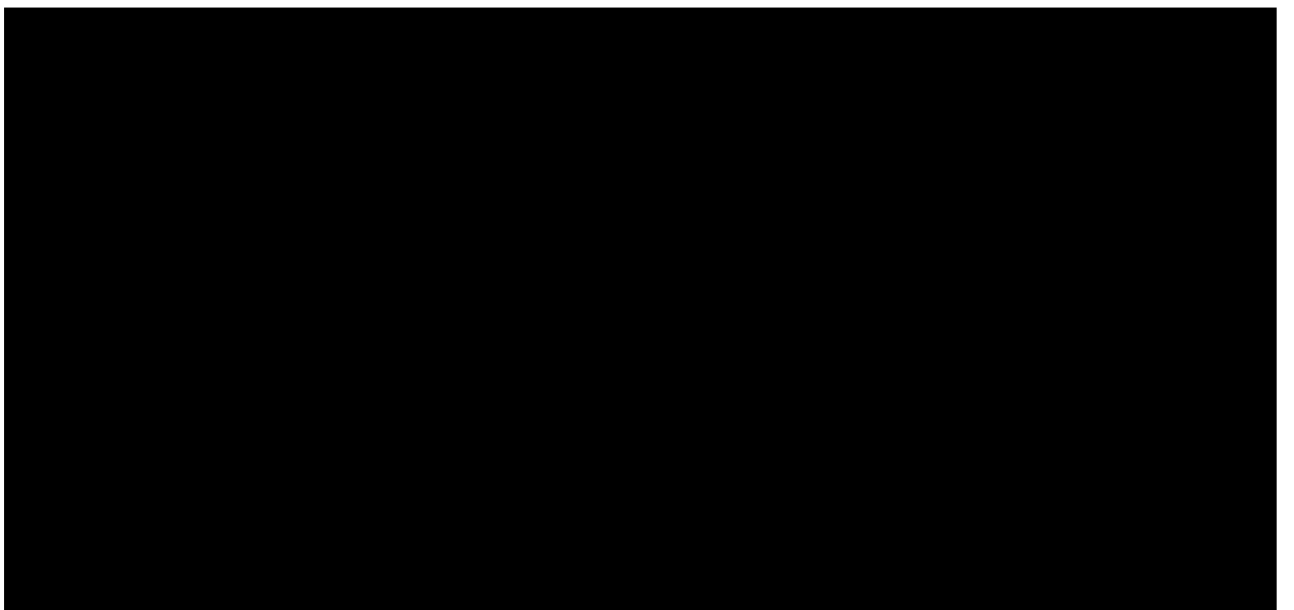
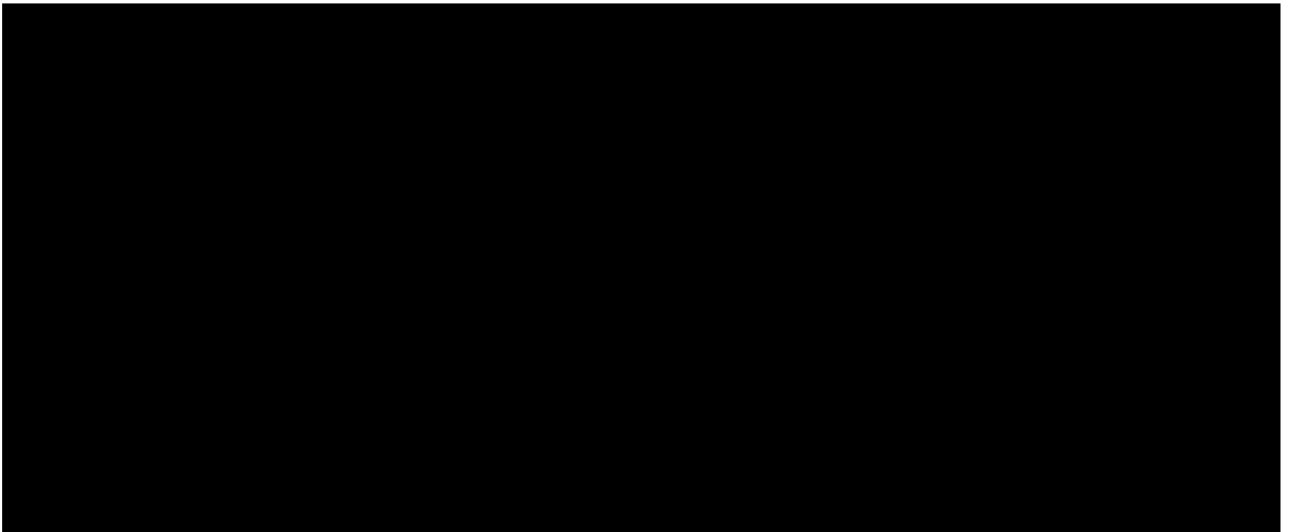
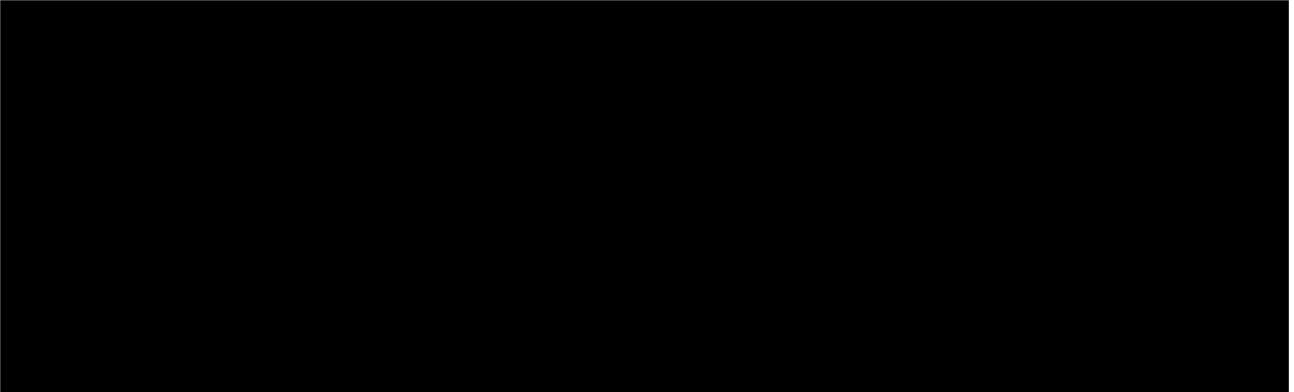
Access Path Square Figure Eight encompassing the beds 3m (W) access for Lifting equipment.

Field Operations

Annual production: February seed propagation, December final Harvest. 11-month production. Last Frost April 21st First Frost 1st December. First Flowers Mid-April.

Seed Propagation, potting on, Hardening Off Plants.

Broadfork, Rake, Stakes, Netting, Pest Management, Cutting, Conditioning, Packing



Agro Forestry

This area will be planted up at the end of the year, Apple, Pear, Cherry Trees in with the flower rows, It will take years to establish. Raspberry canes will be grown for foliage used in Floristry.

We will enrich the soil annually via our own composting on site, waste greenery from the flower farm will be used along with Biannual Hedge Clippings.

Wood pruning from the woodland will be shredded and added to the compost area. We will harvest rainwater from the compost shelter.

The woodland and Tree Nursery will be the areas that Myerscough will be interested in through the Arboriculture Department.

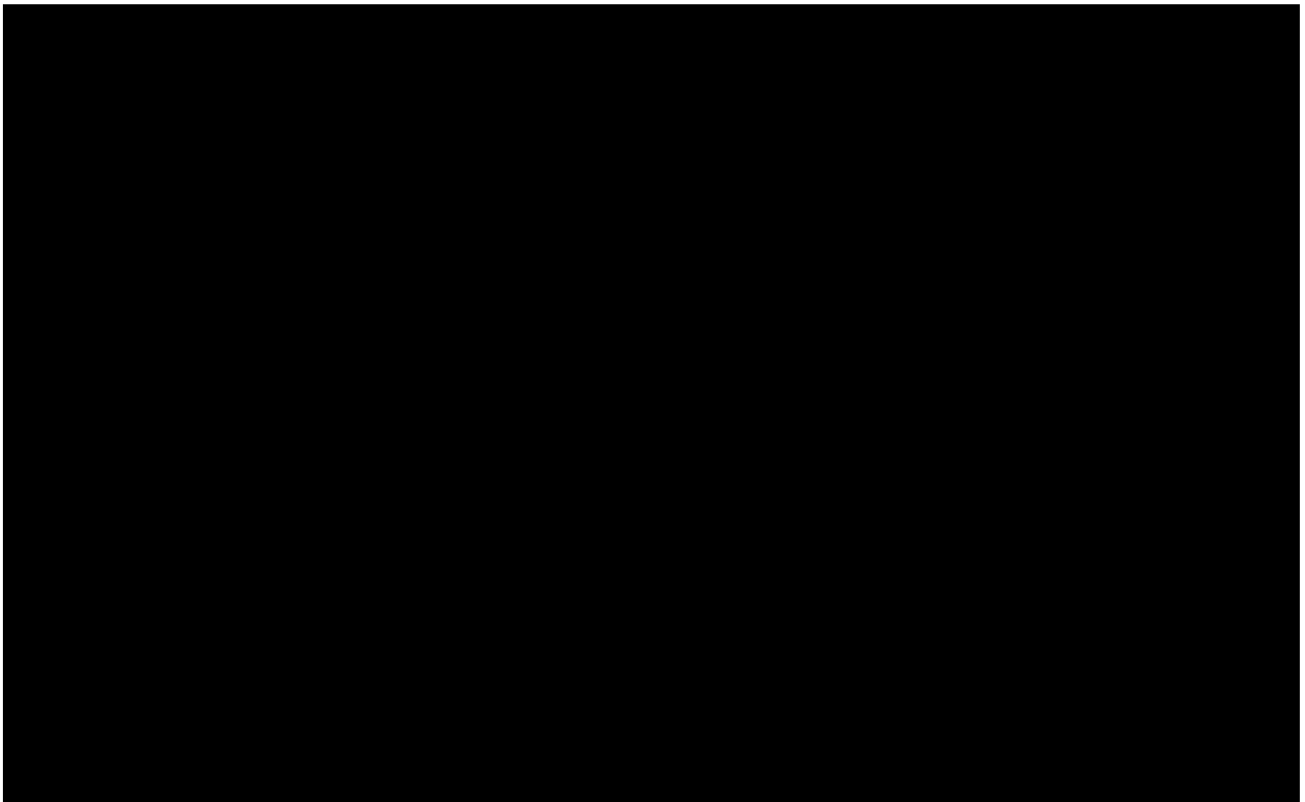
Specific areas will be chosen for extra functions, such as wildflower for pollinators, habitat, wildlife attraction, so many benefits can be created, both from a yield and habitat perspective.

Mixed hedgerow offering flowers to pollinators, berries to birds and future seeds for the nursery.

Tree Seed Nursery

Our tree stands will be harvested in September through to October and Stratified under control until March. The seeds are germinated and then sown into modules where they will remain regularly tented for two years.

These figures are based on the required development of the barn and semi-permanent structures on site:



Business and Improvement plan

Made up of a number of elements:

Land based activity.

Land management

Waste assimilation

Energy and water

Land Management

Objective

To conserve, manage and enhance the environmental quality of the land. Increase the sites biodiversity, landscape, and bring benefits to the wider landscape. This will be integral to the management of the entire site, forming part of a sustainable land management system that provides a green business while benefiting other aspects of the environment in a completely holistic and pesticide free way (excluding Woodland)

We will build soil, organic matter, store carbon whilst increasing populations of pollinating insects and create animal and bird habitats.

By doing so it will also increase the adaption of the natural environment to climate change.

Management

The first step will be to conserve all existing features of biodiversity, such as hedgerow and natural habitats, conservation of these features will include continuing and reintroducing appropriate holistic management to ensure these are retained in good condition (increasing their resilience to change) and extending these to fit the overall site plan, these will form wildlife corridors. The land currently is poor having been lost, through the intensification of agriculture, so a plan to create new habitat, of traditional orchards, woodland, wetland, with a creation of ponds to store water for crop irrigation, growth of coppice and the use of traditional woodland and shelterbelts to help protect horticultural areas and enhance carbon storage.

In Summary

Biodiversity, conserving and extending existing habitats to support species, so in turn maximise biodiversity. Benefits can be gained from the wildlife friendly design recreating

traditional landscape features such as hedges, orchards, woodland regeneration, coppices, shrubbery and wildflower margins nuts and berries will create food for the birds, animals and insects.

Carbon storage increases

Existing semi natural habitats extended, habitats are recreated, ideally creating wildlife corridors, linking other habitats beyond.

Populations of once characteristic farmland birds of our area are increased through habitat creation.

Soil and organic matter are increased.

Populations of pollinating insects, bees are increased.

Beetle banks, natural beehive, hedgehog boxes, bat boxes, bird boxes, insect habitats will be included on the site.

Energy and Water

Energy and water are both resources which the development consumes, so create an environmental impact, so these resources will be minimised and re used wherever possible and provided with renewable resources.

Energy will be provided by Solar, it will be minimised through suitable design and use of technology.

Water, the primary source will be rainwater harvested which will be maximised with guttering and tanks and stored on site from building and structures.

The balance will be drawn from waterbodies, ponds created as part of the development, effective harvesting through rainwater capture and use the ponds (in the areas that currently flood) ponds will allow for large volume water storage, will provide all the water needed.

The crops will be gravity irrigated. Ponds and lakes created will maximise habitat creation whilst storing tons of carbon.

Waste

The development will create waste, the majority of which will be assimilated on site, in environmentally sustainable ways. Green waste from growing cut flowers and timber. A wide range of organic waste will be assimilated on site through a combination of composting and recycling and this reuse will increase overall site fertility and productivity. Green waste will be composted.

Building and Structures

Agricultural Building

This will be used for the storage of chemical and equipment for management of the woodland. Ladders 3.6m, lifting equipment and implement storage. Tractor and trailer, Quad. Chainsaw, lopping and shredding equipment. Machine maintenance. Gardening tools, Crates plus dollies, a conditioning packing area for flowers.

60ft in length and 30ft width. The height to the eaves is 14ft and approx., 19ft to the ridge. Roller shutter door to the south and a pedestrian door to the east side.

Location of the agricultural building will not be obstructive in views from outside the site, there will also be the benefit of additional hedging at present just fencing plus trees this will filter these views, especially of structures and areas of horticulture. These will combine with shelter belts to improve the microclimate and offer shelter to cropped areas.

Poly Tunnels x2

24ft x 36 ft soil foundation.

Community impact

This development will not impact negatively on neighbouring communities. No production noise or production smell. Visitors to site are by appointment only and main sales are through online methods.

Plan explained: reason and benefits.

The land runs downhill from east to west and from north to south especially in the top field the land does not flood but becomes seasonally wet. The water is finding the course of least resistance. A pond would help store this seasonal water. It will also create a new habitat for wildlife and store carbon. Ponds can make a large impact on the big environmental issue that affect us all, climate change, flooding and pollution. As well as being fantastic for wildlife. Ponds support two thirds of all freshwater species and creating clean new ponds is one of the simplest and most effective way to protect freshwater wildlife, supporting species including the common frog, common toad, Teal, Common great Diving Beetle, Pond Olive Mayfly, Blue Tailed Damselfly, Broadleaf pondweed, Great crested Newt, Pillwort and medicinal leech. These natural predators will control pests, keep a natural balance without the use of chemicals. Water consumption is now more important than ever, these ponds will give us forage stocks, so we are prepared for any weather shocks created from climate change.

Poly Tunnels

Germinating Seeds, cultivating saplings before hardening off to plant out in the field. These polytunnels will have a guttering system which will lead to a water collection barrel, when full the excess will be pumped to IBC water storage used to water tree saplings. All irrigation will have filters so to ensure no contamination or growth of bacteria in the tubes.

Field Planting

No till planting beds for Annuals, Biannual, Roses, Peonies, Sunflower and Dahlias. Spring Bulbs Heritage Narcissus and speciality Tulips. Ranunculas and spring flower will be grown in one of the poly tunnels providing early mixes for sale. Benefits of this, build soil and increase biodiversity. Beneficial organisms within the soil will flourish in the undisturbed soil and over time will improve soil structure. The soil and balance of nutrients are more easily maintained. Losses of moisture and organic matter will be greatly reduced. Fewer weeds, due to the surface mulch of organic matter and the lack of bare soil. Higher crop yields. Less labour intensive. No carbon release.

Grass Tracks around the outer edge of the site

Creates easy tractor access around the site to avoid compaction, access required for the transportation of compost, pruning and clippings for shredder and compost heap. Clipping Hedgerows. Transportation of IBC around the site. Equipment to the woodland. The verges will be planted with wildflower to enhance ecological value of the site and the continuity between here and the larger area. On the north and south boundaries where the current waterway is, we plan to create beetle banks, created from the removal of soil from the building foundation. The grass mounds will boost predatory insect numbers which will help pest control, create a habitat for ground nesting birds and small mammals and aid hibernation.

Hedgerows

Compensatory planting and habitat enhancement. Hedgerows around the site will be retained and improved. The boundary hedgerows are currently species poor and provide little potential for use by hedgehogs and the value to small mammal is currently limited. We will be planting 250 meters of new hedgerow and shown on the plan. This is approximately 1250 new whips.

Woodland Trees

The three acres of woodland on site will be continually surveyed, initially a canopy study to detail exactly what species of tree are included, we will assess tree health with a tree survey and tree risk assessment and develop a management strategy for the future. This will be done with collaboration, help from student from Myerscough College and volunteers from the woodland trust along with volunteer Tree wardens. The invasive rhododendron will be eradicated from the site however this can take several years to clear. Once done natural flora and fauna will be able to be introduced. The sloping banks will be reinforced with cocoa matting and growing medium with steel netting, further planting of ferns and understory shrubs. Native bulbs will provide early nectar for pollinators along with woodland anemones and English bluebells positioned naturally. We will plant edible perennials under trees in the field and have a research and development area looking at growing perennial vegetables and fruit trees. The banking to entrance of the wood will be planted with seasonal heathers.

Benefits

Agroforestry mimics natural ecosystems far more closely than monocultures do, where one single where one single crop is grown over large areas of land.

It works by letting different biological systems cooperate and flourish. This leads to a rise in productivity, as tree and plants find ways to interact and support each other symbiotically. All of this can actively improve conditions for plants and wildlife alike.

Firstly, planting trees reduces soil erosion their roots bind the soil in place so it doesn't wash away during heavy rain or strong wind, which can otherwise cause huge problems. They also take up water, prevent water pollution from reaching our ponds and rivers.

Increased Productivity

Trees act as an extra crop giving protection against poor harvest, fruit, nuts or timber can provide an alternative income stream if the main crop fails due to unlucky circumstances such as wet summers or mild winters. Diversified cropping through agroforestry can support farm business to operate throughout the year and avoid the peaks and troughs of seasonal demands and therefore providing a source of year-round income.

More space for wildlife

Wildlife has an equal right to landscape as we do. We can get the same yield out of smaller field through agroforestry, the rest of the space will be used to plant extra trees and hedgerow to house wildlife. In trials, these extra habitats have even helped with pest control, because they act as a home for "friendly predators", who combat some of the pests that would otherwise eat or destroy crops. Agroforestry landscape also provide plenty of corridors for wildlife to move between habitats which is crucial when it comes to foraging and breeding.

Better for the Planet

The main thing we need to do is to cut greenhouse gas emissions. Trees are a great way to do this because they take carbon from the atmosphere and store it safely deep in the soil. They also cycle nutrients which feed other plants, animals and fungi, who go on to nourish the soil further, and healthy soils can store far more carbon than degraded soils.

Healthy soils can also reduce our dependence on chemical fertilizers because they already contain all the nutrients, we farmers need and can replenish themselves naturally.

If we are to feed a growing world population, clever solutions that can deliver sustainable and resilient resources. This will become especially important in the future when climate change might alter weather patterns and make growing conditions less predictable.

BAP

Bats

The woodland offer opportunity for bat life we will collaborate with North Lancashire Bat Group to assess the site. We will include artificial bat boxes in suitable areas after consultation. We pledge to record any sightings and report data to them.

Birds

The hedgerows around the site are minimal as they are not intact and require hedge laying to thicken the base, we plan to diversify the hedgerow species included, to provide foraging for pollinators and berries for the birds, this will offer shelter for nesting birds. We plan to

plant further hedgerows on site to link more corridors. The new building will offer nesting boxes under the eaves in suitable positions.

There are Curlew, Lapwing, Grey Partridge and Tree Sparrow in the area. We commit to further collaboration with the RSPB.

Brown Hare

Brown Hare are a UK BAP priority species and seen regularly in the area. The site hedgerows have some potential for brown hares to create forms so we are creating future potential for and value to brown hares to be adequately made.

Badger

The woodland would offer habitat the ground is quite wet Badger tend to like a sandier soil, however we will collaborate with The Lancashire Badger Group who will survey the area for signs and finding will be reported. We will incorporate gaps in boundary fences at their base to facilitate the passing of badgers or hedgehogs across the site.

Invertebrates / Reptiles

The site will provide important resource for invertebrates in the local area. The pond along with landscaping will include native or wildlife friendly species including night flowering plants. Much of the land is devoid of significant ground cover. This will be improved within the new design.

Policy Assessment – for information only

5.1 The following policies are detailed as relevant to the application. In principle the proposal is acceptable in that it can clearly be shown to be reasonably necessary for the purpose of agriculture.

5.2 The site falls within the countryside. Development for the essential requirement of agriculture would accord with the aims of policy SP2, SP4 of the Adopted Wyre Local Plan.

SP2

1. The development will contribute to the overall physical, social, environmental and economic character of the area in which the development is located.

- a) Facilitates economic growth in the area
- b) Reduces and manages flood risk and manages surface water.
- c) Protects and enhances biodiversity, landscape, cultural heritage and green infrastructure.
- d) Achieves safe and high-quality environment which promotes health and wellbeing.
- e) Will improve health and wellbeing of local infrastructure and service.
- f) will facilitate provisions to local infrastructure and service.

6. The development proposal demonstrates, how it responds to the challenge of climate change through appropriate design and by making best use of resources and assets, including the incorporation of water and energy.

SP4

This development will protect the countryside, support rural communities and the rural economy. It's for the purpose of agricultural business in line with policies.

EP8 Rural Economy

The scale and nature of the activity is not detrimental to the rural character of the area, and will contribute towards maintaining a healthy rural economy.

The new building and supporting infrastructure are necessary.

The policy states that proposal should also accord Core Development Management Policies, in this case...

CDMP2

The development has a surface water management plan along with a land drainage strategy. It will not be an unacceptable risk of flooding or lead to an increased risk of flooding elsewhere.

The plan shows rainwater harvesting for later use and how we plan to utilise the sites current natural discharge process to reduce flows to a minimum by green engineering solutions such as ponds and gravity fed irrigation release throughout the lay of the land. Which will be adequate water drainage system that is maintainable for the lifetime of the development.

CDMP3

And would therefore have regard to issues of essential need, amenity, scale, design and materials.

It respects the character of the area and contributes to the creation of an attractive environment. It will make a positive contribution to the local area, providing provision and education to Myerscough College.

The design responds positively to its surroundings, Structures reflect the rest in the local area in character and design.

CDMP4

The proposed design and building materials are suitable for the proposed use and siting, is appropriately positioned from an operational perspective and is positioned to allow ease of access. The proposed development for an agricultural building is appropriate in the countryside.

The development will provide enhancements to the environments in relation to the environment.

There is no unacceptable impact on environmental asset or interests, including, green infrastructure, habitats, species, soils, water quality and resources, trees and hedgerows, these will only be enhanced with volunteers and experts from the memberships and associations previously mentioned.

Green infrastructures will be created to help reduce air pollution, reduce and manage flood risk and make a positive contribution to the Wyre with the retention and enhancement of existing ecological and landscape features on the site, creating new areas of trees and woodland, habitats and ecological network, incorporating a fabric that will support local species.