NOVA, PRIMROSE ROAD, CLITHEROE

Planting Specification

Studio Perfectus

Planting Schedule	Size	Qty
Trees		
Amelanchier Lamarckian - Multi-stem	50Ltr	1
Betula pendula	50Ltr	1
Ginkgo Biloba	50Ltr	1
Malus domestica 'Anni Elizabeth'		3
Pinus Mugo – Multi-Stem	50Ltr	3
Pinus sylvestris		2
Pinus Wallachian	50Ltr	1
Quercus robur	50Ltr	1
Shrubs		
Ilex crenata	5Ltr	19
Taxus baccata 3 per linear meter (60m)	2Ltr	180
Crosses		
Grasses Calamagnostic brachutrich	2Ltr	2
Calamagrostis brachytrich		21
Deschampsia cespitosa 'Goldschleier' Hakonechloa macra	2Ltr 2Ltr	112
Luzula Nivea	+	
Miscanthus sinensis 'Kleine Fontäne'	2Ltr 2Ltr	110
		11
Stipa tenuissima	2Ltr	53
Mixed native shrub area - 430m² (70% of area to be planted – 301m²)		
Corylus avellana	2Ltr	25%
Cornus sanguinea	2Ltr	25%
Ilex aquifolium	2Ltr	25%
Crataegus monogyna	2Ltr	25%
Herbaceous Perennials		
Verbena bonariensis	2Ltr	52
Veronicastrum virginicum 'Fascination'	2Ltr	12
Vinca minor f. alba 'Alba Variegata' (v)	2Ltr	60
Ferns		
Dryopteris filix-mas 'Cristata'	2Ltr	75
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Biennials		
Digitalis purpurea 'Virtuosa Rose'	2Ltr	28

Bamboos		
Phyllostachys nigra		5
Wildflower lawn		
Wildflower Turf – 20% slow-growing grasses, 80% Native Wildflowers		206m2
Lawns		
erald Turf – 25% perennial ryegrass, 20% smooth stalked meadow grass, 10% chewings cue, 25% strong creeping red fescue and 20% slender creeping red fescue	-	206m2

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This specification should be read in conjunction with all Contract Documents.

A <u>Preliminaries and general conditions</u>

A1 Description of Project

A100 THE PROJECT:

Name of the project: Nova

Address of the site: Nova, Primrose Road, Clitheroe, BB7 1BS

A105 SHORT DESCRIPTION OF THE WORKS: Proposed new detached dwelling.

A106 DESCRIPTION OF THE WORKS: This specification is for the additional planting to the existing site; this will support the application for a new detached dwelling.

A2 Management of the Works

A201 SITE MEETINGS: Hold site meetings when required by the Contract Administrator.

A202 ORDERING:

Order goods and materials in good time so the work is not delayed.

A203 DISCREPANCIES

Refer any discrepancies found in the documents immediately to the Contract Administrator for clarification.

A204 PROGRAMME AND PROGRESS REPORTS

Before commencement, provide the Contract Administrator with a programme of work showing dates for all main operations and the number of staff to be employed daily on the site.

Keep the programme updated and reissued at monthly intervals.

- A205 USE OF THE SITE by the Contractor shall be solely for carrying out Works described in the Contract.
- A206 WORKING HOURS: to be 08.00 to 18.00hrs. Monday to Friday. No work is to be executed on-site outside these hours without agreement.
- A207 NOISE: to be kept to a minimum at all times. No radios, CD, MP3 or similar will be allowed.
- A208 LIAISON WITH OTHER CONTRACTORS: Co-operate and liaise with any other contractors on site to ensure that the Works proceed safely and efficiently.

A3 Quality and safety

A301 BRITISH STANDARDS AND CODES OF PRACTICE

Where the Tender Documents do not fully detail the quality of the Works, comply with current good practise as defined by:-

- BS 4428 'Recommendations for general landscape work' and other relevant British or European Standards:
- National Plant Specification (available free at www.csdhub.com);
- any other Code issued by a relevant Trade organisation.
- all British Standards and other documents referred to in this specification are to be the version current at the date of Tender.

A302 PROTECTION

Adequately protect all existing landscape, buildings, other artefacts, and public and private roads, which are to be retained, from damage caused by the carrying out of the Works. Damage is to be made good at the Contractor's expense.

Tree and vegetation protective fencing see specification clause A617.

A303 PROTECT VEGETATION TO BE RETAINED

Do not damage or prune the visible parts of any vegetation which is to be retained without permission. Within the Root Protection Area or spread of the crown of trees (whichever is greater) or other retained vegetation:

- do not reduce or increase soil levels;
- avoid compaction of the soil;
- do not use machinery or store any materials or equipment, or locate facilities;
- do not spill or store toxic materials;
- where excavation is agreed, use only trenchless or hand excavation and backfill immediately;
- do not cut roots over 25mm diameter or damage their bark without agreement.

A304 DAMAGE TO PLANTS:

Plants damaged by the Works are to be repaired or replaced with agreed species at the next suitable planting season at the discretion of the Contract Administrator and at the Contractor's expense. Any replaced trees or shrubs shall be maintained by the Contractor for the next 12 months and replaced if they fail to thrive during that period.

Damaged trees in a Conservation Area or protected by a TPO or if the project has Planning Permission shall be repaired/replaced to the requirements of the Planning Authority and Contract Administrator.

A305 CONDITION OF THE SITE

Before work commences, agree with the Contract Administrator the condition of the site/site access. Make a photographic record if requested and copy to Contract Administrator.

A306 SAFETY HEALTH AND WELFARE

Comply with the latest revisions or updates of the *Health and Safety at Work Act*, the *Management of Health and Safety at Work Regulations*, the *Construction (Design and Management) Regulations* (CDM), the *Control of Pesticide Regulations*, the EU *Biocide Regulations*, Plant Protection Products legislation, the *Control of Substances Hazardous to Health Regulations* (COSHH) and all other relevant Acts, Statutory Instruments, Regulations or Orders.

Ensure compliance of employees, sub-contractors and all other persons on site.

Provide adequate welfare and first aid facilities.

Carry out risk assessments and prepare method statements as appropriate.

Ensure safe working methods are used.

A307 HEALTH AND SAFETY HAZARDS

The following significant risks remain following the designer's process of eliminating risks and reducing the remaining risks during the design process:

- Public visitors to the garden
- Large plant specimens must be lifted by 2 people or mechanical aid

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A308 PESTICIDES (including herbicides and other chemicals hazardous to fauna and flora, see www.hse.gov.uk/pesticides/):

- Where appropriate ensure that only firms Certificated under the *Food and Environmental Protection*Act carry out application of these chemicals;
- Obtain advice on whether the use of a chemical is appropriate and if so which and at what rate for
 the particular circumstances, from a competent person with a BASIS Certificate in Crop Protection
 (Amenity Horticulture). Provide Contract Administrator with full details of the advice and
 recommendations;
- Contractor is entirely responsible for the choice, application, storage, disposal etc of pesticides;
- Choice to take account of existing vegetation being retained and proposed vegetation;
- Make a COSHH assessment before use and ensure where appropriate that application of chemicals is made only by competent individuals with an NPTC certificate in the Safe Use of Pesticides and on the National Register of Sprayer Operators;
- Apply entirely in accordance with all relevant Regulations, the conditions of approval of the chemical, manufacturer's recommendations and the *Pesticides: Code of Practice for Using Plant Protection Products*;
- Comply with Environment Agency requirements for the use of pesticides near water if applicable;
- Keep appropriate records of all pesticide applications on site;
- Prevent all unauthorised access to treated areas for at least 24 hours;
- Store chemicals in a locked secure space in their original clearly marked containers.

A4 General requirements

A401 SITE CLEANLINESS: Keep the site clean and tidy at all times.

Remove rubbish from site as work progresses and at least at the end of each working week.

A402 WASTE DISPOSAL:

- Comply with all waste disposal legislation applicable;
- Only allow licensed waste carriers to carry waste from site and to licensed locations;
- Retain all waste transfer notes and make available for inspection on request;
- Apply waste minimisation and re-using, recycling, recovering before considering disposal;
- Segregate waste as far as possible to aid recovery.
- A403 FIRES are not permitted on site without agreement. When permitted, fires must not be within 10m horizontal distance of the canopy spread of any trees or other vegetation to be retained.

A404 MAINTENANCE PRE COMPLETION:

All of the works shall be maintained as necessary until the Contract Administrator certifies practical completion.

Control weeds on site throughout the contract period.

Water plants as necessary to ensure establishment. Water plants thoroughly but infrequently, allowing soil to dry between watering.

See also maintenance items in individual specification sections.

B Hard landscape - Workmanship and materials

B1 General preamble

B101 SETTING OUT:

- Provide and use suitable instruments for accurately setting out the Works;
- Make these instruments available to the Contract Administrator if requested for purposes of checking;
- Clearly define all boundaries between different elements of the design and inform Contract
 Administrator that setting out is ready for inspection before starting any subsequent construction or
 planting work.

B2 Excavation and filling

B201 GROUND WORKS: comply with *BS 4428 Code of Practice for general landscape operations* and *BS 8000-1 clause 3.1 - 3.3* for excavation and filling.

B202 SOIL CONDITIONS

Undertake operations involving topsoil, subsoil in soft landscape areas and subsoil for reuse, when the soil is reasonably dry and workable and non-plastic in consistency, with a soil moisture content at or below the lower plastic limit; not when the soil is wet.

- B203 SITE CLEARANCE: remove to an authorised tip all vegetation which is not to be retained, stones larger than 60mm, concrete, brick, tile, metal, timber and any other unwanted material not shown as retained on the drawings or specified for retention or appropriate for reuse in the Works.

 Segregate materials for recycling whenever appropriate and comply with specification clause A402.

 Advise Contract Administrator before removal or disposal of anything unforeseen discovered.
- B204 EXISTING TOPSOIL: to be removed from areas of hard landscape and areas to be re-graded. Keep free of contamination, and compaction and store in heaps less than 1m high. Remove excess just before the work has achieved practical completion

B205 COMPACTION/DAMAGE BY PLANT:

Do not allow plant to run over topsoil or soil heaps.

Minimise compaction by controlling access routes.

Break up all compacted ground or pans in soft landscape areas by subsoil cultivation in accordance with specification clause B227 before proceeding with the filling/construction works in the area or before reinstatement.

B206 EXCAVATION FOR SOFT LANDSCAPE:

Excavate soft landscape areas as necessary to accommodate topsoil depths as specification clause B245.

B207 SUBSOIL CULTIVATE:

Break up subsoil with appropriate machinery for soil type and in appropriate weather and soil conditions to a minimum depth of 300mm using 500mm long fixed tines set 300mm apart, in 2 directions at right-angles. To:

- The bottom of excavations for soft landscape areas prior to top soiling;
- Areas of subsoil prior to adding subsoil to raise levels under proposed soft landscape areas. Use hand-operated machinery or hand tools where necessary.
- B208 SUB-SOIL: Store sub-soil of appropriate quality for reuse if needed. Store clear of top soil in separate heaps. Soil in excess of requirements or deemed unsuitable for back-filling, to be removed from site.
- B209 SUBSOIL FILL TO SOFT LANDSCAPE AREAS: Ensure surface to be filled is not compacted. Subsoil cultivate in accordance with specification clause B227 before adding material.

Spread and consolidate appropriate agreed fill in layers not exceeding 200mm deep. General levels to be within 50mm of design levels.

Contours to be free flowing to reflect the surface contours and different soil depths for different types of area.

Finished surface to be loose before topsoiling, if necessary by subsoil cultivation.

- B210 SPREAD TOP SOIL from topsoil storage heap to provide the following requirements and minimum depths:
 - shrub areas 400mm;
 - Graded slopes to be of even gradient;
 - Graded to avoid ponding hollows;
 - Graded to even flowing contours with no sharp angles in any direction (unless shown on drawings);
 - Topsoil edges 50mm above bordering hard surfaces to allow for settlement;

C Plants and planting - Workmanship and Materials

C1 General preamble

C100 GENERAL

Setting out see specification clause B101

Fires see specification clause A403

Retained vegetation protection see specification clause A303

Soil conditions see specification clause B202

C101 CLEARANCE, EARTHWORKS AND SOILING for soft landscape areas see specification clauses B200 to B210

C102 WATER SUPPLY RESTRICTIONS

If the water supply is, or is likely to be restricted, advise Contract Administrator and do not carry out planting or seeding until instructed. If planting or seeding has been carried out, obtain instructions on watering.

C103 SUPPLY & HANDLING OF TREES & PLANTS

Comply with the National Plant Specification (NPS) and the NPS Handling and Establishment (Code of Practice for Plant Handling by CPSE) available free at www.csdhub.com.

Comply with *Nurseries, Retailers and Landscapers – Biosecurity Best Practice Protocols* which is available free at

http://webarchive.nationalarchives.gov.uk/20131103143814/http://www.fera.defra.gov.uk/plants/plant Health/treeHealth/bestPracticeProtocols.cfm.

Ensure all nurseries/plant suppliers comply with the NPS and Biosecurity Protocols.

All plants shall have been growing in GB for at least 12 months prior to delivery.

All plants shall have been grown in peat-free growing media. Provide details of the growing media used.

C105 PLANT LABELLING:

All plants delivered to site shall be clearly and durably labelled with exact genus, species, cultivar and supplier. Where plants are grouped one label is to be retained in place on completion of the work.

C107 SEASONS: Undertake planting in the following seasons unless the agreed programme indicates otherwise:

- Deciduous plants: beginning November to the end of March.
- Evergreen plants: October/November or April
- Grass and wildflower seeding: March/April or September/October
- Bulbs: when available depending on species, usually in Autumn or Spring
- Aquatic and marginal plants: when available in Spring and Autumn

C108 WEATHER AND SOIL CONDITIONS

Soil conditions see specification clause B202

Undertake soft landscape works generally in open weather conditions, typically mild, dull and moist. Do not undertake planting seeding or turfing when the temperature is below 4°C and falling, when the ground is covered in snow, in frozen or waterlogged ground or in drought conditions.

C109 PLANT FAILURES: all plants supplied and planted by the Contractor, which fail to thrive within the period for the rectification of defects of plants stated in Section A2B of this Specification, shall be replaced with the same species to match the size of adjacent plants of the same species at the next suitable planting season, unless otherwise agreed.

C110 PESTICIDES (including herbicides):

Apply if required in accordance with specification clause A308.

C2 Turfed/Seeded lawns and meadows

C200 NURSERY STOCK TURF: in accordance with the plant list and as specified in the *National Plant Specification* (NPS, available free at www.csdhub.com).

Comply with the requirements of clause C103 above.

C201 GRADIENTS AND LEVELS:

Conform to the spot heights or contours on drawings and grade to even flowing contours with no sharp angles in any direction and no ponding hollows (unless shown on drawings) Unless otherwise specified final levels after settlement are to be 20mm above any adjacent paving or other hard surfaces. See also specification clause B210

C202 PREPARATION FOR PLANTING:

Apply herbicide if required in accordance with specification clause A540, allowing adequate time for it to work before proceeding.

Rotovate ground to a minimum of 250mm deep and remove stones over 50mm in any dimension. Remove existing unwanted plants including their roots.

In areas where it is unachievable to rotavate mechanically, manual cultivation of the soil by hand must be used.

C203 FERTILISER:

Apply Rapid Roots pre-turfing Fertiliser @ 20g/m2 to all areas prior to turfing.

C204 PREPARATION OF PLANTS:

Check for and reject any damaged, diseased, poorly rooted, pest infested or turf that does not comply with all the requirements of the plant list (unless previously agreed).

C205 WATERING BEFORE PLANTING:

If soil is dry, thoroughly water 48 hours before planting.

C206 FINAL CULTIVATION:

Timing – After grading and fertilising.

Ensure a minimum of 100mm of topsoil to root in.

Light compaction of topsoil.

Rake level with a crumb-like consistency at the top of the soil.

C207 PLANT:

In previously prepared areas, in the position shown on the drawings; at the rate specified.

C208 IMMEDIATELY AFTER PLANTING:

Ensure measures are in place to stop all foot traffic over the newly turfed areas for a period of 3-6 weeks – only when the root system penetrates the soil below is the lawn ready for full use.

C209 WATERING:

Water thoroughly immediately after planting and at intervals as necessary in accordance with clause A660 until the Contract Administrator certifies practical completion.

C210 NURSERY STOCK WILDFLOWER TURF: in accordance with the plant list and as specified in the *National Plant Specification* (NPS, available free at www.csdhub.com).

Comply with the requirements of clause C103 above.

C211 GRADIENTS AND LEVELS:

Conform to the spot heights or contours on drawings and grade to even flowing contours with no sharp angles in any direction and no ponding hollows (unless shown on drawings) Unless otherwise specified final levels after settlement are to be 20mm above any adjacent paving or other hard surfaces. See also specification clause B210

C212 PREPARATION FOR PLANTING:

Apply herbicide if required in accordance with specification clause A540, allowing adequate time for it to work before proceeding.

Rotovate ground to a minimum of 250mm deep and remove stones over 50mm in any dimension. Remove existing unwanted plants including their roots.

In areas where it is unachievable to rotavate mechanically, manual cultivation of the soil by hand must be used.

C213 FERTILISER:

Apply Rapid Roots pre-turfing Fertiliser @ 20g/m2 to all areas prior to turfing.

C214 PREPARATION OF PLANTS:

Check for and reject any damaged, diseased, poorly rooted, pest infested or turf that does not comply with all the requirements of the plant list (unless previously agreed).

C215 WATERING BEFORE PLANTING:

If soil is dry, thoroughly water 48 hours before planting.

C216 FINAL CULTIVATION:

Timing – After grading and fertilising.

Ensure a minimum of 100mm of low nutrient soil with a pH of neutral to pH 7(existing stripped soil may be used if it meets these requirements).

Light compaction of topsoil.

Rake level with a crumb-like consistency at the top of the soil.

C217 PLANT:

In previously prepared areas, in the position shown on the drawings; at the rate specified.

C218 IMMEDIATELY AFTER PLANTING:

Ensure measures are in place to stop all foot traffic over the newly turfed areas for a period of 3-6 weeks – only when the root system penetrates the soi below is the lawn ready for full use.

C219 WATERING:

Water thoroughly immediately after planting and at intervals as necessary in accordance with clause A404 until the Contract Administrator certifies practical completion.

C3 Shrubs, herbaceous, groundcover and aquatic plants

C300 NURSERY STOCK: in accordance with the plant list and as specified in the *National Plant Specification* (NPS, available free at www.csdhub.com).

Comply with the requirements of clause C103 above.

C301 GRADIENTS AND LEVELS:

Conform to the spot heights or contours on drawings and grade to even flowing contours with no sharp angles in any direction and no ponding hollows (unless shown on drawings).

Level of soil adjacent to paving and other surfaces shall be as shown on the detail drawings.

C302 PREPARATION FOR PLANTING:

Apply herbicide if required in accordance with specification clause A540, allowing adequate time for it to work before proceeding.

Rotovate ground to a minimum of 250mm deep and remove stones over 50mm in any dimension.

Remove existing unwanted plants including their roots.

In areas where it is unachievable to rotavate mechanically, manual cultivation of the soil by hand must be used (small beds to the front of the dwellings).

C303 ORGANIC MATTER: apply and incorporate into the surface 250mm of planting areas:

composted green waste complying with BSI PAS 100 from Yorgonics at the rate of 0.05 m3/m².

C304 FERTILISER: incorporate Fish, Blood, Bone:

• in planting areas at the rate of 70gm/m² into the topsoil

C305 PREPARATION OF PLANTS:

Remove inorganic containers.

Check for and reject any damaged, diseased, poorly rooted, pot-bound, pest infested, wrongly identified plants, or plants not complying with all the requirements of the plant list (unless previously agreed) Carefully prune any minor root damage.

C306 WATERING BEFORE PLANTING:

If soil is dry, thoroughly water 48 hours before planting

Saturate the root ball of container grown and rootballed plants 24 hours before planting.

C307 PLANT:

- in previously prepared pits and planting areas
- in the position shown on the drawings;
- at the rate specified, avoiding regimented rows unless specifically shown;
- ensure holes are large enough to allow adequate root spread and tease out congested root balls of container grown plants;
- excavate holes at least 75mm below the root system;
- set plants so that their original soil level matches the new surrounding ground and
- with their best side displayed.

C308 IMMEDIATELY AFTER PLANTING:

Lightly prune back any damaged or malformed growth.

Rake soil to an even, fine tilth to the required levels.

C309 WATERING:

Water thoroughly immediately after planting and at intervals as necessary in accordance with clause A404 until the Contract Administrator certifies practical completion.

C310 MULCHING:

Fork soil to a medium tilth in the areas to be mulched. Apply mulch after watering to a lightly consolidated depth of 50 mm.

C311 MULCH:

Planting beds

Supplier: Greenvale Type: Organic Mulch

C312 STAKING

All trees are to be staked in strict accordance with BS 8545:2014

All shrubs that are not self-supporting shall be supported using sawn or riven timber stakes 1500mm in length, no smaller than 25mm square section and driven 600mm into the ground. The stake shall terminate 75mm below the total height of the shrub.

C313 MAINTENANCE PLANTS AND PLANTING AREAS

Keep the ground weed free.

C4 Work to existing trees and plants

C400 TREE WORK to be to BS 3998 'Recommendations for Tree Work' unless otherwise specified or agreed. See also specification clauses:

- A140 TPO and other permissions;
- A515 and A520 Health and Safety;
- A620 site cleanliness;
- A622 Waste disposal;
- A624 fires.

C405 SITE CLEARANCE: HEDGES

Areas of hedges and individual trees to be cleared are indicated on drawing no L1.1-1.4 Agree with the Contract Administrator and mark each tree to be removed. Stump clearance: see specification clause C635.

C410 TREE WORK SUBCONTRACTOR

The removal of major branches or felling of trees over 6m high and similar tree surgery operations shall only be carried out by specialist subcontractors with £5 million (any one claim arising from one event) public liability insurance.

C420 BRANCH REMOVAL:

Cut branches sufficiently far from the main stem to leave the branch bark ridge intact. Avoid moisture traps and horizontal surfaces. Remove heavy branches in sections. Remove dead or damaged wood whether or not specifically listed.

C425 LIFTING THE CROWN:

Carefully select and remove branches up to a height of 1800mm so space below the canopy is clear up to the specified height.

C440 WOOD CHIPS / LOGS: Chips from stump and brushwood chipping and/or logs are to be stored on site in agreed locations or as shown on the plans for use by the Employer or wildlife.