

Outline Landscaping & Maintenance Intent

Supporting Statement (to be read in conjunction with drawings, and design & access statement)

Formations and revised levels will be created by imported inert material. The imported fill material will be tested and certified clean to ensure its suitability. This will be administered in accordance with the Environment Agency approval process for the remediation of this site. Total volume of imported material will be 21,600M³

The duration of the improvement works will be dependent on seasons, and availability of the imported material, however we would propose to complete the project within two years of commencement of the works, and with phased completions of areas within the two year programme. Planting will be completed in the first appropriate season following the completion of landscaping/groundworks.

Drainage for the amenity areas will be provided by a 400mm free draining sub-soil layer and a below ground field drainage system incorporating perforated pipes in a herringbone pattern discharging to a soak-away, full design and specification for this will be provided prior to construction works.

Top soil will partially invoke British Standard 3882 refer to subsequent specifications.

The depths & volumes of imported materials are as follows:-
 Top soil layer 200mm thick, volume = 4,000 M³ approx;
 Subsoil free draining 400mm thick layer, volume = 8,000 M³ approx;
 Subsoil to make up levels requires a volume = 9,500 M³ approx;
 Recycled drainage material 100 M³ approx.

Grass seed will be provided to the proposed two flat plateau areas for enhanced community use to Q30/311

Wild flower grass seed to Q30/312 will be provided to newly exposed/imported topsoil on new embankments/mounds created by the improvement works.

Existing embankments and landscaping unaffected by the improvement works will remain as existing. Improvement work will be limited to within the site boundary as indicated on the drawings. Compressed stone dust/gravel footpaths & tracks within the site boundary will improved and repaired, where re-aligned they will reinstated with similar gravel tracks.

Where identified on the proposed plan, trees will be planted to the noted density on newly formed mounds. We request a planning condition for the tree planting schedule containing a native tree and shrub planting mix to be agreed between the Applicant's specialist landscape contractor and Landscape Officer prior to any works starting.

Soil for tree planting is to be moist, friable and not waterlogged. Aggressive weeds (particularly grasses) should be controlled before planting as they will compete with the new trees. Deciduous trees are to be planted between late October and late March, and not in frozen conditions.

Following completion of the landscaping and planting works of the enhanced community recreation space with their agreement responsibility will be handed over to Brymbo Community Association. This will include responsibility for the maintenance of the area. The Community Association will develop a management plan in consultation with a specialist landscaping contractor.

The following specification clauses have been provided to communicate the intent of the ground works, landscaping and maintenance procedures that are proposed within this application, final details can be refined prior to the start of works.

D20 Excavating and Filling

Clearance

225 Handling Topsoil

- Standard: To BS 3882.
- Aggressive weeds:
Species: Included in the Weeds Act, section 2 or the Wildlife and Countryside Act, Schedule 9, part II.
Give notice: Obtain instructions before moving topsoil.
- Contamination: Do not mix topsoil with:
Subsoil, stone, hardcore, rubbish or material from demolition work.
- Other soil or material containing aggressive weeds, sharps, plastics and non soil forming materials and notifiable animal or plant diseases.
- Oil, fuel, cement or other substances harmful to plant growth.
- Other classifications of topsoil.
- Multiple handling: Keep to a minimum. Use topsoil immediately after stripping.

Filling

500 Proposed Fill Materials

- Details: Submit full details of proposed fill materials to demonstrate compliance with specification, including:
Type and source of imported fill.
Proposals for processing and reuse of material excavated on site.
Test reports as required elsewhere.
- Timing: *At least 21 days before starting filling.*

510 Hazardous, Aggressive or Unstable Materials

- General: Do not use fill material which would, either in themselves or in combination with other materials or ground water, give rise to a health hazard, damage to building structures or instability in the filling, including material that is:
Frozen or containing ice.
Organic.
Contaminated or noxious.
Susceptible to spontaneous combustion.
Likely to erode or decay and cause voids.
With excessive moisture content, slurry, mud or from marshes or bogs.
Clay of liquid limit exceeding 80 and/or plasticity index exceeding 55.
Unacceptable, class U2 as defined in the Highways Agency 'Specification for highway works', clause 601.

610 Compacted Filling For Landscape Areas

- Fill: Material capable of compaction by light earthmoving plant.

- Filling: Layers not more than 200mm thick. Lightly compact each layer to produce a layer to produce a stable soil structure.

615 Loose Tip Filling For Landscape Areas

- Filling: Do not firm, consolidate or compact when laying. Tip and grade to approximate levels in one operation with minimum of trafficking by plant.

Q28 Topsoil and growing media

200 Grading Subsoil

- General: Grade to smooth flowing contours to achieve specified finished levels of topsoil.
- Areas of ticker topsoil: Excavate locally.

250 Subsoil Surface Preparation

- General: Excavate and/or place fill to required profiles and levels, as section D20.
- Loosening:
Light and non-cohesive sub soils: When ground conditions are reasonably dry, loosen thoroughly to a depth of 300mm.
Stiff clay and cohesive sub soils: When ground conditions are reasonably dry, loosen thoroughly to a depth of 450mm.
Rock and chalk subgrades: Lightly scarify to promote free drainage.
- Stones: Immediately before spreading topsoil, remove stones larger than 75mm.
- Remove: *Arisings, contaminants, and debris.*

342 Imported top soil, custom mix

- Texture to BS 3882, figure 1: Any class from silt loam to sandy clay
- Reaction, to BS 1377-3: *Ph 5.5-8.5*
- Organic matter: *Minimum 5%*
- Nutrient content: *Minimum index values for nitrogen, phosphorus, potassium and magnesium to be as BS 3882 multipurpose topsoil.*
- Crumb structure: *Made up of discernible crumbs.*
- Stones: Size in any dimension (maximum): *20mm for playing fields, 50mm for general planting areas, 50mm for woodlands.*
Stone content by dry weight (maximum): *No requirement.*
- Foreign matter: On visual inspection, free of fragments and roots of aggressive weeds, sticks, straw, subsoil, pieces of brick, concrete, glass, wire, large lumps of clay or vegetation, and the like.

670 Contamination

- General: Do not use topsoil contaminated with subsoil, rubbish or other materials that are:
Corrosive, explosive or flammable.
Hazardous to human or animal life.
Detrimental to healthy plant growth.
- Subsoil: In areas to receive topsoil, do not use subsoil contaminated with the above materials.
- Give notice: If any evidence or symptoms of soil contamination are discovered on the site, or in topsoil to be imported.

690 Handling Topsoil

- Aggressive weeds: Give notice and obtain instructions before moving topsoil.
- Plant: Select and use plant to minimize disturbance, trafficking and compaction.
- Contamination: Do not mix topsoil with:
Subsoil, stone, hardcore, rubbish or material from demolition work.
Other grades of topsoil.
- Multiple handling: Keep to a minimum. Use topsoil immediately after stripping.
- Wet conditions: Handle topsoil in the driest condition possible. Do not handle during or after heavy rainfall or when it is wetter than the plastic limit less 3%, to BS 1377-2.

700 Spreading Topsoil

- Temporary roads/surfacing: Remove before spreading topsoil.
- Layers:
Depth (maximum): 150mm.
Gently firm each layer before spreading the next.
- Depths after firming and settlement (minimum): *Grass Area 100-150mm unless otherwise indicated on drawings.*
- Crumb structure: Do not compact topsoil. Preserve a friable texture of separate visible crumbs wherever possible.

710 Loose Tipping of Topsoil

- General: Do not firm, consolidate or compact topsoil when laying. Tip and grade to approximate levels in one operation with minimum of trafficking by plant.
- Depths after settlement (minimum):

720 Sportsfields

- Grading: To even levels and within the following permitted deviations:
From levels or gradients shown on drawings: $\pm 75\text{mm}$.
- From line between boning rods 30m apart: $\pm 25\text{mm}$.

Q30 Seeding/Turfing

General Information Requirements

115 Seeded Areas

- Growth and development: Healthy, vigorous grass sward, free from the visible effects of pests, weeds and disease.
- Appearance: A closely knit, continuous ground cover of even density, height and colour.

120 Climatic conditions

- General: Carry out work while soil and weather conditions are suitable.

145 Watering

- Quantity: Wet full depth of topsoil.
 - Application: Even and without displacing seed, seedlings or soil.
 - Frequency: As necessary to ensure the establishment and continued thriving of all seeding.
- Plant only into moist soil and water thoroughly to the full depth of soil immediately after planting. Water regularly through the establishing period (minimum 3 months) to prevent dehydration.

Preparation

250 Cultivation

- Compacted topsoil: Break up full depth.
- Soil ameliorant/Conditioner/Fertilizer: Fully incorporate into topsoil to a depth of 150mm
- Tilth: Reduce topsoil to a fine tilth.
- Material brought to the surface: Remove stones and clay balls larger than 50mm in any dimension, roots, tufts of grass, rubbish and debris.

280 Final Cultivation

- Timing: After grading and fertilizing.
- Seed bed: Reduce to fine firm tilth with good crumb structure.
- Depth: 25mm
- Surface preparation: Rake to a true, even surface, friable and lightly firmed but not overcompacted.
- Remove surface stones/earth clods exceeding: 50mm
- Adjacent levels: Extend cultivation into existing adjacent grassed areas sufficient to ensure full marrying of levels.

Seeding

311 Grass Seed

- Supplier: *British Seed Houses Amenity or similar approved*

- Mixture reference: *A9 (General Outfield) or similar approved*
- Application rate: *35g/m² or to supplier's recommended application rate.*

312 Wildflower seed mixture

Supplier: *British Seed Houses Amenity or similar approved*

- Mixture reference: *WFG2 Flowering Meadow*

Origin (as defined in the National Plant Specification): *Refer to supplier's information.*

Rate of application: *5g/m²*

Maintenance

610 Failures of seeding

- Defective materials or workmanship: *Areas that have failed to thrive.*
- Exclusions: *Theft or malicious damage.*
- Method of making good: *Recultivation and reseeding.*
- Timing of making good: *The next suitable planting season.*

620 Maintaining amenity and functional grassed areas

- Maximum height of growth at any time: *Generally 50mm*
- Preparation: *Before each cut remove all litter and debris.*
- Cutting: *As and when necessary to a height of 25mm*
Arisings: *Remove*
- Weed control: *Substantially free of broad leaved weeds.*
Method: *Application of a suitable selective herbicide.*
- Stones brought to the surface: *Remove regularly.*
Size: *Exceeding 25mm in any dimension.*
- Watering: *As Clause Q30/145.*

650 Maintaining grassed areas with perennial wild flowers

- Preparation: *Before each cut remove all litter and debris.*
- Height and frequency of cut in first growing season: *n/a*
Time of first cut: *Site visits should be made to decide on the timings of mowing, and advice obtained from the seed supplier.*
Height of first cut: *Not below 50mm*
Frequency of subsequent cutting (minimum): *once per year, two cuts (maximum)*
Height of growth permitted (maximum) *n/a*
- Height and frequency of cut in second growing season: *n/a*
-Time of cut: *Single mowing in August after flowering, arisings removed.*
-Height of cut: *Not below 50mm*
- Watering: *As Clause Q30/145.*

Q31 External Planting

General Information Requirements

120 Climatic conditions

- General: Carry out work while soil and weather conditions are suitable.

125 Times of year for planting

- Deciduous trees and shrubs: Late October to late March

145 Watering

- Quantity: Wet full depth of topsoil.
- Application: Even and without displacing seed, plants or soil.
- Frequency: As necessary to ensure the establishment and continued thriving of all planting.

Plant only into moist soil and water thoroughly to the full depth of soil immediately after planting. Water regularly through the establishing period and continued thriving of planting.

200 Trees – General

- Condition: Materially undamaged, sturdy, healthy and vigorous.
- Appearance: Of good shape and without elongated shoots.
- Hardiness: Grown in suitable environment and hardened off.
- Health: Free from pests, diseases, discoloration, weeds and physiological disorders.
- Root system and condition: Balanced with branch system.
Standard: BS 3936
- Species: True to name. Refer to specialist landscape contractor tree planting schedule.
- Origin/Provenance: Local provenance.
Definition: Origin and Provenance have the meaning given in the National Plant Specification.

216 Trees – Specification criteria

- Names, forms, dimensions and other criteria: To the relevant part of BS 3936.

265 Plant handling, storage transport and planting

- Standard: To HTA 'Handling and establishing landscape plants'.
- Frost: Protect plants from frost.
- Handling: Handle plants with care. Protect from mechanical damage and do not shock, e.g by dropping from a vehicle.
- Plant packaging: To be suitable
- Planting: Upright or well balance with best side to front.

290 Surplus materials

- Subsoil, stones, debris, wrapping material, canes, ties, temporary labelling, rubbish, prunings and other arisings: Remove.

Planting trees

505 Tree pits

- Sizes: 75mm deeper than root ball and wide enough to accommodate roots when fully spread.
- Sloping ground: Maintain horizontal bases and vertical sides with no less than minimum depth throughout.
- Pit bottoms: With slightly raised centre. Break upto a depth of 150mm
Treatment: Submit proposals
- Pit sides: Scarify.
- Backfilling material: Reuse excavated material

595 Tree Protection

- Type: Split tube
- Material: biodegradable plastics
- Size: 0.2m high
- Colour: Clear
- Support: Bamboo cane with ties
- General: Ensure that protection methods do not impede natural movement of trees or restrict growth.

680 Setting out

- Planting density
- Layout : Random groups of no less than 3 or more than 7 of the same species, ensuring that no three plants are aligned in any one direction.

770 Woodland planting maintenance

- Watering: Only as necessary to prevent planting wilting.
- Loose planting: Reaffirm surrounding soil, without compacting.
- Weed control: Cut down and remove weeds prior to setting seed in a 1m diameter area around each tree.

Q35 Landscape Maintenance

155 Watering

- Supply: Submit proposals
- Quantity: As required
- Application: Do not damage or loosen plants.
- Compacted soil: Loosen or scoop out, to direct water to rootzone.
- Frequency: As necessary for the continued thriving of all planting.

175 Disposal of arisings

- General: Unless specified otherwise, dispose of arisings as follows remove from site to recycling facility.

190 Litter

- Extraneous rubbish not arising from contract work: Collect and remove from site.

197 Cleanliness

- Soil and arisings: Remove from hard surfaces.
- General: Leave the works in a clean, tidy condition at completion and after any maintenance operations.

210 Maintenance of grassed areas

- General: *Maintain grass in a manner appropriate to the intended use.*
- Soil and grass:
Condition: *Maintain a healthy vigorous sward, free from disease, fungal growth, discolouration, scorch or wilt.*
- Waterlogging and compaction: *Prevent.*
- Damage: *Repair trampling, abrasion or scalping.*
- Litter and fallen leaves: *Remove regularly to maintain a neat appearance.*

220 Grass cutting generally

- Before mowing: Remove litter, rubbish and debris.
- Finish: Neat and even, without surface rutting, compaction or damage to grass.
- Edges: Leave neat and well defined. Neatly trim around obstructions.
- Adjoining hard areas: Sweep clear and remove arisings.
- Drought or wet conditions: Obtain instructions.

225 Tree Stems

- Precautions: Do not use mowing machinery closer than 100mm to tree stems. Use nylon filament rotary cutters and other hand held mechanical tools carefully to avoid damage to bark.

265 Mowing Amenity Fields

- Grass height: 75mm

- Arisings: Remove from site.

273 Maintaining grassed areas with perennial wild flowers

- Preparation: *Before each cut remove all litter and debris.*
- Height and frequency of cut in first growing season: *n/a*
Time of first cut: *Site visits should be made to decide on the timings of mowing, and advice obtained from the seed supplier.*
Height of first cut: *Not below 50mm*
Frequency of subsequent cutting (minimum): *once per year, two cuts (maximum)*
Height of growth permitted (maximum) *n/a*
- Height and frequency of cut in second growing season: *n/a*
-Time of cut: *Single mowing in August after flowering, arisings removed.*
-Height of cut: *Not below 50mm*
- Watering: *As Clause Q30/145.*

525 Tree guards

- Loose or defective guards: Adjust, refix or replace to original specification and to prevent chafing, remove weeds.

620 Removal of dead plant material

- Operations: At the end of the growing season, check trees and remove dead foliage, dead wood, and broken or damaged branches and stems.

645 Weed control generally

- Weed tolerance: Remove annually (minimum).
- Adjacent plants, trees and grass: Do not damage.

655 Weed cutting by hand or machine

- Undesirable grass, brambles and herbaceous growth: Cut down cleanly to a maximum 75mm
- Herbicides: Do not use.

Tree Work

810 Tree work generally

- Identification: Before starting work agree which trees are to be removed or pruned.
- Protection: Avoid damage to neighbouring trees and property.
- Standards: To BS 3998 and HSE 'Forestry and arboriculture safety leaflets'.
- Removing branches: Cut as Arboricultural Association leaflet 'mature tree management' (where applicable). Cut vertical branches similarly, with no more slope on the cut surface than is necessary to shed rainwater.

835 Cutting and pruning generally

- Tools: Appropriate, well maintained and sharp.

- Final pruning cuts:
Chainsaws: Do not use on branches of less than 50mm diameter.
Hand saws: Form a smooth cut surface.
Anvil type secateurs: Do not use.
- Removing branches: Do not damage or tear the stem.
- Wounds: Keep as small as possible, cut cleanly back to sound wood leaving a smooth surface, and angled so that water will not collect on the cut area.
- Cutting: Cut at a fork or at the main stem to avoid stumps wherever possible.
- Large branches: remove only if unavoidable.
Remove in small sections and lower to ground with ropes and slings.
- Dead branches and stubs: When removing, do not cut into live wood.
- Unsafe branches: Remove epicormic shoots and potentially weak forks that could fail in adverse weather conditions.
- Disease and fungus: Give notice if detected. Do not apply fungicide or sealant unless instructed.