



South Gloucestershire Council Landscape

Dodington Parish Council

Specification

QEII Playing Fields

13-11-2024

Installation of new path network in existing public park

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D20

Excavating and filling

Generally/the site

145 Variations in ground water level

1. Give notice: If levels encountered are significantly different from levels in the site investigation report or previously measured.

150 Existing services, features and structures

1. Services: See section A12 for locations.
2. Site features to be retained: See section A12 for details.
3. Structures: See section A34 for details of protection.

Clearance/excavating

164 Tree roots

1. Protected area: Do not cut roots within precautionary protection area.
 - 1.1. Size of area: Branch spread of the tree
2. Excavation in protected area
 - 2.1. Method: As stated in the tree report, Cell web Construction to path
 - 2.2. Backfill as soon as possible or temporarily line with polyethylene sheet to reduce evaporation.
3. Outside protected area: Give notice of roots exceeding 25 mm and do not cut without approval.
4. Cutting
 - 4.1. Make clean smooth cuts with no ragged edges.
 - 4.2. Pare cut surfaces smooth with a sharp knife.
 - 4.3. Treatment of cut roots: Not required
5. Backfill: As dug material, enriched with phosphate fertilizer

168 Site clearance

1. Timing: Before topsoil stripping, if any.
2. General: Clear site of rubbish, debris and vegetation. Do not compact topsoil.
3. Treatment: to be agreed

170 Removing small trees, shrubs, hedges and roots

1. Identification: Clearly mark trees to be removed.
2. Small trees, shrubs and hedges: Cut down.
3. Roots: Grub up and dispose of without undue disturbance of soil and adjacent areas.
4. Safety: Comply with Forest Industry Safety Accord safety leaflets.

175 Felling large trees

1. Definition: Girth over 600 mm.
2. Identification: Clearly mark trees to be removed.
3. Safety: Comply with Forest Industry Safety Accord safety leaflets.
4. Felling: As close to the ground as possible.

5. **Stumps:** Remove mechanically to a minimum depth of 300 mm below ground level
6. **Work near retained trees:** Take down trees carefully in small sections to avoid damage to adjacent trees that are to be retained, where tree canopies overlap and in confined spaces generally.

180 Chipping and shredding

1. **General:** Permitted, spread arisings on site in areas designated

220 Stripping topsoil

1. **General:** Before beginning general excavation or filling, strip topsoil from areas where there will be regrading, buildings, pavings/ roads and other areas shown on drawings.
2. **Depth**
 - 2.1. Remove to an average depth of 150 mm.
 - 2.2. Give notice where the depth of topsoil is difficult to determine.
3. **Handling:** Handle topsoil for reuse or sale in accordance with clause 225.
4. **Around trees:** Do not remove topsoil from below the spread of trees to be retained.
5. **Site storage:** Keep separate from excavated sub-soil

225 Handling topsoil

1. **Standard:** To BS 3882.
2. **Aggressive weeds**
 - 2.1. **Species:** Notify the presence of species included in the Weeds Act, section 2, or the appropriate Wildlife and Countryside Act for the relevant jurisdiction.
 - 2.2. **Give notice:** Obtain instructions before moving topsoil.
3. **Contamination:** Do not mix topsoil with:
 - 3.1. Subsoil, stone, hardcore, rubbish or material from demolition work.
 - 3.2. Other soil or material containing aggressive weeds, sharps, plastics and non soil forming materials and notifiable animal or plant diseases.
 - 3.3. Oil, fuel, cement or other substances harmful to plant growth.
 - 3.4. Other classifications of topsoil.
4. **Multiple handling:** Keep to a minimum. Use topsoil immediately after stripping.

270 Foundations generally

1. **Give notice if**
 - 1.1. A natural bearing formation of undisturbed subsoil is not obtained at the depth shown on the drawings.
 - 1.2. The formation contains soft or hard spots or highly variable material.

330 Unrecorded features

1. **Give notice:** If unrecorded foundations, beds, voids, basements, filling, tanks, pipes, cables, drains, manholes, watercourses, ditches, etc. not shown on the drawings are encountered.

Disposal of materials

441 Surplus subsoil

1. **Excavated material:** Stockpile in temporary storage heaps.
2. **Retained material:** Spread and level surplus subsoil on site.
 - 2.1. **Locations:** to be agreed by client
 - 2.2. **Protected areas:** Do not raise soil level within root spread of trees that are to be retained.

3. **Remaining material:** Remove from site.

450 Water

1. **Generally:** Keep all excavations free from water until:
 - 1.1. Formations are covered.
 - 1.2. Below ground constructions are completed.
 - 1.3. Basement structures and retaining walls are able to resist leakage, water pressure and flotation.
2. **Drainage:** Form surfaces of excavations and fill to provide adequate falls.
3. **Removal of water:** Provide temporary drains, sumps and pumping as necessary. Do not pollute watercourses with silt laden water.

Filling

510 Hazardous, aggressive or unstable materials

1. **General:** Do not use fill materials 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:
 - 1.1. Frozen or containing ice.
 - 1.2. Organic.
 - 1.3. Contaminated or noxious.
 - 1.4. Susceptible to spontaneous combustion.
 - 1.5. Likely to erode or decay and cause voids.
 - 1.6. With excessive moisture content, slurry, mud or from marshes or bogs.
 - 1.7. Clay of liquid limit exceeding 80 and/or plasticity index exceeding 55.
 - 1.8. Unacceptable, class U2 as defined in the 'Specification for highway works', clause 601.

530 Placing fill

1. **Surfaces of excavations and areas to be filled:** Free from loose soil, topsoil, organic material, rubbish and standing water.
2. **Freezing conditions:** Do not place fill on frozen surfaces. Remove material affected by frost. Replace and recompact if not damaged after thawing.
3. **Adjacent structures, membranes and buried services**
 - 3.1. Do not overload, destabilise or damage.
 - 3.2. Submit proposals for temporary support necessary to ensure stability during filling.
 - 3.3. Allow 14 days (minimum) before backfilling against in situ concrete structures.
4. **Layers:** Place so that only one type of material occurs in each layer.
5. **Earthmoving equipment:** Vary route to avoid rutting.

535 Compaction generally

1. **General:** Compact fill not specified to be left loose as soon as possible after placing.
2. **After compaction:** Surface of each layer must be well closed, showing no movement under compaction plant, and without cracks, holes, ridges, loose material and the like.
3. **Defective areas:** Remove and recompact to full thickness of layer using new material.

550 Geotextile sheet

1. **Manufacturer:** Submit proposals
 - 1.1. **Product reference:**

2. Type: Woven
3. Jointing: 300 mm overlap
4. Preparation of subgrade: Before laying sheet, remove humps and sharp projections. Fill hollows
5. Protect from
 - 5.1. Exposure to light.
 - 5.2. Contaminants.
 - 5.3. Materials listed as potentially deleterious by geotextile manufacturer.
 - 5.4. Wind uplift.

571 Geocells

1. Manufacturer: Cellweb or similar approved
 - 1.1. Product reference: Cellular confinement System (TRP)
2. Materials: High Density Polyethylene (HDPE)
3. Recycled content: 0% (minimum) to BS EN ISO 14021
4. Size of cells (length x width x thickness): 75mm depth
5. Preparation of subgrade: Before laying geocells, remove humps and sharp projections, and fill hollows
6. Fixing/ Connecting: Carbon steel 'J' pins

617 Type 1 unbound mixture

1. Fill: To 'Specification for highway works', clauses 801 and 803:
 - 1.1. Crushed rock (other than argillaceous rock).
 - 1.2. Coarse crushed concrete aggregate.
 - 1.3. Recycled aggregates.
 - 1.4. Crushed non-expansive slag to clause 801.2.
 - 1.5. Well-burned non-plastic colliery shale.
2. Amendments to requirements in the 'Specification for highway works': None
3. Filling: To 'Specification for highway works', clause 802.

Bioremediation - Not Used

'specification for highway works: earthworks specification' appendices - Not Used

Ω End of Section

Q20

Granular sub-bases to roads/ pavings

To be read with preliminaries/ general conditions.

110 Thicknesses of sub-base/ subgrade improvement layers

1. Thicknesses: See sections: Q23 Gravel/hoggin/woodchip roads/pavings.

140 Excavation of subgrades

1. Final excavation to formation or subformation level: Carry out immediately before compaction of subgrade.
2. Soft spots and voids: Give notice.
3. Old drainage and service trenches: Give notice
4. Wet conditions: Do not excavate or compact when the subgrade may be damaged or destabilized.

145 Preparation and compaction of subgrades

1. Timing: Immediately before placing sub-base.
2. Soft or damaged areas: Obtain instructions
3. Compaction: Thoroughly, by roller or other suitable means, adequate to resist subsidence or deformation of the subgrade during construction and of the completed roads/ pavings when in use. Take particular care to compact fully at intrusions, perimeters and where local excavation and backfilling has taken place.

170 Geotextile filter/ separator membrane

1. Description: Footpaths
2. Manufacturer: Submit proposals
 - 2.1. Product reference: Submit proposals
3. Jointing: 300 mm overlap
4. Protect from
 - 4.1. Exposure to light, except during laying (maximum five hours).
 - 4.2. Contaminants.
 - 4.3. Materials listed as potentially deleterious by geotextile manufacturer.
 - 4.4. Damage, until fully covered by fill.
 - 4.5. Wind uplift, by laying not more than 15 m before covering with fill.
5. Preparation: Remove humps and sharp projections and fill hollows before laying.

210 Highways agency Type 1 unbound mixture for sub-base

1. Material: Type 1 unbound mixture to Highways Agency 'Specification for highway works', clauses 801 and 803.
 - 1.1. Recycled aggregate: Permitted

230 Placing granular material generally

1. Preparation: Loose soil, rubbish and standing water removed.
2. Structures, membranes and buried services: Ensure stability and avoid damage.

250 Laying granular sub-bases

1. Description: FOR PEDESTRIAN AREAS

2. **General:** Spread and levelled.
3. **Compaction**
 - 3.1. **Timing:** As soon as possible after laying.
 - 3.2. **Method:** By roller or other suitable means, adequate to resist subsidence or deformation of the sub-base during construction and of the completed paving when in use. Take particular care to compact fully at intrusions, perimeters and where local excavation and backfilling has taken place.

310 Accuracy

1. **Permissible deviation from required levels, falls and cambers (maximum)**
 - 1.1. **Subgrades**
 - 1.1.1. **Roads and parking areas:** +20 -30 mm.
 - 1.1.2. **Footways and recreation areas:** ± 20 mm.
 - 1.2. **Sub-bases**
 - 1.2.1. **Footways and recreation areas:** 10 -30 mm

330 Cold weather working

1. **Frozen materials:** Do not use.
2. **Freezing conditions:** Do not place fill on frozen surfaces. Remove material affected by frost. Replace and recompact if not damaged after thawing.

340 Protection

1. **Sub-bases:** As soon as practicable, cover with subsequent layers, specified elsewhere.
2. **Subgrades and sub-bases:** Prevent degradation by construction traffic, construction operations and inclement weather.

Ω End of Section

Q23

Gravel/ hoggin/ woodchip/ resin bound roads/ pavings/ overlays

Types of surfacing

140 Surfacing for paths

1. Description: Compacted stone dust path
2. Subgrade improvement layer: Type 1 unbound mixture, as section Q20
 - 2.1. Compacted thickness: Not applicable
3. Geotextile: Sheet
4. Granular sub-base: Type 1 unbound mixture, as section Q20
 - 4.1. Compacted thickness: 150 mm
5. Surface course: Limestone, 3 mm to dust
 - 5.1. Thickness: 25 mm
6. Drainage falls: Lay sub-base with 1:40 crossfall or 1:50 central camber.
7. Surface of path: 75 mm above existing ground level.
8. Completion: Compact to produce a firm, regular surface, stable in use.

Laying

310 Timber edging

1. Description: To edge footpaths
2. Softwood board
 - 2.1. Size: 150 x 38 mm.
 - 2.2. Fixing: Galvanized nails into softwood pegs.
3. Softwood pegs
 - 3.1. Size: 50 x 50 x 450 mm long
 - 3.2. Fixing: Drive into ground.
 - 3.3. Centres: Submit proposals
4. Preservative treatment: As section Z12 and [Wood Protection Association \(WPA\), TW15 Preservative treatment of wood-based sheet materials](#), with 15 year desired service life

340 Laying generally

1. Channels, gullies, etc: Keep clear.
2. Finished surfaces
 - 2.1. Lines and levels: To prevent ponding.
 - 2.2. Overall texture: Even.
 - 2.3. State at completion: Clean.

350 Cold weather working

1. Frozen materials: Do not use.
2. Freezing conditions: Do not lay pavings.
3. Cold bituminous surface dressings: Do not apply when ambient temperature is below 10°C.
4. Other dressings or overlays: As manufacturers' recommendations.

360 Drainage falls

1. Sealed surfaces
 - 1.1. Falls and cross falls (minimum): 1:40.
 - 1.2. Camber (minimum): 1:50.
2. Unsealed surfaces (minimum): 1:30.

380 Laying granular surfaces in pedestrian areas and cycle tracks

1. Permissible deviation from required levels, falls and cambers (maximum): ± 12 mm.
2. General: Spread and level in 100 mm maximum layers. As soon as possible, compact each layer.
3. Dry weather: Lightly water layers during compaction.

390 Protection from traffic and plant

1. Paved areas: Restrict access to prevent damage.

Completion - Not Used

Ω End of Section

Q28

Topsoil and soil ameliorants

System outline

115 Topsoil system for turfing and seeding

1. Description: For path edges
2. Composition
 - 2.1. Topsoil: Excavated material
 - 2.2. Ameliorants: None
 - 2.3. Accessories: None

Products

300 Preparation materials generally

1. Purity: Free of pests and disease.
2. 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.
3. Contamination: Do not use topsoil contaminated with subsoil, rubbish or other materials that are:
 - 3.1. Corrosive, explosive or flammable.
 - 3.2. Hazardous to human or animal life.
 - 3.3. Detrimental to healthy plant growth.
4. Subsoil: In areas to receive topsoil or planting media, do not use subsoil contaminated with the above materials.
5. Objectionable odour: None.
6. Give notice: If any evidence or symptoms of soil contamination are discovered on the site or in topsoil or planting media to be imported.

310 Materials not permitted

1. Materials: Peat

315 Imported topsoil to BS 3882

1. Description: For path edges
2. Quantity: Provide as necessary to make up any deficiency of topsoil existing on site and to complete the work.
3. Standard: To BS 3882.
4. Classification: Multipurpose
 - 4.1. Soil textural class to BS 3882, Figure 1: Loamy sand
5. Source: Submit proposals

Execution

660 Grading subsoil for:

1. Description: GRASSED AREAS
2. Standard: In accordance with BS 8601.
3. General: Grade to smooth flowing contours to achieve specified finished levels of topsoil.
4. Areas of thicker topsoil: Excavate locally.

5. Avoid compaction.
6. Excess subsoil: Remove.

675 Preparation of undisturbed topsoil

1. Standard: In accordance with BS 4428.
 - 1.1. Grading and cultivation:
2. Hard ground: Break up thoroughly.
3. Clearing: Remove visible roots and large stones with a diameter greater than
4. Areas covered with turf or thick sward: Plough or dig over to full depth of topsoil.
5. Fallow period (minimum):
 - 5.1. Weed control: At appropriate times

680 Surplus topsoil to be retained

1. Generally: Spread and level on site:
 - 1.1. Locations: As directed by contract administrator
 - 1.2. Protected areas: Do not raise soil level within root spread of trees that are to be retained.

700 Grading of topsoil

1. Topsoil condition: Reasonably dry and workable.
2. Contours: Smooth and flowing, with falls for adequate drainage.
 - 2.1. Hollows and ridges: Not permitted.
3. Give notice: If required levels cannot be achieved by movement of existing soil.

705 Handling topsoil

1. Standard: In accordance with BS 3882.
2. Aggressive weeds: Give notice and obtain instructions before moving topsoil.
3. Plant: Select and use plant to minimize disturbance, trafficking and compaction.
4. Contamination: Do not mix topsoil with:
 - 4.1. Subsoil, stone, hardcore, rubbish or material from demolition work.
 - 4.2. Other grades of topsoil.
5. Multiple handling: Keep to a minimum. Use or stockpile topsoil immediately after stripping.
6. Wet conditions: Handle topsoil in the driest condition possible. Do not handle during or after heavy rainfall, or when the moisture content is greater than the plastic limit.

710 Spreading topsoil on:

1. Description: GRASSED AREAS / PATH EDGES
2. Standard: In accordance with BS 3882.
3. Temporary roads/ surfacing: Remove before spreading topsoil.
4. Layers
 - 4.1. Depth (maximum): 150 mm.
 - 4.2. Gently firm each layer before spreading the next.
5. Depth after firming and settlement: 150 mm
6. Crumb structure: Do not compact topsoil. Preserve a friable texture of separate visible crumbs wherever possible.

718 Final cultivation

1. Description: FOR GRASS SEEDING / PATH EDGES
2. Compacted topsoil: Break up to full depth.
3. Tilth: Loosen, aerate and break up topsoil to a tilth suitable for blade grading.
4. Depth: 150 mm
5. Particle size (maximum): 20 mm
6. Timing: After grading, and within a few days before seeding
7. Weather and ground conditions: Suitably dry.
8. Surface: Leave regular and even.
9. Undesirable material brought to the surface
 - 9.1. Remove visible weeds.
 - 9.2. Remove roots and large stones with any dimension exceeding 50 mm.

Completion - Not Used

Ω End of Section

Q30

Seeding/ turfing

General information/requirements

115 Seeded and turfed areas

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

120 Climatic conditions

1. **General:** Carry out the work while soil and weather conditions are suitable.

145 Watering

1. **Quantity:** Wet full depth of topsoil.
2. **Application:** Even and without displacing seed, seedlings or soil.
3. **Frequency:** As necessary to ensure the establishment and continued thriving of all seeding/turfing.

150 Water restrictions

1. **Timing:** If water supply is or is likely to be restricted by emergency legislation do not carry out seeding/turfing until instructed. If seeding/turfing has been carried out, obtain instructions on watering.

Preparation

212 Seed bed cleaning before sowing

1. **Description:** path edges
2. **Operations:** Remove weeds by hand weeding and hoeing.

250 Soil requirements

1. **Type**
 - 1.1. **Seeded areas:** Soil for grass swards, as section Q28

Seeding

310 Grass seed

1. **Description:** For path edges
2. **Mixture:** General purpose amenity grass seed mix
3. **Application rate:** 20–35 g/m²

330 Sowing

1. **General:** Establish good seed contact with the root zone.
2. **Method:** Manually broadcast, raked and rolled
 - 2.1. **Distribution:** 2 equal sowings at right angles to each other and diagonally to main axis

335 Grass sowing season

1. **Grass seed generally:** April to June or August to October

Turfing - Not Used

Protecting/cutting

590 Cleanliness

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

Maintenance

610 Failures of seeding/ turfing

1. Duration: Carry out the following operations from completion of seeding/ turfing until: the end of the rectification period.
2. Defective materials or workmanship: Areas that have failed to thrive.
 - 2.1. Exclusions: Theft or malicious damage.
3. Method of making good: Recultivation and reseeding/ returfing.
4. Timing of making good: Submit proposals

Ω End of Section

Q50

Site/ street furniture/ equipment

Gates, barriers and parking controls

190 Bollards

1. Description: Way marker posts for exercise path
2. Manufacturer: Landmark, 32 Henry Road, New Barnet, Hertfordshire.
enquiries@madebylandmark.com
 - 2.1. Product reference: Oxford waymarking post 71007
3. Material: Wood Wood Wood
 - 3.1. Finish as delivered: Natural
4. Height above ground: 1000 mm
5. Sectional size: 100 x 100 mm square
6. Top: Pyramid - 4 way weathered
7. Special features: Text to be routed on front side, and disc to 2 sides
8. Method of fixing: Root fixed below ground, set in concrete base

Site and street furniture - Not Used

Installation

510 Concrete foundations generally

1. Standard: To BS 8500-2.
2. Concrete: Designated, not less than GEN 1
3. Admixtures: Do not use.
4. Foundation holes: Neat vertical sides.
5. Depth of foundations, bedding, haunching: Appropriate to provide adequate support and to receive overlying soft landscape or paving finishes.

520 Setting in earth

1. Holes: As small as practicable.
2. Components being fixed: Accurately positioned and securely supported.
3. Buried depth (minimum):
4. Earth refill: Well rammed as filling proceeds.

Ω End of Section



Specification created using NBS Chorus