

Establishing the quality of existing pitches to be lost and their proposed replacements of 'Equivalent Quality'

Introduction

The Government's *National Planning Policy Framework* (NPPF) ¹ paragraph 74 states that existing playing fields should not be built on unless certain criteria can be met. One of these is where a replacement pitch of an equivalent or better quality is provided in a suitable location.

The Sport England (SE) policy to protect playing fields as set out in *A Sporting Future for the Playing Fields of England* ² is consistent with Government policy. It is used to determine SE's position on planning applications affecting playing fields including those where SE are a statutory consultee. Essentially, SE will oppose the granting of planning permission for any development which would lead to the loss of, or prejudice the use of, all or part of a playing field(s) unless one of five exceptions (E1 - E5) applies. One of these exceptions, E4, states that:

'The playing field lost would be replaced by a playing field or playing fields of an equivalent or better quality and of equivalent or greater quantity, in a suitable location and subject to equivalent or better management arrangements, prior to the commencement of development.'

An essential part of assessing replacement playing field proposals against the NPPF and Exception E4 criteria is demonstrating equivalent (or better) quality. SE will not accept inferior quality replacement playing fields as they are unlikely to be able to meet the current or future needs of the existing playing field users.

Sport England exception policy E4 applies where an existing playing field would be replaced by one, or more of an equivalent or better quality in a suitable location and subject to equivalent or better management arrangements, prior to the commencement of development.

¹ See <https://www.gov.uk/government/publications/national-planning-policy-framework--2>

² See <http://www.sportengland.org/facilities-planning/planning-for-sport/development-management/planning-applications/playing-field-land/>

Purpose of this briefing note

In the context of Government and SE planning policies, the purpose of this briefing note is therefore to provide technical guidance on how the quality of pitches must be assessed. It describes a robust assessment process to determine whether proposals will in practice provide the 'equivalent quality' replacement playing fields that are required.

Proposals which follow this guidance and undertake an equivalent quality assessment (EQA) report offer greater potential to accord with the above policies.

Section D5 of SE's playing fields policy states that 'equivalent quality' is interpreted as:



...being laid out, drained and provided with the necessary ancillary facilities so as to have the capability to provide for a similar number of matches being played and of producing playing characteristics which allow the same level of competitive play. For a playing field to be of equivalent quality it must be capable of providing playing pitches on which matches can be played to the same competitive standard – without any additional maintenance input. For instance, if it is proposed to provide a playing field of equivalent quality to one on which a pitch is used by a senior county league club then the replacement must also be capable of providing for this standard of play without any additional costs being incurred over and above those which are required on the existing site.



The purpose of this briefing note is to provide technical guidance on how to undertake a robust assessment to determine whether proposals will provide, in practice, at least equivalent quality replacement playing fields.

Scope of an Equivalent Quality Assessment (EQA) Report

An EQA report needs to cover **three** critical stages to be undertaken by a suitably qualified professional before making a decision on the overall strategy and the appropriate specifications. These include assessments of:

1. The performance of the existing pitch(es) based on detailed site analysis
2. The proposed performance of the replacement pitch(es) including the impact of any improvement works
3. Whether the proposed replacement pitch(es) performance will be at least equivalent to or better than the existing pitch(es) in the short, medium and long term.

Commissioning an EQA Report

Only suitably qualified and experienced sports turf consultants should be commissioned who meet the selection criteria stipulated in Appendix 1 of Sport England's *Natural Turf for Sport* Design Guidance Note - see text extract included in Appendix 1 of this briefing note for ease of reference

Minimum Criteria

As a minimum, the following criteria must be included respectively for the three stages:

Stage 1 - Assessment of the existing pitch(es) performance, based on detailed site analysis

This must include:

- A geophysical survey (e.g. electro-magnetic inductance scans) to assist in establishing soil variability beneath the pitches and to target detailed investigations
- Site location drawing including access information
- Site layout drawings including the orientation and dimensions of the pitches to ascertain whether they comply with Sport England recommendations
- Excavation of test pits to characterise the underlying soil profile in terms of soil type, nutrient status, salinity, organic matter content, compactive state, rooting depth, stone content, depth to shallow rock and drainage status (including the type and condition of drainage infrastructure and depth to groundwater if encountered)
- Conducting a Performance Quality Standards (PQS) assessment to establish whether the following criteria meet minimum recommended standards:
 - Grass height
 - Ground cover
 - Presence of weeds
 - Thatch depth
 - Rate of water infiltration through the surface
 - Surface evenness
 - Pitch dimensions
 - Pitch gradients
 - Pitch orientation
 - Surface hardness
 - Soil acidity (pH values)
- A summary of the principal factors affecting the condition of the facility including usage that the pitches can support, pitch capacity for adult and junior play, and what works would be required to meet minimum PQS including an indicative cost of conducting the works.

Stage 2 - Assessment of the proposed replacement pitch(es) performance, including the impact of any improvement works

Generally for proposals where the existing site is reused and is accessible

For situations where the proposed replacement pitch provision is to be located on land that is accessible, the site assessment should be conducted in conjunction with an assessment of the proposed construction specifications, to enable comparisons to be made between the existing provision (as assessed in Stage 1) and the proposed provision.

This assessment should include:

- All the same criteria as for the existing pitches assessment criteria listed for Stage 1
- Existing and proposed layouts including the orientation and dimensions of pitches
- Land drainage scheme specification and layout including design drainage rates, outfall details, cross-sections and a schedule of inspection chambers with associated invert levels
- Initial 12 months' agronomic maintenance schedule
- Ongoing agronomic maintenance schedule
- Ensuring that the PQS are at least equivalent to those of the existing pitch provision after remedial works would be undertaken (as established at the end of Stage 1)
- The cost for the proposed works.

Additional requirements for proposals (all of part of) which involve another site which is inaccessible:

For situations where the proposed replacement pitch provision is to be located on land that is not currently accessible (e.g. beneath the footprint of existing buildings intended for demolition), in addition to the items listed above, the assessment should include:

- Existing and proposed levels
- Proposed construction specification including source of subsoil/topsoil for the pitches. If onsite material is to be used, the particle size distribution (PSD), acidity (pH) and nutrient status needs to be established.

See Appendix 2 for further guidance and information on constructing pitches on the site of former buildings.

Stage 3 - Assessment of whether the proposed replacement pitch(es) performance will be at least equivalent to, or better than, the existing pitch(es) in the short, medium and long term.

The output of the EQA report must confirm, or otherwise, whether the new replacement pitch provision is likely to perform in the short, medium and long term at least as well as the original pitch provision being lost, with particular reference to:

- PQS requirements across all criteria being at least equal to the original pitch
- The cost and ease of maintenance of the newly created pitch provision being no greater than those of the original pitch in the short, medium and long term
- The pitch capacity for adult and junior play being no less than that for the original pitch provision
- The orientation and gradient is at least equal to the existing pitch provision in terms of recommended PQS
- Any significant restrictions to the use of the new pitch provision (e.g. location of pylons or wind turbines which may cause a visual distraction or require pitches to be taken out of use for maintenance of the turbines etc.)
- The distance from, or ease of access to, changing facilities.

For an existing pitch to be lost, the EQA must conclude that the proposed replacement pitch will have at least an equivalent PQS as the original pitch and must not cost any more to improve and maintain in the short, medium and long term.

Appendix 1: Text extract from Appendix 1 of *Natural Turf for Sport Design Guidance Note*

Selection criteria for consultants on turf/grass projects

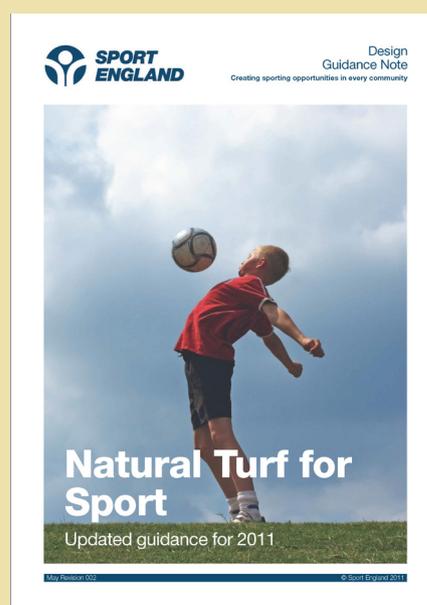
The selection of the right consultant for sports turf and sports drainage work is as critical as getting the right architect to design the clubhouse or sports hall. Choosing the right consultant will save time and money and will bring real added value to the design, construction and maintenance of the pitch over many years.

The following are critical issues that need to be considered when selecting a suitable consultant:

- Does the consultant have relevant qualifications and expertise such as:
 - Currently recognised as acting as an independent consultant in the sport turf/grass industry?
 - A recognised plant or earth science degree?
 - References from at least two clients for similar work?
 - Sufficient expertise to cover all of the work required, for example, drainage as well as pitch works?
- Ensure that the consultant:
 - Is independent and does not have any formal association or understanding with any commercial organisation that could influence his or her impartiality
 - Holds an appropriate level of professional indemnity insurance
 - Demonstrates a clear understanding of the brief and your requirements
 - Has the ability and the resources required to meet the necessary deadlines
 - Confirms the total cost of the professional services and if there are likely to be any additional costs
 - Demonstrates a willingness to attend for an interview and/or present their submission
 - Provides ongoing support following the completion of the main works.

***Sport England's
'Natural Turf for Sport'
Design Guidance Note
is available for
download at:***

<https://www.sportengland.org/facilities-planning/tools-guidance/design-and-cost-guidance/natural-turf-for-sport/>



Appendix 2: Pitch construction on the site of former building sites

Introduction

In recent years there has been a trend towards developing new schools and academies on existing school sites by constructing the buildings on the existing playing fields, followed by the sports pitches on the footprint of the recently demolished school buildings. Whilst this facilitates the construction programme, as developers can readily commence building works on the open space provided by the former playing fields, this process presents certain challenges with respect to the construction of good quality pitches on brown-field sites. In particular, attention is required in order to avoid potential risks such as the presence of contaminated materials/sharps, future settlement/subsidence, susceptibility to drought/increased irrigation requirements, and poor drainage. Site specific circumstances will dictate the optimum approach to be adopted for a given site however the following notes are presented in order to provide some generic guidance on a potential solution, and its associated cost. Please also refer to Type 6 pitch construction, Pages 26 & 27, Sport England Design Guidance Note *Natural Turf for Sport*, 2011.

Assumptions:

1. A Youth U15/U16 football pitch (91 x 55 metres with 3 metre safety margin = 5,917 m²) is to be constructed on inert crushed concrete rubble from demolished school buildings.
2. No topsoil or subsoil is available.
3. A means of disposal of water from a land drainage scheme is available

In order to meet minimum Performance Quality Standards (PQS) specified by Sport England, consideration should be given to the indicative construction profile presented in Figure 1.

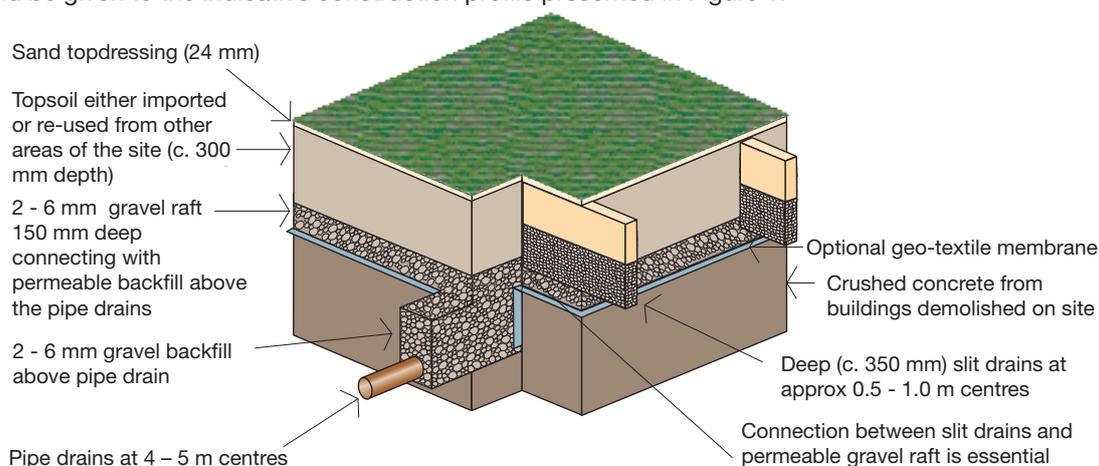


Figure 1 Indicative gravel raft construction with slit drains

This type of construction requires the contractor to provide a subformation of at least 300 mm in depth of well-graded, crushed concrete such that it readily compacts and interlocks to provide a firm, uniform base upon which to build the pitch. The pitch construction comprises:

1. >300 mm of well-graded crushed concrete, consolidated to prevent future differential settlement
2. An optional geotextile separation membrane
3. Piped land drains installed at 4 m to 5 m spacings, backfilled with 2-6 mm gravel or stone chippings
4. A 150 mm deep gravel raft comprising 2-6 mm gravel or stone chippings
5. 300 mm of specified imported topsoil (or reused from other areas of the site)
6. Deep (350 mm) slit drains installed at 0.5 m to 1.0 m spacing such that a direct hydraulic connection between the pitch surface and the gravel raft is achieved
7. Three applications of 8 mm layers of topdressing sand (24 mm in total)
8. Final cultivation, fertiliser application and seeding.

Equivalent Quality Assessment of Natural Turf Pitches

Indicative costs

Gravel raft construction wth slit drains	Cost (£) excl. VAT
Transport and preliminaries	5,000
Preparation of crushed concrete subformation	10,000
Drainage and gravel raft*	62,000
Importation, placement, grading and cultivation of specified topsoil **	95,000
Installation of slit drains	25,000
Cultivations, fertiliser, seed, goal sockets and as built survey	5,000
Sand topdressing (24 mm)	7,000
12 months initial maintenance ***	9,000
Contingency	22,000
Total	240,000

Notes:

* If an optional geotextile membrane was applied, the additional cost would be approximately £4,200.

** If appropriate quality topsoil is available on site that has been stockpiled for re-use from the new school development, the above costs could be reduce to £145,000.

*** The 12 months initial maintenance period will typically involve the following operations:

- o Mowing (~30 cuts)
- o Fertiliser (3 applications)
- o Herbicide (as required)
- o Aeration (Verti-draining on 2 occasions)
- o Overseeding (as required)
- o Sand topdressing (1 application of 6 mm)
- o Herbicide/fungicide application (if required)

Following the initial maintenance period, the pitch will require ongoing agronomic maintenance involving the same operations listed above and so there will be a need for the Client to either invest in machinery and trained operatives, or sub-contract the work to a specialist, or a combination of both.

Programme

The length of the construction phase and growing-in period will depend on factors such as the time of year and weather conditions, however, a typical programme is presented below.

Pitch Construction Works	Year 1												Year 2											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Mobilisation of Contractor																								
Preparation of Sub-base formation																								
Placement of topsoil																								
Drainage installation																								
Cultivations, fertilisation and seeding																								
Irrigation																								
12-months maintenance																								
Pitch ready for use																								

Notes:

The precise date for the return to play is highly dependent on the weather conditions that prevail during the construction works and growing-in period. The pitch shall be inspected regularly and play shall recommence upon approval from the Contract Administrator.

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