Former Peacock Centre and Land at Pipewell Avenue, Gorton

Open Space Strategy

On behalf of **Clarion Housing Association Limited and Clarion Housing Property Development Services Limited**

Project Ref: 333102268/A5| Rev: 03 | Date: June 2026

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For and on behalf of Stantec UK Limited				

Revision	Date	Description	Prepared	Reviewed	Approved
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1 Introduction

1.1.1 This Open Space Strategy note has been prepared by Stantec on behalf of Clarion Housing Association Limited and Clarion Housing Property Development Services Limited (the 'Applicant'), and is submitted in support of a full planning application (the 'Application') to Manchester City Council (the 'Council' / 'MCC') for the erection of 75 homes across two sites, including a 25 home-apartment building, with associated vehicular access and parking, private amenity spaces, new and enhanced public spaces, including new informal play areas, and improved walking and cycling links, at the former Peacock Centre and Pipewell Avenue Sites, Gorton, Manchester (hereafter referred to as the 'Site').

1.2 Purpose of this Report

1.2.1 Whilst the application site is not formally allocated as open space within the Council's adopted development plan, part of the Site has been identified within the Council's latest open Space Assessment as amenity grassland (though this Report will set out how the Site itself has not formed part of the audit, and that the land immediately adjacent to it, that has been assessed, has been identified as being of a poor quality), and therefore could potentially be captured by the Council's broad open space policies. The purpose of this Report therefore is to outline the relevant considerations pertinent to the redevelopment of the loss of this area of open space, as well as any mitigating factors that justify such a loss in the context of both local and national planning policy, as well as any other material planning considerations of relevance.

1.2.2 The Strategy demonstrates that there is a demonstrable case in favour of the redevelopment of the land in question and that suitable mitigation, and compensatory measures exist that ensure that any loss is off set by the wider benefits of the proposed development and offsite mitigation.

1.2.3 This Report should be read in conjunction with the wider planning submission documents, most notably the accompanying Planning Statement and Statement of Community Involvement, prepared by Stantec, as well as the Agronomy Report for proposed offsite mitigation, prepared by Labosport and agreed with MCC and MCR Active (which is provided at **Appendix A** of this Strategy).

1.3 Statement Structure

1.3.1 The Structure of this Strategy Note is as follows:

- Section 2 provides an overview of the Application Site and its surroundings;
- Section 3 outlines the proposed development;
- Section 4 sets out the local and national planning policy considerations pertinent to the consideration of open space matters;
- Section 5 details the Council's latest Open Space Assessment and its relevance in relation to the Application Site;
- Section 6 details the Open Space Strategy which underpins the proposed development; and finally
- Section 7 takes all of the preceding sections in the round and outlines the material considerations pertinent to the case and how these have informed the planning balance and justification for the proposed development.

2 The Site Location and Surroundings

2.1.1 This Section provides details of the Site's location and surroundings, as well as its physical characteristics. Full details of this are set out within both the Planning Statement and Design and Access Statement, which accompany the planning submission.

2.2 Site Location

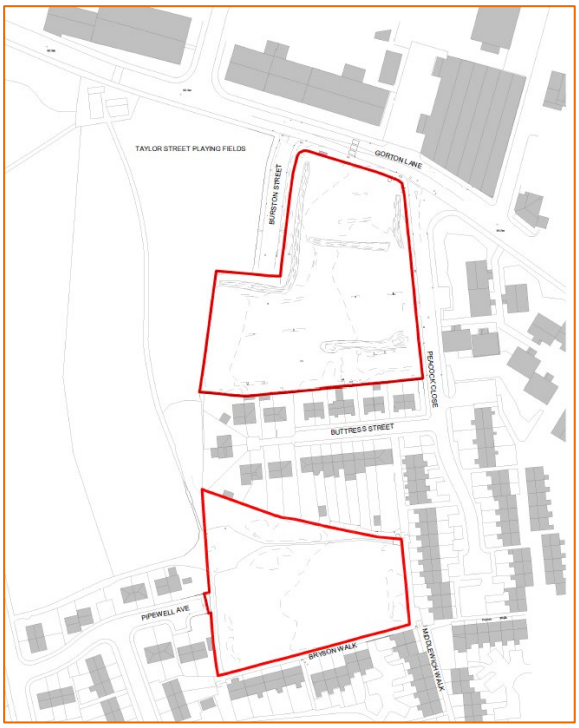
2.2.1 The application Site comprises two distinct separate land parcels. The northernmost parcel, accessed from Burston Street and Peacock Close (and fronting Gorton Lane) is the location of the former Peacock Centre, a former community facility which has closed in recent years and subsequently demolished, with the site now laying vacant. This parcel is identified on the Council's brownfield register (Ref: Gort_N_Cap_700), listed as having an indicative capacity of 32 homes. Hereafter referred to as the 'Peacock Centre Site'.

2.2.2 The southernmost parcel, which adjoins Pipewell Avenue is an undeveloped land parcel that is accessible on foot from Bryson Walk and Middlewich Walk. This parcel is identified within the Council's latest open space strategy as amenity greenspace (discussed further later within this Report), though it is not formally designated as public open space on the Council's Proposals Map. A site visit and feedback from the public consultation exercise has also confirmed that the site has been subject to fly tipping and anti-social behaviour over recent years. This part of the application site will hereafter be referred to as the 'Pipewell Avenue Site', and is the parcel which forms the basis of this Open Space Strategy note.

2.2.3 In total, the Application Site extends to approximately 1.35 hectares. The Pipewell Avenue land parcel extends to approximately 0.55 hectares.

2.2.4 The extent of the Application Site is set out within the Site Location Plan extract at Figure 1 below. The Pipewell Avenue parcel, which is the focus of this Note, is the southernmost of the two land parcels.

Figure 1: Site Location Plan



2.2.5 In terms of statutory designations, the Site (the wider Site or the southern parcel) is not located within a Conservation Area and there are no known landscape or environmental designations that affect the Site. There are no listed buildings within, or immediately adjacent to the Site. The entire Site lies within Flood Zone 1 and is at the lowest risk of flooding.

2.2.6 The Site is in a highly sustainable location, with pedestrian and cycle infrastructure close to the Site. The Site also benefits from bus stops immediately north of the Peacock Centre parcel of the Site, providing regular services to Manchester City Centre, Cheetham Hill, Dane Bank, and Pendleton, as well as connections to the wider transportation network. In addition, the Site is also located within walking distance of Belle Vue Station, Gorton Station, as well as retail and civic amenities within the district centre, including Gorton Hub, supermarkets, day nurseries and schools.

2.2.7 In terms of nearby open space, the Site benefits from excellent connectivity and accessibility to a number of parks and recreational spaces, most notably the Taylor Street Playing Fields, located immediately adjoining the Site to the west, as well as the King George V Playing Fields, located approximately 450 metres to the east of the Site, and Gorton Park, which lies approximately 640 metres to the west of the Site. There are also numerous areas of amenity grassland and informal open space located amongst the surrounding residential areas to the south and east of the Application Site.

2.3 Surroundings

2.3.1 The Site is located within the Gorton & Abbey Hey area, which forms part of eastern Manchester, sitting approximately 4.6km east of Manchester City Centre.

2.3.2 The Site is located within a well-established urban area. The Peacock Centre Site lies to the south of Gorton Lane, with commercial development north of Gorton Lane. Burston Street, off Gorton Lane, runs partway along the western side of the Site and Peacock Close forms the eastern boundary. Residential properties are located further to the east and also adjoin the Peacock Centre Site to the south.

2.3.3 Established residential properties along Buttress Street are situated between the two parcels of land that comprise the wider Site, with the rear gardens of the southern Buttress Street properties forming the northern boundary of the Pipewell Avenue Site.

2.3.4 The Pipewell Avenue Site is surrounded by residential properties on all sides. To the south lies Bryson Walk, a footpath that runs between Pipewell Avenue and the adjacent residential properties to the south. Taylor Street Playing Fields are located to the north-west of the Site, immediately adjoining the Site boundary. To the east of the Site lies Middlewich Walk, a pedestrian-only route.

3 The Proposed Development

3.1.1 A full description of the proposed development is set out within the accompanying Planning Statement and Design and Access Statement. In summary, this application seeks full planning permission for the redevelopment of both land parcels to provide a residential development of 75 dwellings, containing a mix of houses and apartments. The proposal will also include for vehicular parking, private amenity space, landscaping and open space areas.

3.1.2 Figure 2 below provides an extract of the submitted Landscape Masterplan, detailing the extent of the development and open spaces provided by it. A total of 0.24 hectares of public open space will be provided within the development, across the two parcels.

Figure 2: Proposed Landscape Masterplan





3.1.3 Further detail on the specific nature and designs of the public open space proposed can be found in the accompanying landscape plans as well as the supporting Design and Access Statement for the Application. Key features of the on-site open space provision include the following:

Former Peacock Centre (Northern Parcel)

- Informal, naturalistic play provision, including elements such as balancing beams, stepping logs, and fallen tree trunks to encourage exploratory play;
- Multi-stem flowering tree species within layered structural planting to frame and define the public open space;
- Dry attenuation basin integrated with informal seating opportunities;
- Timber arch gateway marking the entrance to the communal green from the northern approach;
- Combination of formal and informal seating types distributed across the space;
- Feature specimen trees located at key corners to define entrances and provide informal wayfinding cues; and
- Defensible planting around apartment edges to provide privacy, security, and clear boundary definition.

Land at Pipewell Avenue (Southern Parcel)

- Accessible communal growing space with raised planters, extending the adjacent Taylor Street Playing Fields character;
- Edible and permaculture-inspired planting to support community growing and potential foraging opportunities; and
- “Birch Walk” (or similar character corridor) defined by meadow planting along the green corridor adjacent to Bryson Walk.

4 Planning Policy Context

4.1.1 This Section of the Report outlines the planning policy context which underpins the assessment of the development proposals in the context of any loss of open space, and how such matters are to be treated in the consideration of planning applications. Both national and local planning policy are considered here, and are each taken, in turn, below.

4.1.2 A full evaluation of national and local planning policy in relation to the proposed development is set out within the accompanying Planning Statement.

4.2 National Planning Policy Context

4.2.1 At the time of submission of this Planning Application, the 2024 iteration (as updated in 2025) of the National Planning Policy Framework (NPPF).

4.2.2 The NPPF advocates a presumption in favour of sustainable development, stating at paragraph 11 that development proposals which accord with an up to date development plan should be approved without delay, or where there are no relevant development plan policies, or relevant policies are considered out of date, planning permission should be granted unless any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the Policies in the Framework taken as a whole.

4.2.3 Paragraph 12 confirms that the presumption in favour of sustainable development does not change the statutory status of the development plan as the starting point for decision-making. It also confirms however that Local planning authorities may take decisions that depart from an up-to-date development plan, but only if material considerations in a particular case indicate that the plan should not be followed.

4.2.4 Paragraph 39 of the NPPF confirms that local planning authorities should approach decisions on proposed development in a positive and creative way. They should use the full range of planning tools available, including brownfield registers and permission in principle, and work proactively with applicants to secure developments that will improve the economic, social and environmental conditions of the area. Decision-makers at every level should seek to approve applications for sustainable development where possible.

4.2.5 Paragraph 61 affirms the Government's objective of significantly boosting the supply of homes, and that a sufficient amount and variety of land can come forward for development where it is needed, and that this land comes forward in a manner which meets the needs of the local community.

4.2.6 With specific regard to open space and recreation, paragraph 103 of the NPPF states that access to a network of high quality open spaces and opportunities for sport and physical activity is important for the health and well-being of communities, and can deliver wider benefits for nature and support efforts to address climate change.

4.2.7 Paragraph 104 adds to this, stating that:

> *Existing open space, sports and recreational buildings and land, including playing fields and formal play spaces, should not be built on unless:*
>
> *a) an assessment has been undertaken which has clearly shown the open space, buildings or land to be surplus to requirements; or*
>
> *b) the loss resulting from the proposed development would be replaced by equivalent or better provision in terms of quantity and quality in a suitable location; or*

c) *the development is for alternative sports and recreational provision, the benefits of which clearly outweigh the loss of the current or former use.*

4.3 Local Planning Policy Context

4.3.1 The adopted development plan pertinent to the consideration of this Application consists of the following documents:

- Manchester City Council Core Strategy Development Plan Document, July 2012; and
- Places for Everyone Joint Development Plan Document for Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Tameside, Trafford and Wigan, March 2024.

4.3.2 The provisions of each of these documents in relation to open space matters are outlined, in turn, below.

Manchester City Council Core Strategy

4.3.3 The MCC Core Strategy was first adopted in July 2012 and, at the time of submission, remains the adopted development plan for the City, covering a plan period of 2012 to 2027.

4.3.4 No part of the Application Site is identified within the adopted Local Plan Proposals Map however, by virtue of its identification within the aforementioned Open Space Assessment, it is potentially affected by the Council's broad open space policies, discussed in further detail below.

4.3.5 Policy EN10 of the Core Strategy pertains to the safeguarding of open space, sport and recreation facilities. It states that the Council will seek to retain and improve existing open spaces, sport and recreation facilities to the standards set out above and provide a network of diverse, multi-functional open spaces. It goes on to state that proposals will be supported that:

- *improve the quality and quantity of accessible open space, sport and recreation in the local area*
- *provide innovative solutions to improving the network of existing open spaces, increase accessibility to green corridors, and enhance biodiversity*
- *improve access to open space for disabled people*

4.3.6 EN10 adopts a similar approach to that of the NPPF, detailed above, and goes on to provide in relation to development proposals impacting upon existing areas of open space, stating that:

Proposals on existing open spaces and sport and recreation facilities will only be permitted where:

- *Equivalent or better replacement open space, sport or recreation facilities will be provided in the local area;*

OR

- *The site has been demonstrated to be surplus for its current open space, sport or recreation function and the City wide standards set out above are maintained, and*
    - *it could not fulfil other unsatisfied open space, sport or recreation needs, and*

- *a proposed replacement will remedy a deficiency in another type of open space, sport or recreation facility in the local area*

OR

- *The development will be ancillary to the open space, sport or recreation facility and complement the use or character*

Places for Everyone

4.3.7 Places for Everyone (PfE) took effect in March 2024 and became part of the statutory development plan for each of the nine PfE authorities, including Manchester City Council, from that date. It is a strategic, regional planning document which should be read alongside the adopted Core Strategy in the determination of this Planning Application.

4.3.8 Policy JP-G6 pertains to urban green space and sets out that existing urban green space will be protected and enhanced "in balance with other considerations". It goes on to state that development should be designed to support the positive use of nearby green spaces, such as by offering a high-quality setting, providing natural surveillance, and facilitating easy access by walking and cycling.

4.3.9 These policies are considered further, in the context of the proposed development, as well as other material considerations, later within this Report.

5 Council Open Space Assessment

5.1.1 This Section of the Report focuses on the Council's latest Open Space Assessment, and how the Application Site features within the Assessment, as well as considering the wider provision of open space in the locality

5.2 Manchester City Open Space Assessment

5.2.1 Manchester City Council's Open Space Assessment was prepared by The Environment Partnership (TEP), and published by the Council in May 2025. At the time of submission, the assessment is approximately one year old and is considered to represent an up-to-date assessment of open space provision across the City.

5.2.2 The Assessment seeks to provide qualitative and quantitative assessment of the City's designated green spaces. In terms of amenity greenspace, civic space, natural and semi-natural greenspace, parks and gardens, and provision for children and young people, the Assessment recommends a quality standard of "Good", equivalent to a score of 60% or above.

5.2.3 The Assessment highlights that a total of 448 sites were audited in total, with table 1 below confirming the scoring of sites across the city, benchmarked against the Green Flag Award Criteria:

Table 1: Open Space Assessment Quality Scores Distribution

Quality Score Against Green Flag Award Criteria	Number of Sites	% of Audit
Excellent	0	0%
Very Good	75	17%
Good	93	21%
Fair	189	42%
Poor	91	20%
Total	**448**	**100%**

5.2.4 As table 1 above demonstrates, only 38% of the City's audited green spaces are achieving the desired quality standard, meaning that 62% of the City's green spaces are not currently meeting an appropriate standard.

5.2.5 In addition to the above, the Assessment also attributes a "Value" score to the audited green spaces, with a recommended value score of 40% being targeted, equivalent to a "medium" classification.

5.2.6 Table 2 below indicated the value attributed to the 448 audited sites for the purpose of the Council's Open Space Assessment.

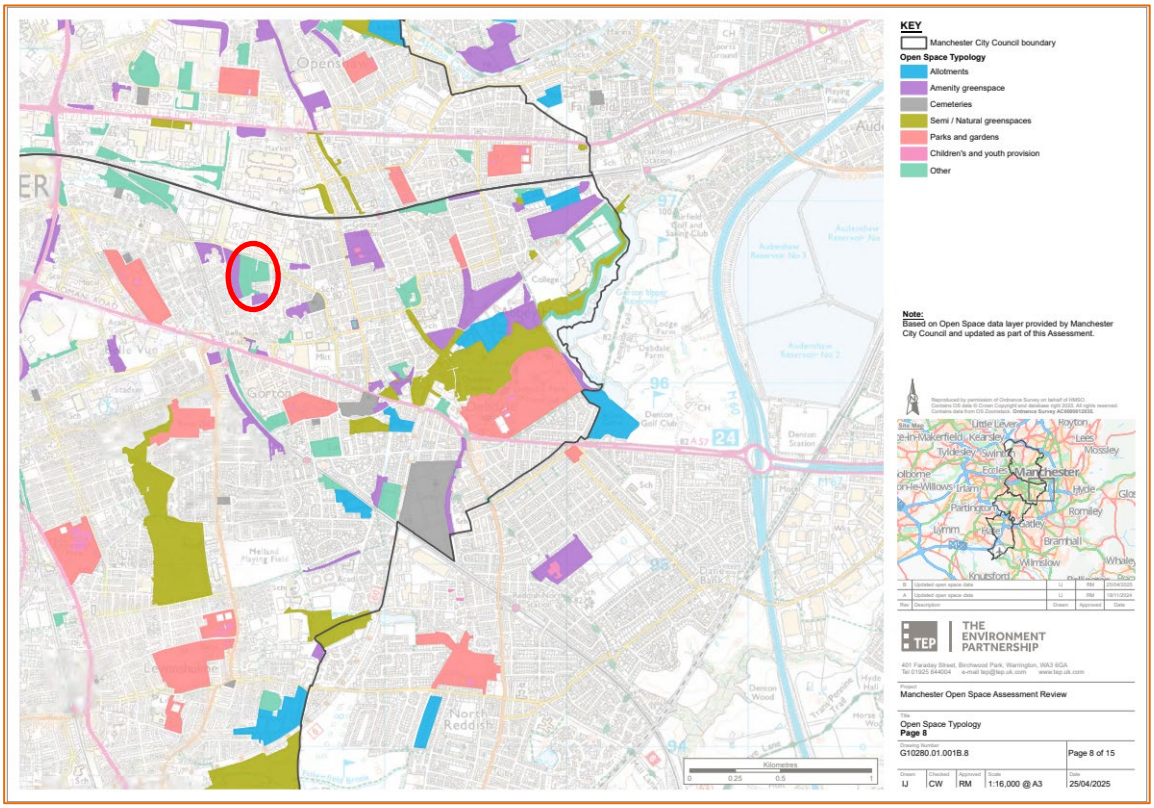
Table 2: Open Space Assessment Value Scores Distribution

Value Score	Number of Sites	% of Audit
High	172	38%
Medium	176	39%
Low	100	22%
Total	**448**	**100%**

5.2.7 As table 2 above demonstrates, whilst the majority of green spaces are seen as being of value to the local community, 22% of sites are seen as being of low value, and fall below the desired threshold.

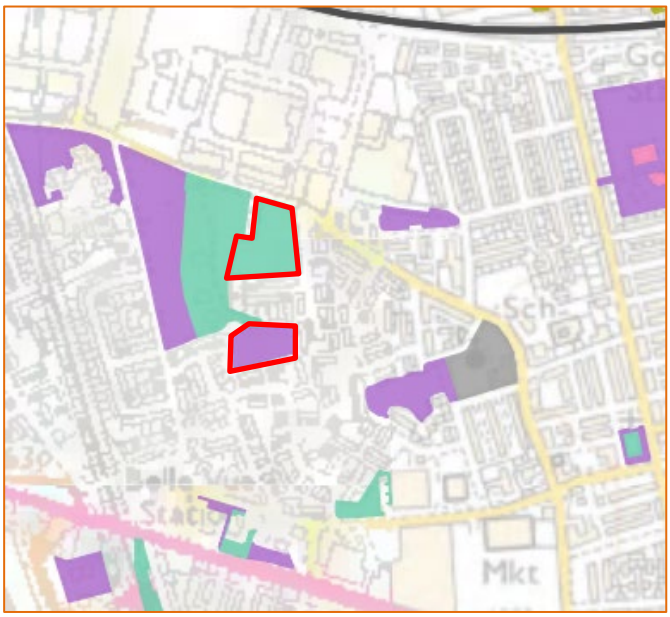
5.2.8 Turning to how the Application Site has been classified within the Open Space Assessment. The Site sits within the "Central" area for the purposes of the Assessment with the Open Space typology (Map 5, Page 8) identifies that the northern land parcel, along with approximately half of the Taylor Street Playing Fields area falling within the "Other" category, with the Pipewell Avenue parcel, along with the remainder of the Taylor Street Playing Fields, being classed as "Amenity Greenspace. An extract of this map, with the Application Site identified, is included at Figure 3 below:

Figure 3: Open Space Assessment - Open Space Typology Map (Map 5 Page 8) Extract



5.2.9 For ease of reference, a zoomed-in extract of the image above is provided at Figure 4 below.

Figure 4: Open Space Assessment - Open Space Typology Map (Map 5 Page 8) Extract (Zoomed-in)



5.2.10 The green shading above denotes land falling within the "other" category, with the purple shading denoting land classified as "amenity greenspace".

5.2.11 "Other" land is defined within the Open Space Assessment as:

> *Those which are not accessible, for example, privately owned, fenced or on motorway embankments, or which are documented in the Strategic Housing Land Availability Assessment (SHLAA) or Employment Study, have not been assessed as part of the total open space provision. This is because they:*
>
> - *Do not currently provide publicly accessible recreational open space, or*
> - *Are likely to be developed over the lifetime of the next Local Plan and, therefore, will not provide publicly accessible open space by the end of the plan period.*

5.2.12 On this basis, there is no need to further consider the northern land parcel in terms of any loss of open space as the Open Space Assessment recognises that the Site will be brought forward for development in the near future. Indeed, as a brownfield (listed on the Council's Brownfield Land Register), inaccessible site, the former Peacock Centre site offers no open space benefits to the local community at present, but will do in the future as part of the proposed development.

5.2.13 As stated above however, the Open Space Assessment does categorise the Pipewell Avenue site as amenity greenspace. This is defined within the Assessment as:

> *Informal green spaces providing opportunities for informal recreation for residents and workers whilst enhancing the appearance of the area.*

5.2.14 The proposed development would result in the partial loss of this area of amenity greenspace and so it is necessary to understand the quality and value of this area before defining a strategy for any mitigation and/or compensatory measures. It is also pertinent to understand overall levels of amenity greenspace provision, to understand the impact of any loss

(notwithstanding any compensation / reprovision which may be secured as part of the proposed development).

5.2.15 To that end, based on the population figures provided within the Open Space Assessment (i.e. 568,402 as of 2024), in addition to the current standard for amenity greenspace of 0.55ha per 1000 population there is a requirement of approximately 324 hectares of amenity green space against a current provision of 313.41 hectares stated within the Open Space Assessment.

5.2.16 Notwithstanding that however, it is important to understand how the open space at the Site has been assessed in terms of its quality, and value. Map 9 of the Open Space Assessment illustrates, this however it is noted that both land parcels which constitute the Application Site were not audited.

5.2.17 In a similar vein, Map 10 of the Open Space Assessment illustrates the value scores of open spaces, and again the Application Site has not been subject to an audit.

5.2.18 The reasons for this are not clear, however it is noted that the remainder of the Taylor Street Playing Fields has been subject to assessment, and, given its proximity to the Application Site, would appear a suitable comparable in making assumptions about the quality and value attributed to the Site. The red shading on the extracts (at Figures 5 and 6 below) indicate that the Taylor Street Playing Fields are considered to be of a poor quality and of low value. Given that the southern parcel (which forms the basis of this Report) adjoins the Taylor Street Playing Fields, it is considered directly comparable and as such it is reasonable to assume that a similar score would be held for the Application Site.

Figure 5: Open Space Assessment, Map 9 (Quality) Extract

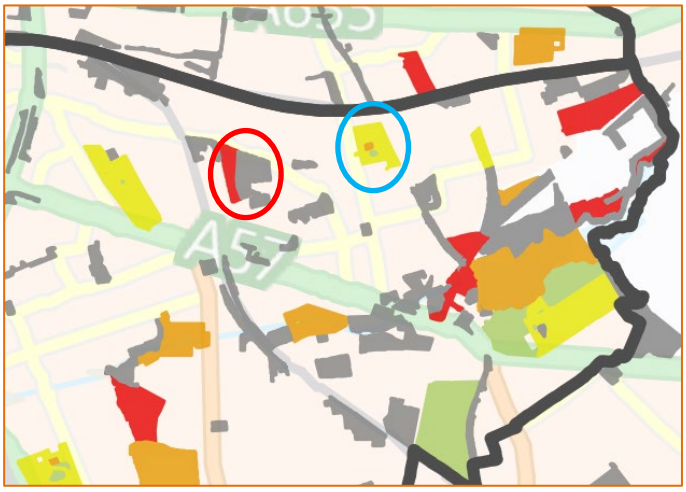
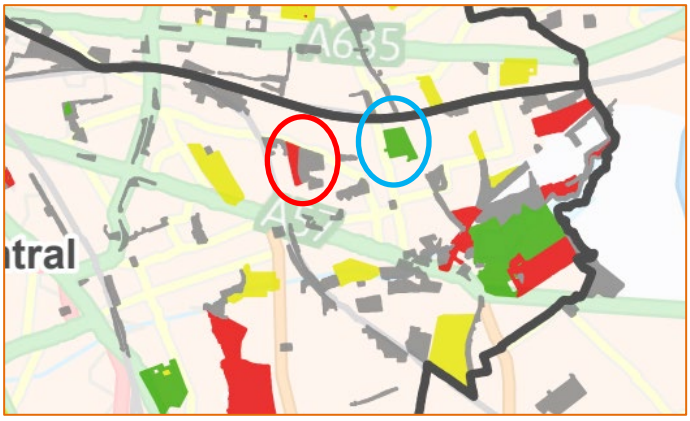


Figure 6: Open Space Assessment, Map 10 (Value) Extract



5.2.19 Linked to this, the results of the audit, as appended to the Open Space Assessment, confirm that the Taylor Street Playing Fields, as a direct comparable, score very poorly in terms of quality and value, with the second-lowest score of the amenity greenspace in the central sub-area. The audit extract at Figure 7 below illustrates this.

Figure 7: Open Space Assessment – Central Area, Amenity Greenspace Audit Scores

CENTRAL SUB AREA

Sites in red do not meet the proposed Quality or Value score

Site Reference	Site Name	Typology	Quality Score	Quality Banding	Value Score	Value Banding
Amenity Greenspace						
1904	Cornbrook Openspace	Amenity greenspace	76.7	Very Good	35.3	Low
320	King George V Playing Field	Amenity greenspace	66	Good	70.6	High
364	Manchester University, Brunswick Street	Amenity greenspace	64.5	Good	28.2	Low
1951	Parkstone	Amenity greenspace	43	Fair	44.7	Medium
1973	Alston Road	Amenity greenspace	39.8	Poor	27.1	Low
2013	Taylor Street Playing Fields	Amenity greenspace	38.7	Poor	20	Low
576	Underwood Close NSN	Amenity greenspace	18.3	Poor	20	Low

5.2.20 In addition to the above, it is also noteworthy that the King George V Playing Fields, which is also categorised as amenity green space within the Open Space Assessment, and discussed further later within this Report, is considered of good quality and of high value. This area is highlighted with a blue ring at Figures 5 and 6 above. The scores of this area are also visible at Figure 7 above.

5.2.21 It is clear therefore that the available evidence points towards the amenity green space which forms part of the Application Site is of a poor quality, in open space terms, and of low value to the local community. This position aligns with the findings resulting from the extensive public consultation exercise, which is set out in detail within the accompanying Statement of Community Involvement. This has highlighted a strength of public feeling that the land in question at Pipewell Avenue is not valued by the community. To the contrary, many local residents have highlighted that the land has become a magnate for crime and anti-social behaviour, particularly fly-tipping. It is apparent from the public consultation exercise that there is support for the development of this Site in order to stop fly-tipping which has blighted the area in recent years (photos of which illustrating this are provided later within this Note). Moreover, as part of the future occupation of the Site, the Applicant will have a management regime in place to ensure that this problem does not persist once the development is occupied.

5.2.22 Taking all of this in the round therefore, it is apparent that there is a deficit of approximately 10.5 hectares of amenity greenspace across the city. The development of this site would see a minor quantitative loss of approximately 0.55 hectares, but this would be offset to some extent by the reprovision of open space within the Site, which equates to approximately 0.24 hectares. That said, it is apparent, both from the available evidence within the Open Space Assessment, as well as through discussions with the local community, that the greenspace within the Application Site is of poor quality and low value, and therefore offers little material benefit to the community, and is actually harmful to the quality of life of some residents as opposed to being beneficial.

5.2.23 How this position has informed the development proposals, and the open space strategy therein, is discussed further within Sections 6 and 7 of this Report.

6 Proposed Open Space Strategy

6.1.1 Having regards to the contextual position set out within the preceding sections of this Report, this Section sets out the strategy for Open Space which informs the development for which planning permission is being sought.

6.2 Open Space Strategy

6.2.1 As stated at the outset, this planning application seeks planning permission for the redevelopment of both land parcels to deliver much needed, high quality affordable homes. Only the southern parcel lies within an area of defined open space within the Council's latest Open Space Assessment.

6.2.2 Both the evidence within the Open Space Assessment, as well as information gathered directly by the Applicant from local residents (as outlined within the supporting SCI) points towards this area not being valued by the local community, with it creating problems such as fly tipping and anti-social behaviour in reality, as opposed to it being an area of benefit to the community. That being said, this does not alter its identification within the Council's evidence base as an area of amenity space and so the planning policy tests, both at a local and national level as set out within Section 4 of this Report apply.

6.2.3 Both the NPPF and MCC Core Strategy seek to protect designated open spaces from development unless it can be demonstrated that they are surplus to requirements, or that any lost areas are replaced in the locality with an equivalent, or better quality area.

6.2.4 Given that the Open Space Assessment highlights a deficit in amenity greenspace across Manchester, it is not considered that the land could be demonstrated as being surplus to requirements, although it is noted that the strength of community feeling in respect of the Site (as documented within the supporting SCI) would suggest that it is surplus to the requirements of the local community.

6.2.5 As such, and in recognition that there will be a loss of greenspace, the proposal includes a two-pronged strategy to compensate the loss. In the first instance, and across the Application Site as a whole, there will be a re-provision of enhanced public open space, this equates to an area of approximately 0.24 hectares and would serve to mitigate some of the loss on-site. It is accepted however that by virtue of the nature of the development, it is not possible to replace the space on a like-for-like basis in quantitative terms on site. Notwithstanding that, the new open space that will be provided, as well as the wider public realm, will be of a far greater quality that that which is to be lost, and will benefit the wider community, as well as existing and future residents through enhanced connections to the Taylor Street Playing Fields. Moreover, the long-term ownership and management of these areas by the Applicant will ensure that the quality of the open space provided is maintained over time, and will ensure that problems related to fly-tipping do not return to the Site.

6.2.6 An extract of the proposed landscaping plan for the development is provided at Figure 8 below and highlights the extent of public open space that will be provided on-site as part of the proposed development.

Figure 8: Proposed Landscaping Plan





6.2.7 In respect of the northern parcel, this was not previously publicly accessible and so these proposals bring this area back into the public domain in terms of both access and open spaces. As with the southern parcel, the northern parcel has also become a magnate for crime and anti-social behaviour and so the benefits of the scheme in bringing both sites back to a beneficial use are clear to see. This is demonstrated by the recent Site photographs (as taken on the 26th March 2026) provided at Figure 9 below.

Figure 9: Recent Site Photographs







6.2.8 In addition to the above however, the Applicant is also committed to the provision of a commuted sum to go towards off-site improvements. It is understood that this sum would be directed towards facilitating improvements to the playing pitches at the nearby King George V Playing Fields. The proposed improvements are set out within the accompanying Agronomy Report, which is provided at **Appendix A** of this report. This demonstrates the existing condition of the facility, and the extent to which it can be improved.

6.2.9 Needless to say that this would benefit the wider community and would ensure that the development can enhance an already good quality, highly valued local facility (as noted from the findings of the Open Space Audit detailed in Section 5 previously). Moreover, given that the King George V Park is categorised as amenity greenspace, and therein falls within the same open space category as the southern parcel of the Application Site, the improvements to it can be considered comparable in qualitative and quantitative terms.

6.2.10 These two aspects combined represent the open space strategy for the proposed development and are considered to represent a betterment both in terms of the quality of open space on offer, but also usability of the space. Naturally this will benefit the future residents of the development, but it is clear that having spoken with the community, the on site improvements, as well as the improvements proposed for the King George V Park will have a far greater reach within the local community than the Site does in its current form.

7 Material Considerations and Planning Balance

7.1.1 This Open Space Strategy Note has been prepared by Stantec on behalf of the Applicant, and is submitted in support of a full planning application to Manchester City Council for the erection of 75 homes across two sites, including a 25 home-apartment building, with associated vehicular access and parking, private amenity spaces, new and enhanced public spaces, including new informal play areas, and improved walking and cycling links, at the former Peacock Centre and Pipewell Avenue Sites, Gorton, Manchester.

7.1.2 The Site comprises two distinct parcels but is being brought forward for development under one planning application. Neither parcel is formally identified as open space within the Council's adopted Proposals Map. The northernmost parcel is a derelict, inaccessible brownfield site, whereas the southern parcel is an area of grassland identified within the Council's Open Space Assessment as an area of amenity greenspace.

7.1.3 National and local planning policies presume against the development on designated public open spaces unless there are circumstances that would justify it, primarily if it can be demonstrates that the land in question is surplus to requirements, or that the loss of any open space is offset by provision elsewhere that is equivalent or better than that lost.

7.1.4 Whilst the Site is not formally designated as open space, its identification within the supporting evidence base as (partially) an area of amenity space means that it could be seen to be affected by the Council's broad open space policies. It is noted however that there is no specific open space policy within the adopted development plan which directly affects the Site.

7.1.5 Moreover, whilst the Council's Open Space Assessment identifies the southern parcel as amenity greenspace, it is clear that it has not been audited for its quality or value to the local community. The reasons for this are unclear however the adjoining playing fields at Taylor Street have been assessed and found to be of a poor quality and of low value to the local community. Given that the land in question adjoins this area, this is considered to be an appropriate comparison.

7.1.6 This would align with the feedback received from the local community which indicates that the land, despite its open space designation, has been prone to fly tipping, other crime and anti-social behaviour. It is seen as a blight on the local area and, as set out within the accompanying Statement of Community Involvement, there is support for the Site's development in order to eradicate these issues.

7.1.7 Notwithstanding, there may still be a requirement to pass the local and national planning policy tests which require re-provision. As set out within Section 6, the loss of amenity greenspace on the Site is to be compensated by an enhanced quality of public realm and on-site public open space (spanning the two land parcels), as well as offsite improvements to nearby green space.

7.1.8 The combination of these measures are considered to constitute a betterment on the current situation and will see investment in valued community assets, as opposed to the retention of an area of underutilised land that is not valued, and of poor quality, simply because it is has been identified in an evidence base document.

7.1.9 When coupling this with the other extensive benefits of the scheme, including (but not limited to) the provision of much needed affordable housing, the reuse of a derelict brownfield site and the investment in the local area, it is apparent that there is significant cause, and justification for the loss of amenity greenspace at the Site, and when considering the planning balance in the round, it is considered that the benefits of the scheme gar outweigh any perceived harms arising from the development in terms of open space provision / reprovision.

7.1.10 Accordingly, the local and national planning policy tests are considered to be satisfied and, as such, open space matters support the granting of planning permission.

Appendix A

Agronomy Report

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CLARION HOUSING GROUP

A feasibility study for the remediation of a natural turf football pitch at King George V Park, Gorton, M18 8WQ

2nd January 2026

25-1090



TGMS and PSD Agronomy are trading names of Labosport Limited.
Company number: 05185905.
Registered Office: Unit 3 Aerial Way, Hucknall, Nottingham, NG15 6DW.
Directors: Prof. David James, Dr. Kathryn Severn and David Rigby

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Please note, important: The aim of this report is to appraise the current conditions at the site specified in 'Physical Site Survey' below only. This is not a design document and does not include detailed design or design information and should not be used for this purpose. As such, Labosoprt UK accepts no design liability or responsibility for subsequent works based on the information contained within this report.

REVISION RECORD					
Rev	**Date**	**Description**	**Prepared**	**Checked**	**Approved**
0	05/01/2026	Document Creation	RJE	GO	GO

1 EXECUTIVE SUMMARY King George V Park

KEY: **No action required** **Action may be required** **Action required**

1.1 Site information

	1	**Objective:** A feasibility study for the remediation of a natural turf football pitch at King George V Park, Gorton, M18 8WQ.
	2	**Site visit:** Rich Eastham of Labosport UK Ltd conducted a detailed site investigation of the site on the 2nd of January 2026 to evaluate the agronomic condition and drainage status of the derelict football pitch.
	3	**Site location**: The site is bounded by residential dwellings on all boundaries
	4	**Hydrology:** No watercourses pass through the site. Climate data obtained from the Flood Estimation Handbook (FEH) indicate that the standard-period average annual rainfall (SAAR) for this catchment is 907 mm which is marginally higher than the national average of 855 mm/year.
	5	**Land drainage flow rates:** The predicted drainage rates are lower than the greenfield runoff rates, and so the installation of a land drainage system is not expected to result in greater flow rates than the greenfield condition. It is therefore concluded that additional attenuation should not be required for this site. Drainage design should account for at least the 1:30 return period outfall rate of 8.8 l/s/ha for the site over a 24-hour period.
	6	**Flood risk from rivers and seas:** Based on information obtained from the Environment Agency (EA) via gov.uk (Figure 13), the site is located in Flood Zone 1 (Figure 10) and at very low risk of flooding from rivers and seas (<0.1%, (<1 in 1000 years)).
	7	**Flood risk from surface water:** Based on information obtained from the Environment Agency (EA) via gov.uk (Figure 11), the development area is at very low risk of surface water flooding (0.1- 1%, (each year)). Although the rest of the park and the surrounding areas are higher risk.
	8	**Landfill:** Based on information obtained from environment.data.gov.uk, the site has historic landfill on the eastern boundary, however it appears to be outside the development area (Figure 12) with no permitted landfill evident (Figure 13). The presence of historic landfill sites could affect surface levels or the nature of any earthworks.
	9	**Groundwater Source Protection Zones:** Based on information obtained from magic.defra.gov.uk, the site is not located within a Groundwater Source Protection Zone. If it was, this could have restricted the construction of a deep bored soakaway (depending upon geology) as a means of achieving drainage outfall from the site should a more convenient means of water disposal not be available.
	10	**Recommended pitch dimensions and gradients:** The dimensions of the pitch estimated form arial imagery are 90 m x 61 m which is 1 m shorter but 6 m wider than the recommended pitch dimensions of 91 x 55 m for an U15/16 pitch according to the FA recommendations shown in Table 2. It should be feasible to construct a pitch on the site which conforms with the FA guidance for U15/16's or two mini pitches with a 3 m run off. The topographical survey confirms the pitch in the line of play has a fall of 1.21 and 0.37% running east to west along the northern elevation of the playing field and gradients of 0.05 to 1.25% running into the centre of the southern elevation (see Figure 15). The north south falls across the line of play are 0.12% along the western end of the pitch, whilst the eastern section has falls of 0.42%. While all falls comply with Sport England's guidelines, they are not optimal for efficient water drainage with the potential for water retaining hollows within surface undulations that are present. The proposed pitch gradients, comprising a 0.50% fall across the line of play and a 0.75% fall in the direction of play. These gradients are intended to promote effective surface water drainage while maintaining an even and playable surface. The overall pitch dimensions are proposed as 97 m x 61 m, which include 3 m run-off areas on all sides to provide safe clearance beyond the marked playing area. However, the final pitch size may be constrained by the requirement to maintain tree protection zones along the park's perimeter, particularly in relation to the existing specimen oak trees. These constraints may necessitate adjustments to the pitch layout or dimensions to ensure compliance with potential arboricultural protection measures and to safeguard the long-term health of the trees.
	11	**Pitch orientation:** Sport England (SE) has published guidance on optimum pitch orientation for a range of sports. For winter games pitches, this ranges from 285° to 20° in order to mitigate against the effects of low winter sunshine projection. The pitch is orientated at 79° and therefore does not

		comply with the guidance. Compliance is not possible due to site constraints however mini pitches could be orientated within the guidelines.
	12	**Soil maps:** The soil has been mapped by the Soil Survey of England and Wales. Based on field studies the soil is unsurveyed mainly urban and industrial areas.
	13	**Geology:** Chester Formation-Sandstone. These sedimentary rocks are fluvial in origin. They are detrital, ranging from coarse- to fine-grained and form beds and lenses of deposits reflecting the channels, floodplains and levees of a river or estuary (if in a coastal setting). Superficial deposits: Till, Devensian-Diamicton. These sedimentary deposits are glacigenic in origin. They are detrital, created by the action of ice and meltwater, they can form a wide range of deposits and geomorphologies associated with glacial and inter-glacial periods during the Quaternary Period.
	14	**Soil profile pit description:** The development area features a soil profile consisting of **260 mm sandy loam topsoil overlying sandy loam subsoil**. This profile provides broadly favourable conditions for sports pitch construction. Laboratory analysis confirms a composition of 64**% sand** and 29**% silt**.
	15	**Soil pH and nutrient status:** Indices of 2 - 3 indicate that there is sufficient supply of a particular nutrient. The nutrient status of the topsoil is generally in good order. Soil pH of 5.8 is within the recommended range for the cultivation of Perennial ryegrass species (5.5 to 7.5). An application of Lime is recommended during the construction phase to raise the pH toward the upper limits of the range.
	16	**Agronomic condition:** Vegetative cover across the site was ~90 % and comprised predominantly perennial ryegrass and weed grasses with Creeping buttercup *(Ranunculus repens).* The sward height was in excess of 75 mm with debris from fireworks present within the sward, this would suggest that the maintenance of the park is infrequent. During the excavation of TP 1 evidence of Chafer Grub activity was identified. Chafer Grubs are the larvae of chafer beetles that feed on grass roots, causing thinning, yellowing, and eventual die-back of turf on sports pitches. Management focuses first on monitoring (soil inspection, assessing bird activity, and damage levels), combined with cultural practices such as maintaining a healthy, well-drained sward and avoiding excessive thatch that favours egg-laying. Where thresholds are exceeded, the targeted use of authorised insecticides as part of an integrated pest management (IPM) programme should assist in reduced numbers.
	17	**Site usage:** Following pitch construction and the installation of a land drainage system, the proposed natural turf pitches may be able to support 3 to 6 hours of usage per week in the winter (4.5 to 9 hours per week for players under 15 years of age).
	18	**Performance Quality Standards:** In its current condition, the development area audited for Clarion Housing Group passes 8 elements (of 10 measured) of Sport England's Performance Quality Standards.

1.2 Recommendations

Based on the findings from the site assessment, recommended pitch construction works are set out in Section 5 of this report.

1.3 Indicative costs for the development proposals

Indicative cost estimates for the recommended pitch construction works are set out in Section 6 of this report, and summarised below:

1 The cost of creating the proposed natural turf sports pitches in line with the soil characteristics, topography of the site and carrying capacity is anticipated to be in the region of the following estimates:

Summary of project costs

Option	Construction	Maintenance	Total ex VAT	VAT	Total Inc. VAT
Natural turf area	£112,310.00	£19,900.00	£132,210.00	£26,422.00	**£158,652.00**

2	With respect to timescales for completing the project, it is essential that construction works take place in good, dry ground conditions. Grass is ideally sown in spring or early autumn to maximise the balance between moisture and temperature. The grass must be allowed to establish a healthy and deep root network and mature canopy to resist the stresses applied.

Please note that the Client should determine whether or not planning permission from the Local Authority is required for the proposed works. The outfall of drainage water into surrounding areas will be subject to permission from the Lead Local Flood Authority and/or the Internal Drainage Board. The costs for obtaining this permission, or any conditions of permission, are not included in the estimates in this document and are the responsibility of the Client.

Rich Eastham – January 2026

2 INTRODUCTION AND OBJECTIVES

PSD has been commissioned by Clarion Housing Group to conduct a feasibility study for the remediation of a derelict natural turf football pitch at King George V Park, Gorton, M18 8WQ. The site comprises 1 no. natural grass pitch, 1 no MUGA, 1 no Basketball net, children's playground and walking area. The focus of the report is to understand the feasibility of bringing the natural grass pitch back into play.

The objectives of the feasibility study are as follows:

- To undertake a baseline Performance Quality Standard Assessment using Sport England guidelines.
- To undertake a detailed site investigation to characterise the underlying soil profile with a view to developing the optimum pitch provision.
- To determine the most appropriate development option for the pitch in consultation with the Client such that the requisite Performance Quality Standards (PQS) are met whilst minimising construction costs, and optimising subsoil and topsoil re-use.
- To derive indicative construction costs for budgetary purposes and present costed options where applicable.
- To provide an indicative work programme in order that the Client has a clear picture of the duration of the proposed construction works and when the pitch may be available for use.

3 PHYSICAL SITE SURVEY

Rich Eastham Labosport UK Ltd conducted a detailed site investigation of the site on the 02nd of January 2026 to evaluate the agronomic condition and drainage status of the derelict football pitch.

3.1 Site location

The site comprises of one existing natural turf football pitches.
The site address is

King George V Park
Chapman Street,
Gorton,
M18 8WQ

Grid reference (centre of the field).
OS X (Eastings) 388863
OS Y (Northings) 396785



Figure 1. Site location indicative only and not to scale.

The site is bounded by housing developments on all sides. (Figure 1).

Figure 2 below shows the location of soil trial pits.



Figure 2. Site overview showing the approximate locations of the test pits TP1 and 2. (Aerial photograph courtesy of What.Three.Words).

Photographs from a walkover survey are presented in Figures 3 to 8.



Figure 3. General view from the east.



Figure 4. General view from the west of the site.



Figure 5. General view to the north.



Figure 6. General view along northern boundary.



Figure 7. Basketball furniture.



Figure 8. General view of the MUGA.

3.2 Geomorphology and climate

3.2.1 Hydrology

No watercourses pass through the site.

Standard period annual rainfall

Climate data obtained from the Flood Estimation Handbook (FEH) indicate that the standard-period average annual rainfall (SAAR) for this catchment is 907 mm which is marginally higher than the national average of 855 mm/year (Figure 9).

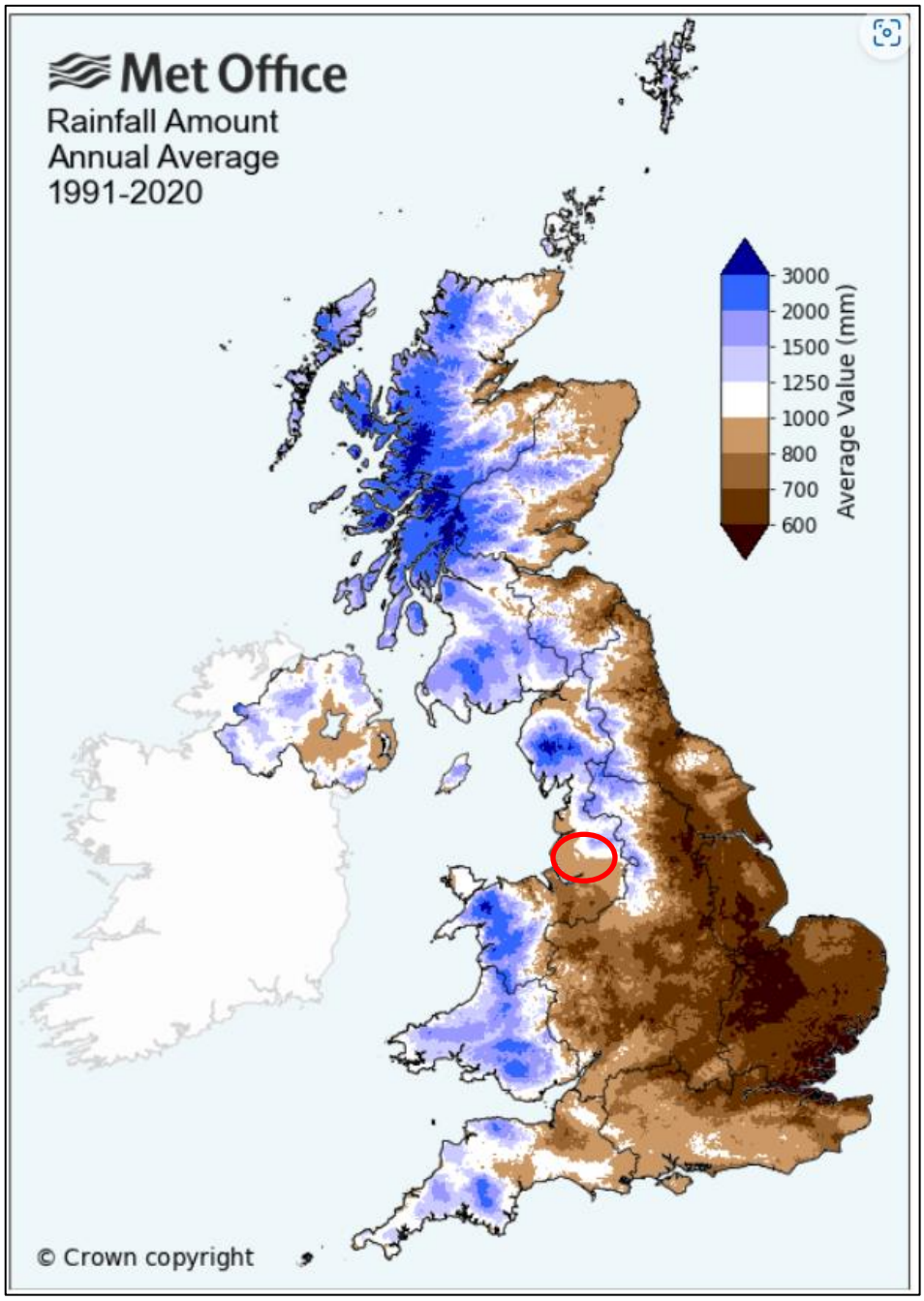


Figure 9. MET office rainfall statistics (1991-2020). Red circle indicates the location of the development area.

Predicted drainage outfall rates

Drainage outfall rates have been calculated using the ADAS 345 method (Table 1).

Greenfield runoff rates for the site have been calculated using the Flood Estimation Handbook method and are also presented in Table 1. It is important to note that both rates are based on one hectare.

The predicted drainage rates are lower than the greenfield runoff rates, and so the installation of a land drainage system is not expected to result in greater flow rates than the greenfield condition. It is therefore concluded that additional attenuation should not be required for this site. Drainage design should account for at least the 1:30 return period outfall rate of 8.8 l/s/ha for the site over a 24-hour period.

Table 1. Greenfield run off rate (FEH method) and drainage outfall rates (ADAS 345 Method) for the proposed site for 6 hr and 24 hr duration events for the return periods shown.

Return period	Greenfield Runoff Rate (FEH method) (l/s/ha)	Drainage Outfall Rate (6 hr FEH rainfall event) l/s/ha)	Drainage Outfall Rate (24 hr FEH rainfall event) (l/s/ha)
1:1	7.1	2.6	3.8
1:30	13.9	6.0	8.8
1:100	17.0	7.9	11.4

3.2.2 Risk of flooding from rivers and seas

Based on information obtained from the Environment Agency (EA) via gov.uk, the site is located in Flood Zone 1 (Figure 10) and at very low risk of flooding from rivers and seas (<0.1%, (<1 in 1000 years)).

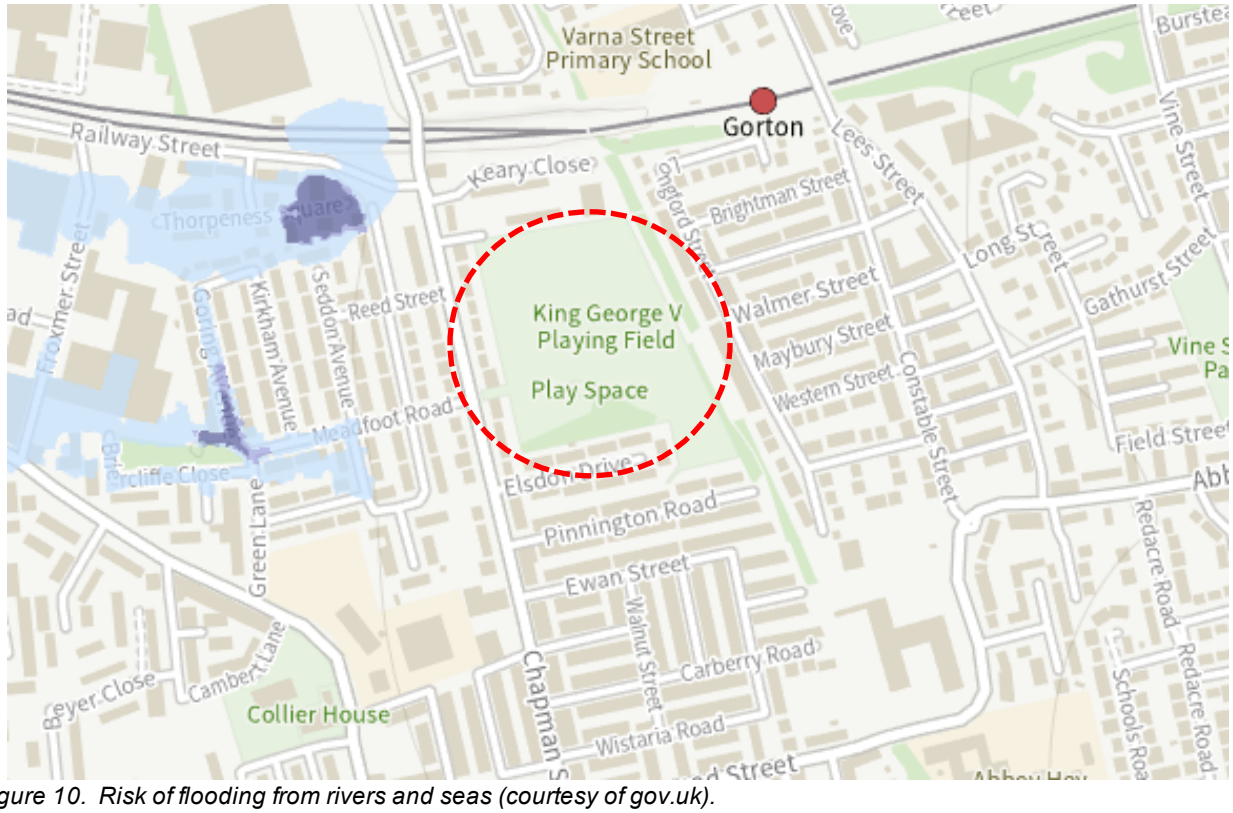


Figure 10. Risk of flooding from rivers and seas (courtesy of gov.uk).

3.2.3 Risk of flooding from surface water

Based on information obtained from the Environment Agency (EA) via gov.uk (Figure 11), the development area is at very low risk of surface water flooding (0.1- 1%, (each year)). Although the rest of the park and the surrounding areas are higher risk.

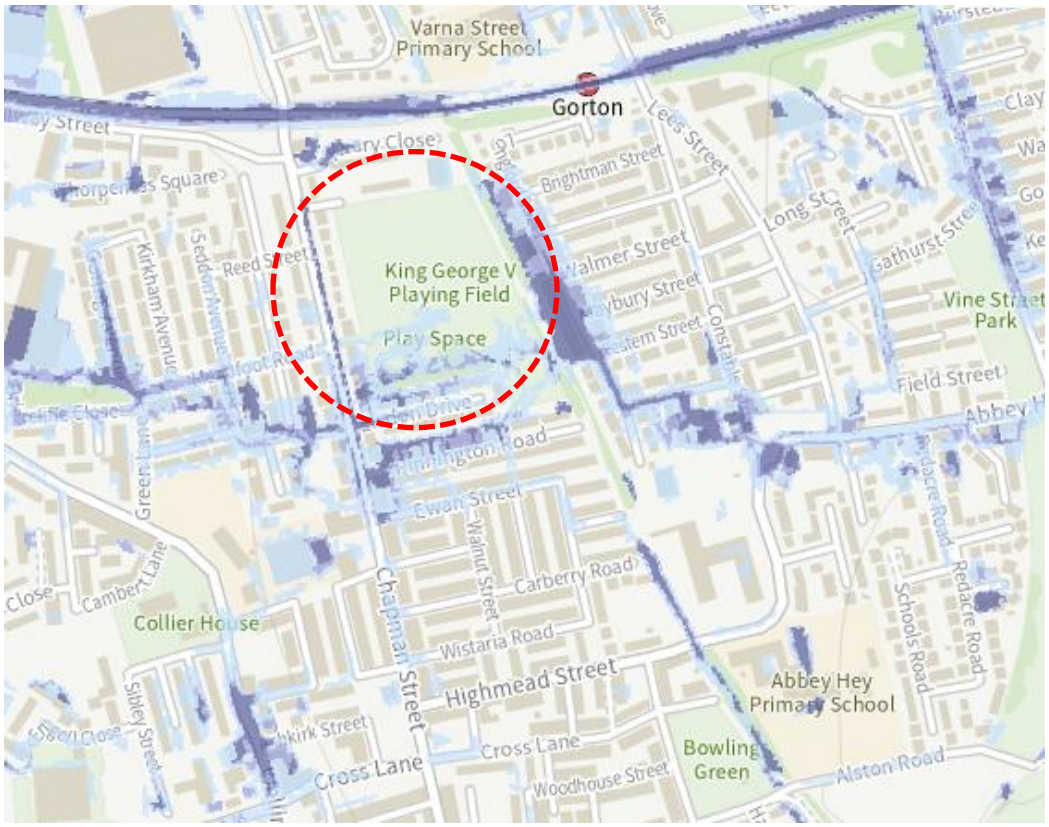


Figure 11. Risk of flooding from surface water (courtesy of gov.uk).

Given this information, it should be possible to undertake site remodelling works to address adverse levels and gradient without affecting the volume or dynamics of a flood plain.

3.2.4 Landfill

Based on information obtained from environment.data.gov.uk, the site has historic landfill on the eastern boundary, however it appears to be outside the development area (Figure 12) with no permitted landfill evident (Figure 13). The presence of historic landfill sites could affect surface levels or the nature of any earthworks.

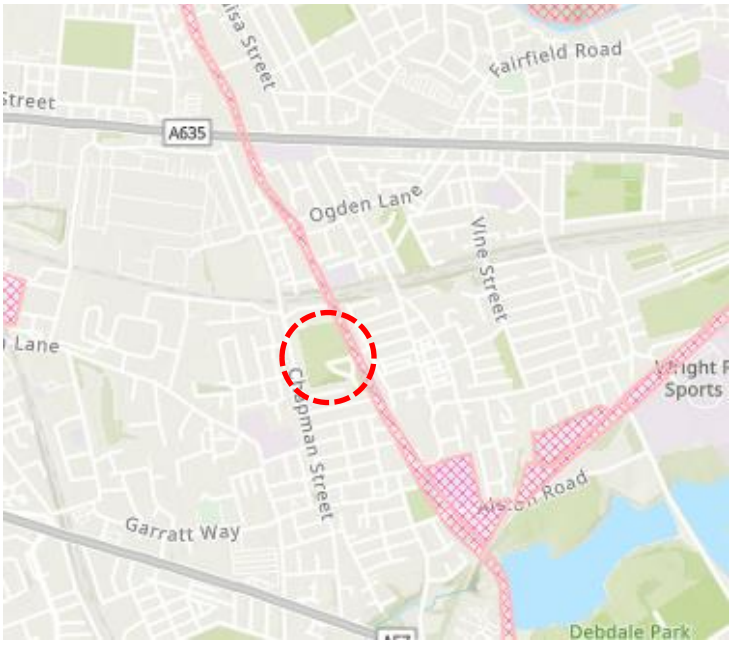


Figure 12. Historic landfill (pink hatched polygons) courtesy of environment.data.gov.uk.

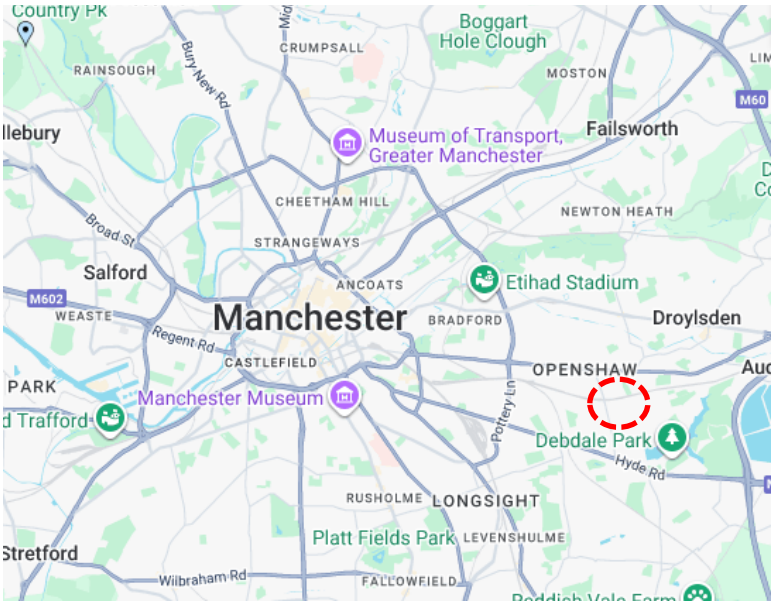


Figure 13. Permitted landfill (blue marker) courtesy of love.junk.com.

3.2.5 Groundwater source protection

Based on information obtained from magic.defra.gov.uk, the site is not located within a Groundwater Source Protection Zone (Figure 14). If it was, this could have restricted the construction of a deep bored soakaway (depending upon geology) as a means of achieving drainage outfall from the site should a more convenient means of water disposal not be available.



Figure 14. Groundwater source protection zones (courtesy of magic.defra.gov.uk).

Key: = *Inner Zone*
= *Outer Zone*
= *Total Catchment*

3.3 Recommended pitch dimensions and gradients

The dimensions of the pitch estimated form arial imagery are 90 m x 61 m which is 1 m shorter but 6 m wider than the recommended pitch dimensions of 91 x 55 m for an U15/16 pitch according to the FA recommendations shown in Table 2 below. It should be feasible to construct a pitch on the site which conforms with the FA guidance for U15/16s or two mini pitches with a 3 m run off.

Table 2 The FA recommended pitch sizes for football.

The FA Recommended Pitch Sizes							
		Recommended size **without** runoff (safety area around pitch)		Recommended size **including** runoff (safety area around pitch)		Recommended size of goal posts	
Age grouping	Type	Length x width (metres)		Lengthx width (metres)		Height x width (metres)	
Mini-Soccer U7/U8	5v5	37	27	43	33	1.83 (6')	3.66 (12')
Mini-Soccer U9/U10	7v7	55	37	61	43	1.83 (6')	3.66 (12')
Youth U11/U12	9v9	73	46	79	52	2.13 (7')	4.88 (16')
Youth U13/U14	11v11	82	50	88	56	2.13 (7')	6.40 (21')*
Youth U15/U16	11v11	91	55	97	61	2.44 (8')	7.32 (24')
Youth U17/U18	11v11	100	64	106	70	2.44 (8')	7.32 (24')
Over 18 (senior ages)	11v11	100	64	106	70	2.44 (8')	7.32 (24')

*If a pitch is to be provided for U13/14 it is recommended that 7 x 21 goalposts are provided. However, it should be noted that 8 x 24 would also be acceptable as not all sites will be able to provide specifically for this age group.

The construction of any natural turf sports pitch is required to follow Sport England guidance for pitch gradients, which state that pitch falls should not exceed 1.25% in the direction of play and not exceed 2.00% across the direction of play.

The topographical survey confirms the pitch in the line of play has a fall of 1.21 and 0.37% running east to west along the northern elevation of the playing field and gradients of 0.05 to 1.25% running into the centre of the southern elevation (see Figure 15). The north south falls across the line of play are 0.12% along the western end of the pitch, whilst the eastern section has falls of 0.42%. While all falls comply with Sport England's guidelines, they are not optimal for efficient water drainage with the potential for water retaining hollows within surface undulations that are present.



Figure 15. Topographical survey.

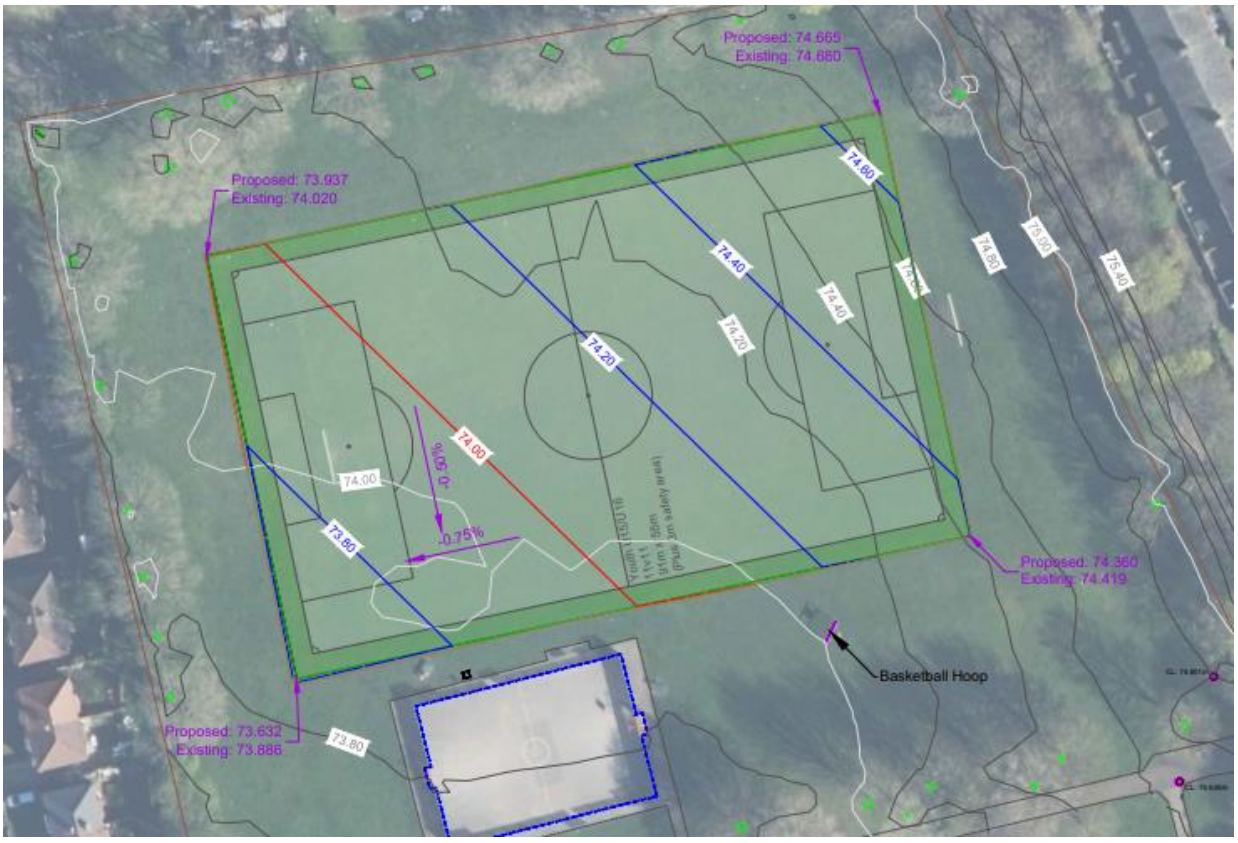


Figure 16. Proposed gradients

Figure 16 illustrates the proposed pitch gradients, comprising a 0.50% fall across the line of play and a 0.75% fall in the direction of play. These gradients are intended to promote effective surface water drainage while maintaining an even and playable surface.

The overall pitch dimensions are proposed as 97 m x 61 m, which include 3 m run-off areas on all sides to provide safe clearance beyond the marked playing area. However, the final pitch size may

be constrained by the requirement to maintain tree protection zones along the park's perimeter, particularly in relation to the existing specimen oak trees. These constraints may necessitate adjustments to the pitch layout or dimensions to ensure compliance with arboricultural protection measures and to safeguard the long-term health of the trees. There may be enough space on the site to move the pitch westward if dictated to by the root protection zones.

3.4 Pitch orientation

Sport England (SE) has published guidance on optimum pitch orientation for a range of sports (Figure 17). For winter games pitches, this ranges from 285° to 20° to mitigate against the effects of low winter sunshine projection. With reference to Figures 3 and 17, the pitch is orientated at 79° and therefore does not comply with the guidance. Compliance is not possible due to site constraints if the U15/16 were to be constructed however mini pitches could be orientated within the guidelines.

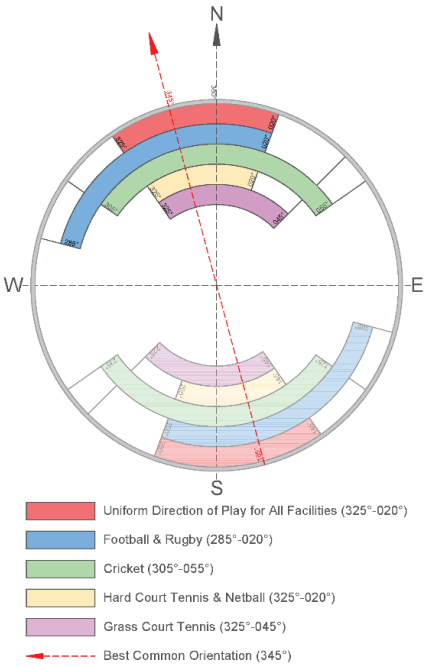


Figure 17. Optimum pitch orientations (Sport England).

3.5 Soils and geology

The soil has been mapped by the Soil Survey of England and Wales. Based on field studies the soil is unsurveyed mainly urban and industrial areas.

The geological origin:

Chester Formation-Sandstone. These sedimentary rocks are fluvial in origin. They are detrital, ranging from coarse to fine-grained and form beds and lenses of deposits reflecting the channels, floodplains and levees of a river or estuary (if in a coastal setting).

Superficial deposits:

Till, Devensian-Diamicton. These sedimentary deposits are glacigenic in origin. They are detrital, created by the action of ice and meltwater, they can form a wide range of deposits and geomorphologies associated with glacial and inter-glacial periods during the Quaternary Period.

BGS records indicate that a borehole was installed ~10 m to the south of the site. The strata of which is 0 - 0.300 m concrete over 0.300 – 1.40 m cinder fill, over 1.40 – 3.20 m firm grey silty clay, over 3.2 – 7.0 m stiff brown silty clay with occasional pebbles and sand inclusions.

Reference: SJ89NE1174
Name: GORTON STORM WATER RELIEF SEWER 1
Water Well Reference: N/A
Precision: ± 10 METRES
Length (m): 7
Date: 1975
Easting: 388800
Northing: 396610
Scan Quality: not Entered
Record: Scan

3.6 Soil sampling

3.6.1 Test Pit Profile Descriptions

Two soil test pits (TP1 and TP2, Figure 2) were excavated using hand tools to characterise the underlying soil profile.





	TP1	TP2
Topsoil depth	260 mm	260 mm
Topsoil texture	Sandy Loam	Sandy loam
Stones	10 – 20 mm diameter rounded cobbles in topsoil	10 - 20 mm diameter rounded cobbles in topsoil
Subsoil texture and depth	Clay Loam to 700 mm	Clay Loam to 700 mm
Groundwater	Non encountered	Non encountered
Ground cover	Perennial ryegrass dominant	Perennial ryegrass dominant
Surface level uniformity	Slight undulations	Slight undulations

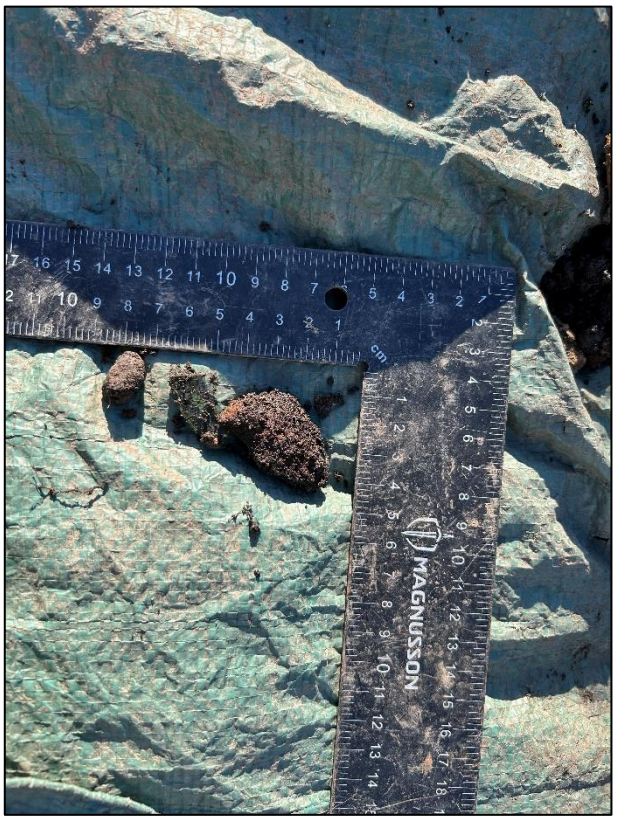


Figure 18. TP2 – Stones extracted from the topsoil.

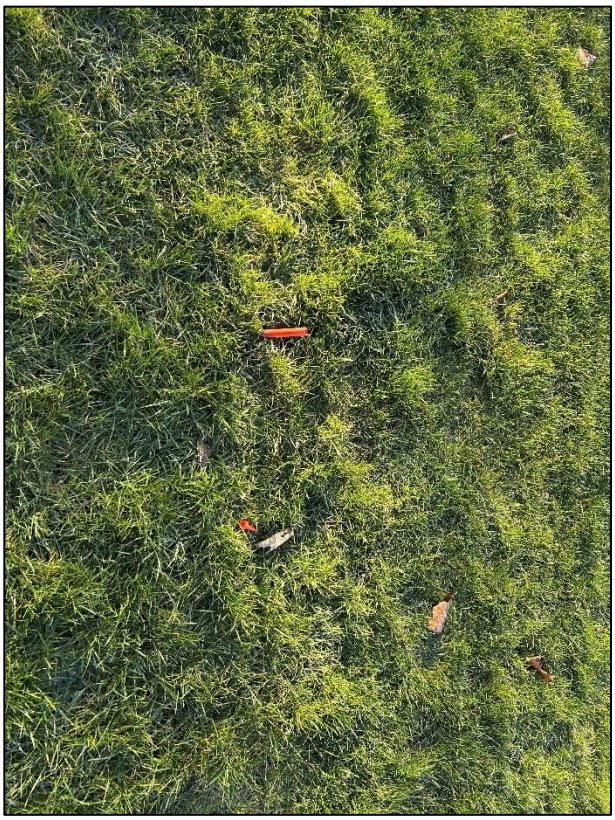


Figure 19. TP2 – Typical example of sward composition.

3.6.2 Soil textural analysis

The results from a soil textural analysis of a composite sample sent to contract laboratory are appended, and a summary is presented in Table 3. The results concur with observations made during the site investigation.

Table 3. Soil texture results (Sand 2.00–0.063 mm; Silt 0.063 mm–0.002 mm; Clay <0.002 mm).

Location	Horizon	Sand (%)	Silt (%)	Clay (%)	Classification
Sample	Topsoil 0.00 m-0.26 m	64.0	29.3	6.7	SANDY LOAM
Sample	Subsoil 0.26 m-0.70 m	41.4	29.4	29.5	CLAY LOAM

3.6.3 Topsoil pH and nutrient status

The results from an analysis of the pH and nutrient status of a composite sample of topsoil sent to contract laboratory are appended, and a summary is presented in Table 4.

Table 4. Topsoil pH and nutrient results.

Location	Horizon	pH	Phosphorus (ppm)	Index	Potassium (ppm)	Index	Magnesium (ppm)	Index
Sample	Topsoil	5.8	18	2.2	135	2.1	155	3.7

Indices of 2 - 3 indicate that there is sufficient supply of a particular nutrient. With reference to Table 3, the nutrient status of the topsoil is generally in good order. Soil pH of 5.8 is within the recommended range for the cultivation of Perennial ryegrass species (5.5 to 7.5). An application of Lime is recommended during the construction phase to raise the pH toward the upper limits of the range.

3.6.4 Soils summary

The development area features a soil profile consisting of **260 mm sandy loam topsoil** overlying **clay loam subsoil**. This profile provides broadly favourable conditions for sports pitch construction. Laboratory analysis confirms a composition of **64% sand** and **29% silt**, classifying it as a **sandy loam.**

Maintained in a well structured condition, the profile offers optimal **drainage capacity** and **moisture retention**, with the high sand content enhancing permeability and reducing the potential for surface waterlogging. These properties help maintain playable conditions, even during wet periods.

However, the soil type has inherent limitations. Fine-textured soils with high sand and moderate silt content are **susceptible to compaction** under heavy foot traffic or sustained loading. Compaction can impair infiltration, root development, and surface evenness. To mitigate this, **routine maintenance**—including **aeration, topdressing, and traffic management**—is essential to prevent surface crusting and maintain turf resilience.

Additionally, the **silt content** poses a long-term drainage concern. Unlike sand (which remains stable) or clay (which forms aggregates), **silt particles are mobile** and can migrate downward, clogging macropores critical for drainage. Over time, this may reduce the effectiveness of installed drainage systems. However, **annual maintenance**, such as **clearing silt traps and inspecting chambers**, can help sustain drainage performance.

SANDY LOAM soil is desirable for playing field construction as it is associated with moderate to good natural drainage rates and nutrient retention, however this soil type is also susceptible to compaction and so routine decompaction operations will need to be conducted as part of the ongoing agronomic maintenance schedule.

Following re-modelling earthworks to create the desired pitch gradients which will adversely affect natural soil structure, the installation of a land drainage scheme that is designed to intercept rainwater at the surface before it has had an opportunity to soak in to the soil profile is recommended.

These systems work by using a primary drainage system comprising closely spaced, deep lateral drains combined with a secondary drainage system of closely spaced sand grooves or sand bands cut into the surface that link into the primary system below.

A typical arrangement is presented in Figure 20.

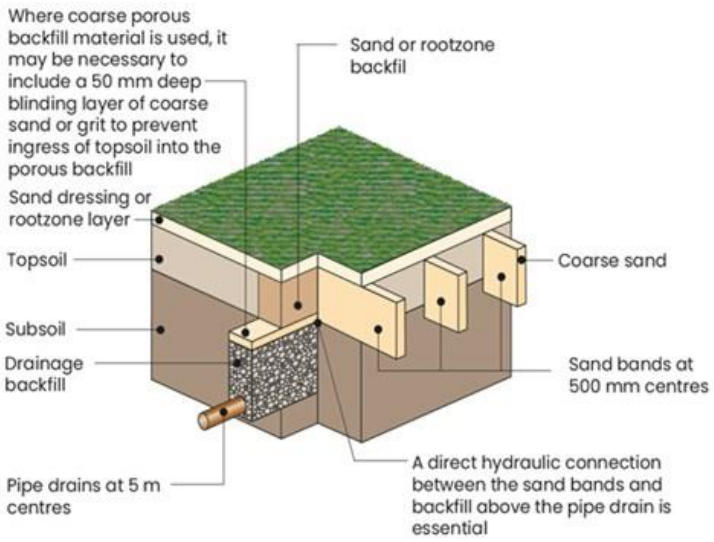


Figure 20. Typical sand band-based surface by-pass drainage system (Ref: Sport England Design Guidance Note "Natural Turf for Sport", 2025).

3.6.5 Issues with Stone Content

Observations during the initial site visit identified some stone content within the topsoil, mainly rounded cobbles typically 10 – 20 mm in the longest axis.



Figure 21. Overview of stone content.

Methods to deal with stones during construction works include stone burial, stone removal and topsoil screening. Each method has limitations and complete stone removal is neither practical nor possible.

Significant de-structuring of the soil can occur through intensive stone removal/screening operations, which can inadvertently decrease infiltration rates of the indigenous soil without significant de-compaction works. Due to the methodology for stone buying/picking, only stones over certain dimensions can be effectively buried/removed, often leaving smaller sharp-edged flints on or near the surface. It is these stones that can cause significant injury in the form of cuts and abrasions.

The only method that will potentially mitigate the risk of stones is the importation of ~ 25 mm rootzone (to act as a buffer) to be spread across the entirety of the site. This is an expensive process and costs associated with this operation are presented in the indicative development/cost options.

It is recommended that following any aeration or scarification works which are implemented as part of good maintenance, a thorough inspection of the pitches is undertaken to identify any stones which may have been brought up to the surface following the works. Industry Standards suggest there should be no stones greater than 20 mm in longest axis within the upper 50 mm of the soil profile and no sharp stones within this zone. Following any remediation works, it could not be guaranteed that these criteria for stone content could be achieved without the importation of additional soil/rootzone to act as a buffer.

3.7 Existing drainage infrastructure and outfall

No existing drainage infrastructure was noted within the area for pitch construction.

The client will need to identify an outfall for the proposed drainage scheme.

3.8 Irrigation

It is strongly recommended that pitches are irrigated when the installation of an intensive drainage scheme occurs. Provision should be made for a pressurised irrigation main supply with hydrant points for travelling irrigators as a minimum. If a permanent system is not included, temporary irrigation will be required during the grow-in process of any new facility.

Evapotranspiration (the combined removal of water from the soil through evaporation and plant transpiration) is likely to peak at around 5 mm/day which, over a 7,000 m^2 playing area (typical football pitch), equates to 35 m^3 of water. As a minimum, an irrigation system should be designed to have sufficient water storage or capacity to deliver 70% of this volume in an overnight period of 8 hours (applying water overnight significantly improves water use efficiency because of reduced evapotranspiration, allowing water to soak further into the ground where it can be used more efficiently). This would require ~25,000 litres to be applied to return moisture which has been lost from a single pitch.

Any system needs to be capable of delivering the 25 m^3 in an 8-hour window (i.e., ~3 m^3/h) which requires sufficient pump capacity. Note that direct connection of automatic irrigation systems to the mains water supply is illegal and is unlikely to deliver sufficient performance (irrigation systems require 3-5 bar pressure however the pressure of a typical mains water supply is in the range of 1-3 bar).

It is with these points in mind that irrigation has been included for consideration within the feasibility and the client should liaise with a suitably qualified irrigation engineer to identify any appropriate irrigation solutions.

3.8.1 Water sourcing and cost

As an indication, at a water supply cost of £2.16/m^3 (accurate as of December 2025, United Utilities), the cost of 25 m^3 of water would be ~£54.00, therefore in the height of summer, thrice weekly irrigation applications may cost ~£162.00 per week per pitch. It is important to note that typically irrigation will only be required during a period of extreme drought and generally from June through August.

3.9 Agronomic condition

Vegetative cover across the site was ~90 % and comprised predominantly perennial ryegrass and weed grasses with Creeping buttercup *(Ranunculus repens)*. The sward height was in excess of 75 mm with debris from fireworks present within the sward, this would suggest that the maintenance of the park is infrequent.

During the excavation of TP 1 evidence of Chafer Grub activity was identified. Chafer Grubs are the larvae of chafer beetles that feed on grass roots, causing thinning, yellowing, and eventual die-back of turf on sports pitches. Management focuses first on monitoring (soil inspection, assessing bird activity, and damage levels), combined with cultural practices such as maintaining a healthy, well-drained sward and avoiding excessive thatch that favours egg-laying. Where thresholds are exceeded, the targeted use of authorised insecticides as part of an integrated pest management (IPM) programme should assist in reduced numbers.



Figure 22. Chafer grub.



Figure 23. Sward composition.

3.10 Site usage

It is difficult to predict with any accuracy the hours of play achievable if the site was to be regraded and a new drainage scheme installed as this depends on local weather conditions, schedule of use, age of participants and the quality of the on-going maintenance, however Sport England considers the following (Table 5) to represent a reasonable estimation for winter sports (Ref: Natural Turf for Sport, 2025).

Table 6. Sport England estimated usage levels

Drainage status	*Type*	*Adult weekly use* (hours)*
Undrained	*1*	*Under 2*
Pipe drained	*2*	*2 - 3*
Pipe drained with mole drains	*3*	*2 - 4*
Pipe drained with sand grooves	*4*	*3 - 5*
Pipe drained with slit drains	*5*	*3 - 6*
Pipe drained with sand bands	***6***	***3 - 6***
Pipe drained with topsoil and drainage layer	*7*	3 - 6
Pipe drained with carpet hybrid system	*8*	*10 - 20*
Pipe-drained with suspended water table and stitched-hybrid system	*9*	*10 - 20*

Table 5. Sport England estimated usage levels.

*The usage levels shown will increase by ~50 % for players under 15 years of age.

It is therefore concluded that, following pitch remediation and the installation of a land drainage system including sand bands (Type 6) , the proposed natural turf pitch may be able to support 3 to 6 hours of usage per week in the winter (4.5 to 9 hours per week for players under 15 years of age).

3.11 Performance Quality Standards (PQS)

Performance Quality Standards (PQS) provide a recommended minimum quality standard for the construction and maintenance of natural turf pitches. PQS were originally developed via a voluntary

technical consortium with representation from the Sports Turf Research Institute, National Playing Fields Association and the Grounds Management association, and have now been adopted by Sport England and Governing Bodies of Sport.

Sport England has produced a pro forma for summarising the condition of natural turf sports pitches by conducting a Performance Quality Standard assessment and comparing the results for a given site against minimum standards. The results of this assessment are presented in Appendix II with a summary of the results presented in Table 6.

With reference to Table 6, the pitch passes eight of the ten PQS parameters tested.

Table 6. Summary of Performance Quality Assessments.

3.11.1

Client: Clarion Housing Group Physical Site Survey date: 2nd January 2026

Project Title: **A feasibility study for the remediation of a natural turf football pitch at King George V Park, Gorton, M18 8WQ**

ELEMENT	LIMITS	METHOD OF TEST	Visit 1
Ground cover %	>70 for SH 25-30 >80 for SH 30-35	BS 7370: P3 A6	✓
Broad-leaved weeds %	<10	BS 7370: P3 A6	x
Sward height mm	20-60 PS 20-75 SM	BS 7370: P3 A3	x
Thatch depth mm	<5	BS 7370: P3 A7	✓
Hardness in g	35-200	STRI method of test using a 0.5 kg Clegg Impact Hammer from a drop height of 0.55 m	✓
*Water infiltration rate mm h^{-1}	5	BS 7370: P3 A8	✓
Evenness (2 metre straight edge)	<20 mm	BS 7370: P3 A6	✓
Slope: Direction of play Across play	<1.25% <2.00%	BS 7370: P3 A5	✓
pH value	5.5 – 7.5	ISO 10390	✓
GUIDANCE FOR ROOTZONE LAYER			
Maximum diameter (stones)	<32 mm	Particle Size Distribution	✓

3.12 Construction considerations

Issues which can arise from natural grass pitch construction can be summarised as follows:

- **Services** – It is recommended that the client obtains up to date service plans of the site prior to any development works. It is important to note that the presence of services may inhibit the scope of works. This is particularly pertinent for site re-modelling and land drainage works.
- **Planning permission** – Where cut and fill remodelling earthworks and the installation of a land drainage scheme are required, it may be prudent to obtain guidance from the local planning department as to whether planning permission is necessary.
- **Irrigation** – The construction of natural grass pitches relies on optimal weather conditions to aid germination and grass plant establishment. In some cases, when construction is carried out in summer and during droughty conditions, supplementary irrigation may be required, the costs of which should be factored into the budget. It is the responsibility of the Client to provide sufficient irrigation during the duration of project construction phase and subsequent initial maintenance phase.

- **Irrigation (following handover) – It is important that the recipient of the pitch understands that in the absence of irrigation, pitch conditions will deteriorate with a potential loss of ground cover and an increase in hardness (more so in summer). Pitch drain runs may also settle as the surrounding clay soils shrink. Invariably, the grass will return following sufficient precipitation however supplementary irrigation may be required should drought conditions persist.**
- **Outfall** – When discharging into existing drainage infrastructure or natural water courses, it may be necessary to obtain the relevant permissions including discharge consents and/or land drainage consent from the Environment Agency, landowner or lead flood authority. These procedures can significantly delay proceedings, and prior investigation may be necessary at feasibility stage. It is the responsibility of the Client to obtain the appropriate consents.
- **Cut and fill earthworks** – Cut and fill involves significant earthmoving using large plant machinery e.g. dozers, excavators and dumper trucks. The nature of the works inevitably destroys the natural soil structure (cracks, fissures, worm holes and root holes) that has built up over many years resulting in a significant reduction in drainage rates. Differential settlement is also not uncommon. Following cut and fill remodelling earthworks, the installation of a drainage scheme will be necessary to mitigate the effect of the earthworks on natural drainage rates.
- **Maintenance scheme** – For any natural turf pitch development, it is essential that a well-structured, intensive maintenance programme is implemented to maintain the pitch(es) following construction. Failure to implement the recommended maintenance schedule will result in a deterioration of pitch condition and subsequent reduction in availability for use. A generic agronomic maintenance programme is presented in Appendices I.
- **Settlement of drain lines** – Land drains can be prone to settlement as the soil surrounding the drainpipe dries out and shrinks (perfectly normal in new constructions). Whilst topping up drain lines is usually covered by the Contractor during the first 12-months following construction, it is possible that drains may continue to sink to some extent after this time. Therefore, there should be some allowance within the maintenance programme to ensure that drain lines are kept topped up and overseeded.

4 DEVELOPMENT OPTIONS

Please note: the following is not a detailed design specification and merely constitutes options for consideration at the feasibility stage. Labosport will only warrant a full design specification following the production of a specification of method, materials and performance outcomes. Based on the findings from the site assessment, the following development options are recommended:

Development option: Vegetation removal, topsoil regrade, installation of a primary drainage scheme at 5 metre centres, secondary bypass scheme (sand bands) and a 25 mm rootzone carpet.

This option is the recommended approach for constructing a natural turf football pitch. It includes vegetation removal, topsoil stripping, subsoil regrading, and the installation of a primary land drainage system. This is supported by a secondary surface bypass drainage system comprising sand grooves. As part of the construction, a 25 mm rootzone carpet will be installed to maintain hydraulic connectivity between the sand grooves and the drainage trench backfill above the proposed piped drains.

Important, please note: Following this type of construction, the pitch should be maintained for a period of 12 months without use prior to handover back to the client. This is to ensure the recipient receives the pitch in the correct condition and the contractor has the necessary time to implement all specified operations.

4.1 Part A: Pitch construction [5,917 m^2]

The works by a specialist sports pitch contractor would comprise the following:

- Setting out.
- Removal of vegetation
- Topsoil strip
- Cut and Fill earthworks
- Stone separation and removal.
- Topsoil spread
- Surface grading.
- Installation of a primary piped drainage system at 5m centres.
- Installation of secondary drainage system (sand bands).
- Importation and placement of screened, approved 25 mm rootzone carpet.
- Disposal of excavation spoil.
- Final cultivations – to produce a suitable tilth and to restore levels.
- Establishment of a new grass sward from seed (including seeding and fertiliser
- Reinstatement of damage.
- As-built survey, O&M Manual and H&S File.

N.B. Earthworks should only be carried out under suitable weather and ground conditions (i.e. soil in a dry and friable state) to avoid structural damage.

4.2 Part B: 12 Months initial agronomic maintenance [5,917 m^2]

Depending on the construction timetable, it is possible that on-going maintenance will be required for the first 12-months following completion of the pitch construction works. This would include the following items:

- Mowing.
- Granular fertiliser application.
- Liquid fertiliser application.
- Slow-release granular fertiliser application.
- Plant growth regulator application.
- Selective herbicide application.
- Overseeding.
- Decompaction / aeration.

- Pest and disease control.
- Marking out and installation of permanent pitch corner markers.
- Rootzone topdressing (1 no. x 8 mm to protect secondary drainage).

5 INDICATIVE COST ESTIMATES

5.1 Sports pitch / playing field construction

Please note that these costs are indicative only and true cost can only be established by competitive tender.

Item	Cost for 5,917 m²
Site clearance (including goal post removal)	£8,000.00
Topsoil strip	£6,000.00
Site remodelling (cut and fill earthworks) 276 m³	£1,100.00
Topsoil return	£6,000.00
Stone burial (if required)	£1,000.00
Installation of a pipe drainage scheme @ 5 m centres, incl. collectors, main drains, and junctions	£23,700.00
Installation of secondary drainage i.e., Sand bands	£17,500.00
Installation of 25 mm Rootzone carpet	£19,100.00
Final cultivations	£2,000.00
Installation of new goal posts	£4,700.00
Establishment of a new grass sward (includes seeding and fertiliser)	£3,000.00
Reinstatement of damage	£2,000.00
Subtotal (ex VAT)	£94,100.00
Prelims, mobilisation, setting out and reinstatement	£8,000.00
Contingency (10%)	£10,210.00
Total ex VAT	**£112,310.00**

12-months maintenance post-construction (based on a development area of 5,917 m²)

Item	Cost for 5,917 m²
Mowing (30 cuts)	£3,500.00
Fertiliser x3	£3,000.00
Verti-draining/spiking x2	£1,000.00
Selective herbicide (as required)	£1,000.00
Pest and disease control (as required)	£1,000.00
Overseeding x1	£3,000.00
Rootzone top dressing 1 x 8 mm application	£7,400.00
Total	**£19,900,00**

NOTES TO TABLES:

a. Costs are based on a general estimation of the works required. If conducted in isolation, the costs are like to increase and would need to be costed accordingly.
b. Costs do not include temporary irrigation which may be required if dry weather is experienced during grass establishment.
c. Rootzone dressing must the same specification as the rootzone carpet.
d. Costs are based on recent Contractors rates (2025).
e. These indicative costs do not include professional fees (ex VAT) for design and specification, tender production and evaluation and contract administration (supervision).

5.2 Summary of project costs

Option	Construction	Maintenance	Total ex VAT	VAT	Total Inc. VAT
Natural turf area	£112,310.00	£19,900.00	£132,210.00	£26,422.00	**£158,652.00**

Please note: The costs represented above are for the development area and based on 5,917 m². Due to the volatility of the market, actual costs may vary as much as ± 20% depending on contractor availability, prices of aggregates and time of year.

5.3 Cost Guidance

The costs detailed above are broadly in line with Sport England facilities cost guidance, which can be seen in the following link.

Facility Costs 3Q2024

6 INDICATIVE WORK PROGRAMME

With respect to timescales for completing the project, it is recommended that pitch construction works are only completed under suitable ground and weather conditions to avoid excessive compaction and smear. For the natural turf areas, grass is ideally sown in spring or early autumn to maximise the balance between moisture and temperature.

The grass must be allowed to establish a healthy and deep root network and mature canopy to resist the stresses applied during play. The date for start of play for the natural grass area is highly dependent on weather conditions during the construction phase and growing-in period, more so in the absence of supplementary irrigation.

An indicative work programme is presented below.

Natural turf pitch	**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 the specialist pitch contractor																								
Surface grading and stone removal																								
Primary drainage installation																								
Secondary drainage installation																								
Light cultivation and grading																								
Application of rootzone carpet																								
Fertiliser application and seeding																								
Reinstatement of damage																								
12 months of initial maintenance																								
Pitch / area ready for use																								

7 IMPLICATIONS OF WORKS ON FUTURE MAINTENANCE, LONGEVITY AND USAGE

7.1 Maintenance issues

- Land drains can be prone to differential settlement (i.e. there can be some sinkage over the drain lines) as the soil surrounding the drainpipe dries out and shrinks; this is perfectly normal in new constructions. Whilst topping up drain lines is usually covered by the Contractor during the first 12-months following construction, it is possible that drains may continue to sink to some extent after this time. Therefore, there should be some allowance within the maintenance programme to ensure that drain runs are kept topped up.
- In general terms, a maintenance budget of **~£6-9k** / senior pitch is normally required to maintain the facility in good condition. This figure includes an allowance for annual sand topdressing.
- A routine maintenance schedule is appended (Appendix I)

7.2 Drainage system longevity

- Whilst only a guide, the piped drainage system should have an operational lifespan of approximately 25 years if well maintained (e.g. silt traps regularly inspected and emptied, and collector drains flushed).
- If managed well (i.e. annual sand topdressing) and not over-used (please see Item 8.3 below), sand bands beneath a sand carpet should have an operational lifespan of 6 - 8 years (dependent on the rate of silt ingress from the surrounding soil).

7.3 Usage

- Provided the site is well maintained, the type of drainage system proposed for this site should allow 3 – 6 hours of use / week / pitch (4 ½ to 9 hours for U15's) on average without causing detriment to the grass sward or soil structure. In very wet conditions, usage may be less than this.

8 OUTLINE PROJECT RISK ASSESSMENT

The following risks to the project should be considered:

1. **Weather:** Good dry weather during construction is essential for project progress. This is particularly sensitive once the vegetation has been removed, and the topsoil has been stripped.
2. **Timeliness and quality of construction:** It is important that the specialist pitch contractor appointed has the scale of operation and capacity to deliver this project on time and to the requisite high quality. A premium for highly experienced, well-equipped contractors must be valued in the tender process. Cost should not be the only consideration.
3. **Drain line sinkage and establishment challenges:** Whenever piped drainage is installed there are challenges with settlement of the permeable drain back fill and getting grass to establish in the drain runs. Settlement occurs due to a combination of shrinkage of the surrounding soil on drying and natural settlement of the permeable backfill with time, and so construction method and monitoring of the contractor are essential. Grass establishment problems along the drain runs can occur because the backfill materials are freely draining (so that the drains function) and therefore do not retain much water and readily leach nutrients. This is mitigated to an extent at the design stage by the specification of the construction method for mixing some topsoil into the tops of the drains, but this approach is dependent upon the inclusion of a secondary drainage scheme. Watering and fertiliser applications along the drain runs during establishment may be required during periods of drought.
4. **Spoil:** Spoil from the drainage installation shall be disposed of off-site unless the Client would prefer on-site disposal as a cost-cutting measure.
5. **Ongoing operational finance:** The Client should carefully consider the maintenance demand (in terms of time, skill and cost) for the proposed surfaces.

9 CONFIDENTIALITY

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11 APPENDICES

11.1 Appendix I: Outline Maintenance Recommendations

Mowing. The grass shall be maintained at a height of 30 using cylinder mowing equipment. The grass should never be allowed to exceed a height of 50 mm. If the grass does become too long, the height of cut should be reduced gradually over 3 – 4 cuts allowing some time for recovery in between. N.B. On no account should the grass height be reduced by more than 50% on any one occasion. Overall, approximately 30 mowing operations may be required each year, depending on weather and growing conditions.

Fertiliser application. Allowance should be made for a sufficient number of fertiliser applications to maintain healthy growth and colour. The fertiliser regime should be based on the results of annual soil sampling to determine nutrient concentrations, but the following programme is provided as a guide:

- April 12:6:6 at 350 kg/ha
- September 5:5:20 at 350 kg/ha

Fertiliser shall be applied with appropriate equipment that ensures a uniform distribution.

Weed control. Apply a selective herbicide in the spring (if required) to combat the weeds present. This to be applied at least two weeks after the first fertiliser treatment (April) and at a time when grass growth is strong and healthy. NB. Do not apply herbicide during periods of potential turf stress, i.e. if the weather is hot and dry or if frosts are forecast. Apply herbicide strictly according to the manufacturers label recommendations and only by suitably qualified personnel.

Pesticide/Fungicide [If required]. A pesticide/fungicide application may be required should disease be present within the grass sward. An approved fungicide should be used with activity against the pathogens present and be applied following the manufacturers label recommendations by suitably qualified personnel.

Aeration / Compaction Alleviation. Verti-drain (or other similar de-compaction treatment) the pitches on at least two occasions in the spring and autumn. Use 18 mm diameter solid tines working to a minimum depth of 200 mm below the surface set to provide some heave. Verti-draining must not be carried out if ground conditions are too soft or during frost.

Additional aeration treatments (e.g. slitting or spiking) during the playing season would also be highly beneficial to maintain surface drainage rates. These treatments should only be undertaken when ground conditions are suitable.

Sand topdressing. Supply and spread an approved medium-fine sand suitable for sports use during the renovations period at the rate of 85 t/ha. After each application, the sand should be worked into the surface with brushes or drag mats. Given the presence of the rootzone carpet, this may not be required until Year 4.

Overseeding. Overseed the pitches and safety margins as required at the application rate of approximately 200 kg/ha immediately after the end of season renovation. Use at least three cultivars of perennial ryegrass chosen form the latest Turfgrass Seed booklet with live ground cover and visual merit ratings of 6.5 or more. Make at least two passes with seeding equipment designed to place the seed approximately 5 mm below the surface.

Harrowing [Playing season as required]. To maintain surface levels, it is recommended to chain harrow / drag mat the pitches as opposed to flat rolling which tends to compact the pitch surface and exacerbate undulations. This should only be undertaken under suitable ground conditions.

Divot repair [Playing season]. After each match, divot and tread the divots back into position. This will remove any bare soil which allows weeds and weed grasses to germinate. Filling in divots with seed/soil mix will help to maintain better grass coverage.

Renovation of worn areas [Playing season]. Areas of high wear should be dressed and seeded using a divot repair mix (seed/rootzone) during the playing season as required to maintain good grass cover. These areas should be hand watered (if necessary) to ensure rapid grass germination and establishment.

Line Marking [Playing season]. Line marking should be undertaken on a weekly basis during the playing season.

Goal post safety. The posts should be regularly checked for damage and re-painted / re-paired as necessary following the manufacturer's guidance.

11.2 Appendix II: Performance Quality Standards

Client: Clarion Housing Group Physical Site Survey date:

Project Title: King George V Park, Gorton M18 8WQ.

ELEMENT	LIMITS	METHOD OF TEST
Ground cover %	>70 for SH 25-30 >80 for SH 30-35	BS 7370 : P3 A6
Broad-leaved weeds %	<10	BS 7370 : P3 A6
Sward height mm	20-60 PS 20-75 SM	BS 7370 : P3 A3
Thatch depth mm	<5	BS 7370 : P3 A7
Hardness in g	35-200	STRI method of test using a 0.5 kg Clegg Impact Hammer from a drop height of 0.55 m
*Water infiltration rate mm h^{-1}	5	BS 7370 : P3 A8
Evenness (2 metre straight edge)	<20 mm	BS 7370 : P3 A6
Slope: Direction of play Across play	<1.25% <2.00%	BS 7370 : P3 A5
pH value	5.5 – 7.5	ISO 10390
GUIDANCE FOR ROOTZONE LAYER		
Maximum diameter	<32 mm	Particle Size Distribution

KEY: SH = Sward Height PS = Playing Season SM = Summer Maintenance

* Based on previous experience of pitches on similar soils it is expected that once the soils are wet to depth during the winter, the rate of infiltration will decline to less than 5 mm / hr.

Visual assessment is an acceptable alternative method of testing, if undertaken by a turfgrass consultant who can satisfy the selection criteria identified within the Turfgrass Consultants – Construction/Upgrade Brief.

Assessment undertaken by: Rich Eastham Consultancy: Labosport UK