# Sutcliffe Park Management Plan 2019-24



The Broadwalk at Sutcliffe Park





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## **PART I: WHERE WE ARE NOW**

## I.I Park Address and Contact Details

Name of Site: Sutcliffe Park

Address: Sutcliffe Park

Eltham Road

Eltham London SE9 5LW

If you require any further details about this plan please contact:

Address: Parks Estates & Open Spaces

The Oxleas Woods Centre

Crown Woods Lane

London SE18 3JA

Tel: 020 8856 0100

Email: parks@royalgreenwich.gov.uk

Sutcliffe Park has an active "Friends of Group. The Friends of Sutcliffe Park can be contacted via Parks Estates & Open Spaces or the Friends of Sutcliffe Park Facebook page.



# 1.2 Introduction - What is a Management Plan?

Park Management Plans are documents that set out the manner in which a park should be managed. Therefore, they are an important aid to the efficient and effective management of the parks to which they relate. Management plans form part of a process for evaluating performance against agreed standards, consulting and involving people, strategic planning and providing continuity. Individual plans will be specific to each park and will deliver aims and objectives specific to the needs of the local community. A Park Management Plan also provides an excellent opportunity to collate a wealth of information relating to the park that the management authority possesses, into a single comprehensive document.

#### Purpose of this Management Plan

The Sutcliffe Park Management Plan builds on the prescriptions from the Sutcliffe Park Flood Storage Scheme Landscape Management Plan 1999 proposals to ensure that the site continues to fulfil its designed purpose, while increasing biodiversity and enabling the park to provide an increasingly useable and used open space. The Sutcliffe Park Flood Storage Scheme Landscape Management Plan 1999 was written by Land Management Services Limited for the Environment Agency and was developed to implement a scheme intended to provide flood protection for the Quaggy River and its surrounds. The plan details the actions required to convert part of the park into a flood storage area and further maintain this area of the park as a nature conservation area. It laid out proposed new habitats and vegetation within the park as well as containing a management prescription regarding the actions required to maintain the flood protection infrastructure in working condition for the next thirty-five years. The Flood Storage scheme was carried out successfully. The 1999 Plan has achieved all its short-term objectives, and the long-term objectives, as a whole will continue to be implemented.

This plan is intended to help parks staff in maintaining and developing Sutcliffe Park as a resource for the community and visitors to the area. The plan will be under constant informal review, with an annual review of progress and a comprehensive review every 5 years. It is envisaged that the plan will provide a framework around which any future decisions concerning this site will be taken, help to encourage relationships between The Royal Borough of Greenwich and the community and provide access to information on the management approach to this site.

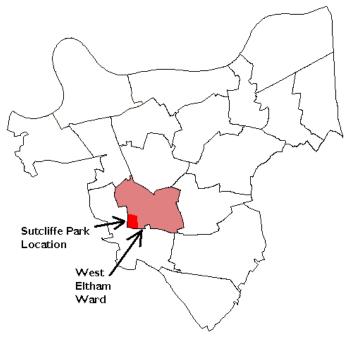
In addition, it is hoped that the management plan for Sutcliffe Park will assist with allocating existing and securing additional resources for developments on this site that this management plan specifies. Future actions/priorities for this site are identified in the action plan to this document. This management plan therefore provides a benchmark against which future progress can be measured. This plan will cover any changes to management of the flood storage area and will also detail the management actions for the management of the rest of the park including the sports ground area and the amenity grassed areas.

#### Wider Policy Context

This Management Plan has been written within the context of a wide framework of national, regional and local policy statements and strategies. A number of strategies have been considered in particular The Parks & Open Spaces Strategy to ensure that the priorities identified in this plan deliver and compliment the appropriate aims and objectives identified in them. The main documents impacting on the development of this plan are listed in Appendix I.

# 1.3 Description of Park

This large, tree-lined park in the western part of Eltham features areas of open grassland, meadow and wetland. The river Quaggy meanders through the site after a flood alleviation scheme was created, releasing it from its underground culvert. Rich in wildlife, Sutcliffe Park has been declared a local nature reserve and is one of Royal Greenwich's Green Flag sites. Sutcliffe Park is a large area of open parkland that is owned by The Royal Borough of Greenwich. In 2009 the site was formally declared a reservoir and the Environment Agency manages and maintains the flood control infrastructure within the park. The Park covers an area of 16.5 hectares and contains a large wetland habitat area. The park's underlying Geology is London Clay. There is also a regionally important athletics facility on site which is leased to Greenwich Leisure Limited (GLL).



Location of Sutcliffe Park within The Royal Borough of Greenwich

The park named after Mr J Sutcliffe, a former Royal Borough of Greenwich engineer is bordered by Eltham Road on the south, Kidbrooke Park Road on its west side and Tudway road on its north side. In 2010 a £750 million regeneration project commenced to the North and East of Sutcliffe Park. This project includes the development of Harrow Meadow into high quality housing, now completed. The eastern side of the park was handed back to Parks Estates and Open Spaces in January 2016.

The perimeter of Sutcliffe Park is delineated by a line of poplar and horse chestnuts of varying age. Approximately two metres from this outer row of trees is a bituminised pathway which in places has an additional row of trees on the other side creating avenues, particularly on the western side. The one major feature of the park that has been retained throughout the redevelopment of the park is the north/south pathway through the centre of the park, with the addition of several wooden foot bridges over the Quaggy at its lowest point.

Most of the Southwest quadrant of the park is taken up by the Sutcliffe Park Sports Centre which is surrounded by a two meter palisade fence with a beech hedge inside it.

Details regarding the history of Sutcliffe Park can be found in Appendix 2

#### 1.4 Access to the Park

Sutcliffe Park is open to visitors 24/7. Eight entrances facilitate access into the park on the north, south and west boundaries where there is a fence line separating the park from the adjacent busy roads. The design approach to the new housing estate to the East is to maintain open boundaries encouraging improved movement through the area.

All pathways are less than 1:14 gradient, have no steps and are suitable for disabled access. Prior to the development, there were two pathways in the park, one following the boundary of the park and one down the centre running from north to south forming the 'Spine' of the park. These two pathways are still present, but new pathways have been provided to improve access throughout the flood storage area.



Map of Sutcliffe Park and surrounding area

Sutcliffe Park is well serviced by public transport with bus routes for the 321, 122 and B16 passing and park on the main road and bus routes for the B15 & 160 running nearby. The nearest British Rail train station is Kidbrooke, which is within a ten-minute walk of the park and is on the London to Bexleyheath line.

A pay and display car park is located within the park and managed by GLL and limited free parking is available on Eltham Road.

In 2016 Sutcliffe Park became part of a safe cycling route, a scheme for creating safe cycling through green spaces throughout Greenwich.

# 1.5 Ecology and Landscape

The legacy of the award-winning flood alleviation scheme is the transformation of Sutcliffe Park into one of the most spectacular wetland sites in Greater London. It is rich in wildlife and provides a home for a variety of birds, animals and plants.

The central area of the park - around the flood water collection area was declared a Local Nature Reserve in 2006. The slopes of the flood control area are managed as conservation grassland, which is cut and cleared once a year in accordance with Parks Estates & Open Spaces conservation grassland management regime to promote invertebrate and small vertebrate population.

The boundary area around the flood storage area acts as a buffer zone between the road, fence, and pathways to the environmental grassland in the flood storage area. There are several areas planted out with bulbs in the north-eastern corner of the park. The water course areas of the flood control area are currently managed to promote the water flow through the park, while maintaining a healthy aquatic ecosystem. Other areas within the park that are mown as short amenity grass to facilitate access to visitors and encourage recreation play.



The Lake in Flood

Depending on your time of visit, you may see dragonflies, damselflies, herons, little egrets, kingfishers, reed warblers, common snipes, kestrels, swans, chiffchaffs, herring, gulls, moorhens, wagtails and redwings. There is a small population of Canada Geese (Branta canadensis) within the park will be monitored in case their number pose a problem for the park

Himalayan balsam occurs in the park brought in by the river Quaggy. This is kept under control via a number of workdays involving Friends, members of QWAG (Quaggy Waterways Action Group) and Parks, Estates & Open Spaces staff.

The Royal Borough does not at this time have trained ecological staff or the resources to employ them on a regular basis. Assistance from the Environment Agency is being sought for regular stage one habitat surveys in order to fully assess the effectiveness of the management of the site.

The reed beds within the watercourse are particularly successful and Common Reed (Phragmites spp) has been over successful in this area and has started to colonise the deeper water areas. In 2011 the Environment Agency carried out some vegetation clearance, including Phragmites, along the river to enable increased flow and reduce congestion. In 2011 the Royal Borough successfully treated an outbreak of New Zealand Pigmy weed (Crassula sp) by covering the plant with black plastic to deny it of light.



Reed Beds around the Lake

#### **A**rboriculture

There are a variety of trees within the park, most of them provided as avenues for the perimeter and spine pathways. There is an avenue of mature cherry trees planted next to the children's playground. Replacement cherries have been planted to fill the gaps to preserve the avenue.



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There is an avenue of Horse Chestnut (Aesculus hippocastanum) along the western boundary of the park. The stock of Horse chestnuts (Aesculus sp) are suffering the effects of leaf minor and Bleeding canker. Some have been pruned subsequently and they are being monitored by the Arboricultural Manager.

Additional trees were planted within the flood storage area as per the initial planting and are still maturing. Native whips have planted to the north/west boundaries of the park to improve biodiversity and provide a screen to the traffic from Kidbrooke Park Road and Tudway Road.

The Friends Group secured funding from Berkley Homes, the Middle Park and Sutcliffe ward budget and The Eltham West ward budget which was match funded by Trees for Cities for a Legacy Tree Planting Project for Sutcliffe Park in 2017/18. The project of £36,000 saw a total of 58 trees, a hedgerow and naturalised bulbs planted at Sutcliffe Park by members of the local community. See the map below which also shows the number of trees that were chosen for the tree trail in the park. Leaf rubbing posts with the tree names have been installed next to these trees.



An arboricultural survey was carried out in Sutcliffe Park in June 2018 and works are carried out in accordance with actions identified within that survey. The survey will be updated on a five year basis.

Once any habitat surveys are complete, this management plan will be updated to incorporate recommendations from those surveys.

Planting Mixes for whips and conservation grass can be found in Appendix 6.

#### 1.6 Park Infrastructure

#### **S**ignage

Signage is located at key positions within the park. Park entrance signs are located at Kidbrooke Park Road and Eltham Road. There are welcome signs inside the main entrances with a map of the park and other relevant visitor information. Directional signs are located at strategic locations within the park. (see diagram below)



Interpretation signage is provided at key points around the flood storage area, pointing out features of importance and species that live within the conservation area provided by the flood storage area. There is also a double a notice board containing park information which is updated by the Friends of Sutcliffe Park.

There is directional signage situated in strategic local roads giving direction to the park.

#### **Fencing**

The boundary metal railings to the park were reconditioned and painted in 2008/9, using contractors or the probationary service (Payback). Some realignment of the access gate off Eltham Road, close to the inlet was repositioned in 2010 to enable vehicle access to the Berkeley home construction site.

#### **Park Furniture**

In the flood storage area, the furniture is all made from wood reclaimed from the Thames. A local Mencap group were involved with the installation of the central area of seating, set out in the manner of a classroom circle (Riverwood project). There are no other seats or litter bins within

this area, as park furniture within this area could potentially be a major problem to the drainage infrastructure and effective flooding circulation.

In 2011 three picnic benches on hard standing with litter bins were installed adjacent to the playground in the park, following consultation with the park friends. Overall, there are a good number of seats, litter bins and dog bins within the park, providing excellent amenity value.

#### **Water Control Infrastructure**

The River Quaggy enters the park via a culvert at the south-east corner from under Eltham Road. Near to the granite weir in the south-east of the park, a sluice (low-flow inlet) controls the distribution of the water – either down the weir into the park or along the underground culvert. At the park's far north-west corner, a low-flow outlet structure re-routes the river back into the culvert.

A trash screen was installed by the EA in 2018 as the river enters the park to provide further protection against local flooding. The culvert and associated flood control infrastructure are managed and maintained by the Environment Agency. The actual river and its flow is a shared responsibility between The Royal Borough and the Environment Agency.



River Quaggy Trash Screen installed in 2018

# 1.7 Recreational and Sporting Facilities

#### **Sutcliffe Park Sports Centre**

The athletics track, home to the famous Cambridge Harriers Athletics Club, was constructed in the 1950s and was refurbished in 2016 /17. It provides excellent sports and training facilities for users from a wide catchment area and is now one of the best tracks in south London. The major improvement works costing £12 million included a new sports centre providing an indoor running track, an indoor skate park, extreme climbing, a soft play area and a café for visitors. Public toilets and an area for education / community use are also available. Responsibility for the maintenance of the buildings is part of the lease agreement with Better Leisure Limited. More information about the Sutcliffe Park athletics track is available on the Better Leisure website:

https://www.better.org.uk/leisure-centre/london/greenwich/sutcliffe-park-athletics-track



Sutcliffe Park Sport Centre and Running Track

#### Children's Playground

A children's playground was installed in the park in 2008/09 and has proved a successful addition to the park, attracting many young families. A small natural play area was installed next to the Sports Centre entrance in 2017 providing an additional play area for children.

Park Rangers carry out weekly visual inspections on all play equipment and the playground inspector carries out more in depth checks on a bi-monthly basis and carries out any necessary works identified. An independent annual inspection is carried out to make sure that the playground and other fixed equipment conforms to the European Standards EN1176 and EN 1177.

#### **Outdoor Gym**

An outdoor gym was installed in Sutcliffe Park to give the local community and visitors to the park the opportunity to exercise for free. The Friends of Sutciffe Park were consulted on the location of the outdoor gym and it was installed in 2011. The Playground to Stadium Investment funded this equipment

#### **Table Tennis**

Two Table Tennis tables were installed in the park in 2011 near the playground at the southern end of the park funded by the English Table Tennis Association.







#### Informal Recreation within the Park

There are large areas of grass that are regularly cut to encourage informal recreational play such as casual football, picnics and playing. The circular pathway around the park is popular with walkers, runners and cyclists.

#### 1.8 Park User Information

#### **Demographics**

The information contained in this section is gathered from the Ward Profiles on the 2011 Census Information website.

Sutcliffe Park is located in the Eltham West Ward of The Royal Borough of Greenwich. The ward of Eltham West is 242.6 hectares in size with a population of 14,550 and a population density of 6062.5 persons per square km.

25.1% of the Ward's population were age 15 and under, 63.9% were 16 to 64 and 11% of the wards population were 65 and over.

The percentage of area that is classified as green space within the Eltham West Ward is 30.5%.

#### Patterns of use

Since the flood storage area was opened, park visits have increased by 73% and time spent in the park per person each month has increased by over three and a half hours. 66% of visitors visit for health reasons (compared to 25% before improvements) such as fresh air and walking and the number of people visiting to see wildlife increased from 2% to 47%. (EA report, 2004)

The housing estate on the north and east side of the park has been completely redeveloped to provide modern social and privately owned houses and apartments. The Royal Borough of Greenwich is working closely with Berkeley homes on this project. Patterns of use are changing dramatically and will continue to change until there is a relatively stable residential population in the new housing developments.

A number of local primary and secondary schools regularly use the park for as an educational resource as part of their school curriculum.

#### Stakeholder List

- Friends of Sutcliffe Park
- Environment Agency
- Cambridge Harriers Athletics Club
- Quaggy Waterways Action Group (QWAG)
- The Riverwood Project (Mencap)
- Peter Savage (DSP) re LNR status
- Better Leisure Limited (Sutcliffe Park Sports)
- Running clubs and other sports clubs
- Greenwich Wildlife Advisory Group (GWAG)
- Thames 21 (Community Clearups)
- Local schools including: Thomas Tallis Secondary, Ealdham Primary, Middle Park Primary
- Berkeley Homes

# 1.9 Management of the Park

#### Parks Management

The day-to-day management of the park described in this management plan is the responsibility of the Parks Estates & Open Spaces Service within The Royal Borough of Greenwich.

The Parks Estates & Open Spaces Service is located within the Directorate of Communities & Environment. The Head of Parks Estates & Open Spaces is accountable for the overall management responsibility of the Service. Parks Estates & Open Spaces organisational structure chart can be found in Appendix 3. Individual management functions are devolved, and key functions are identified as follows:

- Horticultural Maintenance
- Arboricultural Maintenance
- Park Rangers
- Parks Strategy & Development
- Ecology & conservation
- Business Support Sports lettings, complaints, monitoring

Horticultural Maintenance Staff responsible for Sutcliffe Park are directly employed by the Royal Borough of Greenwich. A mobile team of gardeners are based off site visit the park on a regular basis. Their role is to undertake varied high quality horticultural/ground maintenance works in the Pleasaunce. The team works closely with the Friends Group. A sample of a Work Programme can be found in Appendix 4

A mobile team of Park Rangers visit the park on a daily basis. Their role is to carry out litter picking and bin emptying, to assist members of the public, to carry out daily inspections of facilities and play equipment, and to carry out minor repairs.

#### **Budget Information**

The budgets used to maintain Parks Estates & Open Spaces are currently split into two areas, Horticulture / Park Ranger Operations and Property Services.

#### Horticultural / Park Ranger Operations

Funding for most of the spending within Sutcliffe Park comes directly from The Royal Borough of Greenwich Parks Estates & Open Spaces budget.

Revenue Expenditure 18/19 £424,915.72

Capital Expenditure 18/19 £12,046,124.97 (includes 12million for new sports centre)

#### **Property Services**

The corporate budgets for both planned and responsive maintenance of the Council's property infrastructure are held by Greenwich Property Services in the Directorate of Regeneration, Enterprise & Skills. Planned works are carried out on a strict basis of corporate priorities. Responsive repairs are carried out for minor items as and when they arise.

#### **External Investment**

Playground to Stadium Funding - opportunities created by the 2012 Olympics created a legacy of improved infrastructure and outdoor sports facilities in the Borough's Parks Estates & Open Spaces. As part of this £4.77 million investment programme, an outdoor gym was installed at Sutcliffe Park in 2011.

English Table Tennis Association - donated two outdoor table tennis tables to the park in 2011

#### **Safety & Security**

Parks' staff are the frontline contact with people that visit and use Sutcliffe Park. They are responsible for building up good relationships with visitors to the site and are in a position to give information, advice and help where needed.

Staff patrol the site on a daily basis and identify and address new hazards that may occur. As the Park is divided by visual barriers such as dense vegetation and hedges, there is the potential for unobserved behaviour due to obstructed sightlines.

ASB is closely monitored and records are kept, analysed for trends, risk assessed and responsive action taken. The Royal Borough also works closely with the local safer neighbourhood team.

Acts of vandalism are to be treated as serious and the police are called as required. Occasional incidents of graffiti are removed within 5 working days but often on the same day. People acting in an anti-social manner will be asked to stop that behaviour and/or asked to leave the site.

Breaches of Park Bylaws will be enforced by the Parks Rangers. Any other criminal activities witnessed will be referred to the Metropolitan Police for further action.

#### **Environmental Management**

Parks, Estates & Open Spaces horticultural and arboricultural work is managed in conjunction with an Environmental Management System that conforms to the internationally respected EN ISO I4001:2015. Parks, Estates & Open Spaces Environmental Policy and Management System is externally audited and certified against the ISO I4001 to ensure the service is delivered in an environmentally sustainable manner and to reduce any negative effects on the environment that may be caused by grounds maintenance operations.

A copy of the Environmental Policy can be found in Appendix I. In line with the Environmental Policy, the Directorate has also adopted a peat use policy and pesticide use policy, which can also be found in Appendix I. All staff have completed an Environmental Induction and have access to a copy of the Environmental Management System which is in the Red Folder at each depot.

<u>Energy usage</u> -Parks, Estates and Open Spaces aims to minimise energy usage in delivering the Service. Maintenance equipment is serviced regularly to ensure that fuel consumption of mechanical equipment is maximised.

Recycling - The Parks, Estates and Open Spaces department recycles as much of its green waste as possible. The green waste is taken to Holbrook Yard to be shredded and screened. The resulting mulch is used within the Parks Estates & Open Spaces around the borough. Small wood is chipped and composted. Some large wood is reused to create wood piles to encourage increased biodiversity and potential habitats for stag beetles and other invertebrates. Some of the large timber is used to make benches, which are used in parks, or to delineate areas within Parks.

#### **Health and Safety Management**

Staff access Health and Safety information via a Red Folder, located at every depot where staff are based. The contents of the Red Folders include a list of first aiders, list of PAI PA6A certificate holders, COSHH assessments, Risk Assessments and the Environmental Management System Manual. The Directorate's Health and Safety Policy is available on staff notice boards and on the Council intranet. The contents of the red folder are reviewed on a regular basis. COSHH assessments are carried out on all new substances before use and risk assessments are carried out for any new activities or machinery introduced to the park and appropriate control measures are implemented to minimise any associated risk. A COSHH statement can be found in Appendix I.

#### Fleet Management

The vehicles used by the Parks, Estates and Open Spaces department are maintained by The Royal Borough's Fleet Management Service. The Borough is accredited to the Fleet Operator Recognition

Scheme (FORS). FORS is a voluntary accreditation scheme for fleet operators which aim to raise the level of quality within fleet operations, and to demonstrate which operators are achieving exemplary levels of best practice in safety, efficiency, and environmental protection. In addition to this, staff perform routine checks on all machinery before use.

#### Flood Management

Since 2006, management of the flood storage area has been the responsibility of the Environment Agency. The original landscape management plan set out long term management prescriptions and objectives for the flood storage area. These will need to be re-assessed to evaluate their effectiveness in achieving objectives, as the ecosystem will change over time. Annual inspections, monitoring and maintenance of flow control structures, culvert and embankments is carried out by the Environment Agency to ensure the integrity and function of the reservoir and its associated control structures. The Environment Agency monitor the watercourse re erosion of the banks and low flow channel as they have responsibility for maintaining flow, flood prevention and management of river structures. They also carry out occasional remedial work.

#### **Community Involvement**

There is an active and dynamic Friends of Group for Sutcliffe Park that encourages community involvement and usage of the park and organises events and activities that further promote the park within the wider community.

The Friends of Sutcliffe Park get involved with various practical and strategic activities. The group has an active management committee who help make strategic decisions regarding management of the Park. The Friends Group was formed in 2007 and has approximately 15 key members. They hold meetings locally every two months and advertise this on the park noticeboard and their facebook page.



Bluebell and Daffodil Bulb Planting at Sutcliffe Park in November 2018

The Friends Group work closely with Parks Estates & Open Spaces department and with the Quaggy Waterway Action Group. They organise many events and activities in the park, such as bat talks and fun days. Workdays for bulb and whip planting are also organised and well attended.

The Friends Group encourages the use of Sutcliffe Park as an educational tool and venue. They have been involved in some excellent initiatives to involve young people and have secured and continue to seek external funding to help continually improve the park. The Friends are continuing to be innovative and successful.

Members of the community via the Friends regularly volunteer to undertake tasks within Sutcliffe Park. This is an excellent resource that the Royal Borough and Friends wish to continue to develop. Activities are individually assessed for potential risk to the volunteers and others.

Below, the Friends of Sutcliffe Park worked in partnership with Trees for Cities to organise a Community Planting day in Sutcliffe Park in 2017.



#### **Sutcliffe Park Sports Centre**

Under the terms of the lease, the horticultural maintenance of the athletics area remains the responsibility of The Royal Borough of Greenwich's Parks Estates & Open Spaces department.

#### Awards and Recognition

Since the redevelopment of Sutcliffe Park, it has been awarded Local Nature Reserve Status, and has been designated by the Greenwich Unitary Development Plan as a Site of Nature Conservation Importance (SNCI) and Green Flag status since 2008.

In addition, the Environment Agency has been awarded the RSPB/CIWEM Living Wetlands Award 2007 for the Sutcliffe Park – Quaggy River Flood Risk Management Scheme.

#### Marketing Information, Activities and Approach

Information about local parks within the borough can be found on The Royal Borough of Greenwich website <a href="https://www.royalgreenwich.gov.uk">www.royalgreenwich.gov.uk</a>

The Park is also marketed via Green Chain Walk publicity, Better Leisure Limited, the Friends Group social media, event publicity, and occasionally via the free Royal Borough newspaper that is delivered to all households in the Borough. Please see Appendix 5 for an example of publicity material. The notice board in the park is regularly updated regarding park events.



#### PART 2: WHERE DO WE WANT TO GET TO

#### VISION

To be developed further in consultation with Friends of Sutcliffe Park

- To maintain the flood storage area so that it is fit for it's primary purpose
- To continue to achieve green flag status for the park, as a flagship ecological restoration and flood protection park.
- To provide users of the park with the opportunity for education on environmental issues

#### **STRENGTHS**

- Excellent ecology site
- Good community involvement already with GWAG and Friends of group
- Working with Environment Agency
- Good park furniture already in place

#### **CHALLENGES**

- ASB within the site –and in particular graffiti and vandalism, both usually on the man-made surfaces.
- No litter bins within the flood storage area. This has led to the flood storage area often being littered.
- No staff on site with wide range of ecological rehabilitation/ remediation/ regeneration skills
- Open access to the public
- Maintaining the ecology and water flow on site, working with the Environment Agency
- Dog control and Enforcement

#### **RECOMMENDATIONS**

- Undertake consultation with stakeholders and feed the results of into the Management Plan
- Undertake a review of the ecology of the park
- Continue working towards the achievement of a recognised standard
- Continue to involve the Friends of Sutcliffe Park, The Environment Agency, GWAG and Thames 21 the in the ecologically sustainable management of the park
- Monitor and reduce ASB within Sutcliffe Park
- To improve awareness/use of site by all sections of the community
- Further investigate what events can be held within the park and support the friends group in holding any of their events within the park

# **PART 3: HOW WILL WE GET THERE**

## **ACTION PLAN**

Key

Action to be taken during the years indicated (resources permitting)

Actions ongoing during the years identified

Action achieved

Item	Actions	2019	2020	2021	2022	2023	2024	Action By:
Pathways and hard surfaces	Patch and replace where necessary to eliminate trip hazards							Parks, Estates & Open Spaces
Arboriculture	Five year review of tree management plan for the site and follow the recommendations in it							Parks, Estates & Open Spaces
Arboriculture	Monitor the condition of the Chestnut trees within the park and take actions as appropriate							Parks, Estates & Open Spaces
Signage and interpretation	Secure funding to install information sign by the lake regarding correct feeding of birds							Parks, Estates & Open Spaces
Signage and interpretation	Secure funding to replace and update the interpretation signage in the park.							Parks, Estates & Open Spaces
To reduce ASB in the park	Monitor the Anti Social Behaviour in the park and carry out remedial action when required							Parks, Estates & Open Spaces

Item	Actions	2019	2020	2021	2022	2023	2024	Action By:
Consultation with stakeholders re ecology of park	Consult Friends of Sutcliffe Park, EA and GWAG on the management of the ecology of the park and integrate advice received into this plan.							Parks, Estates & Open Spaces
To secure Inward Investment	Undertake work to identify and secure new funding streams as appropriate (ongoing)							Parks, Estates & Open Spaces
Continue to achieve Green Flag	Identify improvements necessary within the park and apply for green Flag Award (Ongoing after initial application)							Parks, Estates & Open Spaces
Dog control	Monitor dog control incidents involving dogs biting trees, too many dogs off leads and access to ecological features							Parks, Estates & Open Spaces
Replacement of park furniture	Replace the Riverwood benches on the viewing area at Sutcliffe Park. Contact Environment Agency for permit to work over culvert.							Parks, Estates & Open Spaces
Improve drainage in the playground during wet periods	In late 2015 a problem with flooding in part of the playground has been identified. Working with RBG Flood Manager to resolve issue and install drainage solution.							Parks, Estates & Open Spaces
Marketing	Investigate ways of improving marketing of site and marketing material (through use of different mediums etc)							Parks, Estates & Open Spaces

**Important Note:** Improvement actions requiring investment are subject to funding being secured. There are no additional funds available from The Borough unless it has been identified against a specific action.

#### PART 4: HOW WILL WE KNOW WHEN WE'VE ARRIVED

#### **MONITORING & REVIEW**

The Sutcliffe Park Management Plan will be fully reviewed and updated every five years by Parks Management Staff responsible for Sutcliffe Park. It will also be updated annually as required.

There will also be a need to keep a working document copy of the Management Plan within the parks office so that issues and changes that arise as well as new information can be documented, and the action plan can be regularly reviewed and completed works documented within it as part of the Parks Service business planning process.

# **APPENDIX I:** Legislation, policies and strategies affecting park management

As highlighted earlier in the plan, The Royal Borough of Greenwich's Parks Estates & Open Spaces department operates within a wide framework of national, regional and local policy statements and strategies. The main documents impacting on the development of this plan are listed below.

#### The Greenwich Strategy

The Greenwich Strategy sets out the vision for The Royal Borough of Greenwich as being the place to live, work, learn and visit. This vision underpins all of the strategies produced by The Royal Borough of Greenwich and directly impacts on all service plans and service delivery.

#### The Cultural Strategy

Parks Estates & Open Spaces is one of six 'areas' considered by the Cultural Strategy. The Strategy has five over-arching themes: - Equality and Access, Sustainability, the Cultural Economy, Achievement and Excellence and Partnerships. All of these aims are relevant to this management plan and have been considered in developing the opportunities and priorities for this site.

#### **Green Space Strategy**

The Green Spaces Strategy sets out the Borough's strategic intentions for its green assets and its vision of the positive contribution that Greenwich's open networks make to our lives. The thematic objectives (community safety, biodiversity, education and culture, culture & events, tackling inequality, sport, health & well being) are all relevant to the management plan for Sutcliffe Park.

#### Parks Estates & Open Spaces Service Plan

The Parks Estates & Open Spaces department aims to develop, manage, ensure accessibility and maintain to a high standard the borough's Parks, Open Spaces, Woodlands, Tree Stock, Cemeteries, Playgrounds, Sports Pitches, Allotments and other outdoor facilities. To meet the needs of the community and deliver the Council's core objectives where applicable to the service, and specifically regarding the provision of a clean and well cared for environment and supporting Health and Quality of Life for the local community.

Through consultation with local residents/visitors, the management plan for Sutcliffe Park supports these aims by ensuring accessibility of the site and that it meet the needs of the local community. It is envisaged that it will also assist with achieving the aim of mainlining the site to a high standard.

#### **Parks and Open Spaces Strategy**

The 10 year Strategy, adopted in 2017 is centred on the following seven themes:

- Park and open spaces management: Ensuring our parks and open spaces are well managed, maintained in good condition and are safe to use;
- **Community engagement:** Ensuring we actively engage and work in partnership with local residents to provide good quality parks that meet the needs of the local community;
- **Nature and biodiversity:** Ensuring that areas and habitats are provided for wildlife and that they are protected from inappropriate development;

- **Environmental management:** Maximise resource efficiency by increasing recycling opportunities, establish better use of essential energy sources and controlling the use of pesticides and chemicals;
- **Recreation, health and wellbeing:** Ensuring that parks provide spaces for active recreation and quiet reflection and contribute to the health and well-being of the local community;
- Regeneration and local economy: Ensuring our parks are well designed, attractive to visitors and encourage enterprise and employment of local people; and
- **Culture and heritage:** Ensuring our parks are places for culture and that their heritage is preserved and celebrated.

#### **Dog Control**

Dog fouling has been recognised as being a problem within many of The Royal Borough's parks and open spaces. The Public Space Protection Orders, Anti-social Behaviour, Crime and Policing Act 2014 makes it possible for local authorities to introduce Dog Control Orders. These orders would make it an offence for persons in control of their dog(s) to:

- Not clean up after their dog has fouled.
- Have more than 4 dogs in their control at one time.
- Not to have their dog on a lead in designated areas
- Not to have their dog on a lead and kept on a lead when instructed to do so by an authorised officer.
- To allow their dog(s) to access designated dog exclusion areas.

Tenancy Services Officers, Officers from Parks and Open Spaces, Police Community Support Officers and the Dog Warden are authorised to issue fixed penalties

#### ISO 9001:2008 - Quality Management

- ISO 9001:2015- Quality Management System
- The Parks, Estates & Open Spaces arboricultural services is accredited to the ISO 9001:2015. The ISO 9001Quality Management System is used by the Royal Borough to manage their activities and resources to guarantee a quality service. The ISO 9001 helps the Royal Borough achieve customer satisfaction because it provides a framework for service analysis and definition and for the improvement of processes. The four main parts covered under the Quality Management System are (i) management responsibility (ii)resource management (iii) process management and (iv) measurement, analysis and improvement.
- •
- Customer Focus
- •
- Leadership
- Involving People
- Process Approach
- System Approach to management
- Continual Improvement
- Factual Approach to decision making

• Supplier relationship, which benefit both sides.

The Parks Estates & Open Spaces department is currently ISO 9000 accredited.

# ISO 14001:2015 – Environmental Management ISO 14001: 2015 – Environmental

#### **Management System**

The Parks, Estates & Open Spaces horticultural and arboricultural services are managed in conjunction with an Environmental Management System that is accredited to the internationally respected EN ISO 14001:2015 Environmental Standard. The Royal Borough's grounds maintenance and tree maintenance activities are controlled to ensure the service is delivered in an environmentally sustainable manner and to reduce any negative effects on the environment that may be their operations. Parks, Estates & Open Spaces works towards sustainable development and continual environmental improvements.

#### ISO 45001:2018 - Health, Safety & Wellbeing Management System

The Parks, Estates & Open Spaces arboricultural services is accredited to the ISO 45001:2018 which provides a framework for managing Occupation Health & Safety risks and opportunities. The aim is to prevent work related injury and ill health to workers and to provide safe, healthier workplaces by eliminating hazards minimizing risks by taking effective preventative and protective measures. The intended outcomes of the Health, Safety and Wellbeing Management System include (i) continual improvement of performance, (ii) fulfilment of legal and other requirements and (iii) achievement of Health & safety

The Royal Borough of Greenwich Parks Estates & Open Spaces section has an environmental management system (EMS) which is externally audited and certified against the internationally respected BS EN ISO 14001:2015environmental standard. In line with The Royal Borough of Greenwich's aim of protecting the environment, the directorate has adopted an environmental policy which aims to ensure that service is delivered in an environmentally friendly manner.

#### **Core Strategy**

Local Councils have a duty to prepare a Core Strategy by law. The Greenwich Core Strategy (CS) sets out the vision for use of the land in the Royal Borough, and provides the main guidance for making decisions on individual planning proposals. The document is intended to cover the period 2013 – 2028. It is a legal document with the following purposes:-

- To provide a framework of acceptable uses within the Royal Borough, defining areas where development is not desired or where it needs to be carefully directed and;
- To provide a detailed basis for the control and development

The CS may be viewed at the Directorate of Regeneration, Enterprise and Skills, Planning Department, The Woolwich Centre, 35 Wellington Street Woolwich, SE18 6HQ, via The Royal Borough of Greenwich's website, or alternatively at a local library or online.

The CS designates Sutcliffe Park as:

- Metropolitan Open Land OS1, OS2, OS(a)
- Green Chain OS3
- Area at Risk from Flooding E2
- Local Nature Reserve OS4
- Site of Nature Conservation Importance (SNCI also known as SINC) OS4
- Strategic Development Location section 3.3, H1

For more details on each designation, please consult the full version of the CS via any of the venues described above using the references next to each designation.

#### Legislation

The Parks Estates & Open Spaces department operates within the frameworks set out by the following legislation, and therefore, the legislation may impact upon the delivery of service of the Parks Estates & Open Spaces department both financially, through planning and human resources. This is not a comprehensive list but is indicative of key pieces of legislation relating to PE &OS.

- Alcohol Consumption in Public Places Order 2003
- Clean Neighbourhoods Act 2004
- Control of Pesticide Protection Act 1986
- Country Code 1981
- Country side and Rights of Way Act 2000 and increments
- Countryside & Right of Way Act 2000
- Disability Discrimination Act 1998
- Health & Safety at Work Act 1998
- Cleaner Neighbourhood act 2005
- Litter Act 1983
- Ministry of Housing and Local Government Provisional Order Confirmation
- (Greater London Parks Estates & Open Spaces Act )1967
- Natural Environment and Rural Communities Act 2006
- Occupiers Liability Act 1957
- Road Traffic Act 1988 (as amended 1991)
- The 2004 Country Code
- The Anti Social Behaviour Act 2003
- The Dangerous Dogs Act 1991 & Dogs Act 1871??
- The National Parks & Access to the Countryside Act 1949
- The Weeds Act 1959
- The Wildlife & Countryside Act 1981

#### **SUTCLIFFE PARK GUIDELINES FOR EVENTS**

#### **PURPOSE**

To explain and clarify the Parks Services position on running events within Sutcliffe Park and to establish best practice principles. The Parks service is committed to increasing the use of the site through a range of events and outreach activities to expanding the Range of site Users/Visitors

#### **Key Issues/Policy**

Young People

It is important for the sustainable future of the Pleasaunce that young people become interested in the site, care for it and appreciate it. Events targeted at children and teenagers are an appropriate method of encouraging this involvement.

Local Community Groups

A number of local community groups are partners in the project. They will be encouraged to use Sutcliffe Park for suitable events throughout the year.

#### **Ethnic Minorities**

There is a lack of evidence regarding ethnic minority attendance at previous events held in Sutcliffe Park but it is generally accepted that ethnic minorities are under-represented as visitors. A programme of outreach to ethnic minority groups should be developed to encourage minority groups to visit Sutcliffe Park and to take advantage of the opportunities offered by the rangers Service (guided walks, presentations etc).

#### **Event Organisation**

Public events will be advertised in the Greenwich Time (The Royal Borough Newspaper) which is distributed to all households in the borough and on posters, leaflets and flyers. Posters will show the Borough logo. These will be displayed at least one week before the events.

Events will be advertised on public information boards in parks and may also be advertised in Libraries and other Royal Borough buildings. All posters will be removed at the most, 48 hours after an event. An events plan will be written for each event to facilitate the re-running of events in the future. Information about the event costs, in terms of time and other resources will also be kept. Events costs must be authorised in advance by Parks Management.

#### Running the Events

Events will be organised on an annual basis. Some additional events may be run responding to requests from specific user groups, schools or organisations. These events may not be advertised and may not be open to the general public. Some additional events may be run that are advertised and open to the general public. All events will be carefully planned and sufficiently staffed. Children's events will have at least two members of staff to accompany the group. Adult events may have one member of staff present only, depending on the size of the group and the nature of the event. A first aid kit and mobile phone will be available to staff for all events.

### Site Preparation

A site Health & Safety assessment must be carried out on the day of the event. If a hazard is evident, which can not be safely removed prior to the event, the event may be altered or cancelled. Cancelling Events

Events may be cancelled because of illness, poor weather or hazards on site etc. Notices to this effect must be displayed on site and where possible at all poster locations, as far ahead of the event as possible. A contact phone number will be given for further information.

#### **Suitability of Events**

Only events deemed suitable by Parks Estates & Open Spaces Management will be allowed within Parks Estates & Open Spaces. These will include events that have reference to the particular site and or are in keeping with the aims of The Borough. Events which may cause offence or damage the site in any way will not be allowed.

#### **Events Introduction**

A briefing will take place with events organisers outlining health and safety issues and appropriate behaviour. The introduction will also cover staff introductions, durations of the event and an event outline.

#### **Events Monitoring**

All events will be monitored using an events monitoring form. Events and activities will conclude with an opportunity for feedback. A comments and suggestions form will be available at the end of every event and there will be the opportunity for verbal feedback. Data from these monitoring methods will be compiled and analysed every six months as well as on annual review basis.

#### Charging

Most events organised by the Parks Service will be free. Events organised jointly with or solely by partners are more likely to make changes. The Borough will require all events to make concessions for people on low incomes and identified groups.

running organised e	s committed to inc	throughout the	year. Events w	ill cover a range	of user and
	The aim of events ding and appreciation		to increase visit	or numbers and	increase

# The Royal Borough of Greenwich

Communities & Environment
Parks Estates & Open Spaces
Use of Peat/Peat Based Product Policy

#### **Background:**

Peat is a Heterogeneous mixture of decomposed plant material (humus) that has accumulated in a water-saturated environment and in the absence of oxygen.

Peat lands play an important role in the biosphere. They affect hydrological dynamics and water quality and provide important habitats for plant and animal species.

The extraction of peat for mans use has a major negative environmental impact in the long term. In recent decades peat has been dug in vast quantities for use by the plant nursery industry and horticulture.

Peat has particular calculable water conductive properties. Plant production in the UK is somewhat organised to use peat as an alternative to mineral soils because of its consistent qualities and PH level.

It is a non-sustainable product

#### Our Policy:

- In Parks Estates & Open Spaces we do not use peat as a soil ameliorant or mulch.
- We do not use peat or peat based product in relation to tree or shrub planting
- We encourage our suppliers to use products other than peat in the growing of trees, shrubs and bedding plants
- We train our staff in the rationale of not using peat based products
- D. Squires

#### Parks Estates & Open Spaces

Oxleas Woods Centre Crown Woods Lane London SE18 3JA

# The Royal Borough of Greenwich

Communities & Environment Parks Estates & Open Spaces Pesticide Policy

#### (Authorised by the Parks Estates & Open Spaces Manager)

As part of a continual move towards better environmental practice, we aim to minimise the use of pesticide where possible and to promote the use of alternative maintenance and curative procedures in relation to Sutcliffe Park

#### We aim to:-

- Eliminate the hazards of pesticides
- Reduce the dependence of pesticides
- Promote alternatives to pesticides
- Communicate good practice through membership to PAN (Pesticide Action Network).

#### Objectives:-

- Control the problem of worm casting, without the use of lumbricides
- To limit the use of selective herbicide to the ornamental areas only
- To not use insecticides
- To limit the use of fungicides to the Bowling Greens
- To use organic fertilisers.
- To use mulch for water conservation were practical



# 4.2 Environmental Policy

The Royal Borough of Greenwich recognises that environmental issues are of fundamental importance to our customers, and to our business success.

The Royal Borough of Greenwich aims to work towards the achievement of sustainable development and continual improvement.

Under the scope of its Environmental Management Systems, The Royal Borough of Greenwich strives to:

- Promote sustainability and the use of sustainable resources
- Promote conservation and environmental awareness
- Promote activities which enhance the environment.
- Achieve continual improvements in environmental performance
- · Prevent the release of pollution
- Minimise the release of waste, noise and emissions
- · Minimise activities which have a negative effect on the environment
- Maximise activities which have a positive effect on the environment
- Comply with applicable legal and other requirements that relate to environmental
  aspects
- Work in partnership with other organisations in environmental management
- Set environmental targets built into the day to day running of the service
- Use products which have a minimum impact on the environment
- Provide training in environmental issues to all persons
- Communicate the Environmental Policy to all persons working for or on behalf of The Royal Borough of Greenwich
- · Review Environmental objectives, targets and policy

Signed	Trun 5	Head of Farks & Open apa					
		1					
Issue 09		Issue Date: 10/04/	Ref: LC.EMS.P&OS				
		Page 6 of 40					

#### Parks Estates & Open Spaces COSHH Statement

Parks Estates & Open Spaces are committed to ensuring safe working practices and to minimising the negative effects on the environment from our activities.

Control of Substances Hazardous to Health within Parks Estates & Open Spaces is through implementation of risk assessments on all substances where exposure could lead to an adverse effect on health or danger to safety, and the introduction of appropriate control measures.

COSHH assessments are undertaken by a trained member of staff and are reviewed annually

Written records are kept to demonstrate that risks have been considered

Control measures highlighted in the assessment are implemented and maintained

Parks Estates & Open Spaces employees only use products in conjunction with a COSHH assessment

Health surveillance is used to evaluate effectiveness of control measures

An up to date inventory is kept of all hazardous substances to which staff are likely to be exposed to during their work activities

No other products may be brought into use without prior Management Review product approval

Parks Estates & Open Spaces Environmental Policy also sets guidelines for the use of substances hazardous to health

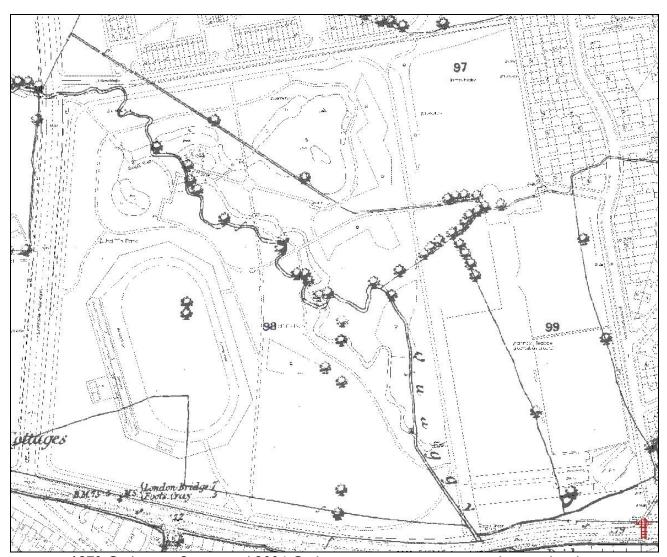
# **APPENDIX 2: History of Sutcliffe Park**

From OS Map 1869 (map 17 in the Heritage Centre) – open land, Quaggy entirely above ground in natural meanders, west of Eltham Green

OS Map 1937 – map 414 – Quaggy straightened but no indication of park – Roan Sports Ground indicated

OS Map 1950 1:2500 – Sutcliffe Park marked (plan TQ 4074 + 4174), running track marked, Quaggy River straightened and runs north then west around boundary, trees on part of east and west boundaries, plus southern boundary as well as central avenue

OS Map 1991 1:1250 – Map TQ 4174NW – bowling green, tennis court, harrow meadow recreation and pavilion in SE corner; Quaggy underground, more trees, entrance to running track part way down central avenue



1870 Ordinance Survey and 2004 Ordinance survey superimposed on each other

The area covered by Sutcliffe Park was originally called Harrow Meadows and was a boggy piece of ground that contained the Quaggy river (a tributary of the Ravensbourne River); This flood prone meadow would have been hard to farm, especially during the winter months.

When the townships of Lewisham, Kidbrooke, Lee & Eltham became heavily developed in the 1930s, the then Metropolitan Borough of Woolwich diverted the Quaggy underground in concrete channels, or culverts, to protect the new homes. The culverts worked well when the weather was fine, but in times of heavy rainfall, the Quaggy would become a fast flowing torrent and the surge would flood low-lying areas such as Lewisham town centre. At the same time, the Borough reclaimed Harrow Meadow from the Quaggy by covering the culverts and landscaping the area to form 35 acres of parkland. The new park, opened to the public in May 1937, was named after a Mr Sutcliffe, the Borough's former Engineer.

Sutcliffe Park for most of the last century has been a park, which consisted solely of amenity grassland and only used as sportsfields (Possibly as a result of the influence of the <u>National Playing Fields Association</u>, which was started in 1929)

The park's running track was opened on 26 June 1954 and has for many years been the home of the Cambridge Harriers Athletics Club.

It was determined during the 1980's that the channelisation of the Quaggy river was producing a great deal of flooding downstream in it's catchment (Lewisham) during high rainfall events, as water was travelling too fast through the culvert and channel systems, thus overfilling them. In 1989, further work on the channel and culvert system was proposed, but this was opposed by the Quaggy Waterways Action Group (QWAG). In response to this, some restoration of the natural river environment was promised.

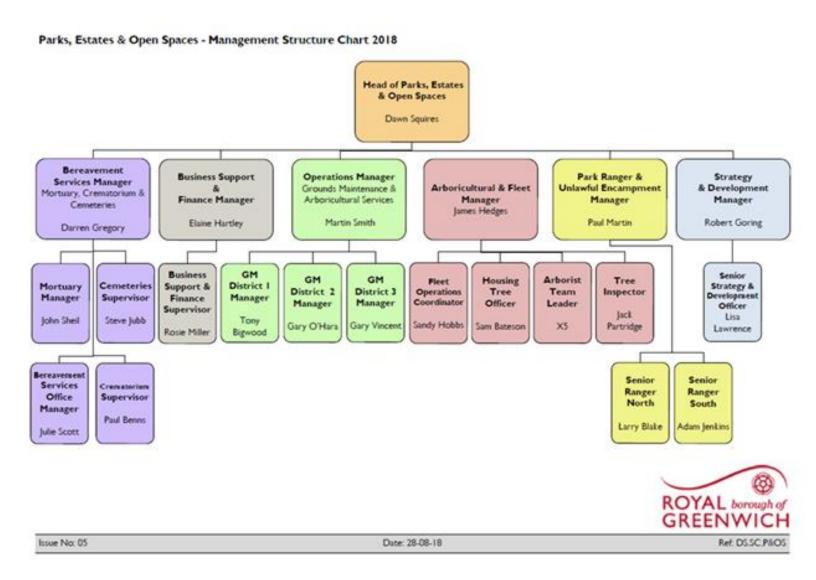
In the early 1990s the National Rivers Authority (now the Environment Agency) drew up the Quaggy Flood Alleviation Plan to deal with this problem. The solution involved releasing the Quaggy from its culvert in certain areas, letting the river resurface and flow above ground. This had two main benefits: water pressure would be reduced and the river was back in sight. However, the Authority also needed to find a "holding area" where floodwaters could be contained in times of high rainfall. Sutcliffe Park was the obvious place and so, in 2002 work was started to create a large "bowl" to hold flood waters, and to divert the Quaggy from its culvert and re-establish it as a meandering, more "natural" watercourse. The old underground concrete culvert survives along the eastern and northern borders as a vital component of the flood alleviation scheme

All construction materials used for the construction of the flood protection area were sourced in the UK, with much of the material having come from recycled sources. In addition, materials removed from the site were re-used wherever possible.

A circular seating area made of oak timbers reclaimed from the Thames, was also created by a local Mencap group and called The Riverwood Project.

The "new" Sutcliffe Park was officially opened on Saturday 12 June 2004. While the work meant the loss of some amenity grassland and a number of sports pitches, it has brought about the creation of a wetland habitat site, rich in bio-diversity and of great ecological benefit.

# **APPENDIX 3: Parks Estates & Open Spaces Management Structure**



# **APPENDIX 4: ANNUAL MAINTENANCE SCHEDULE**

DO3	BM SUTCLIFFE PARK												
line	Description	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	spray all hard standing areas & weedkill channels				1								
2	edging half moon		1										
3	pedestrian grass mowing			2	2	3	3	3	2	2	2	1	
4	brushcutting & obstacles			1	1	1	1	1	1	1	1	1	
5	hedge base maint	1		1		1		1		1		1	
6	leaf clearance	1										1	1
7	shrub bed maint			1	1	1	1	1	1	1			
8	shrub bed maint												1
9	sweeping paths and clear debris from outlet	5	2	2	2	3	2	2	3	2	4	5	4
10	tree feathering			1				1					
T16	Tractor mowing			2	2	3	3	3	2	2	2	1	
M22	Mini Triple mowing			2	2	3	3	3	2	2	2	1	

#### **APPENDIX 5: MARKETING INFORMATION**



www.parksfest.org





# **APPENDIX 6: Planting Mixes**

#### **Grass Seed Mixes**

Mix A: Amenity Grassland - EG22 Wheat Tolerant Turfgrass Mixture

Mix B: Rough Grassland - EMI Emorsgate Basic General Purpose Meadow Mixture

Mix C: Wildflower meadows – EM4 Emorsgate Meadow Mixture for Clay Soils/EM5 Emorsgate Meadow Mixture for Loamy Soils

Mix D: Marginal/Aquatics Mix – Emorsgate EPI Pond Edge Mixture

#### **Tree & Shrub Mixes**

WI: Wetland Tree and Shrub Mix - Salix cinerea (grey willow), Alnus glutinosa (Common alder), Betula pubescens (Downy birch), Crataegus monogyna (Hawthorn), Corylus avellana (Hazel), Frangulus alnus (Alder buckthorn)

DI: Dry Woodland Mix – Fraxinus excelsior (Ash), Quercus robur (English oak), Acer campestre (Field maple), Crataegus monogyna (Hawthorn), Corylus avellana (Hazel), Prunus spinosa (Blackthorn), Cornus sanguinea (Dogwood)

S1: Scrub Mix - Crataegus monogyna (Hawthorn), Corylus avellana (Hazel), Prunus spinosa (Blackthorn), Cornus sanguinea (Dogwood), Vibumum opulus (Guelder rose)

#### **Avenue Trees**

Fraxinus excelsior (Ash), Quercus robur (English oak), Prunus padus (Bird cherry), Aesculus hippocastanum (Horse chestnut), Alnus cordata (Italian alder), Sorbus aria (Whitebeam)

#### **APPENDIX 7: References**

 $Quaggy\ Waterways\ Action\ Group\ -\ \underline{www.qwag.org.uk}$ 

London Borough of Greenwich - www.greenwich.gov.uk

Environment Agency – <u>www.environment-agency.gov.uk</u>

Sutcliffe Park Flood Storage Scheme Landscape Management Plan, September 1999 by Land

Management Services Limited for the Environment Agency

Ordinance Survey Map 1869 - Map 17

Ordinance Survey Map 1937 - May 414

Ordinance Survey Map 1950 1:2500 (TW 4074 + 4174)

Ordinance Survey Map 1991 1:1250 TQ 4174NW

1873 "London District" Sheet 4 Geological Survey

1924 Ordinance Survey Map with Geological

Sutcliffe Park and Harrow Meadow 1998



Sutcliffe Park, and Harrow Meadow 2005



Sutcliffe Park 2016

