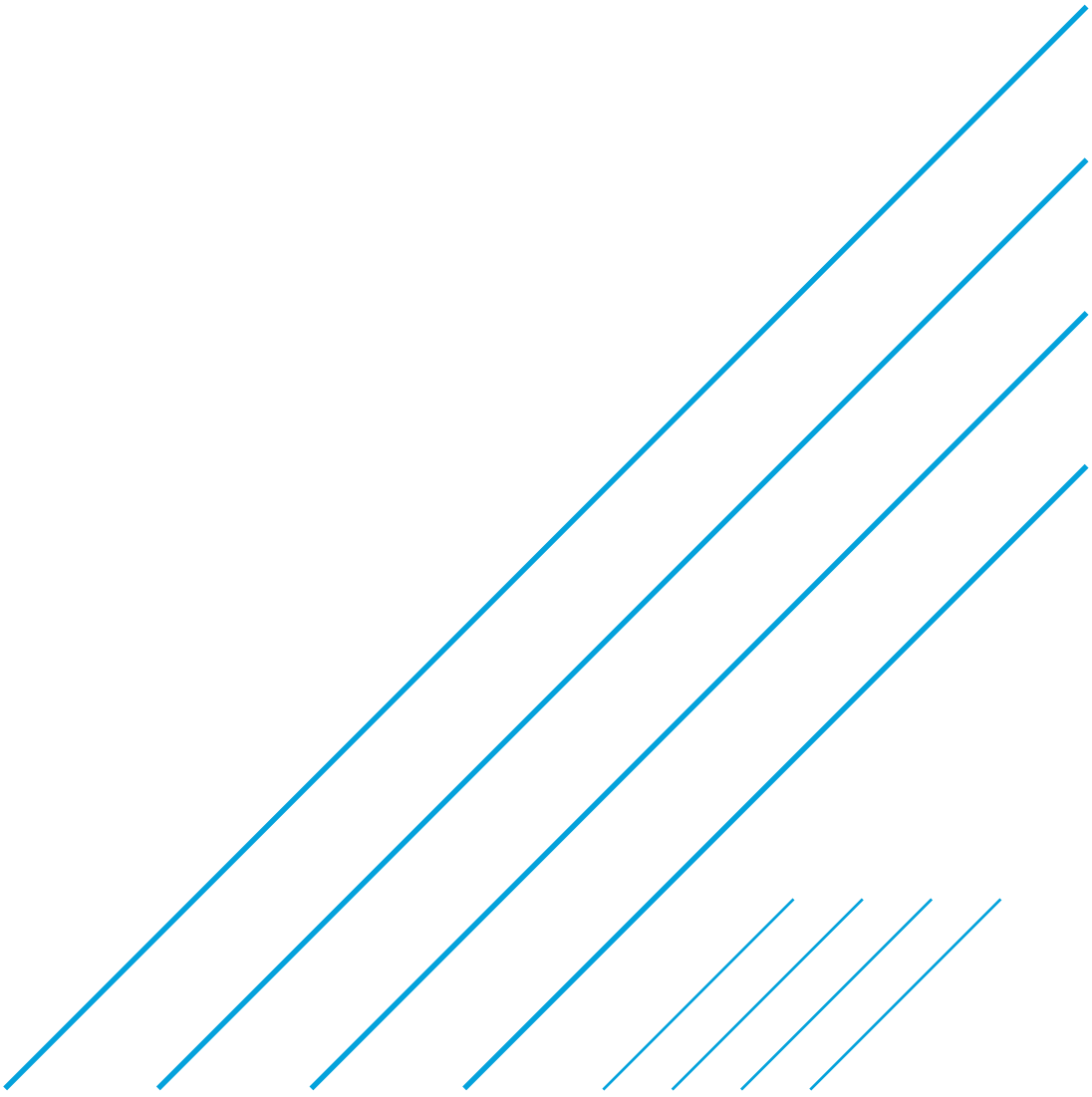


Appendix C

Case Study Site Proposals



Introduction to Case Study Sites

Within this report a selection of parks and public open spaces have been identified for improvement in line with the River Cole Vision, these include:

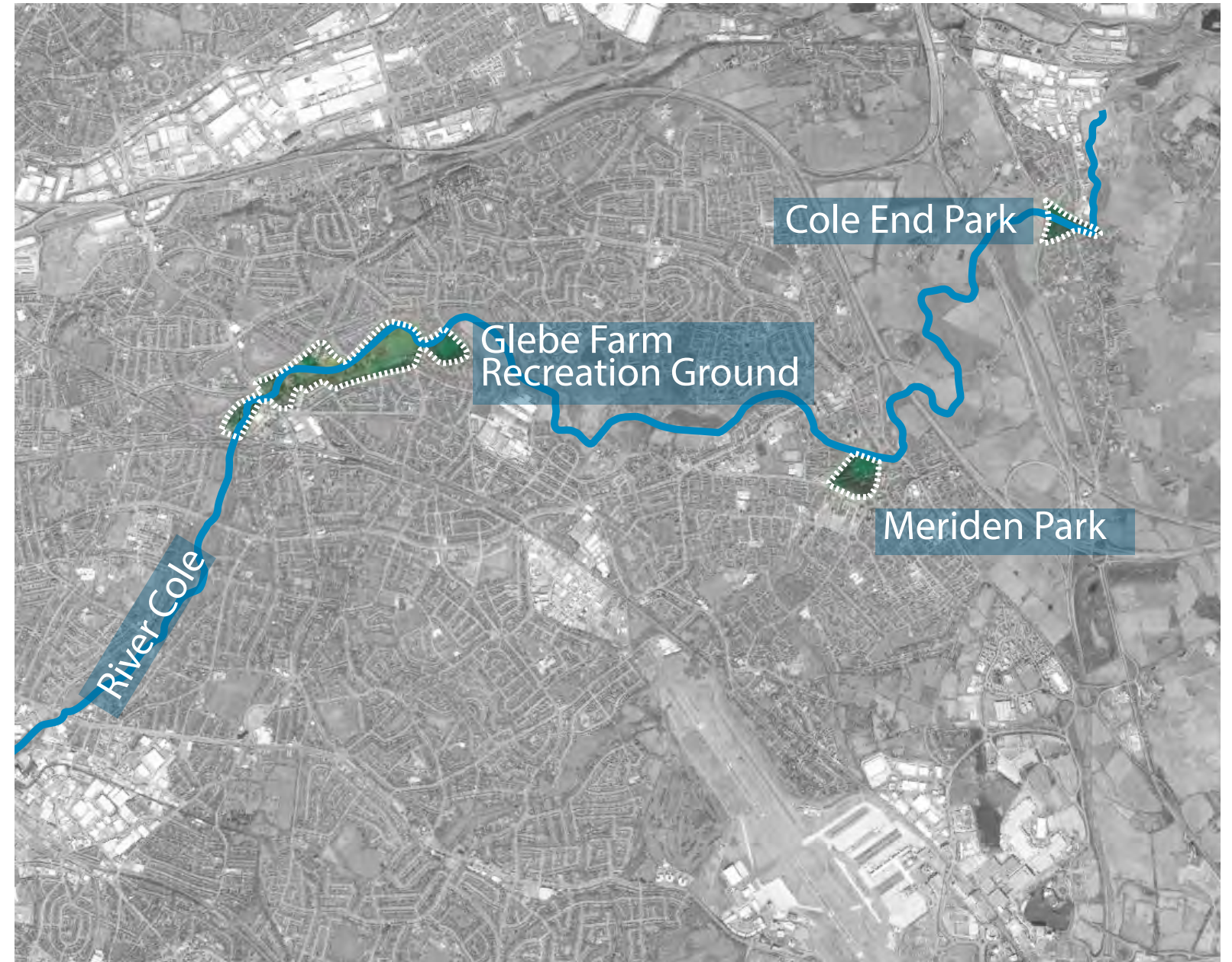
- Cole End Park;
- Glebe Farm Recreation Ground; and
- Meriden Park

Following a number of site visits to these locations, attended by representatives from North Warwickshire Borough Council, The Environment Agency, Warwickshire Wildlife Trust, Warwickshire County Highways and Atkins, this report has been compiled to provide focus on proposed interventions within the parks and public open spaces. The interventions proposed aim to be the most appropriate/valuable, in line with the objectives outlined in the River Cole Vision objectives and masterplan. Guidance is also provided which describes the cost of such interventions to inform prioritisation and implementation feasibility.

The initial assessments for identifying potential improvements have been undertaken at Meriden Park and Cole End Park by Solihull Metropolitan Borough Council and North Warwickshire Borough Council respectively, and some of the improvements have since been implemented. Other proposed improvements, along with recent suggestions, formed the topics of conversation during further site visits.

These sites fall within the Action Zones listed below:

- Glebe Farm Recreation Ground: Action Zone 4: A45 Coventry Road to Packington Avenue.
- Meriden Park: Action Zone 5: Packington Avenue to Kingshurst Brook.
- Cole End Park: Action Zone 6: Kingshurst Brook to River Blythe.



Glebe Farm Recreation Ground

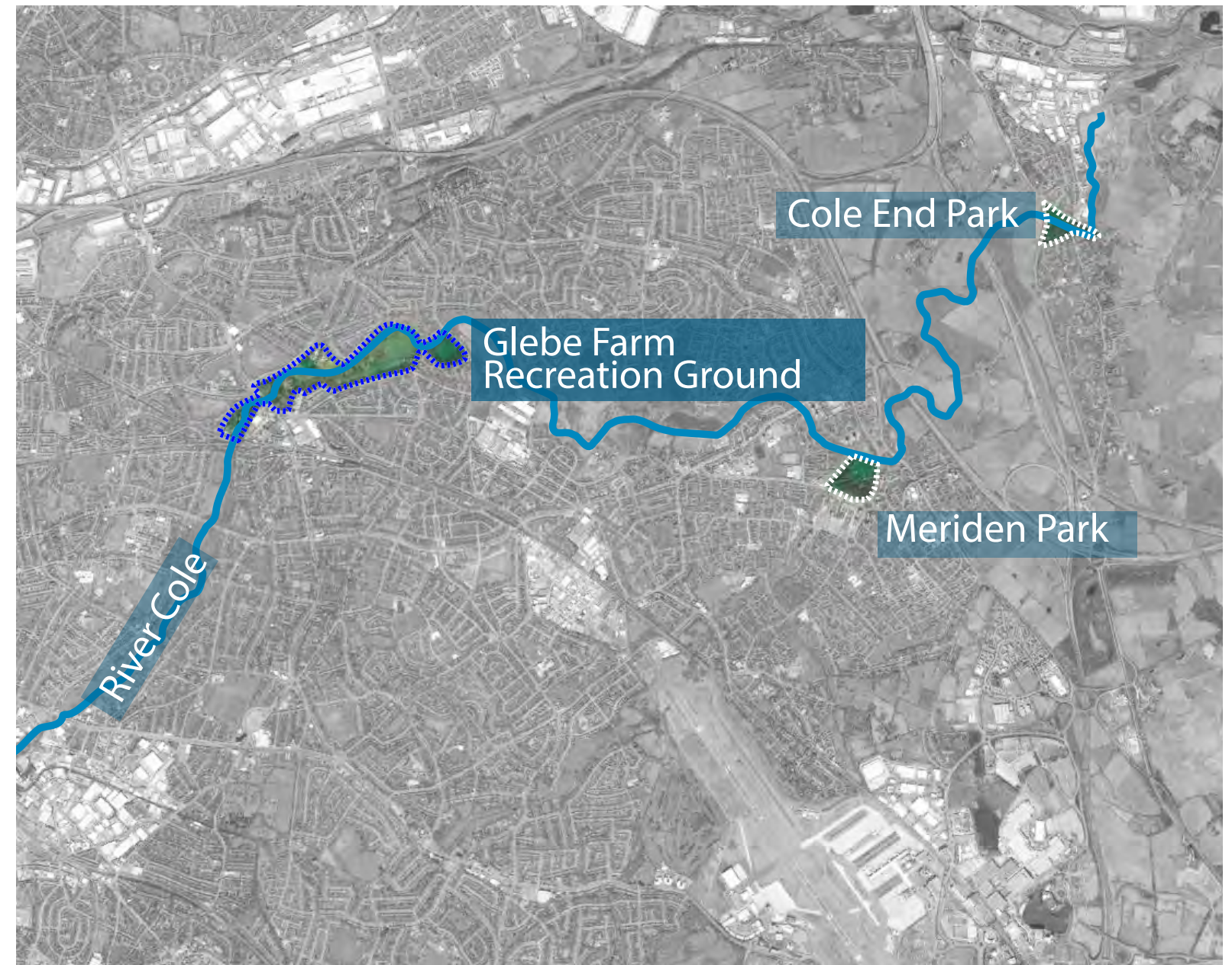
Introduction

Glebe Farm Recreation Ground is located along the River Cole east of Birmingham City Centre. The grounds lie between the districts of Shard End and Hodge Hill to the east and west respectively, and south of the M6. Directly around the site are residential streets including Maryland Avenue to the north, Cole Hall Lane to the east and Wyndhurst Road to the south.

Currently the recreational grounds offer some recreational activities including play equipment for both older and younger years, a youth shelter, and, an area for multi-use games. There is also a car park for Glebe Farm Recreation Ground which leads off to the north of Glebe Farm Road. The recreational grounds are also part of the wider Kingfisher Country Park and is considered as part of a linear walking route along the Cole Valley.

Along the north of the recreational grounds Cole Valley Cycle Route runs from west to east. This route is part of the beginning of National Cycle Route 53, which provides an off-road route along the River Cole and ending around Babbs Mill Lake.

Other facilities of note which lie directly adjacent to the site are Colebourne Primary School and Ward End Cricket Club to the north west and Yardley and District Rugby Football Club to the far east of the grounds.



Glebe Farm Recreation Ground

Site description

Several entrances to the recreational grounds exist, some of which have been formalised with hard surfacing, others are desire lines such as those running east in to the park from Rockland Drive. A wide pedestrian entrance is located to the west of the recreational grounds which has information boards and an occasional vehicular access point. This access lies just off the A4040 roundabout that meets Burney Lane and Cotterills Lane.

Off the other formalised entrances is a parking area for the recreational grounds which lies to the northern end of Glebe Farm Road. The parking consists of approximately 10 parking bays, 2 of which have accessible markings. Currently pedestrian transit across the river is facilitated by a bridge running directly north south on the far east side of the grounds and close to Cole Hall Lane bridge.

The River Cole runs through the centre to the northern side of the Glebe Farm Recreation Ground. The river varies slightly in width and depth with exposed muddy, silty and rocky banks and small islands. The banks of the river are grassy and vegetated with both young to mature trees, as well as scrub species. Banks of the river vary in steepness within the recreational grounds, so accessibility varies. Where banks are steepest muddy bank edges have created potential kingfisher nests. A culvert joins the River Cole within the park, running from an industrial estate between Brook Close and Myers Drive. Fly tipping and rubbish are notable throughout the recreational grounds and visually has a notably strong effect on river quality.

Generally grasses are left taller and trees and scrub create a wide dense to sparse buffer along the edge of the river of approximately 10 - 20m. These grassy and scrubby areas, especially towards the west and around the river, provide some wildlife benefits. Woody debris and rocky islands here also have ecological value.

Denser tree cover and under-story vegetation along the waters edge is especially prominent towards the far eastern edge of the recreational ground. A large area of amenity grassland is central in the recreational grounds with little to no tree cover. A mowing regime was evident which creates wide loop pathways around the outer edge of the amenity grass area.

Aside from the parks open spaces, walking and cycling amenities, there is a fenced playground area within the recreational grounds with play equipment for younger ages, and an area with trim trail type items typically for older ages. Also contained within this area is a tarmacked area with skate park ramps, and a netball pitch with surrounding fencing. A field to the east of the recreational grounds has football posts and is associated with the Yardley and District Rugby Football Club.



Image across the River Cole within Glebe Farm Recreation Ground

Glebe Farm Recreation Ground

Site analysis



Glebe Farm Recreation Ground

Site appraisal

Opportunities, constraints and proposed interventions:

Constraints:

- Litter and fly-tipping.
- Dog waste.
- Accessibility and movement (grass paths only, one river crossing).
- Lack of appropriate maintenance in certain locations.
- Evidence of Japanese Knotweed found on-site.

Non specific interventions:

- Removal of the Japanese Knotweed.
- Regular maintenance, min 6-8 grass cuttings in the season in identified areas.
- Parkland zone and habitat zone with different maintenance requirements.
- Creating access to the river in places where river banks are low.
- Creating management plan with long term maintenance regime.

Opportunities and proposed interventions:

- A. Hard paved loop around the park, connecting all the access points and play area (accessibility, cycling, walking).
- B. Rubbish bins at every access point and play area.
- C. New pedestrian river crossing.
- D. Seating along the main path and few picnic tables.
- E. Introducing additional tree and shrub planting areas and wildflower meadows suitable for local condition.
- F. Creating information boards about local fauna and flora, nature trails etc. (could be done as a community project).
- G. Transforming local woodland in the east side into nature trail/woodland play area (community project).
- H. Close cut grass - potential for different mowing regime/introduction of suitable meadow species to encourage biodiversity and pedestrian routes.



Glebe Farm Recreation Ground

Photographic survey



1 Entrance in the park from Wyndhurst Road.



2 Image from the edge of the River bank towards the entrance on Wyndhurst Road.



3 Image looking towards the entrance on Glebe Farm Road.



4 Image looking north along the River.

Glebe Farm Recreation Ground

Photographic survey



Image towards the edge of the River bank illustrating Japanese Knotweed planting - proposed to be removed.



Image showing the River banks.



Basketball court, parking and play area in the east of the park.



Image looking west across amenity grass area from south east of the park.

Glebe Farm Recreation Ground

Photographic survey



9 Play area in the east of the park.



10 Image towards the east woodland.



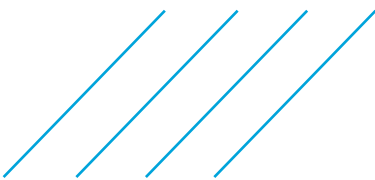
11 Image towards the north east edge of the river.



12 Footpath in the woodland area east of the park.



13 Footpath in the woodland area east of the park.



Glebe Farm Recreation Ground

Photographic survey



Rugby field in the east of the park.



Image near the western part of the park on Wyndhurst Road.



Image towards the residential properties along west part of Wyndhurst Road.



Image from the footpath behind residential area on Rockland Drive.

Glebe Farm Recreation Ground

Proposed masterplan & interventions

Proposed planting areas and wild-flower meadows suitable for local condition.

New hard paved footpath around the park connecting all the access points and play area, and creating a circular path for walking and cycling.

Wider connection along River Cole.

New footbridge over river to connect the north and south sides of the recreational grounds.

Information boards about local flora, nature trails, etc.

Mowing regime change for a mow path.

Wider connection along River Cole.

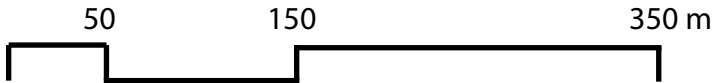
Potential flood storage areas

Proposed location for natural play area; implement nature trails into the existing woodland in the east side area of the park.

Information boards about local flora, nature trails, etc.

This site falls within a catchment wide issue to address invasive species, specific locations or treatments have not been mapped or included within costings.

- Key
- Proposed location of information boards
 - Existing access retained

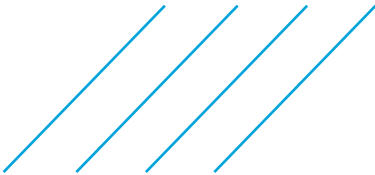


Glebe Farm Recreation Ground

Vision of annual and perennial meadows at Glebe Farm Recreation Ground



These visualisations show opportunities to improve seasonal interest and biodiversity at the Recreation Ground, as well as offering more accessible routes to enjoy new features.



Glebe Farm Recreation Ground

Precedent images



©CC2.0 Robin Stott, Geograph

Example of proposed surfaced loop around the park (accessibility, cycling, walking.)



©CC2.0 Richard Gillin, Flickr

Example of wildflower meadows.



©CC2.0 Bill Kasman, Geograph

Offer new pedestrian river crossing.



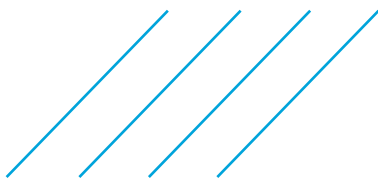
©CC2.0 Jay, Flickr

Example of naturalistic seating proposed along the main path.



©CC2.0 Gerry Dincher, Flickr

Encourage picnicking.

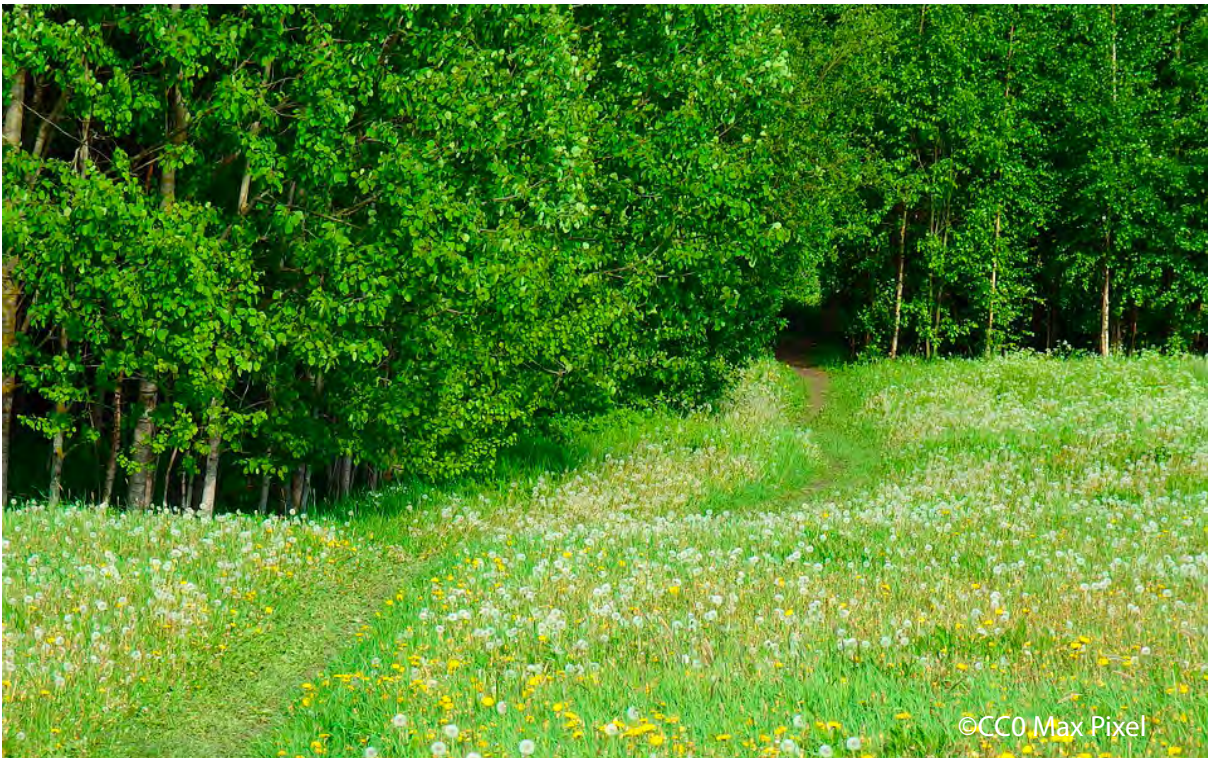


Glebe Farm Recreation Ground

Precedent images



Introduce shallower banks where appropriate to create better opportunities to access the river.



Use maintenance regime to encourage adventure.



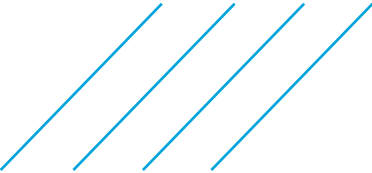
Create information boards for reference and education.



Transforming local woodland and river banks in to nature trails.



Offering challenging naturalistic play opportunity.



Glebe Farm Recreation Ground

Cost Estimate

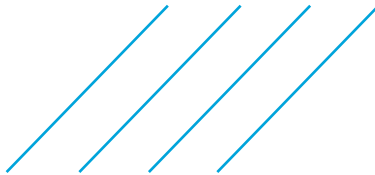
An indicative cost estimate has been produced on the basis of the proposed masterplan.

The overall estimate for works at Glebe Farm Recreation Ground is £985,620.58.

The build-up for this estimate is provided opposite and is based upon the following assumptions and exclusions:

- Removal of Japanese Knotweed excluded
- Connections to the wider area excluded
- Removal of fly tipped material is excluded
- No works to existing river bank, play area, skate park or netball pitch included
- Community Project works excluded
- Flood storage areas assumed average 500mm deep, disposal off site
- Base date 3Q 2019
- Contaminated ground excluded
- Asbestos surveys and removal excluded
- Decontamination excluded (Hazardous materials/ needles/ pigeon guano) to areas within the sites
- Stats / service diversions or protection of existing excluded
- Night working
- Phasing of works
- Value Added Tax
- Survey Fees
- Legal fees
- Statutory fees and charges
- Development Taxes
- Archaeological Investigations
- Works beyond the curtilage of the site
- Any site Abnormals other than those specifically stated
- Finance charges
- Land costs
- Any changes in government policy, taxation or HSC legislation
- Professional Fees
- Regulation and soft spots excluded
- Assumes no ground remediation required
- Environmental mitigation other than those specifically stated
- No allowance for Environment Agency fees or permits
- No allowance for street lighting
- No maintenance included

| Description | Quantity | Unit | Rate | £ p |
|---|----------|------|------------|------------|
| Earthworks | | | | |
| Excavation of flood storage areas , disposal off site | 12,282 | m3 | 34.61 | 425,080.02 |
| Hard Landscaping | | | | |
| New 2m wide gravel footpath timber edged | 3,632 | m2 | 46.68 | 169,541.76 |
| New nature trail path, walk chips with timber edging | 696 | m2 | 21.56 | 15,005.76 |
| Soft Landscaping | | | | |
| Formation of mown path | 446 | m2 | 0.56 | 249.76 |
| Grass seeding to flood storage areas | 24,564 | m2 | 1.50 | 36,846.00 |
| Grass seeding, improvement to existing areas | 3,595 | m2 | 1.50 | 5,392.50 |
| Wildflower seeding | 1,198 | m2 | 2.24 | 2,683.52 |
| Planting, mixture of shrubs | 1,198 | m2 | 25.00 | 29,950.00 |
| Street Furniture | | | | |
| Natural play equipment - 1 nr Nature trail physical development climbing system | 1 | item | 4,500.00 | 4,500.00 |
| Information Boards | 10 | nr | 1,500.00 | 15,000.00 |
| Allowance for 6 Bins, 6 Benches and 2 Dog Waste Bins | 1 | item | 6,090.00 | 6,090.00 |
| General signs | 1 | item | 1,000.00 | 1,000.00 |
| Structures/Buildings | | | | |
| Timber footbridge - approx. 18m long x 3.5m wide | 1 | item | 18,750.00 | 18,750.00 |
| Preliminaries | | | | |
| | 15 | % | 730,089.32 | 109,513.40 |
| Contingency | | | | |
| | 20 | % | 730,089.32 | 146,017.86 |
| | | | Total | 985,620.58 |



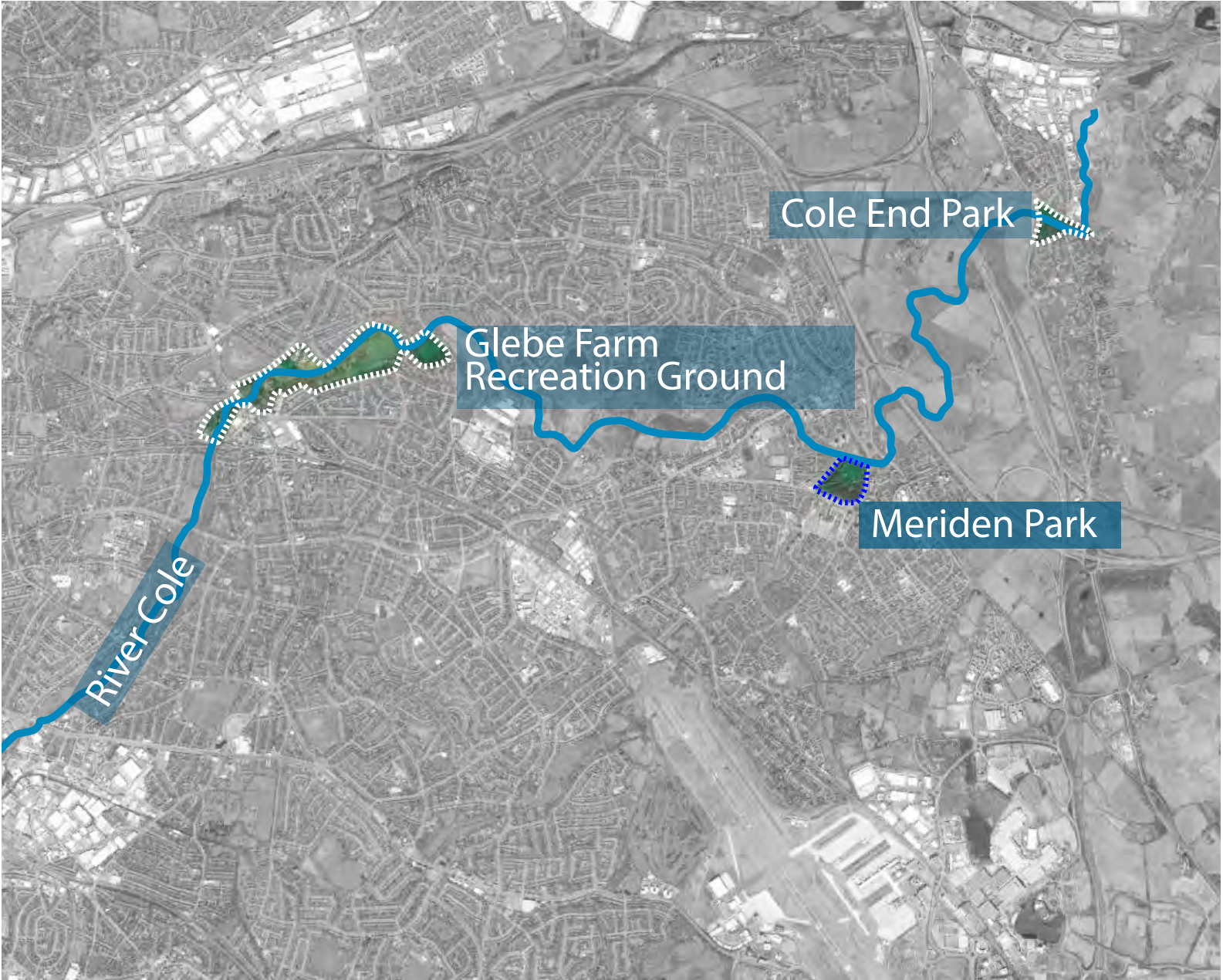
Meriden Park

Introduction

Meriden Park is situated to the east of Birmingham City Centre along the River Cole, which provides the parks northernmost boundary. To the east of the Park is the wooded tributary of Kingshurst Brook. Moorend Avenue, Chelmsley Road and roundabouts bound the park at its eastern and southern sides.

Wildlife benefits of the park are notable, as a large portion of Meriden Park is designated as Chelmsley Wood and Cole Bank Local Nature Reserves. Meriden Parks is also part of a wider connection through the River Cole connecting to Babbs Mill, York Wood and Kingfisher Local Nature Reserves to the north west of the reserve. The park is also designated as part of the wider Kingfisher Country Park.

Recreational facilities within the park include car park, several play areas including a large fenced and supervised adventure play area with play structures for both older and younger years. The park also has a football pitch and skate park, tennis courts and bowls pitch in wooded surroundings. Regular events are also held in the park which offer further recreational value.



Meriden Park

Site description

The main entrance to the park is on its central eastern side along Moorend Avenue, this entrance provides both pedestrian and vehicular access to the park. Several other pedestrian and cycle friendly entrances exist on the east, south and west of the site. Although a bridge over the River Cole exists on Moorend Avenue, there is no connectivity over the River Cole within Meriden Park itself. To the very northeast of the site is an entrance point for occasional vehicular access which is used for large vehicles associated with events such as a funfair.

Traffic along the surrounding roads can be busy, and so connectivity for pedestrians into the park is provided by both level crossings and underpasses. Accessibility in the park is good with level access available throughout and formalised tarmacked paths, as well as accessible designated parking bays in the car park. Access in to some of the more wooded areas is not as easy.

Kingshurst Brook and its associated footbridge is a prominent presence providing character to the park. It is possible to reach the river's edge at some of the less steep locations. Much of the Kingshurst Brook banks are well vegetated with scrub and tree species, as well as pockets of grass not included in a close-cut regime. Kingshurst Brook splits to create several small islands within the park, with the largest being densely vegetated and inaccessible. Visual connectivity to the River Cole is less prominent than to Kingshurst Brook within Meriden Park, as the River Cole provides the northern most boundary, has steep sides in this section, and is obscured by mature trees.

Many areas of amenity lawn with clear management regimes are present throughout the park. Some areas of more mature woodland have a relatively open field layer with little successional scrub. Areas of ornamental planting are also present around entrances and the car park.

Meriden Park provides an important recreational value to the area with regular managed events and several specific play and sport elements. As well as these features the park provides picnicking areas, information boards and some wayfinding signage, however these are varying in quality and condition.



Image across the River Cole within Meriden Park

Meriden Park

Site analysis



Meriden Park

Site appraisal

Opportunities, constraints and proposed interventions:

A - Main Entrance:

- Signage could be improved
- Unwelcoming
- No footpath access
- Messy appearance

B – Car Park Area:

- Limited spaces
- Cluttered appearance
- Inconsistent surfacing
- Some attractive trees
- Level changes across areas
- Seemingly disparate buildings – shipping containers, adventure play hut, toilet/management building

C – Tennis Courts:

- Used by community
- Needs resurfacing
- Needs better fence/gate
- Poor signage
- Poor access for all abilities

D – Bowling Green:

- Not currently utilised as a green
- Good existing perimeter hedge
- Potential for use as new building site or site for enclosed outdoor cinema

E – Play Facilities/Open Space

- Good variety of play provision
- Open spaces are well managed
- Large open space utilised for annual events

F – Woodland

- Good quality woodland area
- Potential for all ability access through woodland
- Continued and enhanced management recommended
- More signage on history of wood and biodiversity

G – Island

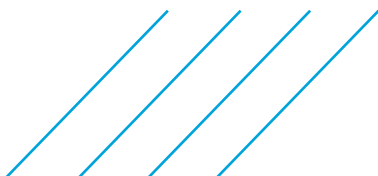
- Good quality woodland area
- Enhanced management recommended
- Potential for use as forest school/bird watching environment
- Recommend secure access to prevent unwanted out of hours access

Non specific interventions:

- Potential for some improved connections from SW through the woodland area.
- Signage for available facilities and routes through the park could be improved
- Potential for interpretation boards across site to highlight habitats, history of area and connection to rest of Cole Valley
- Potential to create traffic free circular routes around park with new footbridges over river
- Potential to create pond dipping platforms along new lake edge and river edges

Further ideas provided by Solihull Metropolitan Borough Council, to be considered in future phases of the project at Meriden Park, are listed below but have not been included in the masterplan or for costing purposes:

- Enhance existing footbridge - introduce art panels/interpretation boards.
- improve legibility of park entrances - hierarchy of interventions dependent on importance.
- Create events space linked to Hub building.
- introduce boardwalks, signage and interpretation to facilitate access to the new wetlands created following the ERDF investment.



Meriden Park

Photographic survey



Image from the park entrance looking towards the Moorend Avenue.



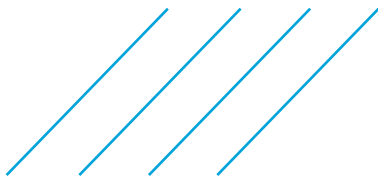
Image showing the existing park entrance from Moorend Avenue.



Image looking towards the existing car park (Containers proposed to be removed.)



Image looking towards the existing public space in the centre of the park.



Meriden Park

Photographic survey



Image looking across existing pathways within the park.



Image showing the existing footbridge within the park.



Image towards the existing footbridge.



Image showing existing play provision within the park.

Meriden Park

Photographic survey



Image looking towards the edge of the River bank east of the park.



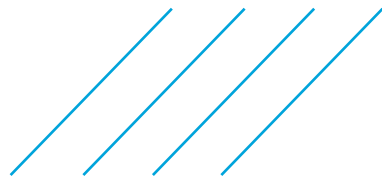
Image looking towards the edge of the river bank north of the park.



Image looking towards the edge of the River bank north of the park.



Image looking towards the residential properties north west of the park.



Meriden Park

Photographic survey



13 Image showing existing pedestrian access into the park from Chelmsley Road.



14 Image showing existing pedestrian access through the existing woodland from Chelmsley Road.



15 Image looking across existing footpath into local woodland.



16 Image showing existing access into local woodland from the park.

Meriden Park

Proposed masterplan & interventions

New bridge for access to island.

Manage woodland and island, Improve bird hide features. Provide forest school environments.

Proposed planting areas and wild-flower meadows suitable for local condition.

Pond dipping platform.

New footbridge supports vehicle free circulation route.

Information boards about local flora, nature trails, etc.

Connection towards Birmingham Airport/NEC

Wider connection along River Cole.

New footbridge over stream to support vehicle free circulation walk.

Information boards about local flora, nature trails, etc.

Potential connection to Coleshill along River Cole.

Discuss with current owners how to integrate facility into Hub building - or retain ex building.

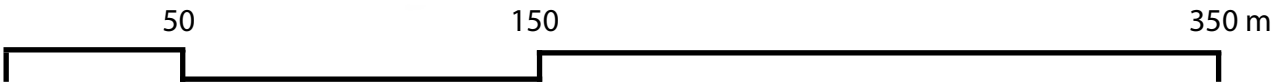
Vehicle in/out access with footpaths into park.

Formalise car park - increase parking provision.

New Hub Building - facility management , cafe, bike hire, information community services.

Retain and enhance tennis courts fencing and surfacing.

- Key
- Proposed location of information boards
 - Existing access retained

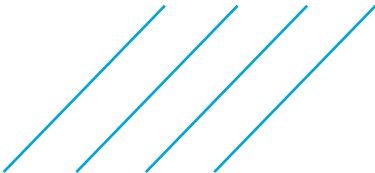


Meriden Park

Vision for Kingshurst Brook edge



This visualisation shows opportunity to create more direct access to the waters edge, offering a lookout point to experience opened views and wildlife.



Meriden Park

Vision for open cafe and community area



This visualisation expresses an opportunity to create a community hub with cafe, outside seating and ornamental planting

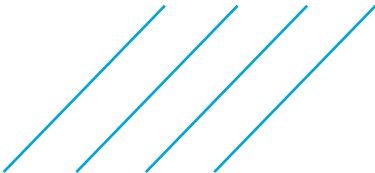


Meriden Park

Vision for Meriden Park's woodland walk



This visualisation expresses an opportunity to create a more accessible woodland walk.



Meriden Park

Precedent images



Creating information boards and add signage.



Introducing wildflower meadows and enhancing tree and shrub planting areas.



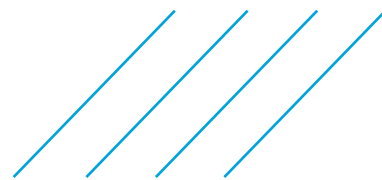
Creating better opportunities for interaction with natural environments.



Offering variety of ways to cross the river.



Enhancing character and creating landmarks with new elements.



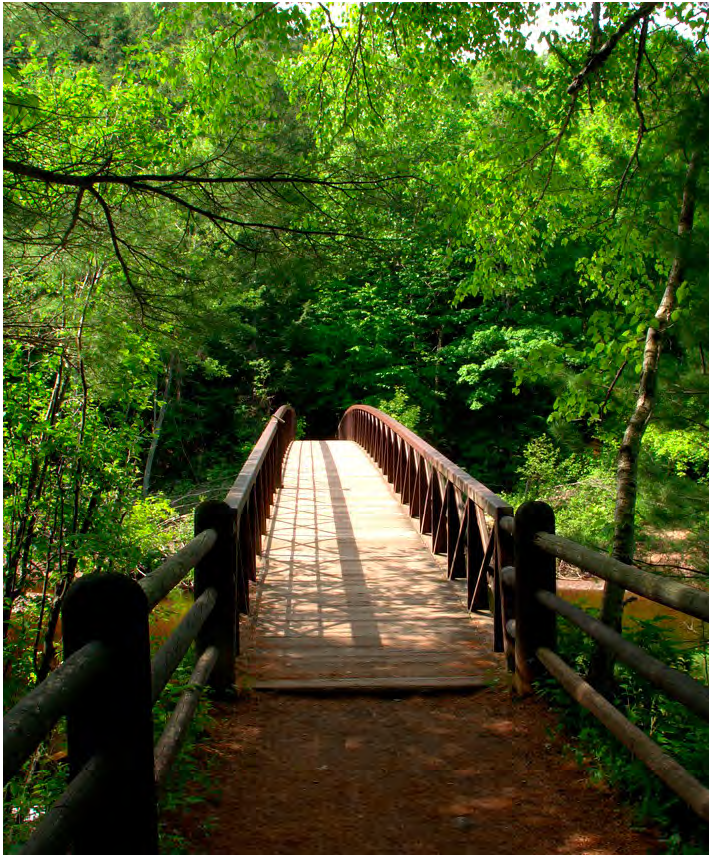
Meriden Park

Precedent images



©CC2.0 Robin Stott, Geograph

Provide naturalistic footpath along the woodland.



Improving the existing footpath into local woodland.



©CC0 Max Pixel

Improve opportunities for play.



©CC2.0 Jay, Flickr

Offer seating along the edge of the river.



Provide play areas.



©CC0 Max Pixel

Offer naturalistic play spaces.

Meriden Park

Cost Estimate

An indicative cost estimate has been produced on the basis of the proposed masterplan.

The overall estimate for works at Meriden Park is £2,722,314.90.

The build-up for this estimate is provided opposite and is based upon the following assumptions and exclusions:

- Connections to the wider area excluded
- Works to existing footbridge excluded
- No works to existing river bank or play areas included
- New building assumed to be brick with tiled roof - excluding café fit out
- Existing building to be left insitu with no refurbishment
- Assumed containers are Council owned
- Base date 3Q 2019
- Contaminated ground excluded
- Asbestos surveys and removal excluded
- Decontamination excluded (Hazardous materials/ needles/ pigeon guano) to areas within the sites
- Stats / service diversions or protection of existing excluded
- Night working
- Phasing of works
- Value Added Tax
- Survey Fees
- Legal fees
- Statutory fees and charges
- Development Taxes
- Archaeological Investigations
- Works beyond the curtilage of the site
- Any site Abnormals other than those specifically stated
- Finance charges
- Land costs
- Any changes in government policy, taxation or HSC legislation
- Professional Fees
- Regulation and soft spots excluded
- Assumes no ground remediation required
- Environmental mitigation other than those specifically stated
- No allowance for Environment Agency fees or permits
- No allowance for street lighting
- No maintenance included

| Description | Quantity | Unit | Rate | £ p |
|--|----------|------|--------------|--------------|
| <u>Demolition/Site Clearance</u> | | | | |
| Remove existing timber bollards dispose | 1 | item | 100.00 | 100.00 |
| Remove existing fencing to tennis court area | 169 | m | 1.50 | 253.50 |
| Remove existing container | 2 | nr | 500.00 | 1,000.00 |
| <u>Hard Landscaping</u> | | | | |
| New tarmac footpath, 2m wide | 98 | m2 | 67.85 | 6,615.38 |
| New 2m wide gravel footpath timber edged | 1,091 | m2 | 46.68 | 50,927.88 |
| Break out existing and resurface existing tarmac carpark, including line marking | 952 | m2 | 105.60 | 100,531.20 |
| Tarmac area to hub building | 325 | m2 | 64.52 | 20,969.00 |
| Break out existing tennis court surfacing and resurface, including remarking | 1,762 | m2 | 94.55 | 166,597.10 |
| <u>Soft Landscaping</u> | | | | |
| Grass seeding | 1,585 | m2 | 1.50 | 2,377.50 |
| Wildflower seeding | 528 | m2 | 1.80 | 950.40 |
| Planting, shubs | 528 | m2 | 25.00 | 13,200.00 |
| <u>Street Furniture/Play Equipment</u> | | | | |
| Natural play equipment - log steps/log piles approx 5 nr pieces. | 1 | item | 4,000.00 | 4,000.00 |
| Information Boards | 18 | nr | 1,500.00 | 27,000.00 |
| Allowance for 6 Bins, 6 Benches and 2 Dog Waste Bins | 1 | item | 6,090.00 | 6,090.00 |
| General signs | 1 | item | 1,000.00 | 1,000.00 |
| <u>Structures/Buildings</u> | | | | |
| Timber bridge average 15m long x 3.5m wide | 3 | nr | 18,750.00 | 56,250.00 |
| Fencing to Tennis court | 169 | m | 50.00 | 8,450.00 |
| Pond dipping Platform, including life buoy | 5 | nr | 2,176.00 | 10,880.00 |
| Allowance for improvements to Bird Hide features | 1 | item | 2000.00 | 2,000.00 |
| Hub Building, single storey, traditional construction, assumed 598m2 | 1 | item | 1,493,500.00 | 1,493,500.00 |
| Preliminaries | | | | |
| | 18 | % | 1,972,691.96 | 355,084.55 |
| Contingency | | | | |
| | 20 | % | 1,972,691.96 | 394,538.39 |
| | | | Total | 2,722,314.90 |



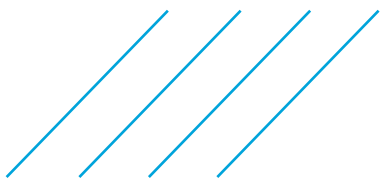
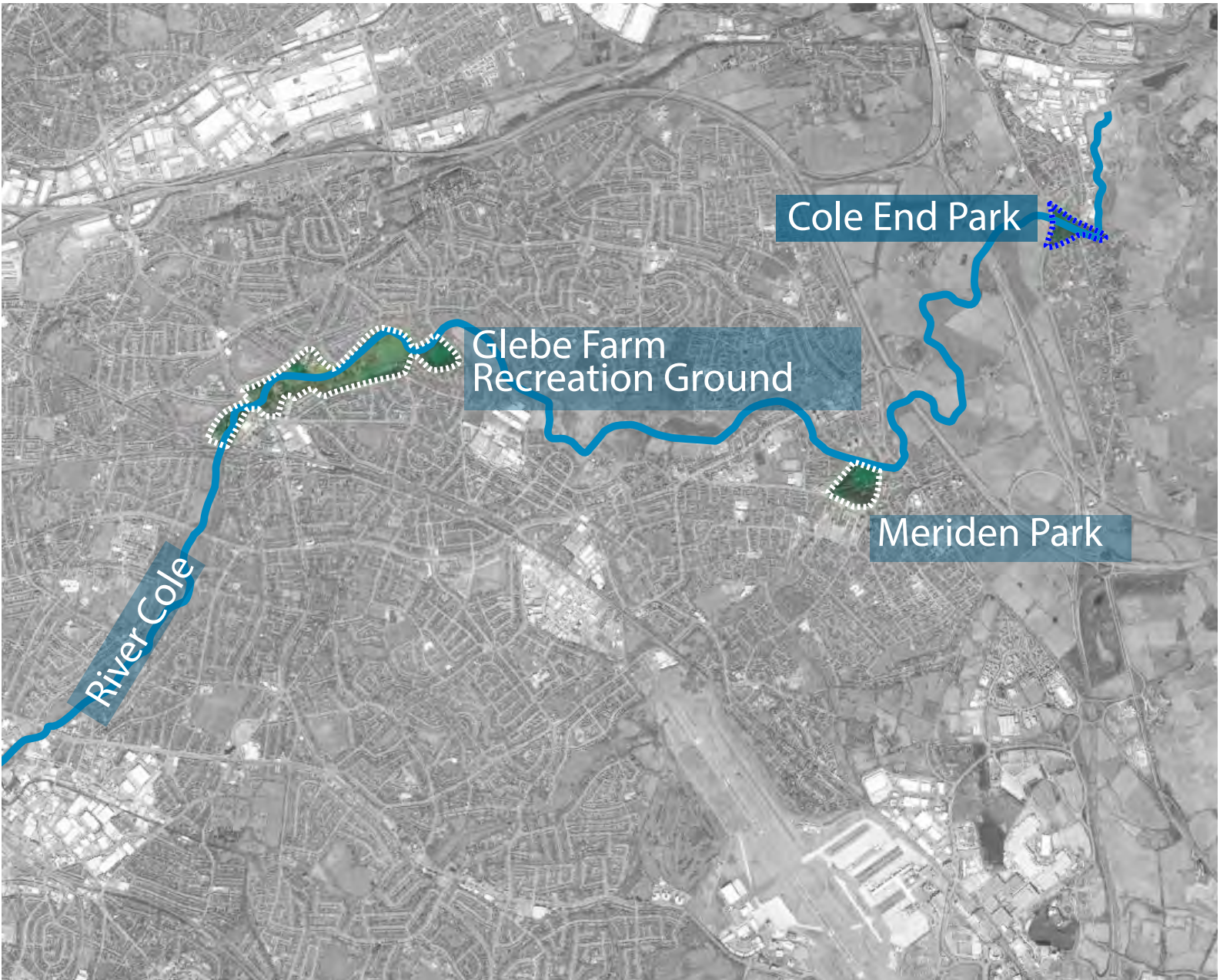
Cole End Park

Introduction

Cole End Park is located along the River Cole east of Birmingham City Centre. The park is situated south of the district of Cole End, and north of Coleshill market town. Lichfield Road bounds the park on its northern and eastern sides, while the A446 provides the parks western boundary. On these boundaries both roads bridge over the River Cole, which runs centrally through the park east to west.

The site currently provides areas for wildlife, children's play and serves as a general amenity area for the local population.

A single footpath runs through the site along the south bank of the river. The footpath continues west from the site under the road bridge or onto the A446 via a set of steps cut into the highway embankment. To the east the path joins the B4117 highway pavement to head south or north across the river via a concrete footbridge.



Cole End Park

Site description

The park is divided by the River Cole which runs west to east and by a concrete aqueduct/conduit running north to south. The conduit carries sewage across the river. To the east of the aqueduct and south of the river is an area designated for wildlife which is managed by the wildlife trust.

Between the wildlife area and the B4117 bridge is an area of grassland containing occasional specimen trees.

To the north of the river is an area of amenity grassland containing mature specimen trees with pollarded willows along much of the river bank to the east of the aqueduct.

The river is heavily canalised through the site with steep banks and limited vegetation / wildlife habitat. The river is uniformly wide and the river bed is reportedly level with no physical features and with no low water channel to allow fish to move up and down the river at times of low water.

Within the park there are four culverts with outlets into the river. Two appear to have collapsed and be no longer active. It is not clear where the culverts run from and who has responsibility for them.

In the south west corner of the site there is a playground accessed from Old Mill Road and connected to the rest of the site via footpaths that run through the nature area / woodland directly to the river bank footpath or east more directly towards the B4117.

Within the amenity grass area to the north of the river there is a strip of slightly raised ground running parallel with the riverbank. It has been surmised that this is probably the arisings from the river bed taken at the time that the river was widened.

Pedestrian transit across the river is facilitated by a concrete and steel bridge running parallel with the road bridge. Between the two bridges the land regularly floods at times of high water and the banks have possibly encroached on the river channel in this location.



Image across the River Cole within Cole End Park

Cole End Park

Site analysis



Cole End Park

Site appraisal

Opportunities, constraints and proposed interventions:

A - Close cut grass - potential for different mowing regime to encourage biodiversity and pedestrian routes

B - Raised earthwork - potentially river gravels from earlier river canalisation - could be used to create riffles and other features on river bed

D - High banks and vertical sides, bank profiles could be altered for improved biodiversity

C - Established footpaths

E - Culverts without flow in to river (two collapsed/blocked)

F - Potential for additional on-site parking subject to services search

G - Bridge (pedestrian) requires updating. Too narrow for two people to pass.

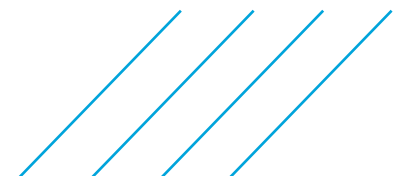
H - Silt build up here overtime due to flooding, this could be remedied and managed to improve aesthetics and better protect receptors such as aquatic life.

I - Arches through culvert provide permeability but poor headroom, opportunity to increase headroom under arches by lowering ground level.

J - Play area - conventional equipment on low impact surface, opportunity for natural play features.

The proposed masterplan has been presented at a public consultation event, this generated further ideas to be considered in future phases of the project at Cole End Park. These are listed below but have not been included in the masterplan or for costing purposes:

- A second footbridge near the Severn Trent sewerage pipe, to create a circular walk.
- Provide a surfaced path along the south of the river.
- Provide natural play features within the woodland and around the park.
- Create meadow in floodplain areas, utilising the low spots.
- Create an area that the local schools can use for outdoor education.



Cole End Park

Photographic survey



1

Pedestrian footbridge across River Cole adjacent to B446 road bridge viewed from the north.



2

Pedestrian footbridge across River Cole adjacent to B446 road bridge viewed towards north west.



3

Collapsed culvert on southern bank of river.



4

Active culvert on southern bank of river.

Cole End Park

Photographic survey



5 Concrete aqueduct / conduit – Arches provide pedestrian permeability but restrict headroom – viewed from the east towards wildlife area.



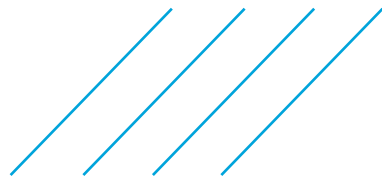
6 Amenity grass area north of river showing raised earthwork parallel with the river (possibly excavations from river).



7 Concrete aqueduct / conduit viewed from the east towards wildlife area along river bank also large culvert



8 Concrete aqueduct / conduit in northern side of site.



Cole End Park

Proposed masterplan & interventions

Mowing regime change
mow paths - leave areas long
to encourage biodiversity.

New pathway to create vehicle free
circulation walk opportunity to
create new cycle connections along
the River Cole.

Potential connection to Meriden
Park along River Cole.

Regrade channel, introduce
washed river gravels and
in-channel features to create
low flow channel.

Lowered river bank, to
encourage biodiversity,
re-route footpath around
lowered river banks.

Re-route footpath around
lowered river bank.

Information boards about
local flora, nature trails, etc.

Proposed natural play areas.

This site falls within a catchment wide issue to address invasive species,
specific locations or treatments have not been mapped or included
within costings.

River bed features (gravel,
woody debris, low flow
channels) proposed in a
number of locations

Potential for new on-site
parking area.

Proposed cycle stands.

Information boards about
local flora, nature trails, etc.

Potential connection to
Coleshill Parkway along
River Cole.

New contemporary bridge
improve visual impact and
character to the park.

Information boards about
local flora, nature trails, etc.

Lower ground to increase
head room through arches.

- Key
- Proposed location of information boards
 - Existing access retained
 - Lower ground to increase head room through arches

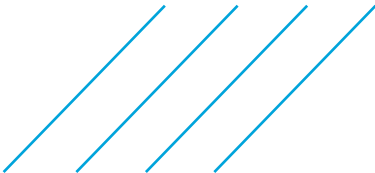


Cole End Park

Vision of enhancements to the banks of the River Cole within Cole End Park



This visualisation expresses the opportunity for a replacement pedestrian footbridge and improvements to river bank profiles in order to encourage both biodiversity and access to the waters edge.



Cole End Park

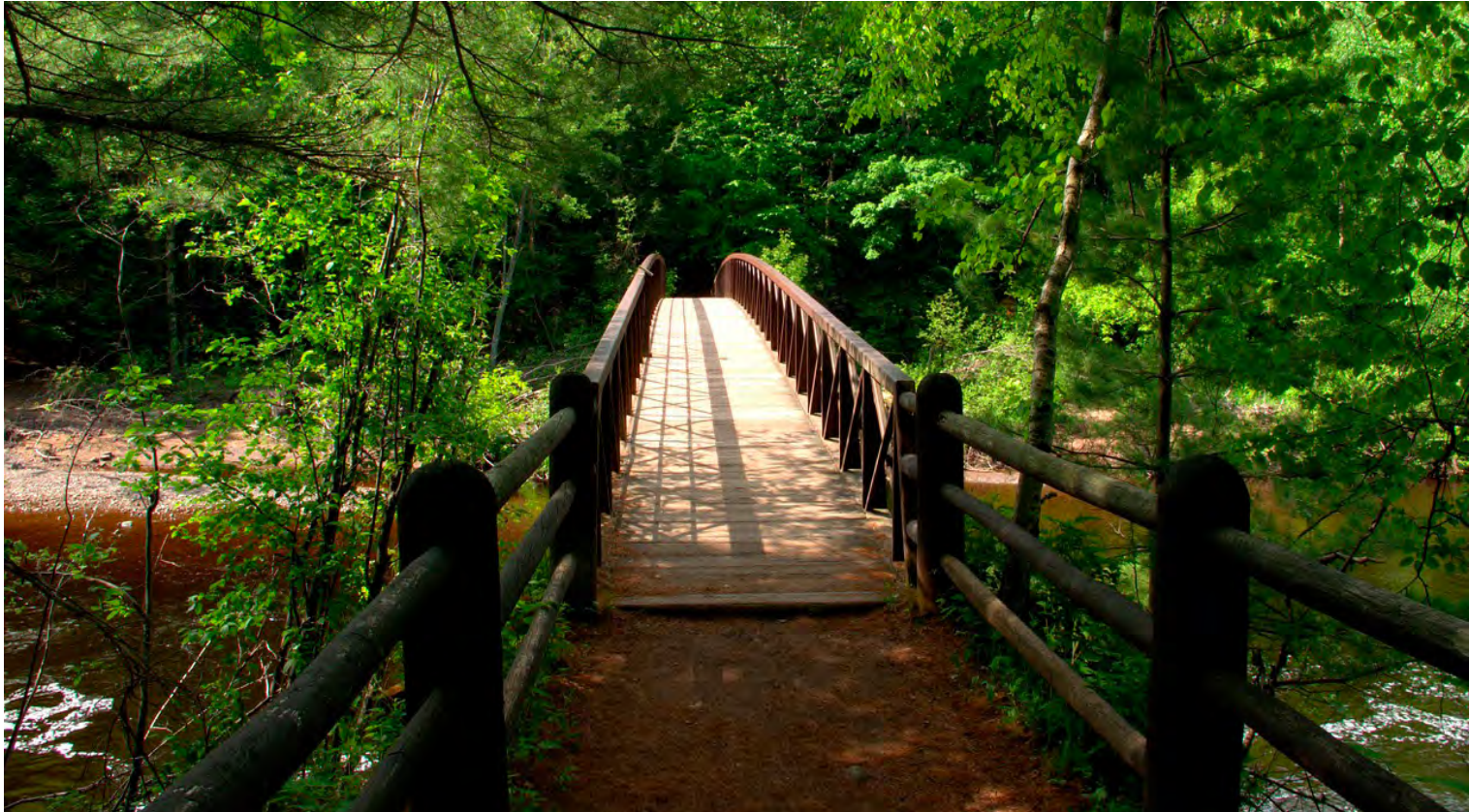
Precedent images



Introduction of more sport, cycle and natural play elements to improve recreational value.



Example of an iconic wooden bridge that could be implemented.



Cole End Park

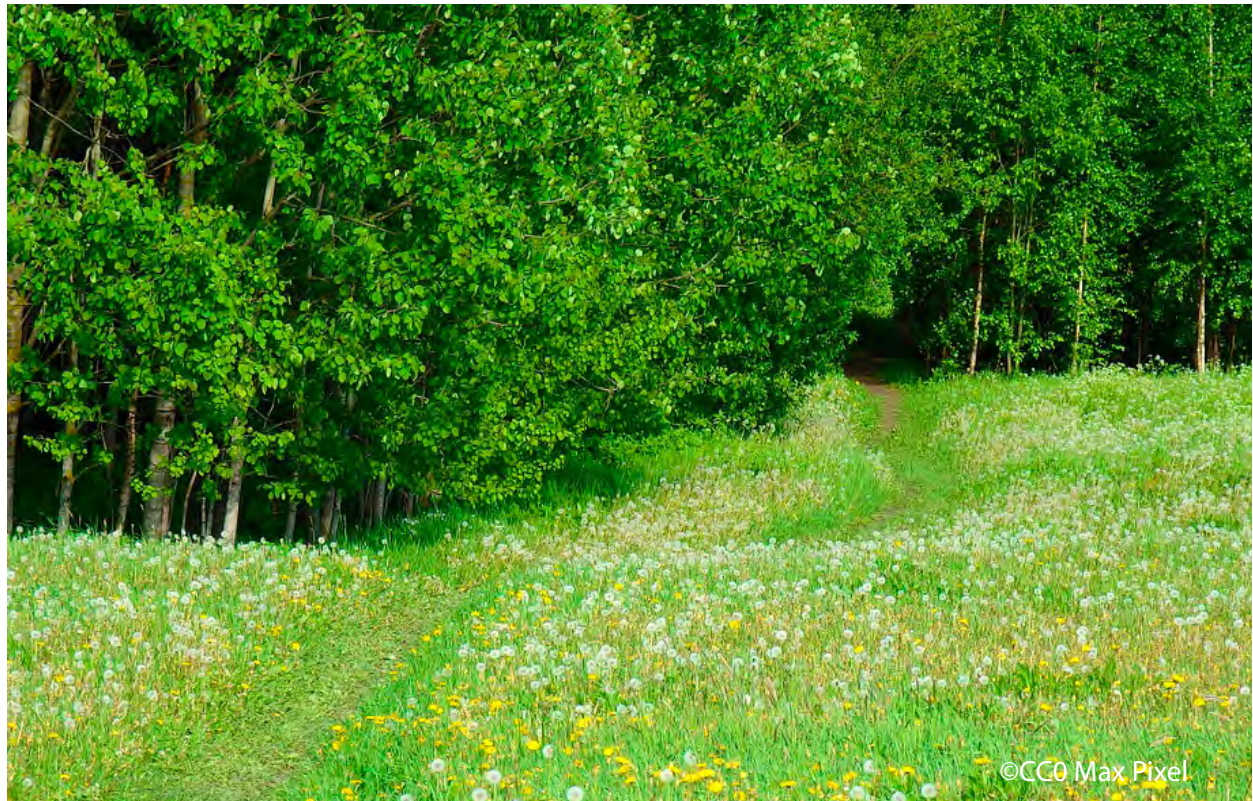
Precedent images



Introduction of additional shrub planting areas and wildflower meadows to provide extended seasonal interest and biodiversity benefits.



Example of proposed information board.



Introduction of temporal features such as a mown path to create better defined identity for the park.



Example of new natural elements and reprofiling along the river edge to encourage natural play and immersion in nature.

Cole End Park

Cost Estimate

An indicative cost estimate has been produced on the basis of the proposed masterplan.

The overall estimate for works at Cole End Park is £768,267.61.

The build-up for this estimate is provided opposite and is based upon the following assumptions and exclusions:

- Works to existing culverts excluded
- Reprofilng to arches assumed 500mm depth, which will not undermine structure foundations
- Gravel Banks assumed to be 300-600mm deep
- Connections to the wider area excluded
- River bank reprofiling assumed to be average 1m wide x 1m deep
- Assumed no requirement to cofferdam river for gravel bank or riverbank reprofiling works
- No allowance for temporary footbridge whilst new footbridge installed
- Base date 3Q 2019
- Contaminated ground excluded
- Asbestos surveys and removal excluded
- Decontamination excluded (Hazardous materials/ needles/ pigeon guano) to areas within the sites
- Stats / service diversions or protection of existing excluded
- Night working
- Phasing of works
- Value Added Tax
- Survey Fees
- Legal fees
- Statutory fees and charges
- Development Taxes
- Archaeological Investigations
- Works beyond the curtilage of the site
- Any site Abnormals other than those specifically stated
- Finance charges
- Land costs
- Any changes in government policy, taxation or HSC legislation
- Professional Fees
- Regulation and soft spots excluded
- Assumes no ground remediation required
- Environmental mitigation other than those specifically stated
- No allowance for Environment Ageny fees or permits
- No allowance for street lighting
- No maintenance included

| Description | Quantity | Unit | Rate | £ p |
|--|----------|------|------------|------------|
| <u>Demolition</u> | | | | |
| Demolish existing metal footbridge approx 45m long, disposal off site | 1 | item | 50,000.00 | 50,000.00 |
| Take down and set aside for reuse play equipment | 1 | item | 2,700.00 | 2,700.00 |
| <u>Earthworks</u> | | | | |
| River bank reprofiling, topsoil strip & replacement, disposal other spoil of site, assumed average 1m wide x 1m deep | 195 | m3 | 51.54 | 10,050.30 |
| Aquaduct arch earthworks reprofiling, maximum 500m | 40 | m3 | 34.61 | 1,384.40 |
| Gravel banks, approximately 600mm deep | 205 | m3 | 74.79 | 15,331.95 |
| <u>Hard Landscaping</u> | | | | |
| Break out existing play area surfacing and resurface with wet pour safer surface | 583 | m2 | 94.55 | 55,122.65 |
| Tarmac cyclepath 3m wide, including edgings | 270 | m2 | 64.53 | 17,423.10 |
| New 2m wide gravel footpath timber edged | 202 | m2 | 46.68 | 9,429.36 |
| New tarmac carpark, including kerbs | 207 | m2 | 87.36 | 18,083.52 |
| <u>Soft Landscaping</u> | | | | |
| Formation of mown path | 670 | m2 | 0.56 | 375.20 |
| Grass seeding | 821 | m2 | 1.50 | 1,232.10 |
| Wildflower seeding | 274 | m2 | 2.24 | 613.31 |
| Coir Planting, including reeds | 195 | m | 45.49 | 8,870.55 |
| <u>Street Furniture/Play Equipment</u> | | | | |
| Take from store, refurbish and reinstall existing play equipment | 1 | item | 5,300.00 | 5,300.00 |
| Natural play equipment - log steps/log piles approx 5 nr pieces. | 1 | item | 4,000.00 | 4,000.00 |
| Information Boards | 6 | nr | 1,500.00 | 9,000.00 |
| Allowance for 6 Bins, 6 Benches and 2 Dog Waste Bins | 1 | item | 6,090.00 | 6,090.00 |
| Cycle stands | 2 | nr | 1,540.34 | 3,080.68 |
| General signs | 1 | item | 1,000.00 | 1,000.00 |
| <u>Structures/Buildings</u> | | | | |
| Timber footbridge - approx. 25m long x 3.5m wide | 1 | item | 350,000.00 | 350,000.00 |
| Preliminaries | 15 | % | 569,087.12 | 85,363.07 |
| Contingency | 20 | % | 569,087.12 | 113,817.42 |
| | | | Total | 768,267.61 |

