


Site Context Plan

The Brickfields Project
St Helens, Merseyside



Regeneration benefits

Brickfields project

- Create 41 hectares of strategic greenspace by transforming DUN PDL brownfield land in St Helens into community woodland by March 2009 and managing it in perpetuity by the Forestry Commission.
- Visually enhance the main rail corridor of the Manchester to Liverpool mainline in Marshall's Cross.
- Improve and create safe non-vehicular access routes to local businesses, schools and residential areas by creating and improving the green infrastructure into St Helens town centre.
- Develop the strategic sphere of influence around the Lea Green Business Park which will make it a more competitive choice for business in a Strategic Investment Area.
- Contribute to the revitalisation of St Helens by improving its local and regional image to business and residents within the sub-region as outlined in the original Business Plan and Yearly Performance Plans.
- Add 41 hectares of new Community Woodland to the critical mass of soft end land reclamation schemes being developed in south St Helens.

Site biography

Brickfields project

The Brickfields project (41 hectares) is located 3 km south of St Helens town centre. The site comprises five areas; the former Sutton Manor Sewage works and Colliery Railway; Farndon Avenue/ Roughdales Quarry; Daisyfield, Buff Quarry and the currently operational Lord St Helens landfill site.

The Brickfields project aims to provide enhanced recreation space and connect it with existing Forestry Commission community woodlands in the area including Sutton Manor and Clock Face. The whole site is considered to be previously developed derelict underused and neglected land.

At present the site is a mix of unmanaged green space and active landfill. The site is bisected by Pendlebury Brook with Lord St Helens and Buff Quarry landfills to the north and the remaining areas to the south.

Roughdales brick works lies to the east of the site and is owned by Ibstock Brick Ltd. The site is used for brick manufacturing and clay storage. To the north east of the site, beyond Chester Lane are the restored Red Quarry North and South landfill sites. To the south east of the site is residential housing and to the south west a small industrial estate. To the west of the site is a large transformer station and to the north

beyond the railway line are open fields with a newly constructed superstore.

Sutton Manor Sewage Works and Colliery Railway is situated in the south western corner of the site and is currently registered to NGF Europe Limited. It became disused in 1975 and 1982. The location of the former works is currently overgrown and derelict. The site is not fenced and can be accessed via a greenway that runs adjacent to the southern side of the former Sutton Manor Colliery Railway embankment, accessed from Walker's Lane. There is no evidence of restoration.

Farndon Avenue is a restored landfill site lying in the south eastern corner of the site, to the east of the Daisyfield landfill and to the south of brick works. The site supports scrubby vegetation only and there has been no formal planting regime. It is used for informal recreational use. There is pedestrian access only from Chester Road, south of the brick works.

Daisyfield is a partially restored closed landfill created from the former Daisyfield Quarry which had been used for the extraction of brick clay.

Daisyfield has previously been subject to restoration through the Wastelands to Woodlands scheme. The site failed to

meet the level of restoration anticipated, although conditions on site are significantly better than if intervention had not occurred. Vegetation has struggled to become established on site and tree and shrub species which have managed to root are of poor quality.

Buff Quarry is located in the northern part of the site. It is a restored landfill site with active leachate and gas collection system and limited public access. Waste disposal at the site occurred over the period 1986 to 1992 with restoration works undertaken over the period 1992-1996. The landfill has been partially restored although there has been some die back of vegetation since restoration.

Cory Landfill (Lord St Helens) is the only operational landfill on site. The operating landfill site comprises a mixture of completed landfill cells, cells being infilled and areas where new cells are being developed. There is an active working quarry face where clay is still extracted from within the licensed landfill site boundary to create additional void space. The landfill site opened to receive of waste in 1999 and is expected to carry on receiving waste until the end of 2007. On completion, each cell will be capped with low permeability clays and composite liners with flexible

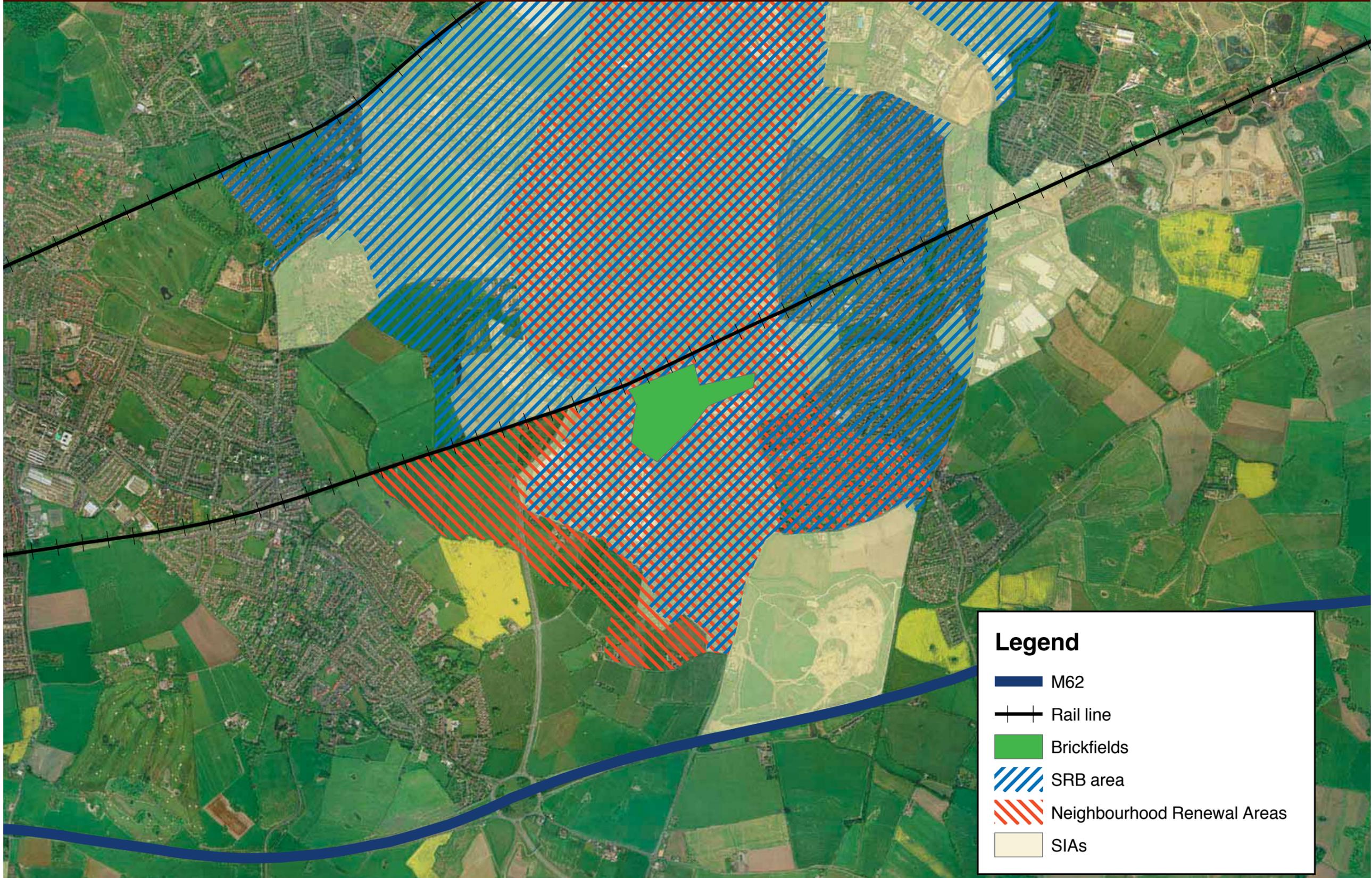
geomembrane liners.

Cory Environmental has developed a Restoration and Aftercare Scheme for the site. The Forestry Commission is presently actively engaged with Cory with a view for the area coming under the Newlands scheme on completion or part of the restoration programme.

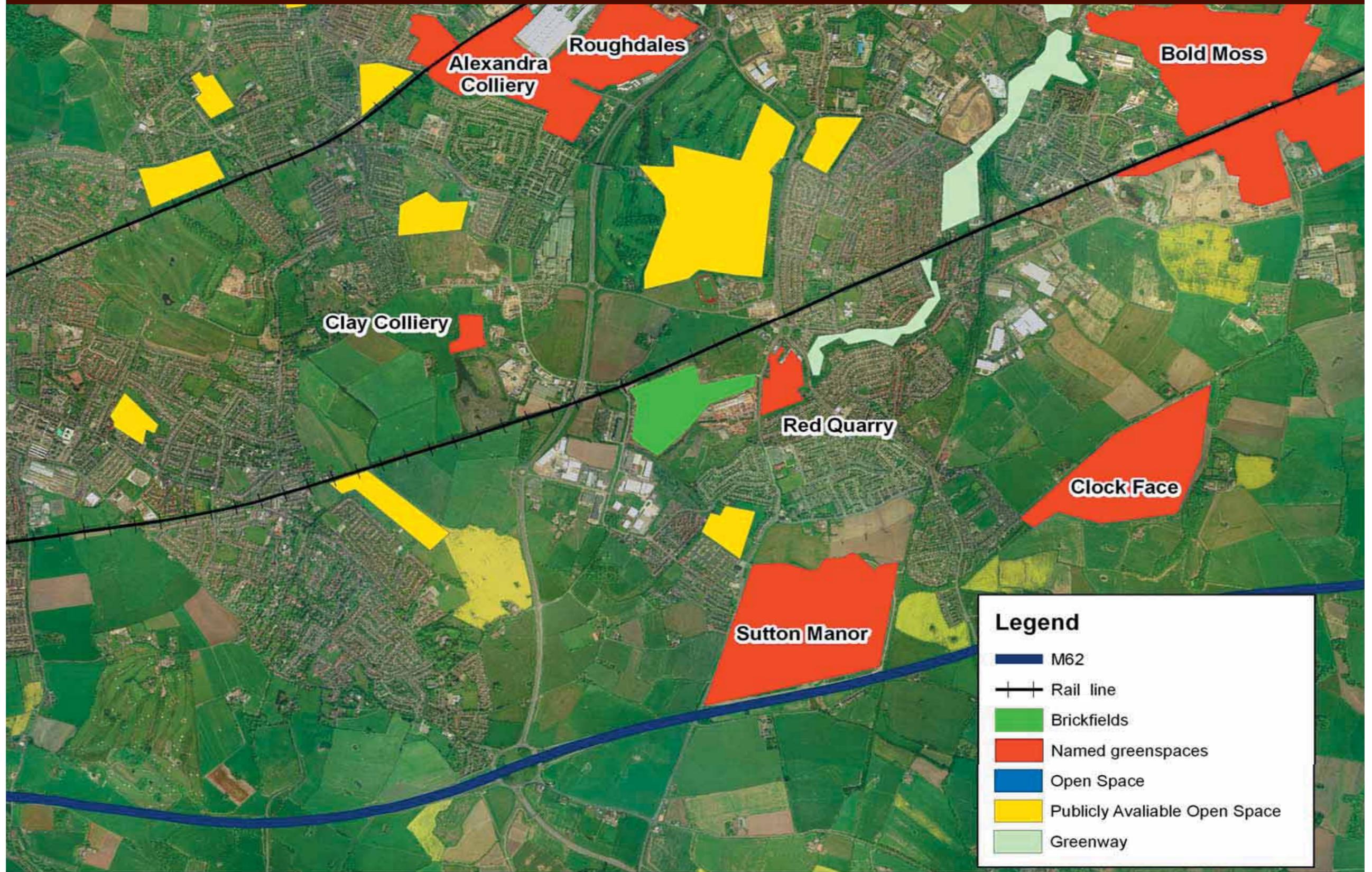
Red Quarry is an area of former landfill owned by MWDA south of the brook creating good links to the wider footpath network.



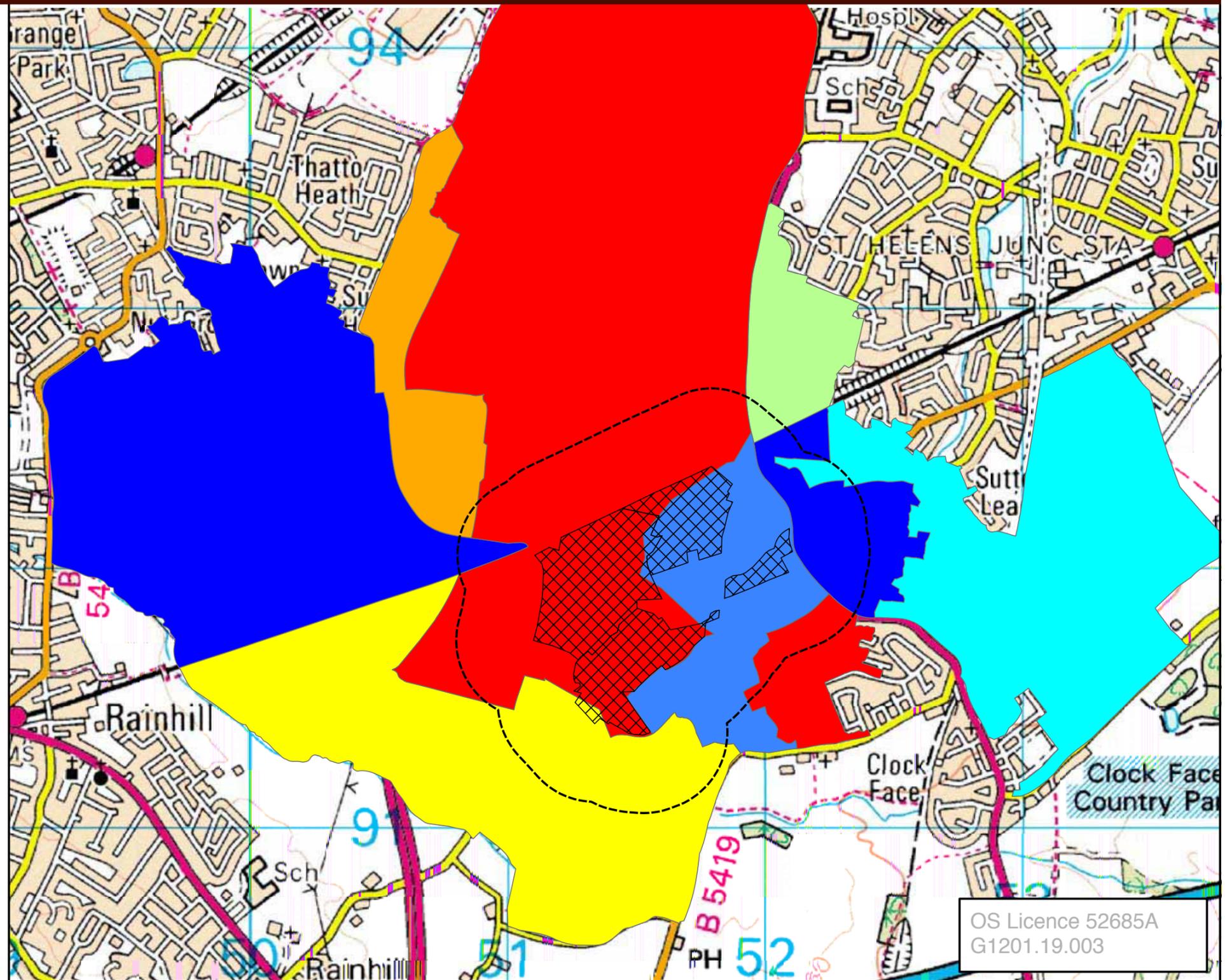
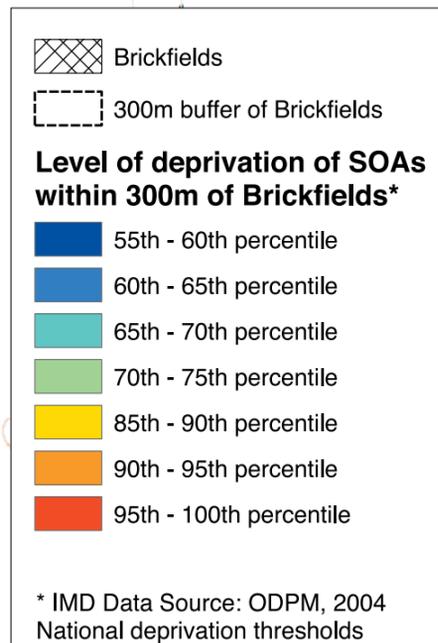
Brickfields project strategic investment plan



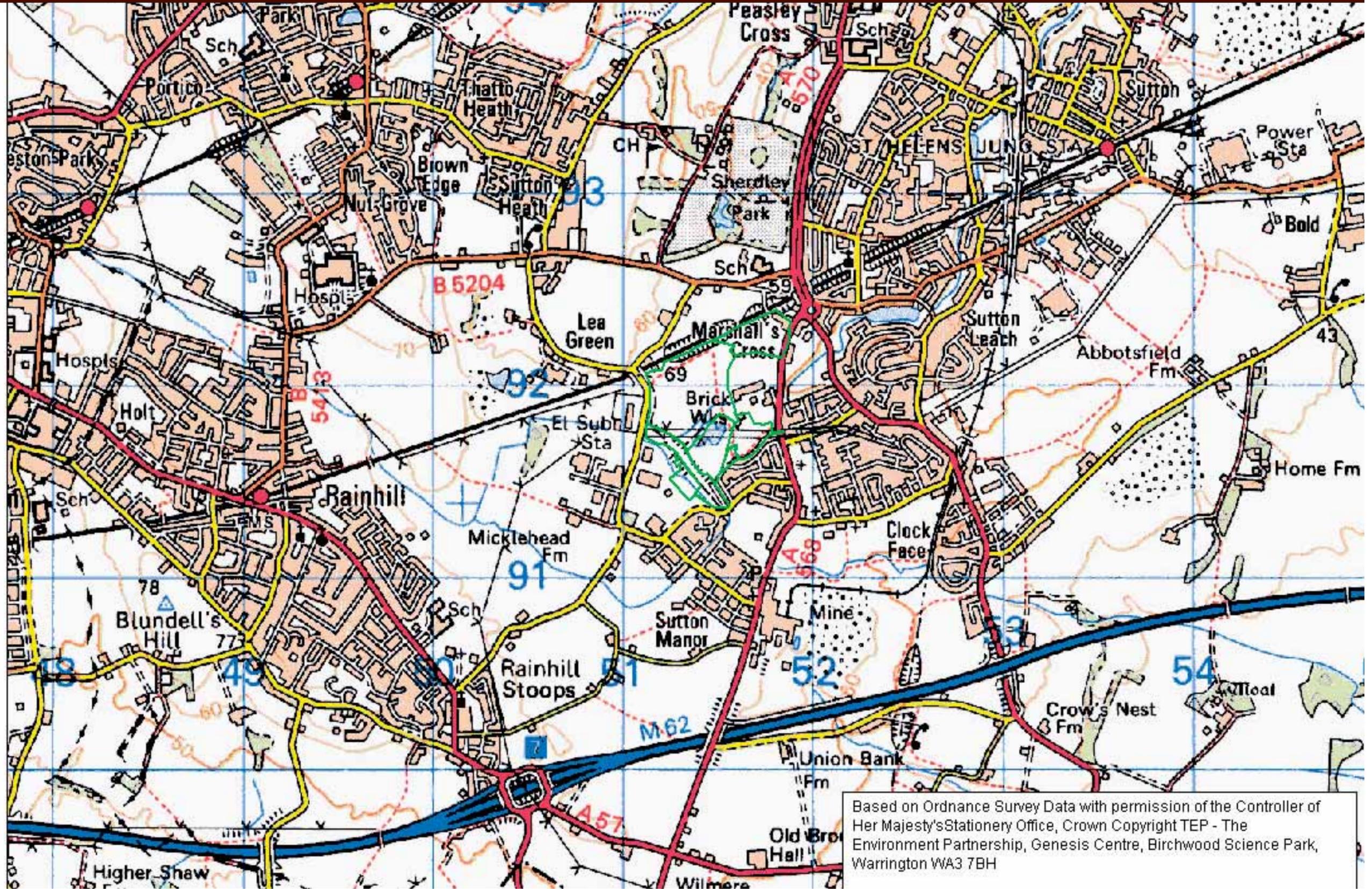
Brickfields project greenspace location map



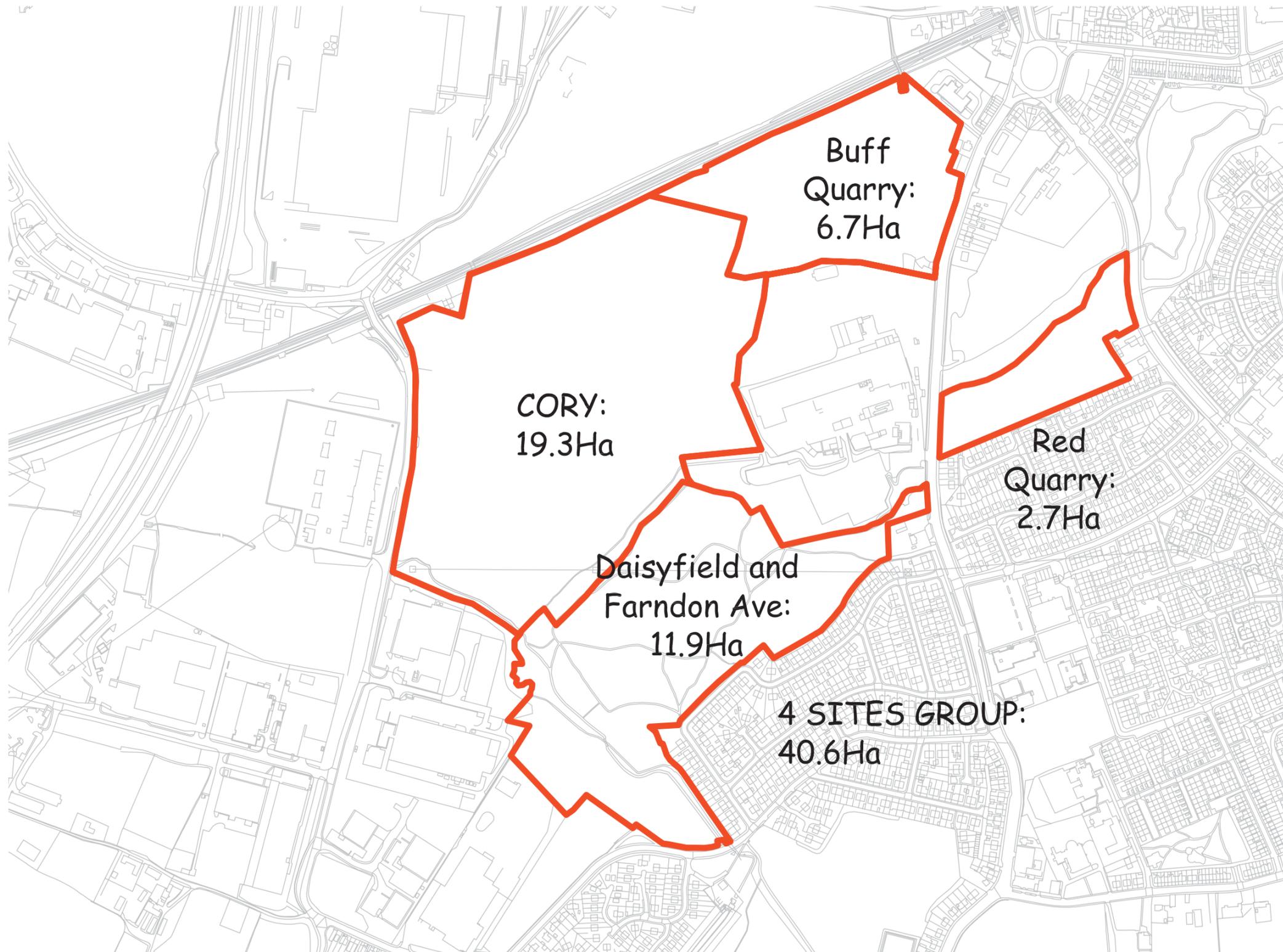
Super output areas - Level of deprivation of super output areas within 300m of Brickfields



Brickfields project location



Brickfields project boundary map

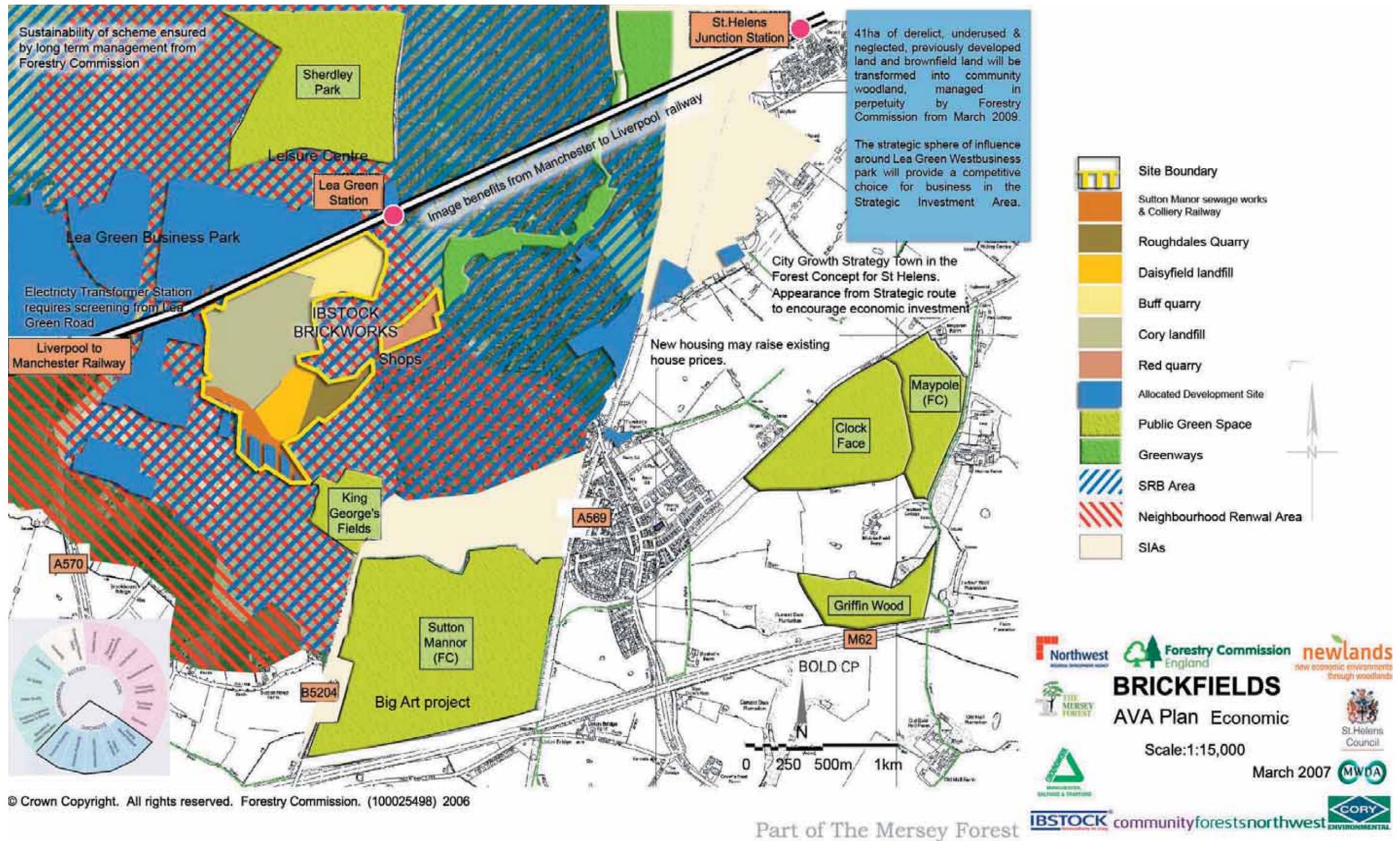


Additional Values Assessment (AVA)

PBRS AUDIT FRAMEWORK - Ibstocks		newlands AVA <small>new economic environments through woodlands</small>		exemplar quality
PBRS BENEFIT CATEGORY	PRBS CRITERIA	Score Threshold	COMMENTS	
	<i>Category</i>	<i>Score Threshold</i>		
Social 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 Performance indicator for exemplar activity	SOC-1: Health Action Zone	1	✓	IBSTOCKS COMPRISES AN EXPANSIVE OPEN SPACE NETWORK WHICH FRAMES A LARGE RESIDENTIAL COMMUNITY IN SOUTH ST HELENS. ALTHOUGH ONLY LIMITED PARTS OF THE NETWORK ARE OPEN TO THE PUBLIC (MUCH OF THE SITE IS STILL AN ACTIVE CLAY QUARRY AND BRICKWORKS) THE AREA IS WELL USED FOR INFORMAL RECREATION. THE SITE FORMS AN IMPORTANT BUFFER BETWEEN RESIDENTIAL COMMUNITIES AND A RANGE OF INDUSTRIAL LAND USES.
	SOC-2: Education Action Zone	1	✓	
	SOC-3: School Catchment	2	✓	
	SOC-4: Residential Catchment	3	✓	
	SOC-5: Site Size	4	✓	
	SOC-6: IMD Percentile (District)	3	✓	
	SOC-7: IMD Percentile (Sub-region)	4		
	SOC-8: IMD Percentile (Northwest)	4	✓	
Economic 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 Performance indicator for exemplar activity	ECO-1: Housing Composition			THE IBSTOCKS NETWORK OF OPEN SPACES SIT DIRECTLY ADJACENT ESTABLISHED INDUSTRIAL AREAS AND ALREADY PROVIDE AN IMPORTANT BUFFERING EFFECT FROM HOUSING. HOWEVER, CONTROLLED ACCESS TO THE SITE FROM AREAS OF EMPLOYMENT IS VERY LIMITED.
	ECO-2: House Prices	1	✓	
	ECO-3: Proximity to Industry	3	✓	
	ECO-4: Proximity to Employment	3	✓	
	ECO-5: Proximity to Proposed Employment	3	✓	
	ECO-6: Proximity to Retail	3		
	ECO-7: Proximity of Transport Corridor	2	✓	
Environmental 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 Performance indicator for exemplar activity	ENV-1: Proximity of Transport Corridor	2	✓	DUE TO ITS SIZE, THE SITE HAS THE CAPACITY TO SUPPORT A RANGE OF HABITATS AND WILDLIFE. THE SITE IS PRESENTLY COMPRISED OF OPEN GRASSLAND WITH ISOLATED SCRUB, RECENT WOODLAND PLANTING AND A RANGE OF AQUATIC HABITATS. THE OPPORTUNITY EXISTS TO ENHANCE THE ECOLOGICAL QUALITY OF THE SITE AND TO BRING WILDLIFE CLOSER TO LOCAL PEOPLE.
	ENV-2: Proximity of Woodland	2	✓	
	ENV-3: Proximity of Ecologically Important Area	2		
	ENV-4: Proximity of Ancient Woodland	2		
	ENV-5: Proximity of Waterbody	3	✓	
	ENV-6: Air Quality Management Area	1		
	ENV-7: Site Size	1	✓	
Access 1 2 3 4 5 6 7 8 9 Performance indicator for exemplar activity	ACC-1: Proximity of Bus Route	1	✓	THE NETWORK OF OPEN SPACES WHICH COMPRISE THE SITE ARE VERY ACCESSIBLE BY FOOT AND BICYCLE FROM THE LOCAL HIGHWAY NETWORK, BUT IS VISUALLY CONTAINED BY PERIPHERAL LAND USES. THE SITE ALSO FORMS PART OF WIDER WALKING AND CYCLING ACCESS NETWORK WITHIN THE BOROUGH.
	ACC-2: Proximity of PROW	1	✓	
	ACC-3: Proximity of Public Recreational Area	3		
	ACC-4: Proximity of A-Road	1		
	ACC-5: Proximity of Rail Station	1		
	ACC-6: Proximity of Cycle Route	1	✓	

Histogram references: 1 = Site score, 2 = Regional mean average, 3 = Sub-regional mean average (AGMA), 4 = Newlands Phase 1 programme mean average
 Performance indicator for exemplary activity is based on the 75 percentile score of all sites in the Newlands 1 programme in relation to each benefit category.

Additional Values Assessment: Economic



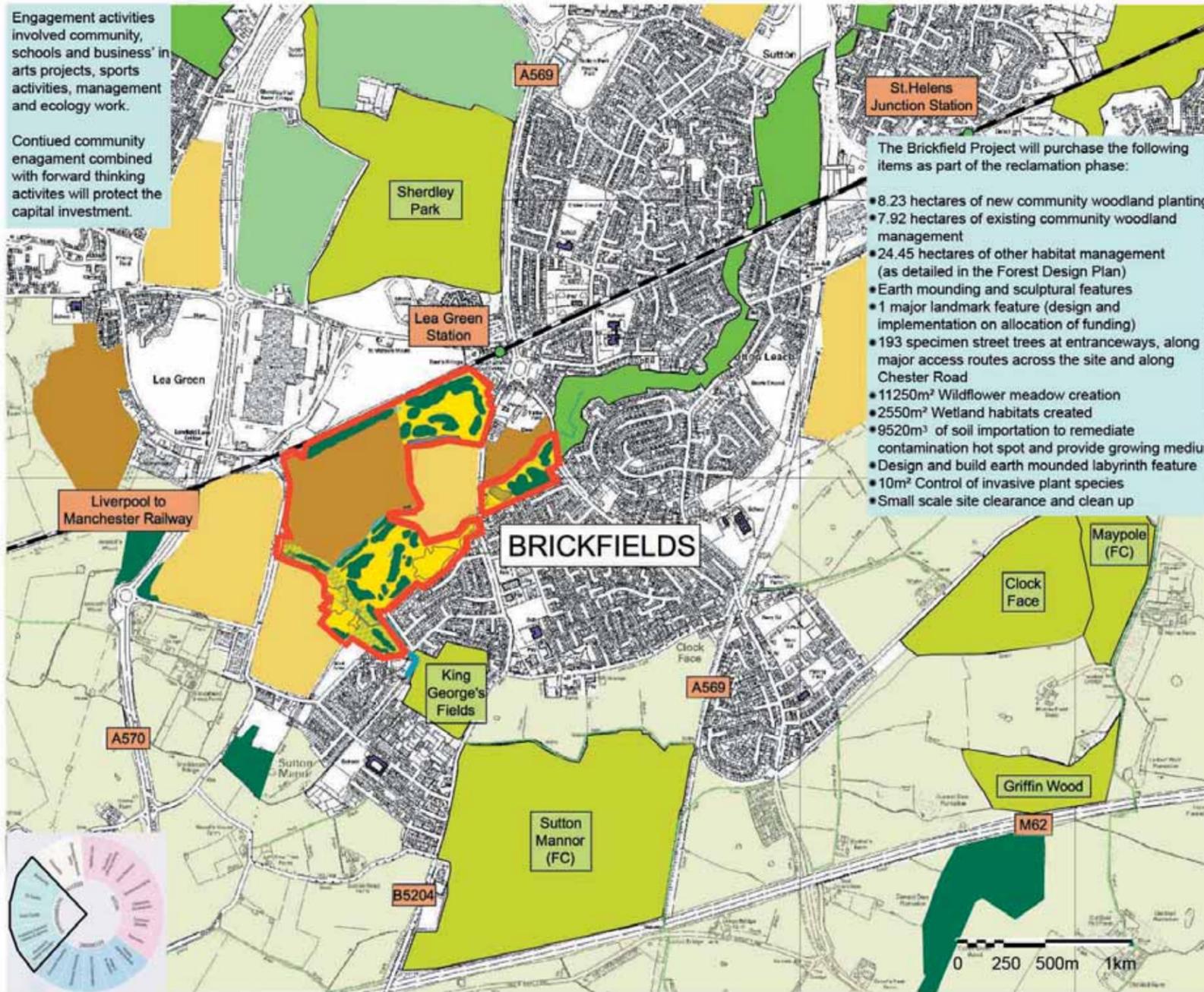
© Crown Copyright. All rights reserved. Forestry Commission. (100025498) 2006



Additional Values Assessment: Environmental

Engagement activities involved community, schools and business' in arts projects, sports activities, management and ecology work.

Continued community engagement combined with forward thinking activities will protect the capital investment.



- The Brickfield Project will purchase the following items as part of the reclamation phase:
- 8.23 hectares of new community woodland planting
 - 7.92 hectares of existing community woodland management
 - 24.45 hectares of other habitat management (as detailed in the Forest Design Plan)
 - Earth mounding and sculptural features
 - 1 major landmark feature (design and implementation on allocation of funding)
 - 193 specimen street trees at entranceways, along major access routes across the site and along Chester Road
 - 11250m² Wildflower meadow creation
 - 2550m² Wetland habitats created
 - 9520m³ of soil importation to remediate contamination hot spot and provide growing medium
 - Design and build earth mounded labyrinth feature
 - 10m² Control of invasive plant species
 - Small scale site clearance and clean up

Environment

The site has two areas of particular nature conservation interest, the area designated as an Site of Community Wildlife Interest (SCWI) and Pendlebury Brook.

The projects will deliver environmental infrastructure improvements along with reclamation woodland planting, community woodland management, habitat management, control of invasive species, earth mounding and sculptural features.

The SCWI is designated due to its acid grassland. Whilst protecting open spaces for the orchids there is a proposed increase in woodland creation.

The disused railway line provides a key habitat for migrating fauna and the site links into wider strategic greenways.

KEY

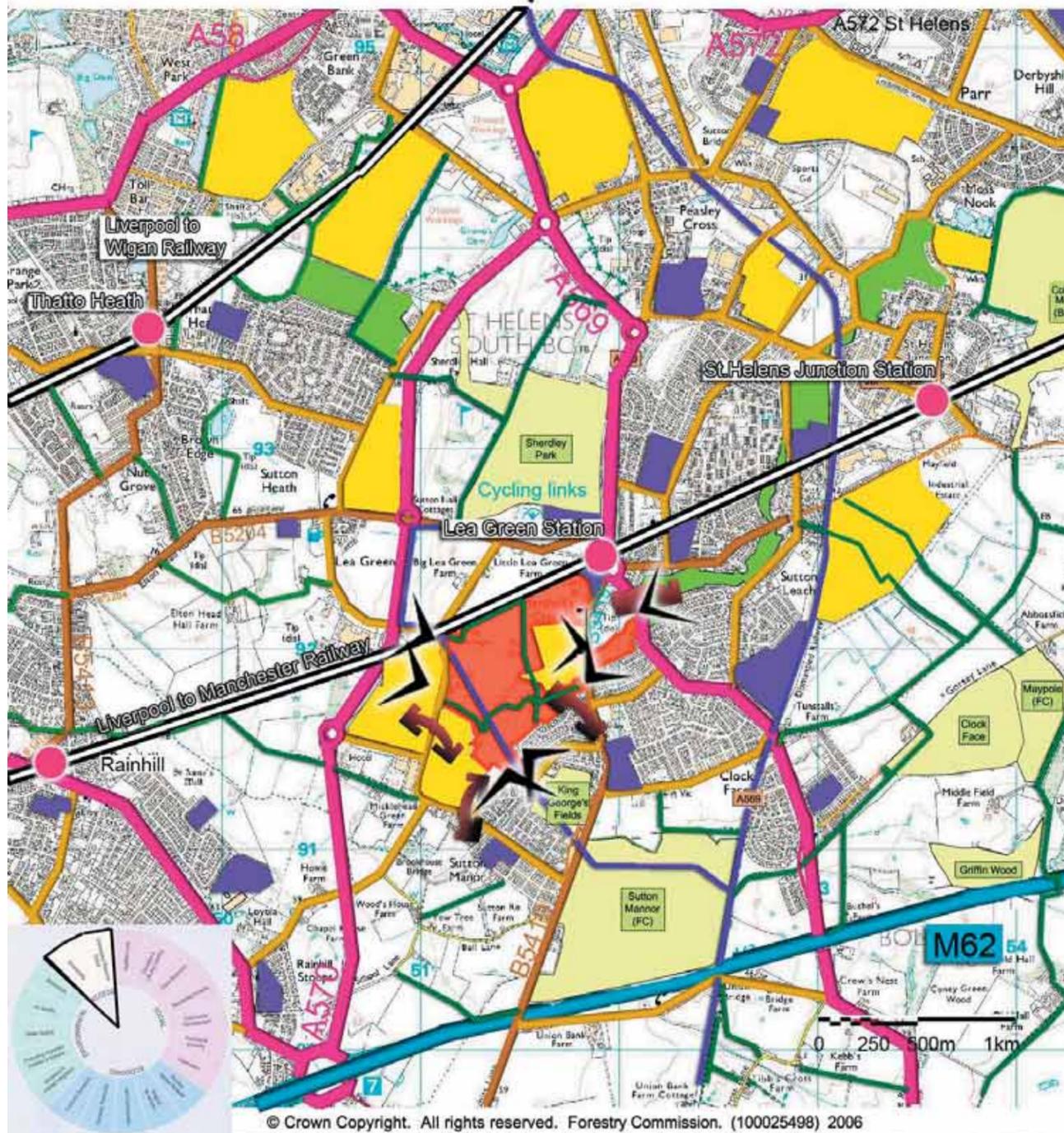
- Site Boundary
- Industrial/business park
- Derelict / disturbed land
- Agricultural land
- Golf course
- Existing woodland
- Public Green Space
- Greenways
- Grass within site

BRICKFIELDS
AVA Plan Environment

Scale: 1:15,000

March 2007

Additional Values Assessment: Access



Access

The footpaths, bridleways, cycleways, greenways and transport corridors join together The Mersey Forest sites around St. Helens. Brickfields forms an important bridging point between Sherdley Park to the north and Sutton Manor to the south, helping to complete this green network.

Improving new walking and cycling facilities will address the local health agenda's desire to open up opportunities for access to employment. The site has potential to be an attractive gateway to visually enhance this major transport route into St. Helens Forest Park.

Buff Quarry is restricted to one access point via Chester Road. Lord St Helens landfill is currently restricted access due to operations, however Daisyfield allows varied levels of access.

Brickfields has undergone a varied process of community engagement involving residents, business' and schools. These ongoing arts projects and sports activities, combined with long term management and ecological aspects of sites will continue to ensure protection of the capital investment into the future.

- KEY**
- Site Boundary
 - Business / Industrial Park
 - Right of Way
 - Proposed Link
 - Entrance Point
 - Green Space Strategic
 - Green Link
 - School
 - Strategic Route

The Brickfield Project will purchase the following items as part of the reclamation phase:

- 8.7km of footpaths and route ways
- 18 signs (threshold, way markers posts and specific signing)
- 13 pedestrian and vehicular access barriers
- 22 permanent orienteering control features and course
- 106m Road corridor improvements along Chester Road

BRICKFIELDS
AVA Plan Access

Scale N.T.S.

March 2007

Part of The Mersey Forest

© Crown Copyright. All rights reserved. Forestry Commission. (100025498) 2006

Costs: NWDA Brickfields project option 2

BRICKFIELDS PROJECT OPTION 2									
Site Name	Phase	Activity	Newlands Business Plan Est Total	Newlands Business Plan Average Cost Per Ha	** Sunk Expenditure	Proposed Expenditure & LTM Option 2	Lifetime Expenditure Option 2	Average Actual Cost per Ha	
Brickfields Project 41 Ha	I	Stage 1 Survey	£61,500	£1,500	£16,554		£16,554	£3,901	
		Stage 2 Survey			£123,539	£19,864	£143,403		
		Design Planning	£32,800	£800	£17,486	£8,054	£25,540		£623
		Community Consultation	£36,900	£900	£31,902	£9,937	£41,839		£1,020
	II	Acquisition & Legal	£51,701	£1,261	£30,648	£39,691	£70,339	£1,716	
	III	Reclamation	£861,000	£21,000	£400	£644,893	£645,293	£15,739	
	IV	Establishment	£262,400	£6,400		£300,017	£300,017	£7,317	
	V	Long Term Management***	£869,487	£21,207		£869,487	£869,487	£21,207	
		*Contingency 2.5%				£23,632	£23,632		
		Total	£2,175,788	£53,068	£220,529	£1,915,575	£2,136,104	£51,523	

* Contingency applies only to Reclamation and Establishment phase and not to sunk costs or Long Term Management

** Sunk Expenditure as of 28th March 2007

*** Long Term Management based on revised figure of £21,207 per Hectare so as to take into account inflationary rise and increased capital inv.

BRICKFIELDS PROJECT								
Site Name	Phase	Activity	*Lifetime Expenditure Option 1	**Lifetime Expenditure Option 2	***Lifetime Expenditure Option 3	****Lifetime Expenditure Option 4	*****Lifetime Expenditure Option 5	
Brickfields Project 41 Ha	I	Stage 1 Survey	£16,554	£16,554	£16,554	£16,554	£16,554	
		Stage 2 Survey	£123,539	£143,403	£143,403	£143,403	£143,403	
		Design Planning	£17,486	£25,540	£25,540	£25,540	£25,540	
		Community Consultation	£31,902	£41,839	£41,839	£41,839	£41,839	
	II	Acquisition & Legal	£30,648	£70,339	£70,339	£70,339	£70,339	
	III	Reclamation	£400	£645,293	£156,638	£722,728	£645,293	
	IV	Establishment		£300,017	£185,927	£336,019	£300,017	
	V	Long Term Management		£869,487	£869,487	£973,825	£1,304,230	
		*Contingency 2.5%		£23,632	£8,564	£26,469	£23,632	
		Total	£220,529	£2,136,104	£1,518,291	£2,356,716	£2,570,847	

NB * Option 1 being based on there being no further investment in the site.

NB ** Option 2 being the preferred Option with costs based on intelligence and estimates from the Brickfields Design Team.

NB *** Option 3 being based on a reduction of the proposed capital investment on the site concentrating on the Economic benefits alone.

NB **** Option 4 being based on a private contractor completing the development of Option 2 with a nominal 12% profit margin.

NB ***** Option 5 being based on there being an extra 50% added to the Long Term Management element of the project.

SUMMARY SCHEDULE OF WORKS RECLAMATION AND ESTABLISHMENT			
Description	Cory	Daisy, Red & Buff	Total (£)
Reclamation Phase			
Civil Works Hard Landscaping	£275,623	£271,529	£547,152
Civil Works Soft Landscaping	£163,434	£82,370	£245,804
Maintenance Reclamation Phase	£24,518	£37,874	£62,392
Sub - total	£463,575	£391,773	£855,349
Establishment Phase			
Planting Works	£79,983	£82,439	£162,422
Seeding Works	£75,164	£618	£75,781
Maintenance Establishment Phase	£123,953	£74,613	£198,567
Forestry Commission Staff			£25,465
Sub - total	£279,099	£157,670	£462,235
SUB TOTAL	£742,674	£549,443	£1,317,584
Contingency			£23,631
Community Projects to protect the Capital Investment			£112,000
Forestry Commission Staff Time, Contract Management, Soil Scientist			£155,998
Outstanding Legal Costs and Site Investigations			£77,546
Sunk Costs			220,529
TOTAL Reclamation & Establishment Cost			£1,907,288

Total project costs

Total project costs

NWDA project funding	£1,266,617
NWDA long term management @ £21,207 / ha	£869,487
NWDA sub-total	£2,136,104
Total ERDF Objective 1 funding	£379,400
Total Biffa funding	£91,271
Total MWDA funding	£20,000
Total Cory funding	£150,000
Total project budget	£2,776,775

Costs

SCHEDULE OF CIVIL WORKS SOFT LANDSCAPING								
Item	Description	Quantity		Total (All sites)	Unit	Total (£)		Total (£)
		Cory	Daisy, Red & Buff			Cory	Daisy, Red & Buff	
Ground Preparation								
1.0	Materials for setting out							
a	Marker pegs for setting out	471	29	500	no.	£660	£41	£700
b	Paints for setting out	30	2	32	no.	£223	£14	£236
	Sub total							£936
2.0 General items								
a	Cut down soft vegetation by handheld mechanised equipment in advance of ground preparation	82,184	5,041	87,224	m2	£2,876	£176	£3,053
b	Cut down scrub vegetation by handheld mechanised equipment in advance of ground preparation on Native woodland planting	9,132	560	9,692	m2	£936	£57	£993
	Sub total							£4,046
3.0 Ground preparation for new woodland and shrub planting								
a	Carry out complete cultivation by excavator of the in situ soil	90,163	2,127	92,290	m2	£27,049	£638	£27,687
b	Remove obstructions greater than 150 mm in dimension from completely cultivated soil	90,163	2,127	92,290	m2	£3,156	£74	£3,230
c	Supply green waste compost	4,508	213	4,721	m3	£36,064	£1,704	£37,768
d	Spread green waste compost and incorporate	90,163	2,127	92,290	m2	£18,033	£425	£18,458
e	Remove obstructions greater than 50 mm in dimension from completely cultivated amended soil	90,163	2,127	92,290	m2	£9,016	£213	£9,229
f	Excavate drainage taps along the lower slope edges of planting compartments	90,163	2,127	92,290	m2	£13,524	£319	£13,844
	Sub total							£110,216
4.0 Ground preparation for new Hedge planting								
a	Carry out complete cultivation by excavator		972	972	lin m		£1,458	£1,458
b	Remove obstructions greater than 150 mm in dimension from completely cultivated colliery spoil		972	972	lin m		£117	£117
c	Supply only general purpose grade soil		502	502	m3		£6,024	£6,024
d	Place 400 mm thickness of imported soil over cultivated fill		972	972	lin m		£1,944	£1,944
e	Remove obstructions greater than 50 mm in dimension from imported soil		972	972	lin m		£39	£39
f	Excavate drainage taps at lowspots along hedgerows		2,004	2,004	lin m		£200	£200
	Sub total							£9,782
5.0 Ground preparation for Specimen Tree planting in avenues to create landscape bunds								
a	Carry out complete cultivation by excavator of the in situ soil	576	765	1,341	lin m	£1,728	£2,295	£4,023
b	Remove obstructions greater than 150 mm in dimension from completely cultivated colliery spoil	576	765	1,341	lin m	£69	£92	£161
c	Supply only general purpose grade soil to meet standard	3,456	4,590	8,046	m3	£41,472	£55,080	£96,552
d	Place 1,000 mm thickness of imported soil over cultivated fill	576	765	1,341	lin m	£8,064	£10,710	£18,774
e	Remove obstructions greater than 50 mm in dimension from imported soil	576	765	1,341	lin m	£161	£214	£376
f	Excavate drainage taps at lowspots along hedgerows	576	765	1,341	lin m	£403	£536	£939
	Sub total							£120,824
	Total					£163,434	£82,370	£245,804

BRICKFIELDS COST ESTIMATES FOR RECLAMATION PHASE									
SCHEDULE OF CIVIL WORKS HARD LANDSCAPING									
Item	Description	Quantity		Total (All sites)	Unit	Total (£)		Total (£)	
		Cory	Daisy, Red & Buff			Cory	Daisy, Red & Buff		
Preliminary Items									
	Erection & removal of secure site compound, toilet, and all associated work, including insurance @5% contract value	n/a			lump sum		£20,653	£26,262	£46,915
	Sub total								£46,915
1.0 Drainage and pollution control measures									
a	Drainage	200	324	524	lin m		£5,108	£8,185	£13,293
b	Concrete fords	39	44	83	no.		£11,479	£13,034	£24,513
	Sub total								£37,806
2.0 Paths and tracks									
a	Cycle paths	1,717	1,582	3,299	lin m		£30,734	£28,318	£59,052
b	Bridle path		1,395	1,395	lin m			£30,690	£30,690
c	Multi User path	2,194	1,381	3,575	lin m		£25,253	£15,896	£41,149
d	Geo Textile membrane for paths and tracks	3,911	4,358	8,269	lin m		£3,911	£4,358	£8,269
e	Construction of mountain bike track	427		427	lin m		£12,810		£12,810
f	Renovate steps		73	73	lin m			£866	£866
	Sub total								£152,836
3.0 General drainage									
	Excavation of reedbed wetland area off line from watercourses including weirs	2,000	550	2,550	m2		£10,000	£2,750	£12,750
	Sub total								£12,750
4.0 Fencing									
	Supply and construction of timber post and 5 bar rail fencing, including timber treatment and concreting in of posts	57		57	m2		£1,425		£1,425
	Sub total								£1,425
5.0 Access									
a	Brick access features at site entrances	3	6	9	no.		£30,000	£60,000	£90,000
b	Horse gates and feature entrances onto Bridle		4	4	no.			£10,000	£10,000
c	Cast resin sculptural benches	9	3	12	no.		£15,750	£5,250	£21,000
d	Sculptural benches, including all formwork and grading	9	3	12	no.		£2,700	£900	£3,600
e	Construct ornamental brick retaining walls	177	107	284	lin m		£17,700	£10,700	£28,400
f	Ornamental brick boundary walls including removal of pallsade fencing		204	204	lin m			£26,520	£26,520
	Sub total								£179,520
6.0 Other									
a	Construct and install orienteering control features	10	12	22	no.		£2,500	£3,000	£5,500
b	Design and build earth mounded labyrinth feature	1	1	2	item		£10,000	£10,000	£20,000
c	Design and build hill top orientation feature	1		1	item		£20,000		£20,000
d	Design and build lazer cut steel bridge	1		1	item		£50,000		£50,000
e	Sign production and installation	2	6	8	item		£4,600	£13,800	£18,400
f	Way markers	5	5	10	item		£1,000	£1,000	£2,000
	Sub total								£115,900
	Total						£275,623	£271,529	£547,152

Costs

SCHEDULE OF SEEDING WORKS									
Item	Description	Quantity			Total (All sites)	Unit	Total (£)		Total (£)
		Cory	Daisy, Red & Buff	Daisy			Cory	Daisy, Red & Buff	
1.0	General items								
a	Overall application by mechanical means of 'foliar acting' herbicide to kill all existing vegetation prior to seedbed preparation.	120,751	550	550	121,301	m2	£2,415	£11	£2,426
	Sub-total						£2,415	£11	£2,426
2.0	Seedbed preparation								
a	Ripping of regraded soils to a depth of 500 mm	120,751	550	550	121,301	m2	£16,905	£77	£16,982
b	Remove obstructions greater than 150 mm in dimension from the ripped soils	120,751	550	550	121,301	m2	£4,830	£22	£4,852
c	Carry out heavy duty seedbed preparation	120,751	550	550	121,301	m2	£12,075	£55	£12,130
d	Remove obstructions greater than 100 mm exposed as a result of discing	120,751	550	550	121,301	m2	£7,245	£33	£7,278
	Sub-total						£41,055	£187	£41,242
3.0	Fertiliser application								
a	Supply and spread mechanically inorganic compound fertiliser	120,751	550	550	121,301	m2	£2,415	£11	£2,426
b	Supply and spread by hand inorganic compound fertiliser	90,163	2,127	2,127	92,290	m2	£2,705	£64	£2,769
	Sub-total						£5,120	£75	£5,195
4.0	Sowing								
a	Supply and mechanically (drilling) Wildflower seed mix	11,250		0	11,250	m2	£2,475		£2,475
b	Supply and sow mechanically (drilling) Butterfly grass and wildflower seed mix	11,245		0	11,245	m2	£2,474		£2,474
c	Supply and sow mechanically (drilling) Conservation grass and wildflower seed mix	5,761		0	5,761	m2	£1,267		£1,267
d	Supply and sow mechanically (drilling) Rough grass seed mix	90,485		0	90,485	m2	£10,858		£10,858
e	Supply and sow by hand Pond grass and wildflower seed mix	2,010	550	550	2,560	m2	£482	£132	£614
f	Supply and sow by hand Woodland grass seed mix	90,163	2,127	2,127	92,290	m2	£9,016	£213	£9,229
	Sub-total						£26,573	£345	£26,918
	Total						£75,164	£618	£75,781

* Taking into account Complementary Funding from ERDF Objective 1, Cory Landfill and Biffaward

SCHEDULE OF WORKS ESTABLISHMENT PHASE MAINTENANCE									
Item	Description	Quantity			Total (All sites)	Unit	Total (£)		Total (£)
		Cory	Daisy, Red & Buff	Daisy			Cory	Daisy, Red & Buff	
1.0	New planting	90,163	13,248		103,411	lin m	£25,827	£13,478	£39,304
2.0	New hedges and avenues	576	1,737		2,313				
3.0	New grassland	120,751	550		121,301	m2	£12,075	£55	£12,130
4.0	Existing grassland	0	100,000		100,000	m2	£0	£10,000	£10,000
5.0	Existing woodland	0	27,700		27,700	m2	£0	£8,310	£8,310
	Sub-total	211,490	143,235		354,725	m2	£37,902	£31,843	£69,744
Description		Quantity			Total	Unit	Total (£)		Total (£)
Item	MAINTENANCE YEAR 2	Cory	Daisy, Red & Buff	(All sites)			Cory	Daisy, Red & Buff	(All sites)
1.0	New planting	90,163	13,248	103,411	lin m		£22,506	£9,801	£32,306
2.0	New hedges and avenues	576	1,737	2,313					
3.0	New grassland	120,751	550	121,301	m2		£12,075	£55	£12,130
4.0	Existing grassland	0	100,000	100,000	m2		£0	£5,000	£5,000
5.0	Existing woodland	0	27,700	27,700	m2		£0	£831	£831
	Sub-total	211,490	143,235	354,725	m2		£34,581	£15,687	£50,267
Description		Quantity			Total	Unit	Total (£)		Total (£)
Item	MAINTENANCE YEAR 3	Cory	Daisy, Red & Buff	(All sites)			Cory	Daisy, Red & Buff	(All sites)
1.0	New woodland planting	90,163	13,248	103,411	lin m		£14,388	£4,593	£18,981
2.0	New hedges and avenues	576	1,737	2,313					
3.0	New grassland	120,751	550	121,301	m2		£7,245	£33	£7,278
4.0	Existing grassland	0	100,000	100,000	m2		£0	£5,000	£5,000
5.0	Existing woodland	0	27,700	27,700	m2		£0	£831	£831
	Sub-total	211,490	143,235	354,725	m2		£21,634	£10,457	£32,090
Description		Quantity			Total	Unit	Total (£)		Total (£)
Item	MAINTENANCE YEAR 4	Cory	Daisy, Red & Buff	(All sites)			Cory	Daisy, Red & Buff	(All sites)
1.0	New woodland planting	90,163	13,248	103,411	lin m		£9,592	£3,062	£12,654
2.0	New hedges and avenues	576	1,737	2,313					
3.0	New grassland	120,751	550	121,301	m2		£7,245	£33	£7,278
4.0	Existing grassland	0	100,000	100,000	m2		£0	£5,000	£5,000
5.0	Existing woodland	0	27,700	27,700	m2		£0	£831	£831
	Sub-total	211,490	143,235	354,725	m2		£16,837	£8,926	£25,763
Description		Quantity			Total	Unit	Total (£)		Total (£)
Item	MAINTENANCE YEAR 5	Cory	Daisy, Red & Buff	(All sites)			Cory	Daisy, Red & Buff	(All sites)
1.0	New woodland planting	90,163	13,248	103,411	lin m		£5,755	£1,837	£7,593
2.0	New hedges and avenues	576	1,737	2,313					
3.0	New grassland	120,751	550	121,301	m2		£7,245	£33	£7,278
4.0	Existing grassland	0	100,000	100,000	m2		£0	£5,000	£5,000
5.0	Existing woodland	0	27,700	27,700	m2		£0	£831	£831
	Sub-total	211,490	143,235	354,725	m2		£13,000	£7,701	£20,702
Total Maintenance Establishment Phase									
Item	Civil Engineering Maintenance Jan 2008 - Dec 2112	27	13.6	41	ha.		£24,518	£37,874	£62,392
Total Maintenance Reclamation Phase									£62,392
Total Maintenance									£260,959

Costs

BRICKFIELDS COST ESTIMATES FOR ESTABLISHMENT PHASE								
SCHEDULE OF PLANTING WORKS								
Item	Description	Quantity		Total	Unit	Total (£)		Total (£)
		Cory	Daisy,Red & Buff	(All sites)		Cory	Daisy,Red & Buff	(All sites)
1.0	Specimen tree planting							
1.1	Supply and pit plant extra heavy standard trees and large containerised conifers incorporation backfill, supply and fitting of underground rootball guying and irrigation systems, plus 'watering in'							
a	Maidenhair tree	18	80	98	no.	£7,560	£33,600	£41,160
b	Colorado spruce	9	29	38	no.	£2,484	£8,004	£10,488
c	Swamp cyprus	15		15	no.	£6,300	£0	£6,300
d	Douglas fir	15	27	42	no.	£3,720	£6,696	£10,416
	Total	57	136	193				
1.2	Firm-up newly planted extra heavy standard trees and large containerised conifers	57	136	193	no.	£154	£367	£521
	Sub-total					£20,218	£48,667	£68,885
2.0	Conservation tree planting mix							
2.1	Supply and notch or pit plant cell grown and container grown trees							
a	English oak	2,406	87	2,492	no.	£1,780	£64	£1,844
b	Downy birch	1,804	65	1,869	no.	£1,173	£42	£1,215
c	Ash	1,203	43	1,246	no.	£866	£31	£897
d	Hazel	1,203	43	1,246	no.	£890	£32	£922
e	Rowan	1,203	43	1,246	no.	£830	£30	£860
f	Wild cherry	1,203	43	1,246	no.	£890	£32	£922
g	Sweet Chestnut	601	22	623	no.	£481	£17	£499
h	Hawthorn	601	22	623	no.	£415	£15	£430
i	Holly	601	22	623	no.	£938	£34	£972
j	Douglas Fir	601	22	623	no.	£391	£14	£405
k	Yew	601	22	623	no.	£571	£21	£592
	Total	12,029	433	12,461				
2.2	Firm-up newly planted trees 2-3 weeks after planting	12,029	433	12,461	no.	£601	£22	£623
	Sub-total					£9,827	£354	£10,181
3.0	Evergreen tree planting mix							
3.1	Supply and notch or pit plant cell grown and container grown trees							
a	Sessile oak	3,962		3,962	no.	£3,090		£3,090
b	Silver birch	3,962		3,962	no.	£2,575		£2,575
c	Field maple	1,981		1,981	no.	£1,486		£1,486
d	European larch	1,981		1,981	no.	£1,090		£1,090
e	Northern pitch pine	1,981		1,981	no.	£1,882		£1,882
f	Douglas fir	1,981		1,981	no.	£1,288		£1,288
g	Beech	990		990	no.	£733		£733
h	Juniper	990		990	no.	£1,139		£1,139
i	Wild service tree	990		990	no.	£773		£773
j	Holly	990		990	no.	£1,545		£1,545

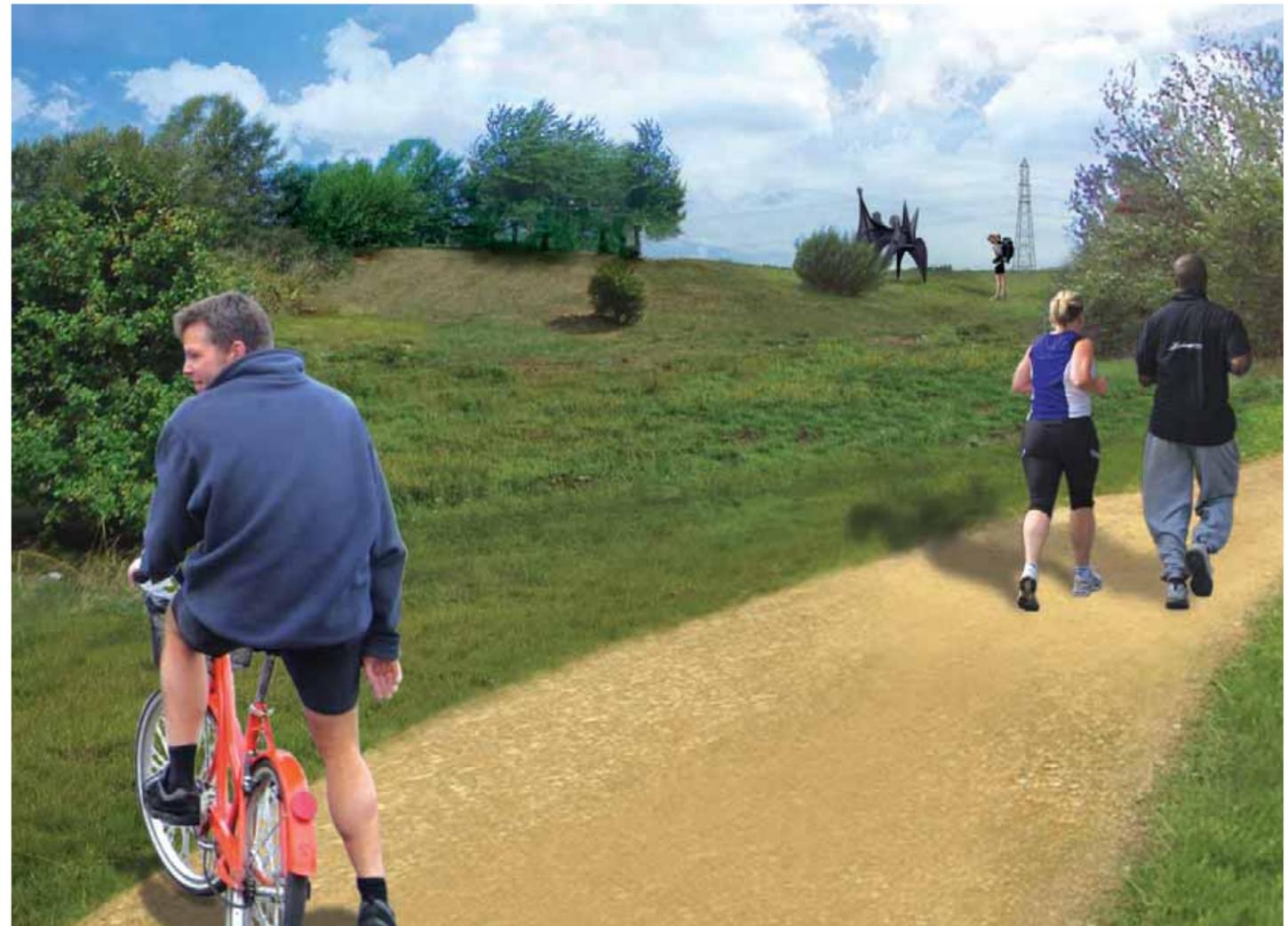
	Total	19,809		19,808				
3.2	Firm-up newly planted trees 2-3 weeks after planting	19,809		19,809	no.	£990		£990
	Sub-total					£16,590		£16,590
4.0	Defensive shrub planting mix							
4.1	Supply and notch or pit plant cell grown and container grown shrubs							
a	Sea buckthorn	154	425	580	no.	£114	£315	£429
b	Hawthorn	154	425	580	no.	£106	£294	£400
c	Dog rose	77	213	290	no.	£56	£153	£209
d	Field rose	116	319	435	no.	£83	£230	£313
e	Blackthorn	116	319	435	no.	£86	£236	£322
f	Common buckthorn	77	213	290	no.	£62	£170	£232
g	Firethorn	39	106	145	no.	£86	£236	£322
h	Barberry	39	106	145	no.	£86	£236	£322
	Total	771	2,127	2,898				
4.2	Firm-up newly planted shrubs 2-3 weeks after planting	771	2,127	2,898	no.	£39	£106	£145
	Sub total					£716	£1,976	£2,692
5.0	Conservation shrub planting mix							
5.1	Supply and pit plant the following container grown shrubs							
a	White dogwood	739		739	no.	£1,234		£1,234
b	Red dogwood	739		739	no.	£1,234		£1,234
c	Purple hazel	739		739	no.	£2,504		£2,504
d	Cotoneaster Buddleia	739		739	no.	£1,234		£1,234
e	Butterfly bush Buddleia	493		493	no.	£936		£936
f	Butterfly bush Buddleia Royal Red	493		493	no.	£936		£936
g	Smoke bush	493		493	no.	£1,670		£1,670
h	Golden Bell bush	493		493	no.	£877		£877
	Total	4,925		4,925				
5.2	Firm-up newly planted shrubs 2-3 weeks after planting	4,925		4,925	no.	£246		£246
	Sub total					£10,869		£10,869
6.0	Hedgerow planting mix							
6.1	Supply and pit plant cell grown and container grown shrubs							
a	Hawthorn			3,645	no.		£2,515	£2,515
b	Hazel			1,093	no.		£809	£809
c	Blackthorn			1,822	no.		£1,312	£1,312
d	Dog rose			547	no.		£394	£394
e	Field rose			547	no.		£394	£394
f	Holly			456	no.		£711	£711
g	Alder buckthorn			456	no.		£365	£365
h	Guelder rose			365	no.		£346	£346
i	Field maple			35	no.		£26	£26
j	Ash			35	no.		£25	£25
k	Crab apple			35	no.		£51	£51
l	Sessile oak			35	no.		£27	£27

Cont. next page

Costs

	Total		9,070	9,070				
6.2	Supply and erect spirally wound tube and single bamboo cane support			9,070	no.		£5,805	£5,805
6.3	Firm-up newly planted shrubs 2-3 weeks after planting			9,070	no.		£454	£454
	Sub total						£13,232	£13,232
7.0	Enhancement tree planting mix							
7.1	Supply and notch or pit plant cell grown and container grown trees							
a	Sessile oak		209	209	no.		£163	£163
b	Ash		209	209	no.		£150	£150
c	Wild cherry		70	70	no.		£51	£51
d	Field maple		70	70	no.		£52	£52
e	Rowan		70	70	no.		£48	£48
f	Red oak		70	70	no.		£56	£56
	Total		695	695				
7.2	Supply and erect premium tree shelter and single timber stake support		695	695	no.		£1,348	£1,348
7.3	Firm-up newly planted shrubs 2-3 weeks after planting		695	695	no.		£42	£42
	Sub total						£1,910	£1,910
8.0	Wetland planting mix							
8.1	Supply and pit plant container grown plants							
a	Water plantain	533	183	716	no.	£853	£293	£1,146
b	Marsh marigold	533	183	716	no.	£853	£293	£1,146
c	Meadow-sweet	533	183	716	no.	£893	£307	£1,200
d	Reed grass	533	183	716	no.	£893	£307	£1,200
e	Yellow flag	533	183	716	no.	£906	£311	£1,217
f	Gypsy-wort	533	183	716	no.	£893	£307	£1,200
g	Creeping jenny	533	183	716	no.	£986	£339	£1,325
h	Yellow loosestrife	533	183	716	no.	£832	£286	£1,117
i	Purple loosestrife	533	183	716	no.	£853	£293	£1,146
j	Water mint	533	183	716	no.	£893	£307	£1,200
k	Reed grass	533	183	716	no.	£893	£307	£1,200
l	Reed	533	183	716	no.	£640	£220	£859
m	Lesser spearwort	533	183	716	no.	£693	£238	£931
n	Cat's-tail	533	183	716	no.	£800	£275	£1,074
o	Brooklime	533	183	716	no.	£853	£293	£1,146
	Total	7,995	2,745	10,740		£12,733	£4,372	£17,105
	Sub total					£12,733	£4,372	£17,105
9.0	Mulching							
a	Supply, distribute and spread mulch in a 1,200 mm diameter of extra heavy standards	57	136	193	m2	£332	£792	£1,123
b	Supply, distribute and spread mulch in a 1,200 mm diameter of semi-mature trees	2,092		2,092	m2	£5,523		£5,523
c	Supply, distribute and spread mulch to cell grown and container grown shrubs in Amenity shrub planting mix	771	2,127	2,898	m2	£2,398	£6,615	£9,013
	Sub total					£8,252	£7,407	£15,659
10.0	Exisiting Woodland Management							
a		1.46	6.46	7.92	ha.	£777	£4,522	£5,299
	Sub total					£777	£4,522	£5,299
	Total					£79,983	£82,439	£162,422

Project visualisations



Project visualisations



Project visualisations



Project partners

Supported by



MERSEY BASIN CAMPAIGN



communityforestsnorthwest



Contact

Chris Waterfield
Newlands Project Officer
The Forestry Commission
Area Office Conservancy, Linmere
North West England
Delamere
Northwich
Cheshire
CW8 2JD