

SF3386 | 271 Cliffe Lane, Gomersal

BIODIVERSITY NET GAIN ASSESSMENT

August 2023 | For Planning
REVISION B

SMEEEDEN FOREMAN

Landscape Architecture • Ecology • Arboriculture

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Quality Assurance

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1.0 INTRODUCTION

- 1.1 Smeeden Foreman Limited has been commissioned by Quarters Gomersal to produce a Biodiversity Net Gain (BNG) assessment for their site at 271 Cliffe Lane, Gomersal (central grid reference SE 20316 26343), hereafter referred to as the 'site'.
- 1.2 This report outlines details of an initial BNG assessment which has been completed for the above scheme in order to demonstrate whether it is possible for current proposals to achieve positive gains in biodiversity through use of the DEFRA Biodiversity v3.1 Metric. Site proposals are for 87No. residential units, 21No. visitor parking bays and associated soft landscaping.
- 1.3 This Biodiversity Net Gain Assessment was originally based on version 3.1 of the DEFRA Biodiversity Metric. This version has since been superseded by version 4.0, released in March 2023. The accepted guidance (Panks *et al*, 2022a,b) states "*it is important for the same version of the Metric to be used consistently throughout all elements and stages of a project, including for calculation any off-site provision, to ensure consistency and comparability*", therefore the value of habitats on and off-site, pre and post development have been run through version 3.1 as initially used.
- 1.4 The principle of 'net gain' is set out in the National Planning Policy Framework (NPPF July 2021):
- Paragraph 174: *'Planning policies and decisions should contribute to and enhance the natural and local environment by:...*
*d) minimising impacts on and providing **net gains for biodiversity**, including by establishing coherent ecological networks that are more resilient to current and future pressures;'*
- Paragraph 179: *'To protect and enhance biodiversity and geodiversity, plans should:*
*b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable **net gains for biodiversity.**'*
- Paragraph 180: *When determining planning applications, local planning authorities should apply the following principles:*
*d) development whose primary objective is to conserve or enhance biodiversity be supported; while opportunities to incorporate biodiversity improvements in and around developments should be integrated as part of their design, especially where this can secure measurable **net gains for biodiversity** or enhance public access to nature where this is appropriate.*
- 1.5 The National Planning Policy Framework (NPPF) states that where development can ensure measurable net gains for biodiversity this should be encouraged. At the time of assessment, the requirement for developers to secure a minimum biodiversity net gain of 10% was progressing through the legislative process within the Environment Bill, this become mandatory as of 12th February 2024.

- 1.6 The Kirklees Local Plan policy LP30 (Biodiversity and Geodiversity) states development proposals should provide biodiversity net gains through good design including specific habitat creation and biodiversity enhancements. *The Biodiversity Net Gain Technical Advice Note* (June 2021) also provides guidance for all proposals and states as per LP30 development proposals will be required to:
- (i) Result in no significant loss or harm to biodiversity in Kirklees through avoidance, adequate mitigation or, as a last resort, compensatory measures secured through the establishment of a legally binding agreement;
 - (ii) Minimise impact on biodiversity and provide net biodiversity gains through good design by incorporating biodiversity enhancements and habitat creation where opportunities exist;
 - (iii) Safeguard and enhance the function and connectivity of the Kirklees Wildlife Habitat Network at a local and wider landscape-scale unless the loss of the site and its functional role within the network can be fully maintained or compensated for in the long term;
 - (iv) Establish additional ecological links to the Kirklees Wildlife Habitat Network where opportunities exist; and
 - (v) Incorporate biodiversity enhancement measures to reflect the priority habitats and species identified for the relevant Kirklees Biodiversity Opportunity Zone.
- 1.7 It is understood that a Biodiversity Net Gain design should improve the extent or condition of biodiversity affected by a project. It should not result in lost or damaged features being replaced by features of lower biodiversity value. The mitigation hierarchy principle of avoid – minimise – remediate – compensate should be followed within the design process with irreplaceable features retained.

2.0 THE SITE

- 2.1 The site is located on the outskirts of the village of Gomersal approximately 6.7km south-east of Bradford Centre. It occupies an area of approximately 3.7 hectares and predominantly comprises areas of modified grassland with pockets of blackthorn scrub, introduced shrub, mixed scrub and ruderal/ephemeral vegetation, with an area of bare ground, a pond, buildings and areas of developed land. The site boundaries are comprised of native hedgerows, lines of trees and native hedgerow associated with a ditch, refer to *Figure 01* (appended).
- 2.2 The site is bound to the north by Ferrand Lane, beyond which lies agricultural farmland, to the east and south are built-up residential areas, and to the west is a small number of residential homes and gardens with agricultural farmland beyond these.
- 2.3 The wider landscape comprises agricultural land to the west, east and north with areas of woodland to the north-west, and residential areas to the south.
- 2.4 Ferrand Lane adjacent to the northern boundary of the proposals site is included within the Kirklees Wildlife Habitat Network with a small spur into the proposals site, along a field boundary in the centre of the site, also included within the Network (refer to *Appendix 01*). The Kirklees Wildlife Habitat Network is a network of areas identified by West Yorkshire Ecology Service which includes designated sites and habitat links within the district. It is used to highlight areas where development proposals should aim to expand and enhance the functionality of the existing links.

3.0 BASELINE ASSESSMENT

- 3.1 The DEFRA Biodiversity Metric v3.1 has been used to carry out the calculation with reference made to *The Biodiversity Metric 3.1 User Guide* (Panks *et al.* April, 2022a) and *Technical Supplement* (April, 2022b). The Metric has been developed by Natural England, the Department for Environment, Food and Rural Affairs (DEFRA) and the Environment Agency with input from various environmental NGOs, developers, councils and other interested parties.
- 3.2 The site was subject to a Preliminary Ecological Assessment in March 2016 (Smeeden Foreman, 2019), with habitat types and key species presented in accordance with the Phase 1 Habitat format proposed by the Joint Nature Conservation Committee (JNCC, 2010). An updated walkover was completed on 3rd November 2022 with habitats mapped to the UK Habitats Classification System (*Version 1.1 UKHabs*, September 2010) to inform the BNG Defra Metric.
- 3.3 The walkover surveys were completed by Senior Ecologist Jonathan Siberry and Assistant Ecologist Sarah Hoyle on 3rd November 2022, with the original phase 1 habitat survey undertaken by Katie Lawrence on 10th March 2016. The walkover survey was undertaken during the sub-optimal survey season for recording flowering plants, however, it is not expected to have a significant impact upon the results of the survey as the majority of the site is subject to regular grazing.
- 3.4 For the purposes of this BNG assessment, the site habitat baseline has been determined in accordance with the UK Habitat Classification System v1.1 (Butcher *et al.*, 2020a; 2020b) using ecological information obtained from the initial site survey and a review of the condition assessment sheets included within the Natural England technical supplement (JP039, July 2021). Refer to Appendix 04 of *SF3386_Ecological Impact Assessment_271 Cliffe Lane, Gomersal_April 2023_REV D* (Smeeden Foreman, 2024) for full details of the Condition Assessments carried out and habitat photographs.
- 3.5 Values for distinctiveness are pre-set within the Metric spreadsheet; strategic significance has been allocated as either high, medium or low, depending on the location of the habitat either within, adjacent to or outside an area of strategic significance (respectively), with reference to Table 5-4 of the Biodiversity Metric v3.1 User Guide (Panks *et al.* 2022b). Refer also to paragraph 1.5 in section 1.0 of this report for relevant local policies used to inform this allocation of strategic significance.
- 3.6 Habitats on site comprise the following when assessed using the UKHabs classification system. This system includes the use of secondary (2°) codes to provide further information on the habitat parcels identified, where relevant:

Area-based Habitats

- **Reference 1:** g4 – Modified grassland
- **Ref. 2:** g4 – Modified grassland
- **Ref. 3:** g4 – Modified grassland

- **Ref. 4:** g4 – Modified grassland
- **Ref. 6:** u 231 – Urban (2° 231 – vegetated garden)
- **Ref. 7:** h3h – Mixed scrub
- **Ref. 8:** h3a – Blackthorn scrub
- **Ref. 9:** r 39 – Pond (Non-priority habitat) (2° 39 – freshwater – man-made)
- **Ref. 10:** s 17 – Sparsely vegetated land (2° 17 – ruderal/ephemeral)
- **Ref. 11:** u 73 – Urban (2° 73 – bare ground)
- **Ref. 12:** u 1160 – Urban (2° 1160 – introduced shrub)
- **Ref. 13:** u1b – Developed land; sealed surface

Individual Trees

- **T1:** u 1171 – Urban (2° 1171 – Mature tree)
- **T2:** u 1172 – Urban (2° 1172 – Young Tree)
- **T3:** u 1171 – Urban (2° 1171 – Mature tree)
- **T4:** u 1171 – Urban (2° 1171 – Mature tree)
- **T5:** u 1171 – Urban (2° 1171 – Mature tree)
- **T9:** u 1170 – Urban (2° 1170 – Tree)
- **T17:** u 1170 – Urban (2° 1170 – Tree)
- **T28:** u 1170 – Urban (2° 1170 – Tree)
- **T29:** u 1171 – Urban (2° 1171 – Mature tree)
- **T30:** u 1171 – Urban (2° 1171 – Mature tree)
- **T32:** u 1171 – Urban (2° 1171 – Mature tree)
- **T33:** u 1171 – Urban (2° 1171 – Mature tree)

- **T34:** u 1171 – Urban (2° 1171 – Mature tree)
- **T36:** u 1170 – Urban (2° 1170 – Tree)

Linear Features

- **Ref. H2:** h2b – native hedgerow
- **Ref. H3:** h2b 191– native hedgerow associated with a ditch (2° 191 – ditch)
- **Ref. LT1:** w1g6 – line of trees
- **Ref. LT2:** w1g6 – line of trees
- **Ref. LT3:** w1g6 – line of trees

3.7 Area-based habitat Ref. 5 and Linear Features Ref. H1 are not included in the assessment due to being part of a wider survey area.

3.8 Details of the on-site habitats are summarised in Table 01 along with the measurements for each habitat type. Baseline habitats have been mapped and measured using scaled GIS drawings (*Figure 02*). Please refer to *Appendix 04* of the Ecological Impact Assessment (Smeeden Foreman, 2023) for a summary of the condition assessment for each habitat.

Table 01: Site Habitats Baseline Summary

Ref No.	UKHAB Habitat Type	UKHAB Code	Area (hectares) / Length (km)	Distinctiveness (pre-set)	Condition	Strategic significance	Justification/notes
Area-based Habitats							
1	Grassland – modified grassland, low distinctiveness	g4	0.0914	Low	Poor	Area / compensation not in local strategy / no local strategy	Condition sheet 5 – Grassland of low distinctiveness Passes 4 of 7 criteria, failures due to low species diversity, evidence of physical damage and lack of bare ground
2	Grassland – modified grassland, low distinctiveness	g4	1.3838	Low	Poor	Location ecologically desirable but not in local strategy	Condition sheet 5 – Grassland of low distinctiveness Passes 6 of 7 criteria, fails essential criterion 1 with low species diversity
3	Grassland – modified grassland, low distinctiveness	g4	0.2259	Low	Poor	Location ecologically desirable but not in local strategy	Condition sheet 5 – Grassland of low distinctiveness Passes 6 of 7 criteria, fails essential criterion 1 with low species diversity

Ref No.	UKHAB Habitat Type	UKHAB Code	Area (hectares) / Length (km)	Distinctiveness (pre-set)	Condition	Strategic significance	Justification/notes
4	Grassland – modified grassland, low distinctiveness	g4	1.6536	Low	Poor	Location ecologically desirable but not in local strategy	Condition sheet 5 – Grassland of low distinctiveness Passes 6 of 7 criteria, fails essential criterion 1 with low species diversity
6	Urban – vegetated garden	u 231	0.0034	Low	N/A	Area / compensation not in local strategy / no local strategy	No condition assessment required
7	Heathland and scrub – mixed scrub	h3h	0.0884	Medium	Poor	Formally identified in local strategy	Condition sheet 19 – Scrub Passes 2 of 5 criteria, failures due to the, lack of a well-developed edge and lack of clearings or glades present within the scrub
8	Heathland and scrub – blackthorn scrub	h3a	0.0249	Medium	Poor	Formally identified in local strategy	Condition sheet 19 – Scrub Passes 1 of 5 criteria, failures due to low number of woody species present, lack of well-developed edge and lack of clearing or glades present within the scrub.
9	Rivers and lakes – pond (Non-priority habitat)	r 39	0.0113	Medium	Moderate	Area / compensation not in local strategy / no local strategy	Condition sheet 17 – Pond Passes 6 of 9 criteria, failures due to poor water quality, lack of semi-natural habitat for at least 10m from the pond edge and lack of aquatic vegetation.
10	Sparsely vegetated land – ruderal ephemeral	s 17	0.003	Low	Poor	Area / compensation not in local strategy / no local strategy	Condition sheet 21 – Urban Passes 1 of 3 criteria, failures due to a lack of a diverse range of native flowering plant species.
11	Urban – bare ground	u 73	0.0024	Low	Poor	Location ecologically desirable but not in local strategy	Condition sheet 21 – Urban Passes 0 of 3 criteria, failures due to lack of varied vegetation structure and a lack of a diverse range of native flowering plant species.
12	Urban – introduced shrub	u 1160	0.001	Low	N/A	Area / compensation not in local strategy / no local strategy	No condition assessment required
13	Urban – developed land; sealed surface	u1b	0.0648	V. Low	N/A	Area / compensation not in local strategy / no local strategy	No condition assessment required

Ref No.	UKHAB Habitat Type	UKHAB Code	Area (hectares) / Length (km)	Distinctiveness (pre-set)	Condition	Strategic significance	Justification/notes
14	Urban – developed land; sealed surface	u1b	0.04	V. Low	N/A	Area / compensation not in local strategy / no local strategy	Buildings B1-8 No condition assessment required
15	Urban – tree	u 1170	0.03662496	Medium	Moderate	Formally identified in local strategy	T17 – medium tree Condition sheet 22 – Urban trees Passes 4 of 6 criteria, failures due to the tree not being veteran or mature and a lack of microhabitats for birds, mammals and insects.
16	Urban – mature tree	u 1171	0.15283008	Medium	Moderate	Formally identified in local strategy	T1, T4 – two large trees Condition sheet 22 – Urban trees Passes 4 of 6 criteria, failures due to the trees not being a native species and a lack of microhabitats for birds, mammals and insects.
17	Urban – young tree / Urban – mature tree	u 1172 / u 1171	0.1894	Medium	Good	Formally identified in local strategy	T2, T3, T34 – one medium tree, two large trees Condition sheet 22 – Urban trees Passes 5 of 6 criteria, failures due to the tree not being mature or veteran (T2), the tree not being a native species (T3) and a lack of microhabitats for birds, mammals and insects (T34).
18	Urban – mature trees	u 1171	0.113	Medium	Good	Location ecologically desirable but not in local strategy	T29, T30, T32, T33 – one medium tree, three large trees Condition sheet 22 – Urban trees T29 passes 6 of 6 criteria, T30 passes 5 of 6 criteria, failures due to the tree not being a native species.
19	Urban – tree	u 1170	0.0081	Medium	Moderate	Location ecologically desirable but not in local strategy	T31, T36 – two small trees Condition sheet 22 – Urban trees Passes 4 of 6 criteria, failures due to the tree not being mature or veteran and a lack of microhabitats for birds, mammals and insects.
20	Urban – mature tree / Urban – tree	u 1171 / u 1170	0.113	Medium	Moderate	Formally identified in local strategy	T5, T9 – one medium tree, one large tree Condition sheet 22 – Urban trees Passes 3 of 6 criteria, failures due to evidence of anthropogenic activities impacting on the tree, lack of microhabitats for birds, mammals, and less than 20% of the tree canopy area is oversailing vegetation beneath.
21	Urban – tree	u 1170	0.0366	Medium	Moderate	Location ecologically desirable but not in local strategy	T28 – one medium tree Condition sheet 22 – Urban trees Passes 4 of 6 criteria, failures due to the tree not being veteran or mature and a lack of microhabitats for birds, mammals and insects.
22	Urban – tree	u 1171	0.1528	Medium	Good	Location ecologically desirable but not in local strategy	T32, T33 – two large trees Condition sheet 22 – Urban Trees T33 passes 6 of 6 criteria, T32 passes 5 of 6 criteria, failures due to the tree providing a lack of microhabitats for birds, mammals and insects.
Linear-based Habitats							

Ref No.	UKHAB Habitat Type	UKHAB Code	Area (hectares) / Length (km)	Distinctiveness (pre-set)	Condition	Strategic significance	Justification/notes
H2	Native hedgerow	h2b	0.062	Low	Good	Formally identified in local strategy	Condition sheet 8 – Hedgerow Passes 7 of 8 criteria – failure due to presence of sub-optimal perennial vegetation.
H3	Native hedgerow associated with a ditch	h2b 191	0.202	Medium	Good	Formally identified in local strategy	Condition sheet 8 – Hedgerow Passes 6 of 8 criteria, failures due to gaps within hedge canopy and the presence of sub-optimal perennial vegetation
LT1	Line of trees	w1g6	0.077	Low	Moderate	Formally identified in local strategy	Condition sheet 15 – Line of Trees Passes 3 of 5 criteria, failures due to the lack of mature or veteran trees and the lack of an undisturbed naturally vegetated strip on both sides of the line of trees.
LT2	Line of trees	w1g6	0.099	Low	Poor	Location ecologically desirable but not in local strategy	Condition sheet 15 – Line of Trees Passes 2 of 5 criteria, failures due to gaps within the canopy, the lack of mature or veteran trees and the lack of an undisturbed naturally vegetated strip on both sides of the line of trees.
LT3	Line of trees	w1g6	0.016	Low	Poor	Area / compensation not in local strategy / no local strategy	Condition sheet 15 – Line of Trees Passes 2 of 5 criteria, failures due to less than 75% of the trees being native, the lack of mature or veteran trees and the lack of an undisturbed naturally vegetated strip on both sides of the line of trees.

3.9 The above data has been used to populate the corresponding Metric Calculation Tool (*SF3386 Biodiversity Metric 3.1 Calculation Tool_REV H, September 2024*), refer to worksheet **A-1 Site Habitat Baseline** and **B-1 Site Hedge Baseline**.

3.10 On-site baseline units calculated within the Metric equate to a total of **17.70 habitat units** for area-based habitats and **3.82 hedgerow units**.

4.0 DEVELOPMENT PROPOSALS

- 4.1 Landscape proposals for the site have been prepared by PWP Design Ltd (refer to *Appendix 02: Outline Landscape Masterplan & Specification (PWP 752 002 Revision 04)*). Proposals include the construction of eighty-seven residential units, twenty-one visitor parking bays and associated soft landscaping. In addition to retained hedgerows and trees, areas of public open space are to incorporate various elements including mixed native hedgerows, native tree/shrub planting, species rich meadow seed mixes, evergreen hedging, turf or ground cover planting within gardens. A naturalised LEAP provision is to be integrated into the POS incorporating materials including boulders and logs which may offer some opportunities for biodiversity. Proposed road verges to be sown with flowering lawn mixes promoting foraging resources for invertebrates. A landscape buffer of native tree and understorey planting to the southern boundary serves to provide screening between new and existing residential gardens and function as a new green corridor. Bulb planting is proposed for ornamental purposes, with specifications to include native bluebell *Hyacinthoides non-scripta*. Full details of planting specifications can be referred to within the landscaping schedules provided by PWP (drawing 752 002 Revision 04).
- 4.2 These proposals form the basis for post-development habitat retention and creation / enhancement calculations, calculated through GIS / CAD with measurements provided by PWP (*Appendix 02*), and have been used to inform the Metric. Refer to the following worksheets (*SF3386 Biodiversity Metric 3.1 Calculation Tool, REV H, September 2024*) with corresponding Assessor comments:
- A-2 Site Habitat Creation
 - B-2 Site Hedge Creation
- 4.3 Use of Metric v3.1 indicates that a net gain in respect to habitat areas is likely to be achieved with the proposals scheme, with an indicated biodiversity gain of **1.84 habitat units** (equating to 10.42% net change) and **1.34 linear hedgerow units** (equating to 35.10% net change), refer to Table 02 below for headline results as shown in the metric.

Table 02: Headline Results – Metric Calculation Tool

271 Cliffe Lane, Gomersal		Return to results menu
Headline Results		
On-site baseline	<i>Habitat units</i>	17.70
	<i>Hedgerow units</i>	3.82
	<i>River units</i>	0.00
On-site post-intervention <small>(Including habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	19.54
	<i>Hedgerow units</i>	5.16
	<i>River units</i>	0.00
On-site net % change <small>(Including habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	10.42%
	<i>Hedgerow units</i>	35.10%
	<i>River units</i>	0.00%
Off-site baseline	<i>Habitat units</i>	0.00
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
Off-site post-intervention <small>(Including habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	0.00
	<i>Hedgerow units</i>	0.00
	<i>River units</i>	0.00
Total net unit change <small>(including all on-site & off-site habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	1.84
	<i>Hedgerow units</i>	1.34
	<i>River units</i>	0.00
Total on-site net % change plus off-site surplus <small>(including all on-site & off-site habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	10.42%
	<i>Hedgerow units</i>	35.10%
	<i>River units</i>	0.00%
Trading rules Satisfied?	Yes ✓	

5.0 SUMMARY

- 5.1 The Kirklees Local Plan policy LP30 (Biodiversity and Geodiversity) states development proposals should provide biodiversity net gains through good design including specific habitat creation and biodiversity enhancements. *The Biodiversity Net Gain Technical Advice Note* (June 2021) also provides guidance for all proposals on how to encourage gains in biodiversity within development schemes within Kirklees.
- 5.2 Units obtained for the site post-development, based on retained habitats and habitat creation included within the landscape proposals (*Appendix 02*) indicate that a net gain in respect to habitat areas is likely to be achieved with the current scheme with **a potential biodiversity net gain of 1.84 habitat units (+10.42% net change)**. **Potential gains of 1.34 hedgerow units (+35.10% net change)** are also considered likely.
- 5.3 Proposals include the construction of eighty-seven residential units, twenty-one visitor parking bays and associated soft landscaping. In addition to retention of primary boundary habitats, the landscaping scheme incorporates a range of mixed native planting, including provision of buffer planting to the southern boundary and wildflower grassland within areas of POS to the north.
- 5.4 To date, the Metric does not accommodate biodiversity enhancements with respect to species and biodiversity net gains attributed to these enhancements are not reflected within the measurable results obtained from the Metric. A bat roost has been confirmed within the residential property in the south-west corner of site, see *SF3386_Ecological Impact Assessment_271 Cliffe Lane, Gomersal_April 2023_REV E* (Smeeden Foreman, 2024). Inclusion of bat boxes, bird boxes and hedgehog highways have been recommended within the Ecological Impact Assessment (Smeeden Foreman, 2024) in line with NPPF considerations. Mitigation with respect to species offers biodiversity gains within the site, aiming to provide roosting, breeding and sheltering opportunities for wildlife in conjunction with on-site habitat provision, promoting connectivity across the development and contributing to the local green infrastructure network.
- 5.5 The retention of existing habitats and habitat creation across the site will aim to maintain connectivity to the adjacent Kirklees Habitat Network and provide opportunities for new and existing local wildlife populations.
- 5.5.1 Finalised landscape proposals should be implemented in accordance with an appropriate landscape specification and Construction Environmental Management Plan: Biodiversity (CEMP: Biodiversity) which will detail measures to avoid accidental impacts on retained habitats. Commitment to long term future management of the site will be required to achieve the habitat conditions aimed for and should be undertaken in accordance with a site-specific Biodiversity and Ecological Management Plan (BEMP) or Biodiversity Net Gain Plan (BNGP).

6.0 REFERENCES

Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2020a) *The UK Habitat Classification User Manual Version 1.1* at <http://ukhab.org>

Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2020) *UK Habitat Classification– Habitat Definitions V1.1* at <http://ukhab.org>

Kirklees Council (2021). *Biodiversity Net Gain Technical Advice Note June 2021*. Available online at: <https://www.kirklees.gov.uk/beta/planning-applications/pdf/biodiverstiy-net-gain-technical-advice-note.pdf> [Accessed June 2023].

Panks, S., White, N., Newsome, A., Nash, M., Potter, J., Heydon, M., Mayhew, E., Alvarez, M., Russell T., Cashon, C., Goddard, F., Scott, S.H., Heaver, M, H. Scott, S.J., Treweek, J., Butcher, B., and Stone, D., (2022a). *Biodiversity metric 3.1: Auditing and accounting for biodiversity – Technical Supplement*. Natural England. Published April 2022.

Panks, S., White, N., Newsome, A., Nash, M., Potter, J., Heydon, M., Mayhew, E., Alvarez, M., Russell T., Cashon, C., Goddard, F., Scott, S.H., Heaver, M, H. Scott, S.J., Treweek, J., Butcher, B., and Stone, D., (2022b). *Biodiversity metric 3.1: Auditing and accounting for biodiversity – User Guide*. Natural England. Published April 2022.

Edwards J, Knight M, Taylor S & Crosher I. E (May 2020) ‘Habitat Networks Maps, User Guidance v.2’, Natural England.

Smeeden Foreman (2023) *SF3386 271 Cliffe Lane, Gomersal: Ecological Impact Assessment_REV E*, Issued January 2024.

FIGURES

Figure 01: Site Location Plan Showing Red Line Site Boundary and Blue Line Survey Boundary

Figure 02: UKHAB Baseline Habitat Plan

FIGURE 01: SITE LOCATION PLAN SHOWING RED LINE SITE BOUNDARY AND BLUE LINE SURVEY BOUNDARY



FIGURE 02: UKHAB BASELINE HABITAT PLAN

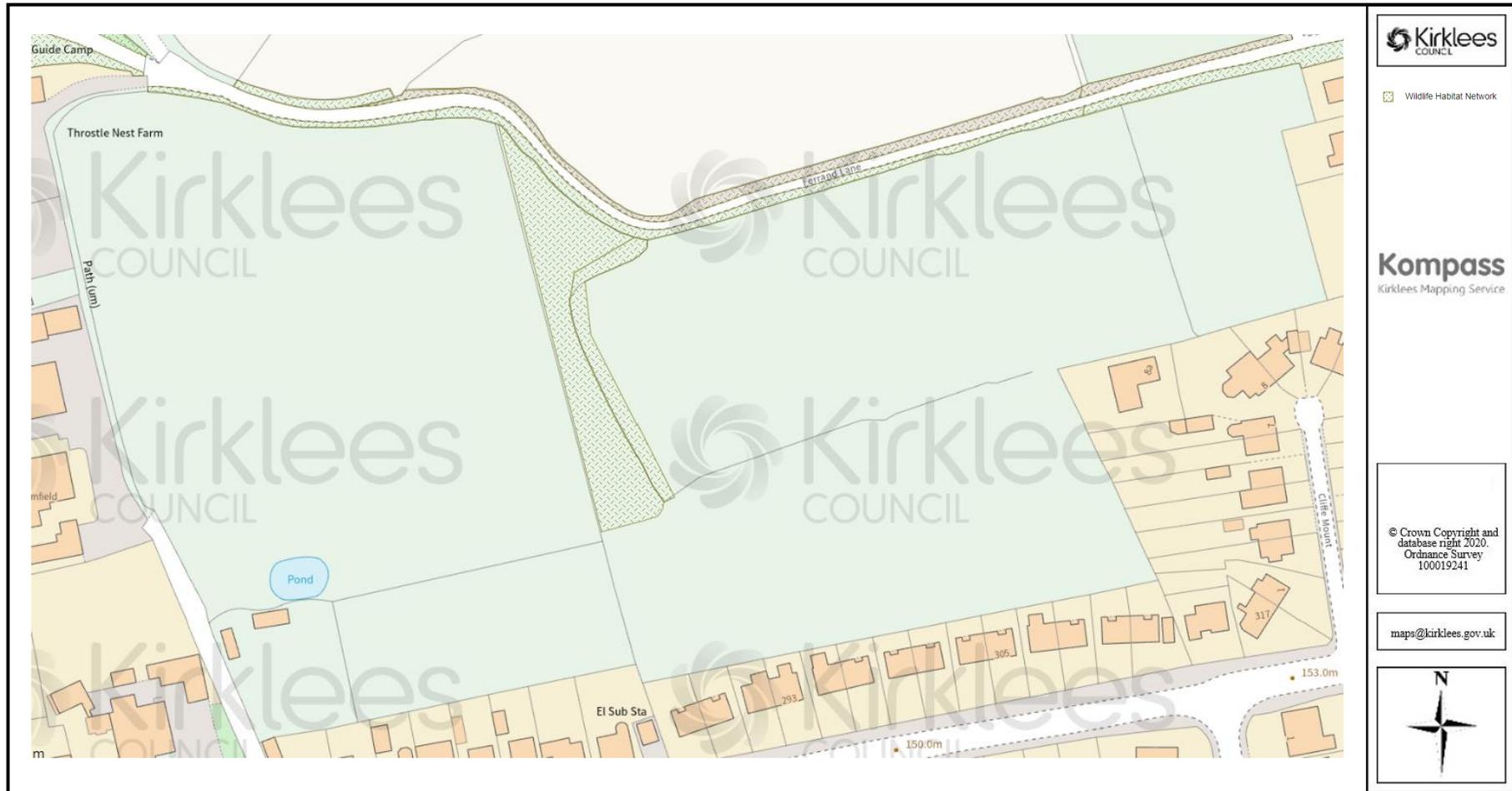


APPENDICES

Appendix 01: Kirklees Wildlife Habitat Network

Appendix 02: Outline Landscape Masterplan & Specification (PWP 752 002 Revision 04)

APPENDIX 01: KIRKLEES WILDLIFE HABITAT NETWORK



APPENDIX 02: OUTLINE LANDSCAPE MASTERPLAN & SPECIFICATION (PWP 752 002 REVISION 04)



SOFTWARES SPECIFICATION NOTES

1. The software used for the production of this drawing is AutoCAD 2021. All drawings shall be saved in DWG format. The drawing shall be saved in the following format: PWP_752_002_04.dwg. The drawing shall be saved in the following format: PWP_752_002_04.dwg. The drawing shall be saved in the following format: PWP_752_002_04.dwg.

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3. The software used for the production of this drawing is AutoCAD 2021. All drawings shall be saved in DWG format. The drawing shall be saved in the following format: PWP_752_002_04.dwg. The drawing shall be saved in the following format: PWP_752_002_04.dwg. The drawing shall be saved in the following format: PWP_752_002_04.dwg.

4. The software used for the production of this drawing is AutoCAD 2021. All drawings shall be saved in DWG format. The drawing shall be saved in the following format: PWP_752_002_04.dwg. The drawing shall be saved in the following format: PWP_752_002_04.dwg. The drawing shall be saved in the following format: PWP_752_002_04.dwg.

5. The software used for the production of this drawing is AutoCAD 2021. All drawings shall be saved in DWG format. The drawing shall be saved in the following format: PWP_752_002_04.dwg. The drawing shall be saved in the following format: PWP_752_002_04.dwg. The drawing shall be saved in the following format: PWP_752_002_04.dwg.

PLANTING SCHEDULES

Feature & Street Trees

Code	Species	Quantity	Notes
FT01	London Plane	10	Plant in 2024
FT02	London Plane	10	Plant in 2025
FT03	London Plane	10	Plant in 2026
FT04	London Plane	10	Plant in 2027
FT05	London Plane	10	Plant in 2028
FT06	London Plane	10	Plant in 2029
FT07	London Plane	10	Plant in 2030
FT08	London Plane	10	Plant in 2031
FT09	London Plane	10	Plant in 2032
FT10	London Plane	10	Plant in 2033
FT11	London Plane	10	Plant in 2034
FT12	London Plane	10	Plant in 2035
FT13	London Plane	10	Plant in 2036
FT14	London Plane	10	Plant in 2037
FT15	London Plane	10	Plant in 2038
FT16	London Plane	10	Plant in 2039
FT17	London Plane	10	Plant in 2040
FT18	London Plane	10	Plant in 2041
FT19	London Plane	10	Plant in 2042
FT20	London Plane	10	Plant in 2043
FT21	London Plane	10	Plant in 2044
FT22	London Plane	10	Plant in 2045
FT23	London Plane	10	Plant in 2046
FT24	London Plane	10	Plant in 2047
FT25	London Plane	10	Plant in 2048
FT26	London Plane	10	Plant in 2049
FT27	London Plane	10	Plant in 2050

Native Planting Mass

Code	Species	Quantity	Notes
MP01	Native Planting Mass	100	Plant in 2024
MP02	Native Planting Mass	100	Plant in 2025
MP03	Native Planting Mass	100	Plant in 2026
MP04	Native Planting Mass	100	Plant in 2027
MP05	Native Planting Mass	100	Plant in 2028
MP06	Native Planting Mass	100	Plant in 2029
MP07	Native Planting Mass	100	Plant in 2030
MP08	Native Planting Mass	100	Plant in 2031
MP09	Native Planting Mass	100	Plant in 2032
MP10	Native Planting Mass	100	Plant in 2033
MP11	Native Planting Mass	100	Plant in 2034
MP12	Native Planting Mass	100	Plant in 2035
MP13	Native Planting Mass	100	Plant in 2036
MP14	Native Planting Mass	100	Plant in 2037
MP15	Native Planting Mass	100	Plant in 2038
MP16	Native Planting Mass	100	Plant in 2039
MP17	Native Planting Mass	100	Plant in 2040
MP18	Native Planting Mass	100	Plant in 2041
MP19	Native Planting Mass	100	Plant in 2042
MP20	Native Planting Mass	100	Plant in 2043
MP21	Native Planting Mass	100	Plant in 2044
MP22	Native Planting Mass	100	Plant in 2045
MP23	Native Planting Mass	100	Plant in 2046
MP24	Native Planting Mass	100	Plant in 2047
MP25	Native Planting Mass	100	Plant in 2048
MP26	Native Planting Mass	100	Plant in 2049
MP27	Native Planting Mass	100	Plant in 2050

Native Trees

Code	Species	Quantity	Notes
NT01	Native Tree	10	Plant in 2024
NT02	Native Tree	10	Plant in 2025
NT03	Native Tree	10	Plant in 2026
NT04	Native Tree	10	Plant in 2027
NT05	Native Tree	10	Plant in 2028
NT06	Native Tree	10	Plant in 2029
NT07	Native Tree	10	Plant in 2030
NT08	Native Tree	10	Plant in 2031
NT09	Native Tree	10	Plant in 2032
NT10	Native Tree	10	Plant in 2033
NT11	Native Tree	10	Plant in 2034
NT12	Native Tree	10	Plant in 2035
NT13	Native Tree	10	Plant in 2036
NT14	Native Tree	10	Plant in 2037
NT15	Native Tree	10	Plant in 2038
NT16	Native Tree	10	Plant in 2039
NT17	Native Tree	10	Plant in 2040
NT18	Native Tree	10	Plant in 2041
NT19	Native Tree	10	Plant in 2042
NT20	Native Tree	10	Plant in 2043
NT21	Native Tree	10	Plant in 2044
NT22	Native Tree	10	Plant in 2045
NT23	Native Tree	10	Plant in 2046
NT24	Native Tree	10	Plant in 2047
NT25	Native Tree	10	Plant in 2048
NT26	Native Tree	10	Plant in 2049
NT27	Native Tree	10	Plant in 2050

Mixed Ornamental Planting

Code	Species	Quantity	Notes
MO01	Mixed Ornamental Planting	100	Plant in 2024
MO02	Mixed Ornamental Planting	100	Plant in 2025
MO03	Mixed Ornamental Planting	100	Plant in 2026
MO04	Mixed Ornamental Planting	100	Plant in 2027
MO05	Mixed Ornamental Planting	100	Plant in 2028
MO06	Mixed Ornamental Planting	100	Plant in 2029
MO07	Mixed Ornamental Planting	100	Plant in 2030
MO08	Mixed Ornamental Planting	100	Plant in 2031
MO09	Mixed Ornamental Planting	100	Plant in 2032
MO10	Mixed Ornamental Planting	100	Plant in 2033
MO11	Mixed Ornamental Planting	100	Plant in 2034
MO12	Mixed Ornamental Planting	100	Plant in 2035
MO13	Mixed Ornamental Planting	100	Plant in 2036
MO14	Mixed Ornamental Planting	100	Plant in 2037
MO15	Mixed Ornamental Planting	100	Plant in 2038
MO16	Mixed Ornamental Planting	100	Plant in 2039
MO17	Mixed Ornamental Planting	100	Plant in 2040
MO18	Mixed Ornamental Planting	100	Plant in 2041
MO19	Mixed Ornamental Planting	100	Plant in 2042
MO20	Mixed Ornamental Planting	100	Plant in 2043
MO21	Mixed Ornamental Planting	100	Plant in 2044
MO22	Mixed Ornamental Planting	100	Plant in 2045
MO23	Mixed Ornamental Planting	100	Plant in 2046
MO24	Mixed Ornamental Planting	100	Plant in 2047
MO25	Mixed Ornamental Planting	100	Plant in 2048
MO26	Mixed Ornamental Planting	100	Plant in 2049
MO27	Mixed Ornamental Planting	100	Plant in 2050

Ground Cover Planting

Code	Species	Quantity	Notes
GC01	Ground Cover Planting	100	Plant in 2024
GC02	Ground Cover Planting	100	Plant in 2025
GC03	Ground Cover Planting	100	Plant in 2026
GC04	Ground Cover Planting	100	Plant in 2027
GC05	Ground Cover Planting	100	Plant in 2028
GC06	Ground Cover Planting	100	Plant in 2029
GC07	Ground Cover Planting	100	Plant in 2030
GC08	Ground Cover Planting	100	Plant in 2031
GC09	Ground Cover Planting	100	Plant in 2032
GC10	Ground Cover Planting	100	Plant in 2033
GC11	Ground Cover Planting	100	Plant in 2034
GC12	Ground Cover Planting	100	Plant in 2035
GC13	Ground Cover Planting	100	Plant in 2036
GC14	Ground Cover Planting	100	Plant in 2037
GC15	Ground Cover Planting	100	Plant in 2038
GC16	Ground Cover Planting	100	Plant in 2039
GC17	Ground Cover Planting	100	Plant in 2040
GC18	Ground Cover Planting	100	Plant in 2041
GC19	Ground Cover Planting	100	Plant in 2042
GC20	Ground Cover Planting	100	Plant in 2043
GC21	Ground Cover Planting	100	Plant in 2044
GC22	Ground Cover Planting	100	Plant in 2045
GC23	Ground Cover Planting	100	Plant in 2046
GC24	Ground Cover Planting	100	Plant in 2047
GC25	Ground Cover Planting	100	Plant in 2048
GC26	Ground Cover Planting	100	Plant in 2049
GC27	Ground Cover Planting	100	Plant in 2050

Notes:

1. FOR PLANTING PROPOSES ONLY
2. NOT TO BE CONSIDERED UNLESS OTHERWISE SPECIFIED
3. HAZARD OF 50% OR MORE BY 100% FROM
4. REFER TO ALL DRAWINGS FOR DETAILS OF ALL WORKS, INCLUDING ALL SERVICES AND UTILITIES
5. ALL WORKS TO BE COMPLETED PRIOR TO COMMENCEMENT OF CONSTRUCTION
6. ALL WORKS TO BE COMPLETED PRIOR TO COMMENCEMENT OF CONSTRUCTION
7. ALL WORKS TO BE COMPLETED PRIOR TO COMMENCEMENT OF CONSTRUCTION
8. ALL WORKS TO BE COMPLETED PRIOR TO COMMENCEMENT OF CONSTRUCTION
9. ALL WORKS TO BE COMPLETED PRIOR TO COMMENCEMENT OF CONSTRUCTION
10. ALL WORKS TO BE COMPLETED PRIOR TO COMMENCEMENT OF CONSTRUCTION
11. ALL WORKS TO BE COMPLETED PRIOR TO COMMENCEMENT OF CONSTRUCTION
12. ALL WORKS TO BE COMPLETED PRIOR TO COMMENCEMENT OF CONSTRUCTION
13. ALL WORKS TO BE COMPLETED PRIOR TO COMMENCEMENT OF CONSTRUCTION
14. ALL WORKS TO BE COMPLETED PRIOR TO COMMENCEMENT OF CONSTRUCTION
15. ALL WORKS TO BE COMPLETED PRIOR TO COMMENCEMENT OF CONSTRUCTION
16. ALL WORKS TO BE COMPLETED PRIOR TO COMMENCEMENT OF CONSTRUCTION
17. ALL WORKS TO BE COMPLETED PRIOR TO COMMENCEMENT OF CONSTRUCTION
18. ALL WORKS TO BE COMPLETED PRIOR TO COMMENCEMENT OF CONSTRUCTION
19. ALL WORKS TO BE COMPLETED PRIOR TO COMMENCEMENT OF CONSTRUCTION
20. ALL WORKS TO BE COMPLETED PRIOR TO COMMENCEMENT OF CONSTRUCTION
21. ALL WORKS TO BE COMPLETED PRIOR TO COMMENCEMENT OF CONSTRUCTION
22. ALL WORKS TO BE COMPLETED PRIOR TO COMMENCEMENT OF CONSTRUCTION
23. ALL WORKS TO BE COMPLETED PRIOR TO COMMENCEMENT OF CONSTRUCTION
24. ALL WORKS TO BE COMPLETED PRIOR TO COMMENCEMENT OF CONSTRUCTION
25. ALL WORKS TO BE COMPLETED PRIOR TO COMMENCEMENT OF CONSTRUCTION

Client and Designer

Client	Designer
Client Name	Designer Name
Client Address	Designer Address
Client Contact	Designer Contact
Client Email	Designer Email
Client Phone	Designer Phone
Client Website	Designer Website
Client Logo	Designer Logo
Client Stamp	Designer Stamp
Client Signature	Designer Signature
Client Date	Designer Date
Client Version	Designer Version
Client Revision	Designer Revision
Client Approval	Designer Approval
Client Comments	Designer Comments
Client Notes	Designer Notes
Client Instructions	Designer Instructions
Client Requirements	Designer Requirements
Client Specifications	Designer Specifications
Client Standards	Designer Standards
Client Guidelines	Designer Guidelines
Client Policies	Designer Policies
Client Procedures	Designer Procedures
Client Protocols	Designer Protocols
Client Processes	Designer Processes
Client Practices	Designer Practices
Client Principles	Designer Principles
Client Values	Designer Values
Client Beliefs	Designer Beliefs
Client Attitudes	Designer Attitudes
Client Behaviors	Designer Behaviors
Client Emotions	Designer Emotions
Client Thoughts	Designer Thoughts
Client Feelings	Designer Feelings
Client Opinions	Designer Opinions
Client Views	Designer Views
Client Perspectives	Designer Perspectives
Client Insights	Designer Insights
Client Knowledge	Designer Knowledge
Client Skills	Designer Skills
Client Abilities	Designer Abilities
Client Talents	Designer Talents
Client Strengths	Designer Strengths
Client Weaknesses	Designer Weaknesses
Client Opportunities	Designer Opportunities
Client Challenges	Designer Challenges
Client Risks	Designer Risks
Client Rewards	Designer Rewards
Client Benefits	Designer Benefits
Client Costs	Designer Costs
Client Investments	Designer Investments
Client Returns	Designer Returns
Client Profits	Designer Profits
Client Losses	Designer Losses
Client Gains	Designer Gains
Client Expenses	Designer Expenses
Client Revenues	Designer Revenues
Client Assets	Designer Assets
Client Liabilities	Designer Liabilities
Client Equity	Designer Equity
Client Debt	Designer Debt
Client Cash	Designer Cash
Client Inventory	Designer Inventory
Client Accounts	Designer Accounts
Client Records	Designer Records
Client Documents	Designer Documents
Client Files	Designer Files
Client Folders	Designer Folders
Client Drives	Designer Drives
Client Networks	Designer Networks
Client Servers	Designer Servers
Client Clients	Designer Clients
Client Users	Designer Users
Client Admins	Designer Admins
Client Managers	Designer Managers
Client Owners	Designer Owners
Client Stakeholders	Designer Stakeholders
Client Partners	Designer Partners
Client Suppliers	Designer Suppliers
Client Customers	Designer Customers
Client Vendors	Designer Vendors
Client Contractors	Designer Contractors
Client Consultants	Designer Consultants
Client Advisors	Designer Advisors
Client Mentors	Designer Mentors
Client Coaches	Designer Coaches
Client Trainers	Designer Trainers
Client Educators	Designer Educators
Client Researchers	Designer Researchers
Client Analysts	Designer Analysts
Client Strategists	Designer Strategists
Client Planners	Designer Planners
Client Implementers	Designer Implementers
Client Evaluators	Designer Evaluators
Client Monitors	Designer Monitors
Client Reporters	Designer Reporters
Client Communicators	Designer Communicators
Client Negotiators	Designer Negotiators
Client Mediators	Designer Mediators
Client Arbitrators	Designer Arbitrators
Client Judges	Designer Judges
Client Lawyers	Designer Lawyers
Client Accountants	Designer Accountants
Client Auditors	Designer Auditors
Client Taxpayers	Designer Taxpayers
Client Regulators	Designer Regulators
Client Insurers	Designer Insurers
Client Lenders	Designer Lenders
Client Borrowers	Designer Borrowers
Client Investors	Designer Investors
Client Donors	Designer Donors
Client Recipients	Designer Recipients
Client Beneficiaries	Designer Beneficiaries
Client Creditors	Designer Creditors
Client Debtors	Designer Debtors
Client Guarantors	Designer Guarantors
Client Sureties	Designer Sureties
Client Indemnifiers	Designer Indemnifiers
Client Insureds	Designer Insureds
Client Policyholders	Designer Policyholders
Client Claimants	Designer Claimants
Client Payees	Designer Payees
Client Payers	Designer Payers
Client Receivers	Designer Receivers
Client Suppliers	Designer Suppliers
Client Providers	Designer Providers
Client Vendors	Designer Vendors
Client Contractors	Designer Contractors
Client Consultants	Designer Consultants
Client Advisors	Designer Advisors
Client Mentors	Designer Mentors
Client Coaches	Designer Coaches
Client Trainers	Designer Trainers
Client Educators	Designer Educators
Client Researchers	Designer Researchers
Client Analysts	Designer Analysts
Client Strategists	Designer Strategists
Client Planners	Designer Planners
Client Implementers	Designer Implementers
Client Evaluators	Designer Evaluators
Client Monitors	Designer Monitors
Client Reporters	Designer Reporters
Client Communicators	Designer Communicators
Client Negotiators	Designer Negotiators
Client Mediators	Designer Mediators
Client Arbitrators	Designer Arbitrators
Client Judges	Designer Judges
Client Lawyers	Designer Lawyers
Client Accountants	Designer Accountants
Client Auditors	Designer Auditors
Client Taxpayers	Designer Taxpayers
Client Regulators	Designer Regulators
Client Insurers	Designer Insurers
Client Lenders	Designer Lenders
Client Borrowers	Designer Borrowers
Client Investors	Designer Investors
Client Donors	Designer Donors
Client Recipients	Designer Recipients
Client Beneficiaries	Designer Beneficiaries
Client Creditors	Designer Creditors
Client Debtors	Designer Debtors
Client Guarantors	Designer Guarantors
Client Sureties	Designer Sureties
Client	