G055 TfL Contractor Data Guide

Guide for providing data to GiGL. Recommended survey standards for TfL contractors.

Related documents:

- L022TfLContractor – TfL Contractor Data Use Licence
- H003DataGuide – GiGL Data Guide

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Introduction

As a contractor to TfL you are required to provide GiGL with the results of any relevant site surveys that you carry out. GiGL can also provide you with a data search report of existing data on behalf of TfL to inform this project (see below). Where instructed by TfL, you must complete the TfL Net Gain toolkit, and record the habitats present before and after the works you carry out on site, especially if works have altered habitat.

This document sets out the recommended survey standards and optimal formats for the data. We particularly need you to provide the results of any habitat surveys; data showing habitats before/after works for comparison; and any species surveys/observations carried out at the site. GiGL also manages datasets of open space extent and uses, site facilities, site designations, street trees and urban greening features such as green roofs – please check with GiGL if you have any data that may be relevant.

You must inform us of any changes to habitats and biodiversity units (e.g. replanting schemes) that you are responsible for delivering, and the status of these changes, i.e. if the intended new/restored habitat is now present or if it will take time to reach maturity.

Ecological expertise and local factors will dictate the most appropriate methods for a given survey. However, it is important for the Net Gain project that the survey results are recorded consistently, enabling us to compare like with like to track changes in habitat over time. GiGL recommends the following data management standards or considerations in the survey design and outputs. This will improve the ease of handling your results alongside original survey data and enable GiGL to incorporate local results into the London dataset without loss of local information, therefore improving the legacy value of survey results. If you have any queries about how to provide the data, please contact the GiGL team.

Desk study

If you are carrying out works that have the potential to affect biodiversity TfL advise you to receive a data search report, or original data, from GiGL. This is designed to inform your desk study of the site, enabling you to review the results of previously survey of your site and support ecological appraisal.

See https://www.gigl.org.uk/data-insight-services/transport-for-london/ for more information.

Recommended survey standards

Habitat data

When to provide data: Baseline, post-development and/or monitoring surveys will generate new field survey data to be sent to GiGL. Planned landscaping and habitats will also contain important data regarding target habitats for net gain reporting.

Datasets supplied must include survey results/plans from within the "red line" boundary of the development or works, but not necessarily restricted to this. For example initial habitats survey may extend beyond the development footprint.

For a single project you must send us the following data at the following project stages, where relevant:

Initial survey:

1. Baseline survey data (GIS map layers and attributes) for habitats currently present at the site and locality, see *Table 1*. (If there is no habitat present at the site to start with, please let us know.)
2. Landscape/habitat creation plans data (GIS map layers and attributes) showing planned post-development habitats – target habitats - with the planned dates of completion and maturity, see *Table 2*.

Monitoring surveys:

Data from any follow up surveys that are necessary to confirm whether the habitat is established and/or interim condition; mapped to the same standards with the full attributes as shown in *Table 1*.

After habitats established:

GIS maps showing habitats now present at the site. Please map the habitats to the same standards as the initial survey data and plans data, with the attributes as outlined in *Table 1*.

- If any areas have not changed since the initial survey, please include the (same) data for them in this update.
- If target habitats differ in size, type, condition from those in plans please provide explanatory notes for divergence, as these datasets will be compared for reporting.

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File format: Survey parcel and habitat boundaries as GIS polygons (tab or shape file[1]), with associated attributes.

- Use British National Grid coordinate system.
- Polygon boundaries for non-linear habitats, lines for linear habitat (hedges, ditches and vegetated walls), points of target notes (for individual trees, see species data section),as relevant.

Attributes: Attributes should describe the habitat present within a polygon (one habitat per polygon) or represented by the line.

Please use the London Phase 1 Survey Method (an adaptation of JNCC Phase 1) – see Supporting Documents. If it is not possible for you to use London Phase 1 Survey Method, please use a nationally recognised standard survey method (see list in Annex 1) and provide your own look-up table explaining how your habitat categories can be cross referenced to London Phase 1 Survey Method categories.

Please follow the relevant attribute format detailed below and made available in template .tab and .shp files with this guide. These attributes in particular capture details of the survey date; the organisation and individual who carried out the survey; the base map used for the surveys and subsequent digitisation; the habitat condition (based on the Farm and Environment Plan condition standards), see the TfL Net Gain Toolkit for more details; and indicate if the survey category habitat is also a London Priority Habitat or UK BAP Priority Habitat (see lists in Annex 2).

Table 1: Habitat attributes table for reporting habitats present at a site i.e. during baseline survey, monitoring survey or final post-completion survey.

Field name	Data type	Description	Example
ID	Integer	Unique integer reference for polygon/line within provided dataset	1
Habitat	Character(254)	Name of habitat present	Reedswamp
HabCode	Integer	Code of habitat present, according to survey classification	17
HabClass	Character(20)	Survey standard used (London Phase 1 (Lon(P1)) Survey Method preferred)	Lon(P1)
PriHabLon	Character(100)	London priority habitat or None, if none present. See Annex 2	Reedbed

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[1] TfL has a London Survey Grid to British National Grid conversion tool available that can be used to convert data between coordinate systems, if needed.

Field name	Data type	Description	Example
PriHabUK	Character(100)	UK BAP Priority Habitat or None, if none present. See Annex 2	Reedbeds
Condition	Character(10)	Current condition of Habitat according to TfL scale: Good, Moderate, Poor	Good
CreateDate	Character(20)	Date that the habitat creation commenced, if relevant. This field can be left blank for habitats not created as part of the project.	10/06/2017
SiteName	Character(254)	Name of surveyed site	Land adjoining South London Depot
SurveyName	Character(254)	Name of survey/project	South London Depot expansion
AreaHa	Decimal(10,2)	Area of the polygon given in hectares. Measured from GIS.	0.05
AreaM2	Decimal(10,2)	Area of the polygon given in m^2. Measured from GIS.	500
LengthM	Decimal(10,2)	Length of the linear feature given in metres. Measured from GIS. Use for hedgerows, ditches and vegetated walls, leave blank for other habitats	
DetermQual	Character(100)	How well the current habitat has been determined: - Definitely is this habitat; probably this habitat, but some uncertainty; habitat probably in polygon, but not accurately mappable	Definitely is this habitat
LPriQual	Character(10)	The reliability of the translation between the survey category and the London Priority habitat if relevant: Good, Average or Poor	Good
UKPriQual	Character(10)	The reliability of the translation between the survey category and	Good

Field name	Data type	Description	Example
		the UK BAP Priority habitat if relevant: Good, Moderate or Poor	
InterpCom	Character(254)	Comments on Priority Habitat translations if Moderate or Poor	
GenCom	Character(254)	Comments on habitat, especially if Priority Habitat present	
CentroidX	Integer	X coordinate (Easting) of central point, determined from GIS. British National Grid coordinate system.	524714
CentroidY	Integer	Y coordinate (Northing) of parcel central point, determined from GIS. British National Grid coordinate system.	180563
GridRef	Character(12)	Ten-figure grid reference of parcel centre point. British National Grid coordinate system.	TQ2471480563
SurveyDate	Character(20)	Date of survey	01/09/2018
Surveyor	Character(50)	Name of principal surveyor	Roberta Waterbury
Contractor	Character(50)	Name of contractor organisation responsible for survey	London Ecologists Ltd.
BaseMap	Character(30)	Maps used during survey	OS 1:10,000
DigiMaps	Character(30)	Maps used to digitise GIS information	OS MasterMap

Table 2: Planned habitats attributes table. For recording the target habitats to be created by the project

Field name	Data type	Description	Example
ID	Integer	Unique integer reference for polygon/line within provided dataset	1
TargetHab	Character(254)	Name of target habitat at maturity	Reedswamp
HabCode	Integer	Code of target habitat, according to survey classification	17

Field name	Data type	Description	Example
HabClass	Character(20)	Survey standard category used (London Phase 1 (Lon(P1)) Survey Method preferred)	Lon(P1)
TargLonPri	Character(100)	Target habitat London Priority Habitat name, if relevant, at maturity.	Reedbed
TargUKPri	Character(100)	Target habitat UK BAP Priority Habitat name, if relevant, at maturity.	Reedbeds
CreateDate	Character(20)	Date that this habitat creation commenced.	10/06/2017
MatureDate	Character(20)	Expected time for created target habitat to reach maturity and target condition: i.e. CreateDate + expected months and years. Example shows 5 years	10/06/2022
SiteName	Character(254)	Name of surveyed site	Land adjoining South London Depot
SurveyName	Character(254)	Name of survey/project	South London Depot expansion
AreaHa	Decimal(10,2)	Area of the polygon given in hectares. Measured from GIS.	0.05
AreaM2	Decimal(10,2)	Area of the polygon given in m2. Measured from GIS.	500
LengthM	Decimal(10,2)	Length of the linear feature given in metres. Measured from GIS. Use for hedgerows, ditches and vegetated walls, leave blank for other habitats	
LPriQual	Character(10)	The reliability of the translation between the target habitat category and the London Priority habitat if relevant: Good, Average or Poor	Good

Field name	Data type	Description	Example
UKPriQual	Character(10)	The reliability of the translation between the target habitat category and the UK BAP Priority habitat if relevant: Good, Moderate or Poor	Good
InterpCom	Character(254)	Comments on Priority Habitat translations if Moderate or Poor	
GenCom	Character(254)	Comments on target habitat	
CentroidX	Integer	X coordinate (Easting) of central point, determined from GIS. British National Grid coordinate system.	524714
CentroidY	Integer	Y coordinate (Northing) of central point, determined from GIS. British National Grid coordinate system.	180563
GridRef	Character(12)	Ten-figure grid reference of parcel centre point. British National Grid coordinate system.	TQ2471480563
MapBy	Character(50)	Name of person responsible for the mapped data	Roberta Waterbury
Contractor	Character(50)	Name of contractor organisation responsible for the mapped data	London Ecologists Ltd.
DigiMaps	Character(30)	Maps used to digitise GIS information	OS MasterMap

Mapping: Single habitat mapping (i.e. one boundary around one habitat patch) is essential for onward data management. Please do not map multiple habitats per boundary, even when using the London Phase 1 Survey Methodology categories (which are likely to have been recorded as multiple habitats per parcel in the historic baseline).

- One habitat per polygon
- Careful digitisation: snapping boundaries to the latest Ordnance Survey MasterMap polygons where appropriate e.g. the boundaries of sites, avoiding slivers and overlapping polygons.

Wildlife records (species observations)

File format: Excel spreadsheet of records following GiGL standard recording template, with one record per row.

Attributes: Please use the format set out in the 'Standard data entry spreadsheet, providing essential attributes as a minimum, see Supporting Documents.

For a species record to be valid, it must state 'what, who, where and when', i.e. 'Species name', 'Observer's name', 'Grid reference' (according to British National Grid) and 'Date'. Additional information can also be included in the appropriate fields.

Please include a reference to the relevant survey parcel/site or target note if appropriate.

Mapping: Mapping is not required for species records.

Notes: Please provide scientific names for species. Species observations may include invasive species or individual trees of note.

Example: For data template, please see Standard Data Entry Spreadsheet in Supporting Documents.

Open space

Open space is defined as:

> *undeveloped land which has an amenity value, or has potential for an amenity value. The value could be visual, derive from a site's historical or cultural interest or from the enjoyment of facilities which it provides. It includes both public and private spaces, but excludes private gardens.*

File format: Boundaries of whole sites mapped as GIS polygons with associated attributes (tab or shape file). Coordinate system: British National Grid.

Attributes: Available information, in particular site name, open space typology (i.e. land use category) and any designations. Open space typologies following the London Survey Method can be easily incorporated into the London dataset. Refer to GiGL data guide and London Phase 1 Survey Method, and, for more information, see Supporting Documents.

See Annex 3 for accepted typologies.

Please follow the below attributes format, or you may use provided shape or tab file templates to populate attributes.

Table 3: Open space dataset attributes. Shaded attributes show priority information to collect for sites following survey. Unshaded categories are optional, but informative if available.

Field	Data type	Description	Example
ID	Integer	Unique integer reference for polygon within provided dataset	1
SiteName	Character(150)	Name of site	South Croydon Cutting
PPG17	Character(50)	Broad land use typology from historic Planning Policy 17 list, see Annex 3a	Green Corridors
PrimaryUse	Character(100)	Primary land use typology from London Phase 1 Survey Method	Railway cutting and railway embankment
OwnerType	Character(254)	Type of ownership, see Annex 3b	London Regional Transport
Owner	Character(250)	Name of site owner	Transport for London
Manager	Character(250)	Name of site manager	Transport for London
Access	Character(20)	Accessibility of the site to the general public, see Annex 3c	None
Restricted	Character(250)	Details of access restrictions, if applicable	
OpenTimes	Character(150)	Site open times, if applicable	
SiteDesc	Character(250)	Short description of the site	Stretch of railway embankment between X Station and Y Station. Steep sided and dominated by mature scrub, bordered by fencing.
AreaHa	Decimal(10,2)	Area of polygon given in hectares. Measured from GIS.	2.5
SurveyName	Character(250)	Name of survey/project	South Croydon Cutting EIA
Surveyor	Character(50)	Name of principal surveyor	Roberta Waterbury
Contractor	Character(50)	Name of contractor organisation responsible for the mapped data	London Ecologists Ltd.
SurveyDate	Character(20)	Date of survey	25/05/2018
CentroidX	Integer	X coordinate (Easting) of site central point, determined from GIS. British National Grid coordinate system.	531528

CentroidY	Integer	Y coordinate (Northing) of site central point, determined from GIS. British National Grid coordinate system.	165315
GridRef	Character(12)	Ten-figure grid reference of parcel centre point. British National Grid coordinate system.	TQ3152865315

Mapping: Please digitise carefully: snapping boundaries to the latest Ordnance Survey MasterMap polygons where appropriate, avoiding slivers and overlapping polygons.

Other data

As well as the core datasets, GiGL also manages other types of data, such as site facilities, urban greening features and street trees. Please check with the GiGL team if your surveys generate data that may be relevant.

Supporting Documents

London Phase 1 Survey Method

London Survey Methodology; Open space and habitat survey for Greater London – Revised survey specification 2004

Priority Habitats

http://www.gigl.org.uk/london-bap-priority-habitats/

UK Biodiversity Action Plan; Priority Habitat Descriptions. BRIG (ed. Ant Maddock) 2008. (Updated Dec 2011).

http://jncc.defra.gov.uk/page-5706

GiGL datasets and templates

H003DataGuide – The GiGL Data Guide

GIS template for providing habitat data available from GiGL. Please contact us

Annex 1

Nationally recognised habitat survey methods that can be included within habitat dataset managed by GiGL.

Habitat survey classification system	
London Phase 1 Survey Method	*Please use*
JNCC Phase 1	*Provide look up table if used*
UK Habitats Survey	*Provide look up table if used*
National Vegetation Classification	*Provide look up table if used*

Annex 2

a. London Priority Habitat list

London Priority habitat	London status
Acid grassland	Habitats with Action Plans
Chalk grassland	
Heathland	
Parks & urban green spaces	
Private gardens	
Reedbeds	
Rivers and streams	
Standing water	
Tidal Thames	
Woodland	
Built structures	Other important habitats
Meadows and pastures	
Fen, marsh and swamp	
Open landscapes with ancient/old trees	

b. UK BAP terrestrial and freshwater habitat list

UK BAP broad habitat	UK BAP priority habitat
Rivers and Streams	Rivers
Standing Open Waters and Canals	Oligotrophic and Dystrophic Lakes
	Ponds
	Mesotrophic Lakes
	Eutrophic Standing Waters
	Aquifer Fed Naturally Fluctuating Water Bodies

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UK BAP broad habitat	UK BAP priority habitat
Arable and Horticultural	Arable Field Margins
Boundary and Linear Features	Hedgerows
Broadleaved, Mixed and Yew Woodland	Traditional Orchards
	Wood-Pasture and Parkland
	Upland Oakwood
	Lowland Beech and Yew Woodland
	Upland Mixed Ashwoods
	Wet Woodland
	Lowland Mixed Deciduous Woodland
	Upland Birchwoods
Coniferous Woodland	Native Pine Woodlands
Acid Grassland	Lowland Dry Acid Grassland
Calcareous Grassland	Lowland Calcareous Grassland
	Upland Calcareous Grassland
Neutral Grassland	Lowland Meadows
	Upland Hay Meadows
Improved Grassland	Coastal and Floodplain Grazing Marsh
Dwarf Shrub Heath	Lowland Heathland
	Upland Heathland
Fen, Marsh and Swamp	Upland Flushes, Fens and Swamps
	Purple Moor Grass and Rush Pastures
	Lowland Fens
	Reedbeds
Bogs	Lowland Raised Bog
	Blanket Bog
Montane Habitats	Mountain Heaths and Willow Scrub
Inland Rock	Inland Rock Outcrop and Scree Habitats
	Calaminarian Grasslands
	Open Mosaic Habitats on Previously Developed
	Limestone Pavements
Supralittoral Rock	Maritime Cliff and Slopes
Supralittoral Sediment	Coastal Vegetated Shingle
	Machair
	Coastal Sand Dunes

Annex 3

a. Open space land use typologies

These are based upon previous Planning Policy Guidance 17: Planning for Open Space, Sport and Recreation categories and the London Phase 1 Survey Method for habitats and open space.

Broad land use category (PPG17)	Space Typology (Primary use)	Description
Parks and Gardens	Park	This refers to traditional public open spaces laid out formally for leisure and recreation. They usually include a mixture of lakes, ponds, lidos, woodland, flower beds, shrubs, ornamental trees, play spaces, formal and informal pitches, bowling greens, tennis courts, golf pitch & put, footpaths, bandstands, toilets, cafes and car parks - but not necessarily all of these. Parts of some parks might be managed as so-called natural areas. Examples of parks include the Royal Parks, municipal parks such as Battersea and Victoria, and wilder places such as Hampstead Heath which, although having distinctly informal qualities, are maintained predominantly for the same purpose, and include the usual swings and roundabouts and playing pitches. Many parks are enclosed by walls or railings, although some parks that began as common land may not be enclosed.
	Formal garden	This refers to spaces with well-defined boundaries that display high standards of horticulture with intricate and detailed landscaping. It includes the London squares common to central London, which are typically square areas of grass with some shrub borders, bounded by railings, and surrounded by buildings. Examples include Belgrave Square and Soho Square.

Broad land use category (PPG17)	Space Typology (Primary use)	Description
Natural and Semi-natural Greenspace	Common	This is a formal designation. They are publicly accessible open spaces with few if any 'facilities'. They will typically be mainly open rough grassland (not mown playing field or recreation ground type grass) and/or woodland. Commons are much less formal than parks or parkland. Examples include Wimbledon Common and Clapham Common.
	Country Parks	These are large areas set aside for informal countryside recreation near or within towns and cities. A list of sites that call themselves Country Parks is available on the Natural England website.
	Private woodland	This refers to woodland which is not accessible for recreational use, nor managed for nature conservation.
	Public woodland	This refers to woodland which is accessible for recreational use, but not managed for nature conservation.
	Nature reserve	This is a category reserved for an open space that is managed primarily for nature conservation.
Green Corridors	River	This should only be used for rivers and streams that do not form part of another land use, such as park, common or nature reserve.
	Canal	This implies an artificial waterway which is navigable. Docks are included in this category.
	Railway cutting and railway embankment	
	Disused railway trackbed	This is usually obvious, with some traces of its former use. Where disused trackbeds are specifically managed for nature conservation record as nature reserve.
	Road island/verge	
	Walking/cycling route	
Outdoor Sports Facilities	Recreation ground	This is an area of mown grass used primarily for informal, unorganised ball games and similar activities (including dog walking). Not to be confused with playing fields, below.

Broad land use category (PPG17)	Space Typology (Primary use)	Description
	Playing field	This is a site comprising playing pitches, usually for football, but also for rugby and hockey and, in the summer, for cricket. They often have changing rooms and pavilions. Almost always, playing fields consist only of pitches; but they will sometimes have other bits of open land around the edges. Pitches are often to be found in parks and commons, but the type here is concerned with sites that are exclusively or predominantly reserved for organised team sports.
	Golf course	
	Other recreational	This is used for sites that are used exclusively or predominantly for other organised sports such as bowls or tennis.
Amenity	Amenity green space	This is an expanse of grass used for information recreation. There will be few, if any, facilities.
	Village green	This is a formal designation. It is usually an expanse of grass in the centre of old villages, often used in the summer for cricket.
	Hospital	This includes the grounds of any clinic or health centre.
	Educational	This refers to school or college grounds and field study centres where school education is the primary function.
	Landscaping around premises	This includes communal amenity space around housing estates and community centres, and also landscaping around industrial premises.
	Reservoir	This includes covered reservoirs unless these form part of a park.
Children and Teenagers	Play space	This is a site set aside mainly for children. It will contain the usual paraphernalia of swings, slides and roundabouts.
	Adventure playground	This is a defined play area for children in a supervised environment. Boundaries and entrances are secure.
	Youth area	This is a defined area for teenagers including skateboard parks, outdoor basketball hoops and other more informal areas such as 'hanging out' areas and teenage shelters.
Allotments, Community gardens	Allotments	

Broad land use category (PPG17)	Space Typology (Primary use)	Description
and City Farms	Community garden	This includes an area that is generally managed and maintained by the local population as a garden and/or for food growing and are normally restricted in their access. For examples Phoenix Garden in Holborn.
	City farm	This includes areas that are generally managed and maintained as a small farm by the local population. They contain livestock and planting and are normally restricted in their access. For example Freightliners Farm in Islington.
Cemeteries and Churchyards	Cemetery/churchyard	This includes burial grounds, graveyards, crematorium grounds and memorial gardens, and gardens or grounds of non-Christian places of worship.
Other Urban Fringe	Equestrian centre	This includes any land used for intensive horse keeping and riding, but not extensive horse grazing, which should be recorded as agriculture.
	Agriculture	This includes arable and grazing land, including horse grazing, and market gardening (such as vegetables, often grown under cloches, etc.).
	Nursery/horticulture	This does not include commercial retail nurseries (although these might legitimately form a part of a park or common, etc.). Horticulture includes areas of permanent glasshouses.
Civic Spaces	Civic/market square	This includes tarmac areas or paved open spaces, which may or may not include planting. They do not necessarily have seats and may just be a plaza area. They often provide a setting for civic buildings and opportunities for open air markets, demonstrations and civic events. Examples include the area in front of the jubilee line station at Canary Wharf, and the plaza in front of Westminster Cathedral.

Broad land use category (PPG17)	Space Typology (Primary use)	Description
	Other hard surfaced areas	This includes other areas designed for pedestrians. These typically are used as 'sitting out' areas, where workers can enjoy the sun and eat their sandwiches, and as such usually have seats or benches. For example, Emma Cons Gardens opposite the Old Vic Theatre. This category excludes pedestrianised streets, car parks, servicing areas to buildings, and housing amenity space such as communal courtyards.
Other	Sewage/water works	This includes extensive sludge drying areas, filter beds, etc.
	Disused quarry/gravel pit	This may be water-filled, but is not necessarily so.
	Vacant land	This is land with no formal land use. This includes many "urban commons" which are used by people for informal recreation and which may be very valuable for nature conservation. If sites have formalised access and management for nature conservation, record as commons or nature reserves as appropriate.
	Land reclamation	This is land recently decontaminated or reclaimed from disuse, which has not yet been redeveloped.
	Other	This could be anything that does not fit any of the above categories, such as airfields.

b. Open space owner typology

Owner type
Charity
Education
Electric Company
Gas Company
Government/Crown
Health
Local Authority
London Regional Transport
Other Private
Rail Company
Religious
Voluntary Organisation
Water Company

c. Open space access categories

Access Type	Description
Free	Freely accessible by the public
De Facto	Readily accessible and clearly used by the public
Restricted	Includes sites where time restrictions apply such as open days (but not parks that close at night), are only accessible to certain people, such as club members, where there is a financial charge for access, or if there is access only to parts of the site, such as on footpaths
None	No access to the public