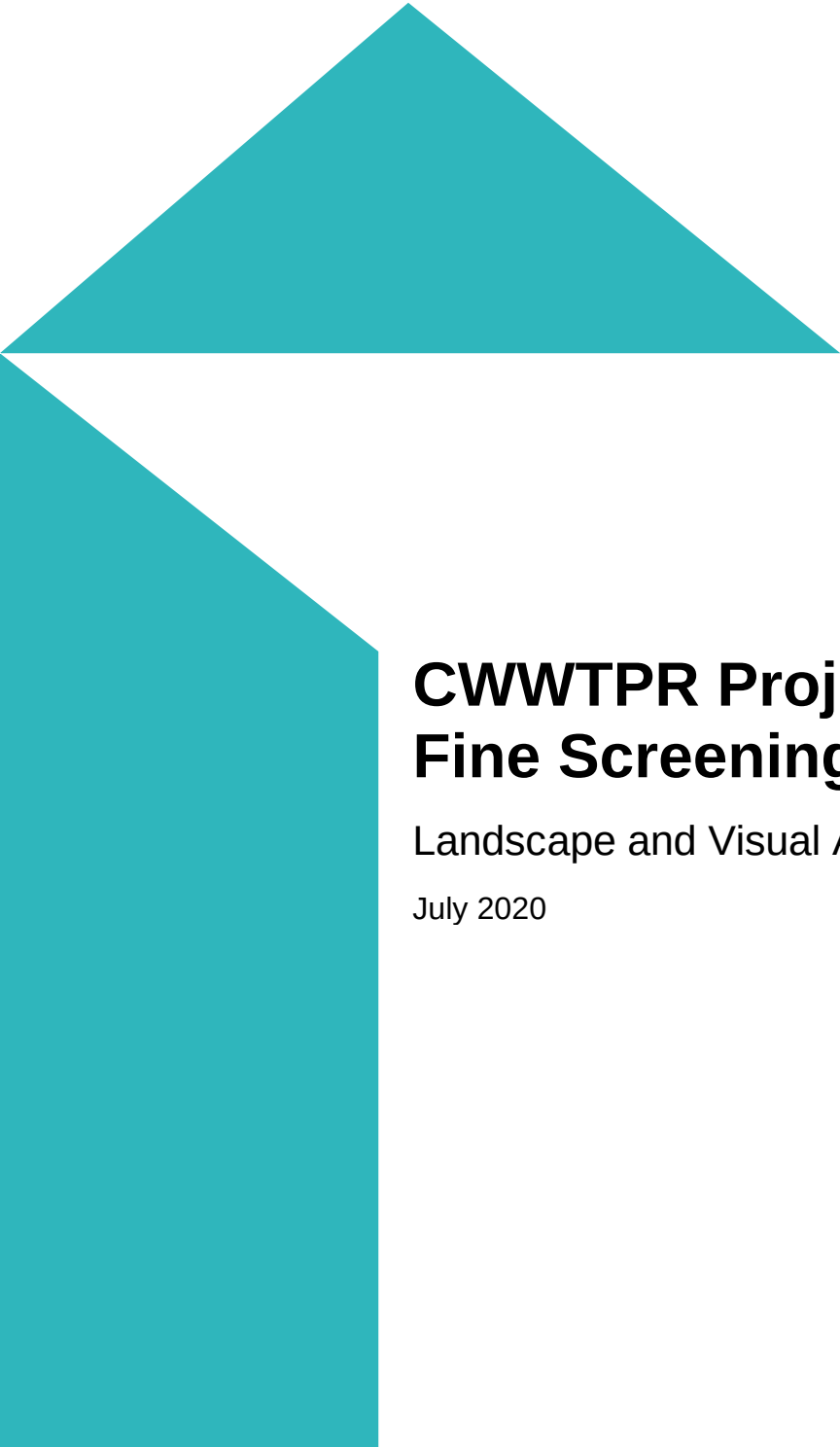




CWWTPR Project - Stage 3 Fine Screening

Landscape and Visual Amenity Appraisal

July 2020

Page intentionally blank for pagination when printed

Mott MacDonald
22 Station Road
Cambridge CB1 2JD
United Kingdom

T +44 (0)1223 463500
mottmac.com

Anglian Water Services Ltd,
Lancaster House,
Ermine Business Park,
Lancaster Way,
Huntingdon,
PE29 6XU

CWWTPR Project - Stage 3 Fine Screening

Landscape and Visual Amenity Appraisal

July 2020

Page intentionally blank for pagination when printed

Document reference: 409071 | 06LVAA | C

Information class: Standard

This document is issued for the party which commissioned it and for specific purposes connected with the above-captioned project only. It should not be relied upon by any other party or used for any other purpose.

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

This document contains confidential information and proprietary intellectual property. It should not be shown to other parties without consent from us and from the party which commissioned it.

Contents

1	Introduction	1
2	Landscape Context	2
2.1	Landscape Character	2
2.1.1	National Character Assessments	2
2.1.2	Local character assessments	4
2.2	Statutory Landscape Designations	5
2.2.1	Conservation Areas	5
2.2.2	Scheduled Monuments	6
2.2.3	Sites of Special Scientific Interest (SSSI)	7
2.3	Non-statutory Landscape Designations	7
2.3.1	Green Belt	7
2.4	Topography	7
3	Visual Amenity	8
3.1	Key Viewpoints	8
4	RAG Assessment	12
5	Recommendations	14
A.	Zone of Theoretical Visibility (ZTV) Plans	16

Tables

Table 3.1:	Visual receptor sensitivity	8
Table 3.2:	Residential visual receptors – Site A	8
Table 3.3:	Residential visual receptors – Site B	9
Table 3.4:	Residential visual receptors – Site C	9
Table 3.5:	Residential visual receptors – Site H	9
Table 3.6:	Residential visual receptors – Site I	9
Table 3.7:	Residential visual receptors – Site J	9
Table 3.8:	Residential visual receptors – Site L	9
Table 3.9:	Commerical visual receptors – Site J	10
Table 3.10:	PRoW visual receptors – Site A	10
Table 3.11:	PRoW visual receptors – Site B	10
Table 3.12:	PRoW visual receptors – Site C	10
Table 3.16:	PRoW visual receptors – Site L	11

Table 4.1: RAG Assessment – All site options

13

1 Introduction

The purpose of this document is to provide a high-level landscape appraisal of the landscape sensitivities associated with the site selection study for the relocation of the Cambridge Wastewater Treatment Plant (WWTP) in order to make the land currently occupied available for housing development. The relocation is currently in the early planning stages and a study area has been identified for investigating potential suitable sites. This study area, defined during the Initial Options Appraisal (Mott MacDonald, 2020), constitutes the combined drainage catchment area of the current Cambridge and Waterbeach WWTPs.

This document includes investigations on:

- Landscape designations;
- Landscape character;
- Topography; and
- Potential visibility from key receptors, including occupiers of residential properties orientated towards the development, walkers whose attention is focused on a landscape of moderate quality and visitors to heritage assets and designated or protected views (a full list of receptors is provided in Section 3).

An overview of the Landscape Context is provided to outline the sensitivities, opportunities and constraints within the landscape, and an overview of the visual amenity to highlight the potential impacts upon local receptors.

The landscape context and visual amenity have been undertaken using a methodology that follows current best practice and guidance from:

- Guidelines for Landscape and Visual Impact Assessment (GLVIA), 3rd Edition: Landscape Institute and Institute of Environmental Management and Assessment (2013).

The final section of the document provides a series of recommendations to further inform the design of the WWTP sites and provide a scheme that reflects the local landscape character and minimises the impact upon local visual receptors.

2 Landscape Context

2.1 Landscape Character

2.1.1 National Character Assessments

The study area is located across two National Character Area (NCA) 88: Bedford and Cambridgeshire Claylands and NCA 46 The Fens. However, all the sites being assessed are located within NCA 88 Bedford and Cambridgeshire Claylands, with the exception of Site L, which is located within NCA 46 The Fens.

NCA 88: Bedford and Cambridgeshire Claylands

The Bedford and Cambridgeshire Claylands National Character Area (NCA) is a broad, gently undulating, lowland plateau dissected by shallow river valleys that gradually widen as they approach The Fens NCA in the east. Within it, but distinct from it, is the Bedfordshire Greensand Ridge, a contrasting narrow and elevated outcrop of Greensand, with its associated habitats on acidic soils such as grassland, heathland and woodland. Views of the Bedfordshire and Cambridgeshire Claylands NCA and its large-scale arable farmland can be seen in most directions, from the elevated ground of the Yardley Whittlewood Ridge, Bedfordshire Greensand Ridge, East Anglian Chalk and Chilterns NCAs.

The NCA partially hosts several internationally and nationally important sites for nature conservation: the Nene Washes, the Ouse Washes and Woodwalton Fen – three Ramsar sites, two Special Protection Areas (SPA) and five Special Areas of Conservation (SAC) that straddle the boundary with The Fens NCA, providing ecological and functional connectivity between these NCAs.

The key characteristics of the NCA include:

- Gently undulating, lowland plateau divided by shallow river valleys that gradually widen as they approach The Fens NCA in the east.
- Predominantly open, arable landscape of planned and regular fields bounded by open ditches and trimmed, often species-poor hedgerows which contrast with those fields that are irregular and piecemeal.
- Wide variety of semi-natural habitats supporting a range of species - some notably rare and scarce - including sites designated for species associated with ancient woodland, wetland sites important for birds, great crested newt and species of stonewort, and traditional orchards and unimproved grassland supporting a rich diversity of wild flowers.
- Diversity of building materials including brick, render, thatch and stone.
- Settlements cluster around major road and rail corridors, with smaller towns, villages and linear settlements widely dispersed throughout, giving a more rural feel. Small villages are usually nucleated around a church or village green, while fen-edge villages are often in a linear form along roads.
- Major transport routes cross the area, including the M1, M11, A1, A6, A5 and A14 roads, the East Coast and Midlands mainline railways, and the Grand Union Canal.

NCA 46 The Fens

The Fens National Character Area (NCA) is a distinctive, historic and human-influenced wetland landscape lying to the west of the Wash estuary, which formerly constituted the largest wetland area in England. The area is notable for its large-scale, flat, open landscape with extensive vistas to level horizons. The level, open topography shapes the impression of huge skies which convey a strong sense of place, tranquillity and inspiration.

It is a large, low-lying, flat landscape with many drainage ditches, dykes and rivers that slowly drain towards the Wash, England's largest tidal estuary. The single obvious factor uniting the Fens is the low-lying, level terrain reflecting its geological past. With the exception of the Isle of Ely, which reaches above 20 m, elevations rarely pass the 10 m contour. The level horizons and the huge scale of the landscape create a strong sense of isolation and tranquillity, and a distinctive sense of place. There are, typically, large open panoramas and enormous skies, whose changing weather patterns have a strong influence on the observer.

The key characteristics of the NCA include:

- Overall, woodland cover is sparse, notably a few small woodland blocks, occasional avenues alongside roads, isolated field trees and shelterbelts of poplar, willow and occasionally leylandii hedges around farmsteads, and numerous orchards around Wisbech. Various alders, notably grey alder, are also used in shelterbelts and roadside avenues.
- The predominant land use is arable - wheat, root crops, bulbs, vegetables and market gardening made possible by actively draining reclaimed land areas. Associated horticultural glasshouses are a significant feature. Beef cattle graze narrow enclosures along the banks of rivers and dykes and on parts of the salt marsh and sea banks.
- Open fields, bounded by a network of drains and the distinctive hierarchy of rivers (some embanked), have a strong influence on the geometric/rectilinear landscape pattern. The structures create local enclosure and a slightly raised landform, which is mirrored in the road network that largely follows the edges of the system of large fields. The drains and ditches are also an important ecological network important for invertebrates, fish including spined loach, and macrophytes.
- The area is very rich in geodiversity and archaeology, with sediments containing evidence for past environmental and climate changes and with high potential for well-preserved waterlogged site remains at the fen edge, within some of the infilled palaeo-rivers and beneath the peat.
- Settlements and isolated farmsteads are mostly located on the modestly elevated 'geological islands' and the low, sinuous roddon banks (infilled ancient watercourses within fens). Elsewhere, villages tend to be dispersed ribbon settlements along the main arterial routes through the settled fens, and scattered farms remain as relics of earlier agricultural settlements. Domestic architecture mostly dates from after 1750 and comprises a mix of late Georgian-style brick houses and 20th-century bungalows.

2.1.2 Local character assessments

The study area is located across two Landscape Character Areas (LCA), described in the Cambridgeshire Landscape Guidelines (Cambridgeshire County Council, 1991); LCA3 Western Claylands and LCA8 Fenlands. The below description provides an overview of the LCA taken from the Cambridgeshire Landscape Guidelines, with a greater level of detail provided following a desktop appraisal of the study area.

LCA3 Western Claylands extends from the north and east edges of Cambridge northeast to the southern edge of Peterborough, albeit subdivided by LCA4 Ouse Valley which follows the River Great Ouse from St Neots through to Huntingdon and St Ives.

It consists of large-scale arable farmland with open fields, sparse trimmed hedgerows and watercourses often cleared of bankside vegetation. There are scattered woodlands and approximately half of these are ancient semi-natural woodlands of considerable importance in the County context. Increased mechanisation has led to the removal of hedgerows and amalgamation of fields. Many of the remaining hedges are 'gappy' and trimmed almost out of existence by regular cutting. Larger farm units have created a need for large storage buildings, which can be prominent in the landscape. Small villages and hamlets are scattered throughout the area, usually in sheltered places with existing trees. Small grass paddocks typically occur on the edges of the villages. Church spires and towers enliven the skyline.

At a local level the LCA includes the settlements of Cottenham, Histon, Impington, Milton, Landbeach and Waterbeach. Histon, Impington and Milton lie adjacent to the edge of Cambridge, separated by the A14, albeit they feel like extensions of the city.

In contrast to the apparent gradual evolution of Histon, Impington and Cottenham recognisable in the spread and layout of housing, Milton and Waterbeach have expanded more rapidly from the 1980s onwards. The barracks and airfield contribute to the character of this part of the LCA.

Land between the villages comprises flat open agricultural farmland that reflects the edge of fenland location. Fields are medium in size with occasional gappy hedgerows and farms dotted across the landscape.

Overall, due to its fair condition, medium tranquillity and moderate susceptibility to change, this area is of medium sensitivity.

LCA8 Fenland extends south and east from Peterborough to Ely and south from Ely to the eastern edge of Cambridge.

Fenland is a landscape of contrasts and variety. Superimposed upon the regimented and highly organised drainage patterns is a much more haphazard pattern of settlement and tree cover. It is a large open landscape and although appearing monotonous, it is in fact characterised by continuous change as the visual characteristics of one fen merge into the next. The open landscape provides distant views where the scattering of clumps and individual trees merge together to produce a feeling of a more densely tree-covered horizon.

There are many 'islands' which rise above the flat ocean of the fens. These range in size from the dominant Isle of Ely which rises over 20m above the adjacent peat fens, to much smaller features which are elevated an almost imperceptible metre or two. These islands are significant in the landscape: most are occupied by settlements or farmsteads which, with their associated tree cover, gives them special prominence.

In the expansive open landscape isolated agricultural buildings, farmsteads and loose-knit villages are often prominent against a background of a constantly changing sky.

At a local level, located between the A10 and River Cam, the LCA is dominated by medium to large flat open arable fields, separated by dykes and occasional hedgerows. Isolated farms and properties are located off roads crossing the study area.

Overall, due to its fair condition, medium tranquillity and moderate susceptibility to change, this area is of medium sensitivity.

All of the proposal sites are located within LCA3 Western Claylands and, therefore, are located within an area of medium sensitivity. As such, it is not possible to differentiate between the sites based on the sensitivity of the landscape character.

2.2 Statutory Designations

2.2.1 Conservation Areas

There are eight conservation areas within the study area, as listed below. Their descriptions are informed by the relevant conservation area appraisals that have been completed to date:

Cottenham

No conservation area appraisal has been completed to date.

Histon

No conservation area appraisal has been completed to date.

Horningsea

The conservation area encompasses the majority of the village, with the exception of the Priory Estate. The southern part of the village has cottages and public houses, many at right angles to the road with boundary fences, railings and long walls. The character changes at the northern end of the village where fine gault brick walls surrounding the large farms define the road to the west, with farm buildings and fences lining the road to the east.

The generally linear nature of the village (especially at the south end) means that glimpses out into open countryside can often be gained. This feeling of openness within the village is emphasised by the green on the east side, whilst its trees combine with those around the Vicarage and contribute much to the quality of the street scene.

Landbeach

No conservation area appraisal has been completed to date.

Oakington

The Conservation Area retains a nucleus of tight-knit historic buildings grouped mostly around the church and the High Street. The rural character of the village is maintained by a number of features comprising: the large area of paddocks in the centre of the village, views out into the surrounding countryside. Trees are very important to the character of the village and there are some significant groups around the rectory and church, on Mill Road and the High Street.

The conservation area is located to the northwest of Water Lane, up to the High Street, encompassing the northern edge of the High Street.

Rampton

The main focus of the conservation area is its historical interest and townscape character. The village had a very limited growth up to the World War Two, meaning most houses predate it. The historic core includes a Saxon church from C12 and a motte castle which overlies part of an earlier medieval settlement.

The conservation area runs across mid High Street, around the Green, up to the end of Cow Street. Most historical buildings are situated around the Green where the agricultural character of the village survives.

St Andrew's Impington

No conservation area appraisal has been completed to date.

Waterbeach

No conservation area appraisal has been completed to date.

Westwick

The majority of buildings in Westwick were built between 1850 and 1939 with only two buildings constructed since World War Two. Westwick Hall is the dominant building in hierarchical terms. Trees and hedgerows that line the road and the old railway track are intrinsic to the character of the village. They form definite boundaries and act as a foil to the built forms. The parkland and views out across agricultural land are essential to the village and give it an essentially rural feel. The original Medieval settlement, together with the site of one of the original village manors, survive as earthworks within the grassland to the north and south of the road, and are clearly visible, albeit in private ownership.

The conservation area is focused on development either side of Oakington Road, east of the guided bus route.

2.2.2 Scheduled Monuments

The following scheduled monuments are in the study area:

- Multi-phased settlement east of Milton.
- Moated site 140m south west of Histon Manor.
- Giant's Hill: a motte castle with part of an earlier medieval settlement and associated field system.
- Cottenham moated site.
- Length of Car Dyke between Green End and Top Moor.
- Denny Abbey.
- Romano-British Settlement at Chittering, Cambs.
- Waterbeach Abbey (site of).
- Car Dyke.

2.2.3 Sites of Special Scientific Interest (SSSI)

There is one SSSI within the study area, listed below, that is partially within the study area. The description is informed by Natural England:

Cam Washes

Cam Washes is the only SSSI situated, non-exclusively, within our study area, in the Cambridgeshire fens. It runs along the banks of the River Cam in eastern Cambridgeshire, between the junction with the River Great Ouse in the north and Commissioner's Farm in the south. Cam Washes are a series of low lying pastures which are subject to seasonal flooding. This seasonal flooding, coupled with a range of grassland structure from damp short grassland to wet tussocky fields, with associated pools, ditches and river margins, together with relative freedom from disturbance makes this an important site for numbers and diversity of wintering and breeding wildfowl and waders. Associated areas of scrub and scattered trees further enhance the value of the area for birds. Although some of the grassland has been agriculturally improved much of the area retains a useful floristic diversity and one small relatively dry field is included largely on floristic grounds.

2.3 Non-statutory Designations

2.3.1 Green Belt

The Cambridge Green Belt was created in 1954. Its purposes, as set out in the Cambridge Local Plan 2006, are to:

- Preserve the unique character of Cambridge as a compact, dynamic city with a thriving historic centre.
- Maintain and enhance the quality of its setting.

Prevent communities in the environs of Cambridge from merging into one another and with the City.

2.4 Topography

It is generally low-lying ground, with altitude dropping toward the north-east of the study area. The area of study encompasses the settlements of Milton, Histon, Impington, Waterbeach, Cottenham, Horningsea, Fen Ditton and Chittering.

3 Visual Amenity

3.1 Key Viewpoints

There is the potential for views across the study area for all site options. However, the number and sensitivity of views varies across the options.

The sensitivity of these visual receptors was evaluated by considering the value attached to specific views and the susceptibility of visual receptor to changes to views and visual amenity. The value attached to a view could derive from a planning designation or an association with a heritage asset. The susceptibility to change depends on the occupation or activity of the receptor and the extent to which their attention is focused on the view and visual amenity.

The evaluation of sensitivity was based on the criteria set out in the table below:

Table 3.1: Visual receptor sensitivity

Receptor	Sensitivity
Occupiers of residential properties orientated towards the development. Walkers and visitors to heritage assets whose attention is focused on a landscape of recognised high quality. Designated or protected views. Views from a recognised high quality landscape such as a National Park or an AONB.	High
People travelling along scenic roads through the landscape. Walkers and visitors to heritage assets whose attention is focused on a landscape of moderate quality. People walking along residential streets. Occupiers of residential properties with oblique views of the development.	Medium
People at work and in educational institutions. People engaged in formal sports activities. People walking through urban areas (for example commuters). People on main roads or railways whose attention is not focused on the landscape (such as commuters).	Low

For the purpose of the landscape appraisal, Zone of Theoretical Visibility (ZTV) plans were used to determine which receptors might be affected by the proposals (see Appendix A). The below table provides a description of each receptor, their location, sensitivity and distance from the Proposed Scheme (all site options have been considered). The receptors chosen may be representative of more than one individual location and have been selected from a desktop survey. A field survey should be undertaken to determine the precise impacts upon receptors, However, it is considered that this is not required at this stage of assessment.

Table 3.2: Residential visual receptors – Site A

Receptor	Sensitivity	Distance
Viewpoint (VP)1 Residents in properties on Iram Drove, looking south.	High	0.8km
VP2 - Residents in properties on Cow Lane, looking west.	High	0.4km
VP3 - Residents in properties on High Street, Rampton looking north.	High	0.4km

Table 3.3: Residential visual receptors – Site B

Receptor	Sensitivity	Distance
VP4 - Residents in properties on Rampton Road looking southwest.	High	0.4km
VP5 - Residents in properties on Stirling Road and Heron Road Lane, looking northeast.	High	0.7km
VP6 - Residents in New Farm looking east.	High	0.8km

Table 3.4: Residential visual receptors – Site C

Receptor	Sensitivity	Distance
VP7 - Residents in properties on Rampton Road looking southwest.	High	0.5km
VP8 - Residents in properties on Rampton Road and off Oakington Road, Cottenham looking southwest.	High	0.4km
VP9 - Residents in properties on Histon Road looking west.	High	1km
VP10 - Residents of Cuckoo Hill Farm looking northeast.	High	0.5km

Table 3.5: Residential visual receptors – Site H

Receptor	Sensitivity	Distance
VP11 - Residents in properties on Cottenham Road, Histon looking east.	High	0.9km
VP12 - Residents in properties on Histon Road, Cottenham looking southeast.	High	0.8km
VP13 - Residents of Rectory Farm Barns looking west.	High	0.9km
VP14 - Residents of Oldfield Farm Barn looking west.	High	0.6km
VP15 - Residents of Bedlam Farm looking northwest.	High	0.9km
VP16 - Residents of Mill Lane Farm looking north.	High	0.3km

Table 3.6: Residential visual receptors – Site I

Receptor	Sensitivity	Distance
VP17 - Residents of Bedlam Farm looking east.	High	0.8km
VP18 - Residents of Oldfield Farm Barn looking southeast.	High	0.9km
VP19 - Residents of Middle Farm looking south.	High	0.8km
VP20 - Residents of Oldfield Farm looking south.	High	0.4km
VP21 - Residents of Rectory Farm looking west.	High	0.4km
VP22 - Residents in properties on Milton Road looking north.	High	0.5km

Table 3.7: Residential visual receptors – Site J

Receptor	Sensitivity	Distance
VP23 - Residents of Fieldstead Farm looking east.	High	0.5km
VP24 - Residents of Greengates Farm looking south.	High	0.4km

Table 3.8: Residential visual receptors – Site L

Receptor	Sensitivity	Distance
VP25 - Residents of High St, Horningsea looking south.	High	0.8km

Receptor	Sensitivity	Distance
VP26 - Residents of Horningsea Road, Fen Ditton looking northeast.	High	0.5km
VP27 - Residents of High Ditch Road, Fen Ditton looking north.	High	0.8km

Table 3.9: Commerical visual receptors – Site J

Receptor	Sensitivity	Distance
VP28 – Workers at Cambridge Science Park looking north	Medium	0.6km

Table 3.10: PRoW visual receptors – Site A

Receptor	Sensitivity	Distance
VP29 – Users of Bridleway 262/7 looking southeast towards the site.	Medium	0.4km
VP30 - Users of Byway 262/8 looking southeast towards the site.	Medium	0.2km
VP31 - Users of Byway 262/9 looking south towards the site.	Medium	0.7km
VP32 – Users of Bridleway 189/7 looking southeast towards the site.	Medium	0.9km
VP33 - Users of Footpath 189/6 looking north.	Medium	0km
VP34 - Users of Footpath 189/3 looking north.	Medium	0.7km
VP35 – Users of Byway 189/2 looking northeast towards the site.	Medium	0.5km

Table 3.11: PRoW visual receptors – Site B

Receptor	Sensitivity	Distance
VP36 – Users of Bridleway 151/12 looking north towards the site.	Medium	0.3km
VP37 – Users of Bridleway 189/8 looking south towards the site.	Medium	0km
VP38 - Users of Byway 189/2 looking west towards the site.	Medium	0.4km
VP39 - Users of Footpath 189/6 looking west towards the site.	Medium	0.8km
VP40 - Users of Footpath 56/5 looking northwest towards the site.	Medium	0.8km
VP41 - Users of Byway 189/5 looking north west towards the site.	Medium	0.5km
VP42 - Users of Byway 189/4 looking north west towards the site.	Medium	0.5km
VP43 – Users of Bridleway 151/13 looking north towards the site.	Medium	0.6km
VP44 - Users of Byway 151/7 looking north towards the site.	Medium	0.6km

Table 3.12: PRoW visual receptors – Site C

Receptor	Sensitivity	Distance
VP45 - Users of Footpath 56/5 looking southeast towards the site.	Medium	0.8km

Receptor	Sensitivity	Distance
VP46 - Users of Footpath 189/6 looking southeast towards the site.	Medium	0.9km
VP47 - Users of Footpath 56/4 looking southeast towards the site.	Medium	0.8km
VP48 – Users of Bridleway 56/14 looking south towards the site.	Medium	0.6km

Table 3.13: PRoW visual receptors – Site H

Receptor	Sensitivity	Distance
No PRoWs within ZTV	N/A	N/A

Table 3.14: PRoW visual receptors – Site I

Receptor	Sensitivity	Distance
VP49 - Users of Byway 162/3 looking east towards the site.	Medium	0.1km
VP50 - Users of Byway 143/3 looking east towards the site.	Medium	0.08km

Table 3.15: PRoW visual receptors – Site J

Receptor	Sensitivity	Distance
VP51 - Users of Bridleway 135/6 looking north towards the site.	Medium	0.7km
VP52 - Users of Bridleway 285/1 looking north towards the site.	Medium	0.7km
VP53 - Users of Byway 162/3 looking west towards the site.	Medium	0km

Table 3.136: PRoW visual receptors – Site L

Receptor	Sensitivity	Distance
VP54 - Users of Footpath 85/3 looking east towards the site.	Medium	0.5km
VP55 - Users of Byway 85/5 looking east towards the site.	Medium	0.5km
VP56 - Users of Footpath 85/6 looking east towards the site.	Medium	0.7km
VP57 - Users of Footpath 85/8 looking east towards the site.	Medium	0.5km
VP58 - Users of Footpath 85/9 looking north towards the site.	Medium	0.8km
VP59 - Users of Byway 85/14 looking southwest towards the site.	Medium	0.5km
VP60 - Users of Footpath 130/1 looking east towards the site.	Medium	0.6km

4 RAG Assessment

The RAG categories for the landscape appraisal were defined as follows:

	Green	Amber	Red
Potential to impact landscape designations	No landscape designations within 1km of the site	Landscape designations within 500m and 1km of the site	Landscape designations within 0m and 500m
Landscape character sensitivity	Located within a landscape character area of low sensitivity	Located within a landscape character area of medium sensitivity	Located within a landscape character area of high sensitivity
Opportunity to utilise existing features for screening	Vegetation adjacent to the site boundary screening greater than 50% of the site	Vegetation adjacent to the site boundary screening up to 50% of the site	No vegetation providing screening opportunities
Visual sensitivity	Fewer than 10 receptor locations within 1km of the site.	Between 10 and 50 receptor locations within 1km of the site.	Greater than 50 receptor locations within 1km of the site.

The RAG assessment of the shortlisted sites areas is provided in Table 4.1.

Table 4.1: RAG Assessment – All site options

Criteria	Site A	Site B	Site C	Site H	Site I	Site J	Site L
Potential to impact statutory landscape designations	2 scheduled monuments within 1km of the site.	No landscape designations within 1km of the site.	1 scheduled monument within 1km of the site.	No landscape designations within 1km of the site.	No landscape designations within 1km of the site.	No landscape designations within 1km of the site.	No landscape designations within 1km of the site.
Landscape character sensitivity	Site within an area of medium sensitivity.	Site within an area of medium sensitivity.	Site within an area of medium sensitivity.	Site within an area of medium sensitivity.	Site within an area of medium sensitivity.	Site within an area of medium sensitivity.	Site within an area of medium sensitivity.
Opportunity to utilise existing features for screening	No significant areas of vegetation adjacent to the site.	No significant areas of vegetation adjacent to the site.	No significant areas of vegetation adjacent to the site.	No significant areas of vegetation adjacent to the site.	No significant areas of vegetation adjacent to the site.	Significant area of vegetation running along the eastern and southern site boundaries, with additional vegetation to the east and south of the site.	No significant areas of vegetation adjacent to the site.
Visual sensitivity	Between 10 and 50 receptor locations within 1km of the site.	Between 10 and 50 receptor locations within 1km of the site.	Between 10 and 50 receptor locations within 1km of the site.	Between 10 and 50 receptor locations within 1km of the site.	Fewer than 10 receptor locations within 1km of the site.	Fewer than 10 receptor locations within 1km of the site.	Between 10 and 50 receptor locations within 1km of the site.
Summary of criteria	Medium number of visual receptors affected by this site option, located within an area of medium landscape sensitivity and within 1km of two scheduled monuments, with no existing vegetation screening the site.	Medium number of visual receptors affected by this site option, located within an area of medium landscape sensitivity, with no existing vegetation screening the site.	Medium number of visual receptors affected by this site option, located within an area of medium landscape sensitivity and within 1km of a scheduled monument, with no existing vegetation screening the site.	Medium number of visual receptors affected by this site option, located within an area of medium landscape sensitivity, with no existing vegetation screening the site.	Few visual receptors affected by this site option, located within an area of medium landscape sensitivity, with no existing vegetation screening the site.	Few visual receptors affected by this site option, located within an area of medium landscape sensitivity, with existing vegetation partially screening the site.	Medium number of visual receptors affected by this site option, located within an area of medium landscape sensitivity, with no existing vegetation screening the site.

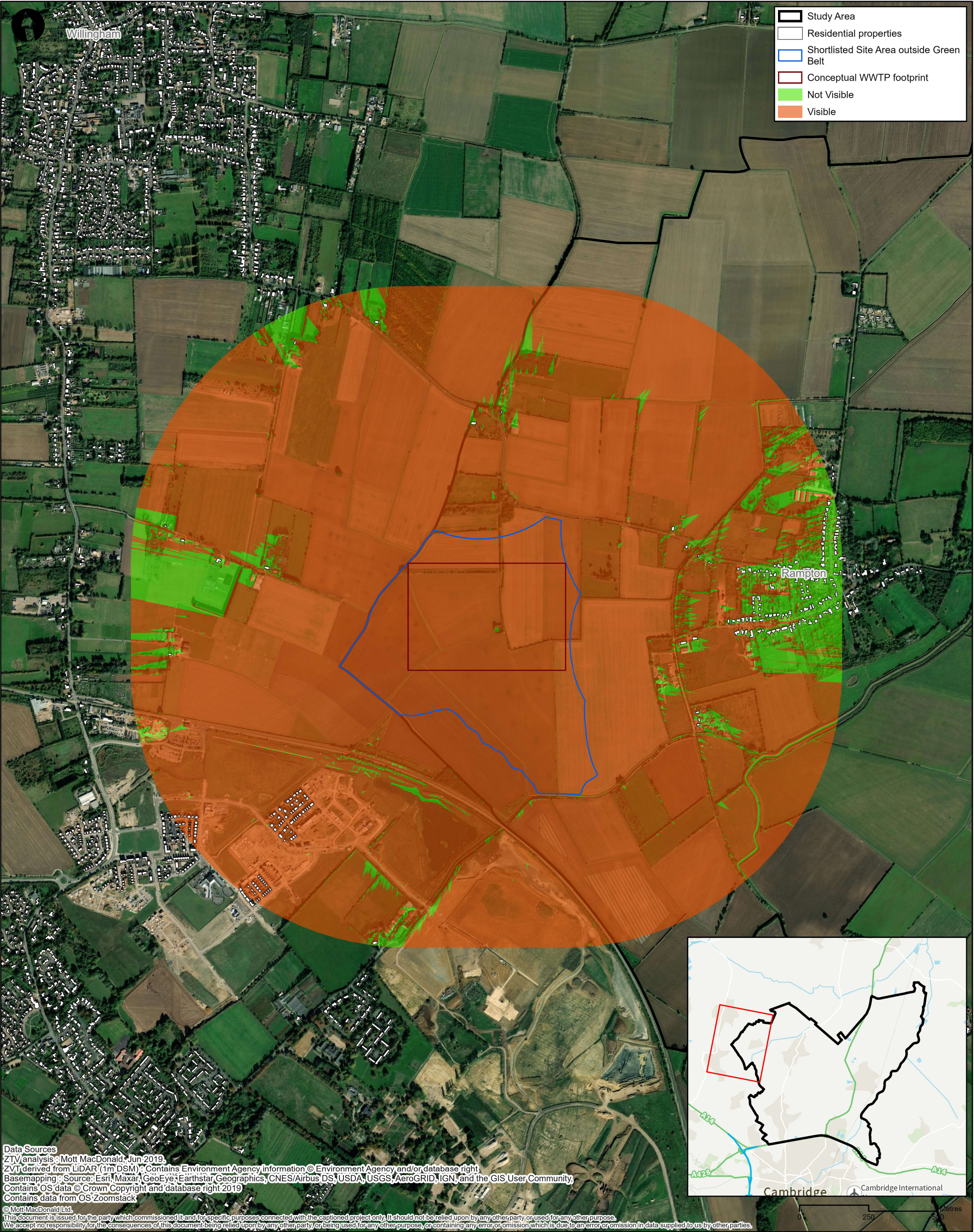
5 Recommendations

Based on the initial landscape and visual amenity appraisal and assessment of the design guidance highlighted within this report, the following recommendations and additional requirements are set out. It should be noted that these may change following consultation with the Local Planning Authority.

- Once a frozen layout for the WWTP has been identified a full Landscape and Visual Impact Assessment (LVIA) should be undertaken.
- Liaise with the engineering and environmental team to develop a WWTP that considers the environmental constraints e.g. important landscape and heritage features, drainage constraints, protected species etc. and responds accordingly.
- Focus design development on minimising visual impact on properties in the wider landscape.
- Develop a landscape design that respects the local landscape character, whilst minimising visual impact of the proposals.
- Prepare an outline Landscape Management Plan to achieve landscape objectives and approach to delivery, maintenance, management and monitoring.

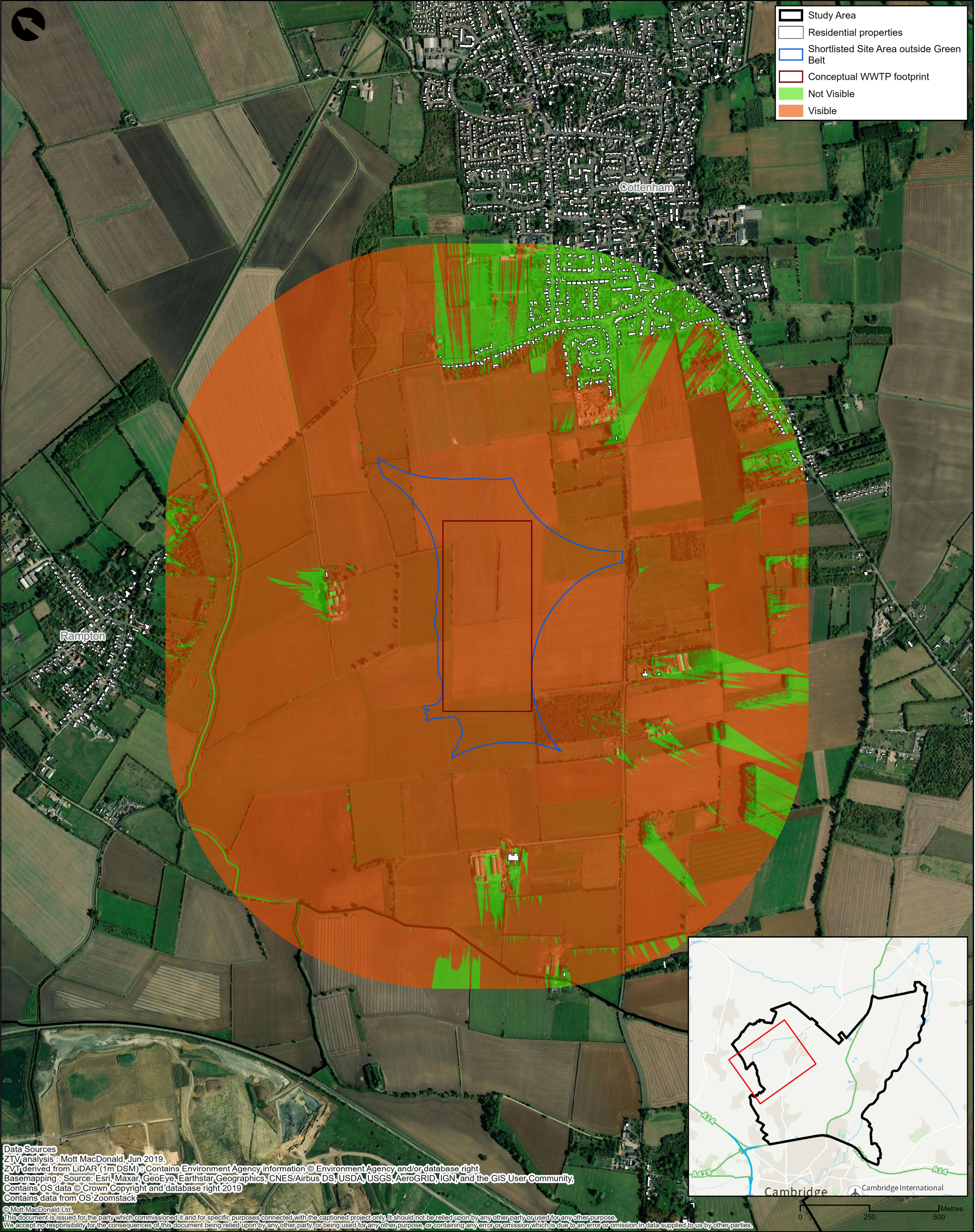
Appendices

A. Zone of Theoretical Visibility (ZTV) Plans



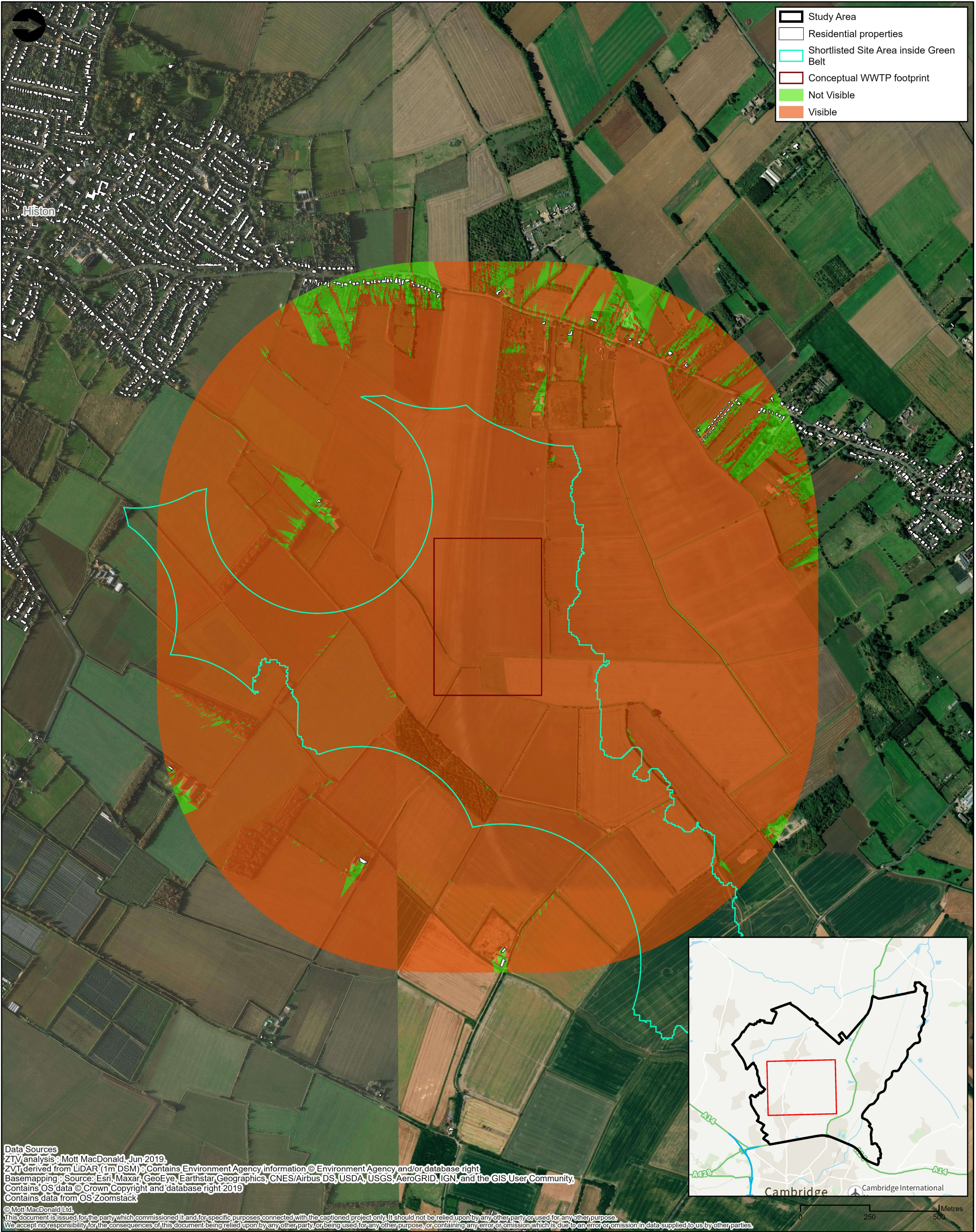
Data Sources
ZTV analysis: Mott MacDonald, Jun 2019.
ZVT derived from LiDAR (1m DSM). Contains Environment Agency information © Environment Agency and/or database right.
Basemapping: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.
Contains OS data © Crown Copyright and database right 2019
Contains data from OS Zoomstack
© Mott MacDonald Ltd.
This document is issued for the party which commissioned it and for specific purposes connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose.
We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

M M MOTT MACDONALD 22 Station Road Cambridge CB1 2JD United Kingdom T +44 (0)20 8774 2000 F +44 (0)20 8681 5706 W mottmac.com	Client anglianwater					Title Cambridge WWTP Relocation Project Site Selection Stage 3 Site B - 1km ZTV			Drawn	N Critten																			
	<table><tr><td>Rev</td><td>Date</td><td>Drawn</td><td>Description</td><td>Ch'k'd</td><td>App'd</td></tr><tr><td>C</td><td>06/05/20</td><td>NC</td><td>Final</td><td>MR</td><td>JN</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>								Rev	Date	Drawn	Description	Ch'k'd	App'd	C	06/05/20	NC	Final	MR	JN							Checked	M Rickard	
									Rev	Date	Drawn	Description	Ch'k'd	App'd															
									C	06/05/20	NC	Final	MR	JN															
Approved	J Newton																												
					Scale at A3 1:12,500																								
						Drawing Number 409071-MMD-00-XX-GIS-Y-0132			Security STD	Status PRE	Rev C																		



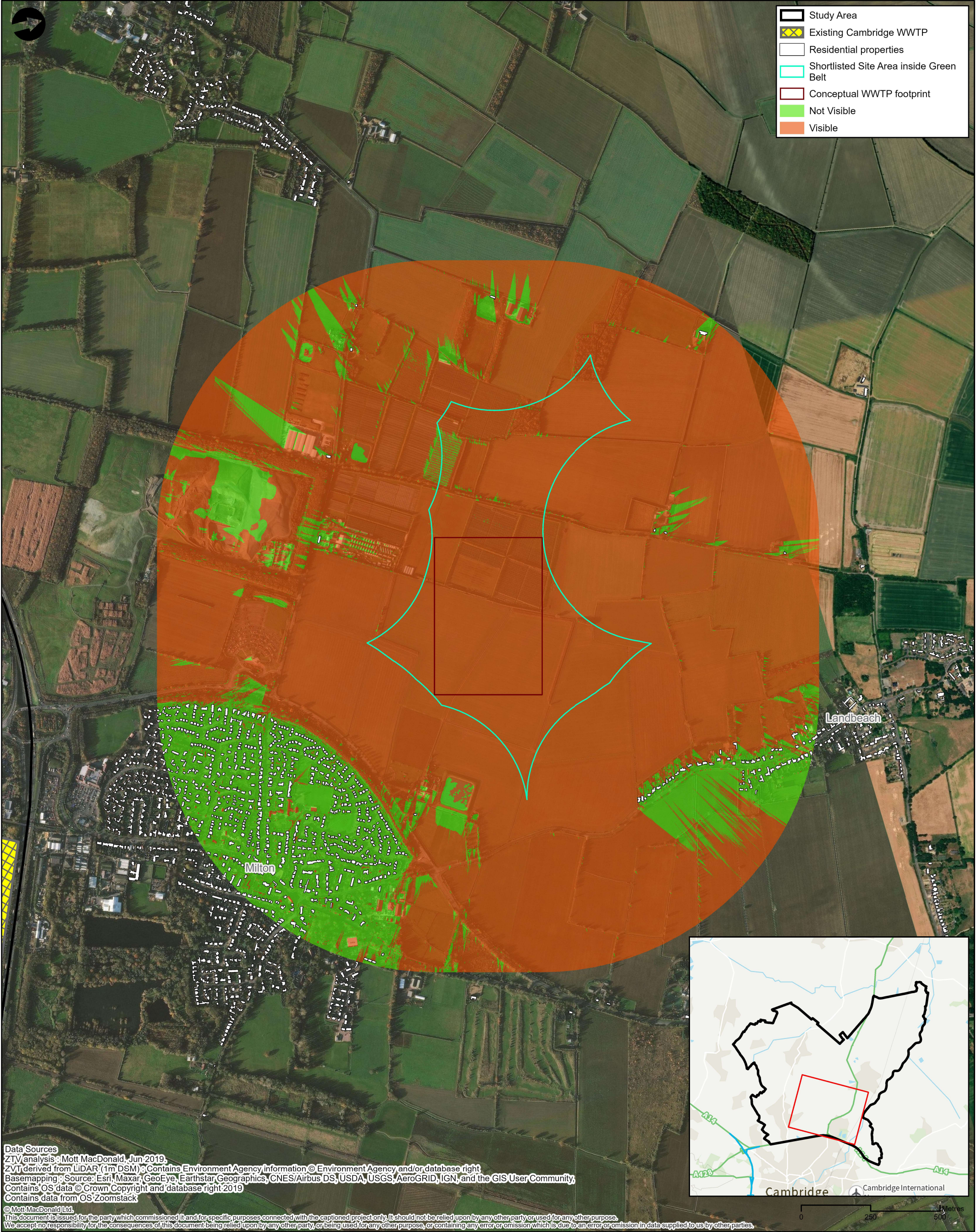
Data Sources
ZTV analysis : Mott MacDonald, Jun 2019.
ZVT derived from LiDAR (1m DSM) : Contains Environment Agency information © Environment Agency and/or database right
Basemapping : Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community,
Contains OS data © Crown Copyright and database right 2019
Contains data from OS Zoomstack
© Mott MacDonald Ltd.
This document is issued for the party which commissioned it and for specific purposes connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose.
We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

M M MOTT MACDONALD 22 Station Road Cambridge CB1 2JD United Kingdom T +44 (0)20 8774 2000 F +44 (0)20 8681 5706 W mottmac.com	Client						Title Cambridge WWTP Relocation Project Site Selection Stage 3 Site C - 1km ZTV	Drawn	N Critten	
	anglianwater							Checked	M Rickard	
								Approved	J Newton	
								Scale at A3 1:12,500		
								Rev	Date	Drawn
C	06/05/20	NC	Final	MR	JN	STD	PRE	C		



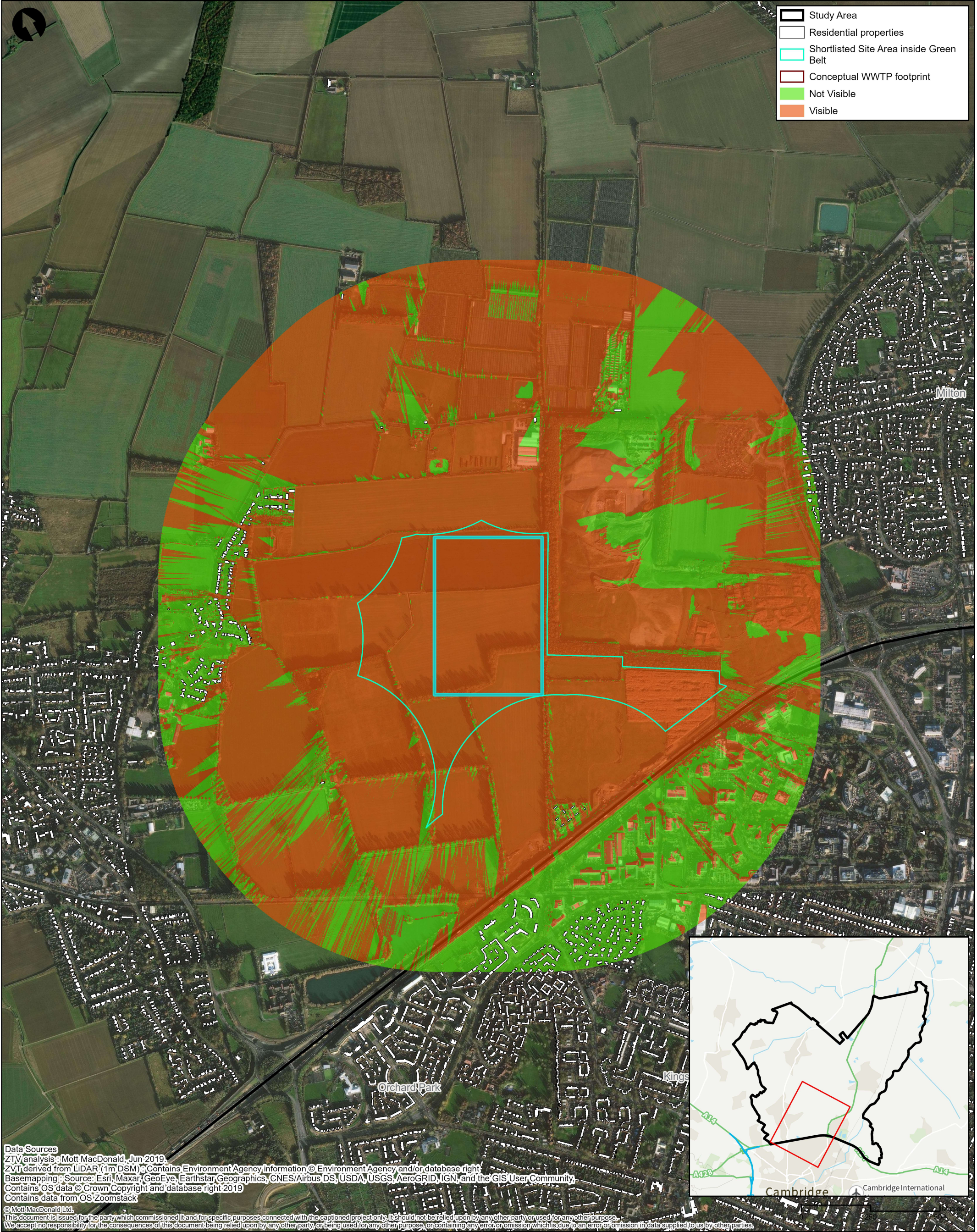
Data Sources
ZTV analysis: Mott MacDonald, Jun 2019.
ZVT derived from LiDAR (1m DSM): Contains Environment Agency information © Environment Agency and/or database right
Basemapping: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community,
Contains OS data © Crown Copyright and database right 2019
Contains data from OS Zoomstack
© Mott MacDonald Ltd.
This document is issued for the party which commissioned it and for specific purposes connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose.
We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

M M MOTT MACDONALD 22 Station Road Cambridge CB1 2JD United Kingdom T +44 (0)20 8774 2000 F +44 (0)20 8681 5706 W mottmac.com	Client anglianwater					Title Cambridge WWTP Relocation Project Site Selection Stage 3 Site H - 1km ZTV			Drawn	N Critten							
									Checked	M Rickard							
									Approved	J Newton							
									Scale at A3 1:12,500								
					Rev	Date	Drawn	Description		Ch'k'd	App'd	Drawing Number 409071-MMD-00-XX-GIS-Y-0134			Security	Status	Rev
					C	06/05/20	NC	Final		MR	JN				STD	PRE	C



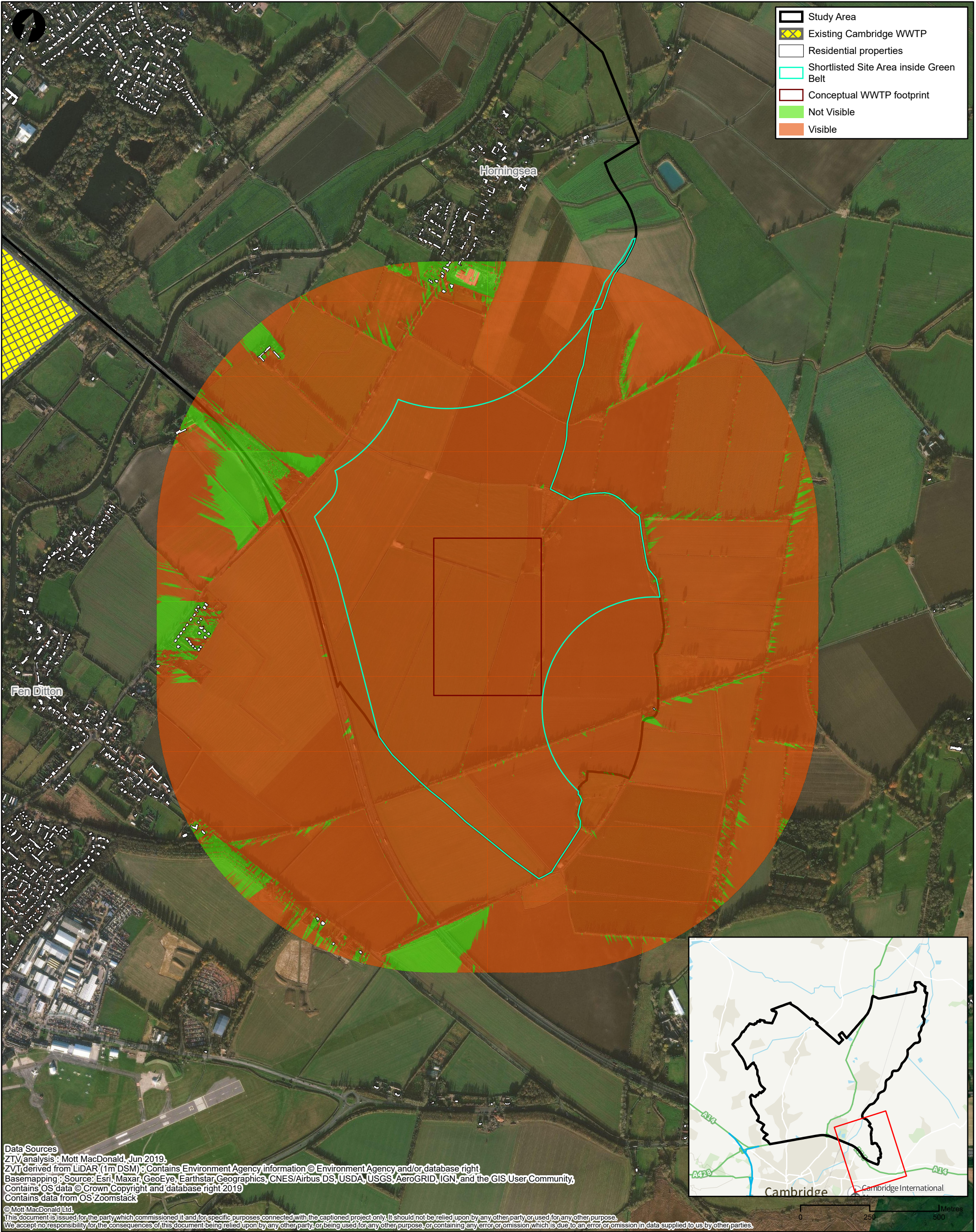
Data Sources
ZTV analysis: Mott MacDonald, Jun 2019.
ZVT derived from LiDAR (1m DSM): Contains Environment Agency information © Environment Agency and/or database right
Basemapping: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community,
Contains OS data © Crown Copyright and database right 2019
Contains data from OS Zoomstack
© Mott MacDonald Ltd.
This document is issued for the party which commissioned it and for specific purposes connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose.
We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

M M MOTT MACDONALD 22 Station Road Cambridge CB1 2JD United Kingdom T +44 (0)20 8774 2000 F +44 (0)20 8681 5706 W mottmac.com	Client					Title			Drawn	N Critten	
	anglianwater					Cambridge WWTP Relocation Project Site Selection Stage 3 Site I - 1km ZTV			Checked	M Rickard	
									Approved	J Newton	
									Scale at A3 1:12,500		
	Rev	Date	Drawn	Description	Ch'k'd	App'd	Drawing Number 409071-MMD-00-XX-GIS-Y-0135			Security	Status
C	06/05/20	NC	Final	MR	JN	STD				PRE	C



Data Sources
ZTV analysis: Mott MacDonald, Jun 2019.
ZVT derived from LiDAR (1m DSM). Contains Environment Agency information © Environment Agency and/or database right.
Basemapping: Source: Esri, Maxar, GeoEye, Earthstar, Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.
Contains OS data © Crown Copyright and database right 2019.
Contains data from OS Zoomstack.
© Mott MacDonald Ltd.
This document is issued for the party which commissioned it and for specific purposes connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose.
We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

M M MOTT MACDONALD 22 Station Road Cambridge CB1 2JD United Kingdom T +44 (0)20 8774 2000 F +44 (0)20 8681 5706 W mottmac.com	Client					Title			Drawn	N Critten		
	anglianwater					Cambridge WWTP Relocation Project Site Selection Stage 3 Site J - 1km ZTV			Checked	M Rickard		
									Approved	J Newton		
						Drawing Number 409071-MMD-00-XX-GIS-Y-0136			Scale at A3 1:12,500			
									Security	Status	Rev	
	Rev	Date	Drawn	Description	Ch'k'd	App'd				STD	PRE	C
	C	06/05/20	NC	Final	MR	JN						



Data Sources
ZTV analysis: Mott MacDonald, Jun 2019.
ZVT derived from LiDAR (1m DSM): Contains Environment Agency information © Environment Agency and/or database right
Basemapping: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community,
Contains OS data © Crown Copyright and database right 2019
Contains data from OS Zoomstack
© Mott MacDonald Ltd.
This document is issued for the party which commissioned it and for specific purposes connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose.
We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

M M MOTT MACDONALD 22 Station Road Cambridge CB1 2JD United Kingdom T +44 (0)20 8774 2000 F +44 (0)20 8681 5706 W mottmac.com	Client					Title Cambridge WWTP Relocation Project Site Selection Stage 3 Site L - 1km ZTV			Drawn	N Critten		
	an glianwater								Checked	M Rickard		
									Approved	J Newton		
	Rev	Date	Drawn	Description		Ch'k'd	App'd	Drawing Number			Security	Status
C	11/06/20	NC	Final		MR	JN	409071-MMD-00-XX-GIS-Y-0137			STD	PRE	C

