JAMES BLAKE ASSOCIATES

Wintering Bird Survey

of

Phases 2-6 and Relief Road,

Haverhill, Suffolk

On behalf of:

Persimmon Homes Suffolk

February 2020

Over 30 Years of Service, Value and Innovation

The Black Barn, Hall Road, Lavenham, Suffolk CO10 9QX
tel: **01787 248216** fax: **01787 247264** email: **jamesblake@jba-landmarc.com**
Chairman: James Blake BA (Hons) Dip LA (Hons) CMLI
Company Secretary: Louise Blake BSc PGCE
Directors: Elzbieta Zebrowska MSc Eng LArch MScEnvSc CMLI : Kevin Slezacek DipArb MArborA
Associate Directors: Vivienne Jackson : Marie Lowe CIMA Cert BA

www.jba-landmarc.com

Registration no. 08169866 VAT no. 512 4127 91

Revision	Purpose	Originated	Checked	Authorised	Date
		CB	AC/SR	JBA	February 2020
Job Number: JBA 18/351 and 17/364		**Title:** Wintering Bird Survey of Phases 2–6 and Relief Road, Haverhill, Suffolk			

Disclaimer

James Blake Associates Ltd have made every effort to meet the client's brief. However, no survey ensures complete and absolute assessment of the changeable natural environment. The findings in this report were based on evidence from thorough survey: It is important to remember that evidence can be limited, hard to detect or concealed by site use and disturbance. When it is stated that no evidence was found or was evident at that point in time, it does not mean that species are not present or could not be present at a later date: The survey was required because habitats are suitable for a given protected species, and such species could colonise areas following completion of the survey.

This report was instructed by Persimmon Homes Suffolk. Neither James Blake Associates Ltd nor any associated company, nor any of their employees, nor any of their contractors, subcontractors or their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or any third party's use of the report.

CONTENTS

EXECUTIVE SUMMARY

Wintering bird surveys were carried out on land proposed for Phases 2-6 and the Relief Road, Haverhill, Suffolk on the 19th November and 24th December 2019; and 17th January and 21st February 2020.

Forty-five bird species were recorded either on the site or overflying. These included nine Species of Principal Importance (SPI) in England. In terms of the Birds of Conservation Concern (BoCC) categorisation, BoCC Red listed species and eight Amber listed species were recorded using the site.

The bird species noted using the site are generally common and widespread. No significant population of interest was recorded.

Key habitat for birds on site includes the mature trees, hedgerows, hedgerow margins, scrub and previously cultivated arable fields. As much of the boundary habitats should be retained where possible and enhanced by the development. The arable fields will be lost to the development but recommended mitigation measures are discussed.

Open space within the development, including Sustainable Drainage Systems (SuDS), is recommended to be designed, created and managed to provide foraging and wintering habitat for birds, including reed bunting (*Emberiza schoeniclus*), skylark (*Alauda arvensis*) and yellowhammer (*Emberiza citrinella*) currently using open fields for wintering and foraging which are not able to be retained by the development.

Public access should be carefully managed to ensure that sensitive bird species and the habitats they depend on are not subject to disturbance. Other enhancements include the provision of bird boxes on new buildings and retained trees. Any vegetation clearance/management should be undertaken outside the breeding bird season. Nesting bird season is deemed to be March to August, weather dependant.

If recommendations outlined in this report, including precautionary measures, are followed, it is considered that impacts to wintering and foraging birds would be low.

1 INTRODUCTION

Background to the study

1.1 James Blake Associates Ltd. (JBA) was commissioned by Persimmon Homes Suffolk, to undertake wintering bird surveys of Phases 2-6 and the Relief Road, Haverhill, Suffolk, (Ordnance Survey National Grid Reference TL 6692 4694, taken from the centre of the site).

1.2 A breeding bird survey was carried out in 2019 (JBA, 2019). This found that the site supported populations of mainly common and widespread species; fifty-two species were recorded in total, of which thirteen species were confirmed breeding, twenty-one species were probable breeders and twelve species possibly breeding. Eight BoCC Red listed species and ten Amber listed species were found. One Schedule 1 species, Barn owl was recorded during the course of another ecological survey.

Surveyors

1.3 Surveys were carried out by Christopher Bridge BSc (Hons) (Natural England Barn Owl Class Licence CL29), Daniel Blake BSc (Hons) Qualifying CIEEM and Sam Rigg BSc (Hons) ACIEEM.

Geographical scope

1.4 The site is located to the north of Haverhill. Residential areas lie to the south and agricultural areas to the north, east and west of the site. A143 Haverhill Road runs to the east of the site. The wider landscape is dominated by arable land with a large deciduous woodland (Norney Plantation County Wildlife Site) to the north (see Figure 1).

1.5 The site comprised previously cultivated arable fields divided by networks of hedgerows with ditches.

Figure 1: Site Location

Reproduced from Magic Maps Application by permission of licence number 100059700

Aims and objectives

1.6 The aim of the survey was to;

- determine if significant bird species and/or population sizes were using the site for wintering and foraging at the time of the survey;
- to determine the likely risk of impact on birds and local bird conservation from the proposed development; and
- to recommend precautionary measures, compensation of habitats or mitigation to prevent harm to birds, if necessary.

2 METHODOLOGY

Methods

2.1 Surveys were conducted in optimal weather conditions (dry, with little/moderate wind) and during the peak bird wintering season (November to February). The duration of each survey was approximately two and a half hours.

2.2 Surveys were undertaken on the 19th November and 24th December 2019; 17th January and 21st February 2020, within three hours of dawn, when territorial behaviour is usually at its peak.

2.3 The survey was based on a registration mapping methodology adapted from the BTO Wintering Bird Survey: during each visit, all birds seen or heard were recorded on a plan along with any significant behaviour, particularly regarding territorial activity e.g. territorial singing and foraging.

Constraints

2.4 There were no constraints to the survey.

3 RESULTS

Survey results

3.1 Forty-five bird species were recorded either on or flying over the site, (see Appendix A for transect maps showing bird activity).

3.2 The table below shows all of the species that were observed, the date(s) of observation and their conservation status.

Table 1: Summary of survey results

Species	BTO code	Suffolk BAP	Schedule 1	NERC SPI	BoCC	Survey dates & species observed			
						19.11.2019	24.12.2019	17.01.2020	21.02.2020
Blackbird *Turdus merula*	B.					✓	✓	✓	✓
Black-headed gull *Chroicocephalus ridibundus*	BH				Amber		✓		✓
Blue tit *Cyanistes caeruleus*	BT					✓	✓	✓	✓
Buzzard *Buteo buteo*	BZ						✓		
Carrion crow *Corvus corone*	C.					✓	✓	✓	✓
Chaffinch *Fringilla coelebs*	CH					✓	✓	✓	
Collared dove *Streptopelia decaocto*	CD					✓	✓	✓	✓
Common gull *Larus canus*	CM				Amber		✓		
Cormorant *Phalacrocorax carbo*	CA						✓		
Dunnock *Prunella modularis*	D.			✓	Amber	✓	✓	✓	✓
Feral pigeon *Columba livia domestica*	FP						✓	✓	
Goldcrest *Regulus regulus*	GC							✓	
Golden plover *Pluvialis apricaria*	GP								✓

Species	BTO code	Suffolk BAP	Schedule 1	NERC SPI	BoCC	Survey dates & species observed			
						19.11.2019	24.12.2019	17.01.2020	21.02.2020
Goldfinch *Carduelis carduelis*	GO					✓	✓	✓	✓
Great-spotted woodpecker *Dendrocopos major*	GS								✓
Great tit *Parus major*	GT					✓	✓	✓	✓
Greenfinch *Carduelis chloris*	GR					✓	✓	✓	✓
Green woodpecker *Picus viridis*	G.					✓	✓	✓	✓
Grey heron *Ardea cinerea*	H.								✓
Herring gull *Larus argentatus*	HG			✓	Red Subsp. *argentatus*				✓
House sparrow *Passer domesticus*	HS			✓	Red	✓	✓	✓	✓
Jackdaw *Corvus monedula*	JD					✓	✓		
Jay *Garrulus glandarius*	J.					✓	✓		
Kestrel *Falco tinnunculus*	K.				Amber	✓	✓	✓	✓
Lesser black-backed gull *Larus fuscus*	LB				Amber				✓
L**innet** *Carduelis cannabina*	LI			✓	Red	✓	✓		
Long-tailed tit *Aegithalos caudatus*	LT					✓	✓		✓
Magpie *Pica pica*	MG					✓	✓	✓	✓
Meadow pipit *Anthus pratensis*	MP				Amber	✓	✓		✓
Pheasant *Phasianus colchicus*	PH					✓	✓	✓	✓
Pied wagtail *Motacilla alba*	PW					✓	✓		
Red kite *Milvus milvus*	KT		✓						✓
Redwing *Turdus lliacus*	RD				Red	✓		✓	

Species	BTO code	Suffolk BAP	Schedule 1	NERC SPI	BoCC	Survey dates & species observed			
						19.11.2019	24.12.2019	17.01.2020	21.02.2020
Reed bunting *Emberiza schoeniclus*	RB			✓	Amber	✓	✓	✓	✓
Robin *Erithacus rubecula*	R.					✓	✓	✓	✓
Rook *Corvus frugilegus*	RO					✓			
Siskin *Carduelis spinus*	SK					✓			
Skylark *Alauda arvensis*	S.			✓	Red	✓	✓	✓	✓
Song thrush *Turdus philomelos*	ST			✓	Red	✓	✓	✓	✓
Sparrowhawk *Accipiter nisus*	SH						✓	✓	✓
Starling *Sturnus vulgaris*	SG			✓	Red	✓	✓	✓	✓
Stock dove *Columba oenas*	SD				Amber				✓
Woodpigeon *Columba palumbus*	WP					✓	✓	✓	✓
Wren *Troglodytes troglodytes*	WR					✓	✓	✓	✓
Yellowhammer *Emberiza citrinella*	Y.			✓	Red	✓	✓	✓	✓

NERC SPI = Species of Principal Importance in England under Section 41 of the NERC Act (2006)
Suffolk BAP = Local Biodiversity Action Plan
BoCC = Birds of Conservation Concern
Schedule 1 = protected (while breeding) under Schedule 1 of the Wildlife and Countryside Act (1981)
Black text: Observed using habitats within the site boundary

Weather conditions

3.3 The four wintering bird survey visit dates and the weather conditions that were recorded during surveys are provided in Table 2.

Table 2: Summary of weather conditions

Visit	Date 2019	Weather conditions
1	19th November	-1 °C, 35% cloud cover and Beaufort 0
2	24th December	8°C, 80% cloud cover and Beaufort 2 to 3
Visit	**Date 2020**	**Weather conditions**
3	17th January	8°C, 90 % cloud cover and Beaufort 3
4	21st February	4°C, 100% cloud cover and Beaufort 3 to 4

4 EVALUATION

4.1 Birds of Conservation Concern (BoCC) assigns species to Red, Amber or Green lists under the following criteria:

Red List species

These are species of high national conservation concern. Species are included on this list if they meet one or more of the following criteria:

- Globally threatened;
- Historical population decline in UK during 1800-1995;
- Rapid (>50%) decline in UK breeding or non-breeding population over last 25 years;
- Rapid (>50%) contraction of UK breeding range over last 25 years.

Amber List species

These are species of medium national conservation concern. Species are included on this list if they meet one or more of the following criteria:

- Historical population decline during 1800-1995, but now recovering with population size having more than doubled over the last 25 years;
- Moderate (25-49%) decline in UK breeding or non-breeding population or breeding range over the last 25 years;
- Species of European Conservation Concern;
- Between only one and 300 breeding pairs, or one and 900 individuals, in the UK;
- >50% of the UK breeding or non-breeding population in ten or fewer sites;
- >20% of the European breeding population in the UK;
- >20% of the North-West European (wildfowl), East Atlantic Flyway (waders) or European (others) non-breeding populations in the UK.

Green List species

All regularly occurring native species that do not qualify under any of the red or amber criteria are green listed. The green list also includes those species listed as recovering from Historical Decline in the last review that have continued to recover and do not qualify under any of the other criteria.

Overview of birds observed during the surveys

4.2 Species of Principal Importance (SPI)

Nine Priority species were identified on or flying over the site; eight of which are confirmed to be over-wintering at the site. Species identified are as follows;

- **Dunnock** (*Prunella modularis*) were recorded during all four survey visits, calling and foraging within trees and scrub on the boundary and hedgerows throughout the site. The dunnock is an SPI and BoCC Amber listed species as UK populations declined significantly during the 1970s and 1980s although are now more stable. The species remains widespread throughout Britain including Suffolk. It is recommended that boundary vegetation is retained and enhanced and gaps in retained hedgerows are planted up to maintain thick and dense wintering and foraging habitats for dunnock. If these measures are undertaken it is considered unlikely that the local population status of wintering dunnock would be significantly impacted by the proposals.

- **House sparrow** (*Passer domesticus*) were recorded during all four surveys; foraging mostly in the edges of fields next to existing dwellings. House sparrows are an SPI and a BoCC Red listed species due to a rapid decline in their abundance over the last 25 years. It is considered likely that this species uses the proposed development site for wintering in good numbers due to the availability of foraging habitat within peripheral hedgerows and adjacent gardens. The house sparrow remains widespread and common throughout England and locally within Suffolk; it was the most recorded bird during the Royal Society for the Protection of Birds (RSPB) 'Big Garden Birdwatch' in 2019, being recorded in 63% of participating gardens, respectively. Habitat for foraging sparrows could be provided within suitably managed buffers to

retained hedgerows and tree lines. It is recommended that boundary vegetation is retained and enhanced and gaps in retained hedgerows are planted up to maintain thick and dense wintering and foraging habitats for house sparrows. It is considered unlikely that this species would be significantly impacted over winter by the proposed development if these measures are undertaken.

- **Linnet** (*Carduelis cannabina*) were recorded during all four survey visits, particularly within overgrown bramble scrub and within the arable fields, as flocks totalling c 30 individuals were recorded. Linnets are a BoCC Red listed species and an SPI due to steep declines between 1968 and 1991. Numbers nationally rose slightly in the ten years after 1985 and since then have seen a decline in England and Wales of approximately 30%. Linnet numbers within Suffolk are currently stable; however the linnet population in East England has declined by 21% between 1994 and 2005. Retention and enhancement of hedgerows will benefit this species, particularly if thorny species are included in the planting mix. Additional scrub planting along the boundaries is also recommended to increase this habitat type. If these recommendations are carried out, it is unlikely that the local wintering population of this species will be significantly impacted by the proposals.

- **Reed bunting** (*Emberiza schoeniclus*) were recorded on all four survey visits using habitats within the site, predominantly hedgerows and arable fields. Reed bunting is a BoCC Amber listed species, as well as an SPI in England, with a long term national trend of a 48% decline between 1968 and 1999. In Eastern England, however, numbers have increased by 20% between 1994 and 2005 due to the clearance of riparian and ditch side vegetation. Hedgerow retention and planting, as recommended previously for other species, would benefit reed bunting. Grassland creation, using a seed mix rich in seed-bearing species, is recommended along the northern and southern boundaries. If these measures are included within the development, it is unlikely that the wintering population of this species will be impacted by the development.

- **Skylark** (*Alauda arvensis*) were seen foraging and heard calling and carrying out territorial singing flights within arable fields on the site during all four

survey visits in small numbers. This species is an SPI in England and Suffolk, a BoCC Red listed species and a Suffolk Biodiversity Action Plan (BAP) species, due to significant population declines over the past 25 years, with a rapid decline from the mid-1970s until the mid-1980s. Skylarks are still widespread throughout the UK and Suffolk but showing a slow decline in abundance. It is considered likely that wintering skylarks will be impacted by the proposals by the direct loss of foraging habitat within the arable fields. Skylark nest plots will be provided off site (JBA, 2019) which will also provide extra wintering and foraging grounds. Grassland areas within the site will form a provision for enhanced foraging habitat for skylark.

- **Song thrush** (*Turdus philomelos*) were recorded calling and territorial singing from perches and foraging within the site during all four survey visits. The abundance of hedgerows and scrub provided good foraging opportunities. The song thrush is an SPI in England, a BoCC Red listed and a Suffolk BAP species, due to significant population declines. Between 1970 and 1995, song thrush declined by approximately 50%, particularly on farmland, where populations decreased by approximately 70%. Song thrush is widespread within the UK and Suffolk and is showing a general increase, although population levels remain relatively low. Retention of on-site foraging habitat, including hedgerows, scrub and mature trees within the site and at the boundaries and native hedgerow and tree planting within the scheme, with areas of less intensive management to allow scrub encroachment, will provide additional wintering and foraging habitat for song thrush and should ensure that wintering population of this species will not be impacted by the development.

- **Starling** (*Sturnus vulgaris*) were recorded during all four survey visits, predominantly foraging within fields and along the boundaries. The site is of high value for wintering starlings. Starlings are a BoCC Red listed species, as well as an SPI in England, due to long term declines in the number of breeding pairs in Britain, reasons for which are under research. Starlings remain widespread within Britain and Suffolk and this species was the second most numerous bird recorded during the RSPB ‘Big Garden Birdwatch’ in 2019. It is recommended that foraging habitat is retained, where possible, and enhanced and/or incorporated into Public Open Space (POS) within landscape plans. If

this can be achieved, it is considered unlikely that wintering starlings would be significantly impacted by the proposed development.

- **Yellowhammer** (*Emberiza citrinella*) were recorded during all four survey visits using habitats within the site, predominantly the internal hedgerows. Yellowhammer is a BoCC Red listed species, as well as an SPI in England, due to >50% decline nationally within the past 20 years. Hedgerow retention and gapping up, as recommended previously for other species would benefit yellowhammer, along with creation of grassland in suitable areas next to retained hedgerows using a seed mix rich in seed-bearing species. If these measures are included in the development, it is likely that the local conservation status of wintering yellowhammer is unlikely to be affected.

- **Herring gull** (*Larus argentatus*), was recorded overflying the site on 21st February 2020. This BoCC Red listed species is considered unlikely to be wintering at the site due to the lack of suitable foraging grounds. It is therefore considered unlikely that the development would impact on the local population status of these gulls.

4.3 BoCC Red Listed Species

Eight Red listed species were recorded during the survey visits, seven of these are also SPI (herring gull, house sparrow, linnet, skylark, song thrush, starling and yellowhammer) which are discussed above in Section 4.2.

The single Red listed species (not SPI) recorded using the site is detailed below;

- **Redwing** (*Turdus iliacus*) were recorded in small numbers within the site boundary on intersecting hedgerows and boundary trees on the southern boundary. The retention of on-site foraging habitat, including fruit-bearing hedgerows, scrub with mature trees within the site and at the boundaries, as well as native hedgerow and tree planting within the scheme, should ensure that this winter visitor will not be impacted by the development.

4.4 BoCC Amber Listed Species

Eight BoCC Amber listed species were recorded either using habitats within the site boundary or overflying; two of which are also SPI (dunnock and reed bunting) which are detailed in paragraph 4.2. The remaining Amber listed species are outlined below;

- **Black-headed gull** (*Chroicocephalus ridibundus*) were recorded on 14th December flying high over the site in small numbers. This species is considered unlikely to be wintering at the site due to the lack of suitable foraging sites and would likely use the arable fields as a flight path only.

- **Kestrel** (*Falco tinnunculus*) were recorded on all four survey visits. Sightings were of individuals flying over the site and foraging on land within the site. Observations of foraging behaviour suggested that kestrel were wintering on the site in small numbers, approximately five. It is considered that the development would impact the local population status of kestrel. Hedgerow retention and gapping up, as recommended previously for other species would benefit kestrel, along with creation of grassland areas in suitable margins next to retained hedgerows using a seed mix rich in seed-bearing species, which would attract small mammals which kestrels rely upon, i.e. field vole and common shrew. If these measures are included in the development, it is likely that the local conservation status of kestrel is unlikely to be affected.

- **Common gull** (*Larus canus*) were recorded on 24th December flying high over the site. This species is considered unlikely to be wintering at the site due to the lack of suitable foraging sites and would likely use the arable fields as a flight path only.

- **Lesser black-backed gull** (*Larus fuscus*) were recorded on 21st February; sightings were of individuals, totalling two, flying high over the site. This species is considered unlikely to be wintering at the site due to the lack of suitable foraging sites and would likely use the arable fields as a flight path only.

- **Meadow pipit** (*Anthus pratensis*) is a winter/spring migrant and is resident in the UK. This species was recorded regularly with the largest group totalling

approximately 25 individuals. Sightings of meadow pipit were of birds predominantly foraging on land within the site and also flying over the site. It is considered that the development would not impact the local population status of meadow pipit. However, to assist the local conservation status of meadow pipit, grassland creation, using a seed mix rich in seed-bearing species, is recommended along the northern and southern boundaries. If these measures are included within the development, it is unlikely that this species will be impacted by the development.

- **Stock dove** (*Columba oenas*) were recorded on 21st February flying high over the site. This species is considered unlikely to be wintering at the site due to the lack of observations over the course of the wintering bird surveys.

4.5 Schedule 1 Species

One Schedule 1 species was recorded using the site as follows:

- **Red kite** was observed on 21st February; an individual flew west over the Norney Plantation County Wildlife Site. A vantage point survey should be undertaken by a licenced ornithologist prior to any works which may disturb potential breeding red kites. This will be overlooking the woodland, predominantly to the north of the site. Red kites breed within Suffolk in small numbers and prefer to nest in large undisturbed deciduous and coniferous woodlands. The Norney Plantation is an idealistic nesting site as it is large enough and undisturbed.

5 RECOMMENDED MITIGATION

5.1 Most of the recommended mitigation has been repeated following on from the breeding bird surveys (JBA, 2019). Recommended mitigation for the wintering bird surveys is incorporated below.

5.2 The illustrative masterplan in Appendix B (Drawing No. 039/E/1500) shows the site boundary and areas of parkland and ecological areas; these areas are likely to aid in foraging, over-wintering and roosting habitat on the site (hedgerows, and grassland) which is used by four of the priority species recorded (dunnock, linnet, song thrush and yellowhammer).

5.3 In order to maintain the majority of the bird wintering, foraging and commuting habitat on site, it is recommended that mature trees, hedgerows and scrub are retained within the development. Retained hedgerows should have margins (at least 5m) consisting of grassland managed for foraging birds where appropriate. Gapping up of retained hedgerows will provide additional over-wintering and foraging opportunities for birds and should include site-native fruit and nut bearing species such as hazel (*Corylus avellana*), hawthorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*) and field maple (*Acer campestre*).

5.4 Planting within the development should aim to increase habitat connectivity for birds within the site and with external habitat. This could include native tree/shrub planting at the boundaries and along access roads, and grouped tree/shrub planting to provide 'islands' of habitat within the development.

5.5 Suitable areas of POS should be sown with shrubs, wildflowers and grasses, such as common bent (*Agrostis capillaris*), red fescue (*Festuca rubra*), and smooth-stalked meadow grass (*Poa pratensis*), to provide additional foraging resources for birds. Clear pathways should be mown and maintained in POS to reduce trampling of habitat and disturbance to birds.

5.6 Any areas set aside primarily for birds and other key species should be fenced off or designed to reduce access by residents and their dogs (e.g. by planting a barrier of thorny species); willow warbler and other ground-nesting

species would benefit from this approach. Post and wire fencing will provide song perches for certain species, e.g. song thrush.

5.7 Proposed waterbodies within the SuDS scheme should be planted with emergent and aquatic species, for example marsh marigold (*Caltha palustris*), bog bean (*Menyanthes trifoliata*), water forget-me-not (*Myositis scorpiodes*), common reed (*Phragmites australis*), reed canary grass (*Phalaris arundinacea*) and pendulous sedge (*Carex pendulus*). This will create a valuable wetland area to attract invertebrates for foraging grey wagtails and meadow pipits post-development.

5.8 Any scrub or tree clearance or management should be undertaken outside the nesting bird season. The nesting season is deemed to be March to September (weather dependant). Should vegetation removal be required during the nesting season, it is recommended that a nesting bird check be undertaken by an ornithologist no more than two days prior to works.

5.9 Any trees, hedgerows and scrub (including margins) to be retained should be suitably protected throughout the duration of the works to preserve over-wintering and foraging habitat for birds.

5.10 Off-site compensation has been previously recommended for 7 pairs of skylark (i.e. skylark nest plots); which will also provide extra and vital wintering and foraging grounds.

5.11 Foraging habitat will be lost. To enable the continuation of barn owl using the site, tussock grassland suitable for small mammals (prey of barn owl) should be provided in perpetuity.

5.12 To compensate for and enhance bird over-wintering/roosting opportunities on the site, a variety of bird boxes should be installed on new buildings within the development. It is recommended that bird boxes suitable for house sparrow (Schwegler 1SP), kestrel (Schwegler no.28), and starling (Schwegler 3SV) could also be installed on buildings.

5.13 Specifically designed barn owl nest boxes should be installed on suitably located retained mature trees as advised and checked by a suitably licensed barn owl ornithologist.

5.14 A variety of standard bird boxes with different sized and shaped entrance holes should be installed on suitably located retained mature trees along the boundaries to attract a greater diversity of birds to over-winter/roost. Bird box installation should follow the advice of an ecologist/ornithologist once a final layout has been produced to ensure the most appropriate locations and fixings.

5.15 A Landscape and Ecological Management Plan (LEMP) should be produced which will detail all necessary installation and maintenance works for new nest boxes. In addition, the LEMP should include sensitive hedge-cutting cycles to produce dense, tall hedgerows with a diversity of species and ground flora, management of hedgerow buffers, appropriate establishment techniques for the grassland and wildflower areas, sensitive grass cutting regimes (which should allow for the development of scrub in appropriate locations) and management regimes for ecologically-valuable waterbodies post development. All on-going management regimes for retained areas should also be included.

6 CONCLUSION

6.1 The birds identified during the surveys were predominantly common and widespread species, both at a national and local level. SPIs included dunnock, linnet, herring gull, house sparrow, reed bunting, skylark, song thrush, starling and yellowhammer; all apart from herring gull are confirmed wintering. No significant populations of any species were found.

6.2 Areas of higher quality wintering and foraging habitat (boundary vegetation, mature trees, hedgerows, scrub and grassland margins) are recommended for retention by the development with appropriate sensitive ecological management to maintain or enhance the biodiversity interest.

6.3 Open space within the development, including SuDS, is recommended to be designed, created and managed to provide wintering and foraging habitat for birds. Public access should be carefully managed to ensure that sensitive bird species and the habitats they depend on are not subject to disturbance.

6.4 Off-site compensation has been previously recommended for 7 pairs of skylark (i.e. skylark nest plots); which will also provide extra and vital wintering and foraging grounds.

6.5 It is considered that by avoidance of impact and by sensitive mitigation, compensation and enhancement measures, the value of the site for wintering birds will be maintained and enhanced by the development.

7 REFERENCES

James Blake Associates (JBA) *Breeding Bird Survey of Phases 2-6 and Relief Road, Haverhill, Suffolk* on behalf of Persimmon Homes, Suffolk (2019).

Eaton, M. A., Aebischer, N. J., Brown, A. F., Hearn, R., Lock, L., Musgrove, A. J., Noble, D. G., Stroud, D. A., & Gregory, R. D. (2015) *Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man.* British Birds 108: 708-746.

GL, Haverhill Road, Haverhill Indicative Phasing Plan Masterplan, 039/E/1500, May 2018.

HMSO Natural Environment and Rural Communities Act. HMSO, London (2006).

HMSO Wildlife and Countryside Act. HMSO, London (1981).

National Planning Policy Framework ISBN: 9781409834137 (2012).

Web references

British Trust for Ornithology (BTO) www.bto.org

Suffolk Local Biodiversity Action Plan (BAP) www.suffolkbiodiversity.org

Suffolk Wildlife Trust (SWT) www.suffolkwildlifetrust.org.uk

Royal Society for the Protection of Birds (RSPB) www.rspb.org.uk

Species of Principal Importance www.jncc.defra.gov.uk

8 APPENDIX

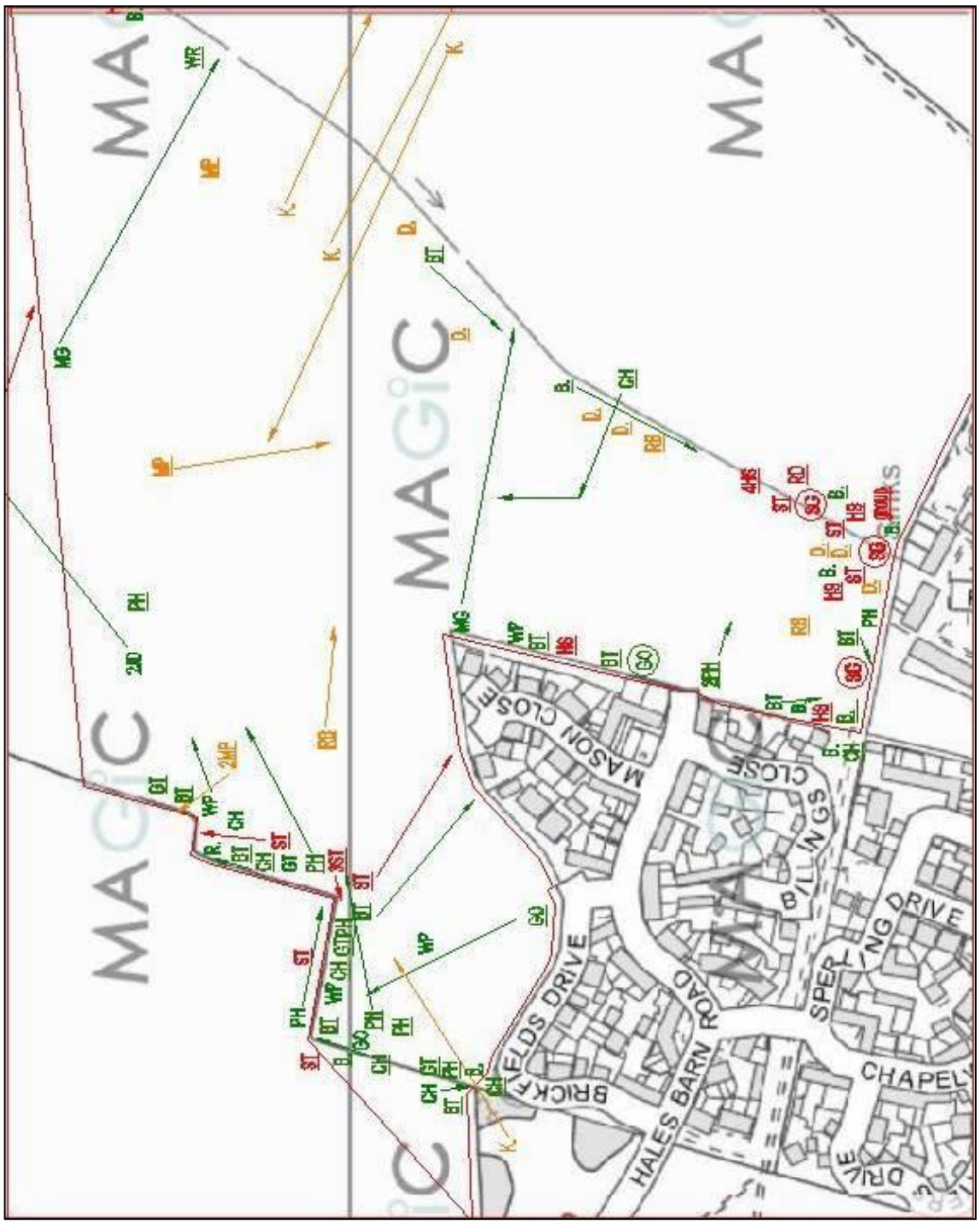
Appendix A: Plans showing bird activity

Species recorded during the four survey visits. The species code used can be found in Table 1, page 8.

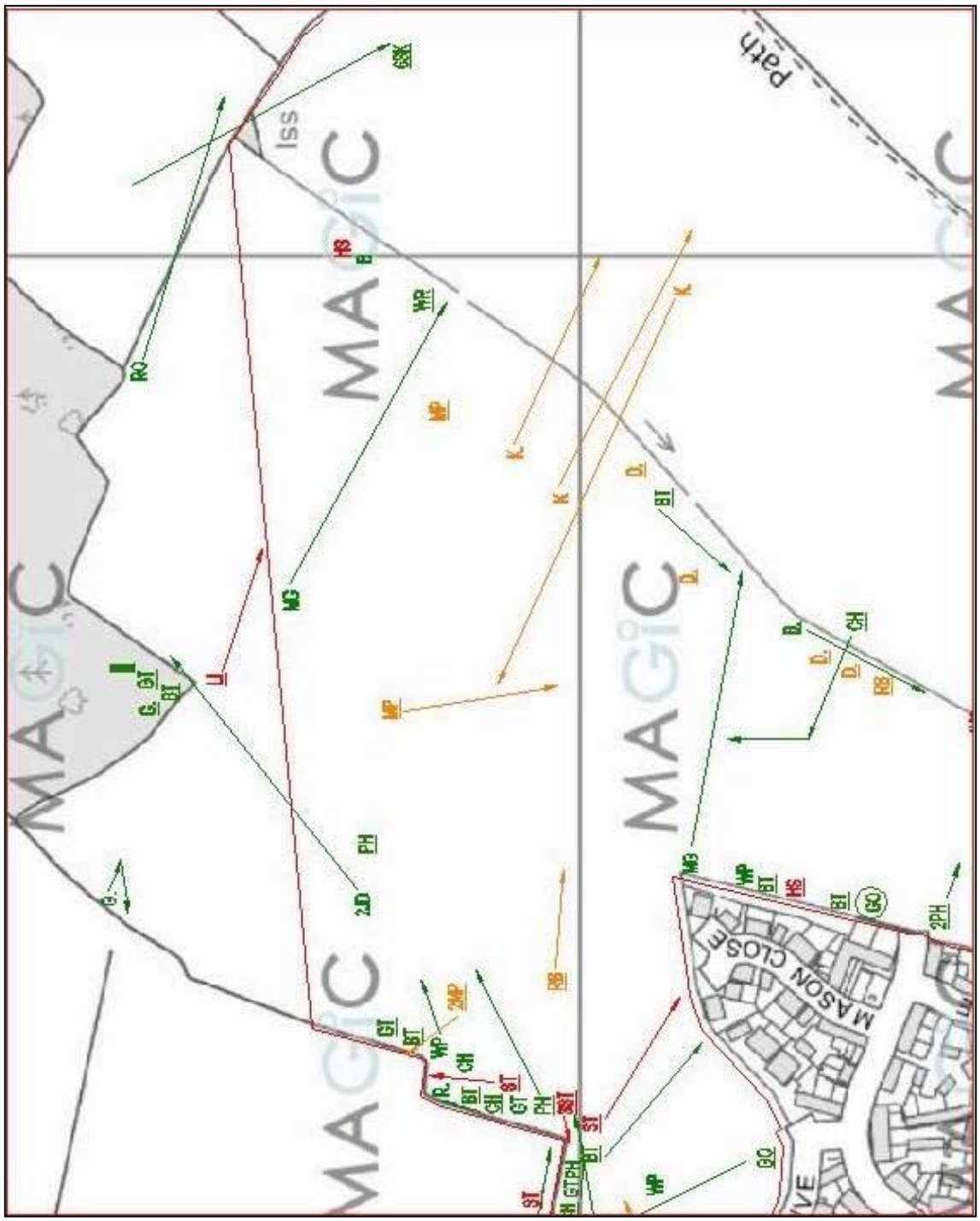
Map Key

C.	BoCC green listed species.	CH	Singing
BH	BoCC amber listed species.	→	Direction of flight.
ST	BoCC red listed species.	—?—	Probably the same bird.
RL	BoCC unlisted species.	S.	NERC Section 41 Species of Principle Importance in England and/or Norfolk BAP
CH	Calling	WR ····· WR	Two birds in song at the same time (definitely different birds).
GO	Aggressive encounter between two goldfinches.	S.pair	A pair (1 male, 1 female) of skylarks likely to be nesting locally
2RBmat	Two reed buntings carrying nest material.		

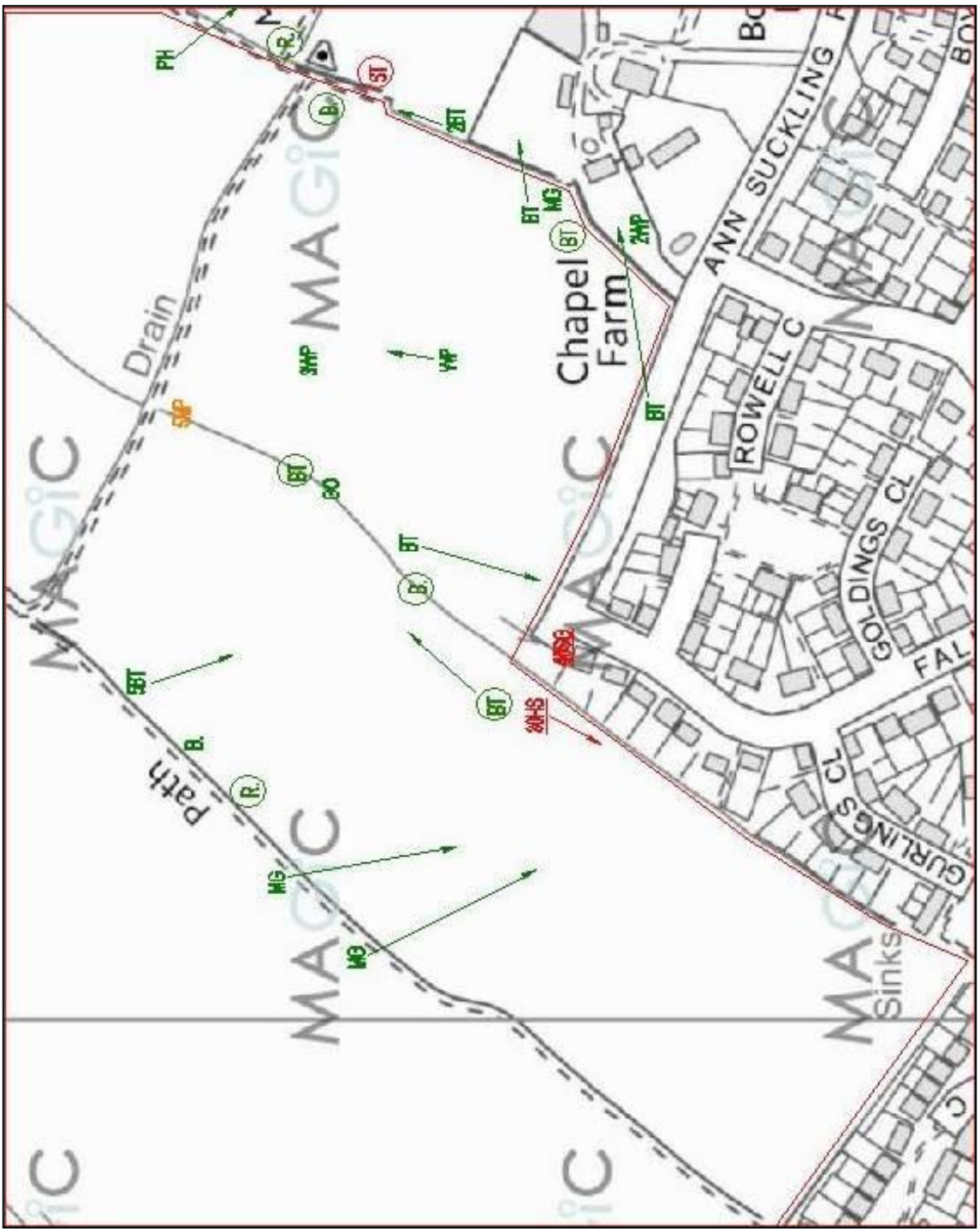
Visit 1: 19th November 2019 – Map A



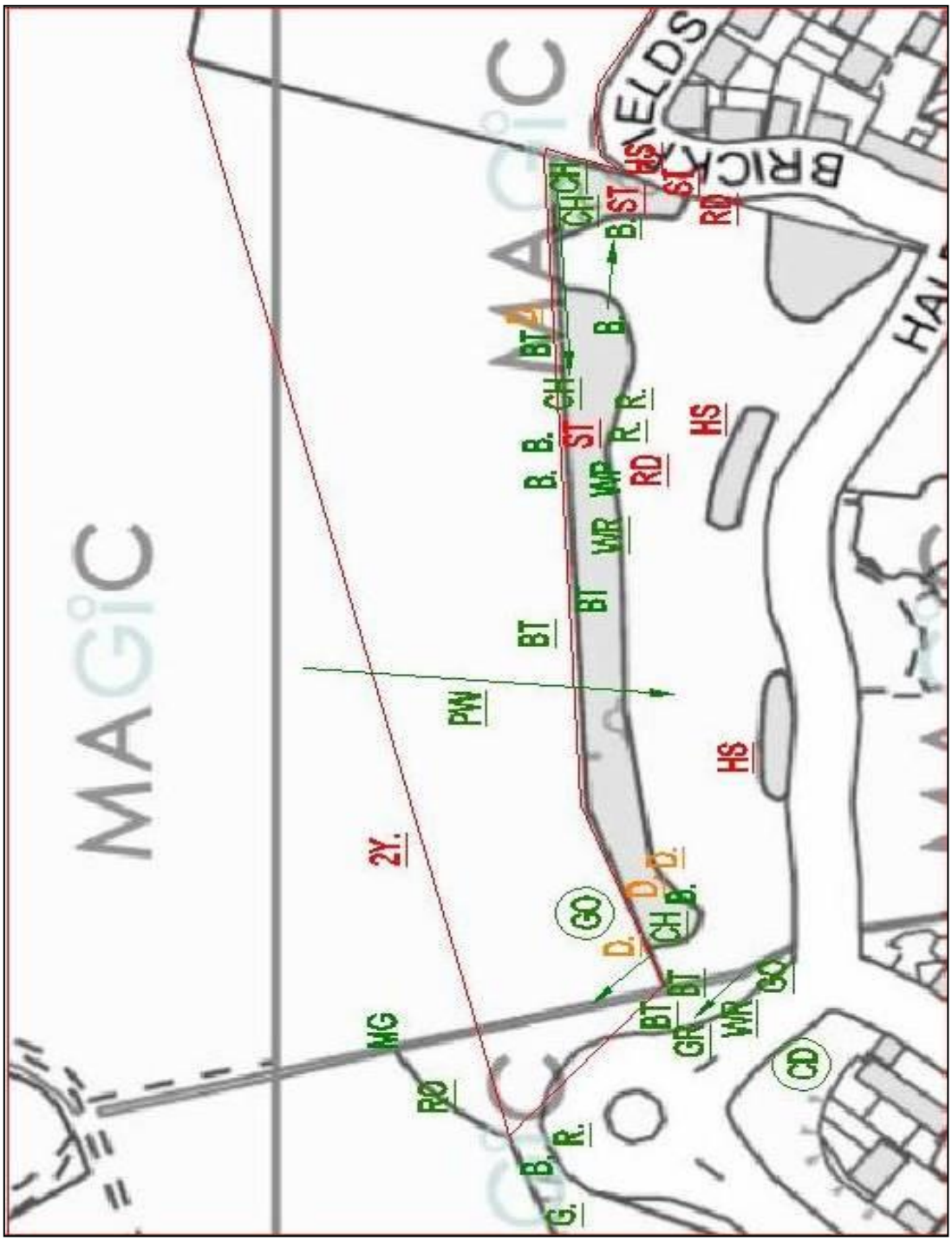
Visit 2: 19th November 2019 – Map B



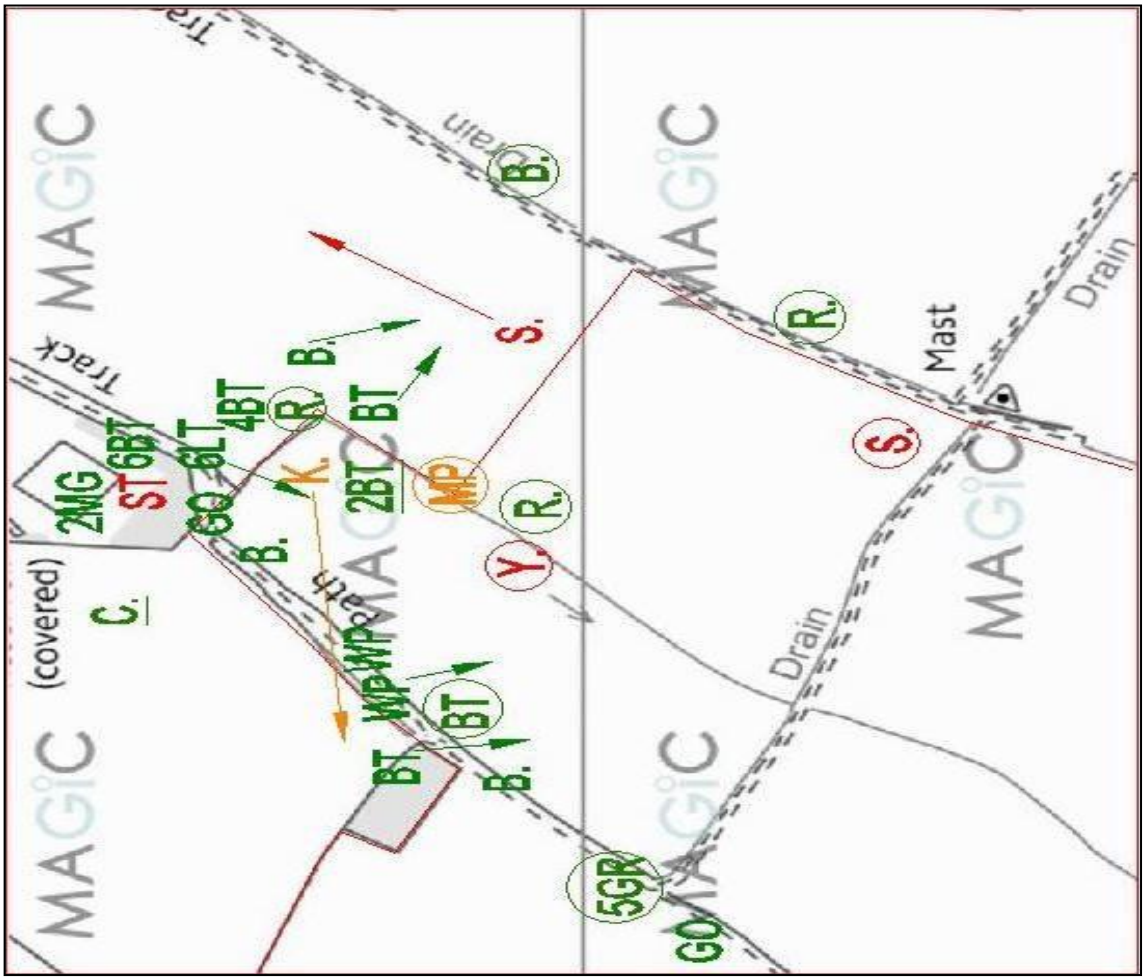
Visit 1: 19th November 2019 – Map C



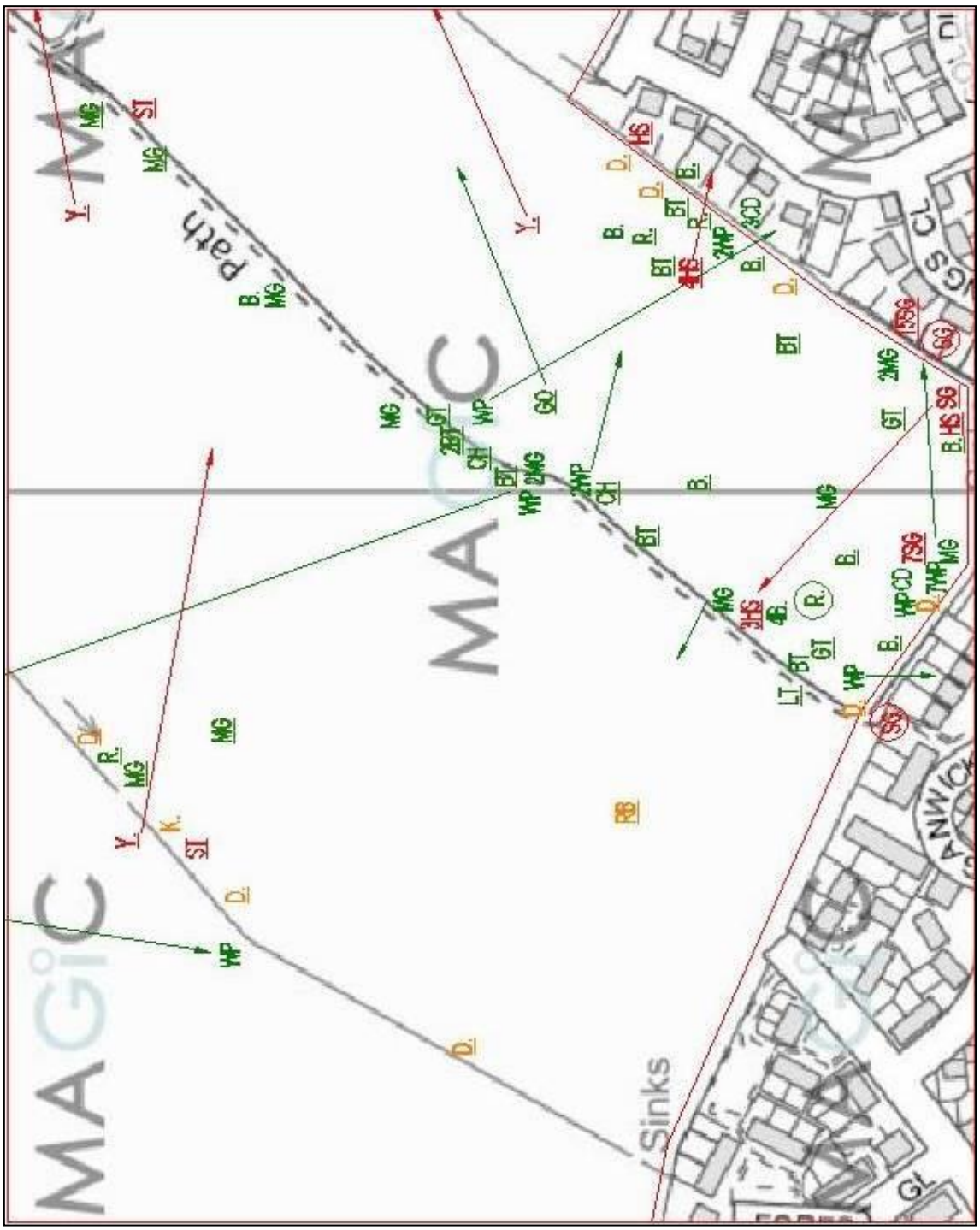
Visit 1: 19th November 2019 – Map D



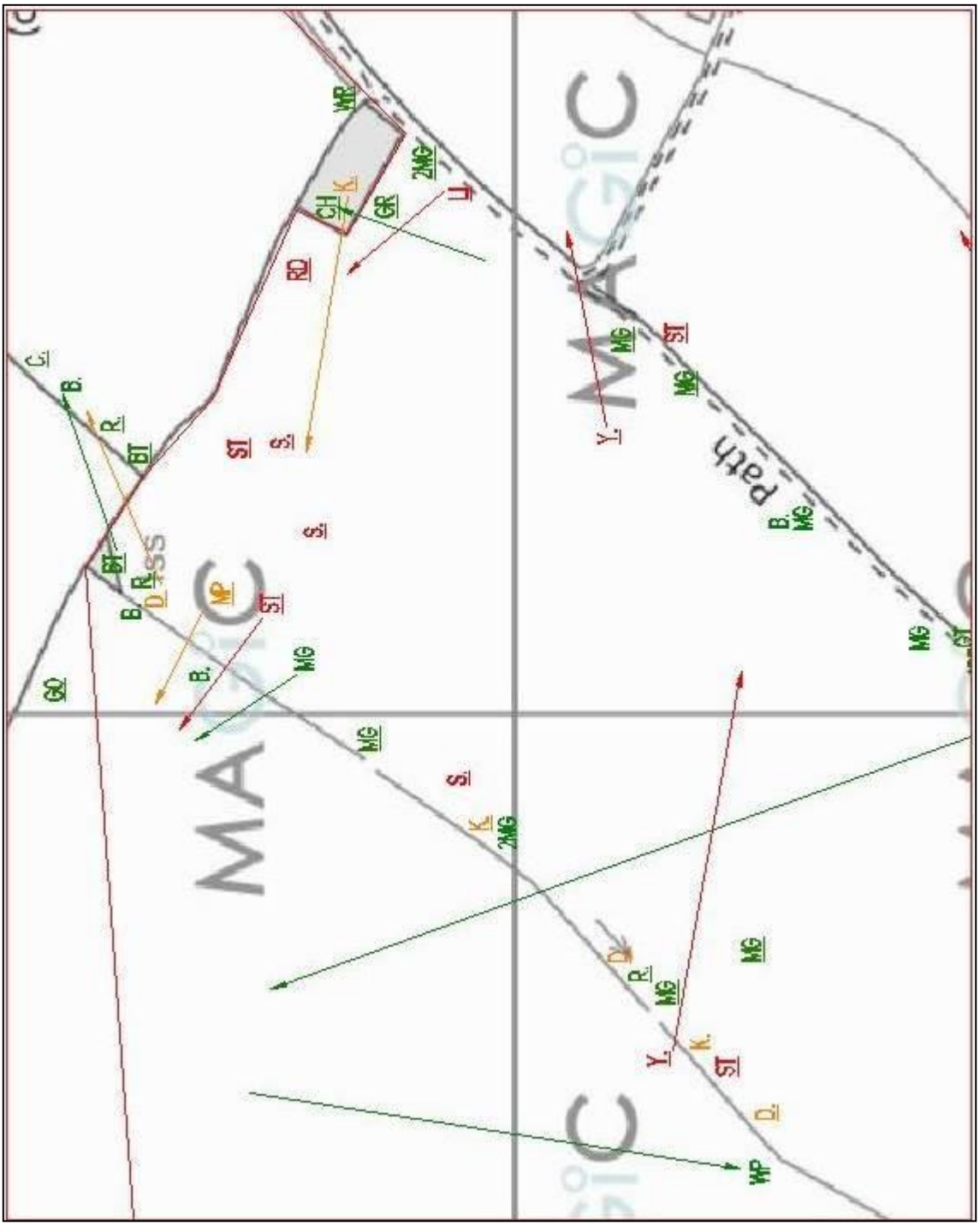
Visit 1: 19th November 2019 – Map E



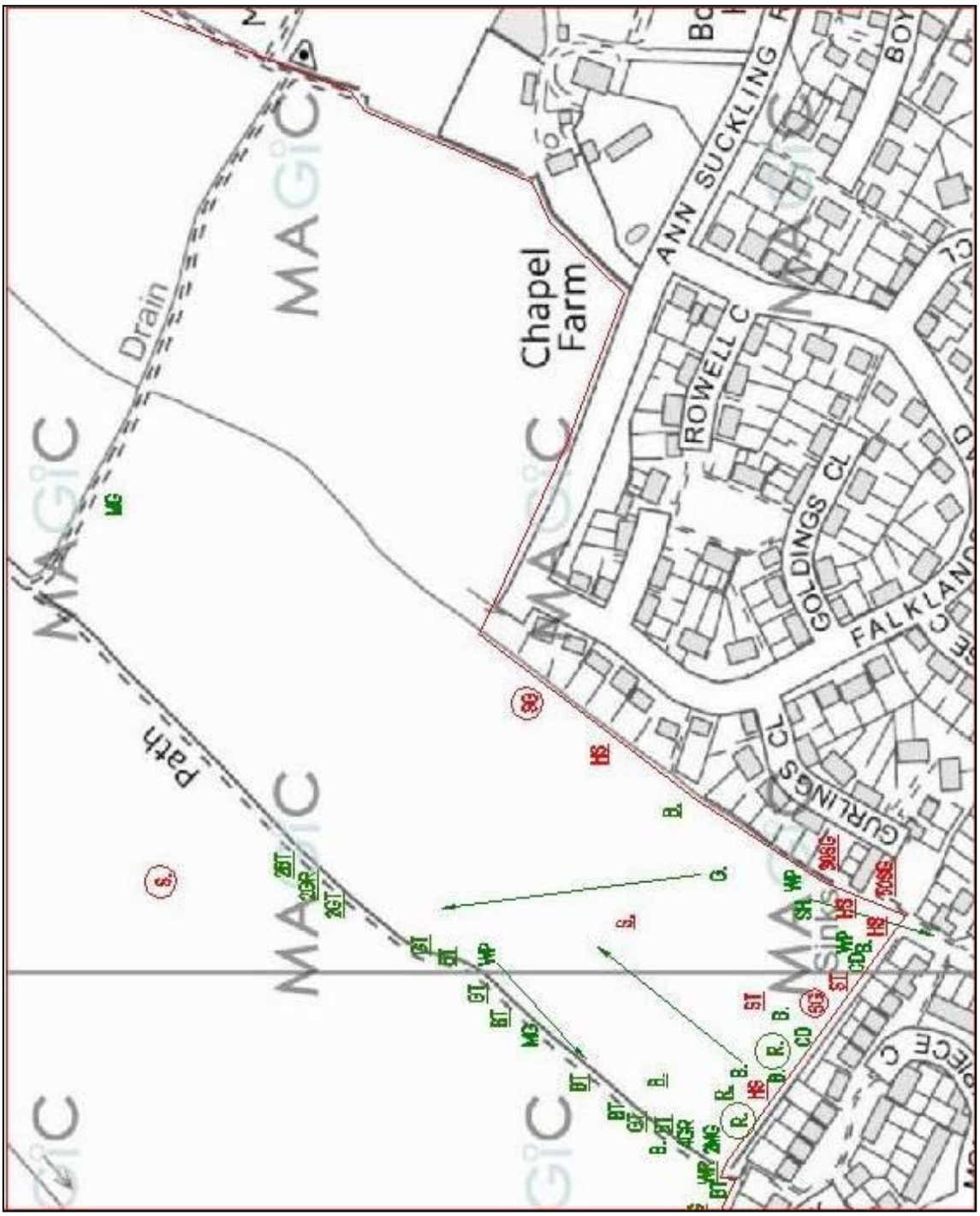
Visit 1: 19th November 2019 – Map F



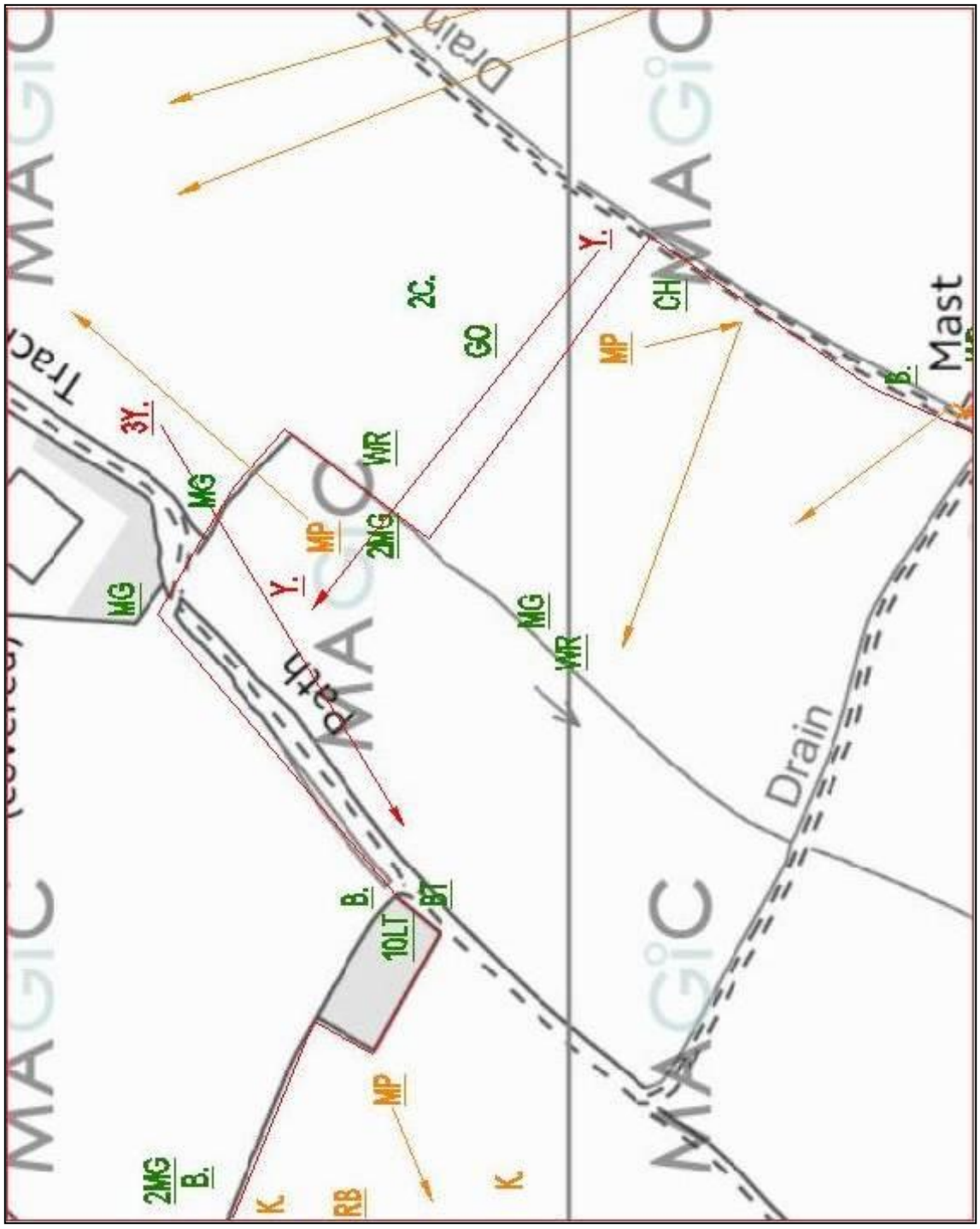
Visit 1: 19th November 2019 – Map G



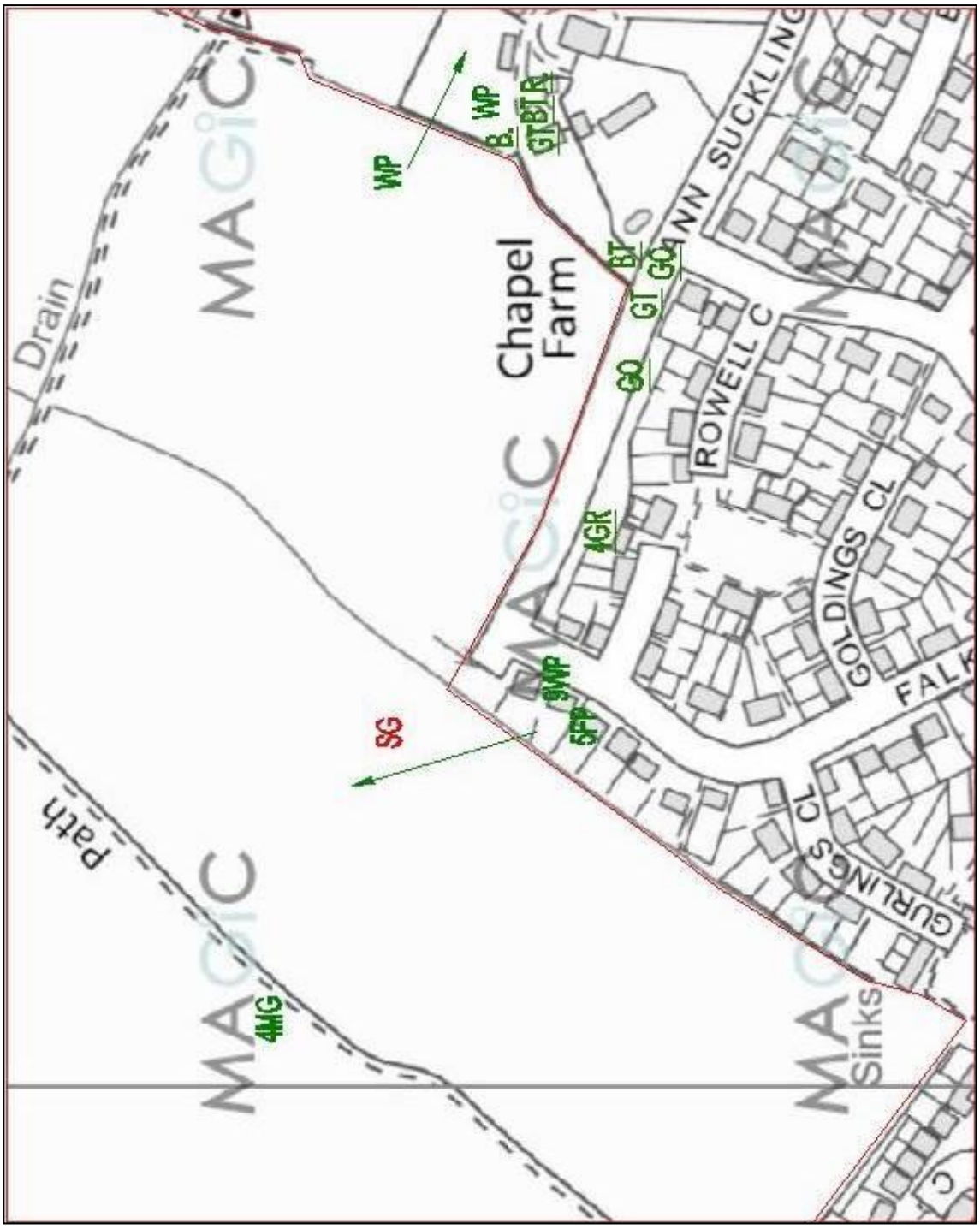
Visit 2: 24th December 2019 – Map A



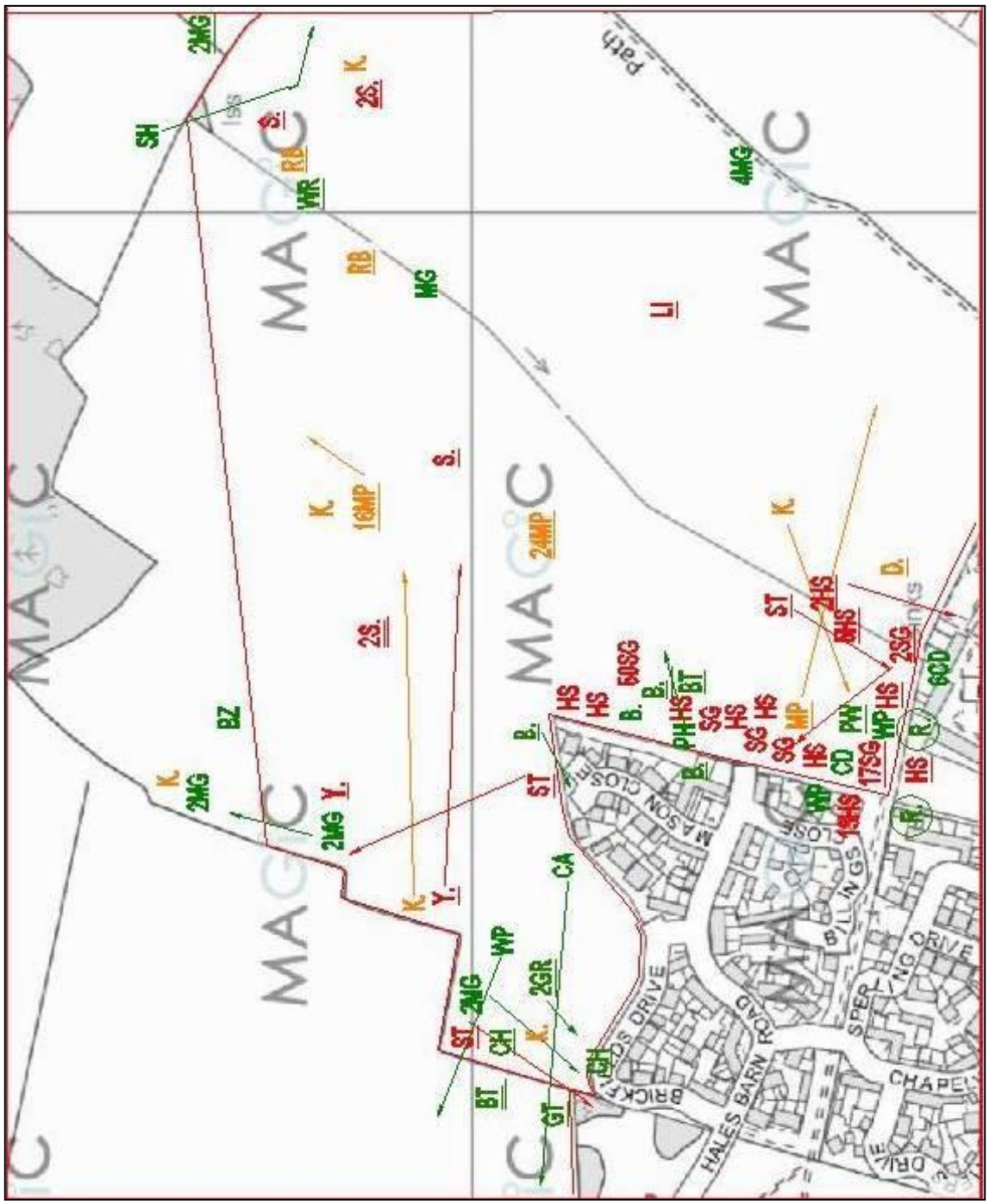
Visit 2: 24th December 2019 – Map B



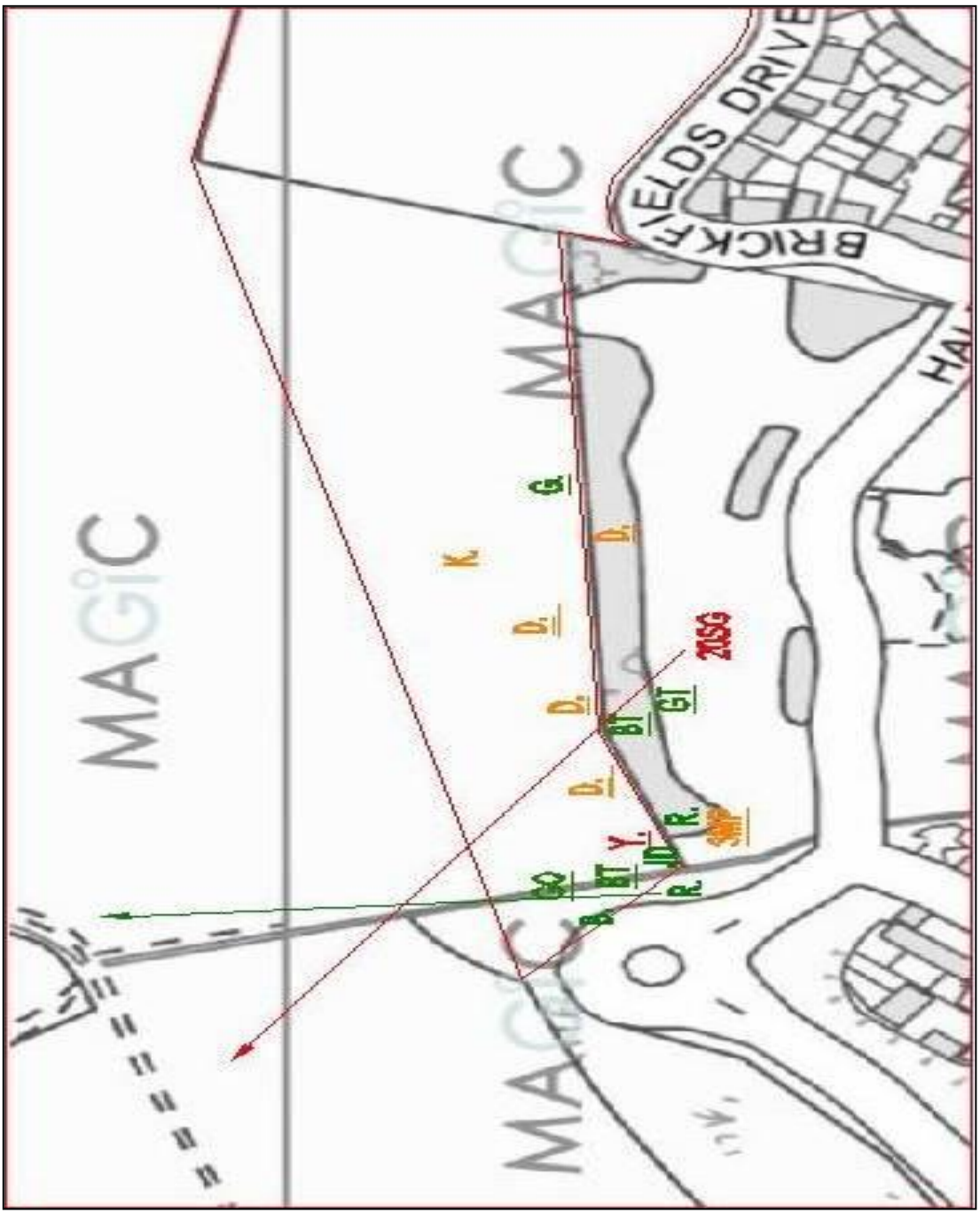
Visit 3: 24th December 2019 – Map C



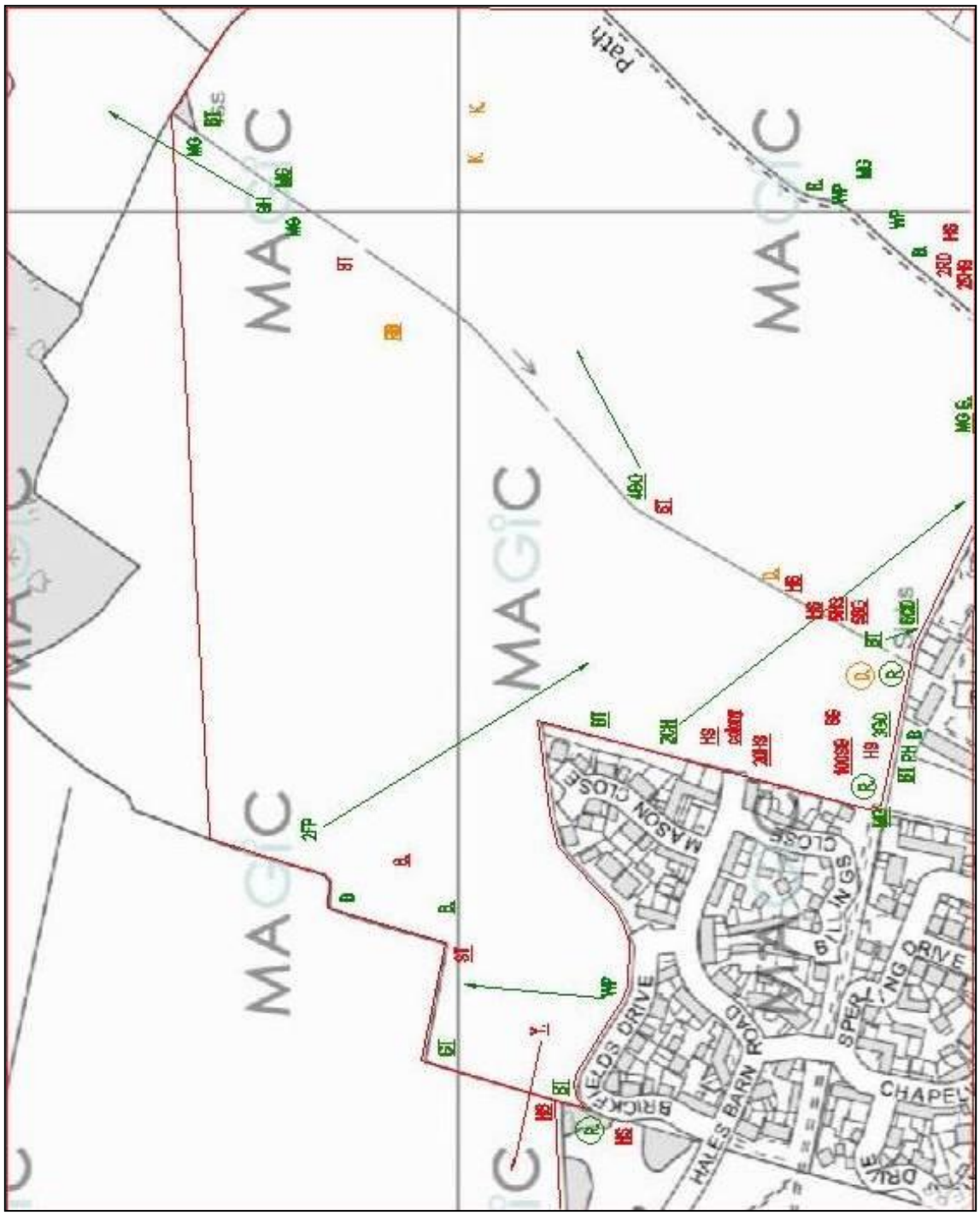
Visit 2: 24th December 2019 – Map D



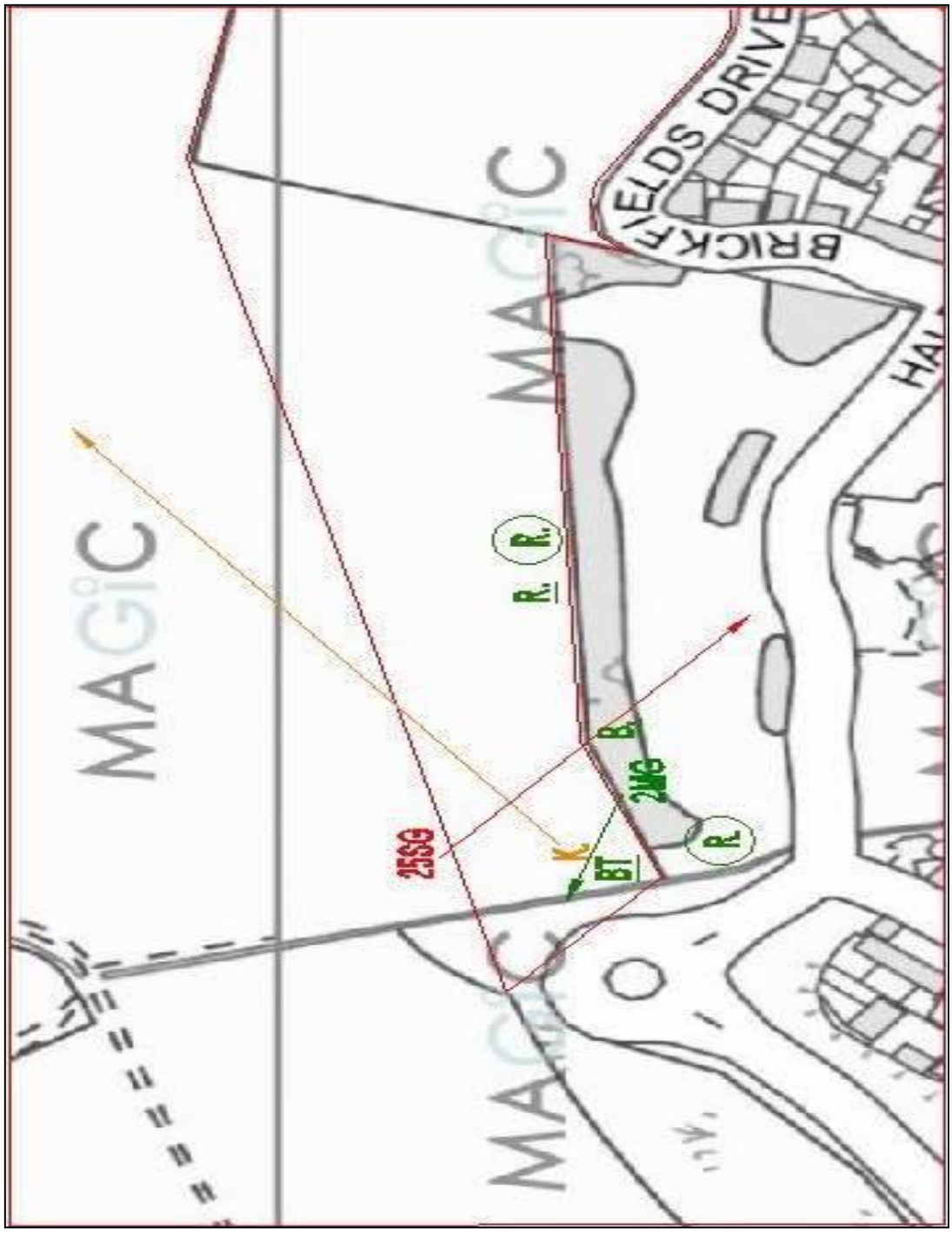
Visit 2: 24th December 2019 – Map E



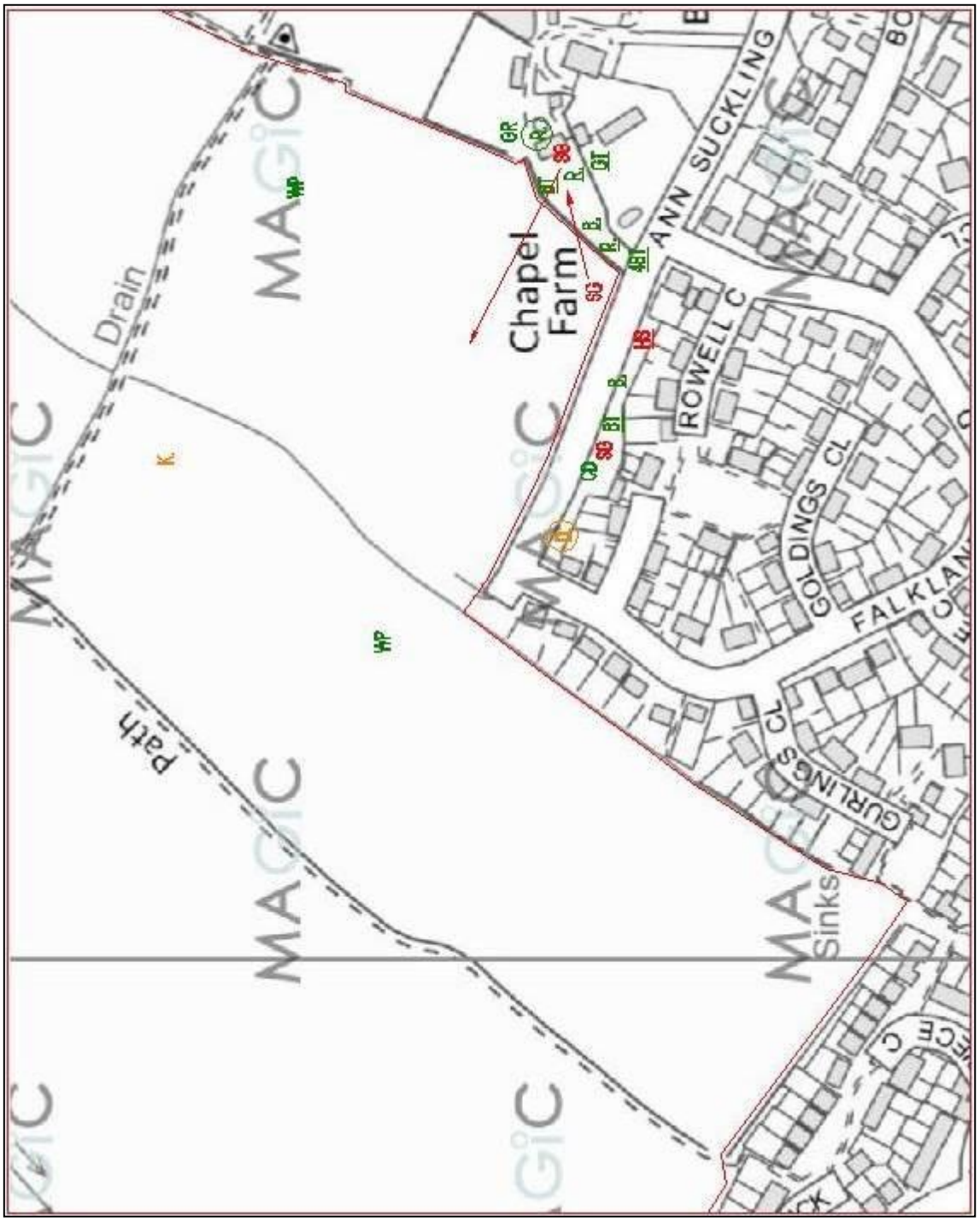
Visit 3: 17th January 2020 – Map A



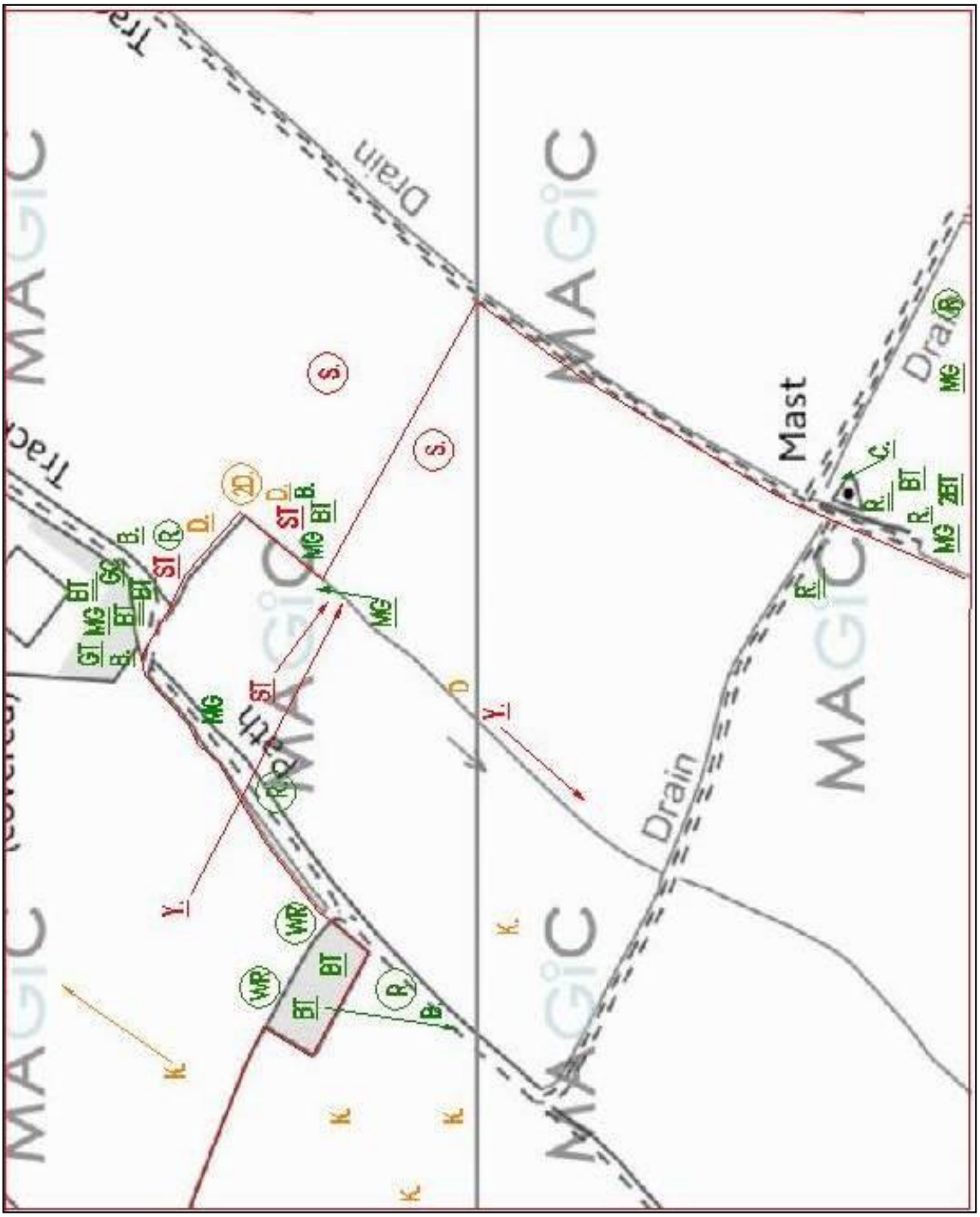
Visit 3: 17th January 2020 – Map B



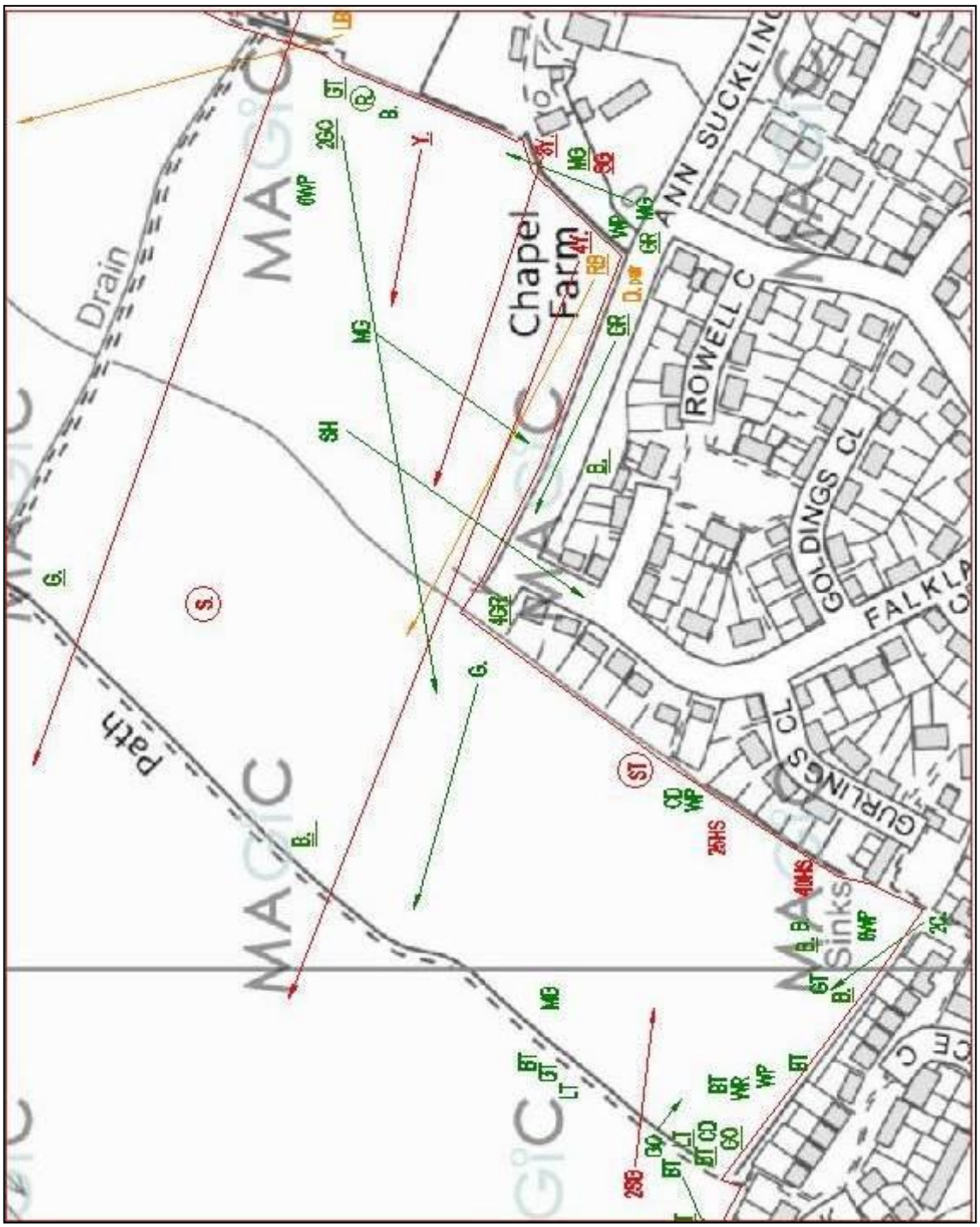
Visit 3: 24th December 2019 – Map C



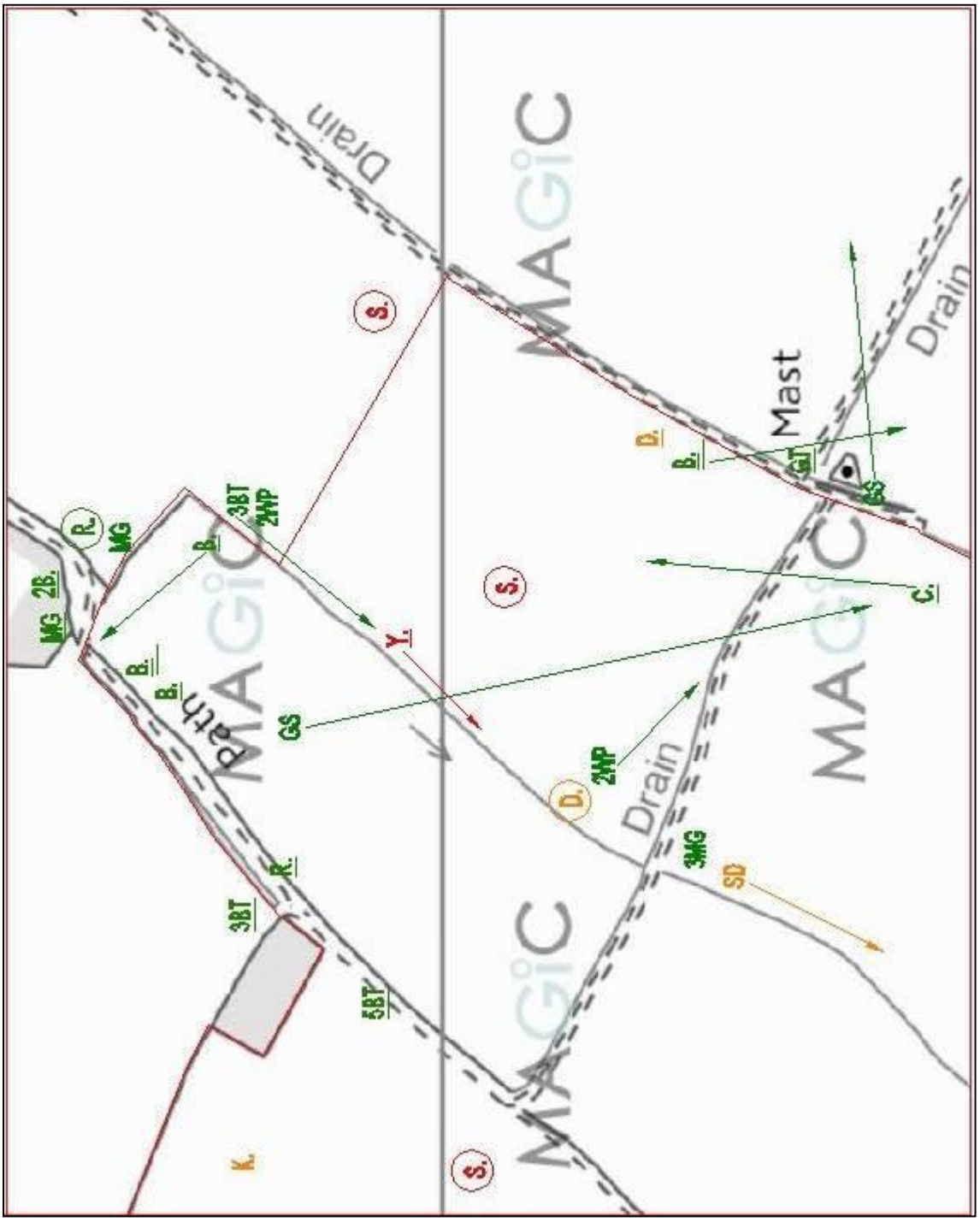
Visit 3: 24th December 2019 – Map D



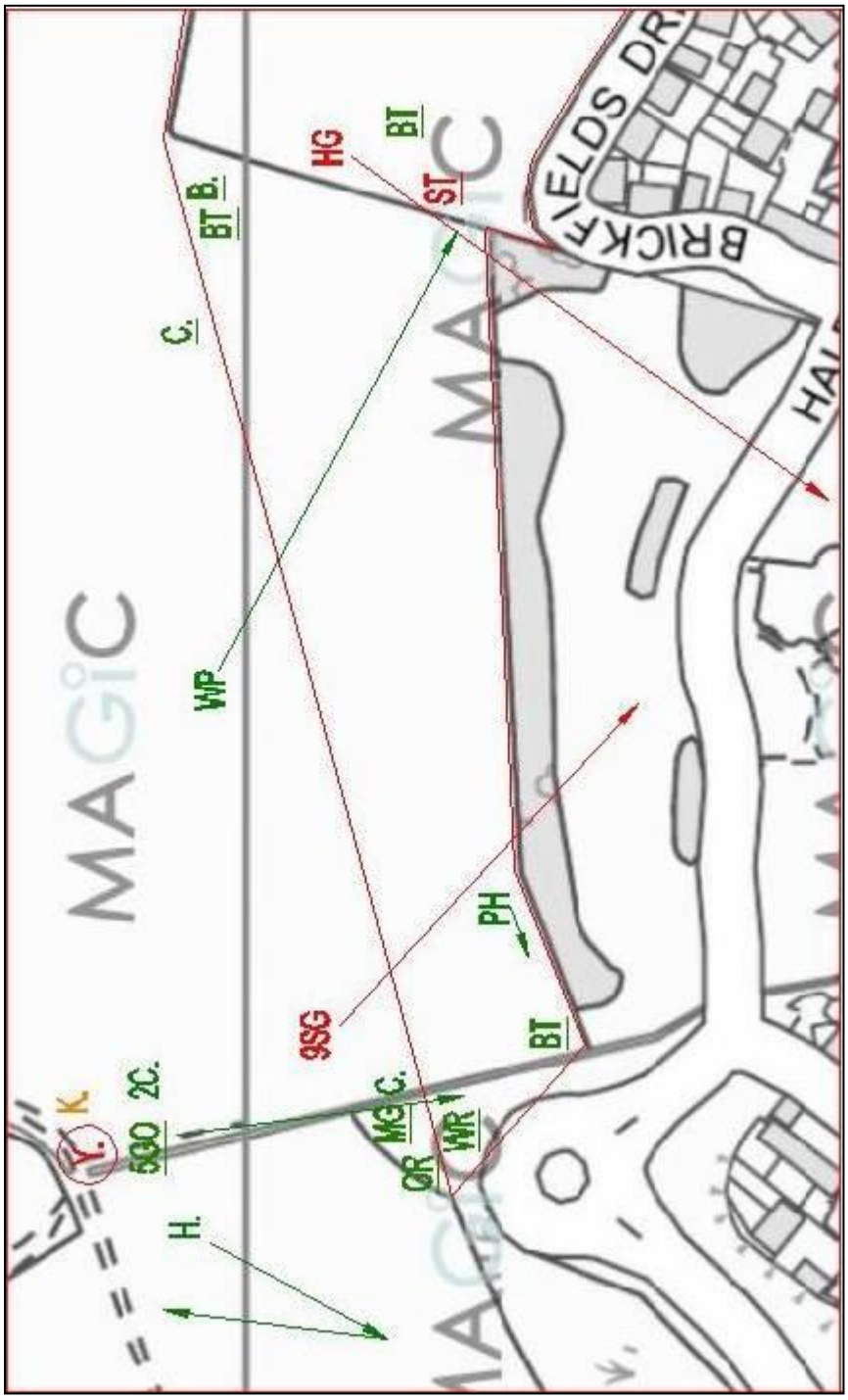
Visit 4: 21st February 2020 – Map A



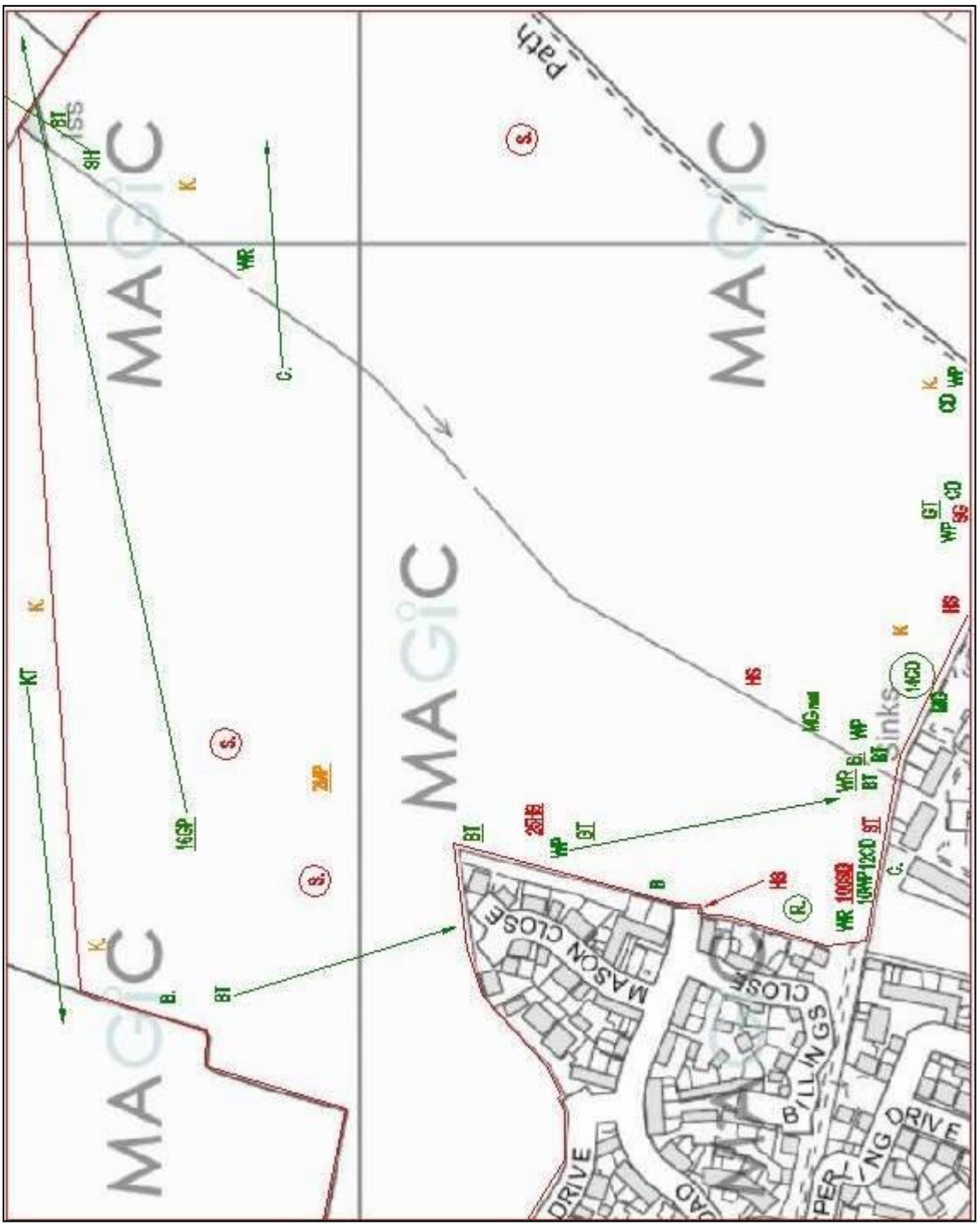
Visit 4: 21st February 2020 – Map B



Visit 4: 21st February 2020 – Map C



Visit 4: 21st February 2020 – Map D



Appendix B: Indicative Masterplan, Haverhill