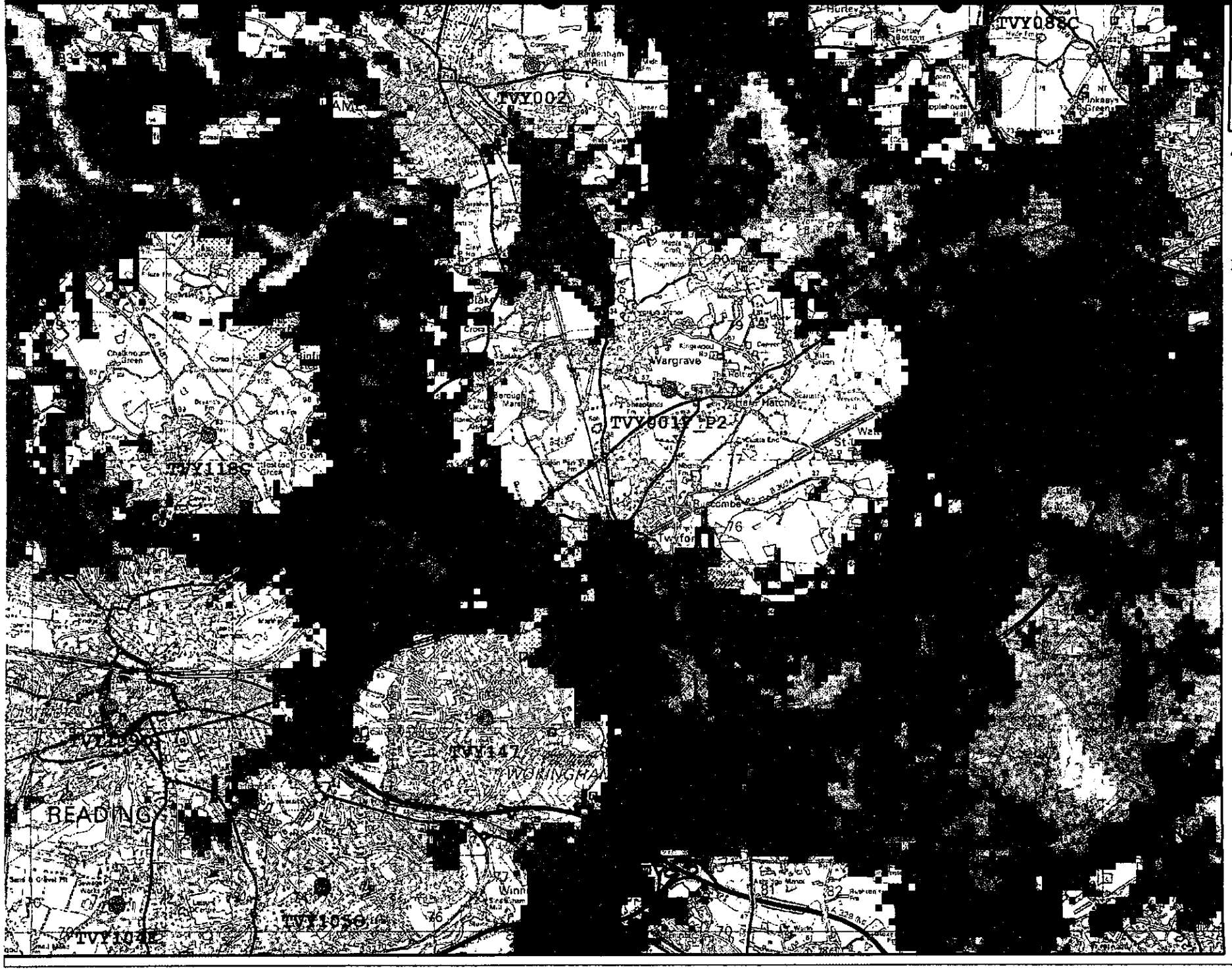


O2

AIRWAVE SERVICE

RESTRICTED

NOT FOR PUBLIC VIEW

TVY001F – With

SOUTH REGION

DATED

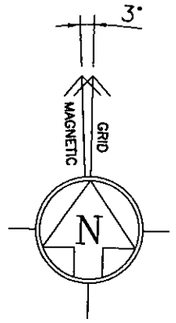
08 January 2003

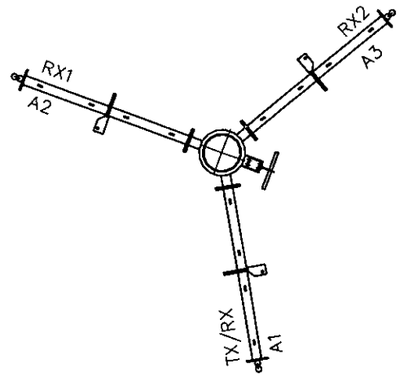
O2

- Major Road
- Hatched on street
- +3 dB Enhancement
- +15dB Enhancement

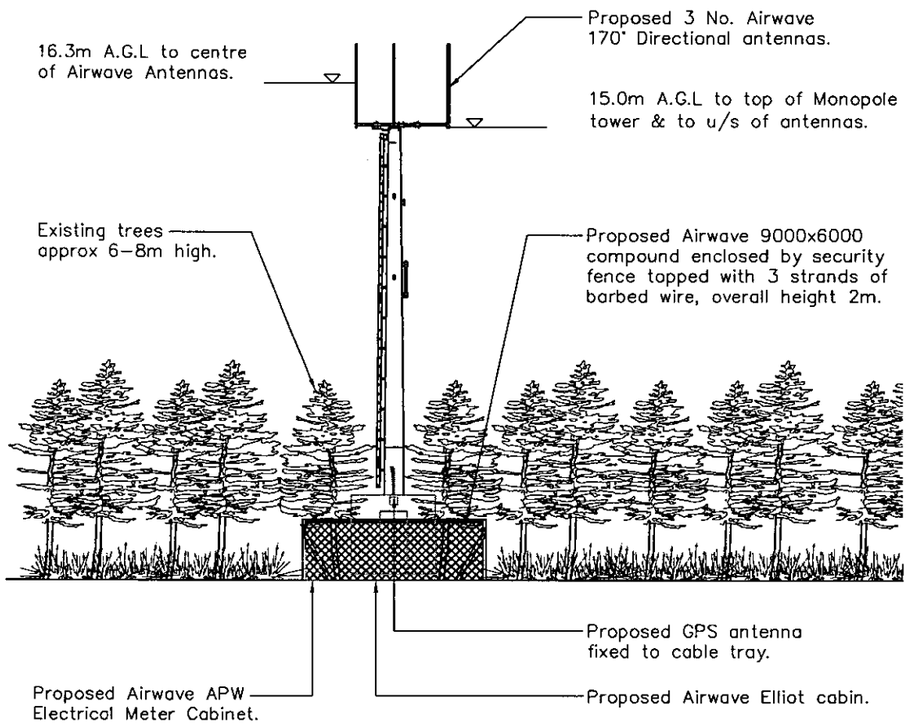
PRODUCED BY

Julian Williams

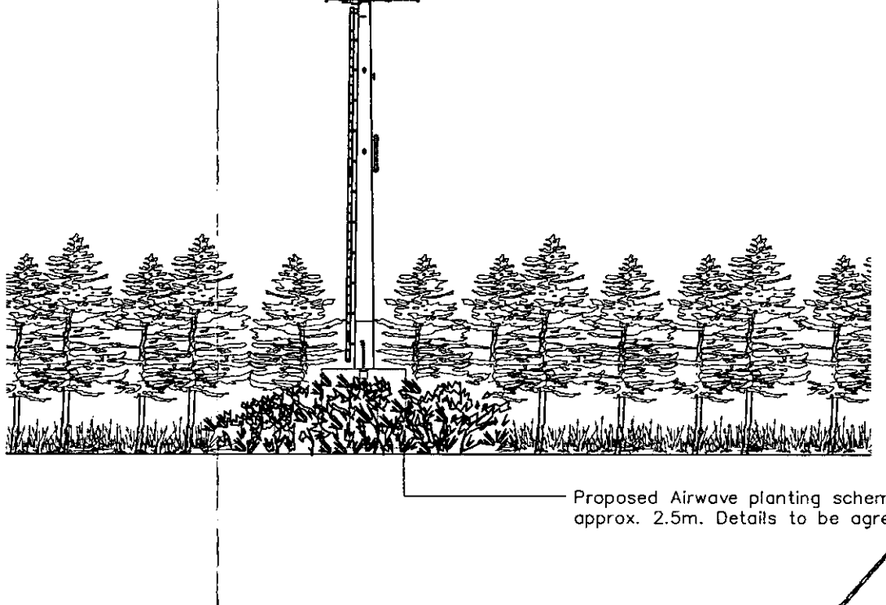




PLAN ON AIRWAVE ANTENNAS
(scale 1:50)



SOUTH FACING ELEVATION WITHOUT PROPOSED LANDSCAPING
(scale 1:200)



SOUTH FACING ELEVATION WITH PROPOSED LANDSCAPING
(scale 1:200)

10000 5000 0 5000 10000 15000 20000

ORIGINAL SCALE AT A3 – 1:200 ALL DIMENSIONS IN MILLIMETRES (UNLESS NOTED OTHERWISE)

NOTE: ORIGINAL DRAWING SIZE A3

NOTES NOTES

1. This drawing to be read in conjunction with Centac/Sage drawing No.s J1270105/TVY001/VD232–01, 02 and Standard O2 drawings.
2. All dimensions are in mm unless otherwise noted.

Antenna Support Structure	
Type	Monopole
Height	15m
Manufacturer	Alifabs

Airwave mm02 Antenna / Dish Schedule						
Antenna Configuration 11						
Duplexer Required Y						
Antenna/ Dish Ref.	Antenna Type	Size (mm)	Height @ A.G.L.(m)	Antenna Bearing	Cable Type	Cable Length(m)
Tx/Rx	Jaybeam	7148410	16.3	170°	LD450	20
Rx 1	Jaybeam	7148410	16.3	170°	LD450	20
Rx 2	Jaybeam	7148410	16.3	170°	LD450	20
GPS	TBC	TBC	TBC	TBC	TBC	TBC

05.DEC.2002 8:37

Rev	Date	Amendments	Drawn By	Approved By
A	29.11.02	Issued for Planning	MM	RM

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Tel.01923 289777 Fax. 01923 853316
Email: enquiries@sage-consulting.co.uk

Airwave mmO2 Ltd
5 Ivingwalk Road
Stockley Park
East Uxbridge
Middlesex
UB11 1TT

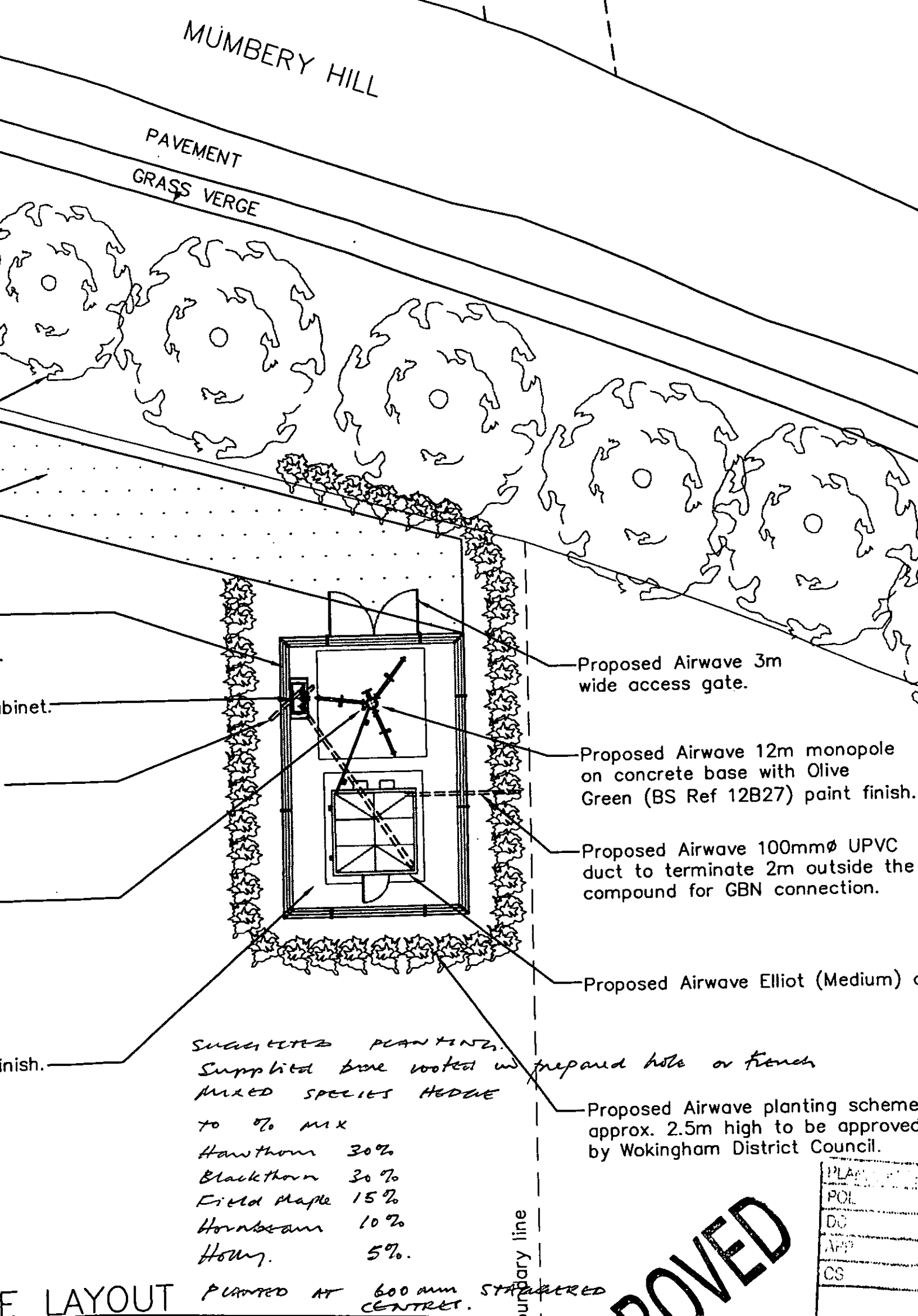
Job Title
CELL: TVY001 – SHEEPLANDS FARM
B477 MUMBERY HILL , TWYFORD,
READING, BERKSHIRE, RG10 8DL

Drawing Title
PLANNING DRAWING
ELEVATION DETAILS
SHEET 3

SUPERSEDED

Scale	DO NOT SCALE THIS DRAWING	County Ref
AS SHOWN		VD232
Drawn by: MM	Checked by: RM	Approved by: LG
Date Drawn: 28/11/02	Date Checked: 28/11/02	Date Approved: 28/11/02

Drawing No. J1270105/TVY001/VD232–03 Rev. A

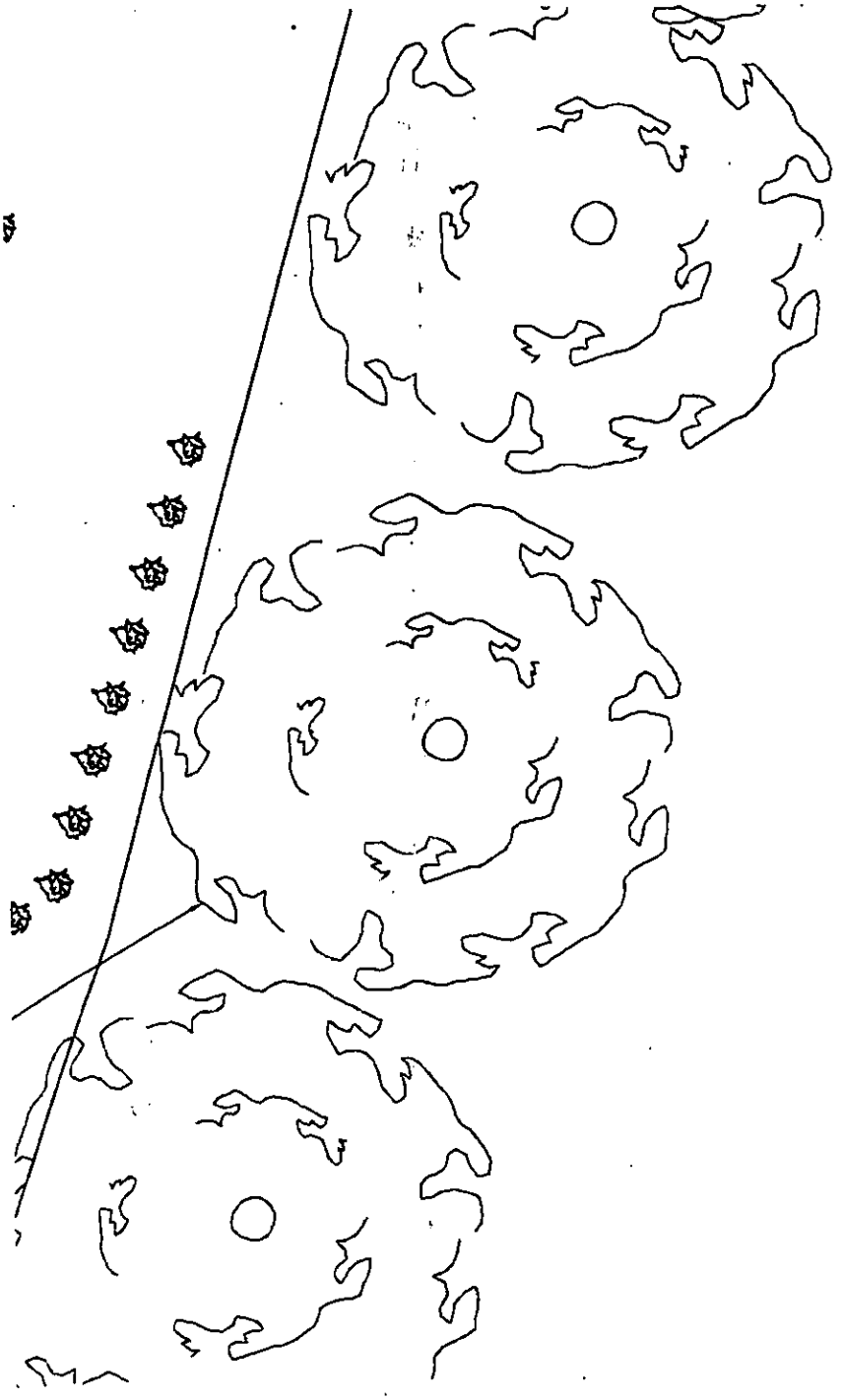

MUMBERY HILL
PAVEMENT
GRASS VERGE
binet.
inish.
Proposed Airwave 3m wide access gate.
Proposed Airwave 12m monopole on concrete base with Olive Green (BS Ref 12B27) paint finish.
Proposed Airwave 100mmø UPVC duct to terminate 2m outside the compound for GBN connection.
Proposed Airwave Elliot (Medium)
Proposed Airwave planting scheme approx. 2.5m high to be approved by Wokingham District Council.
SUGGESTED PLANTING.
Supplied bare rooted in prepared hole or trench
MIXED SPECIES HEDGE
to % MIX
Hawthorn 30%
Blackthorn 30%
Field Maple 15%
Hornbeam 10%
Holly. 5%.
PLANTED AT 600 mm STAGGERED CENTRES.
ndary line
F LAYOUT
OVED
PLA
POL
DC
APP
CS

01789415539

NOTES cont.

AFTERCARE

13. A mulch or mulchmat to be placed around hedging to conserve water.
14. Hedgerow to be watered as necessary. In the first season after planting, if there is totally dry weather for a period of 3 weeks, plants should be watered at the contractors discretion, and at appropriate intervals thereafter.
15. All plants that have died should be replaced in the following planting season, to continue for 3 years. At the end of 3 years after planting, there should be 90% living & vigorous plants. If not then replacement planting to continue until this is achieved.
16. A grass & weed free area of a minimum 1m diameter should be maintained around each tree for a 3 year maintenance period. This can be either by means of chemical application or hand weeding. Re-mulching may be necessary. 2 weeding visits will be necessary in the first 2 years & 1 visit in the 3rd year.



NOTE: ORIGINAL DRAWING SIZE A3

NOTES

1. Do Not Scale.
2. All dimensions are in mm unless otherwise noted.
3. This drawing to be read in conjunction with Sage Civil Works Construction Specification and Airwave Radio Base Station Design Guide and Specification.
4. This drawing to be read in conjunction with Centac/Sage drawing No.s J1270105/TVY001/VD232-01, 02, 03, 11 and 15 and latest revision of standard O2 drawings: GEN/104, 109, 110, 111, 119, 126, 130, GEN/231-235, GEN/305-307, 310, 313, 316, 318, 319, 321, 322, 324, 326, 338, 339, 352, 367, 370, 371, GEN/406, 408, 417, 420, 421, 432-436, 439, 442, 447.

PREPARATION

5. Removal of surface grass by hand tool to a depth of 50mm (screefing) this can be done at time of planting.
6. Landscaping area to be planted with a mixture of 2 different species: approx 25 Hawthorn (Crataegus-Monogyna), approx 25 Blackthorn (Prunus-Spinosa) at 450mm spacing (approx 50 plants).
7. Plants to be bare rooted with a strong fibrous root.
8. Plants to be obtained from a reputable nursery, roots to have been kept moist at all times from lifting to planting.

PLANTING

9. Hedgerow should be individually planted in prepared pits with a minimum area size of 100x100mm, but of a size that comfortably allows sufficient space for the roots to be spread out, & a minimum depth of 50mm, but at a depth that allows the root collar to be at existing ground level. The bottom of the pit should be loosened soil.
10. Plants to be kept covered & the roots moist until time of placing in the pit.
11. Any broken or damaged roots should be cut cleanly with secateurs or sharp knife.
12. Each pit to be watered at time of planting & back filled soil to be firmed around the root so the plant stands in a stable position in the ground.

Rev	Date	Amendments	Drawn By	Approved By
A	15.04.03	Issued For Construction	MM	LG

centaC in association with

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Email:enquiries@sage-consulting.co.uk

Airwave mmO$_2$ Ltd

3 Longwalk Road
Stockley Park
East Uxbridge
Middlesex
UB11 1TT

O$_2$

Job Title

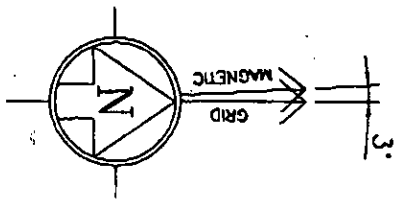
CELL TVY001 - SHEEPLANDS FARM, B477 MUMBERY HILL, TWYFORD, READING, BERKSHIRE, RG10 8DL

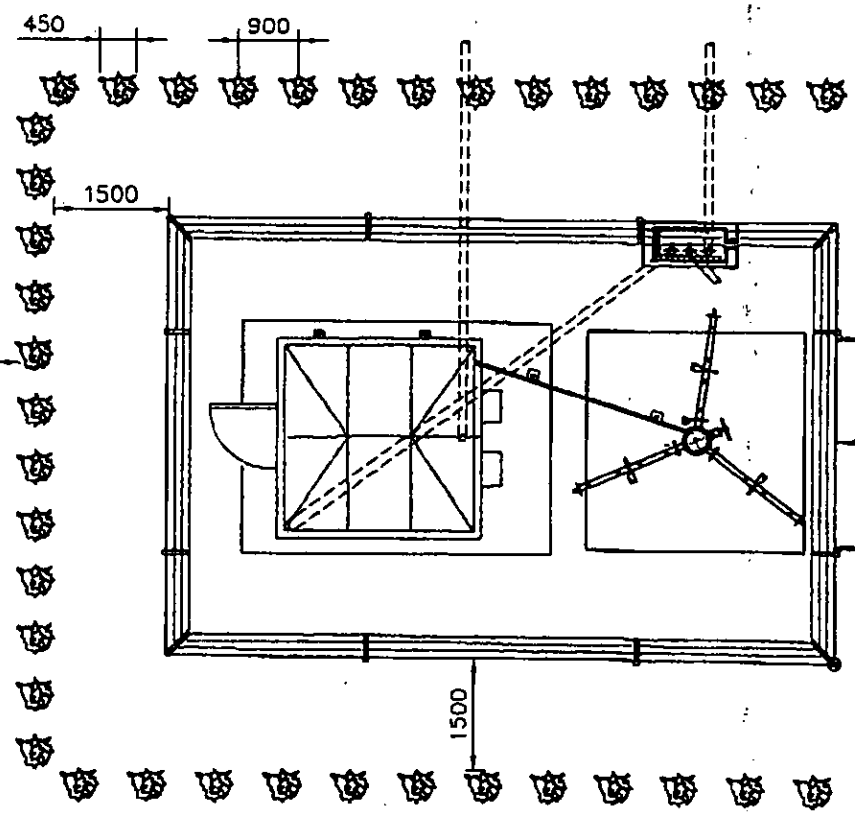
Drawing Title

DETAIL DESIGN
LANDSCAPING SCHEME

Scale		County Ref
AS SHOWN DO NOT SCALE THIS DRAWING		VD232
Drawn by: LG2	Checked by: MM	Approved by: LG
Date Drawn: 14/04/03	Date Checked: 04/02/03	Date Approved: 04/02/03
Drawing No.: J1270105/TVY001/VD232-20		Rev.: A

01789415539





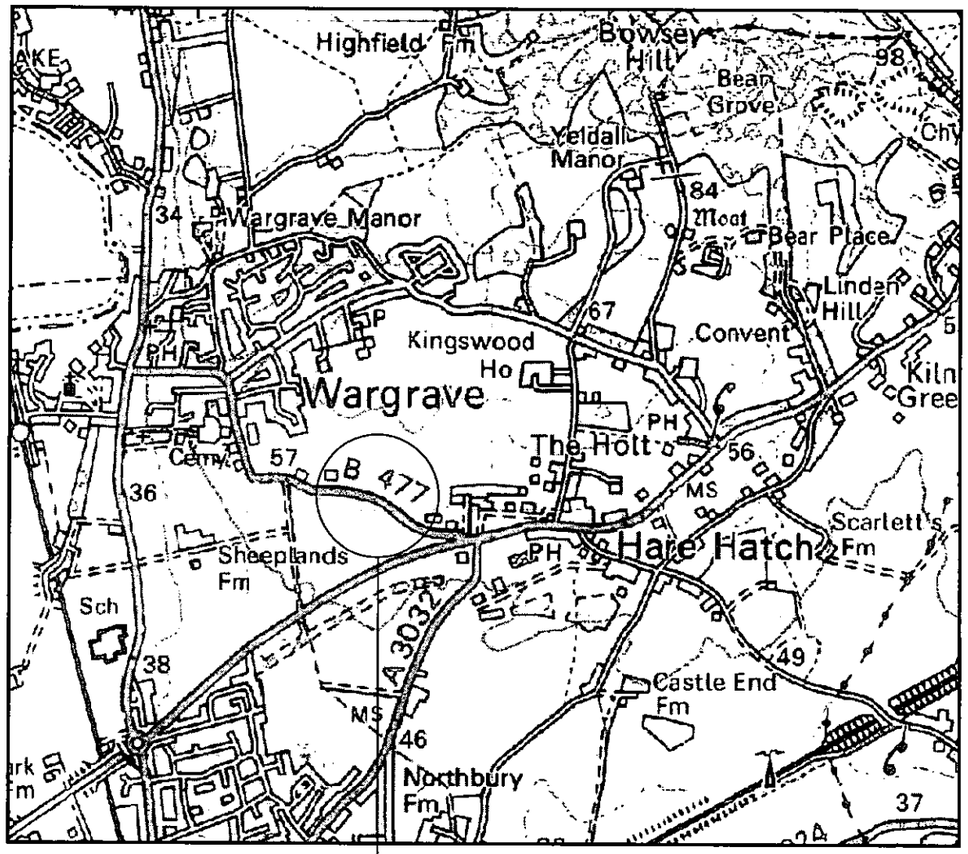
Landscape area with a mixture of Hawthorn and Blackthorn Hedgerow

Existing trees approx. 6–8m high.

SITE LAYOUT PLAN

1:100

SITE LOCATION

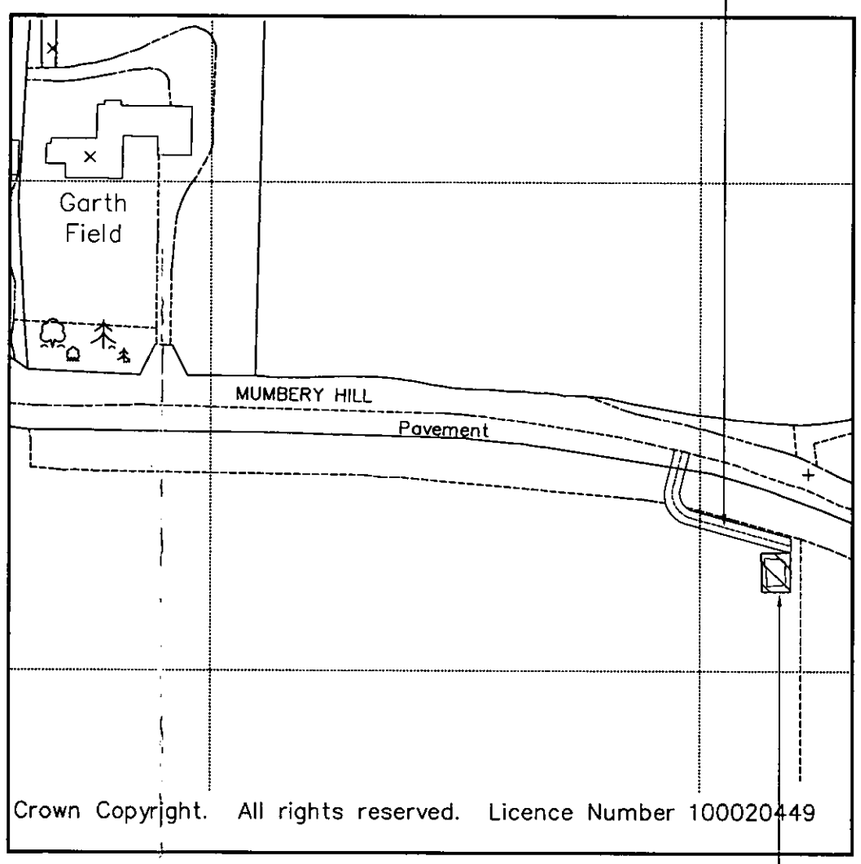


Site Location.

LOCATION PLAN (1:25000)

SITE LOCATION

Proposed site access.



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Proposed Airwave Site.

LOCATION PLAN (1:1250)

NOTE: ORIGINAL DRAWING SIZE A3

NOTES

GENERAL NOTES

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O.S. Ref. : E 479520 N 178035

Access to Site:

Travel from Reading along the A4 Bath road towards Twyford. After passing Twyford and the roundabout for the A321 (Henley on Thames) continue on the A4 and turn left into the B477 Mumbery Hill. The site is located on the left just opposite a set of existing steel access gates on the right hand side of Mumbery Hill.

05.12.2002 8137

APPROVED

Rev	Date	Amendments	Drawn By	Approved By
A	29.11.02	Issued for Planning	MM	RM

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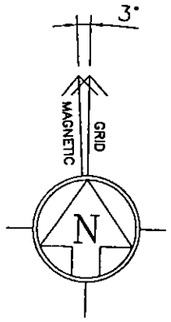
Airwave mmO2 Ltd
5 Iongwalk Road
Stockley Park
East Uxbridge
Middlesex
UB11 1TT

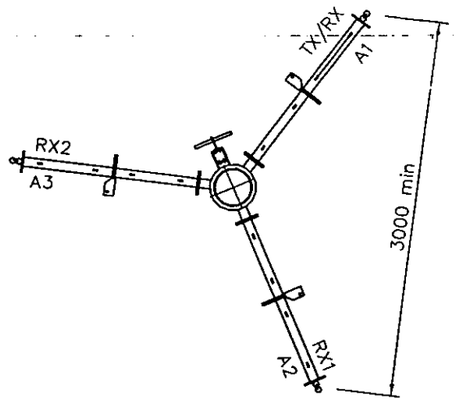
Job Title
CELL TVY001 – SHEEPLANDS FARM
B477 MUMBERY HILL , TWYFORD,
READING, BERKSHIRE, RG10 8DL

Drawing Title
PLANNING DRAWING
SITE LOCATION DETAILS
SHEET 1

Scale	DO NOT SCALE THIS DRAWING	County Ref
AS SHOWN		VD232
Drawn by: MM	Checked by: RM	Approved by: LG
Date Drawn: 28/11/02	Date Checked: 28/11/02	Date Approved: 28/11/02

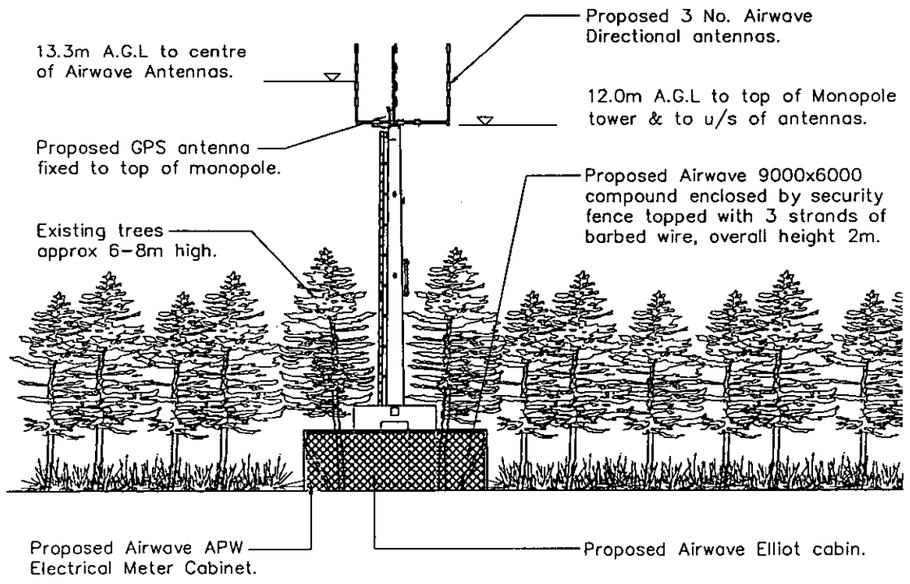
Drawing No. J1270105/TVY001/VD232–01 Rev. A



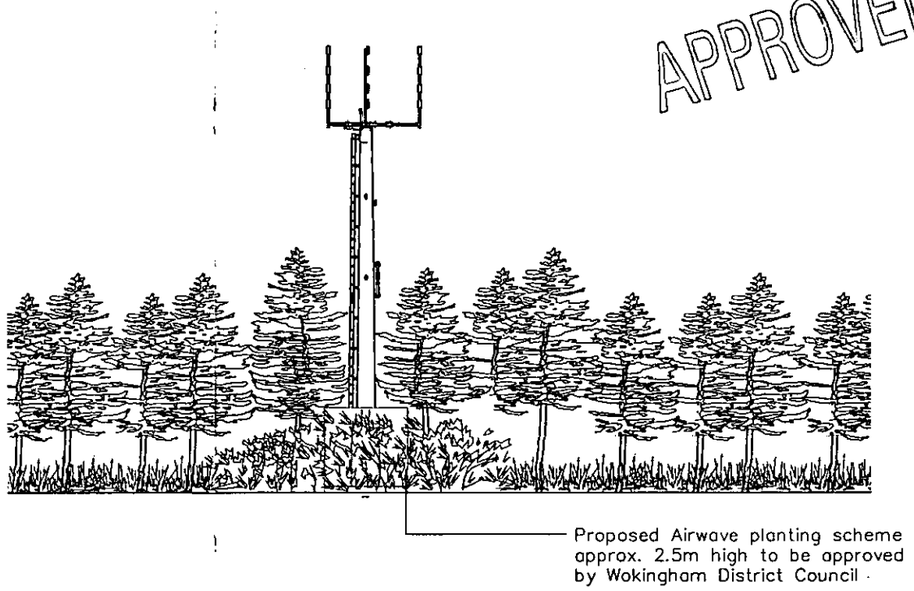


PLAN ON AIRWAVE ANTENNAS
(scale 1:50)

REVISED PLAN
8137



SOUTH FACING ELEVATION
WITHOUT PROPOSED LANDSCAPING
(scale 1:200)



APPROVED

SOUTH FACING ELEVATION
WITH PROPOSED LANDSCAPING
(scale 1:200)

10000 5000 0 5000 10000 15000 20000

ORIGINAL SCALE AT A3 – 1:200 ALL DIMENSIONS IN MILLIMETRES (UNLESS NOTED OTHERWISE)

NOTE: ORIGINAL DRAWING SIZE A3

NOTES NOTES

1. This drawing to be read in conjunction with Centac/Sage drawing No.s J1270105/TVY001/VD232-01, 02 and Standard O_2 drawings.
2. All dimensions are in mm unless otherwise noted.

Antenna Support Structure	
Type	Monopole – Colour: Olive Green Finish (BS 12B27)
Height	12m
Manufacturer	Alifabs

Airwave mm02 Antenna / Dish Schedule

Antenna Configuration 16

Duplexer Required Y

Antenna/ Dish Ref.	Antenna Type	Size (mm)	Height C. A.G.L.(m)	Antenna Bearing	Cable Type	Cable Length(m)
Tx/Rx	Jaybeam	7148385	13.3	40°	LD450	17
Rx 1	Jaybeam	7148385	13.3	40°	LD450	17
Rx 2	Jaybeam	7148385	13.3	40°	LD450	17
GPS	TBC	TBC	TBC	TBC	TBC	TBC

Rev	Date	Amendments	Drawn By	Approved By
D	09.01.03	Monopole Height Modified	MM	RM
C	11.12.02	GPS Antenna Relocated.	MM	RM
B	05.12.02	Antenna Details Amended.	MM	RM
A	29.11.02	Issued for Planning	MM	RM

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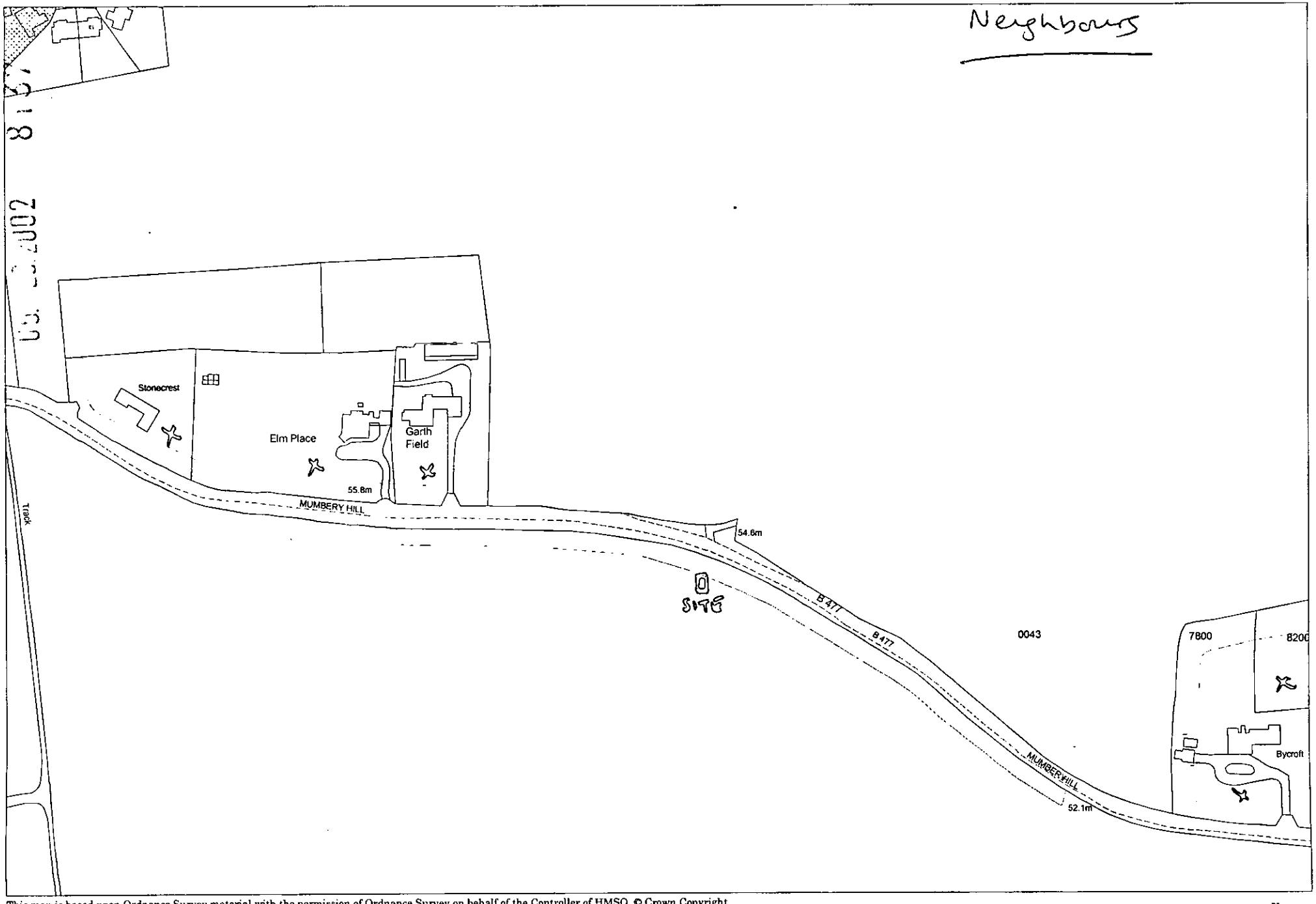
Email: enquiries@sage-consulting.co.uk

Airwave mmO_2 Ltd
5 longwalk Road
Stockley Park
East Uxbridge
Middlesex
UB11 1TT

Job Title
CELL TVY001 – SHEEPLANDS FARM
B477 MUMBERY HILL , TWYFORD,
READING, BERKSHIRE, RG10 8DL

Drawing Title
PLANNING DRAWING
ELEVATION DETAILS
SHEET 3

Scale	DO NOT SCALE THIS DRAWING	County Ref
AS SHOWN		VD232
Drawn by: MM	Checked by: RM	Approved by: LG
Date Drawn: 28/11/02	Date Checked: 28/11/02	Date Approved: 28/11/02
Drawing No.: J1270105/TVY001/VD232-03		Rev.: D



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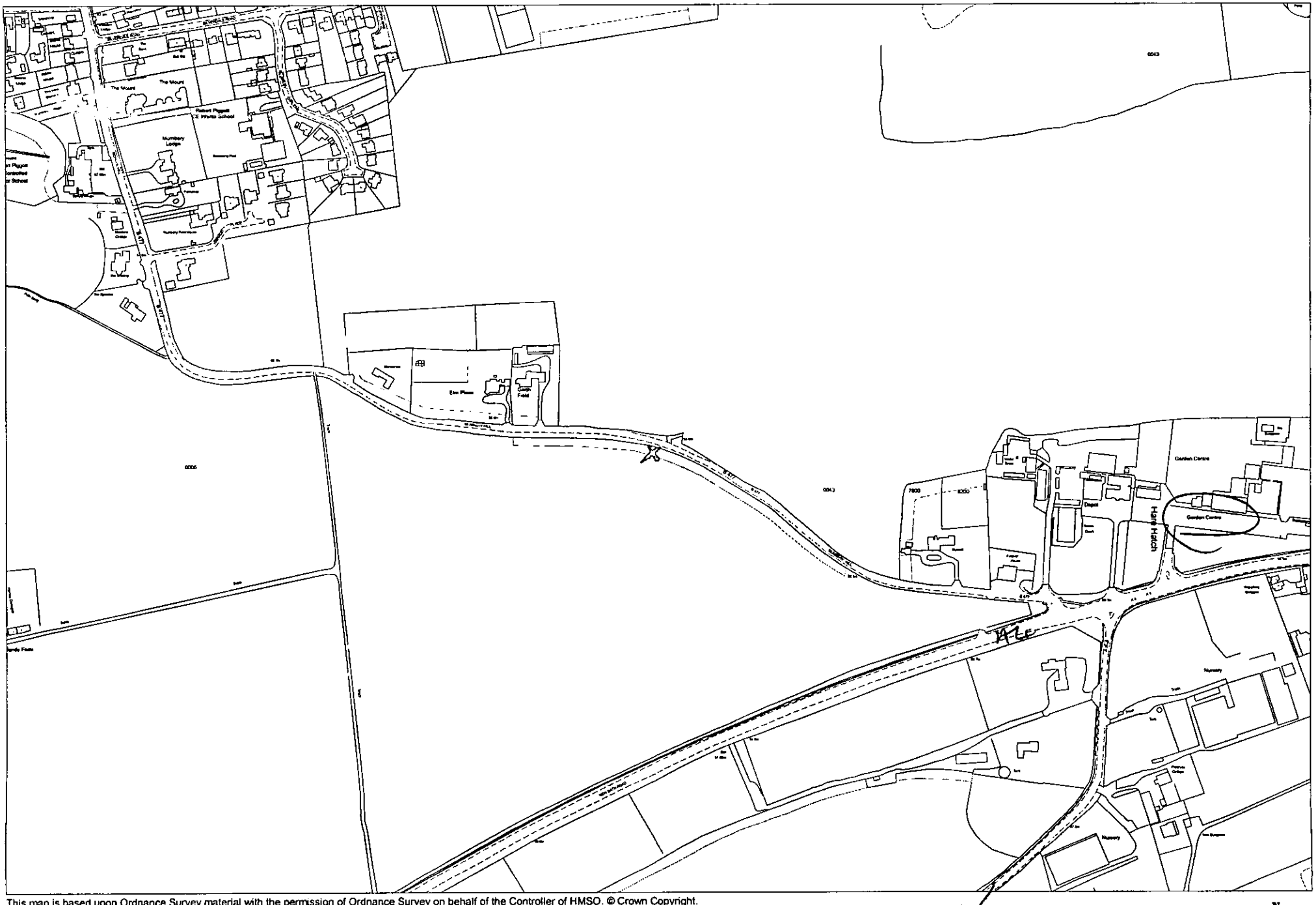
Central Support,Wokingham District Council.

6 December 2002

Scale: 1 : 2500

N
W E
S



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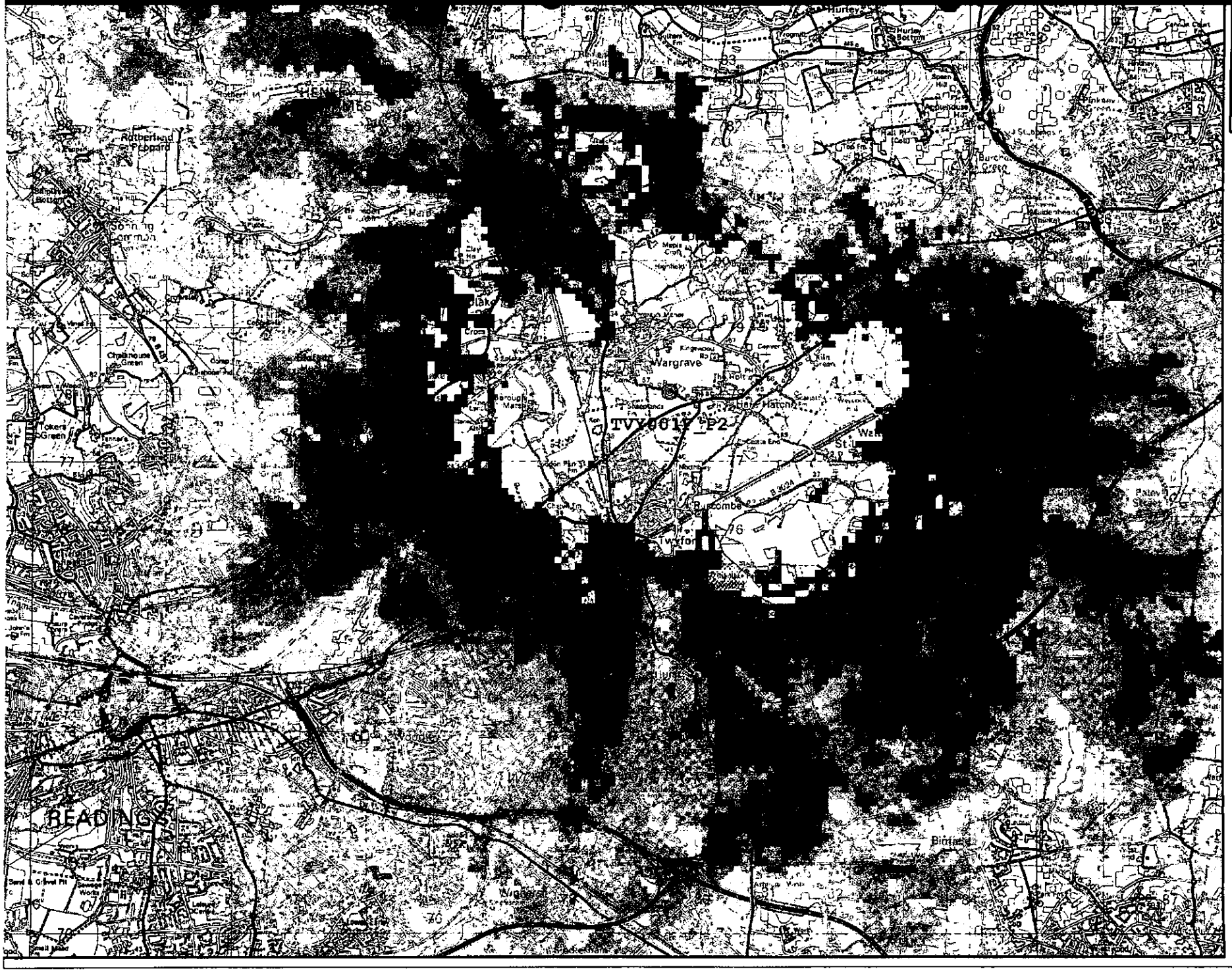
Development Control,Wokingham District Council.

12 December 2002

Tufard

Scale: 1 : 5000

N
W E
S



O2

AIRWAVE SERVICE

RESTRICTED

NOT FOR PUBLIC VIEW

TVY001F
Only

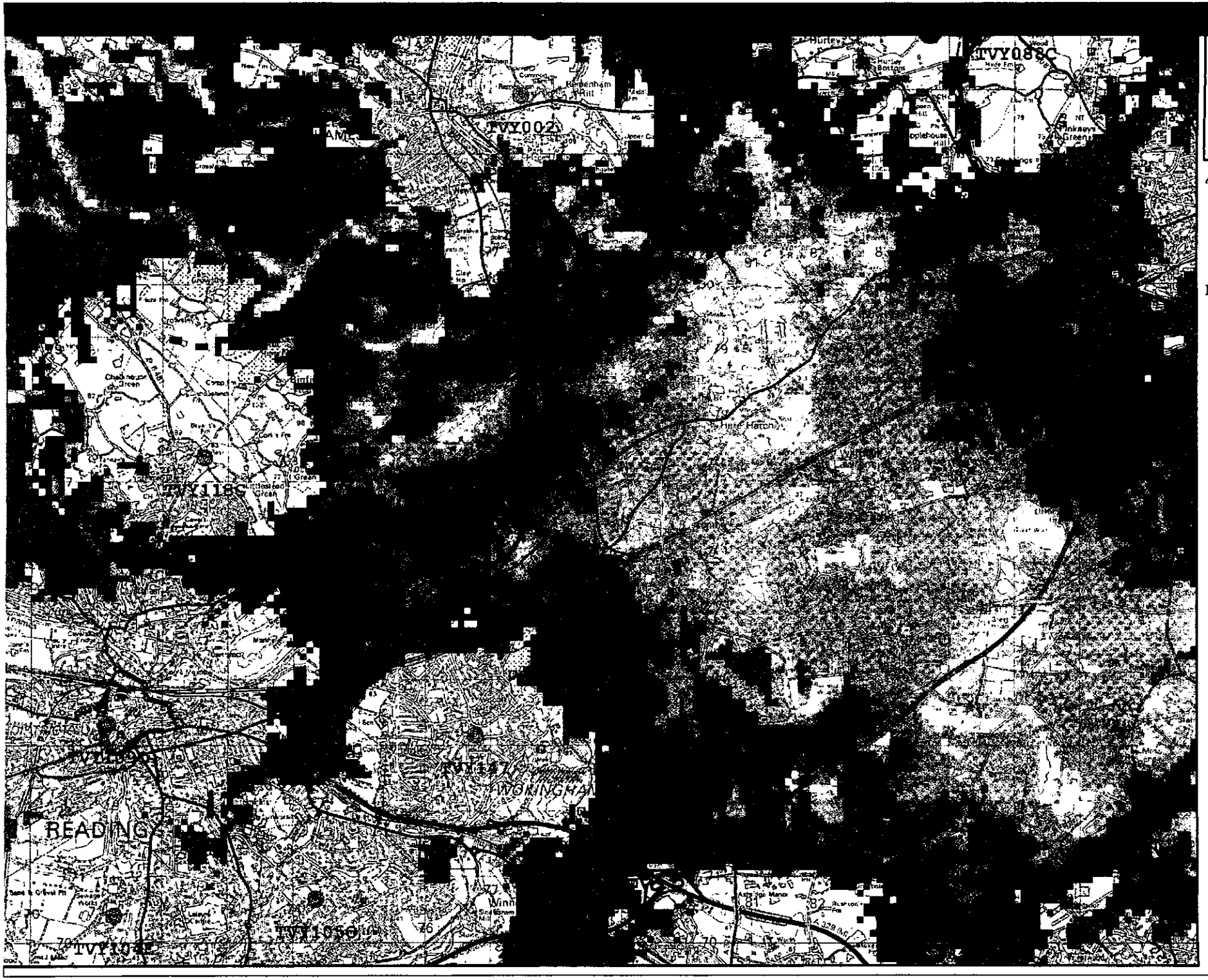
SOUTH REGION

DATED

08 January 2003

PRODUCED BY

Julian Williams



O2

AIRWAVE SERVICE

RESTRICTED

NOT FOR PUBLIC VIEW

TVY001F
Without
SOUTH REGION

DATED

08 January 2003

O2

Major Road

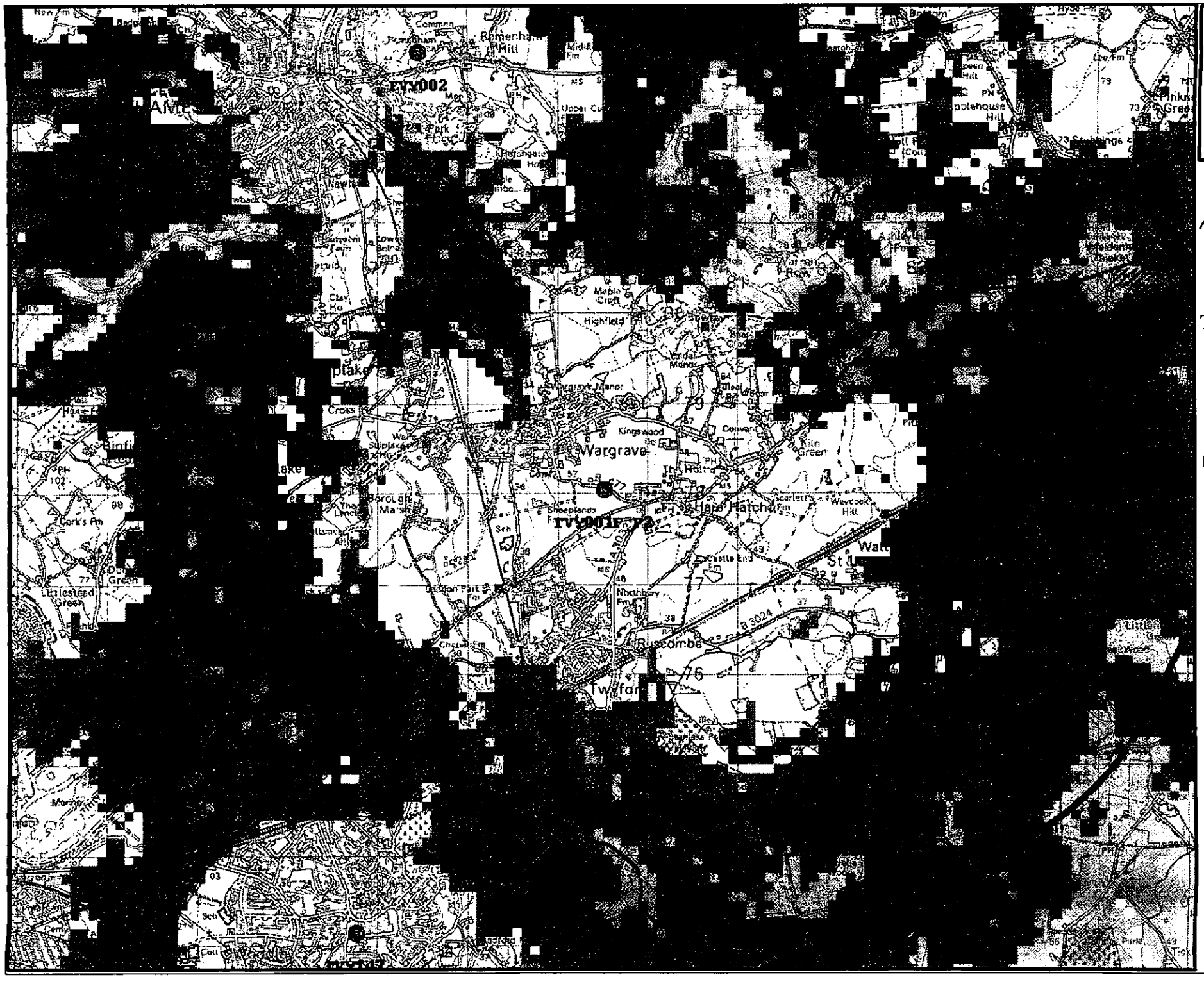
Hatched on street

+3 dB Enhancement

+15dB Enhancement

PRODUCED BY

Julian Williams



O_2

AIRWAVE SERVICE

IN CONFIDENCE
NOT FOR PUBLIC VIEW

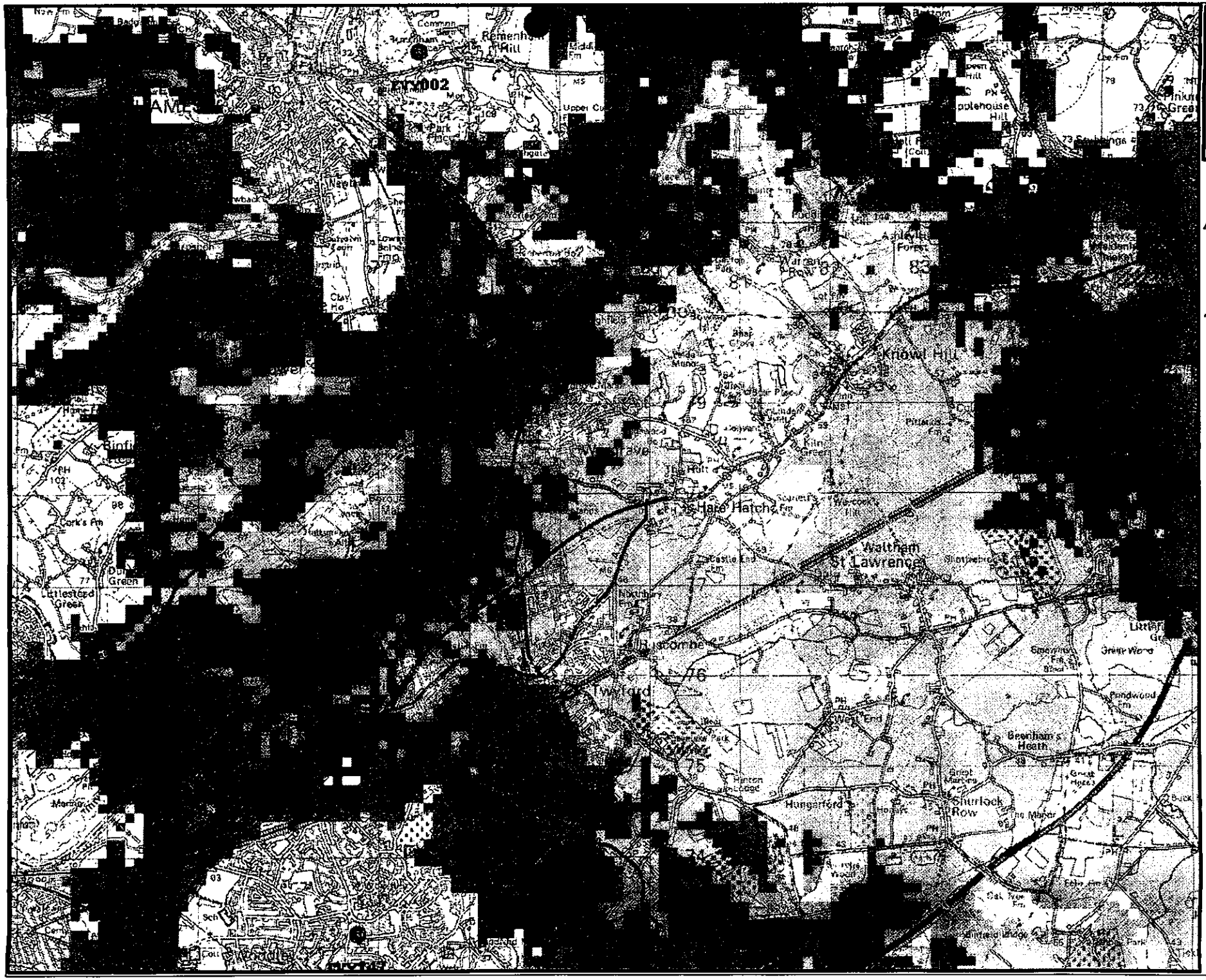
THAMES VALLEY
SOUTH REGION

TVY001F_P2
With
BROADMOOR WOOD

DATED
05 DECEMBER 2002

Radio Planner:
Julian Williams

Produced By:
Raj Mann



O_2

AIRWAVE SERVICE

IN CONFIDENCE
NOT FOR PUBLIC VIEW

THAMES VALLEY
SOUTH REGION

TVY001F_P2
Without
BROADMOOR WOOD

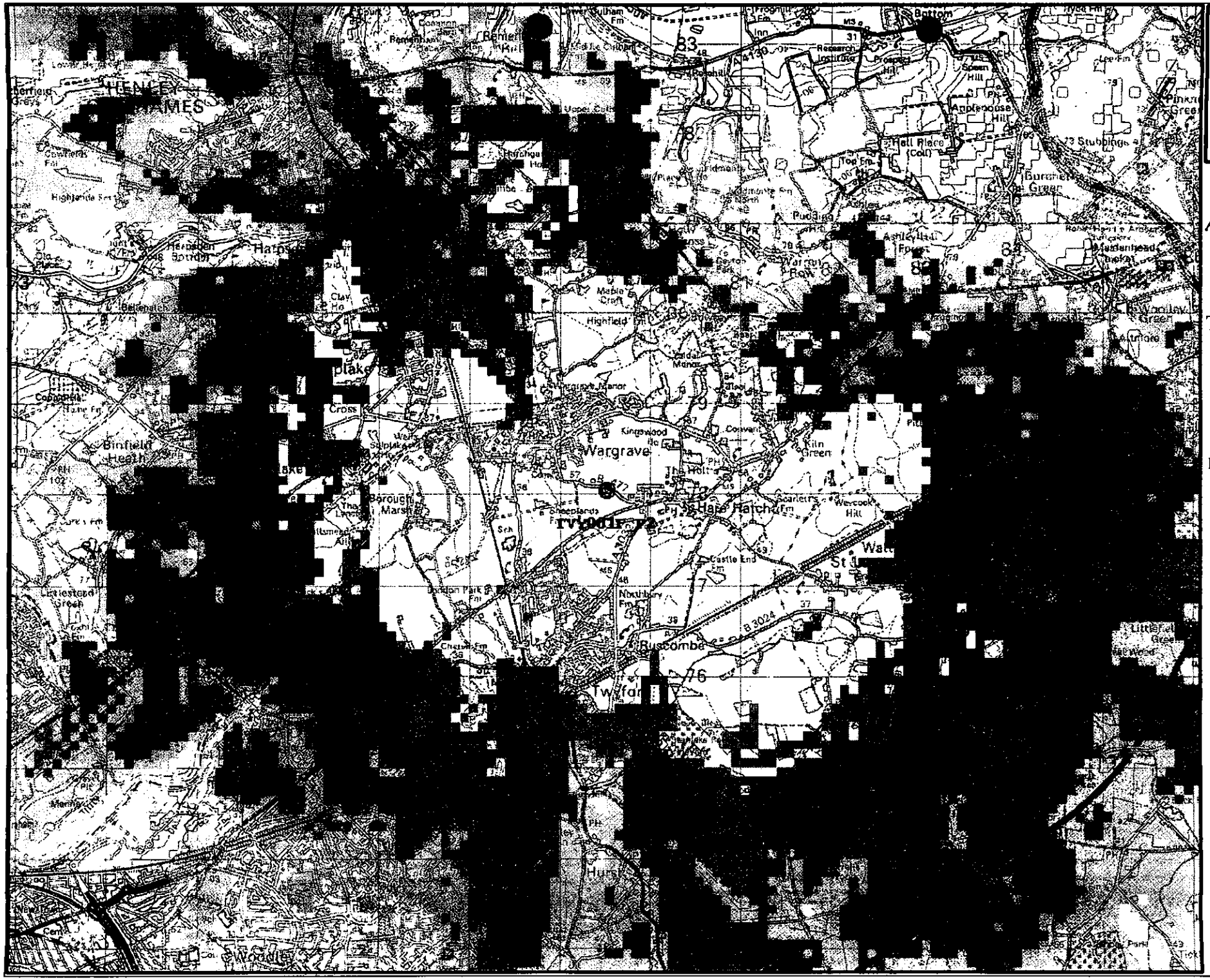
DATED
05 DECEMBER 2002

O_2

- Major Roads
- Household locations
- +5 dB Enhancement
- +15dB Enhancement

Radio Planner:
Julian Williams

Produced By:
Raj Mann



O2

AIRWAVE SERVICE

IN CONFIDENCE
NOT FOR PUBLIC VIEW

THAMES VALLEY
SOUTH REGION

TVY001F_P2
Alone
BROADMOOR WOOD

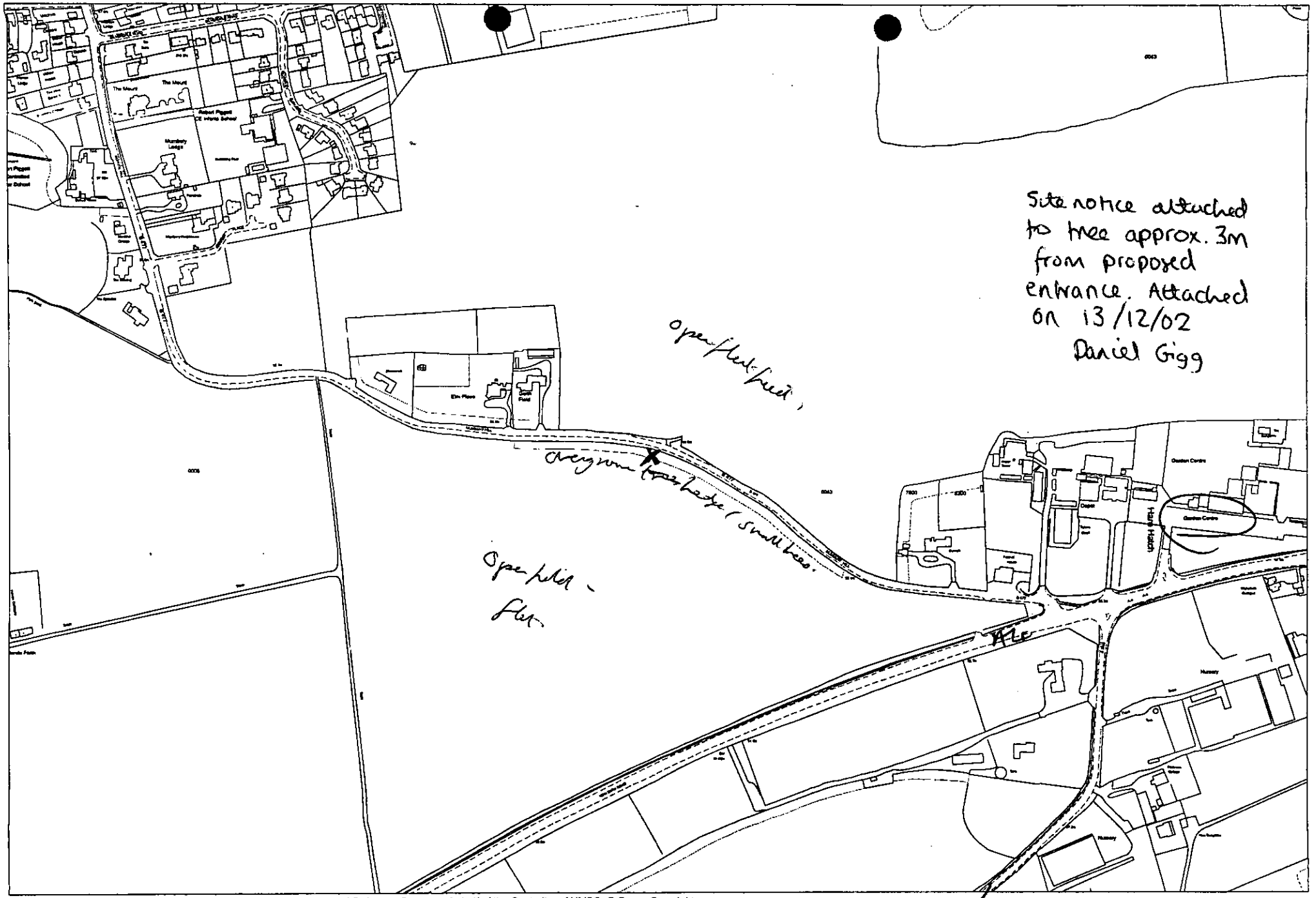
DATED
05 DECEMBER 2002

O2

- Major Roads
- Household Locations
- +5 dB Enhancement
- +15dB Enhancement

Radio Planner:
Julian Williams

Produced By:
Raj Mann



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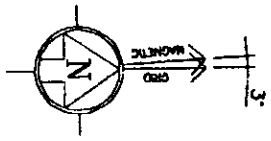
Development Control,Wokingham District Council.

12 December 2002

Scale: 1 : 5000

N W E S

20 Jun 03 16:24 Sage Consulting Limited 01923853316 p.2



NOTES cont.

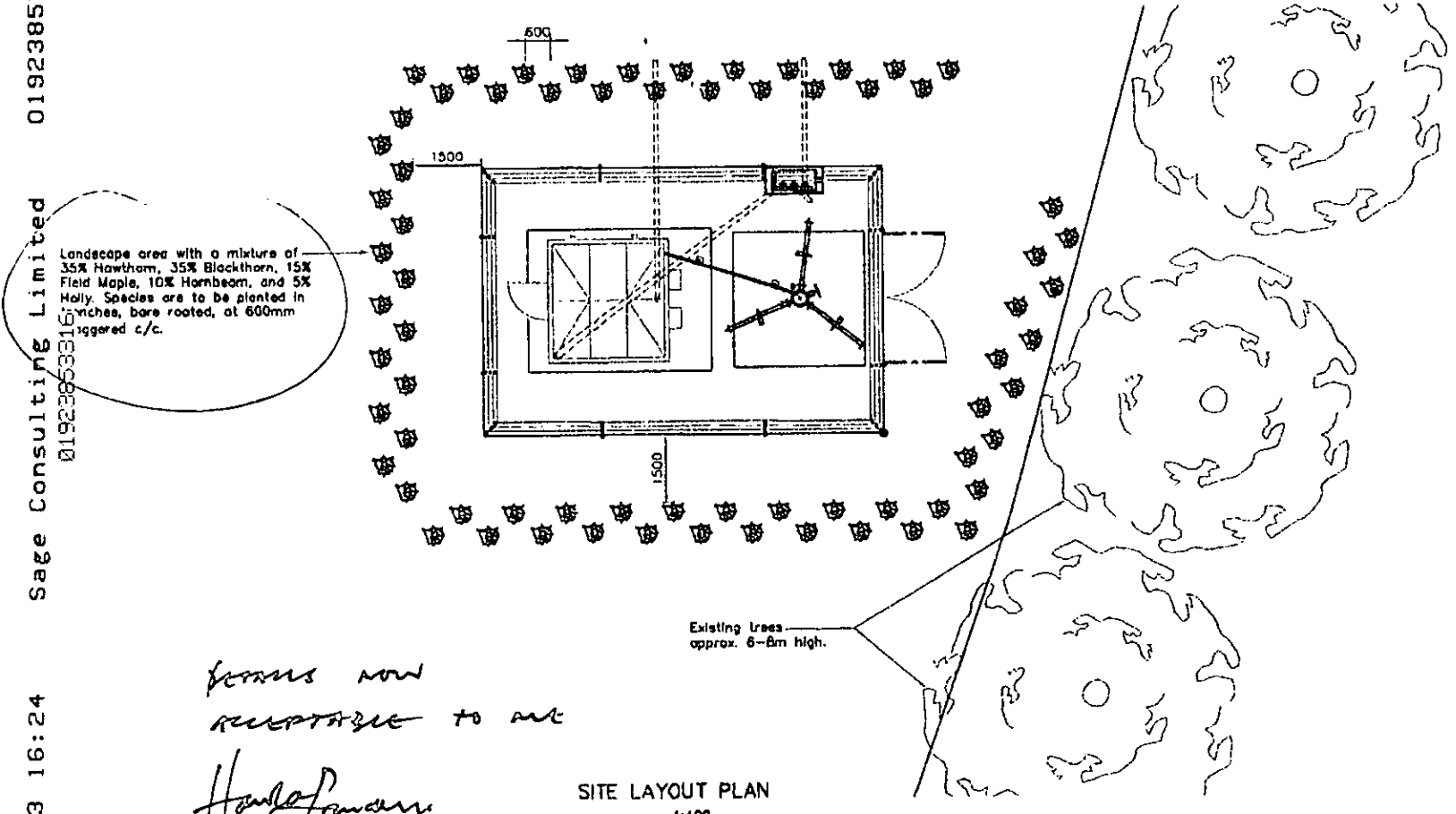
12. Each pit to be watered at time of planting & back filled soil to be firmed around the root so the plant stands in a stable position in the ground
AFTERCARE
13. A mulch or mulchmat to be placed around hedging to conserve water.
14. Hedgerow to be watered as necessary, in the first season after planting, if there is totally dry weather for a period of 3 weeks, plants should be watered at the contractors discretion, and at appropriate intervals thereafter.
15. All plants that have died should be replaced in the following planting season, to continue for 3 years. At the end of 3 years after planting, there should be 90% living & vigorous plants. If not then replacement planting to continue until this is achieved.
16. A grass & weed free area of a minimum 1m diameter should be maintained around each tree for a 3 year maintenance period. This can be either by means of chemical application or hand weeding. Re-mulching may be necessary. 2 weeding visits will be necessary in the first 2 years & 1 visit in the 3rd year.

NOTE: ORIGINAL DRAWING SIZE A3

NOTES

1. Do Not Scale.
2. All dimensions are in mm unless otherwise noted.
3. This drawing to be read in conjunction with Sage Civil Works Construction Specification and Airwave Radio Base Station Design Guide and Specification.
4. This drawing to be read in conjunction with Cantec/Sage drawing No.s J1270105/TVY001/VD232-01, 02, 03, 11 and 15 and latest revision of standard 02 drawings: GEN/104, 109, 110, 111, 119, 128, 130, GEN/231-235, GEN/303-307, 310, 313, 318, 318, 319, 321, 322, 324, 328, 336, 338, 352, 367, 370, 371, GEN/406, 408, 417, 420, 421, 432-436, 439, 442, 447.
PREPARATION
5. Removal of surface grass by hand tool to a depth of 50mm (scraping) this can be done at time of planting.
6. Landscaping area to be planted with a mixture of 5 different species: approx 35% Hawthorn (Crataegus-Monogyna), approx 35% Blackthorn (Prunus-Spinosa), 15% Field Maple, 10% Hornbeam and 5% Holly at 600mm spacing (approx 70 plants).
7. Plants to be bare rooted with a strong fibrous root.
8. Plants to be obtained from a reputable nursery, roots to have been kept moist at all times from lifting to planting.
PLANTING
9. Hedgerow should be individually planted in prepared pits with a minimum area size of 100x100mm, but of a size that comfortably allows sufficient space for the roots to be spread out, & a minimum depth of 30mm, but at a depth that allows the root collar to be at existing ground level. The bottom of the pit should be loosened soil.
10. Plants to be kept covered & the roots moist until time of placing in the pit.
11. Any broken or damaged roots should be cut cleanly with secateurs or sharp knife.

Rev	Date	Amendments	Drawn By	Approved By
C	20.06.03	Minor Amendments	MM	LG
B	17.06.03	Minor Amendments	MM	LG
A	15.04.03	Issued For Construction	MM	LG



SITE LAYOUT PLAN
1:100

forms now acceptable to me

20.06.03.

Cantec in association with
SAGE CONSULTING LTD.

Airwave mmO2 Ltd

Job Title
CELL TVY001 – SHEEPLANDS FARM, 8477 MUMBERY HILL, TWYFORD, READING, BERKSHIRE, RG10 8DL

Drawing Title
DETAIL DESIGN
LANDSCAPING SCHEME

Scale	County Ref
AS SHOWN	VD232
Drawn By: LCJ	Checked By: MM
Approved By: LG
Date Drawn: 14/04/03	Date Checked: 04/05/03
Date Approved: 04/05/03

Drawing No.: J1270105/TVY001/VD232-20 Rev: C

MUMBERY HILL

PAVEMENT

GRASS VERGE

FARMLAND

Existing tress approx. 6–8m high.

Proposed Airwave 3m wide roadstone access track.

Proposed Airwave 9000x6000 compound enclosed by security fence topped with 3 strands of barbed wire, overall height 2m.

Proposed Airwave APW Electrical Meter Cabinet.

Proposed Airwave 100mmø UPVC duct to terminate 2m outside the compound for REC supply.

Proposed Airwave GPS antenna fixed to 450 wide cable tray on support poles.

Proposed single sized gravel compound finish.

Proposed Airwave 3m wide access gate.

Proposed Airwave 15m monopole on concrete base.

Proposed Airwave 100mmø UPVC duct to terminate 2m outside the compound for GBN connection.

Proposed Airwave Elliot (Medium) cabin.

Proposed Airwave planting scheme approx. 2.5m high. Details to be agreed.

Existing site boundary line

3°

MAGNETIC

GRID

N

PROPOSED SITE LAYOUT
(scale 1:200)

10000 5000 0 5000 10000 15000 20000

ORIGINAL SCALE AT A3 – 1:200 ALL DIMENSIONS IN MILLIMETRES (UNLESS NOTED OTHERWISE)

SUPERSEDED

NOTE: ORIGINAL DRAWING SIZE A3

NOTES

1. This drawing to be read in conjunction with Centac/Sage drawing No.s J1270105/TVY001/VD232-01, 03 and Standard O2 drawings.
2. All dimensions are in mm unless otherwise noted.

Airwave mmO2 – Power Supply			
REC Power Supply Required	14.5KVA		
Airwave mmO2 – Cabin Schedule			
Manf.	ELLIOT	Colour Ref	BS 4800/12B27
Type	MEDIUM	Gland Pos. A/B/C	A
Dimension (mm)	2744x2744x2796	Door hinge L/R	L
Material	STEEL	Pre assembled	X Flatpack
Airwave mmO2 – Meter Cabinet Schedule			
Manf.	APW	Colour Ref	BS 4800/12B27
Type	STD	Material	STEEL
Dimension (mm)	1000X467x1000		
Airwave mmO2 – PER DETAILS			
Type	TBC	Voltage	TBC
Autonomy	6 HR	Phase	TBC
Location	CABIN		

05 DEC 2002 8:37

Rev	Date	Amendments	Drawn By	Approved By
A	29.11.02	Issued for Planning	MM	RM

CentaC in association with SAGE CONSULTING LTD.
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Email: enquiries@sage-consulting.co.uk

Airwave mmO2 Ltd
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Stockley Park
East Uxbridge
Middlesex
UB11 1TT

Job Title
CELL TVY001 – SHEEPLANDS FARM
B477 MUMBERY HILL , TWYFORD,
READING, BERKSHIRE, RG10 8DL

Drawing Title
PLANNING DRAWING
SITE LAYOUT
SHEET 2

Scale		County Ref
AS SHOWN DO NOT SCALE THIS DRAWING		VD232
Drawn by MM	Checked by RM	Approved by LC
Date Drawn 28/11/02	Date Checked 28/11/02	Date Approved 28/11/02
Drawing No. J1270105/TVY001/VD232-02		Rev. A