

LEGEND

-  National Parks
-  SPA
-  SAC
-  SSSI

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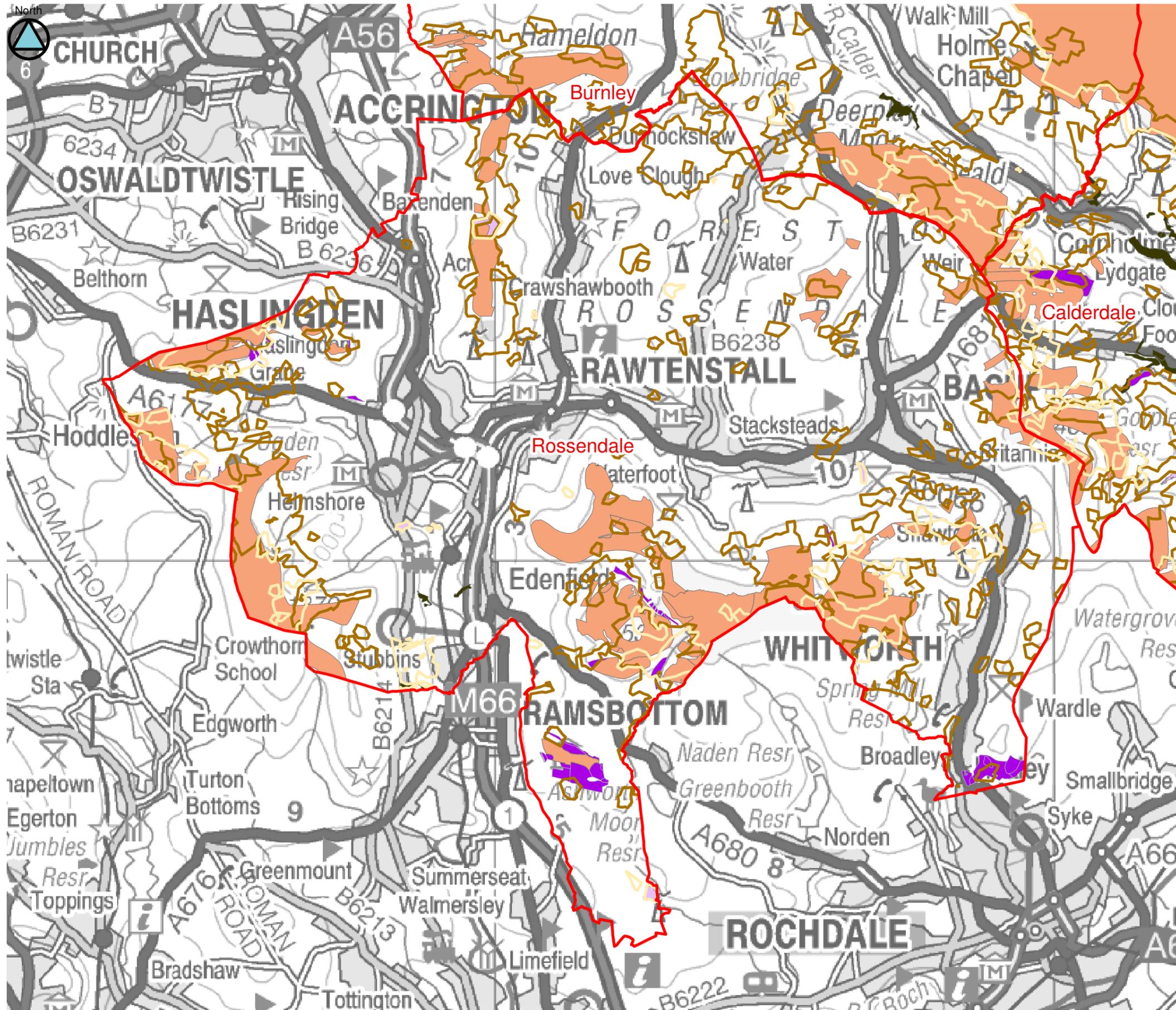


FIGURE A1

ENVIRONMENTAL DESIGNATIONS

Scale 1:70,396 @ A3  1 0.5 0 1 Kilometers

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- Mire fen bog networks
- Healthland networks
- Blanket bog
- Ancient Woodland
- Upland heathland
- Purple moor grass and rush pasture

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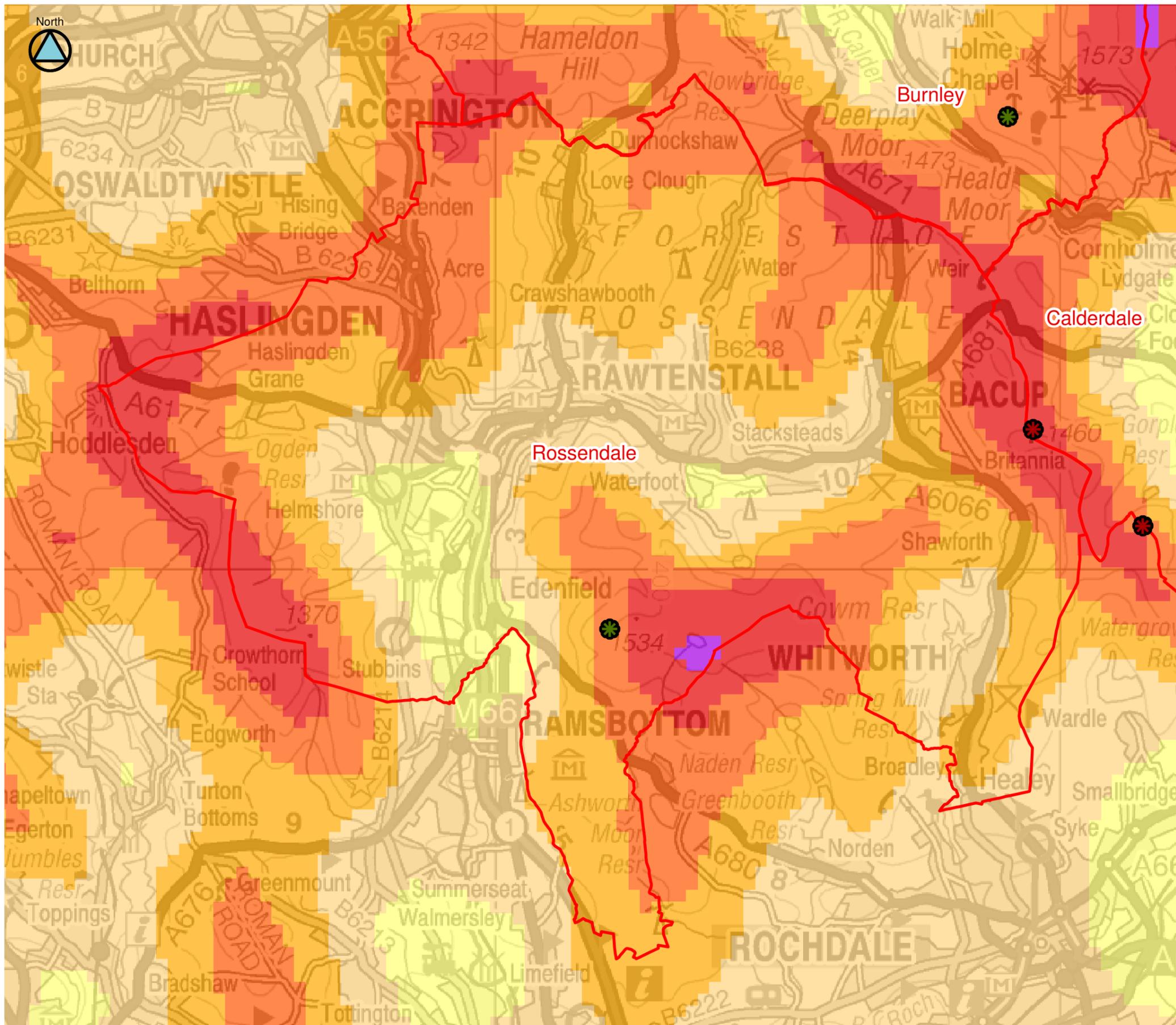


FIGURE A2

**BIODIVERSITY ACTION PLAN
PRIORITY HABITATS (BAPs)**

Scale 1:70,333 @ A3 1 0.5 0 1 Kilometers

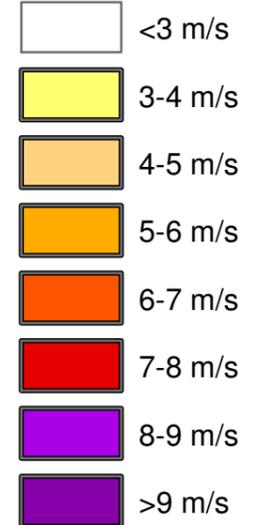
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-  Consented Wind Farms
-  Operational Wind Farms

Wind Speed (m/s) at 10m AGL



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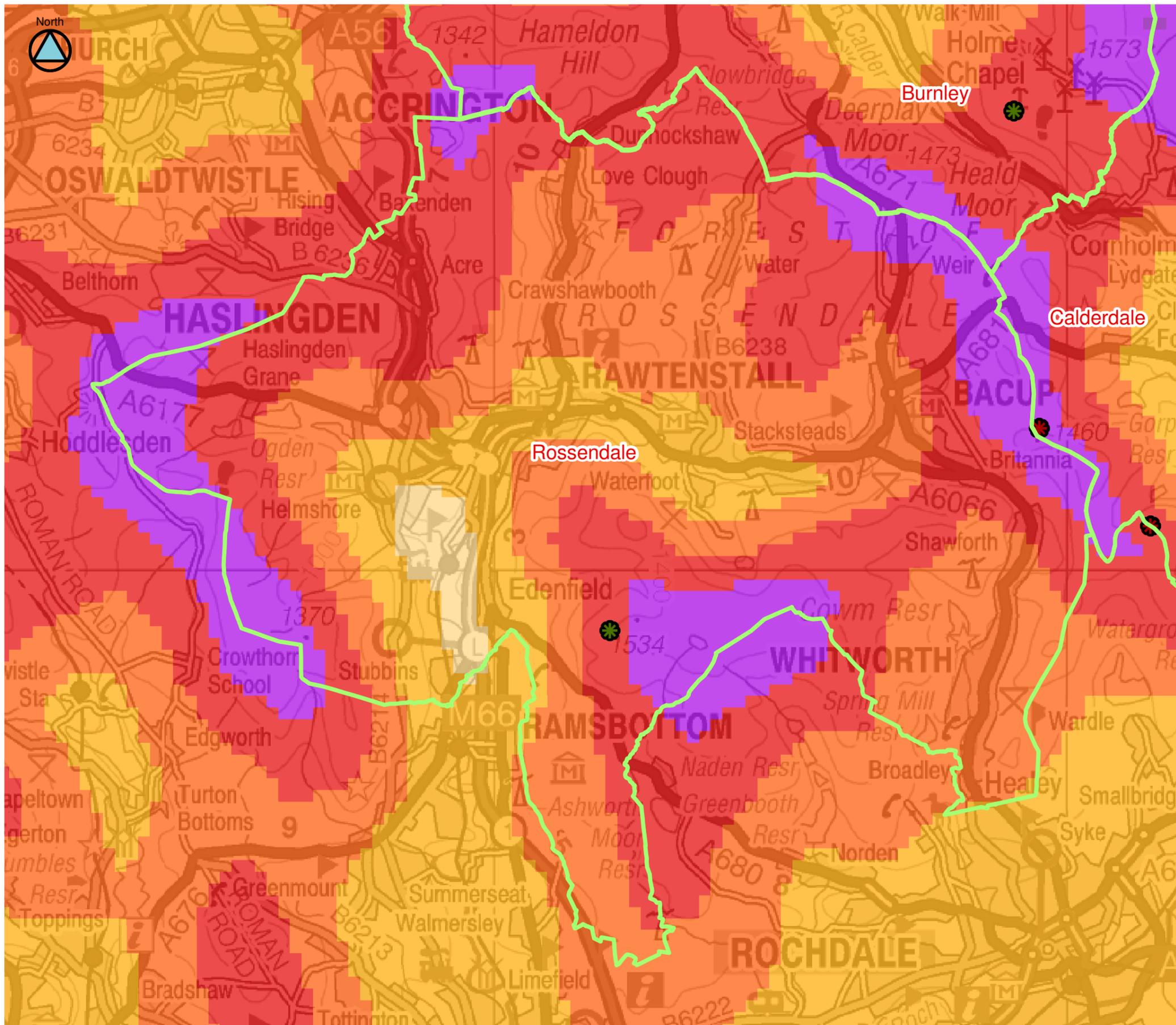


FIGURE A4

Wind Resources Map 10m AGL

Scale 1:70,985 @ A3 1 0.5 0 1 Kilometers

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LEGEND

-  Consented Wind Farms
-  Operational Wind Farms

Wind Speed (m/s) at 45m AGL

-  <5 m/s
-  5-6 m/s
-  6-7 m/s
-  7-8 m/s
-  8-9 m/s
-  >9 m/s

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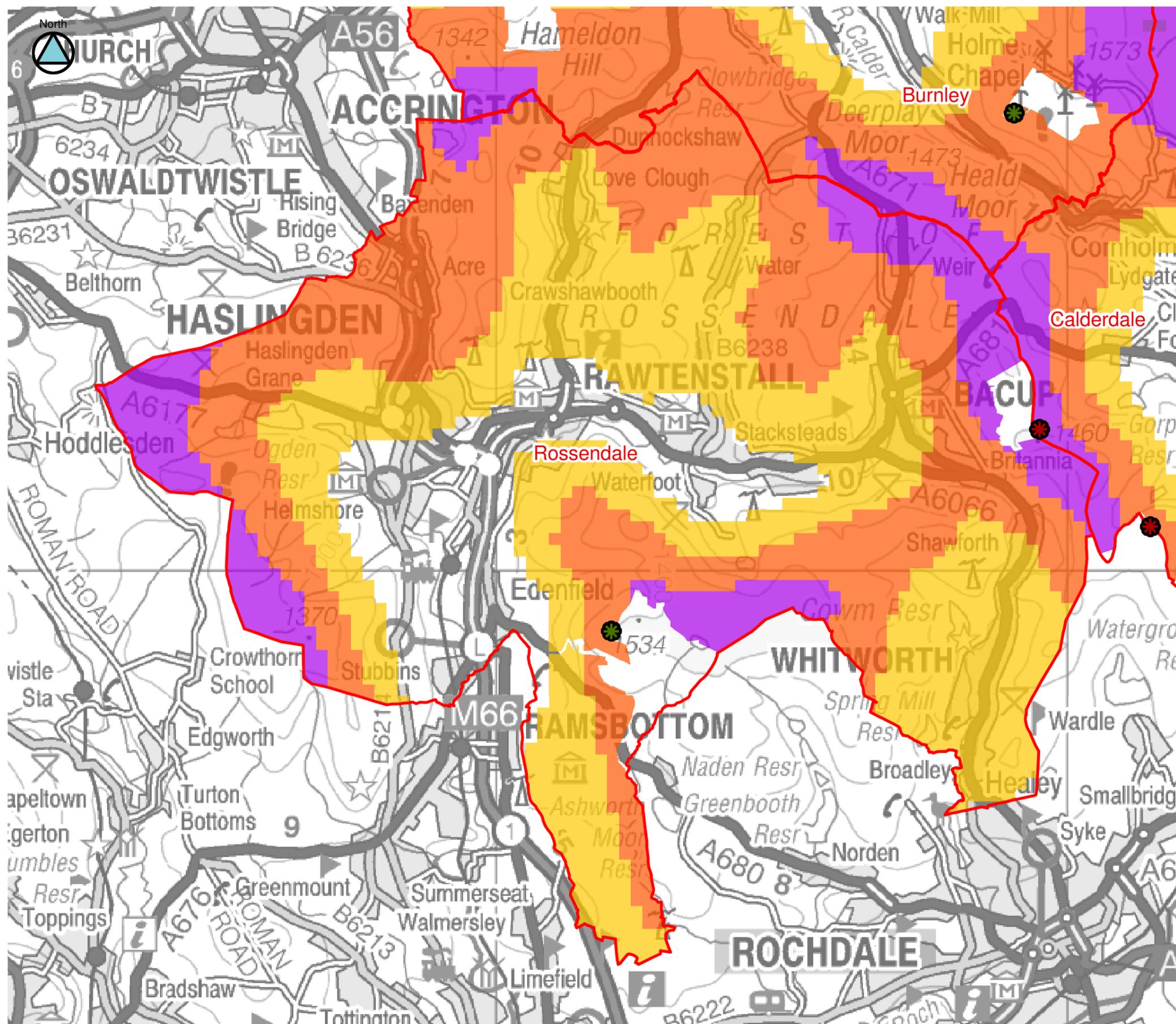


FIGURE A5

Wind Resources Map 45m AGL

Scale 1:70,000 @ A3  1 0.5 0 1 Kilometers

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LEGEND

-  Consented Wind Farms
-  Operational Wind Farms

Wind Speed (m/s) at 45m AGL

-  6-7 m/s
-  7-8 m/s
-  8-9 m/s
-  >9 m/s

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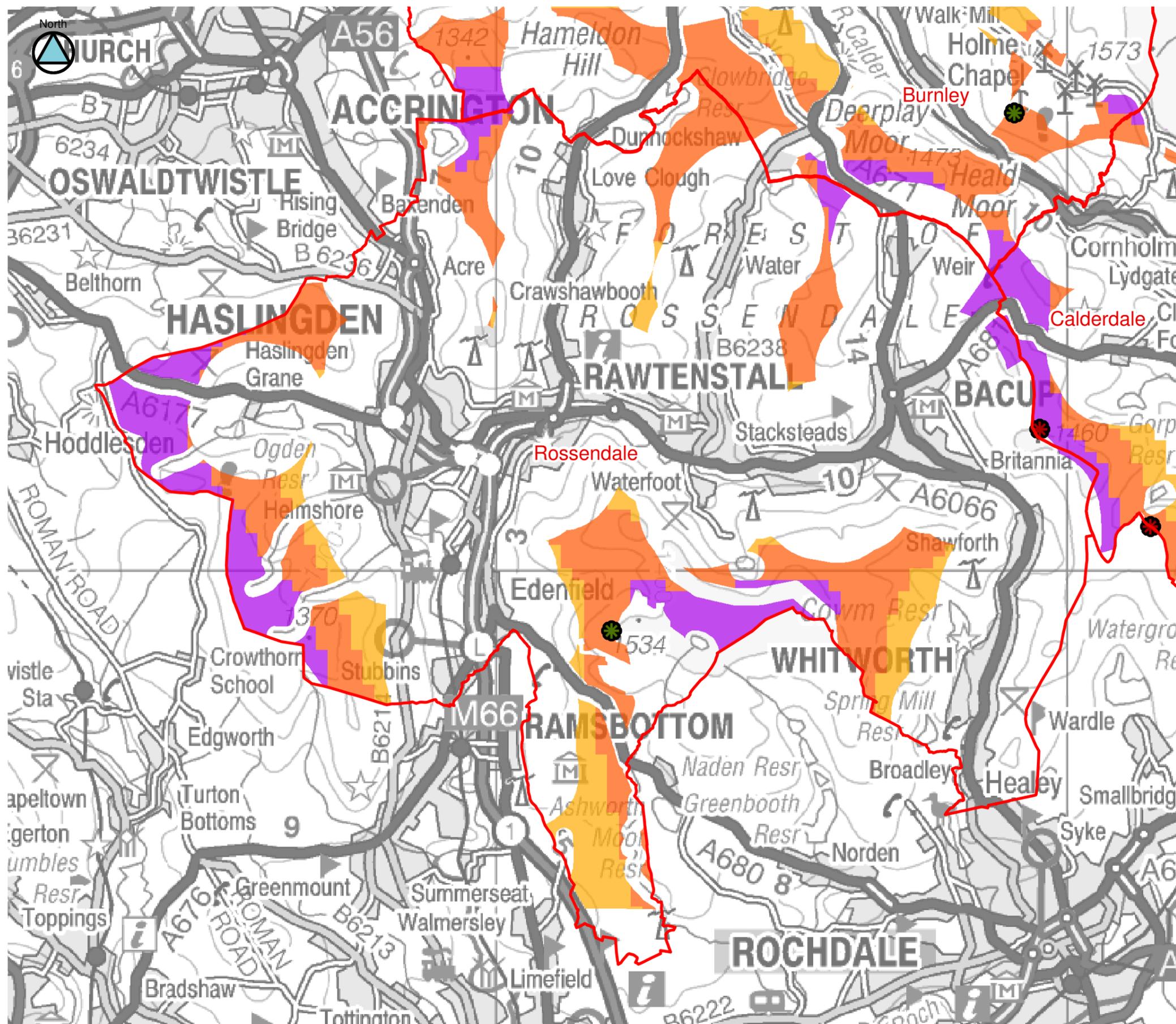
maslen
environmental
part of the JBA Group



FIGURE A6
Commercial Scale Wind Energy
Opportunities

Scale 1:70,000 @ A3 1 0.5 0 1 Kilometers

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LEGEND

-  Consented Wind Farms
-  Operational Wind Farms

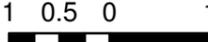
Wind Speed (m/s) at 45m AGL

-  6-7 m/s
-  7-8 m/s
-  8-9 m/s
-  >9 m/s

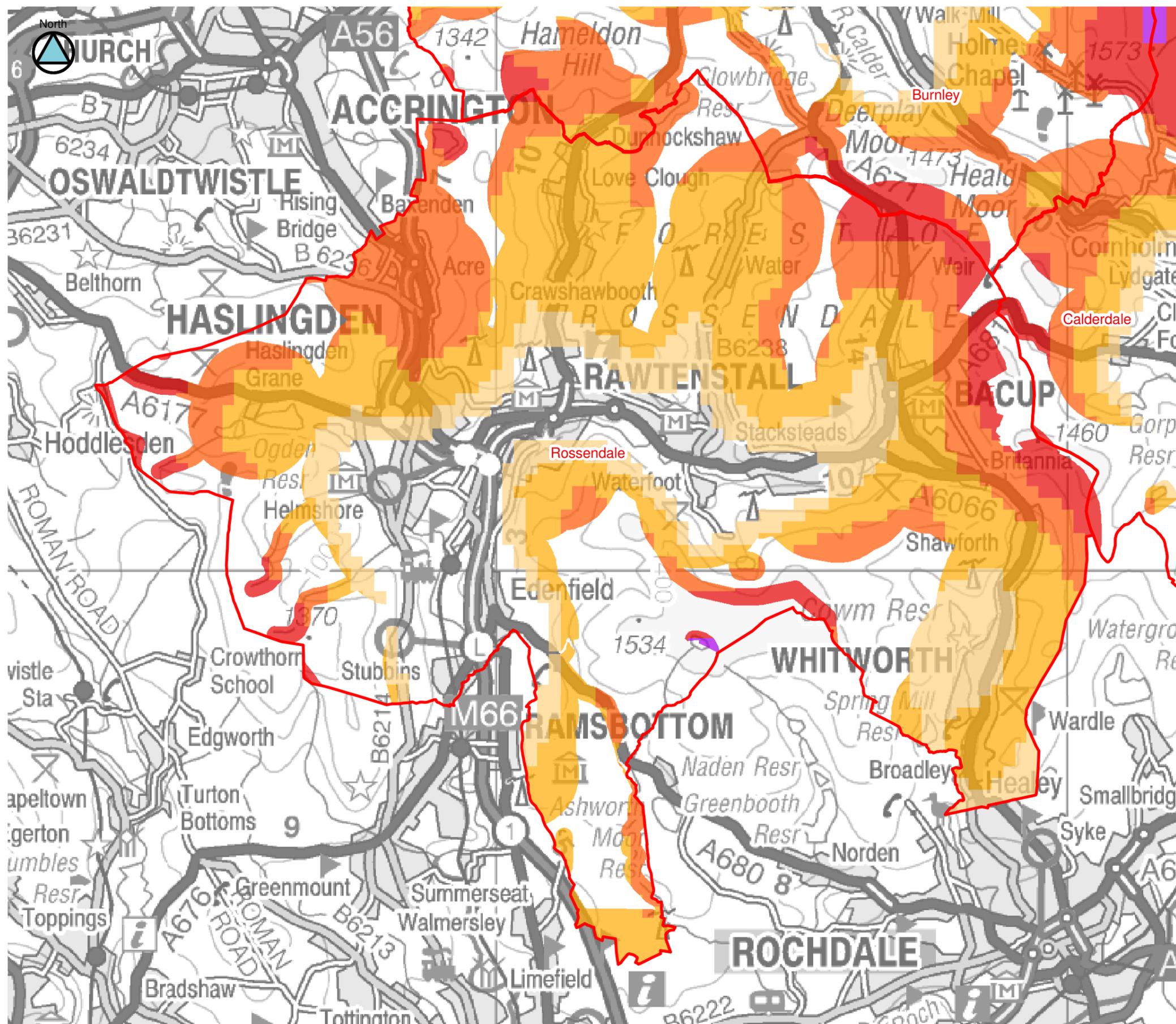
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FIGURE A7
Commercial Scale Wind Energy
Constraints Assessment

Scale 1:70,000 @ A3  1 0.5 0 1 Kilometers

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Wind Speed (m/s) at 10m AGL



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FIGURE A8

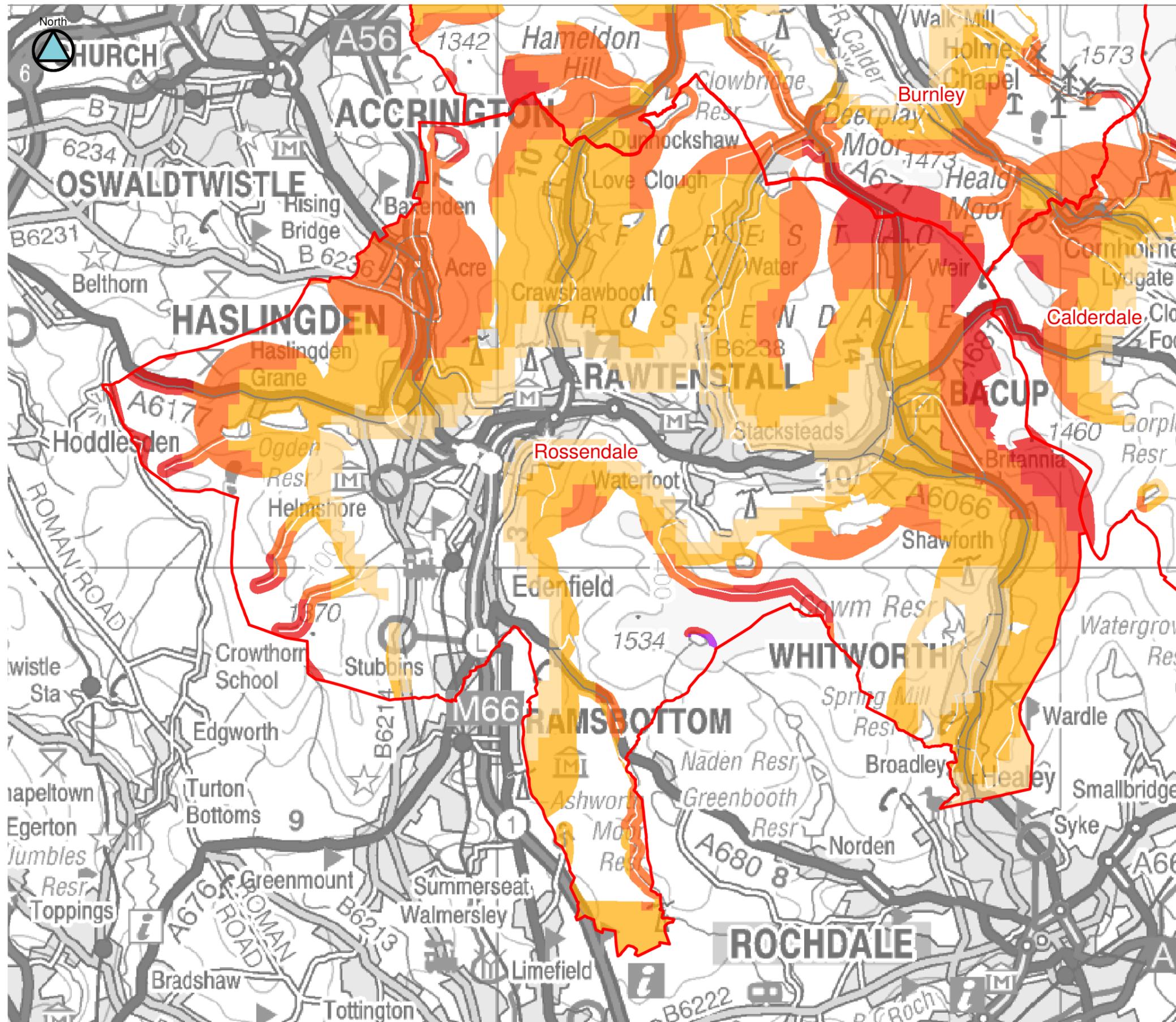
Small Scale Wind Energy Opportunities Assessment

Scale 1:70,000 @ A3

1 0.5 0 1 Kilometers



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Wind Speed (m/s) at 10m AGL

- 4.5 - 5 m/s
- 5 - 6 m/s
- 6 - 7 m/s
- 7 - 8 m/s
- 8 - 9 m/s

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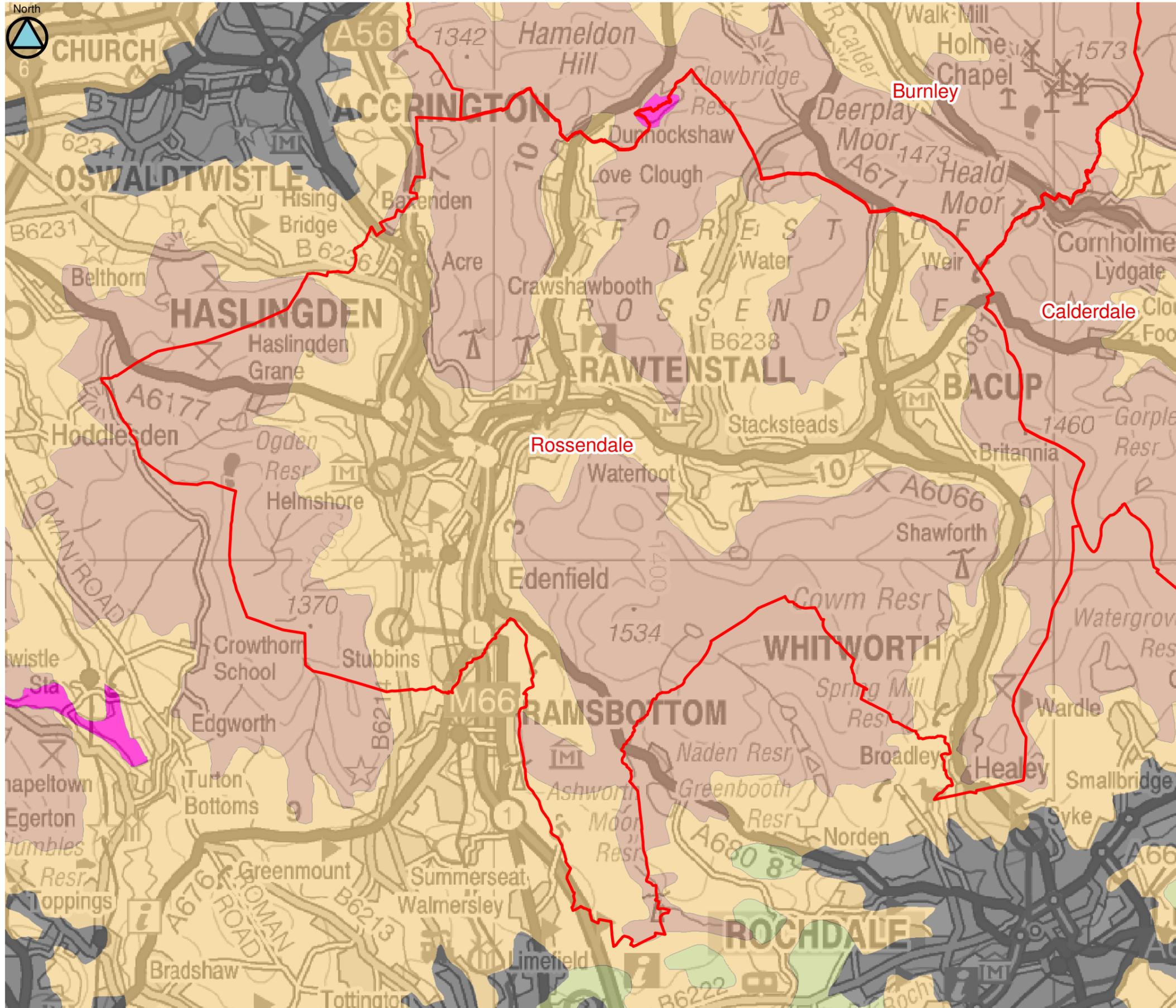


FIGURE A9

Small Scale Wind Energy
Constraints Assessment

Scale 1:70,985 @ A3 1 0.5 0 1 Kilometers

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Agricultural Land Classification

- GRADE 1
- GRADE 2
- GRADE 3
- GRADE 4
- GRADE 5
- NON AGRICULTURAL
- URBAN

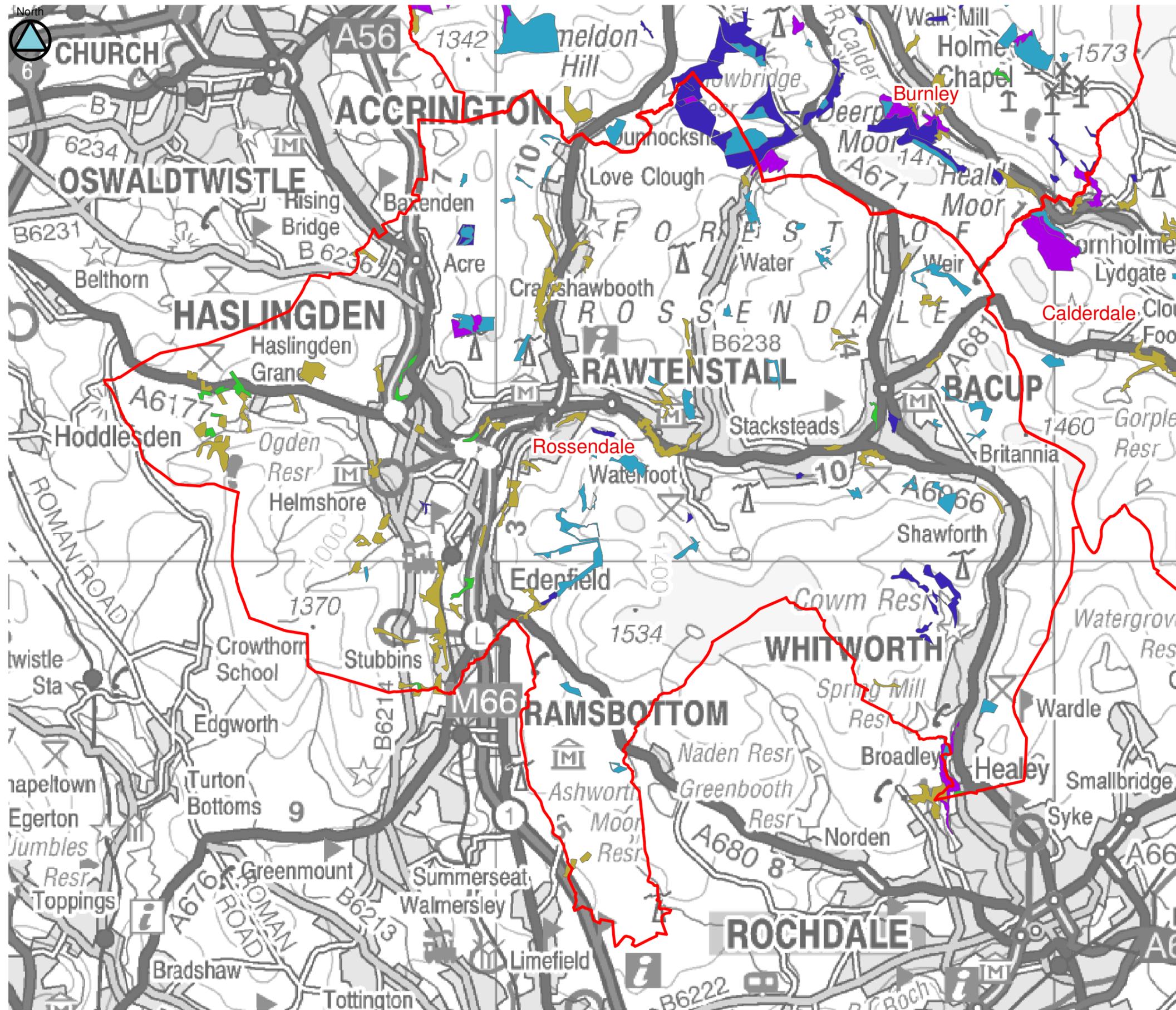
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FIGURE A 10
AGRICULTURAL LAND
CLASSIFICATIONS IN THE STUDY
AREA

Scale 1:70,333 @ A3 1 0.5 0 1 Kilometers

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- Woodland Management Indicator (WMI)**
- Grants and Licensing Activity
 - Productive managed woodland
 - Non-productive managed woodland
 - Under-managed woodland
 - Non-productive woodland

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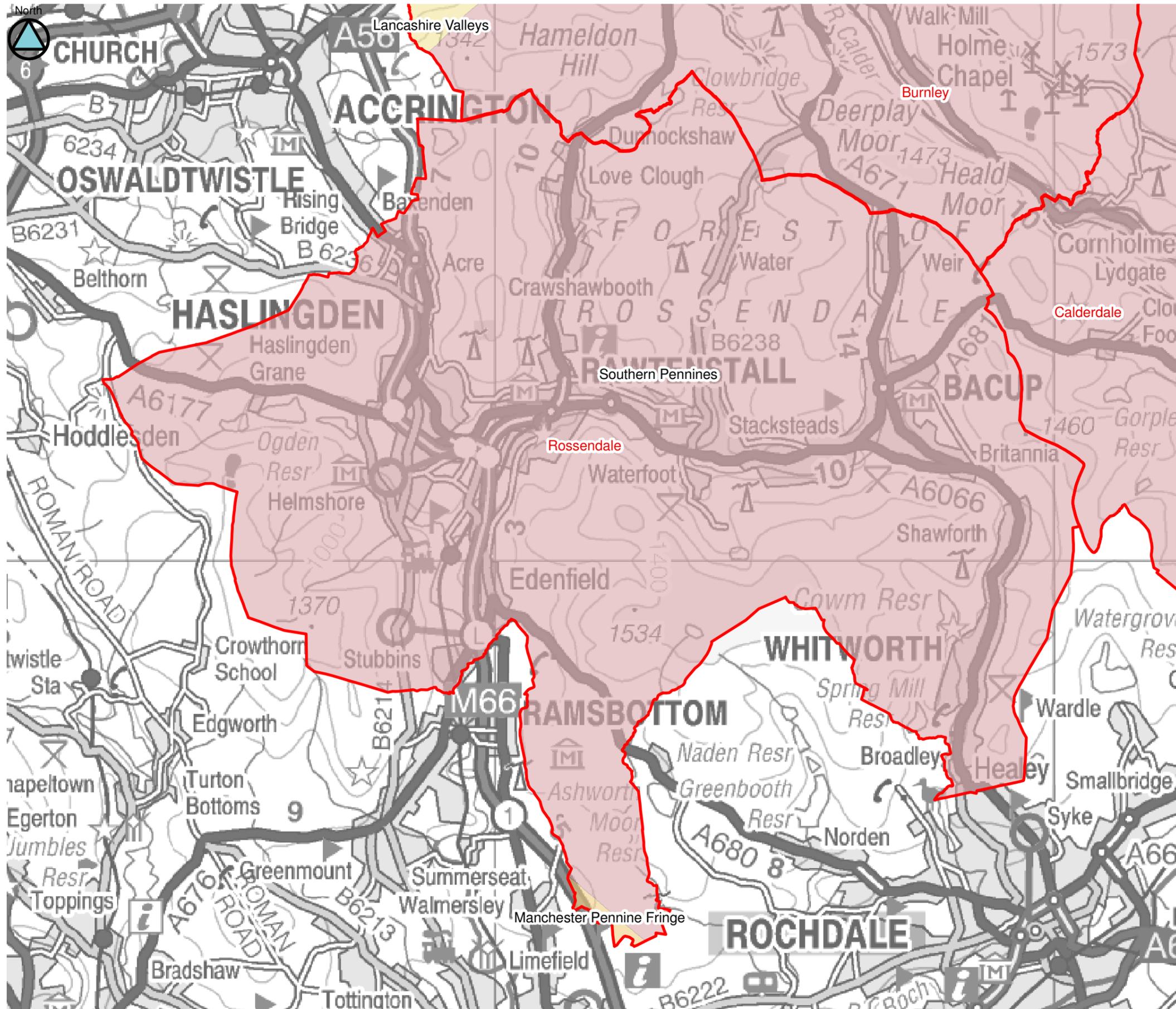


FIGURE A11

**FORESTRY COMMISSION
WOODLAND CLASSIFICATIONS**

Scale 1:70,389 @ A3 1 0.5 0 1 Kilometers

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Character Areas

- Bowland Fringe and Pendle Hill
- Dark Peak
- Lancashire Valleys
- Manchester Pennine Fringe
- Nottinghamshire, Derbyshire and Yorkshire Coalfield
- Southern Pennines
- Yorkshire Southern Pennine Fringe

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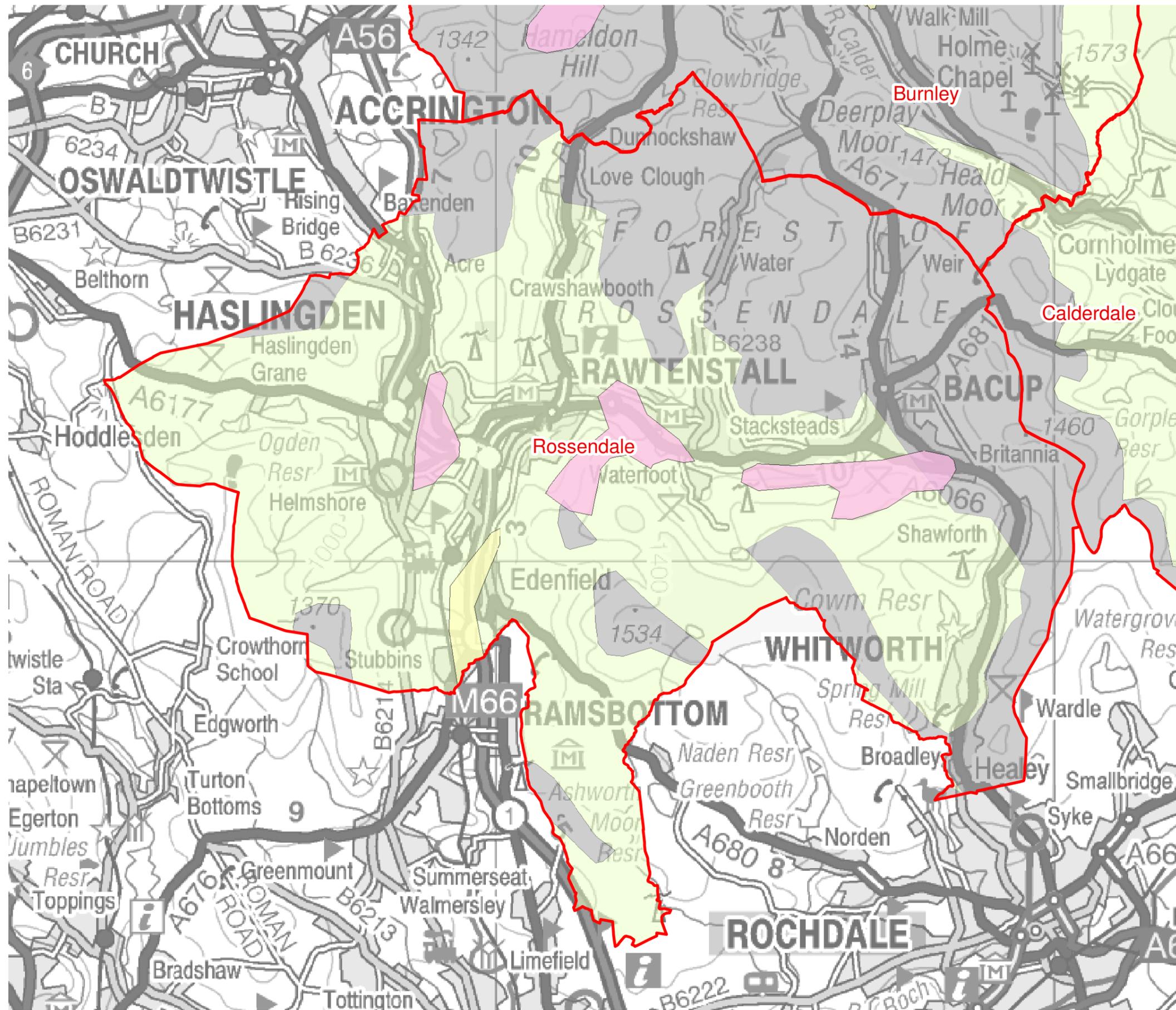
FIGURE A12

CHARACTER AREAS

Scale 1:70,333 @ A3



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Drift aquifers

- Alluvium
- Glacial sand & gravel
- River terrace deposits

Bedrock aquifers

- Middle Coal
- Lower Coal Measures
- Millstone Grit
- Bowland High Group / Craven

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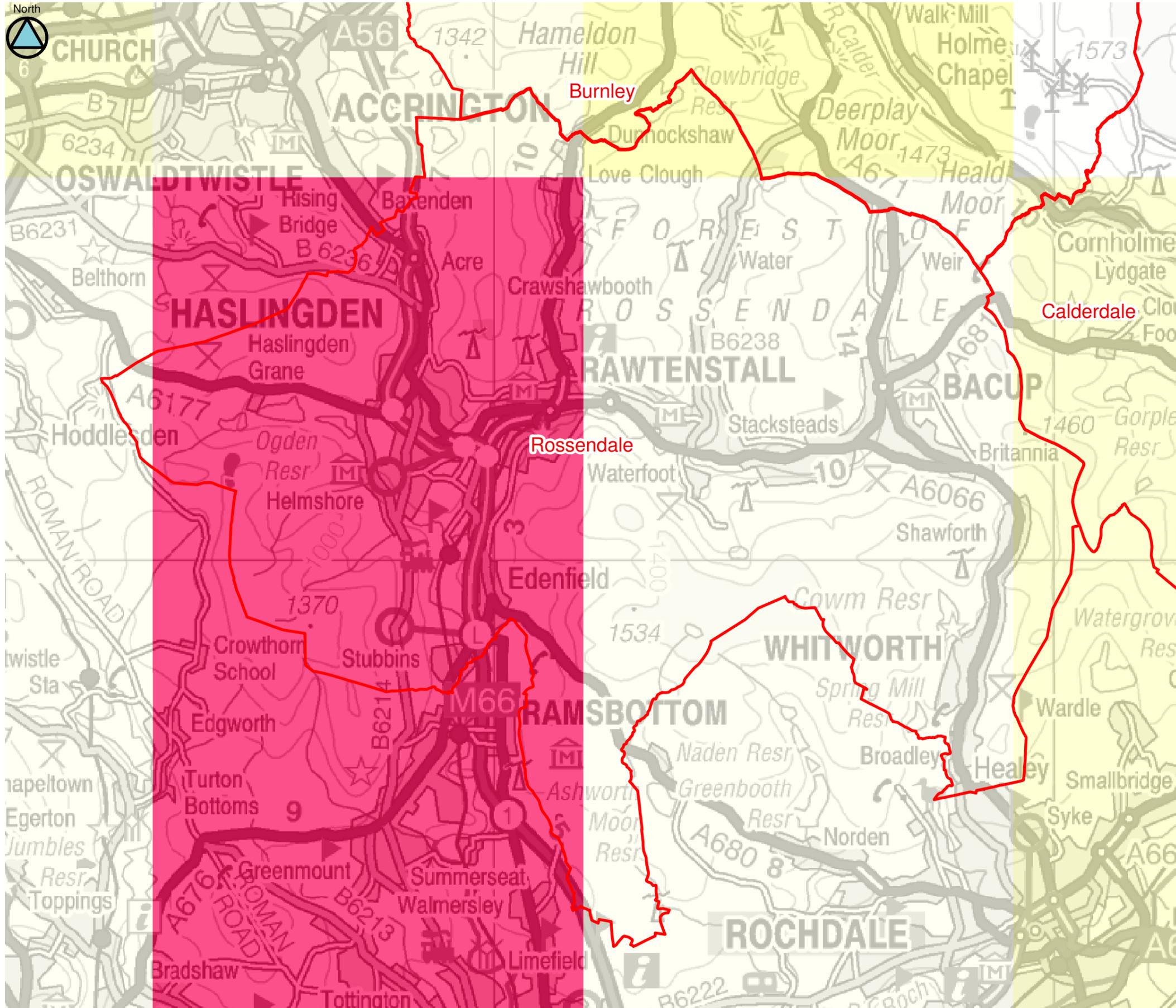
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Scale 1:70,333 @ A3
1
0.5
0
1 Kilometers

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FIGURE A13
AQUIFERS WITHIN THE STUDIED AREA



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Irradiation (kWh/m2)
 High :1120
 Low :1060

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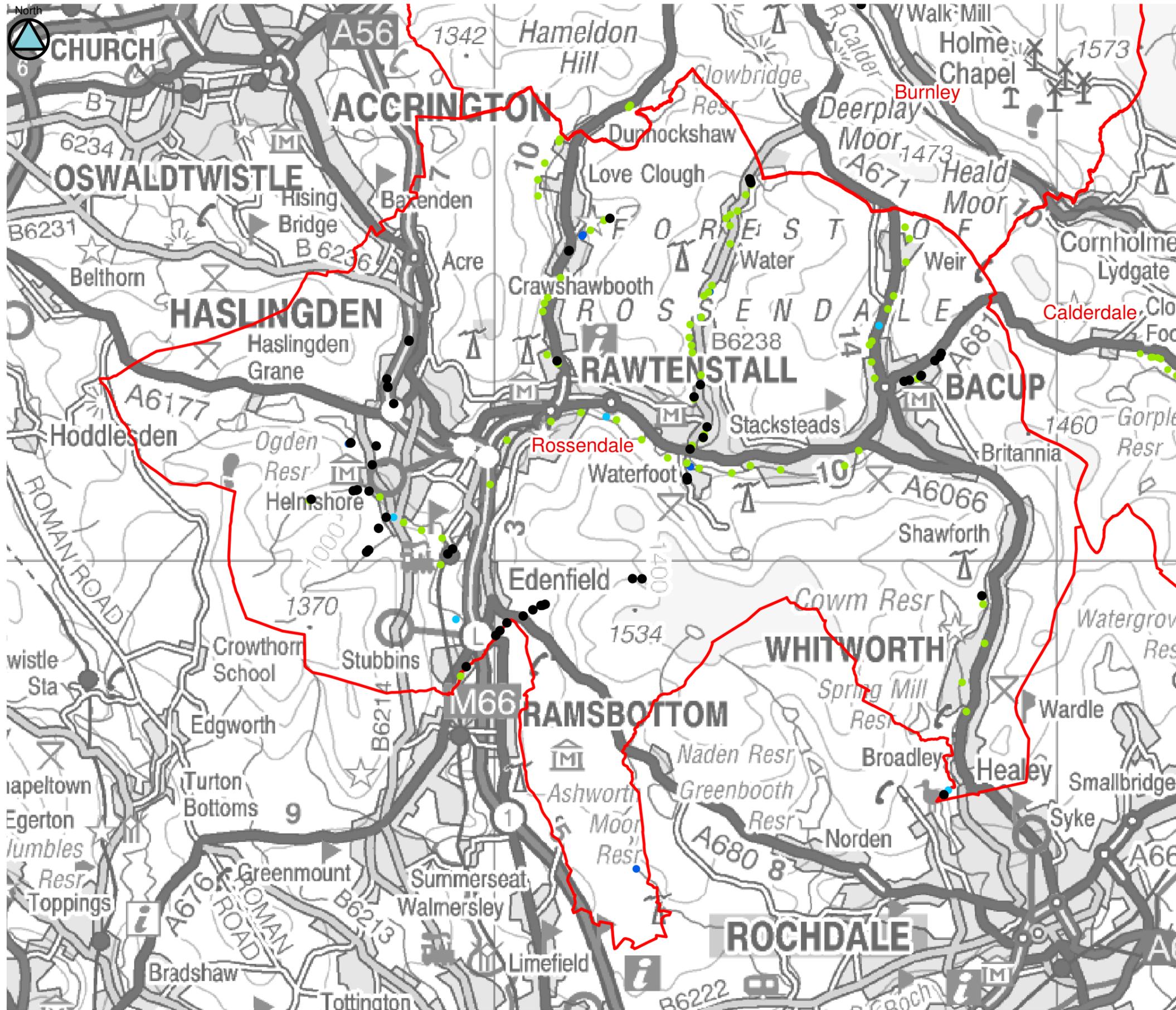


FIGURE A14

YEARLY SUM OF GLOBAL IRRADIATION ON OPTIMALLY INCLINED SURFACES (kWh/m2 between 1981-1990)

Scale 1:70,261 @ A3 1 0.5 0 1 Kilometers

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NFCDD Weirs by Height

- > 3 m
- 2 to 3 m
- < 2 m
- Unknown
- LYRES Identified Hydro Sites

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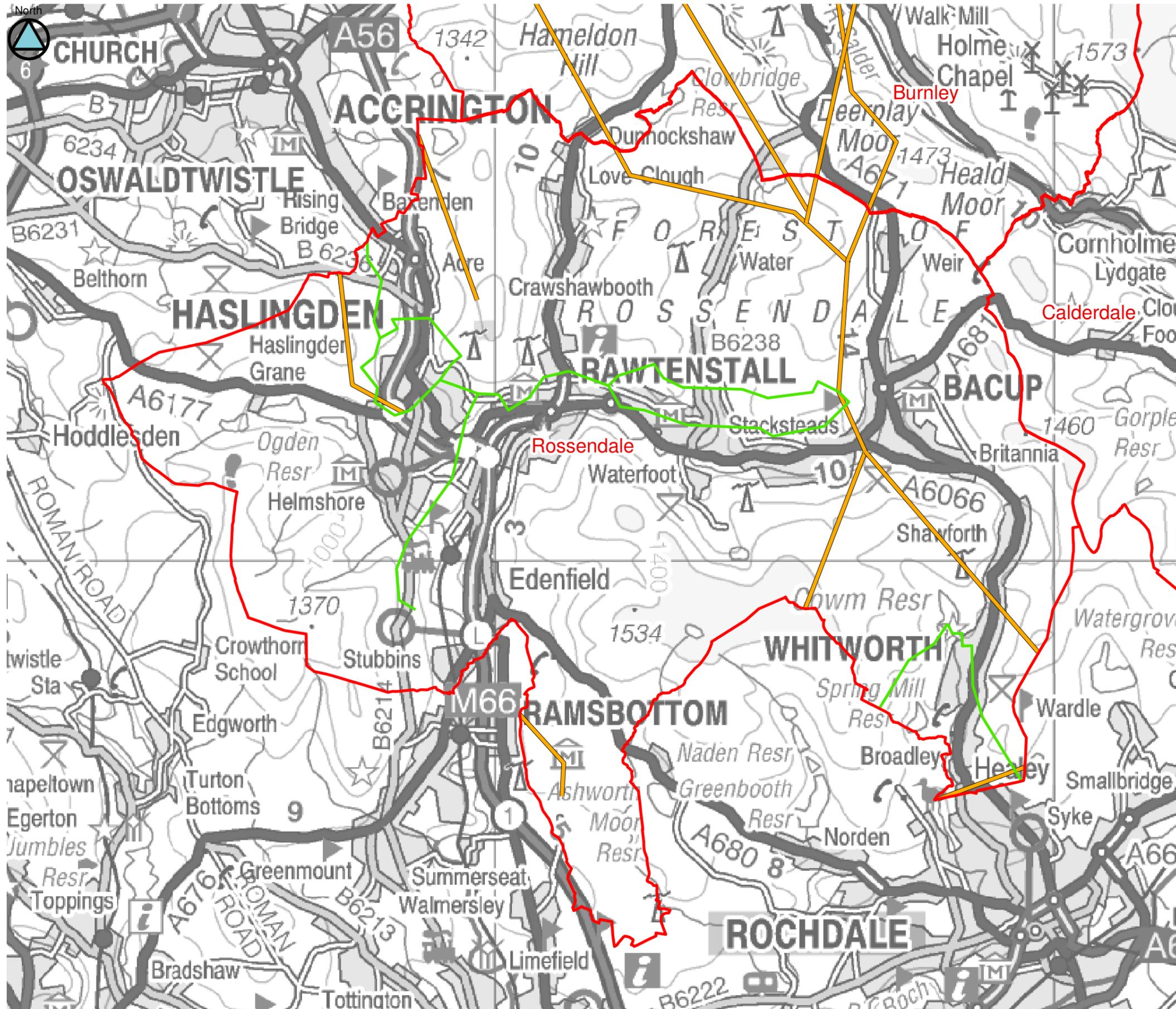


FIGURE A15

NFCDD and LYRES Identified Weirs for Hydropower

Scale 1:70,000 @ A3 1 Kilometers

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Type Electricity Network

- 33kv
- 66kv
- 132kv

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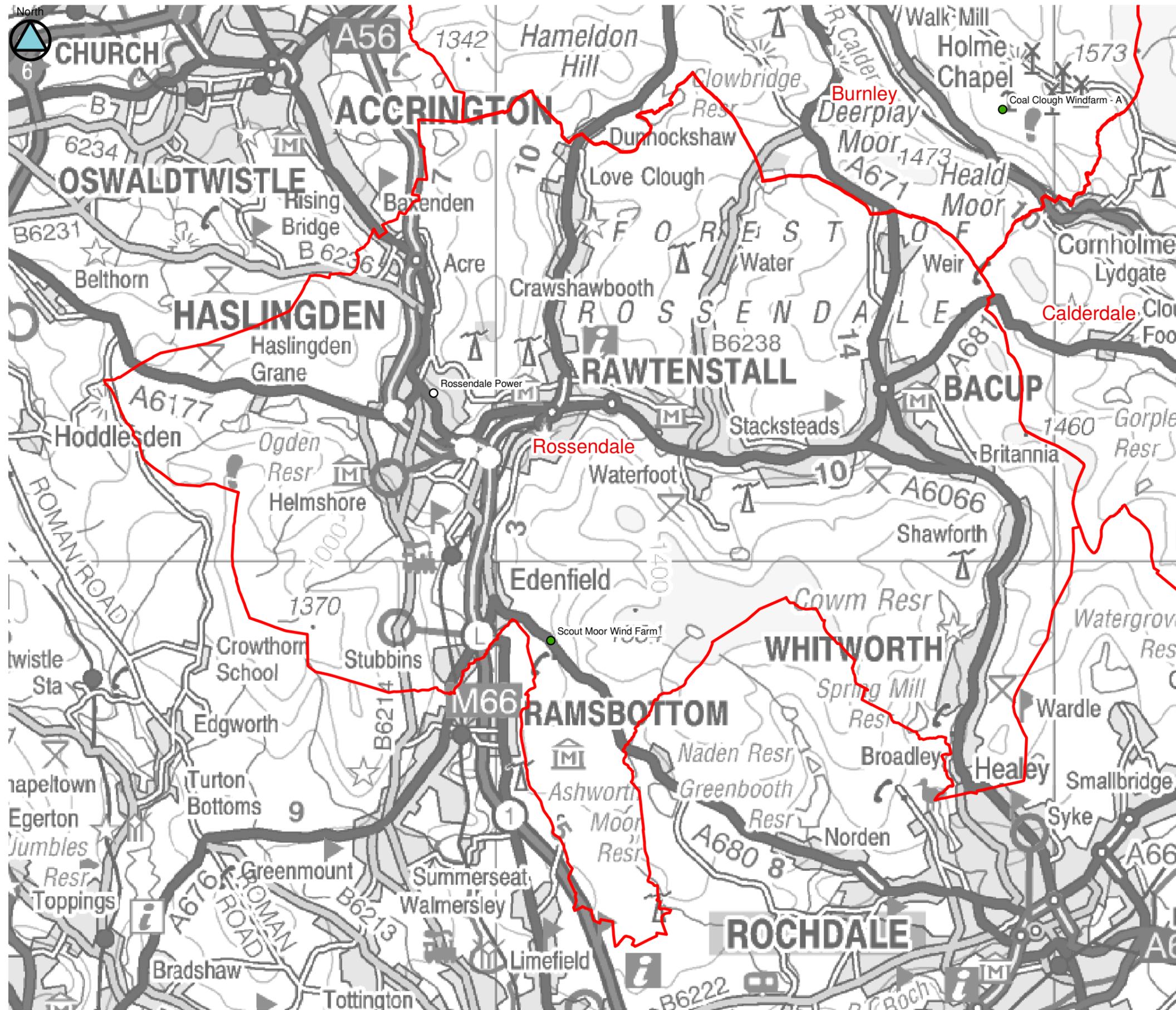


FIGURE A16

ELECTRICITY DISTRIBUTION NETWORK IN THE STUDY AREA

Scale 1:70,333 @ A3 1 0.5 0 1 Kilometers

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- Station Types**
- Landfill gas
 - Micro hydro
 - On-shore wind
 - Sewage gas

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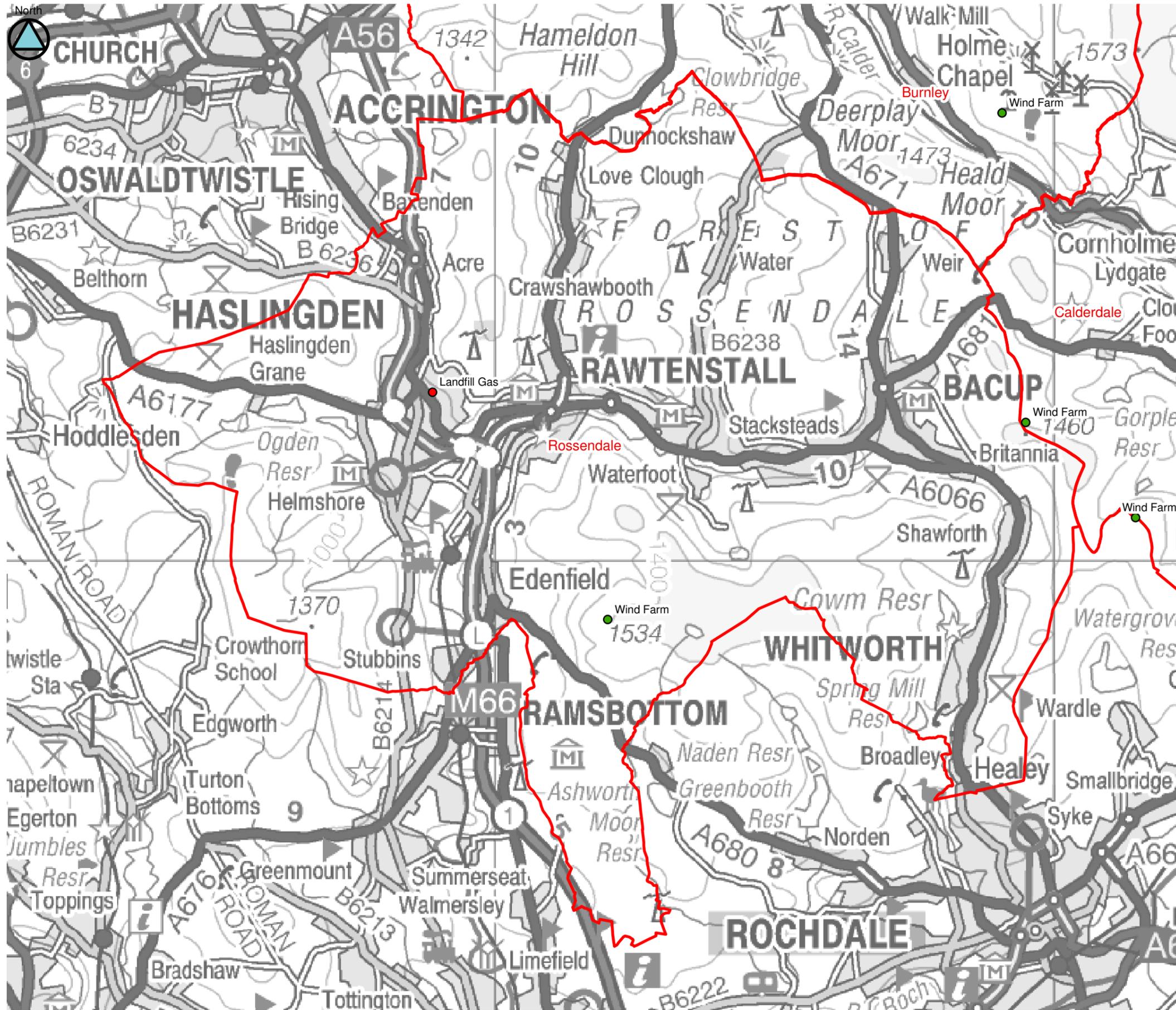


FIGURE A18

ROC Accredited Stations in the Study Area

Scale 1:70,333 @ A3 1 0.5 0 1 Kilometers

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Large Renewables

- Anaerobic Digestion
- CHP
- Combustion
- Landfill Gas
- Waste
- Wind Farm

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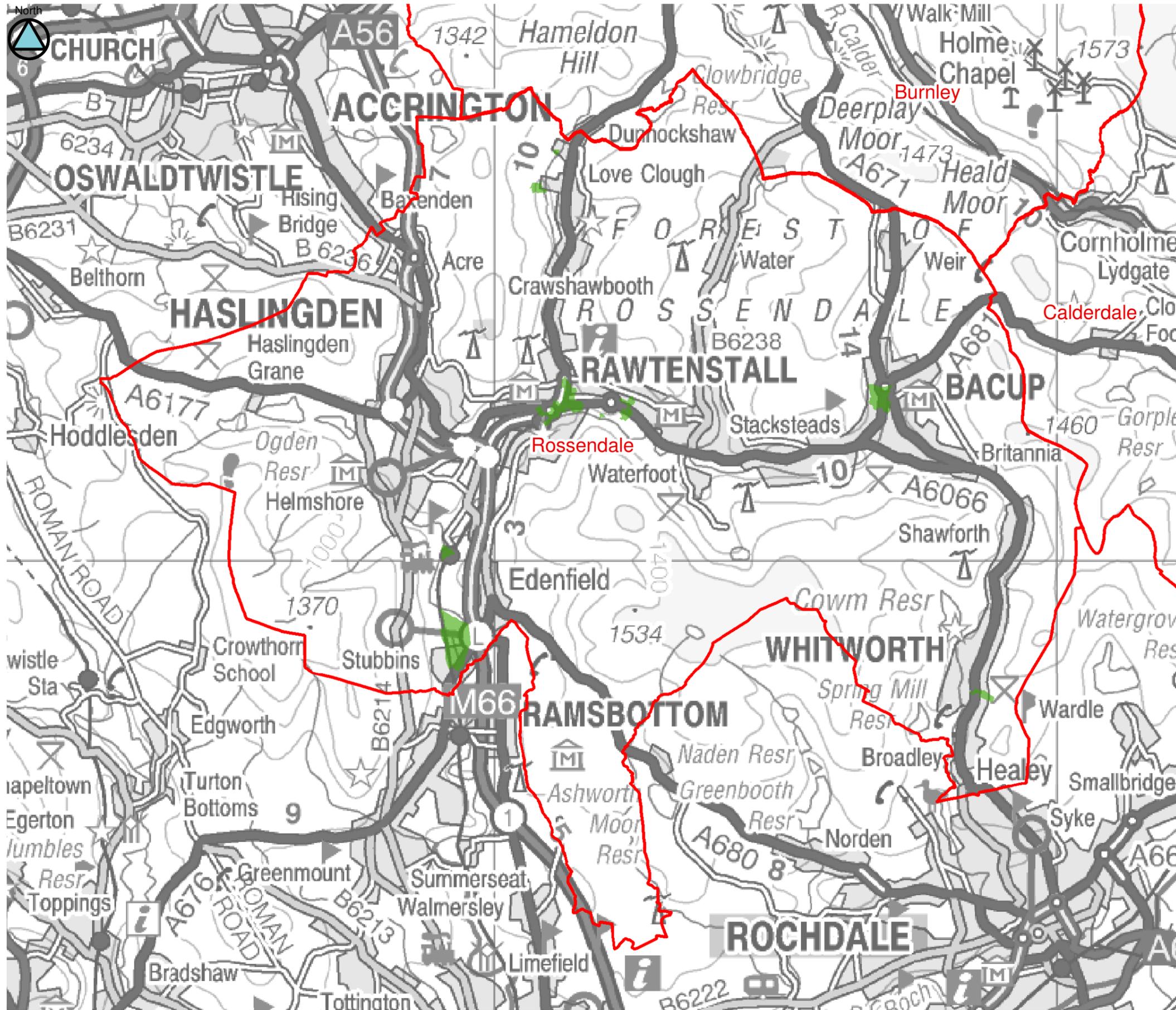
FIGURE A19

Large Renewable Schemes

Scale 1:70,448 @ A3



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 Conservation Areas

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FIGURE A20

CONSERVATION AREAS

Scale 1:70,000 @ A3



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