

**Llandarcy Academy, Neath**

**SUBADRA**

**Environmental - Geotechnical - Laboratory - Foundations**

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## COAL MINING RISK ASSESSMENT REPORT



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Alex Akeroyd

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James Edley

Client: Portable Venues (Group)  
Limited (Smart Space)

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|        |                |
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## 1 Introduction

### 1.1 The Purpose and Scope of This Assessment

The development site is located within the Llandarcy Academy of Sport in Llandarcy, Neath and comprises an outdoor rectangular sports pitch covered with artificial grass. We understand the site is to be redeveloped with a new structure to house the current sports pitch area.

The site lies within a Coal Mining Development High Risk Area. National Planning Policy Framework and relevant planning practice guidance therefore requires a Coal Mining Risk Assessment be provided to the Local Planning Authority in support of the application for the site's development. We have been commissioned by Neptune Planning and Development, on the behalf of Portable Venues (Group) Limited (Smart Space) to undertake a Coal Mining Risk Assessment Report (this report), the purpose and scope of which is as follows:

- Present a desk-based review of available information on the coal mining issues that are relevant to the site;
- Use that information to identify and assess the risks to the proposed development from coal mining legacy, including the cumulative impact of issues;
- Set out appropriate mitigation measures to address the coal mining legacy issues affecting the site, including any necessary remedial works and/or demonstrate how coal mining issues have influenced the proposed development;
- Demonstrate to the Planning Authority that the application site is, or can be made, safe and stable to meet the requirements of national planning policy with regard to development on unstable land.

The findings and opinions in this review are based upon information obtained from the sources outlined above. Information obtained from third parties has been accepted at face value however we do not guarantee its authenticity. Where practicable the information provided was confirmed from a secondary source such as the review of available municipal records.

### 1.2 Previous Reports Relating to the Site

We do not hold, and have not been provided with any, previous reports relating to the site.

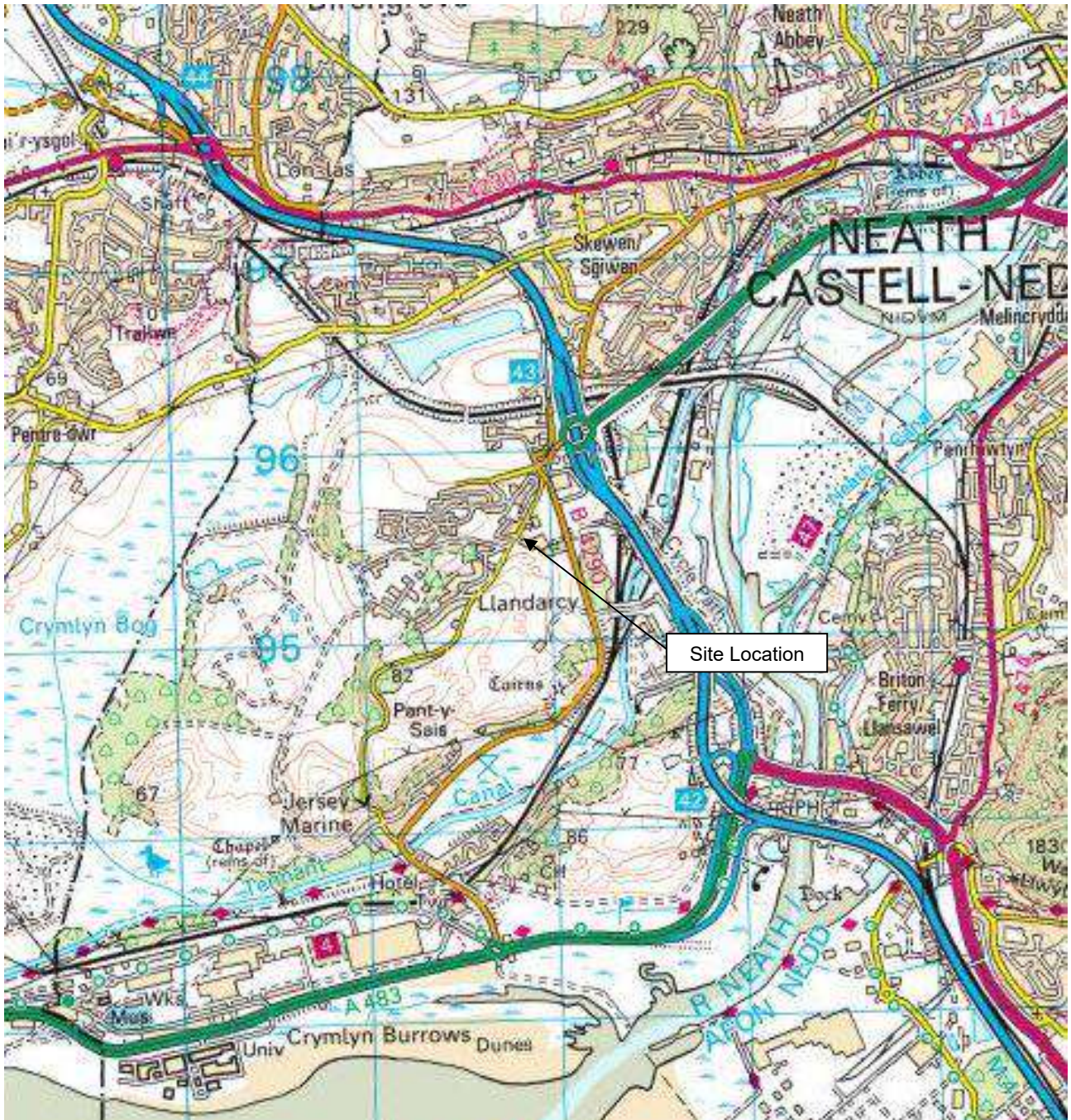
## 2 Desk Study Information

### 2.1 Site Description, Location and Setting

|                    |                                                                                                                                                                                                                               |          |                                                                      |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------------------------------------------------------------------|
| Site Description   | The site comprises an outdoor rectangular sports pitch covered with artificial grass.<br>There are Llandarcy Academy related structures to the immediate south and east of the pitch, with a car park to the immediate north. |          |                                                                      |
| Grid Reference     | 271870 195530                                                                                                                                                                                                                 | Location | In central Llandarcy, ~3.6km to the south-west of Neath town centre. |
| Elevation (approx) | ~40m AOD                                                                                                                                                                                                                      |          |                                                                      |
| Size (approx)      | ~0.09ha                                                                                                                                                                                                                       |          |                                                                      |

**Table One: Site Location and Setting**

|                                                       |                                    |        |                |
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**Figure One: Site Location Map**

|                                                          |                                       |        |                |
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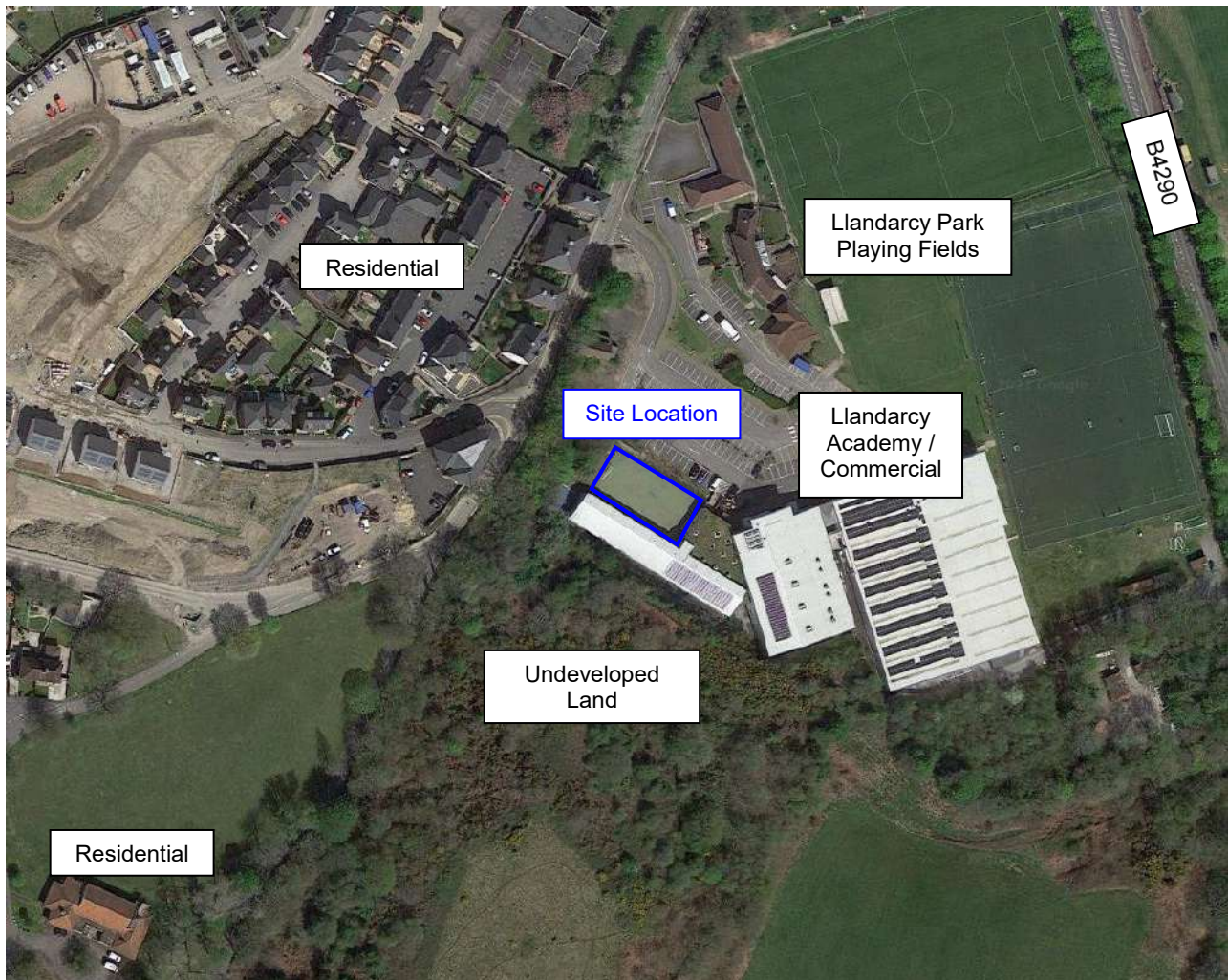
# Llandarcy Academy, Neath

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**Figure Two: Aerial Photograph Showing Site and Surrounding Area**

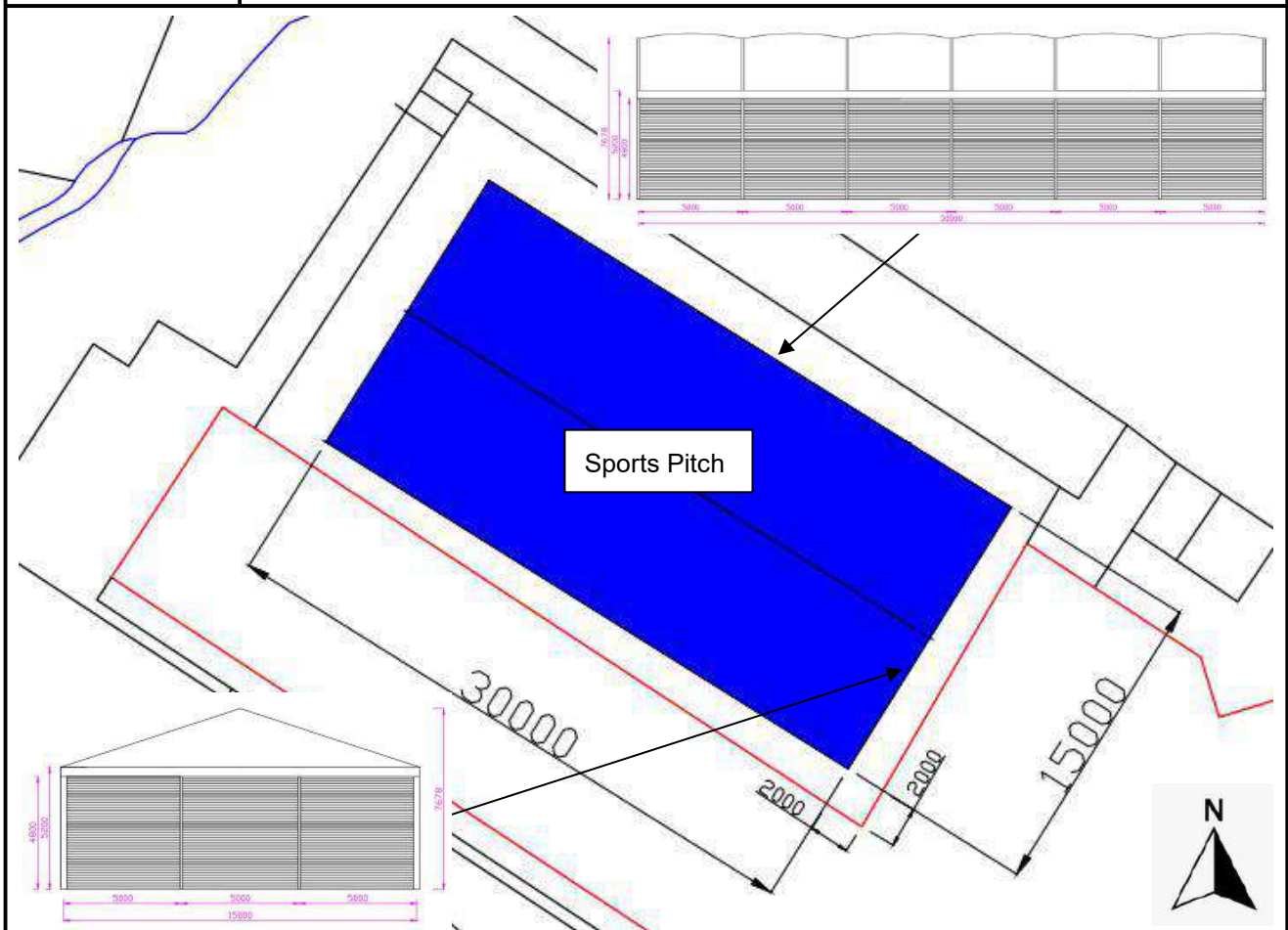
| Direction | Details                                                                                |
|-----------|----------------------------------------------------------------------------------------|
| North     | Car park (adjacent) followed by buildings associated with Llandarcy Academy (>50m).    |
| East      | Buildings forming part of Llandarcy Academy (adjacent).                                |
| South     | A building forming part of Llandarcy Academy (adjacent), followed by undeveloped land. |
| West      | Road followed by residential properties (>25m).                                        |

**Table Two: Surrounding Land Use**

|                                                          |                                       |        |                |
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## 2.2 Proposed Development Plans

|                              |                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Proposed Developments        | <p>We understand the site/pitch is to be redeveloped by erecting a new structure to house the current sports pitch area.</p> <p>The building details are as follows: 15m x 30m x 5.2m side height (external), with a ~7.7m roof height comprising twin layer insulated PVC, 40mm composite wall panels and two pedestrian doors.</p> <p>The location and a side/end view of the proposed structure is included below.</p> |
| Active Planning Applications | At the time of writing this report, a planning application for the site's redevelopment had not been submitted.                                                                                                                                                                                                                                                                                                           |
| Notes                        | We understand that this report is to be submitted in support of a planning application for the site's redevelopment. Whilst our assessment has not been compiled to directly satisfy any specific planning conditions, the information contained in this report may assist in satisfying any such requirements.                                                                                                           |



**Table Three: Proposed Development Plans**

|                                                          |                                       |        |                |
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## 3 Information Sources

We have reviewed the following information when compiling this report:

- An up-to-date CON29M Coal Mining Report, provided by and sourced from by The Coal Authority (October 2021).
- A Mine Entry Interpretive Report for the proposed redevelopment area, sourced from The Coal Authority (October 2021)
- Geological information obtained from the British Geological Survey (www.bgs.ac.uk).
- Assessment of site's history, based on a historical map review.
- Results of past intrusive investigation works undertaken to assess ground conditions for the site or any adjacent/nearby sites, detailed in the British geological Survey archives.

The Coal Authority reports are included as Attachment Three and historical maps in Attachment Four.

## 4 Site-Specific Coal Mining Risk Factors

The table below summarises the potential risks associated with coal mining legacy for the proposed development identified from the various sources of information listed above.

### 4.1 Identification of Coal Mining Risk Factors

| Risk Factor                                                                                                                                 | Risk Present                        | Comment                                                                                                                                                            |
|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Are there coal mining entries (past or present) within 20m of the site boundary?                                                            | <input checked="" type="checkbox"/> | There is a disused/old mineshaft shown located ~5m from site's eastern boundary. Further details are provided in the section below.                                |
| Is the proposed development in the likely zone of influence of past underground coal mining?                                                | <input checked="" type="checkbox"/> | The site is located within the area likely to be affected if coal mining subsistence was to occur because of ground movement.                                      |
| Is the proposed development in the likely zone of influence of present underground coal workings?                                           | <input type="checkbox"/>            | The property is not within a surface area that could be affected by present underground mining.                                                                    |
| Is the proposed development within the likely zone of influence of underground coal workings at shallow depth (ie depths of less than 30m)? | <input type="checkbox"/>            | The property is not within an area with any known past shallow coal mine workings.                                                                                 |
| Is there a possibility of unrecorded shallow mine workings and/or mine entries?                                                             | <input checked="" type="checkbox"/> | The property does lie within an area where shallow coal mine workings <i>may have been</i> worked at some time in the past, but for which no recorded plans exist. |
| Is there a record of mine gas emissions within the site boundary?                                                                           | <input type="checkbox"/>            | The Coal Authority has no record of a mine gas emission requiring action in the vicinity of the site.                                                              |

*Continued on the following page.*

|                                                          |                                       |        |                |
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| Risk Factor                                                                                                                                               | Risk Present             | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Is the proposed development in an area for which the Coal Authority is determining or has granted a license to remove coal by underground mining methods? | <input type="checkbox"/> | <p>The property is not in an area where the Coal Authority has plans to grant a licence to remove coal using underground methods.</p> <p>The property is not in an area where a licence has been granted to remove or otherwise work coal using underground methods.</p> <p>The property is not in an area likely to be affected from any planned future underground coal mining.</p> <p>However, reserves of coal exist in the local area which could be worked at some time in the future.</p> |
| Are there known faults or other lines of weakness due to coal mining at the site?                                                                         | <input type="checkbox"/> | The Coal Authority is not aware of any damage due to geological faults or other lines of weakness that have been affected by coal mining.                                                                                                                                                                                                                                                                                                                                                        |
| Has the site been subject to remedial works by, or on behalf of, the Coal Authority under its surface hazard call out procedures?                         | <input type="checkbox"/> | <p>The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50m, since 31 October 1994.</p> <p>There is no current Stop Notice delaying the start of remedial works or repairs to the property.</p> <p>The Coal Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.</p>                                                     |
| Is the proposed development within the boundary of a surface mining/opencast site from which coal has been removed by surface mining/opencast methods?    | <input type="checkbox"/> | The property is not within the boundary of an opencast site from which coal has been removed by opencast methods.                                                                                                                                                                                                                                                                                                                                                                                |
| Is the proposed development within 200m of a surface mining/opencast site from which coal is being removed?                                               | <input type="checkbox"/> | The property does not lie within 200m of the boundary of an opencast site from which coal is being removed by opencast methods.                                                                                                                                                                                                                                                                                                                                                                  |

**Table Four: Table Three: Site-Specific Coal Mining Risk Factors**

|                                                          |                                       |        |                |
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## 4.2 Assessment of Coal Mining Risk Factors

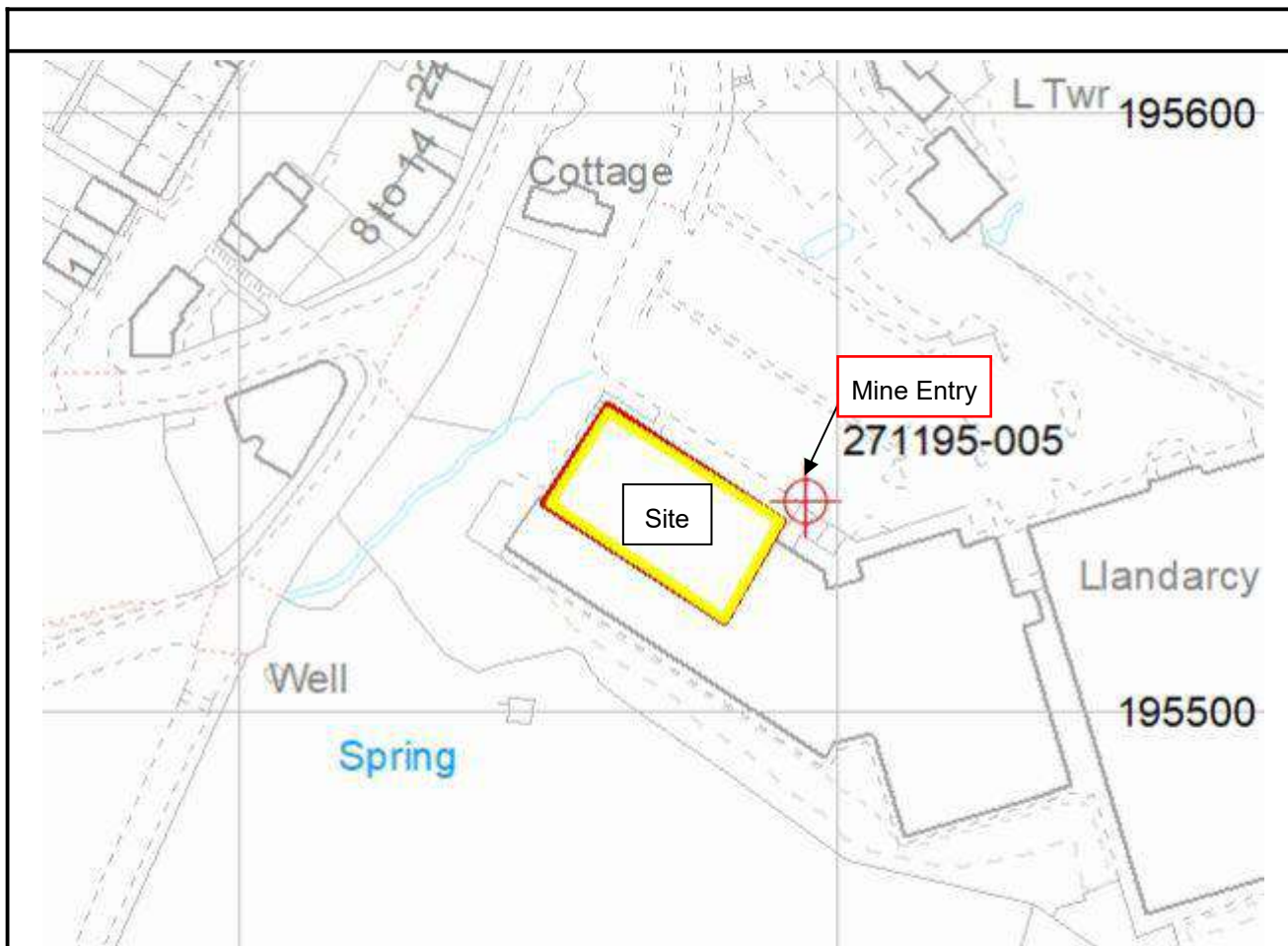
### 4.2.1 Coal Mining Entries Within

Details of the identified mine entry directly adjacent to the site is provided in the table below, and shown on the site plan on the following page.

|                           |                                                                                                                                                                                                                                                                                                                                                                                                       |           |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| Location                  | <p>The Coal Authority reference 271195-005..</p> <p>There is a disused/old mineshaft shown located ~5m from site's eastern boundary, shown located within the current Llandarcy Academy car park area.</p>                                                                                                                                                                                            |           |
| Details of Mine Entry     | Entry Name                                                                                                                                                                                                                                                                                                                                                                                            | Old Shaft |
|                           | Shaft or Adit                                                                                                                                                                                                                                                                                                                                                                                         | Shaft     |
|                           | Date abandoned                                                                                                                                                                                                                                                                                                                                                                                        | Unknown   |
|                           | Depth of superficial deposits                                                                                                                                                                                                                                                                                                                                                                         | 1.5m      |
|                           | Diameter/maximum width (m)                                                                                                                                                                                                                                                                                                                                                                            | 3.0m      |
|                           | Depth of shaft                                                                                                                                                                                                                                                                                                                                                                                        | Unknown   |
| Treatment of Entry        | <p>A 6.4m reinforced concrete cap is placed over this filled mine shaft at rockhead. A stainless steel vent pipe has been incorporated through the backfill above the cap. A marker post marks the position of the shaft at the surface. These works were undertaken by Dean and Dyball Constuction Ltd to a design provided by Quadrant Consulting Engineers in accordance with CIRIA gudelines.</p> |           |
| Additional Entries        | <p>There may be unrecorded mine entries in the local area that do not appear on Coal Authority records.</p>                                                                                                                                                                                                                                                                                           |           |
| Review of Historical Maps | <p>The earliest maps for the site we have viewed date back to 1878-1882, 1899 and 1918 [Scale 1:2,500].</p> <p>These maps show an old pit and quarry on or in in close proximity to eastern site boundary. The map dated 1918 shows Old Shaft less than 10m from the eastern site boundary.</p>                                                                                                       |           |

**Table Five: Details of Coal Mining Entries**

|                                                          |                                       |        |                |
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**Table Six: Mine Entries in the Vicinity of the Site**

Normally mine shafts pose most risk when they are close to or under a building and significantly less when they are further away. Their risk is further reduced if rock lies close to surface and the upper part of the shaft is not in loose soil which unlike rock has the potential to collapse many metres beyond the shaft. Based on the data relating to the recorded mine entry, including its approximate location with respect to the site boundary, The Coal Authority has provided the following comment regarding the shaft and associated risks associated with the proposed development site:

- The property is in an area where the Coal Authority believes there is coal at or close to the surface. This coal may have been worked at some time in the past. The potential presence of coal workings at or close to the surface should be considered, particularly prior to any site works or future development activity, as ground movement could still be a risk.
- If coal mining subsidence was to occur because of ground movement due to the mine entry, the proposed structure (as shown on the plan) is within the area likely to be affected. The opinion takes into account the thickness of the superficial deposits, the potential difference between the actual and the plotted positions of the mine entry and its diameter/maximum width.
- The statistical risk of the main building being damaged by subsidence especially given the information recorded in the treatment details above however is very small.

|                                                          |                                       |        |                |
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## 4.2.2 Unrecorded Shallow Mine Workings

The Coal Authority have indicated that the site lies within an area where shallow coal mine workings may have occurred, but for which no recorded plans exist.

Coal deposits are known to be present in the local area, as evidenced by the following information:

- The BGS hold records for a borehole constructed ~500m to the north of the site (BGS ref. SS79NW263). This records the underlying geology to comprise sand, pebbles and soil to ~5.5m, overlying a thin coal band (~0.15m thick), blue clay to ~6.4m, clay and pebbles to ~11.6m, hard rock to ~29m, followed by layers of rock, cliff, fireclay and thin coal to borehole termination depth of ~80m.
- The historical map below, dating from 1918, shows the presence of the Old Shaft in very close proximity to the eastern site boundary. An Old Quarry is shown to fall within the eastern site boundary and an Old Drift is also shown in close proximity to site (~50m). Drift is a general mining term, relating to a near-horizontal passageway in a mine, following the bed (of coal, for instance).

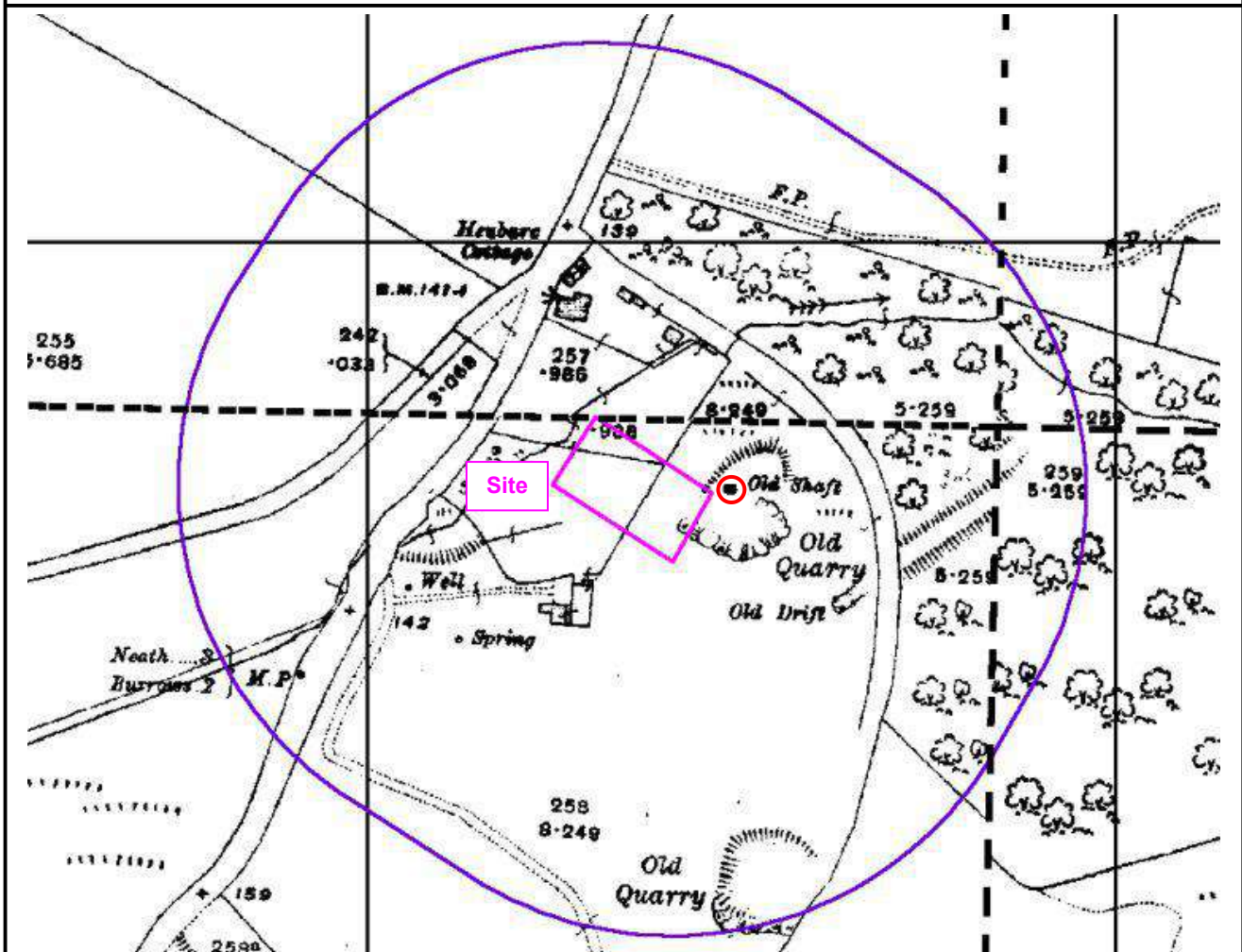


Figure Three: Shallow Mine Workings

|                                                          |                                       |        |                |
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The available information indicates there has most likely been shallow coal mining workings (or for other mineral deposits) at, or in the immediate vicinity of the site. Appropriate mitigation measures, in the form of an exploratory borehole investigation, should therefore be carried out to establish the presence of any shallow coal deposits and/or mine workings.

#### 4.2.3 Zone of Influence of Past Underground Coal Mining

The property is not within a surface area that could be affected by any past recorded underground *coal* mining. However, as highlighted above, mine workings are likely to have occurred in the immediate vicinity of the site and exploratory investigations should ideally be carried out to verify these risks.

Two of the primary hazards to developments are rapid building collapse or slower building subsidence caused by unstable land connected with mine entries or mined-out ground beneath a site. The closer mine workings are to surface the greater the risk they pose to development; shallow mine workings <30m depth below the surface and very shallow workings are of particular concern.

## 5 Mitigation Strategy

Our assessment has confirmed that the site overlies Brithdir Member, generally comprising sandstone with thin mudstone/siltstone and seatearth interbeds and mainly thin coals. Thin coal seams are potentially present at depths of less than 10m, and that there has most likely been past shallow mine workings at, or in the immediate vicinity of the site. There is one recorded mine entry less than 10m from eastern site boundary.

The proposed development is likely include some form of shallow foundation design/construction and may therefore encounter shallow coal seams (and/or any shallow workings) that may be present, particularly at the eastern end of site.

The presence of shallow coal and/or coal mining activities beneath the site might require special foundations and/or ground treatment and/or gas exclusion measures to be implemented as part of the new scheme. We therefore recommend that exploratory drilling is carried at the development site, which should be designed to:

- Verify the make-up of shallow ground, including the depth from surface of the underlying bedrock.
- Verify the presence or absence of coal seams, shallow mine workings or mine shafts within a site; and
- Verify the presence or absence of any explosive or toxic mine gases (such as methane and carbon dioxide).

We could consider the following scope of works adequate to address the above requirements:

- Two boreholes to depths of ~10m at the eastern and western end of the proposed development.
- Due to the risk of encountering mine gas during the proposed works, all boreholes should be regularly tested, particularly at times of falling barometric pressure, for all gases associated with coal mining, commonly carbon dioxide, methane and hydrogen sulphide.

Due to the possible presence of coal seams at shallow depths, a Coal Authority Permit will need to be obtained, prior to the commencement of any intrusive works. [Note: if the results of the borehole investigation confirms that coal seams are present at shallow depths beneath site, a Coal Authority Permit may also be required prior to the construction building foundations].

[Note: The investigation can be combined with those being carried out to provide information on the presence of any shallow contamination issues and to provide geotechnical data.]

The results of the investigation should be used to update this risk assessment and hence establish whether any special foundations and/or ground treatment and/or gas exclusion measures need to be incorporated into the proposed development.

|                                                          |                                       |        |                |
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## 6 Conclusion

Our conclusions of the risk associated with the factors highlighted in Section 3, with regard to our mining assessment (Section 4) and any associated mitigation factors (Section 5), are as summarised in the table below.

|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mine Entries                                      | <p>The information available indicates that a recorded mine entry is located in very close proximity to the development site. The Coal Authority has indicated if coal mining subsidence was to occur because of ground movement due to the mine entry, the proposed structure is within the area likely to be affected.</p> <p>The risk of additional or other mine entries occurring within the site is considered by us to be low (but not negligible).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Unrecorded Shallow Mine Workings                  | <p>The property is in an area where the Coal Authority believes there is coal at or close to the surface. This coal may have been worked at some time in the past. The potential presence of coal workings at or close to the surface should be considered, particularly prior to any site works or future development activity, as ground movement could still be a risk.</p> <p>The proposed development will likely include some form of shallow foundation design/construction and may therefore encounter shallow coal seams (and/or any shallow workings) that may be present, particularly at the eastern end of site.</p>                                                                                                                                                                                                                                                                                                          |
| Zone of Influence of Past Underground Coal Mining | <p>Based on the potential for there to be shallow mine workings beneath the site, and the absence of any site specific data regarding ground conditions directly beneath the site, we are not able to fully quantify the risk of any ground disturbances associated with past mine workings.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Conclusions and Recommendations                   | <p>Based on the results of our findings, it is our opinion that coal mining legacy poses potentially significant hazards to the proposed surface development. It is likely, however, that any stability risks posed from the mining legacy can be mitigated by routinely adopted measures and should therefore not preclude any associated planning permissions being granted.</p> <p>In order to allow us to more accurately determine the risks associated with potential past mining works, we recommend that exploratory investigation works be carried out to verify the presence of shallow coal seams beneath the site and, if present, establish whether these seams contain mine workings. Details of these works is included in Section 5.</p> <p>The results of this Coal Mining Risk Assessment should be reviewed and revised, as necessary, in response to the findings of the proposed exploratory investigation works.</p> |

**Table Seven: Conclusions of Our Coal Mining Risk Assessment**

## 7 References

1. The Coal Authority "Risk Based Approach to Development Management - Guidance for Developers", version 4 - 2017

|                                                          |                                       |        |                |
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**ATTACHMENT ONE:  
NOTICE TO INTERESTED PARTIES**

## NOTICE TO INTERESTED PARTIES

The purpose of our work is to provide general information on the environmental and/or geotechnical conditions existing at the site and related to soil and/or groundwater. The Client or others specified the scope of the investigation and the validity of our conclusions is limited by the scope of work specified. We are not responsible for any such limitations or omissions.

Where stated in this report, we have used information supplied by third parties. While we have evaluated as far as possible the validity of this information, we cannot guarantee its accuracy in any way whatsoever.

No investigation technique is capable of completely identifying all of the contaminants that might be present in the soil or groundwater under a site. Where specified in our report, we have examined the ground by constructing a number of boreholes and/or trial pits. We recovered samples of soil and/or groundwater from available exposures.

The depth and spacing of our Sampling locations were selected to ensure with a reasonable probability that they would be representative of the actual conditions across the whole site. However, safety considerations relating to existing site infrastructure may have restricted our ability to investigate all potential contaminant sources. Specifically, we were unable to investigate the soil and groundwater condition immediately adjacent to the underground structures and/or buried services. These limitations must be borne in mind when considering the conclusions reached in this report.

Soil is intrinsically variable and the spread of contaminants within the soil is therefore subject to a degree of non-uniformity. For these reasons no sampling technique can completely eliminate the possibility of obtaining samples that are not representative of the actual conditions. Our sampling techniques are intended to reduce the possibility to an acceptable level, within the limits imposed by the scope of the investigation.

Groundwater levels and soil vapour levels that we report were accurate at the time of the investigation. Groundwater and soil vapour levels are variable. Long term monitoring may be required to ensure that the levels recorded during our investigation are representative of long term and possible 'worst case' conditions. In accepting our recommendations and/or conclusions the Client acknowledges that further, more detailed investigation would allow a more accurate assessment of site conditions to be made and that this would reduce any consequential risk to the Client.

Our investigation was carried out to assess the significance of contamination resulting from use of the site as identified in this report. Unless we have indicated otherwise, no assessment of the potential impact of any other previous uses has been made. No investigation was carried out to determine whether or not any deleterious or hazardous materials (such as asbestos) have been used in the construction of the buildings present on the site. Unless otherwise stated no investigation or assessment has been made of the presence or otherwise of invasive plant species including but not limited to Japanese Knotweed.

Unless specifically stated otherwise, we have not assessed the effect of any proposed future construction activities on existing structures on or near to the site. Nor, unless stated otherwise, have we assessed the likely effect of trees on existing or proposed structures on or near the site.

We do not accept any responsibility for the cost of remedial works or other costs incurred in whatever way whatsoever as a result of any omissions, errors or other shortcomings in this report unless we have been given reasonable opportunity to verify ourselves that such faults exist and we have been given a reasonable opportunity to carry out works to remedy such faults ourselves using the most practicable means available to us. We do not accept liability for any consequential losses incurred by you while either we or others carry out any remedial works we deem necessary.

This report has been prepared for the Client, as specified on the cover page of this report. In accepting our recommendations and/or conclusions the Client accepts that the terms of our appointment were as detailed in the Proposal, or Proposals, that we provided to the Client before being appointed and that these terms supersede any other terms and/or conditions set out in any contracts agreed between ourselves and the Client, regardless of when such terms and/or conditions were agreed to by us and/or signed by us.

Use of, and reliance on, this report by other third parties will be at such third parties own risk, and we do not accept any liability or responsibility to them.

Neither the whole nor any part of this report, or any reference to it, may be included in any published document circular or statement or published in any way without our prior written approval.

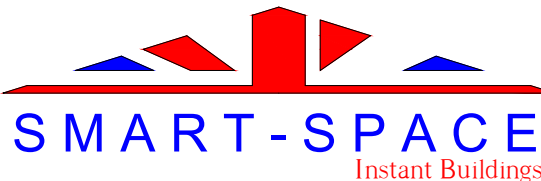
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Client: Portable Venues (Group)  
Limited (Smart Space)

|        |                    |
|--------|--------------------|
| Report | IN21655 CL 002     |
| Date   | November 2021      |
| Page   | Attachment One - 2 |

**ATTACHMENT TWO:  
PROPOSED DEVELOPMENT PLANS**

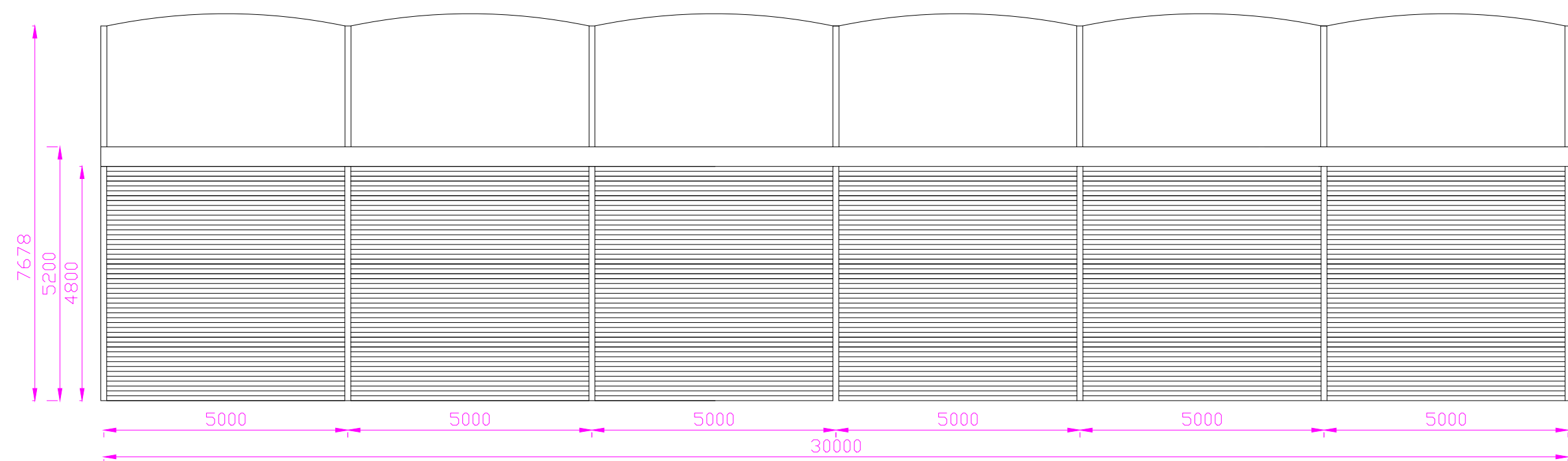


| REVISION                                                                                                                                                                                                                                                              |                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| <div><div><b>SMART-SPACE</b><br/><small>Instant Buildings</small></div><div>MANOR HOUSE FARM<br/>DORDON HALL LANE<br/>GRENDON<br/>WARWICKSHIRE<br/>TEL. 01827 330000</div></div> |                           |
| CLIENT                                                                                                                                                                                                                                                                | <i>Wynn Evans</i>         |
| CONTRACT                                                                                                                                                                                                                                                              | <i>Llandarcy Academy</i>  |
| ITEM                                                                                                                                                                                                                                                                  | <i>Proposed Site Plan</i> |
| DATE                                                                                                                                                                                                                                                                  | 13/09/2021                |
| SCALE                                                                                                                                                                                                                                                                 | 1:400 (A1)                |
| DRG.No.                                                                                                                                                                                                                                                               | SS00374                   |

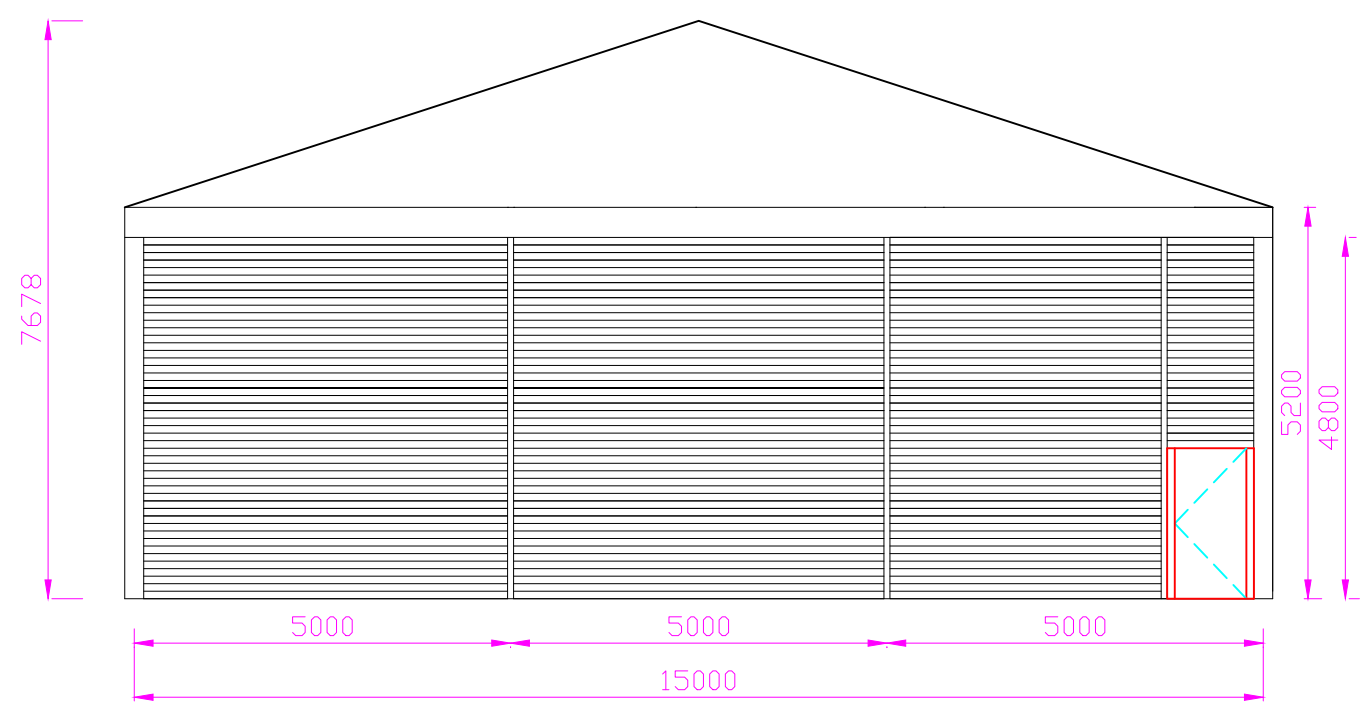
Building Details

15 x 30 x 5.2 Side Height External  
Twin Layer Insulated PVC Roof  
40mm Composite Wall Panels  
2no Pedestrian Doors

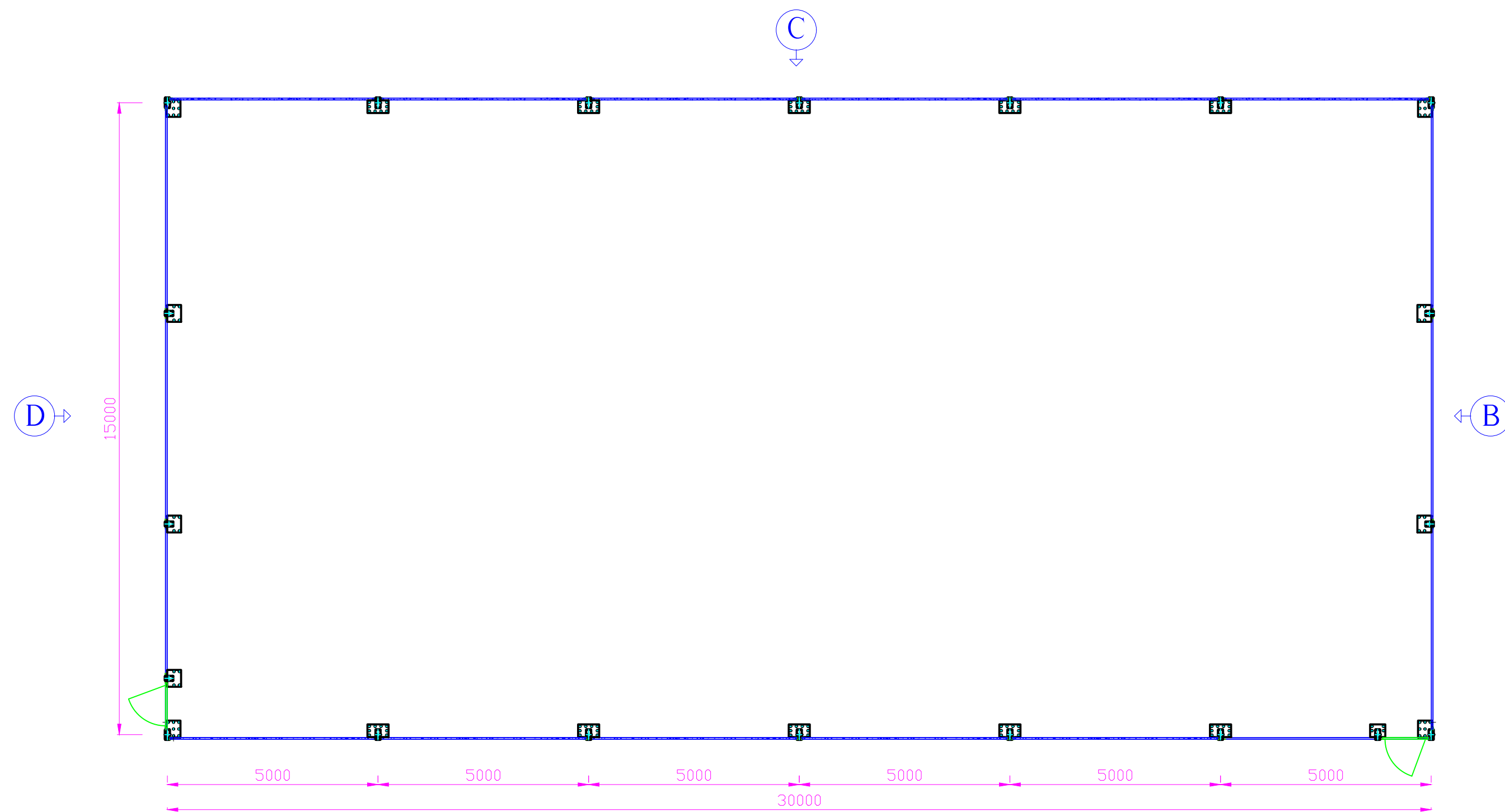
Please note sizes shown are central of legs and  
overall dimensions



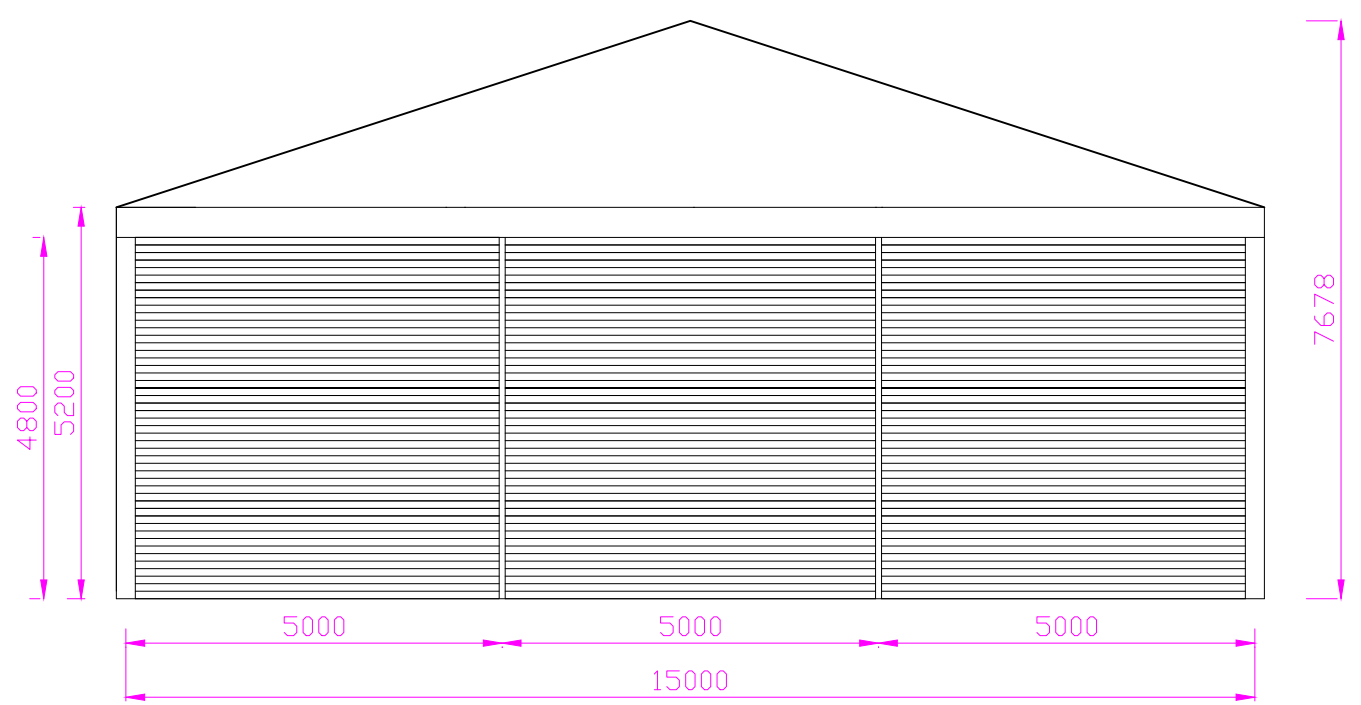
SIDE ELEVATION OF BUILDING (C)



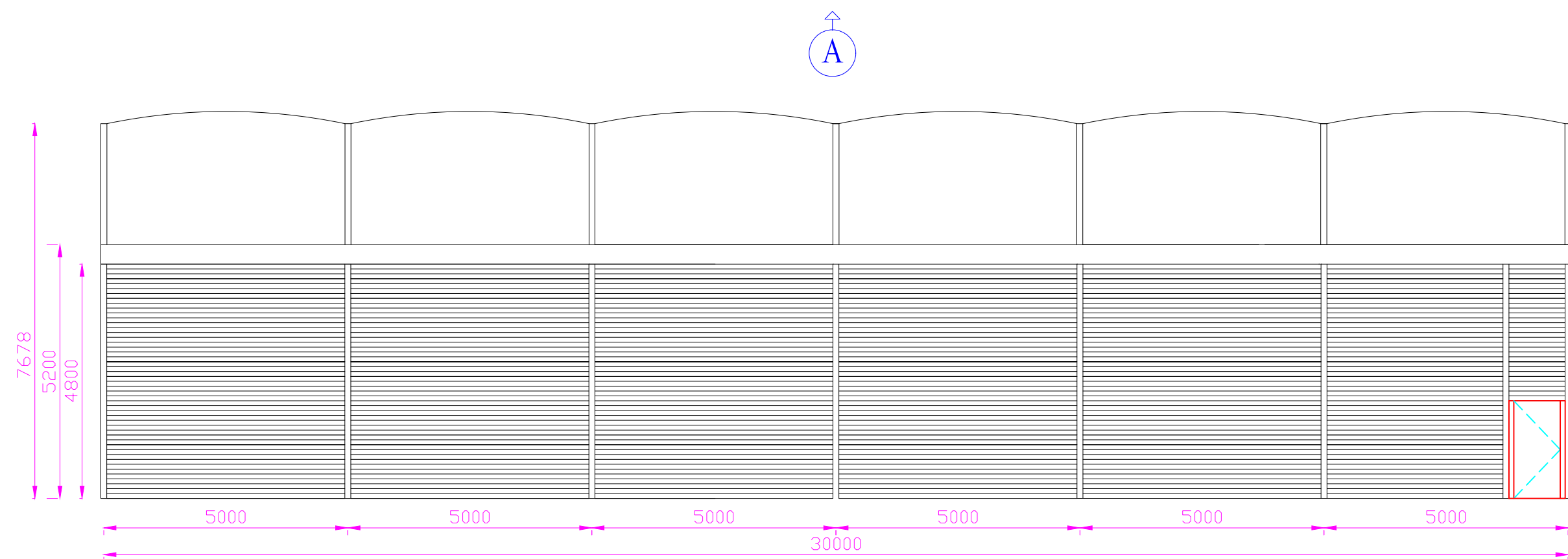
END ELEVATION OF BUILDING (D)



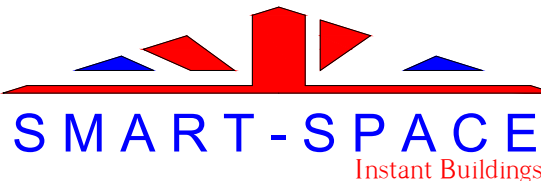
PLAN VIEW SHOWING BUILDING



END ELEVATION OF BUILDING (B)



SIDE ELEVATION OF BUILDING (A)

| REVISION                                                                                                                                                                      |                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| <br>MANOR HOUSE FARM<br>DORDON HALL LANE<br>GRENDON<br>WARWICKSHIRE<br>TEL. 01827 330000 |                            |
| CLIENT<br><i>Wynn Evans</i>                                                                                                                                                   |                            |
| CONTRACT<br><i>Llandarcy Academy</i>                                                                                                                                          |                            |
| ITEM<br><i>15 x 30 x 5.2 mtr</i>                                                                                                                                              |                            |
| DATE<br><i>13/09/2021</i>                                                                                                                                                     | SCALE<br><i>1:100 (A1)</i> |
| DRG.No. <i>SS00373</i>                                                                                                                                                        |                            |

**ATTACHMENT THREE:  
COAL AUTHORITY REPORTS**



The Coal  
Authority

# CON29M

## coal mining report

LLANDARCY ACADEMY OF SPORT, ACCESS ROAD TO LLANDARCY VILLAGE,  
LLANDARCY, NEATH PORT TALBOT, SA10 6JD



### Known or potential coal mining risks

|                                |        |
|--------------------------------|--------|
| Past underground coal mining   | Page 4 |
| Future underground coal mining | Page 4 |
| Mine entries                   | Page 5 |



### Further action

These additional reports can give further detail on the risks identified:

- Mine entry interpretive report
- Mine entry plan and data sheets

For more information please see our **Further action reports** on page 10



### Professional opinion

According to the official mining information records held by the Coal Authority at the time of this search, evidence of, or the potential for, coal mining related features have been identified. In view of the coal mining circumstances we would recommend that any planned or future development should follow detailed technical advice before beginning work on site. Please see **page 3** for further details on **Future development**.

Your reference: **IN21655**  
Our reference: **51002686250001**  
Date: **8 October 2021**

Client name:  
**Alex Akeroyd**

If you require any further assistance please  
contact our experts on:  
**0345 762 6848**  
[groundstability@coal.gov.uk](mailto:groundstability@coal.gov.uk)



The Law  
Society

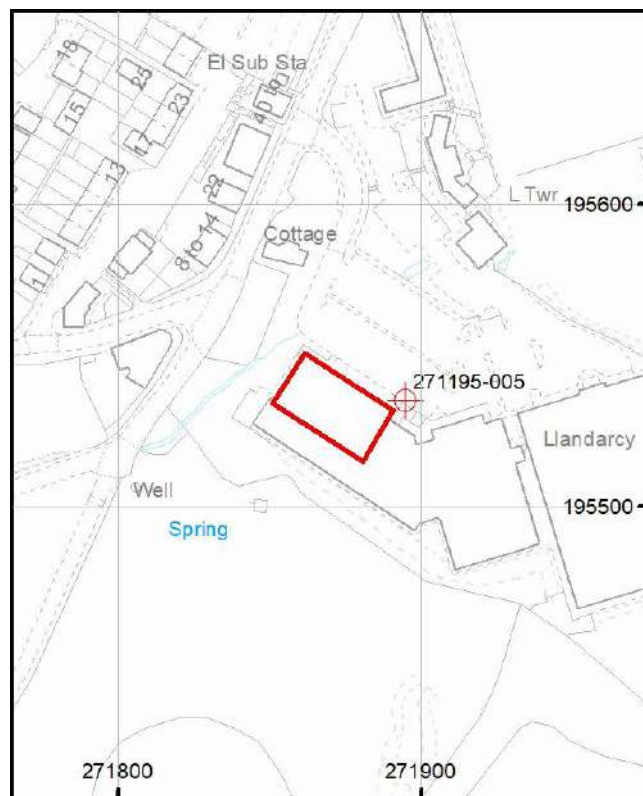
# Enquiry boundary

## Key

Approximate position of enquiry boundary shown



Disused mineshaft



We can confirm that the location is  
**on the coalfield**



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This report is prepared in accordance with the latest Law Society's Guidance Notes 2018, the User Guide 2018 and the Coal Authority's Terms and Conditions applicable at the time the report was produced.



## Accessibility

If you would like this information in an alternative format, please contact our communications team on 0345 762 6848 or email [communications@coal.gov.uk](mailto:communications@coal.gov.uk).

# Professional opinion



## Mine entries

The enquiry boundary shows the approximate location of the disused mine entry/entries referred to in this report. Property owners have the benefit of statutory protection (under the Coal Mining Subsidence Act 1991). This contains provision for the making good, to the reasonable satisfaction of the owner, of physical damage caused by disused coal mine workings including disused coal mine entries. A leaflet setting out the rights and obligations of either the Coal Authority or other responsible persons under the 1991 Act can be obtained by visiting [www.coal.gov.uk](http://www.coal.gov.uk). Please note this Act is not valid where coal was worked or extracted by virtue of the grant of a gale in the Forest of Dean, or any other part of the Hundred of St. Briavels in the county of Gloucester.

If you wish to discuss the relevance of any of the information contained in this report, you should seek the advice of a qualified mining engineer or surveyor. If you or your advisor wishes to examine the source plans from which the information has been taken, these are available to view, at our Coal Authority head office in Mansfield. To book an appointment please call **01623 637 225**. Should you or your advisor wish to carry out a physical investigation that may enter, disturb or interfere with any disused mine entry, prior permission must be sought from the owner. For coal mine entries, the owner will normally be the Coal Authority.

The Coal Authority, regardless of responsibility and in conjunction with other public bodies, provide an emergency, 24 hour call out facility in coalfield areas to assess the public safety implications of mining features (including disused mine entries). To report an emergency you can call **01623 646 333**.



## Future development

If development proposals are being considered, technical advice relating to both the investigation of coal and former coal mines and their treatment should be obtained before beginning work on site. All proposals should apply specialist engineering practice required for former mining areas. No development should be undertaken that intersects, disturbs or interferes with any coal or coal mines without first obtaining the permission of the Coal Authority. Developers should be aware that the investigation of coal seams, mine workings or mine entries may have the potential to generate and/or displace underground gases. Associated risks both to the development site and any neighbouring land or properties should be fully considered when undertaking any ground works. The need for effective measures to prevent gases migrating onto any land or into any properties, either during investigation or remediation work, or after development must also be assessed and properly addressed.

If you are looking to develop, or undertake works, within a coal mining development high risk area your Local Authority planning department may require a Coal Mining Risk Assessment to be undertaken by a qualified mining geologist or engineer. Should you require any additional information then please contact the Coal Authority on **0345 762 6848** or email [cmra@coal.gov.uk](mailto:cmra@coal.gov.uk).

# Detailed findings

Information provided by the Coal Authority in this report is compiled in response to the Law Society's CON29M Coal Mining enquiries. The said enquiries are protected by copyright owned by the Law Society of 113 Chancery Lane, London WC2A 1PL.

The Coal Authority owns the copyright in this report and the information used to produce this report is protected by our database rights. All rights are reserved and unauthorised use is prohibited. If we provide a report for you, this does not mean that copyright and any other rights will pass to you. However, you can use the report for your own purposes.

## 1 Past underground coal mining

The property is not within a surface area that could be affected by any past recorded underground coal mining.

However the property is in an area where the Coal Authority believes there is coal at or close to the surface. This coal may have been worked at some time in the past. The potential presence of coal workings at or close to the surface should be considered, particularly prior to any site works or future development activity, as ground movement could still be a risk. Your attention is drawn to the Professional opinion sections of the report.

## 2 Present underground coal mining

The property is not within a surface area that could be affected by present underground mining.

## 3 Future underground coal mining

The property is not in an area where the Coal Authority has received an application for, and is currently considering whether to grant a licence to remove or work coal by underground methods.

The property is not in an area where a licence has been granted to remove or otherwise work coal using underground methods.

The property is not in an area likely to be affected from any planned future underground coal mining.

However, reserves of coal exist in the local area which could be worked at some time in the future.

No notices have been given, under section 46 of the Coal Mining Subsidence Act 1991, stating that the land is at risk of subsidence.

## 4 Mine entries

Within, or within 20 metres of, the boundary of the property there is 1 mine entry, the approximate position of which is shown on the enquiry boundary plot. For reasons of clarity, mine entry symbols may not be drawn to the same scale as the plan.

Our records disclose the following information:

271195-005. A 6.4m reinforced concrete cap is placed over this filled mine shaft at rockhead. A stainless steel vent pipe has been incorporated through the backfill above the cap. A marker post marks the position of the shaft at the surface. These works were undertaken by Dean and Dyball Constuction Ltd to a design provided by Quadrant Consulting Engineers in accordance with CIRIA gudelines.

This information is based on the information that the Coal Authority has at the time of this enquiry.

Based on the Coal Authority's knowledge of the mining circumstances at the time of this enquiry, there may be unrecorded mine entries in the local area that do not appear on Coal Authority records.

For an additional fee, the Coal Authority can provide a Mine Entry Interpretive Report. The report will provide a separate assessment for the mine entry/entries referred to in this report. It gives an opinion on the likelihood of mining subsidence damage caused from ground movement as a consequence of the mine entry/entries. It also gives details of the remedies available for subsidence damage where the mine entry was sunk in connection with coal mining.

Please note that it may not be possible to produce a report if the main building to the property cannot be identified from Coal Authority plans (ie for development sites and new build).

For further advice on how to order this additional information please visit [www.groundstability.com](http://www.groundstability.com).

## 5 Coal mining geology

The Coal Authority is not aware of any damage due to geological faults or other lines of weakness that have been affected by coal mining.

## 6 Past opencast coal mining

The property is not within the boundary of an opencast site from which coal has been removed by opencast methods.

## 7 Present opencast coal mining

The property does not lie within 200 metres of the boundary of an opencast site from which coal is being removed by opencast methods.

## 8 Future opencast coal mining

There are no licence requests outstanding to remove coal by opencast methods within 800 metres of the boundary.

The property is not within 800 metres of the boundary of an opencast site for which a licence to remove coal by opencast methods has been granted.

## 9 Coal mining subsidence

The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres of the enquiry boundary, since 31 October 1994.

There is no current Stop Notice delaying the start of remedial works or repairs to the property.

The Coal Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

## 10 Mine gas

The Coal Authority has no record of a mine gas emission requiring action.

## 11 Hazards related to coal mining

The property has not been subject to remedial works, by or on behalf of the Coal Authority, under its Emergency Surface Hazard Call Out procedures.

## 12 Withdrawal of support

The property is not in an area where a notice to withdraw support has been given.

The property is not in an area where a notice has been given under section 41 of the Coal Industry Act 1994, cancelling the entitlement to withdraw support.

## 13 Working facilities order

The property is not in an area where an order has been made, under the provisions of the Mines (Working Facilities and Support) Acts 1923 and 1966 or any statutory modification or amendment thereof.

## 14 Payments to owners of former copyhold land

The property is not in an area where a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

# Statutory cover



## Coal mining subsidence

In the unlikely event of any coal mining related subsidence damage, the Coal Authority or the mine operator has a duty to take remedial action in respect of subsidence caused by the withdrawal of support from land or property in connection with lawful coal mining operations.

When the works are the responsibility of the Coal Authority, our dedicated public safety and subsidence team will manage the claim. The house or land owner ("the owner") is covered for these works under the terms of the Coal Mining Subsidence Act 1991 (as amended by the Coal Industry Act 1994). Please note, this Act does not apply where coal was worked or gotten by virtue of the grant of a gale in the Forest of Dean, or any other part of the Hundred of St. Briavels in the county of Gloucester.

If you believe your land or property is suffering from coal mining subsidence damage and you need more information on what to do next, please use the following link to our website which sets out what your rights are and what you need to consider before making a claim.

[www.gov.uk/government/publications/coal-mining-subsidence-damage-notice-form](http://www.gov.uk/government/publications/coal-mining-subsidence-damage-notice-form)



## Coal mining hazards

Our public safety and subsidence team provide a 24 hour a day, 7 days a week hazard reporting service, to help protect the public from hazards caused by past coal workings, such as a mine shaft or shallow working collapse. To report any hazards please call **01623 646 333**. Further information can be found on our website: [www.gov.uk/coalauthority](http://www.gov.uk/coalauthority).

# Glossary



## Key terms

**adit** - horizontal or sloped entrance to a mine

**coal mining subsidence** - ground movement caused by the removal of coal by underground mining

**Coal Mining Subsidence Act 1991** - the Act setting out the duties of the Coal Authority to repair damage caused by coal mining subsidence

**coal mining subsidence damage** - damage to land, buildings or structures caused by the removal of coal by underground mining

**coal seams** - bed of coal of varying thickness

**future opencast coal mining** - a licence granted, or licence application received, by the Coal Authority to excavate coal from the surface

**future underground coal mining** - a licence granted, or licence application received, by the Coal Authority to excavate coal underground. Although it is unlikely, remaining coal reserves could create a possibility for future mining, which would be licensed by the Coal Authority

**mine entries** - collective name for shafts and adits

**payments to owners of former copyhold land** - historically, copyhold land gave rights to coal to the copyholder. Legislation was set up to allow others to work this coal, but they had to issue a notice and pay compensation if a copyholder came forward

**shaft** - vertical entry into a mine

**site investigation** - investigations of coal mining risks carried out with the Coal Authority's permission

**stop notice** - a delay to repairs because further coal mining subsidence damage may occur and it would be unwise to carry out permanent repairs

**subsidence claim** - a formal notice of subsidence damage to the Coal Authority since it was established on 31 October 1994

**withdrawal of support** - a historic notice informing landowners that the coal beneath their property was going to be worked

**working facilities orders** - a court order which gave permission, restricted or prevented coal mine workings



## Further action reports

**Mine entry interpretive report** - assesses the risk of ground movement from mine entries in, or within 20 metres of, the property boundary. To order this report, use the same boundary as the CON29M report, then draw the building on the additional map screen.

For more information and to order this report please visit:

<https://www2.groundstability.com/interpretive-report>

**Mine entry plan and data sheets** - give additional information on mine entries recorded on a piece of land. To order this report use the same boundary as the CON29M report and a member of our team will contact you to confirm the mine entries to include in this bespoke report.

For more information and to order this report please visit:

<https://www2.groundstability.com/plan-and-data-sheets>



The Coal  
Authority

Resolving the **impacts** of mining

# Mine Entry Interpretive Report



LLANDARCY ACADEMY OF SPORT,  
ACCESS ROAD TO LLANDARCY VILLAGE, LLANDARCY, NEATH PORT  
TALBOT, SA10 6JD

|                        |                 |
|------------------------|-----------------|
| Date of enquiry:       | 08 October 2021 |
| Date enquiry received: | 08 October 2021 |
| Issue date:            | 08 October 2021 |

|                 |                |
|-----------------|----------------|
| Our reference:  | 51002686250002 |
| Your reference: | IN21655        |

# Mine Entry Interpretive Report

This report has been prepared using the records held by the Coal Authority at the time the report was produced.

## Client name

Alex Akeroyd

## Enquiry address

LLANDARCY ACADEMY OF SPORT, ACCESS ROAD  
TO LLANDARCY VILLAGE, LLANDARCY, NEATH  
PORT TALBOT, SA10 6JD

## How to contact us

0345 762 6848 (UK)  
+44 (0)1623 637 000 (International)

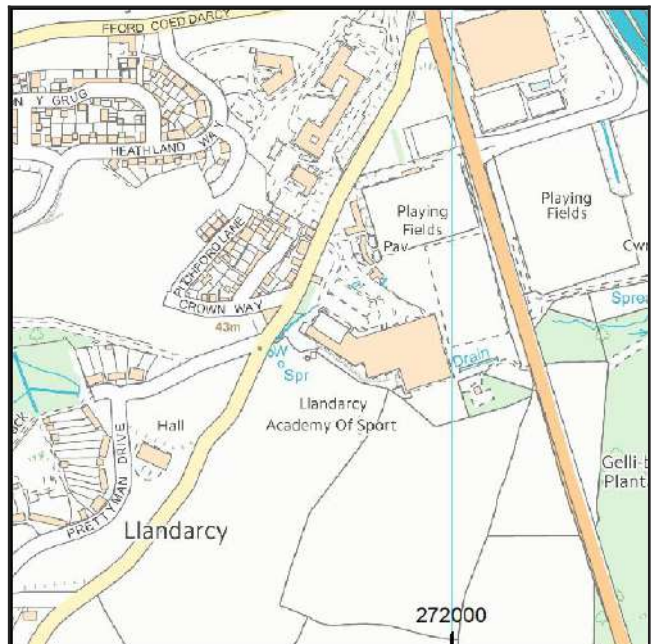
200 Lichfield Lane  
Mansfield  
Nottinghamshire  
NG18 4RG

[www.groundstability.com](http://www.groundstability.com)

 /company/the-coal-authority

 /thecoalauthority

 /coalauthority



Approximate position of property



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# Mine entry information

If you live in a coal mining area there is a very small risk that your home or other property may be affected by coal mining subsidence.

To work out if your property is within the area of possible ground movement the report will take into account the actual or plotted position of the mine entry, its known or assumed diameter and the thickness of deposits above rockhead. For more information, please see our general information section.

In the unlikely event of your property being damaged by coal mining subsidence, you can, under the provisions of the Coal Mining Subsidence Act 1991, make a claim against the mine owner. The mine owner will treat the mine entry and arrange for repairs to the property to be carried out to the reasonable satisfaction of the property owner. The mine owner may also be liable to pay compensation for damage to moveable property such as furniture.

**Please Note** - The Coal Mining Subsidence Act 1991 does not cover subsidence damage caused by extraction of minerals other than coal.

Any insurance given with previous mining reports does not cover this report.

| Mine entry reference 271195-005   |                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Shaft or adit                     | Shaft                                                                                                                                                                                                                                                                                                                                                                                         |
| Mineral worked                    | Coal                                                                                                                                                                                                                                                                                                                                                                                          |
| Source                            | 1/2500 O.S Sheet Glam 24:3 1870 1920 1941 Ed Ab plans 6634 SWR 2654 Geological Sheet                                                                                                                                                                                                                                                                                                          |
| Colliery name                     | Unknown                                                                                                                                                                                                                                                                                                                                                                                       |
| Entry name                        | Old Shaft                                                                                                                                                                                                                                                                                                                                                                                     |
| Date abandoned                    | Unknown                                                                                                                                                                                                                                                                                                                                                                                       |
| Depth of superficial deposits (m) | 1.5                                                                                                                                                                                                                                                                                                                                                                                           |
| Depth of shaft (m)                | Unknown                                                                                                                                                                                                                                                                                                                                                                                       |
| Diameter/maximum width (m)        | 3.0                                                                                                                                                                                                                                                                                                                                                                                           |
| Probable adit azimuth             | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                |
| Treatment details                 | A 6.4m reinforced concrete cap is placed over this filled mine shaft at rockhead. A stainless steel vent pipe has been incorporated through the backfill above the cap. A marker post marks the position of the shaft at the surface. These works were undertaken by Dean and Dyball Constuction Ltd to a design provided by Quadrant Consulting Engineers in accordance with CIRIA gudelines |
| Conveyance                        | Not Applicable                                                                                                                                                                                                                                                                                                                                                                                |
| Other information                 | None                                                                                                                                                                                                                                                                                                                                                                                          |

## The risk

If coal mining subsidence was to occur because of ground movement due to the mine entry, the main building (as shown on the plan) is within the area likely to be affected. Our opinion takes into account the thickness of the superficial deposits, the potential difference between the actual and the plotted positions of the mine entry and its diameter/maximum width.

The possibility of subsidence damage, especially given the information recorded in the treatment details above, is very small but should not be discounted completely.

## The remedies

In the unlikely event of your property being damaged by coal mining subsidence, you can, under the provisions of the Coal Mining Subsidence Act 1991, make a claim against the mine owner. Depending on where you live, responsibility for dealing with your claim rests either with a mining company or the Coal Authority. Details of how to make a claim can be found on our website [www.gov.uk/claim-for-subsidence-damage-caused-by-coal-mining](http://www.gov.uk/claim-for-subsidence-damage-caused-by-coal-mining). If you need any help or advice, please contact us.

## The conclusion

In our opinion, the main building (as shown on the plan) is within the area likely to be affected if coal mining subsidence was to occur because of ground movement.

The statistical risk of the main building being damaged by subsidence especially given the information recorded in the treatment details above however is very small.

In the unlikely event of your property being damaged by coal mining subsidence, you can, under the provisions of the Coal Mining Subsidence Act 1991, make a claim against the mine owner to have the damage repaired.

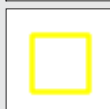
# Enquiry boundary

## Key

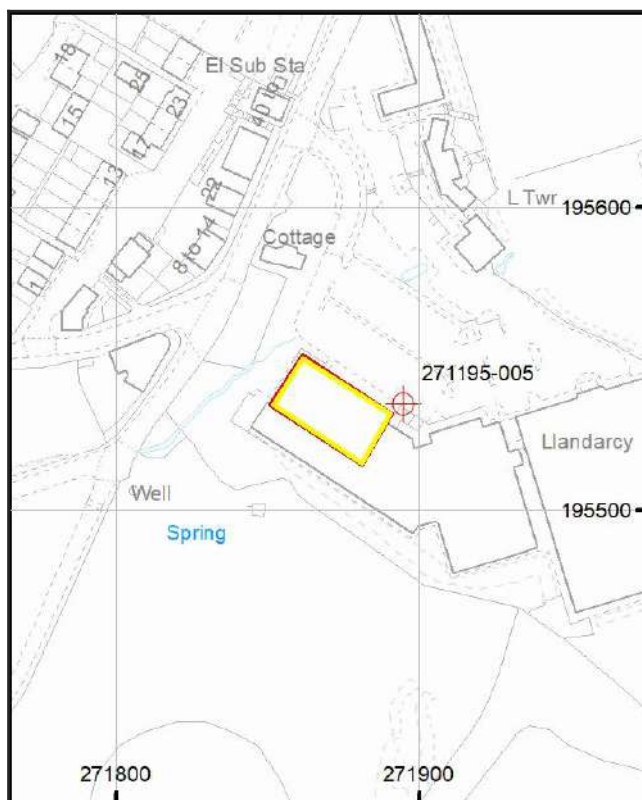
Approximate position of enquiry boundary shown



Approximate position of main building shown



Disused mineshaft



## How to contact us

0345 762 6848 (UK)  
+44 (0)1623 637 000 (International)

200 Lichfield Lane  
Mansfield  
Nottinghamshire  
NG18 4RG

[www.groundstability.com](http://www.groundstability.com)

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 /coalauthority



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# General information

The following information is based on the Authority's interpretation of the facts in its possession at the time the report was produced and on the Ordnance Survey's (OS) improved data. A site inspection has not been carried out.

1. Some of the source documents used may be very old and can have varying standards of accuracy. As a result, the plotted positions of mine entries can be different, to varying degrees, to their actual positions.
2. The thickness of superficial deposits has been taken from the records of the Authority and/or those of the British Geological Survey. © NERC All rights reserved. Where the Authority has information about activities such as infill operations or excavation, which may have affected the thickness of deposits above rockhead, this will also be taken into account.
3. The Authority will only provide the depth of a mine entry where this is known.
4. Where information about the diameter of a shaft is not known, it will be assumed. The assumption will be based on other shafts in the vicinity, the likely date it was sunk and any other relevant information, for example the depth of seams the shaft is thought to have accessed. Where a shaft is not circular, the maximum diagonal dimension will be used.
5. The zone of possible ground movement of an adit will be calculated for the estimated position of the mouth of the adit. It will not apply to the underground length of the adit. The approximate adit direction, where applicable, will be quoted in degrees from North.
6. Where treatment details are recorded, this information will be given. Where records are not available, "Unknown" will be reported.
7. The issue of ownership of mine entries is extremely complicated. Where details of the sale of a mine are known these will be provided. Where no sale details are available, in most instances, ownership will rest in the Coal Authority. Whatever the position with ownership, if coal mining subsidence damage does occur, statute provides for the 'responsible person' to provide a remedy. The 'responsible person' is either the Coal Authority or a licensed mining operator.
8. The report has been prepared by experienced mining surveyors with knowledge in the management and interpretation of coal mining information.

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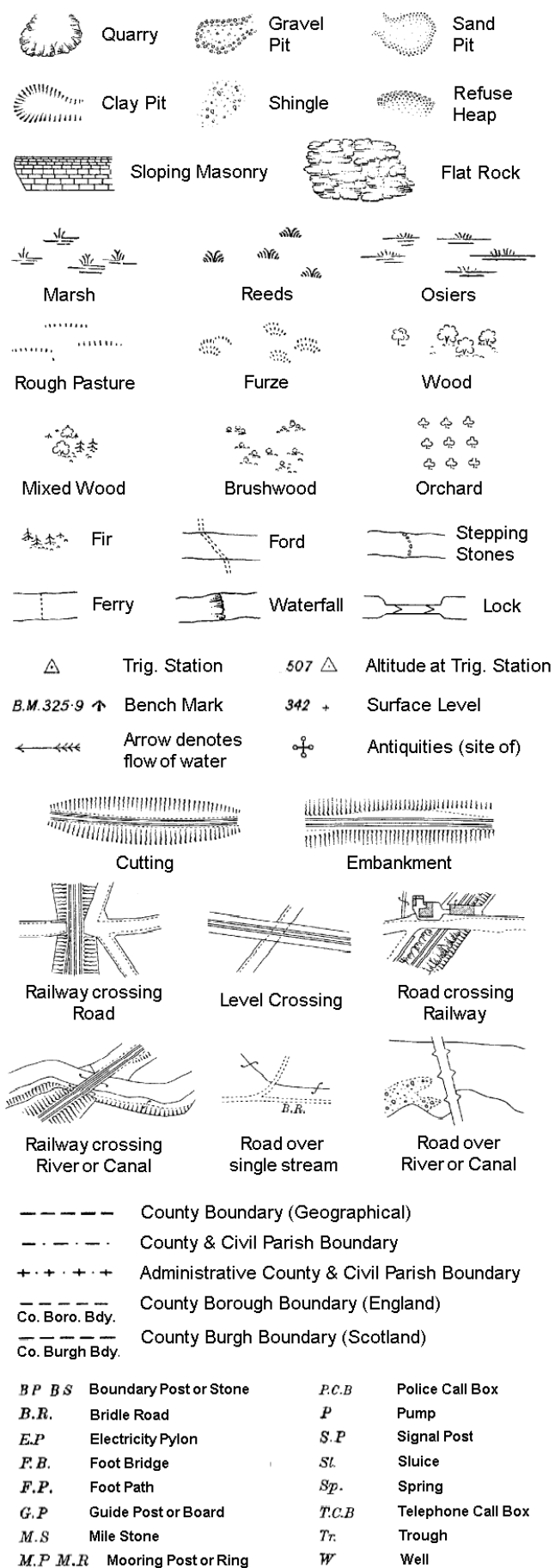
## Terms and conditions

Our full terms and conditions can be found on our website – [www.groundstability.com](http://www.groundstability.com).

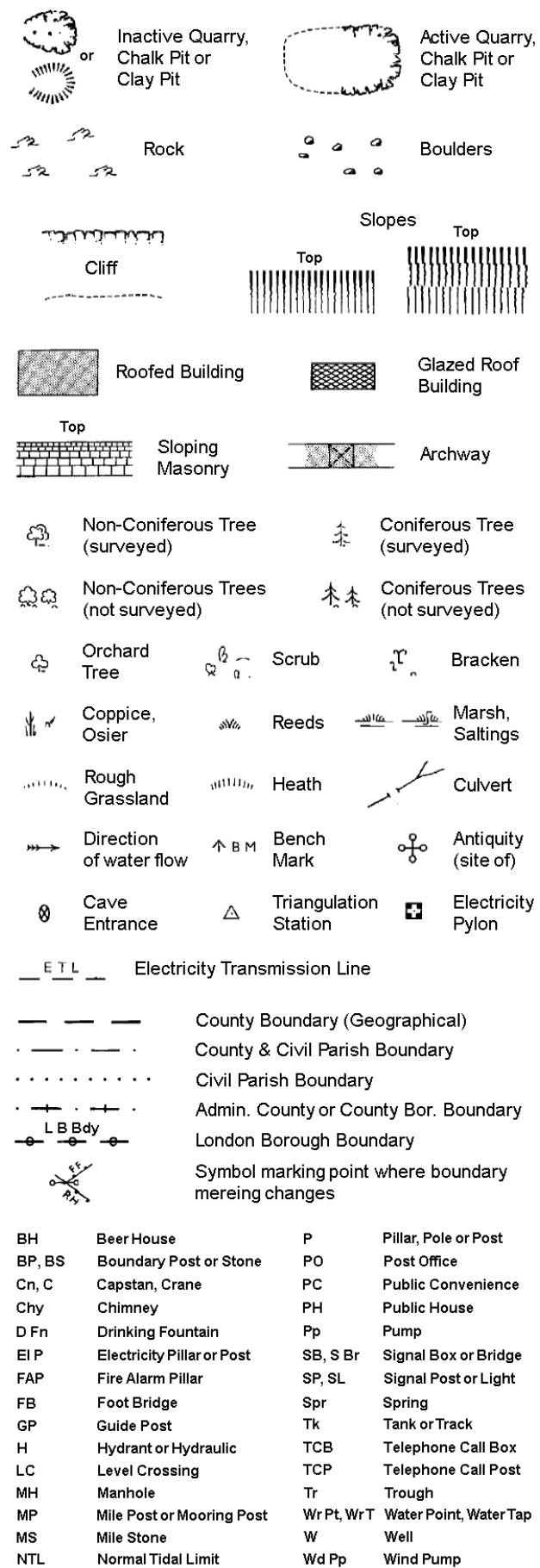
**ATTACHMENT FOUR:  
HISTORICAL MAPS**

## Historical Mapping Legends

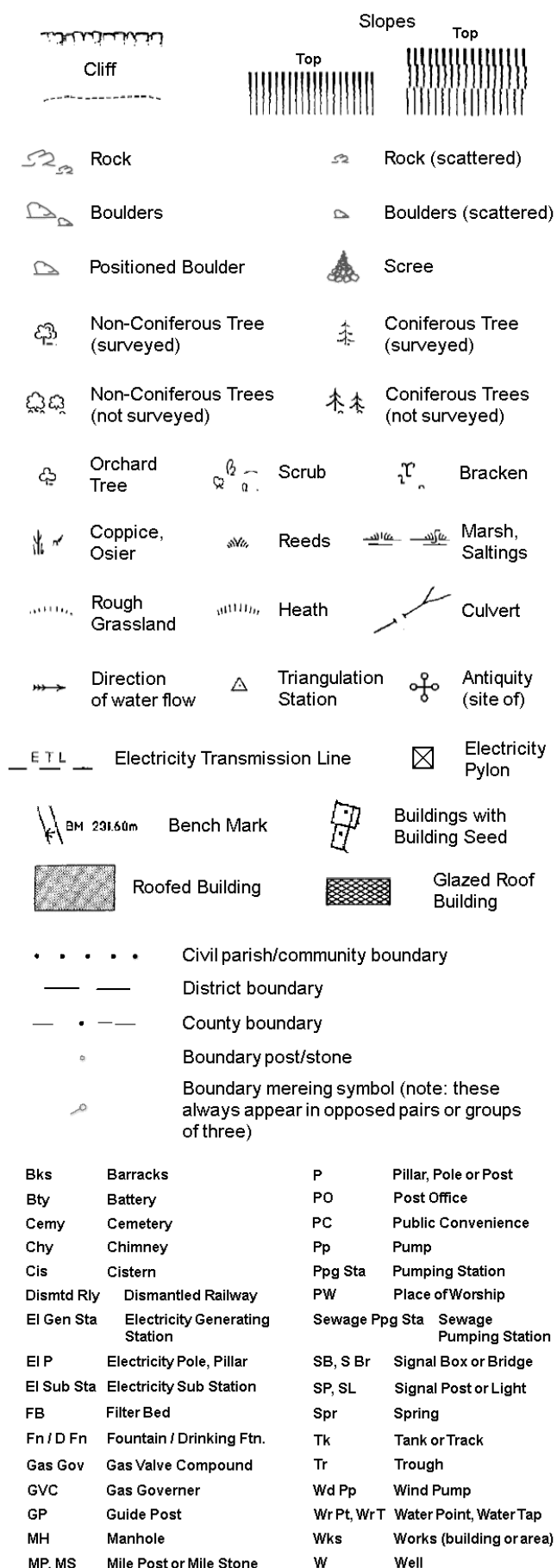
## Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



## Ordinance Survey Plan, Additional SIMs and Supply of Unpublished Survey Information



## Large-Scale National Grid Data 1:2,500 and 1:1,250



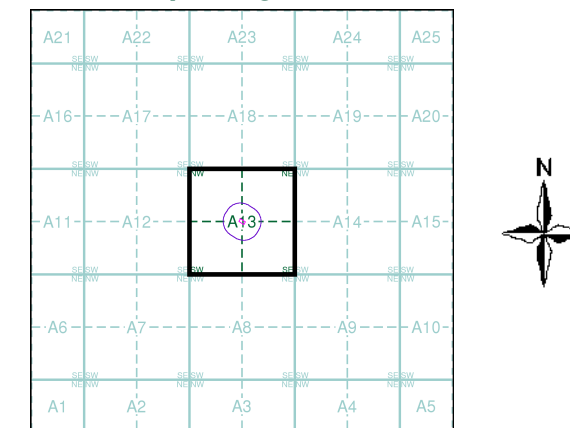
# Envirocheck®

● LANDMARK INFORMATION GROUP®

### Historical Mapping & Photography included:

| Mapping Type                   | Scale   | Date        | Pg |
|--------------------------------|---------|-------------|----|
| Glamorganshire                 | 1:2,500 | 1878 - 1882 | 2  |
| Glamorganshire                 | 1:2,500 | 1899        | 3  |
| Glamorganshire                 | 1:2,500 | 1918        | 4  |
| Glamorganshire                 | 1:2,500 | 1940 - 1941 | 5  |
| Ordnance Survey Plan           | 1:1,250 | 1965        | 6  |
| Ordnance Survey Plan           | 1:2,500 | 1970 - 1971 | 7  |
| Additional SIMs                | 1:2,500 | 1978        | 8  |
| Additional SIMs                | 1:1,250 | 1989        | 9  |
| Large-Scale National Grid Data | 1:1,250 | 1993        | 10 |
| Large-Scale National Grid Data | 1:2,500 | 1993        | 11 |
| Large-Scale National Grid Data | 1:2,500 | 1993        | 12 |
| Large-Scale National Grid Data | 1:1,250 | 1993        | 13 |
| Large-Scale National Grid Data | 1:2,500 | 1995        | 14 |

## Historical Map - Segment A13



## Order Details

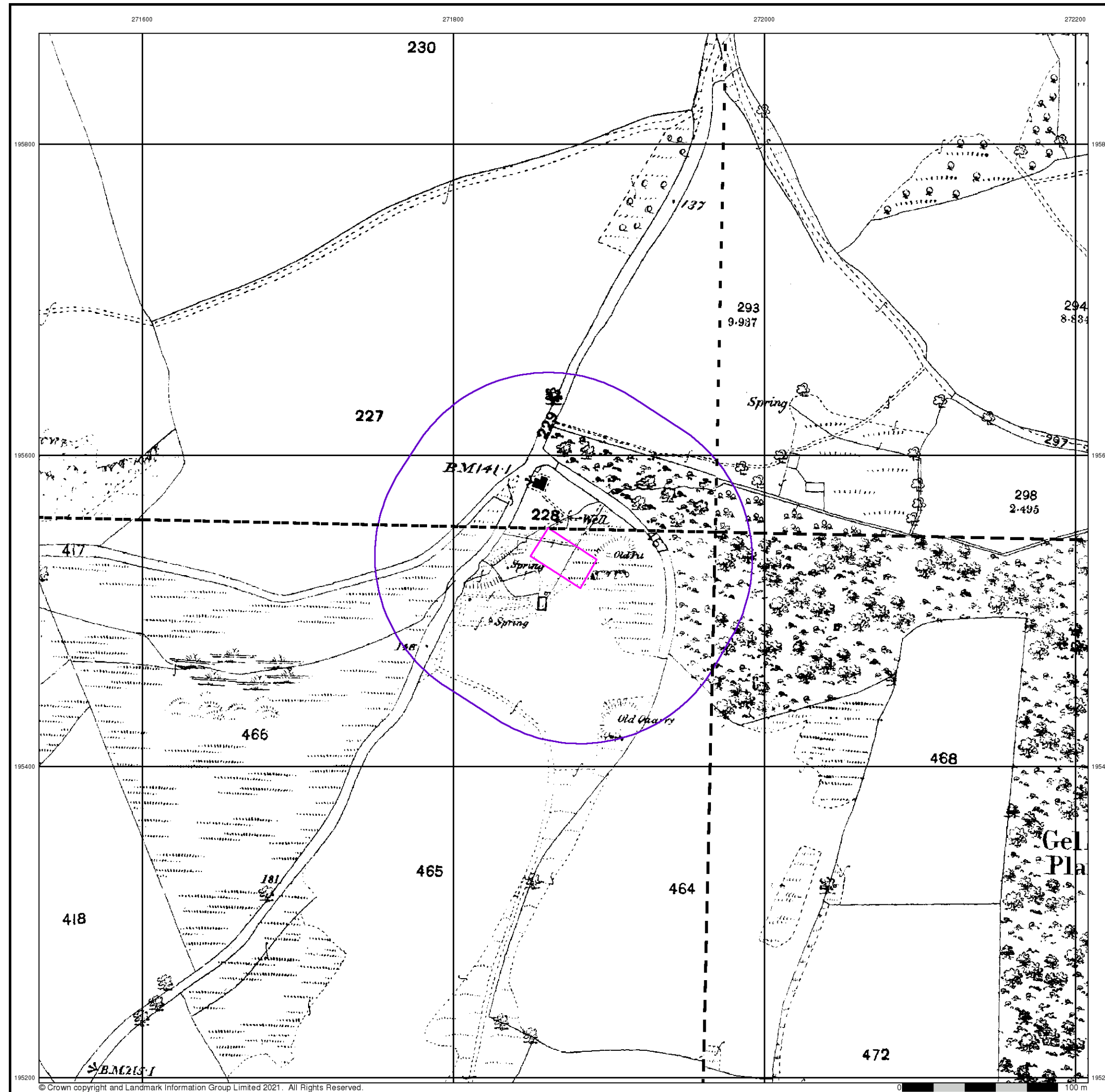
Order Number: 285963284\_1\_1  
Customer Ref: IN21655  
National Grid Reference: 271870, 195530  
Slice: A  
Site Area (Ha): 0.09  
Search Buffer (m): 100

## Site Details

Llandarcy ACADemy of Sport, Access Road to Llandarcy  
Village, LLANDARCY, SA10 6JD

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Glamorganshire

Published 1878 - 1882

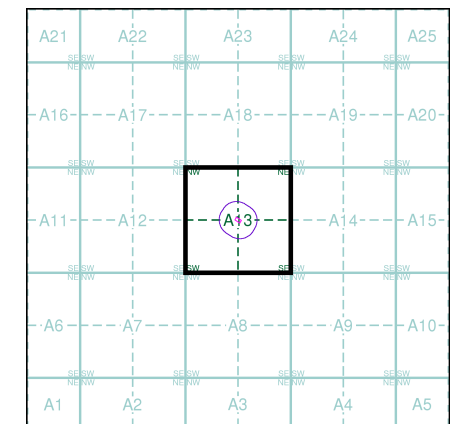
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

|                           |                           |
|---------------------------|---------------------------|
| 015_15<br>1878<br>1:2,500 | 015_16<br>1881<br>1:2,500 |
| 024_03<br>1879<br>1:2,500 | 024_04<br>1882<br>1:2,500 |

Historical Map - Segment A13



Order Details

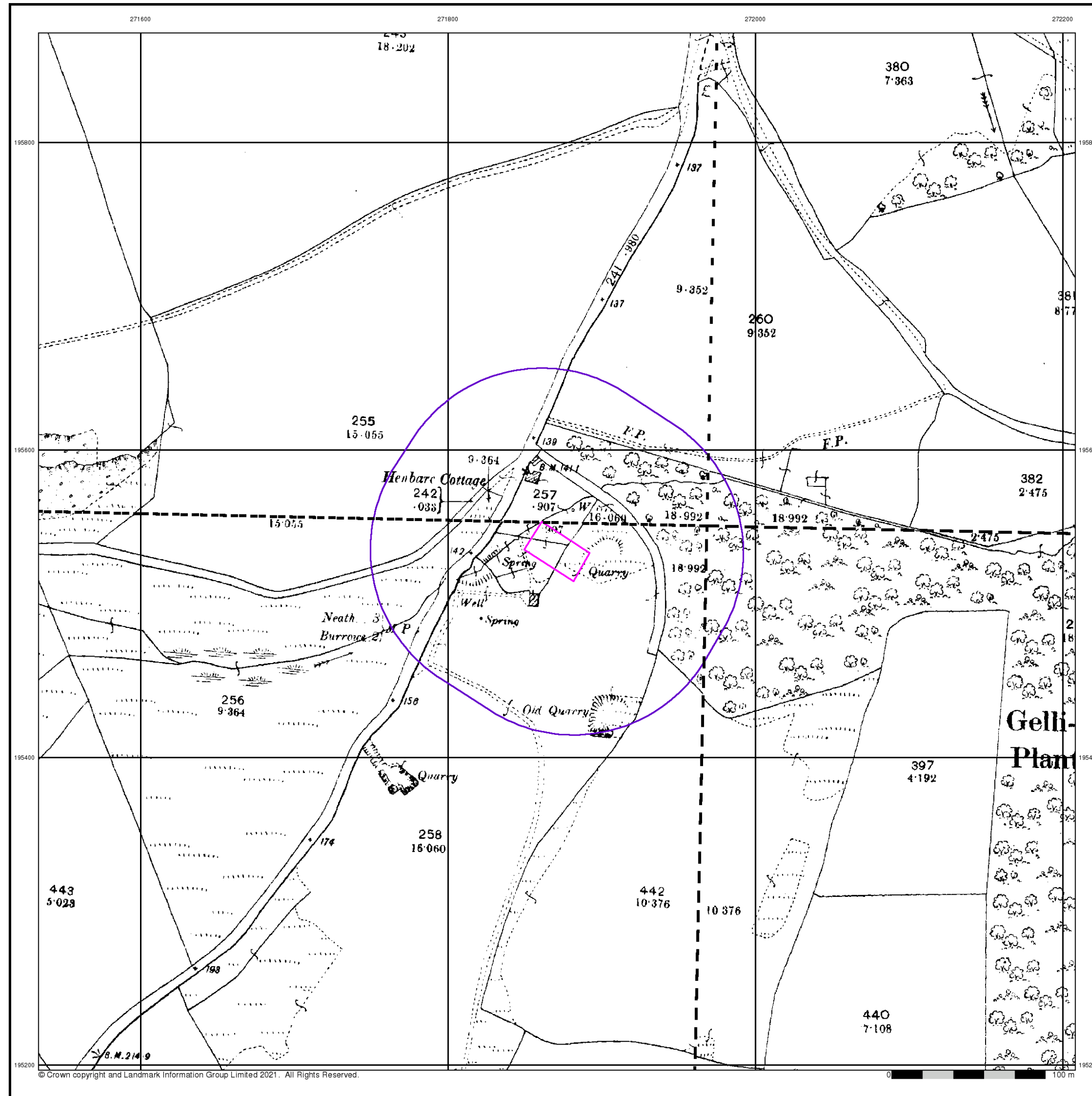
Order Number: 285963284\_1\_1  
Customer Ref: IN21655  
National Grid Reference: 271870, 195530  
Slice: A  
Site Area (Ha): 0.09  
Search Buffer (m): 100

Site Details

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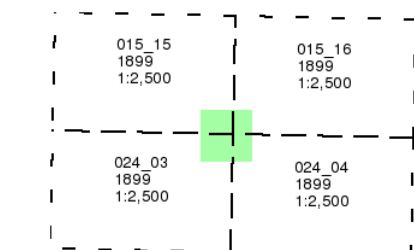
Glamorganshire

Published 1899

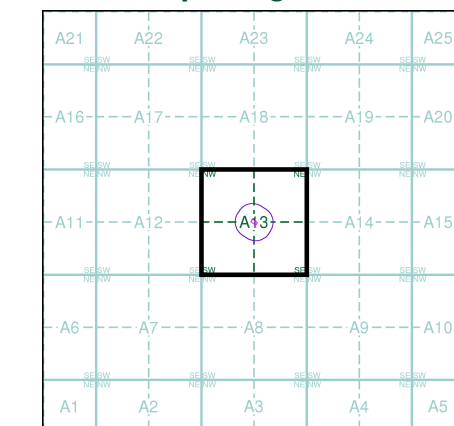
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

## Map Name(s) and Date(s)



## Historical Map - Segment A13



## Order Details

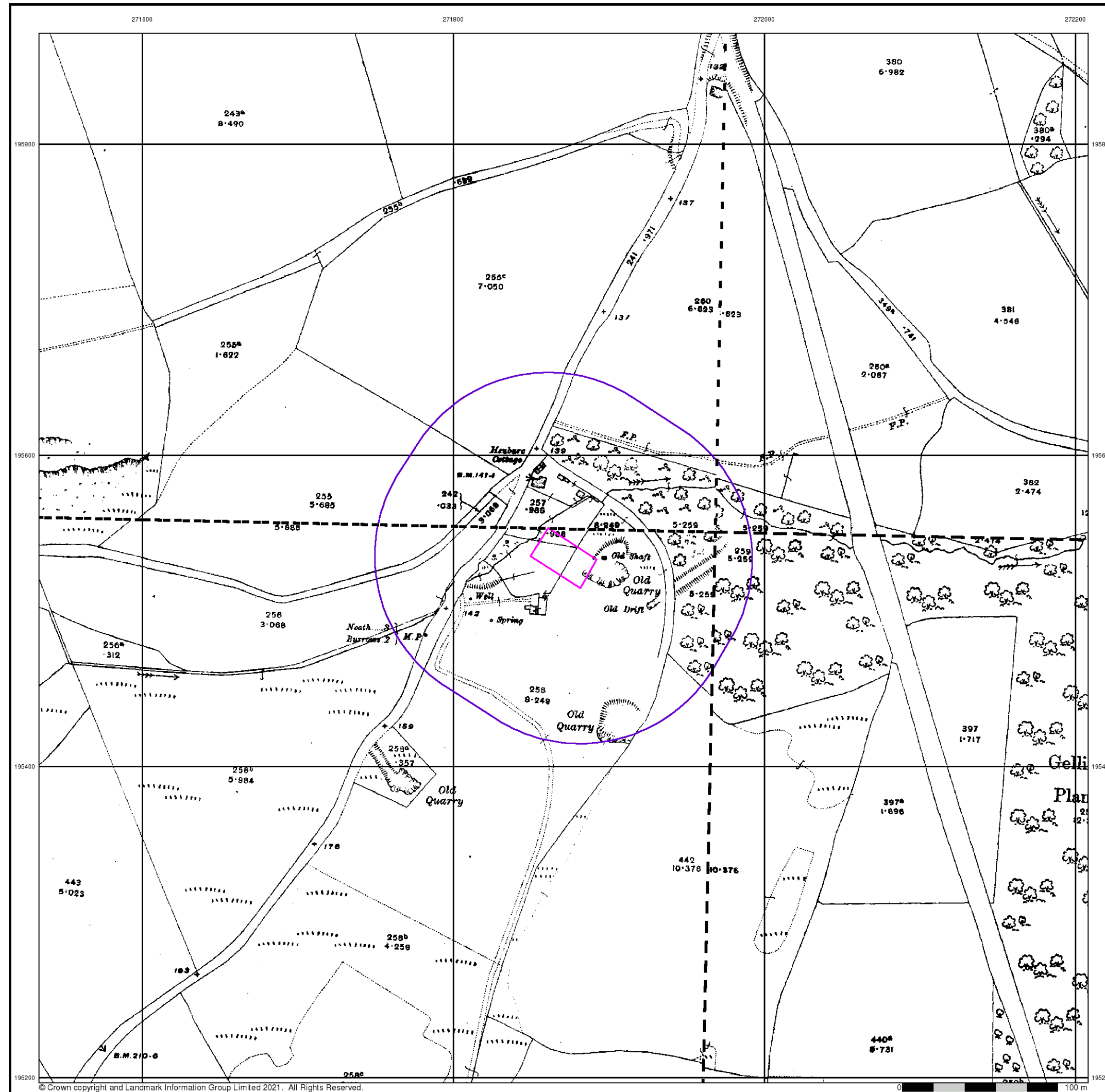
Order Number: 285963284\_1\_1  
Customer Ref: IN21655  
National Grid Reference: 271870, 195530  
Slice: A  
Site Area (Ha): 0.09  
Search Buffer (m): 100

## Site Details

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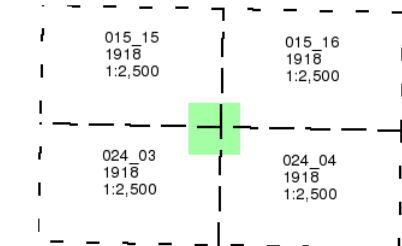
Glamorganshire

Published 1918

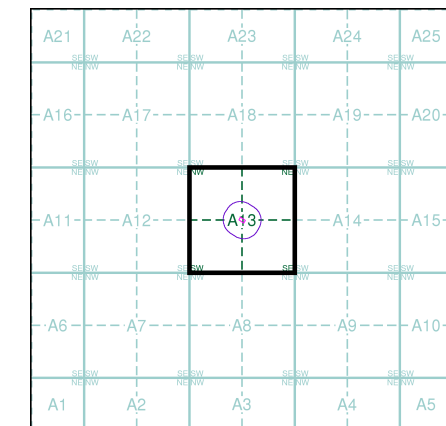
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

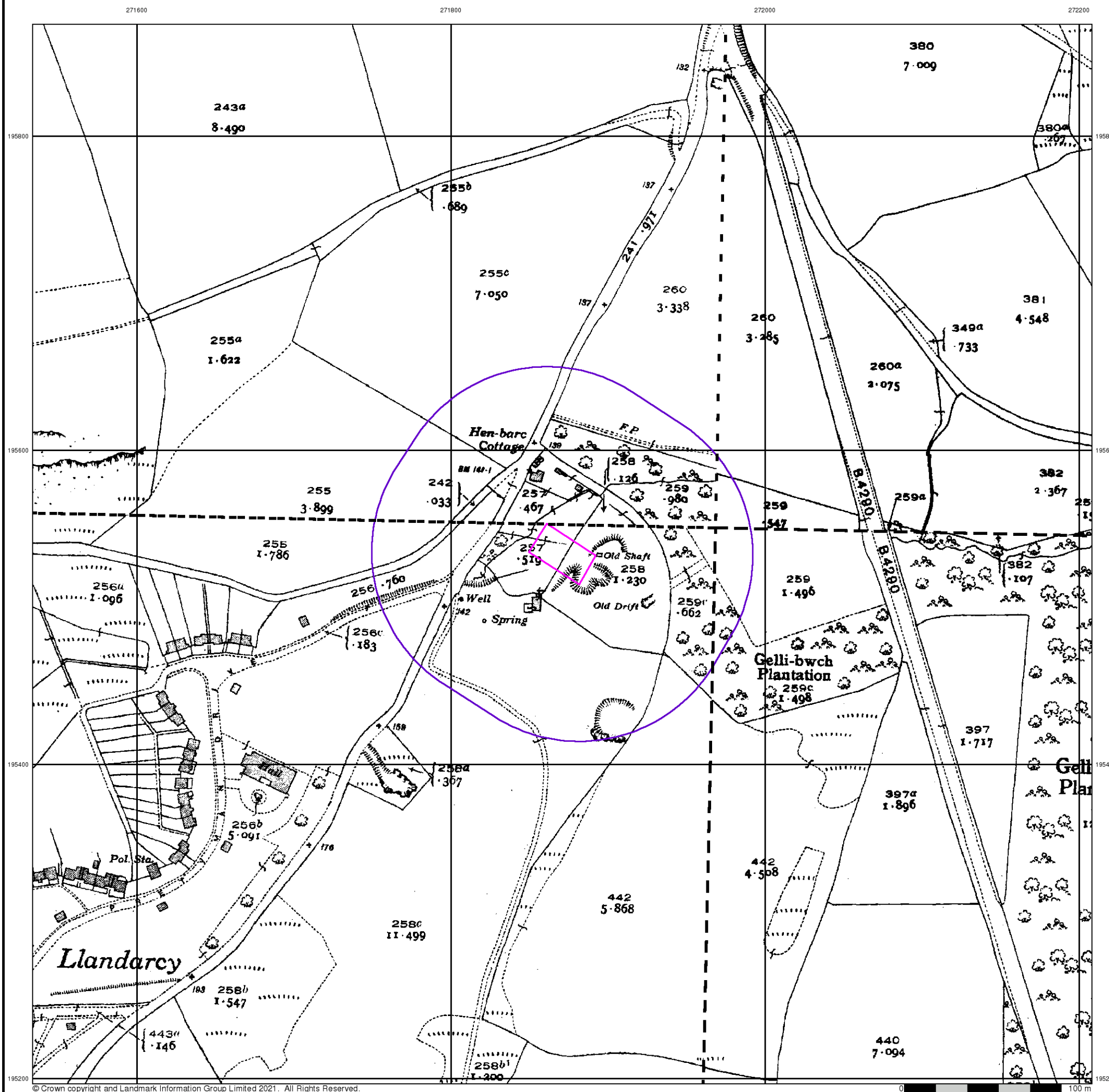
Order Number: 285963284\_1\_1  
Customer Ref: IN21655  
National Grid Reference: 271870, 195530  
Slice: A  
Site Area (Ha): 0.09  
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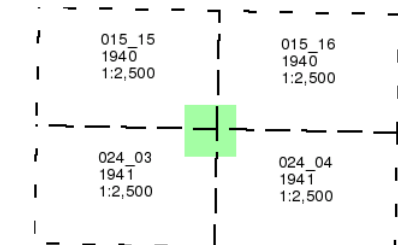
## Glamorganshire

**Published 1940 - 1941**

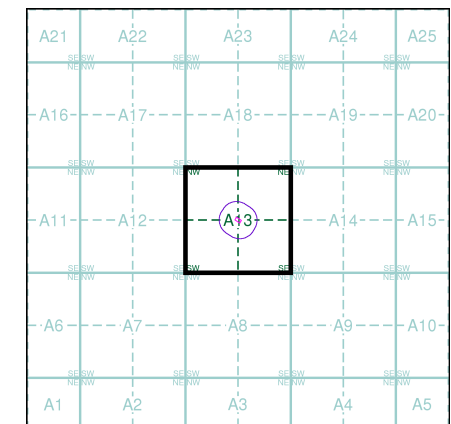
**Source map scale - 1:2,500**

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

## Map Name(s) and Date(s)



## Historical Map - Segment A13



## Order Details

Order Number: 285963284\_1\_1  
Customer Ref: IN21655  
National Grid Reference: 271870, 195530  
Slice: A  
Site Area (Ha): 0.09  
Search Buffer (m): 100

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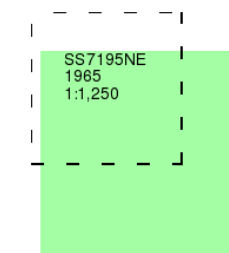
## Ordnance Survey Plan

Published 1965

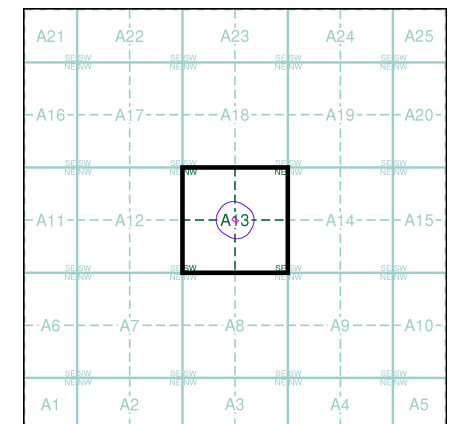
Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

## Map Name(s) and Date(s)



## Historical Map - Segment A13

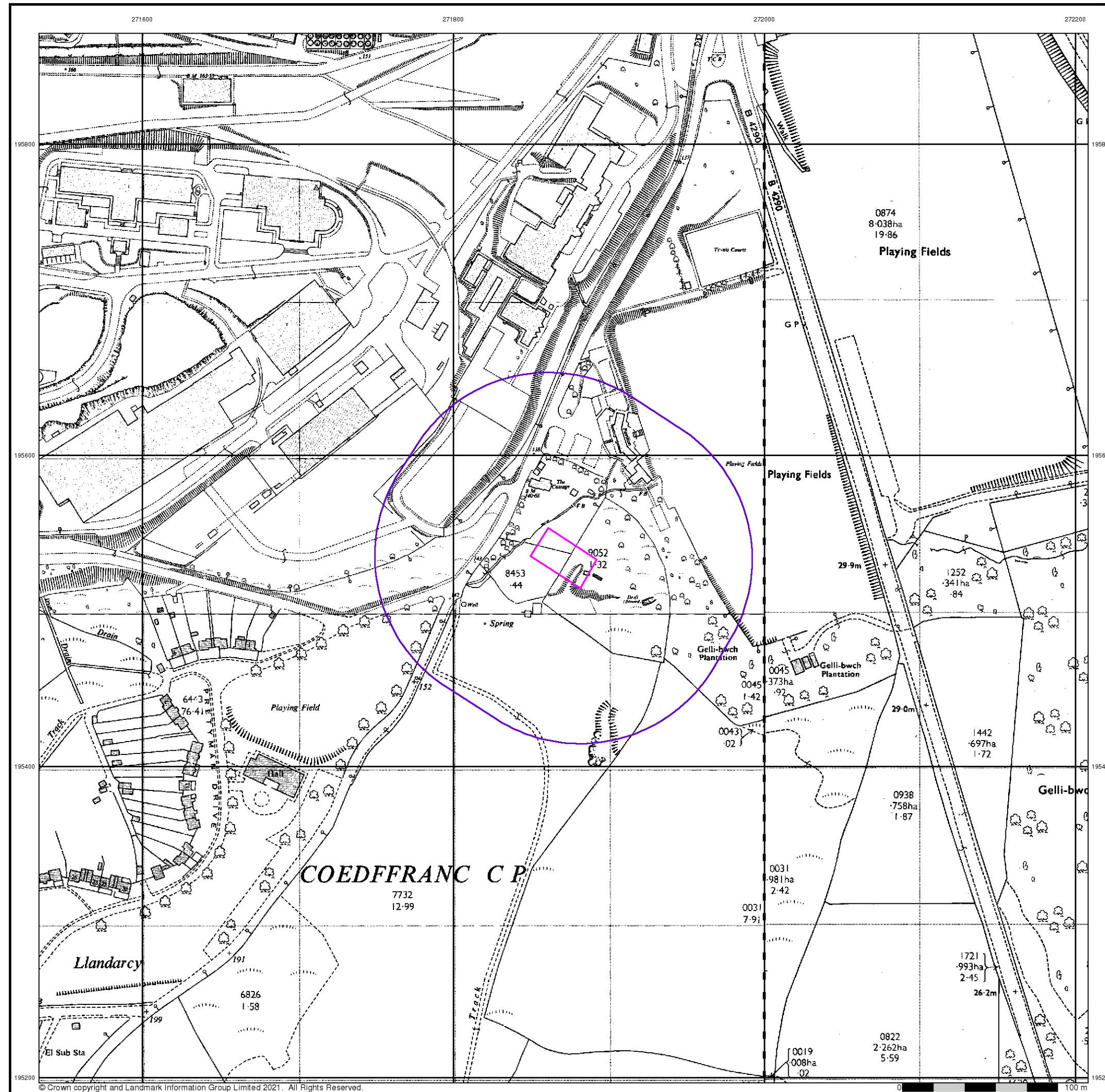


## Order Details

Order Number: 285963284\_1\_1  
Customer Ref: IN21655  
National Grid Reference: 271870, 195530  
Slice: A  
Site Area (Ha): 0.09  
Search Buffer (m): 100

## Site Details

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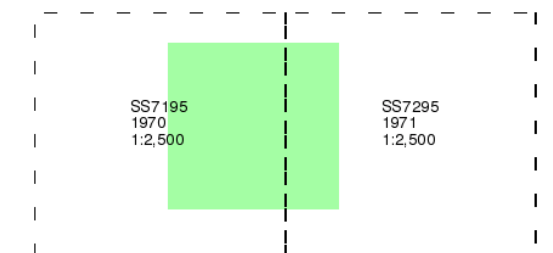
## Ordnance Survey Plan

Published 1970 - 1971

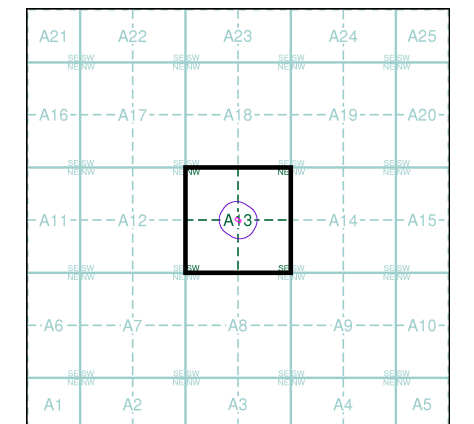
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

## Map Name(s) and Date(s)



## Historical Map - Segment A13



## Order Details

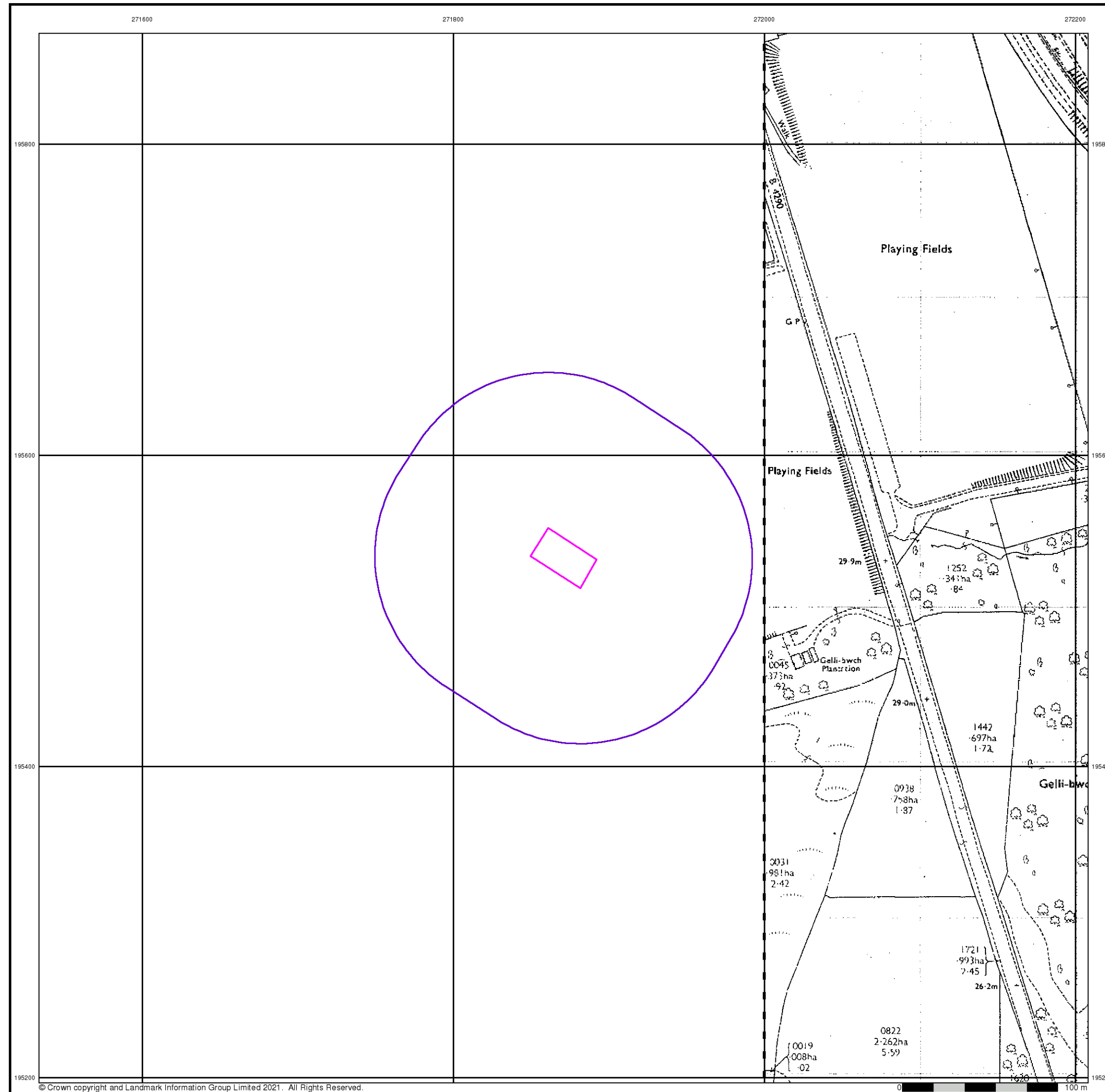
Order Number: 285963284\_1\_1  
Customer Ref: IN21655  
National Grid Reference: 271870, 195530  
Slice: A  
Site Area (Ha): 0.09  
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## Site Details

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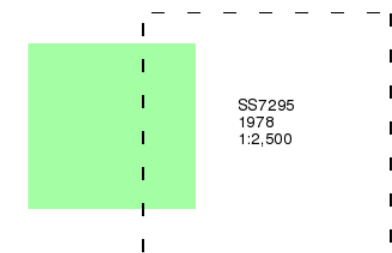
## Additional SIMs

Published 1978

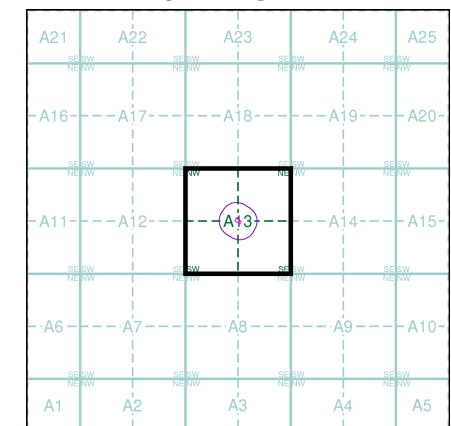
Source map scale - 1:2,500

The SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

## Map Name(s) and Date(s)



## Historical Map - Segment A13

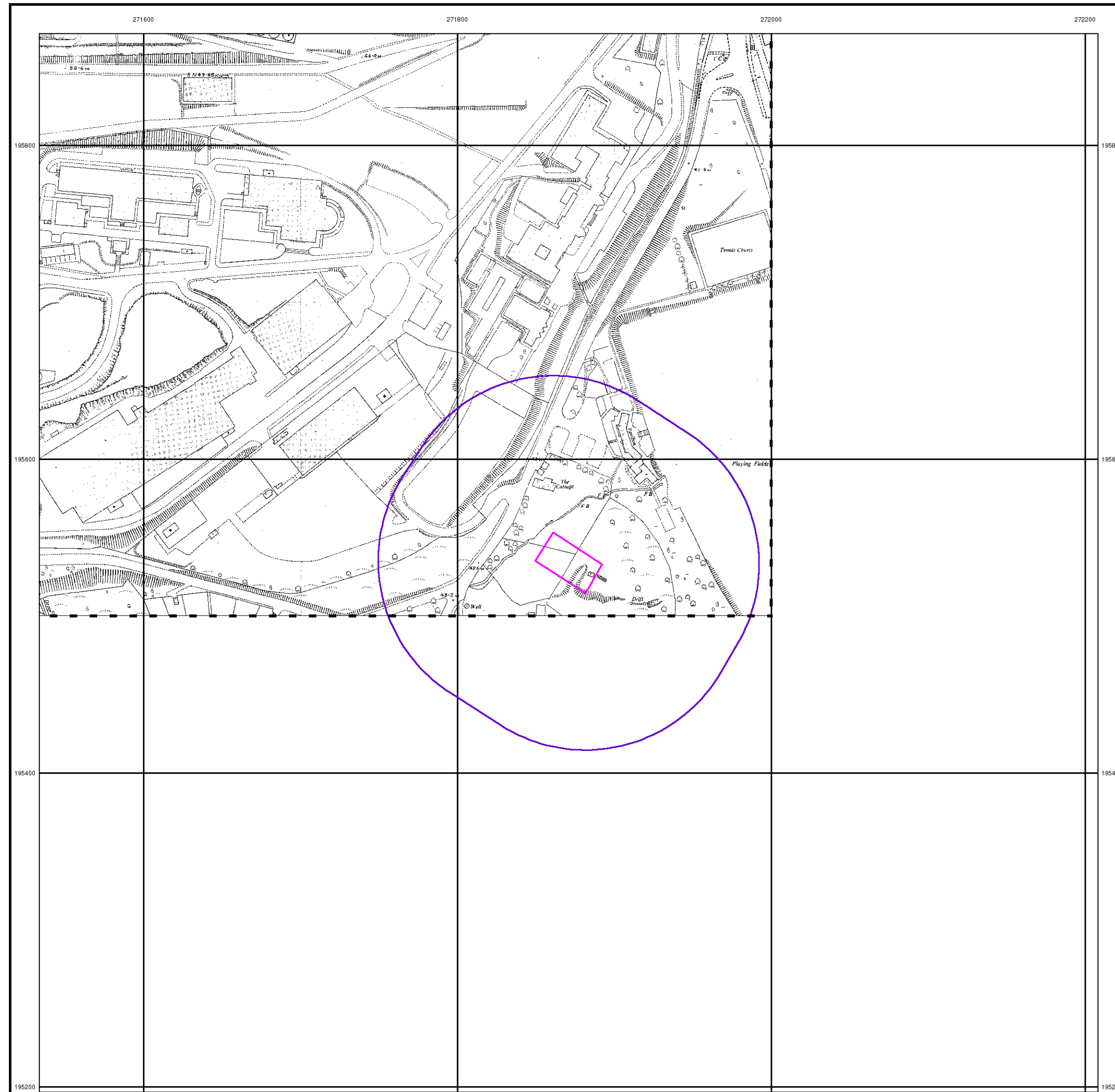


## Order Details

Order Number: 285963284\_1\_1  
Customer Ref: IN21655  
National Grid Reference: 271870, 195530  
Slice: A  
Site Area (Ha): 0.09  
Search Buffer (m): 100

## Site Details

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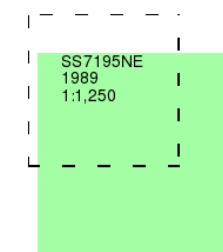
## Additional SIMs

Published 1989

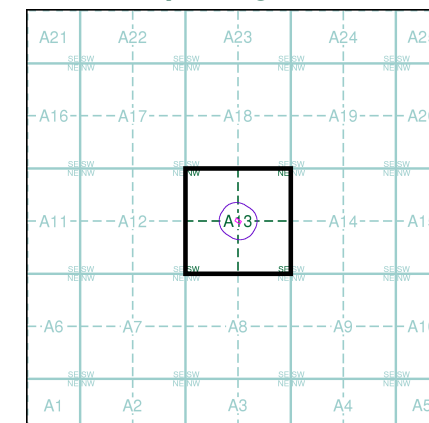
Source map scale - 1:1,250

The SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

## Map Name(s) and Date(s)



## Historical Map - Segment A13

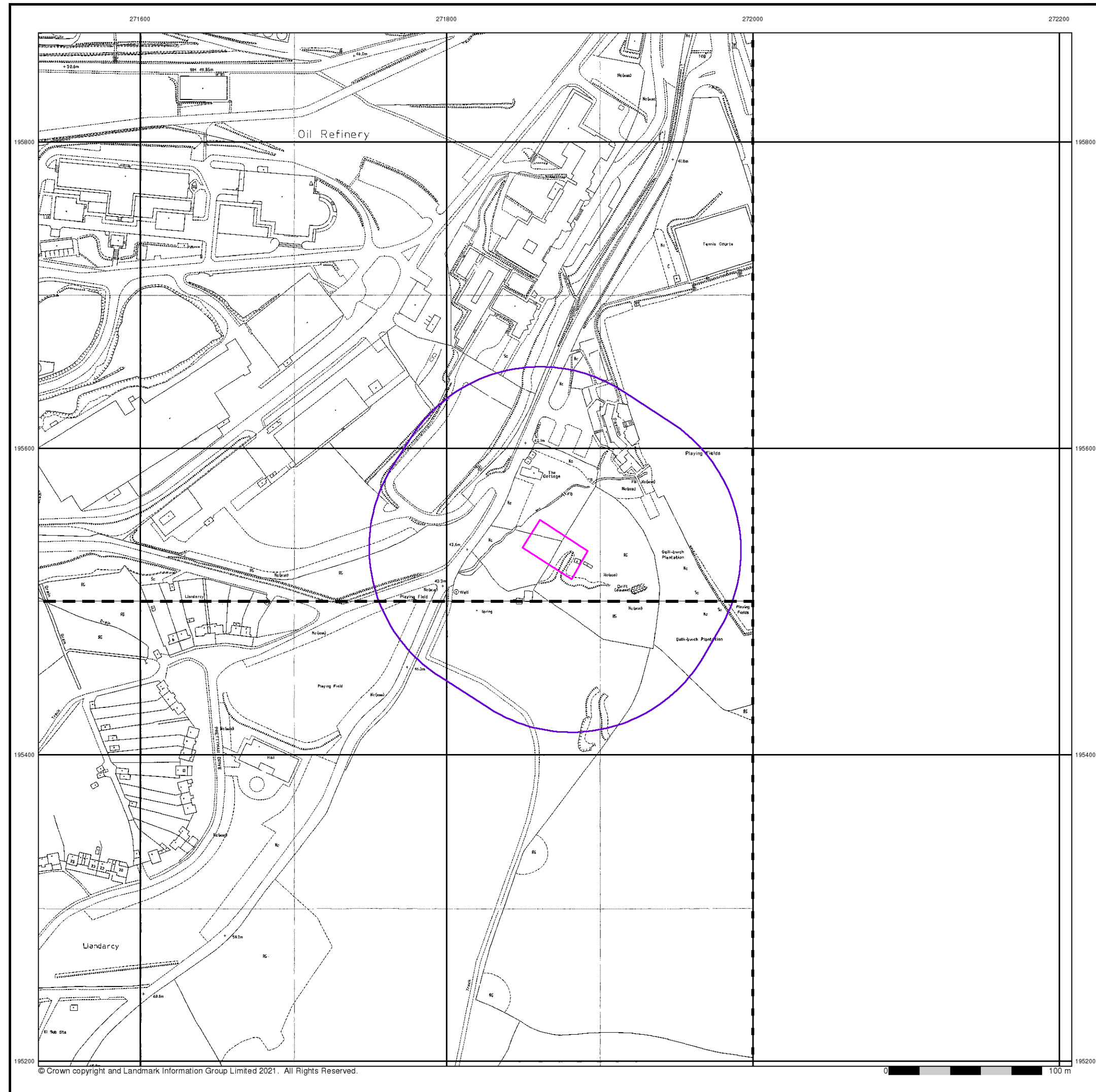


## Order Details

Order Number: 285963284\_1\_1  
Customer Ref: IN21655  
National Grid Reference: 271870, 195530  
Slice: A  
Site Area (Ha): 0.09  
Search Buffer (m): 100

## Site Details

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## Large-Scale National Grid Data

**Published 1993**

**Source map scale - 1:1,250**

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

### Map Name(s) and Date(s)

SS7195NE  
1993  
1:1,250

SS7195SE  
1993  
1:1,250

### Historical Map - Segment A13

### Order Details

|                          |                |
|--------------------------|----------------|
| Order Number:            | 285963284_1_1  |
| Customer Ref:            | IN21655        |
| National Grid Reference: | 271870, 195530 |
| Slice:                   | A              |
| Site Area (Ha):          | 0.09           |
| Search Buffer (m):       | 100            |

### Site Details

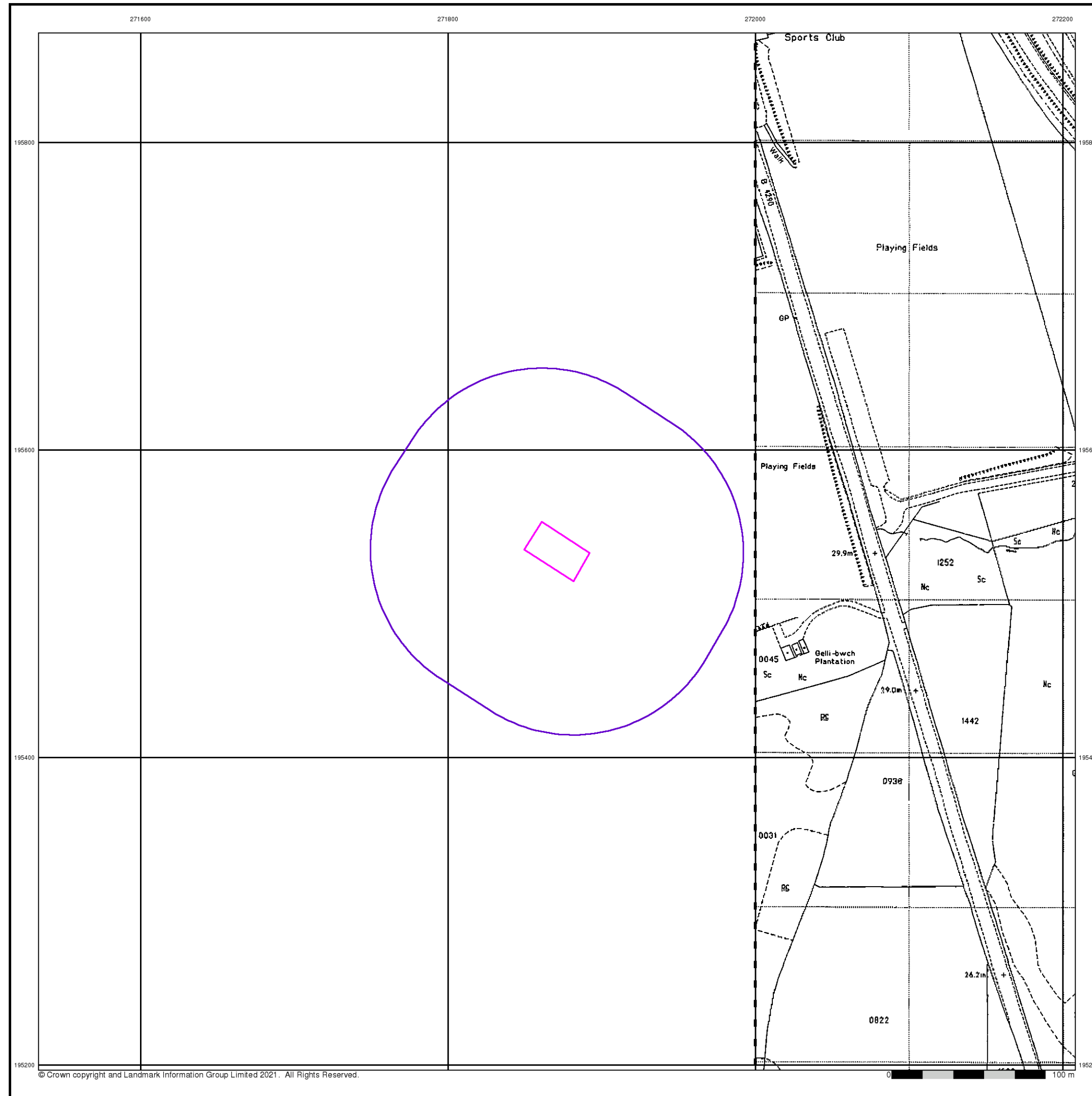
Llandarcy ACADemy of Sport, Access Road to Llandarcy Village, LLANDARCY, SA10 6JD

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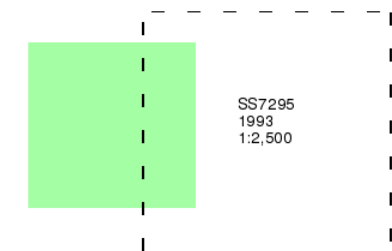
## Large-Scale National Grid Data

Published 1993

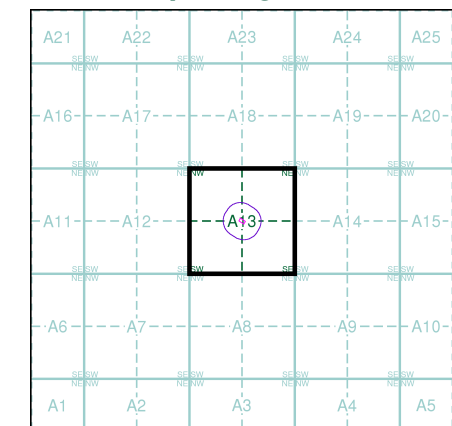
Source map scale - 1:2,500

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

### Map Name(s) and Date(s)



### Historical Map - Segment A13

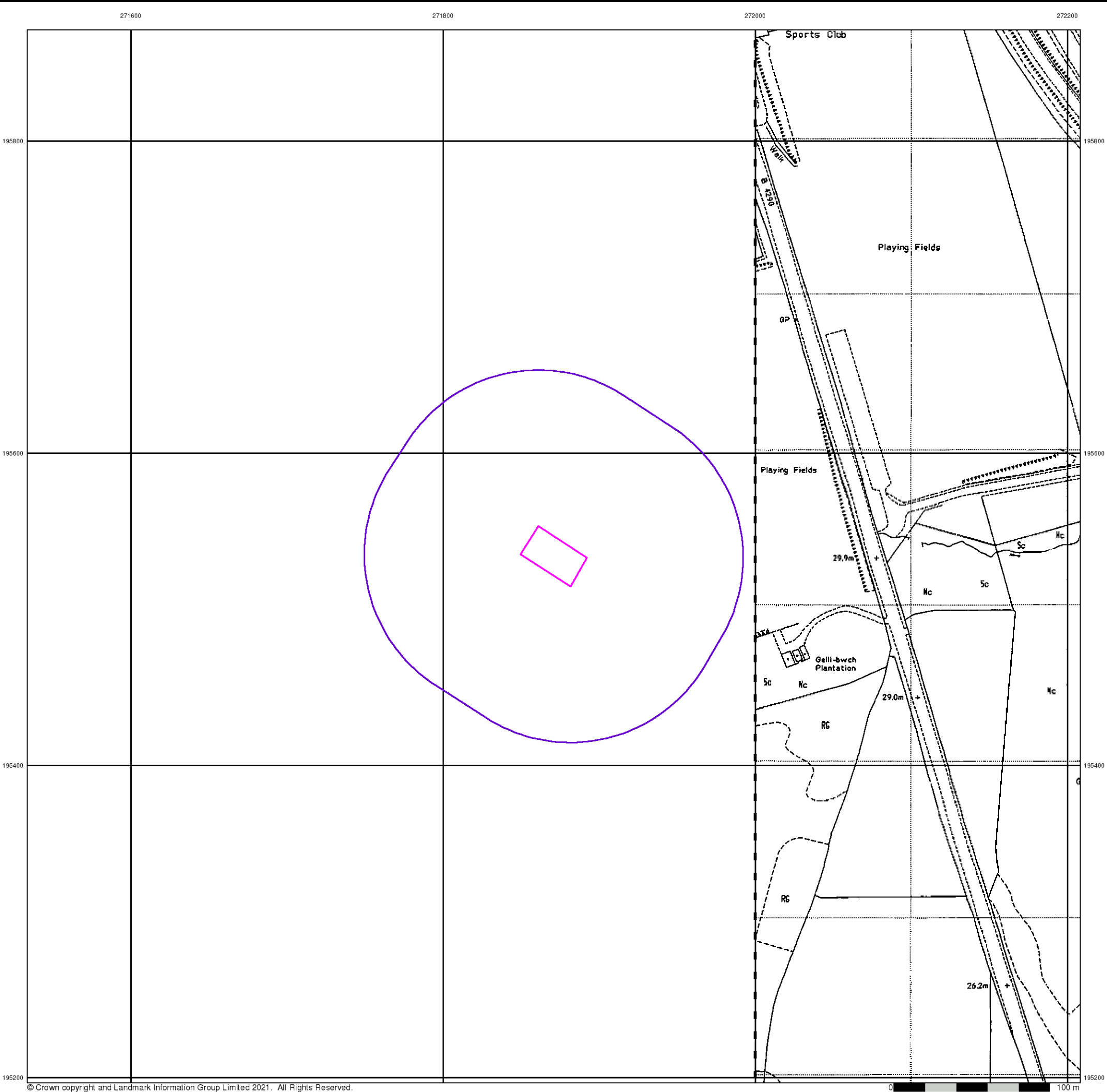


### Order Details

Order Number: 285963284\_1\_1  
Customer Ref: IN21655  
National Grid Reference: 271870, 195530  
Slice: A  
Site Area (Ha): 0.09  
Search Buffer (m): 100

### Site Details

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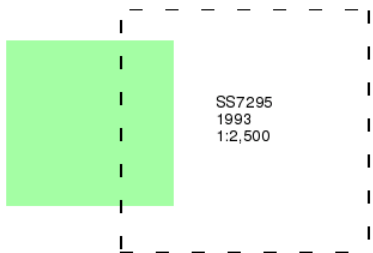
## Large-Scale National Grid Data

Published 1993

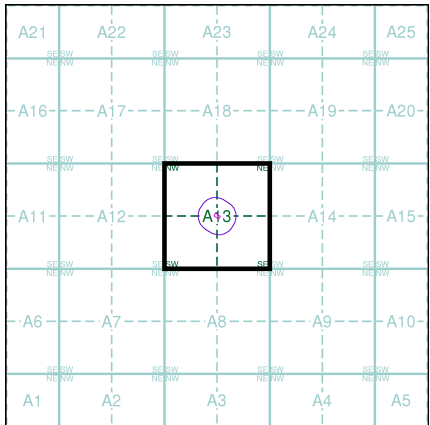
Source map scale - 1:2,500

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

### Map Name(s) and Date(s)



### Historical Map - Segment A13



### Order Details

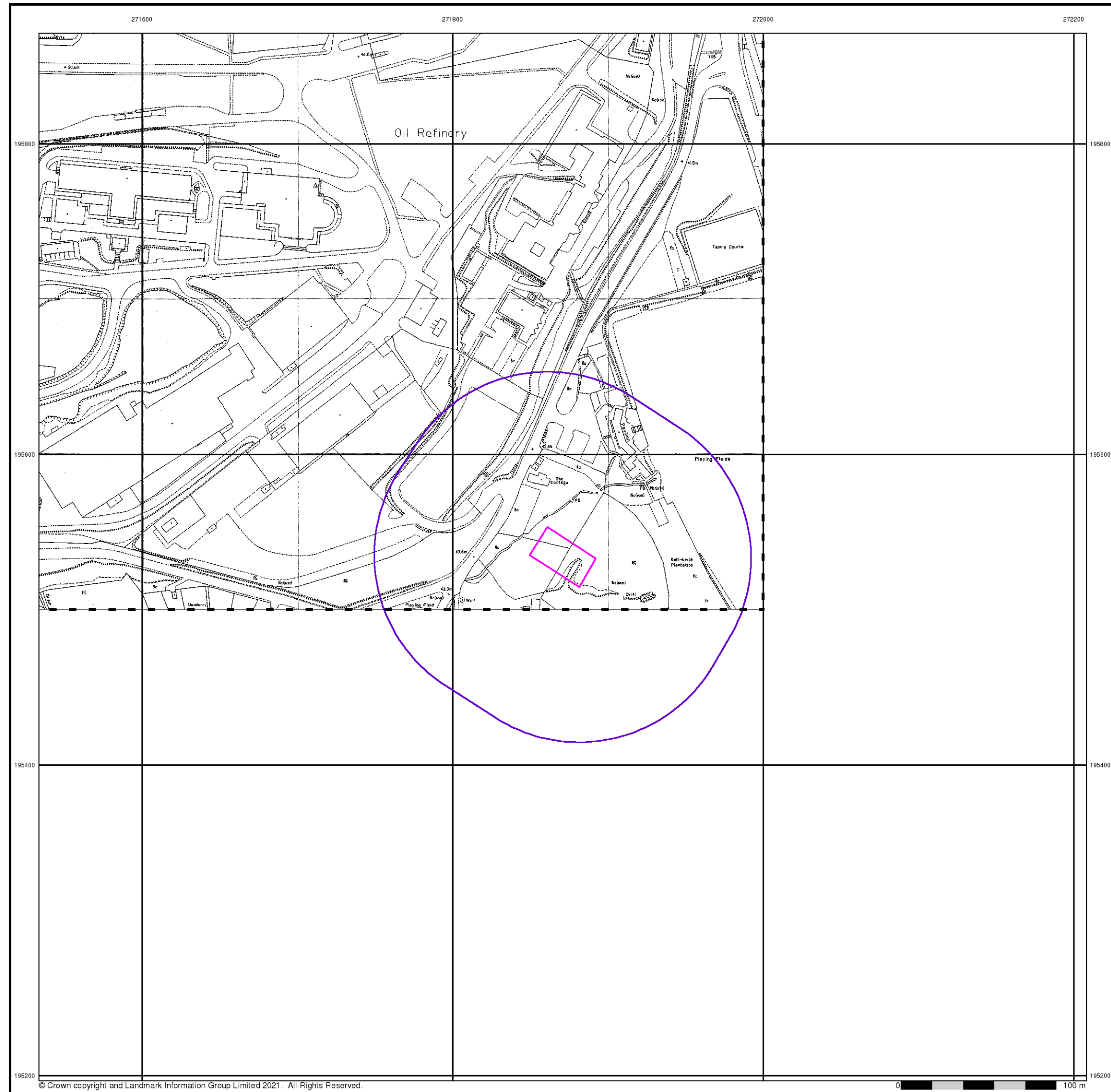
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Customer Ref: IN21655  
National Grid Reference: 271870, 195530  
Slice: A  
Site Area (Ha): 0.09  
Search Buffer (m): 100

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## Large-Scale National Grid Data

**Published 1993**

**Source map scale - 1:1,250**

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

### Map Name(s) and Date(s)

SS7195NE  
1993  
1:1,250

### Historical Map - Segment A13

### Order Details

|                          |                |
|--------------------------|----------------|
| Order Number:            | 285963284_1_1  |
| Customer Ref:            | IN21655        |
| National Grid Reference: | 271870, 195530 |
| Slice:                   | A              |
| Site Area (Ha):          | 0.09           |
| Search Buffer (m):       | 100            |

### Site Details

Llandarcy ACADemy of Sport, Access Road to Llandarcy Village, LLANDARCY, SA10 6JD

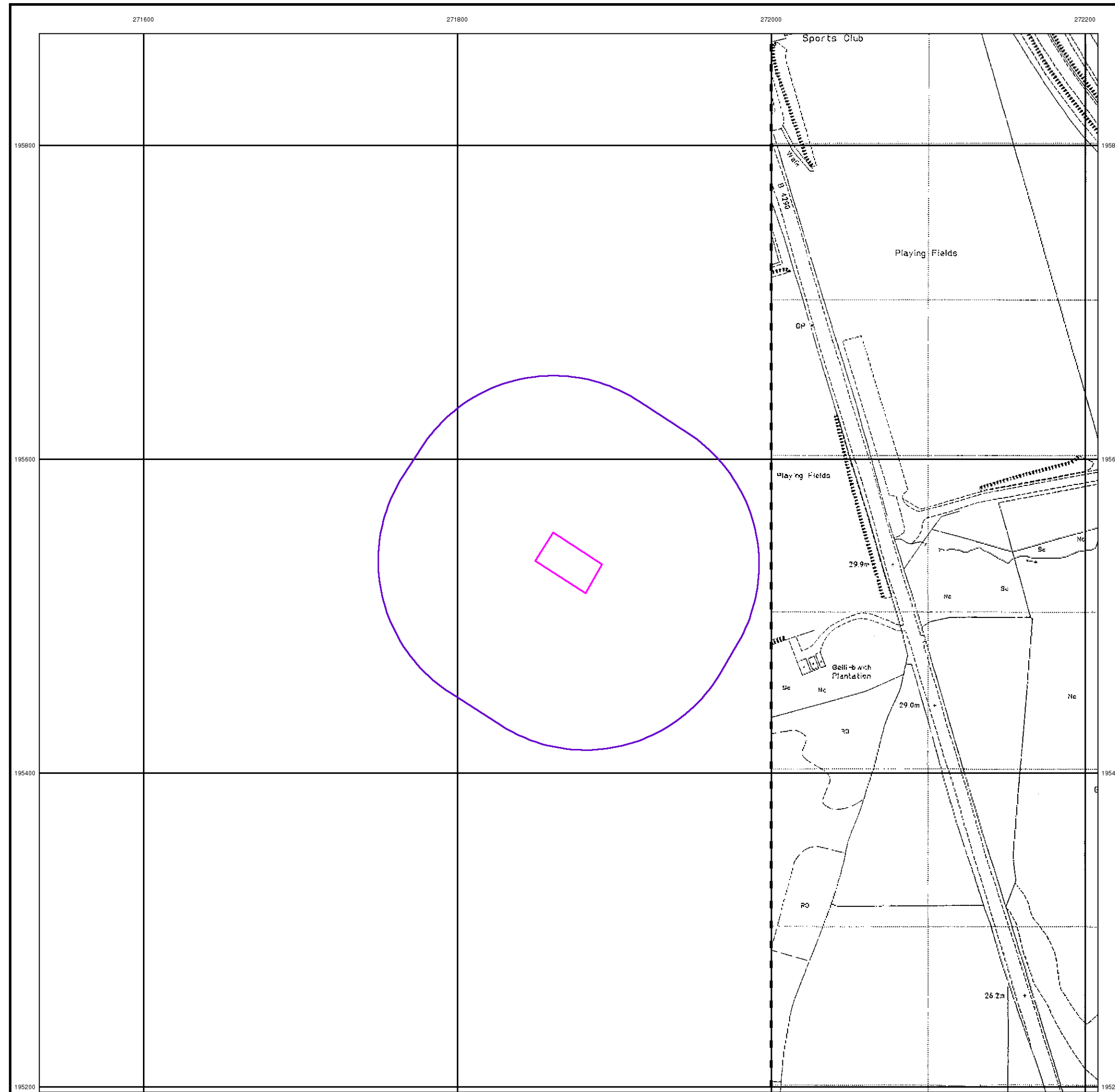
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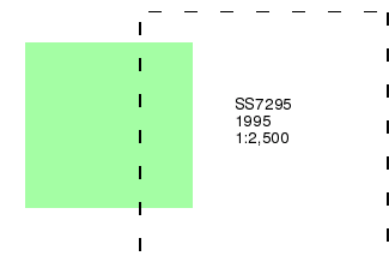
## Large-Scale National Grid Data

Published 1995

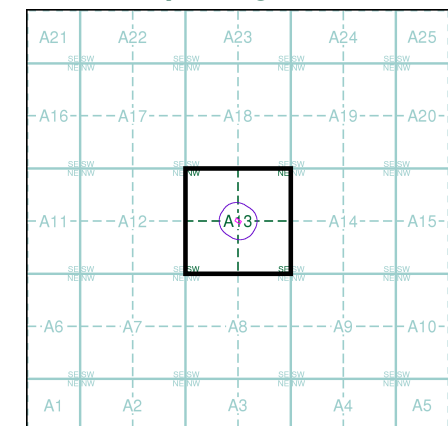
Source map scale - 1:2,500

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

### Map Name(s) and Date(s)



### Historical Map - Segment A13



### Order Details

Order Number: 285963284\_1\_1  
Customer Ref: IN21655  
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