

**WRITTEN SCHEME OF INVESTIGATION (WSI)
FOR A TOPOGRAPHICAL SURVEY**

AT

Pont ar Daf, Storey Arms, Brecon

Prepared for:

The National Trust

February 2017



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Figure 1. Survey Location

Figures 2-4: Design layout plans

Summary

This Written Scheme of Investigation (WSI) details the topographic survey to be undertaken by Archaeology Wales at the request of the National Trust. The topographic survey will allow the archaeological features associated with the Storey Arms public house and enclosure to be recorded prior to the proposed development of a car park facility at Pont-ar-Daf, Storey Arms, Brecon, Powys. The survey will be centred on NGR SN 98744 19898.

The application proposes that the site be redeveloped in an appropriate, sustainable way, to provide a total of 263 car parking spaces including spaces for disabled users, together with parking for minibuses and coaches and secure provision for cyclists (GGAT 2015).

A Desk Based Assessment was prepared by the Glamorgan Gwent Archaeological Trust (GGAT 2015) which summarised that five sites within the development area will be subject to a 'major' effect by the development, one to a 'minor' effect and seven to a 'beneficial' effect. Of these, three sites will be surveyed in detail using GPS.

A topographic plan will be produced of earthworks associated with the Storey Arms building, enclosure and this data will also be used to complement existing topographic data and Lidar data. A 3D view will also be generated from the survey data.

1. Introduction and project background

This Written Scheme of Investigation (WSI) details the topographic survey to be undertaken by Archaeology Wales at the request of the National Trust. The topographic survey will allow the archaeological features associated with the Storey Arms public house and enclosure to be recorded prior to the proposed development of a car park facility at Pont-ar-Daf, Storey Arms, Brecon, Powys. The survey will be centred on NGR SN 98744 19898 (Figure 1). Design information has been made available by the National Trust with regard to the lay out of the new Car Park facility (Figures 2-4).

The topographic survey has been commissioned in support of a planning application for redevelopment of the site (15/11835/FUL) following advice from the archaeological advisor at the Brecon Beacons National Park Authority (BBNPA).

This WSI has been prepared by Rowena Hart MCI(A) Project Manager, Archaeology Wales Ltd (henceforth - AW).

The methodology set out in this WSI will be agreed with the BBNPA Archaeologist, prior to the commencement of the work.

2. Site Description

The development area lies immediately to the east of the A470 and comprises an existing car park and an open area that was previously plantation woodland. The land slopes upwards to the north-east from approximately 435m and 490m OD.

The bedrock geology of the area comprises sandstone and argillaceous rocks overlain by superficial deposits of alluvial fan deposits of sands and gravels (BGS 2017).

3. Archaeological background

A detailed archaeological background to the area has been prepared as part of a Desk Based Assessment (GGAT 2015).

Known earthworks at the site comprise the remains of the earthwork platform and boundary banks/enclosures associated with the Storey Arms. Consequently, the survey will detail the topographic remains of three sites (site codes taken from GGAT 2015):

- PD006 Enclosure of old Storey Arms Pub Enclosure
- PD011/NT 860993 Storey Arms Enclosure
- 115060/725 Storey Arms Inn

In addition, other topographic features of potential archaeological interest may be contained within the site. These include:

- the military remains at the south-eastern boundary of the site
- a Roman Road, the possible line of which passes through the proposed development area.

4. Objectives

This WSI sets out a program of works to ensure that the topographic survey will provide sufficient detail to allow BBNPA to use the survey detail in their consideration of the car park development.

A written report comprising the topographic data will be compiled following the fieldwork and an archive of all collected data will be produced and deposited with an appropriate receiving institution.

5. Timetable of works

5.1. Fieldwork

The fieldwork will be undertaken at the convenience of the client. The work is proposed to start on 20 February 2017. Archaeology Wales will update BBNPA with the exact date.

5.2. Report delivery

The report will be submitted to the client and to BBNPA within a month of the completion of the fieldwork. A copy of the report will also be sent to the regional HER.

6. Fieldwork

6.1. Scope of survey

The survey will be undertaken on an area as outlined in Figure 1. It will ensure the detailed survey of all earthworks associated with the following sites:

PD006 Enclosure of old Storey Arms Pub Enclosure

PD011/NT 860993 Storey Arms Enclosure

115060/725 Storey Arms Inn Inn

In addition, the AW surveyor will be aware of potential for, and record of all morphology of potential archaeological origin which will be impacted by the proposed development, for example the military remains at the south-eastern boundary of the site and the possible Roman Road that passes through the proposed development area (see Section 3).

The surveyor will examine the potential for such remains where they lie within the development boundary but outside the survey area (Figure 1). This will be achieved by a walkover survey. Any potential features will be added to the total survey area at the discretion of the surveyor. Spot heights will be recorded using the same methodology as that outlined below.

6.2. Survey Methodology

The survey will be undertaken using a GeoMax GPS unit. All available mapping will be viewed prior to and during the site work. This will include historic mapping, existing topographic and Lidar data. Data points will be collected at a minimum of 0.5m spacing. The frequency will be increased over areas requiring higher resolution.

6.3. Recording

The data will be recorded onto a GeoMax logger using X-Pad survey software. The data will be downloaded as ASCII files and as DXF format and processed using LSS survey software of Surfer software.

The processed will be delivered as lines/polygons in a shapefile format, using GB OSNG coordinate reference system (OSGB 1936).

7. Monitoring

AW will make its survey fieldwork available for monitoring by the client (and their appointed agents) and the BBNPA Archaeologist. All site attendants should follow Health and Safety requirements. If site visit reports are made AW would be grateful to receive copies.

8. Post-fieldwork programme

8.1. Archive assessment

8.1.1. Site archive

An archive of archaeological site records will be prepared in accordance with *Management of Archaeological Projects* (English Heritage, 1991) Appendix 3.

The site archive will be deposited with an appropriate receiving organisation, in compliance with the ICON and CIfA Guidelines (*Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation* (2007)). Copies of the report and archive index will be deposited with the *National Monuments Record*, RCAHMW, Aberystwyth and the *Regional HER*.

In addition, an archive of records made during the post-fieldwork phase will be prepared to the specifications in *Management of Archaeological Projects*, (English Heritage, 1991) Appendix 6.

8.1.2. Analysis

Following a review of the survey data it will be processed and displayed to best present the features associated with the Storey Arms Inn. This will result in the following inclusions in the final report:

- Non-technical summary
- Location plan showing the area covered by the survey
- Written description and interpretation of all features mapped, including their character, function, potential dating and relationship.
- Topographic representation of the detailed survey along with its integration into existing topographic and Lidar data
- 3D representation of the topographic data.
- A discussion of the local context of the remains by means of reviewing historical maps, and recent topographical survey data, Lidar data and the recently prepared Desk Based Assessment (GGAT 2015).
- An archive list including data file types. This will include a statement of the intent to deposit, and location of deposition, of the archive.

8.2. Reports and archive deposition

8.2.1. Report to client and LPA

A report, comprising a synthesis of data gathered, will be submitted upon completion of the survey.

Subsequently, the report will be submitted to the LPA for approval.

8.2.2. Additional reports

Following approval, and after an appropriate period has elapsed, copies of the report will be deposited with the relevant county Historical Environment Record, the National Monuments Record and, if appropriate, Cadw.

8.2.3. Summary reports for publication

Short archaeological reports will be submitted for publication in relevant journals; as a minimum, a report will be submitted to the annual publication of the regional CBA group or equivalent journal.

8.2.4. Notification of important remains

Where it is considered that remains have been revealed that may satisfy the criteria for statutory protection, AW will submit preliminary notification of the remains to Cadw.

8.2.5. Archive deposition

The survey data will be archived as part of the report but also as raw data in the form of DXF and ASCII files. The research archive will, whenever appropriate, be deposited with a suitable receiving institution, usually the relevant Local Authority museums service. The site archive will be deposited with an appropriate institution. A digital copy of the archive will be deposited with the RCAHMW.

9. Staff

The project will be managed by Rowena Hart MCIfA (AW Project Manager) and the fieldwork undertaken by Louis Stafford (Archaeology Wales). Any alteration to staffing before or during the work will be brought to the attention of BBNPA and the client.

Additional Considerations

10. Health and Safety

10.1. Risk assessment

Prior to the commencement of work AW will carry out and produce a formal Health and Safety Risk Assessment in accordance with *The Management of Health and Safety Regulations* 1992. A copy of the risk assessment will be kept on site and be available for inspection on request. A copy will be sent to the client (or their agent as necessary) for their information. All members of AW staff will adhere to the content of this document.

10.2. Other guidelines

AW will adhere to best practice with regard to Health and Safety in Archaeology as set out in the FAME (Federation of Archaeological Managers and Employers) health and safety manual *Health and Safety in Field Archaeology (2002)*.

11. Insurance

AW is fully insured for this type of work, and holds Insurance with Aviva Insurance Ltd and Hiscox Insurance Company Limited through Towergate Insurance. Full details of these and other relevant policies can be supplied on request.

12. Quality Control

12.1. Professional standards

AW works to the standards and guidance provided by the *Chartered Institute for Archaeologists*. AW fully recognise and endorse the Chartered Institute for Archaeologists' *Code of Conduct*, *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology* and the *Standard and Guidance for archaeological watching briefs* currently in force. All employees of AW, whether corporate members of the Chartered Institute for Archaeologists or not, are expected to adhere to these Codes and Standards during their employment.

12.2. Project tracking

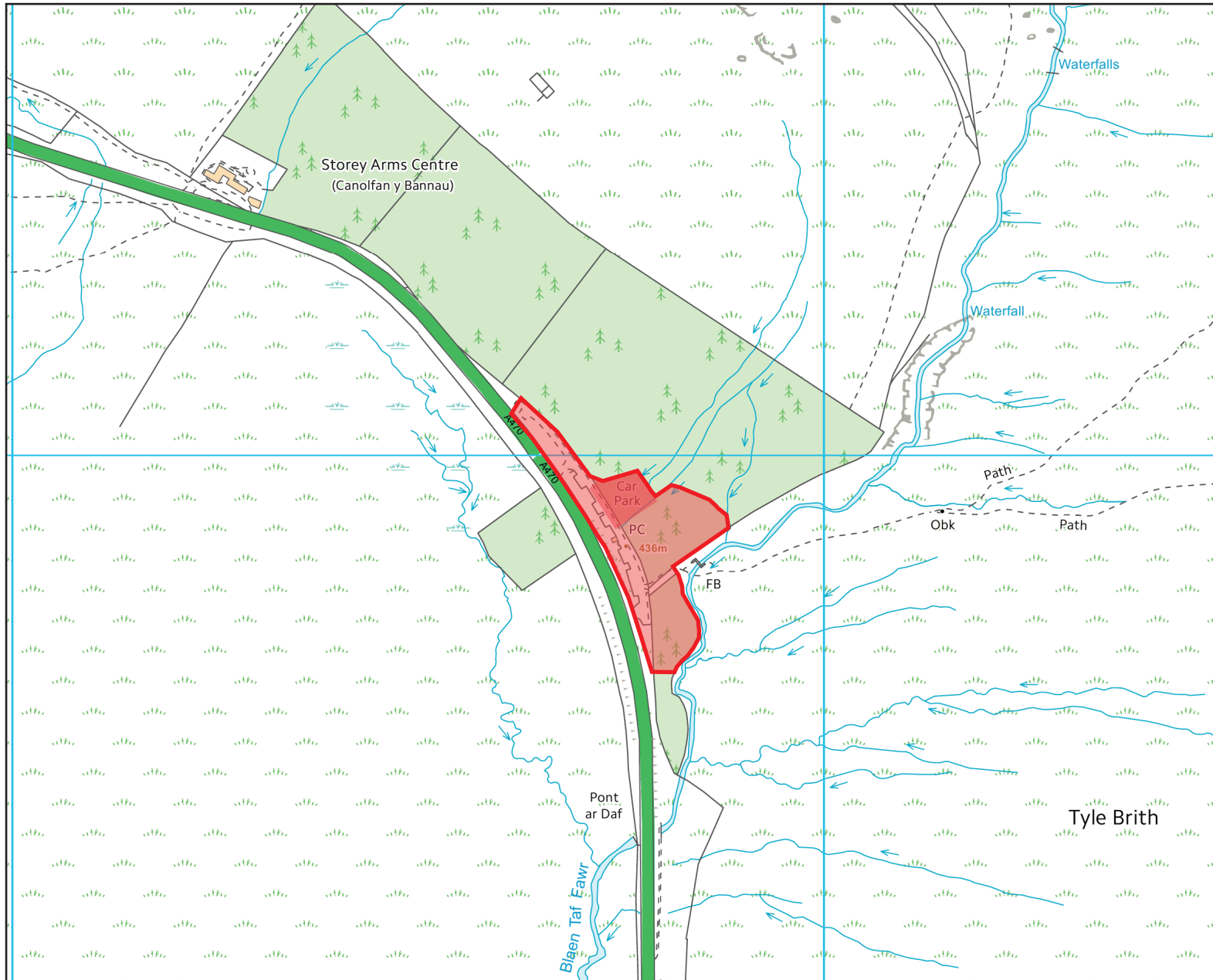
The designated AW manager will monitor all projects in order to ensure that agreed targets are met without reduction in quality of service.

13. Arbitration

Disputes or differences arising in relation to this work shall be referred for a decision in accordance with the Rules of the Chartered Institute of Arbitrators' *Arbitration Scheme for the Institute for Archaeologists* applying at the date of the agreement.

14. References

GGAT, 2015, *Pont ar Daf Car park, Brecon, Powys: Archaeological Desk Based Assessment*. GGAT Report **2015/063**



Site boundary

Figure 1. Extent of detailed topographic survey



- LEGEND**
- MAJOR CONTOUR - 0.50m INTERVALS
 - MINOR CONTOUR - 0.25m INTERVALS
 - PROPOSED SW DRAINAGE - UTILISING EXISTING CONNECTION/ DISCHARGE POINTS
 - PROPOSED SW DRAINAGE - ATTENUATED FLOWS TO WATERCOURSE TO THE SOUTH EAST. - RESTRICTED TO GREENFIELD RUN OFF RATE
 - SHALE
 - HIGHWAY GULLY
 - INSPECTION CHAMBER (4000)
 - MANHOLE
 - ALTON - HCS PRECAST HEADWALL
 - 150mm PERFORATED PIPE

- NOTES**
- 'PURPLE' COLOURED DRAINAGE TO MAKE USE OF EXISTING SURFACE WATER DRAINAGE CONNECTION. PROPOSED DRAINAGE TO REMAIN UNRESTRICTED EXISTING SWING AREA THAT DRAIN TO EXISTING DRAINAGE SYSTEM IS 300L/S. WHERE AN ALLOWANCE FOR A WORST CASE INFILL INTERESTY OF 50mm/HR PROVIDES A DISCHARGE RATE OF 60L/S. THE PROPOSED SWING AREA TO DRAIN TO EXISTING DRAINAGE IS 600L/S. AN INCREASE OF 70L/S. PROPOSED FLOWS BASED UPON A 50mm/HR WORST CASE INFILL INTERESTY A DISCHARGE RATE OF 60L/S IS ADVISED. AN INCREASE OF 60L/S. A PORTION OF THE EXISTING CAR PARK WHICH CURRENTLY DRAINS TO THE EXISTING SW SYSTEM (DOWNHILL AREA) WILL BE DRAINED TO THE POND THIS REDUCES THE 'IMPEDIMENT' AREA TO DRAIN TO THE EXISTING SYSTEM.
 - PROPOSED SURFACE WATER TO INCORPORATE PERCOLATION INTERCEPTORS
 - ALL LAND DRAINAGE INSPECTION CHAMBERS/ MANHOLES TO INCORPORATE 300mm GULLIES
 - ALL DRAINAGE IS SUBJECT TO DETAILED DESIGN
 - NO PERCOLATION INTERCEPTOR REQUIRED TO SMALL PAVING AREAS. COVERED STONE/PAVING WILL PROVIDE MICRO-STRUCTURE WHICH CONTAINS HYDROPHOBIC TRAP CLEANING THE WATER PRIOR TO DISCHARGE TO THE POND
 - ALL PERFORATED PIPES TO HAVE RIDDING PIPES

A 12 12 14 ENGINEERING UPDATED TO SUIT REVISED SITE LAYOUT

Revisions

Project: PONT AR DAF PROPOSED CAR PARK

Client: NATIONAL TRUST

Drawing: ENGINEERING PLAN

Scale: 1:200@A1 Date: NOVEMBER 2014 Drawn by: NC

Drawing No: 10039-101_1 Rev: A

Drawn by: NC

Rev: A

Rev: A

Rev: A

Rev: A

Rev: A

Rev: A

Rev: A

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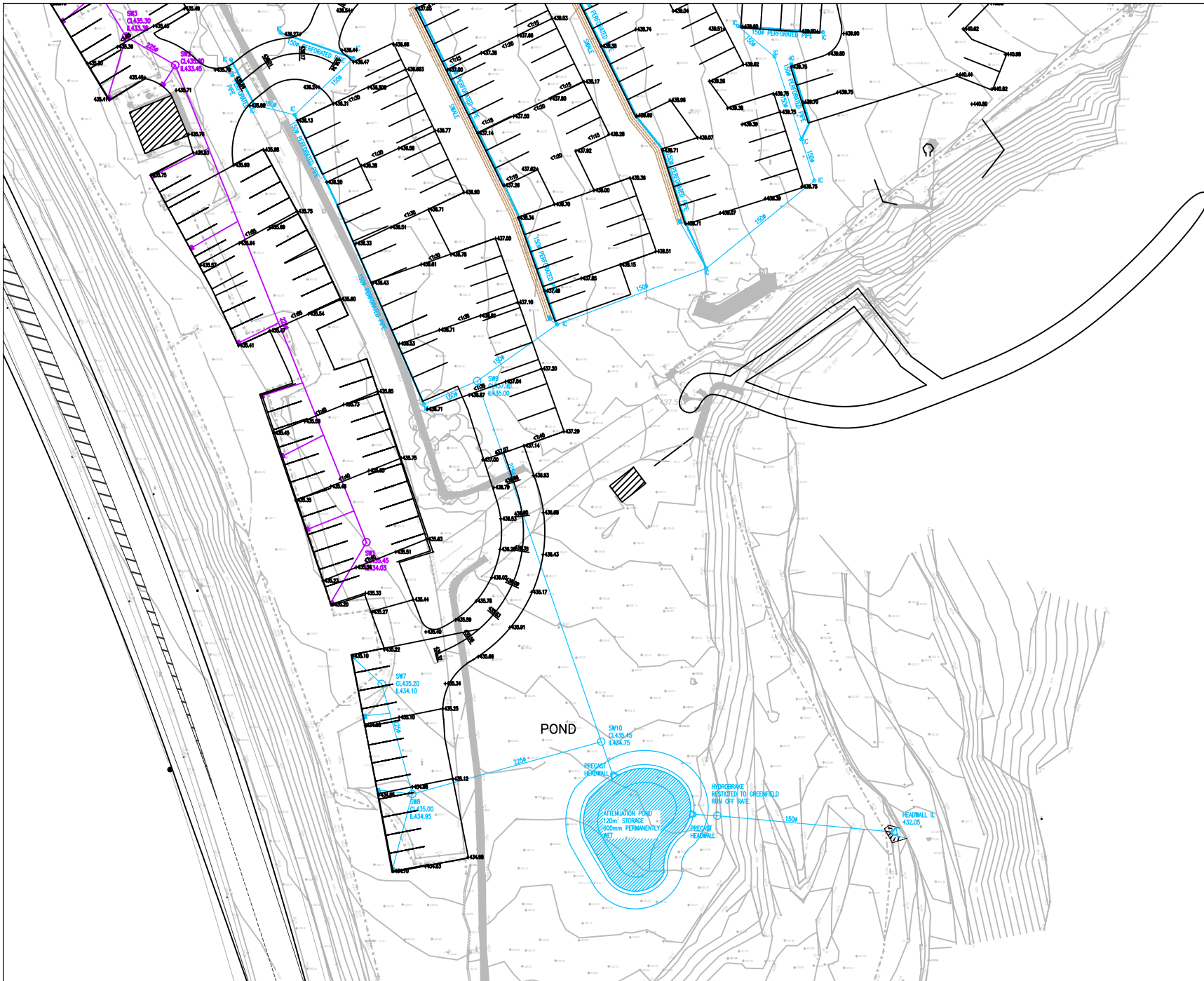
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 - SWALE
 - HIGHWAY GULLY
 - INSPECTION CHAMBER (450)
 - MANHOLE
 - ALTHON - HC3 PRECAST HEADWALL
 - 150mm PERFORATED PIPE

NOTES

- * PUPPLE COLOURED DRAINAGE TO MAKE USE OF EXISTING SURFACE WATER DRAINAGE CONNECTION. PROPOSED DRAINAGE TO REMAIN UNDEVELOPED. EXISTING TRUNK AREA THAT DRAINS TO EXISTING DRAINAGE SYSTEM IS 'THROUGH' WITHIN AN ALLOWANCE FOR A ROOF EDGE PARAPET INTERITY OF 50mm/AN PROVIDES A DISCHARGE RATE OF 50L/S. THE PROPOSED TRUNK AREA TO DRAIN TO EXISTING DRAINAGE IS 450mm IN HEIGHT OF 70%. PROPOSED FLOWS BASED UPON A 10mm/HR ROOF EDGE PARAPET. A DISCHARGE RATE OF 50L/S IS ADVISED. AN INCREASE OF 10L/S/A PORTION OF THE EXISTING CAR PARK WHICH CURRENTLY DRAINS TO THE EXISTING SW SYSTEM EQUIPMENT AREA WILL BE DRAINED TO THE POND THIS BEING THE 'IMPROVEMENT' AREA TO JOIN TO THE EXISTING SYSTEM.
- * PROPOSED SURFACE WATER TO DISCHARGE PERIOD. INSPECTION CHAMBERS ALL LAND DRAINAGE INSPECTION CHAMBERS/ MANHOLES TO BE CONFORME WITH SUDS CODES.
- * ALL DRAINAGE IS SUBJECT TO DETAILED DESIGN.
- * NO PERIOD INSPECTION REQUIRED TO GRAB PONDING AREA.
- * COLOURED DRAINAGE WILL HOUSE SCUM-INJECTION WHICH CONTAINS HYDROCARBONS. THIS CLEANING THE WATER PRIOR TO DISCHARGING TO THE POND.
- * ALL PERFORATED PIPES TO HAVE HOODING POINTS.

B 13.12.18 ENGINEERING UPDATED TO SUIT REVISED SITE LAYOUT
 A 30.03.19 DISCHARGE HEADWALL RELOCATED TO SUITABLE LOCATION ON WATERCOURSE BANK
 Revisions

Project: PONT AR DAF
 PROPOSED CAR PARK

Client: NATIONAL TRUST

Drawing: ENGINEERING PLAN

Scale: 1:200@A1 Date: NOVEMBER 2014 Drawn by: NC

Drawing No: 10039-101_3 Rev: B

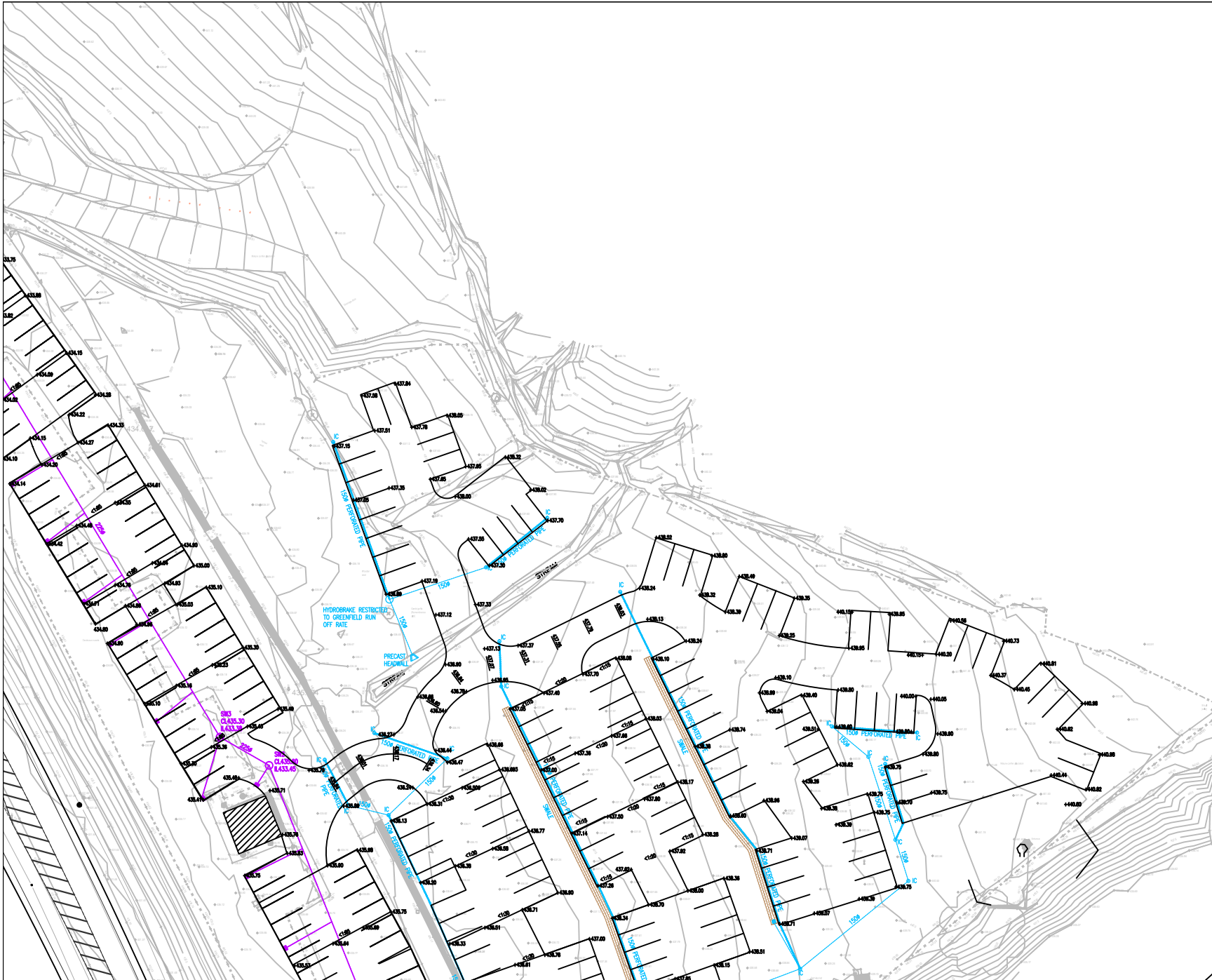
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LEGEND

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- 150mm PERFORATED PIPE

NOTES

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- PROPOSED SURFACE WATER TO INCORPORATE PERFORATED MANHOLES/INSPECTION CHAMBERS/ MANHOLES TO INCORPORATE 300mm GULLY
- ALL DRAINAGE IS SUBJECT TO DETAILED DESIGN
- NO PERFORATED MANHOLES/INSPECTION CHAMBERS/ MANHOLES TO BE USED TO DRAIN TO THE POND THIS REDUCING THE 'IMPROVED' AREA TO DRAIN TO THE EXISTING SYSTEM.
- ALL PERFORATED PIPES TO HAVE BODGING POINTS

A 13.12.16
Revisions

ENGINEERING UPDATED TO SUIT REVISED SITE LAYOUT

Project: **PONT AR DAF PROPOSED CAR PARK**

Client: **NATIONAL TRUST**

Drawing: **ENGINEERING PLAN**

Scale: 1:250@A1 Date: NOVEMBER 2014 Drawn by: NC

Drawing No: **10039-101_2** Rev: A

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