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## Plan Overview

*A Data Management Plan created using DMPonline*

**Title:** An Archaeological Excavation of Cromwell House and The Manor House, Royal Fort Gardens, Bristol

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**Template:** University of Bristol General Template

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### Project abstract:

The Department of Anthropology and Archaeology, University of Bristol, will undertake a three-week training and research excavation within the Royal Fort Gardens, Bristol. The project focuses on the site of Cromwell House, a 17th-century domestic structure thought to overlie or abut the southern boundary of the Civil War Royal Fort constructed under Prince Rupert in 1643.

Unlike other areas of the Royal Fort, Cromwell House and its surrounding landscape remain poorly documented, with limited archival material and unarchived excavations from 2001 providing only partial evidence. The present investigation aims to clarify the structural and chronological relationship between the fortifications and later post-Civil War occupation, testing aerial and geophysical anomalies that may correspond to the fort wall and associated features.

Excavation will be conducted to current ClfA standards, with continuous photogrammetric recording, stratigraphic excavation, and detailed artefact recovery. Results will be integrated with previous University and BaRAS investigations to enhance the archaeological record of the site.

The project contributes to the South West Archaeological Research Framework by advancing understanding of Civil War defences, their reuse, and their transformation into domestic and landscaped spaces. Outcomes will include a digital archive, public outreach events, and a comprehensive excavation report forming part of an ongoing University research and teaching programme.

**ID:** 187977

**Last modified:** 01-07-2026

### Copyright information:

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# An Archaeological Excavation of Cromwell House and The Manor House, Royal Fort Gardens, Bristol

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## Project Summary

**Provide a brief description of the project and the research being carried out. State if the research is part of a larger project, if there are any funders involved, and how data fits in.**

This project comprises a three-week archaeological research and training excavation conducted by the University of Bristol's Department of Anthropology and Archaeology within the Royal Fort Gardens, Bristol. The excavation focuses on the site of Cromwell House, a 17th-century domestic structure situated on or near the southern boundary of the Civil War Royal Fort constructed under Prince Rupert in 1643.

The project forms part of the Department's ongoing Royal Fort research programme, which integrates excavation, survey, and archival research to investigate the transformation of St Michael's Hill from a military stronghold to an 18th-century landscaped estate. It also supports undergraduate field training and contributes to the University's wider teaching and research strategy.

The research is fully funded by the University of Bristol through departmental fieldwork and teaching budgets. The project will generate stratigraphic, spatial, artefactual, and environmental datasets, including digital photogrammetric models, plans, photographs, and excavation records. These data will form a comprehensive digital and physical archive deposited with the University of Bristol Data Repository (data.bris) and, where appropriate, with the Archaeology Data Service (ADS) to ensure long-term accessibility and preservation.

All data generated by the project will be owned and managed by the University of Bristol: Department of Anthropology and Archaeology. The Department's Collections Manager will oversee long-term curation under the Department of Anthropology and Archaeology Collections (DAAC) accession system, ensuring compliance with University and sector data management standards.

## Data Types

### What types of data will be involved?

The data collected and produced will be the following:

- Geospatial survey data:
  - Total Station and/or GNSS GPS data.
  - UAV data.
  - Find and excavation data.
  - Geophysical survey data.
  - Created geospatial data from plans.
- Vector Drawings:
  - Plans and sections of buildings and trenches where applicable.
  - Harris Matrix for excavations where applicable.
  - Extended Harris Matrix for reconstructions.
  - Drawings of artefacts.
- Raster Images:
  - Photographs from UAV surveys.
  - Photographs from terrestrial surveys and excavations.
  - Photographs of artefacts.
  - Rendered images of reconstructions.
- Documents:
  - Reports from invasive and non-invasive archaeological work.
  - Reports from lighting analysis.
  - Reports from photogrammetry surveys.
  - Reports from structural analysis.
  - Reports from terrestrial and aerial surveys.
  - Reports of reconstruction paradata.
- Tabular data:
  - Database of building and landscape survey data.
  - Database of excavation and find data
  - Results from structural analysis.
  - Results from lighting analysis.
  - Calibration data for Photogrammetry.
  - Metadata for files.
  - File tree data for project folder.
- Three-Dimensional Reconstructions and Records
  - Three-dimensional model files.
  - Texture files for three-dimensional models.

### What file formats will be used?

Data will be stored, recorded, and organised according to the best practices outlined by the Archaeology Data Service (ADS) for the storage and archiving of digital data, including raster and vector data, geophysical data, geospatial data, three-dimensional data, and alpha-numeric documentary data.

| Data Type                                                             | Archival File Types                                                                                                                            |
|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Alpha-numerical data                                                  | Plain Text (.txt)<br>Delineated Text (.csv)                                                                                                    |
| Documentary data that may consist of just text, or text and pictures. | Plain Text (.txt)<br>Portable Document Format (.pdf/A)                                                                                         |
| Raster imagery data                                                   | Tag Image File Format (.tiff)<br>Portable Network Graphics(.png)<br>Adobe Digital Negative(.dng)                                               |
| Vector imagery data                                                   | Scalable Vector Graphics (.svg)<br>Portable Document Format (.pdf/A)<br>Drawing Exchange Format (.dxf)<br>Graph Modelling Language (.xgml)     |
| Geodatabase                                                           | Shapefiles (.shp) [this is accompanied by up to eleven reference files that are equally archival]<br>Delineated Text (.csv)<br>GeoTIFF (.tiff) |
| Three-Dimensional models (Records or Reconstructions)                 | Wavefront (.obj)<br>Stereolithography (.stl)                                                                                                   |
| Code                                                                  | R Code (.R)                                                                                                                                    |
| Compressed Files                                                      | .zip                                                                                                                                           |
| Metadata & Paradata                                                   | Delineated Text (.csv)<br>Plain Text (.txt)<br>Portable Document Format (.pdf/A)                                                               |

#### What will be the approximate size of the files?

- 0 - 50 GB

| Data Type                                                             | Estimated File Size (Uncompressed) |
|-----------------------------------------------------------------------|------------------------------------|
| Alpha-numerical data                                                  | < 02 GB                            |
| Documentary data that may consist of just text, or text and pictures. | < 02 GB                            |
| Raster imagery data                                                   | < 20 GB                            |
| Vector imagery data                                                   | < 05 GB                            |
| Geodatabase                                                           | < 05 GB                            |
| Three-Dimensional models (Records or Reconstructions)                 | < 40 GB                            |
| Metadata & Paradata                                                   | < 01 GB                            |
| <b>Total (Uncompressed)</b>                                           | < 75GB                             |
| <b>Total (Compressed)</b>                                             | ~ 35 GB                            |

## Data Capture

#### How will the data be generated and/or gathered?

Data will be generated through a combination of archaeological excavation, survey, and recording activities conducted in accordance with the Chartered Institute for Archaeologists (CIfA) *Standards and Guidance for Excavation* (2023). All excavation will be recorded stratigraphically using context sheets, drawings, written registers, and digital datasets.

Spatial data will be gathered using GNSS and total station survey equipment to record georeferenced points, plans, and sections tied to Ordnance Survey National Grid and Datum (OSGM15/OSTN15). Photogrammetric recording will be employed throughout the excavation to produce detailed 3D models of features, deposits, and trenches. UAV (drone) imagery will supplement site documentation where permitted.

Artefactual data will be recorded through context-based cataloguing, with small finds and samples individually logged and spatially referenced. Environmental and soil samples will be collected, processed, and recorded following Historic England guidelines.

Supporting datasets, including geophysical survey results, aerial imagery, and historic mapping, will be integrated into a unified GIS environment (QGIS/ESRI) to facilitate spatial analysis. All data will be captured digitally in open, non-proprietary formats where possible (e.g. .CSV, .TIFF, .DNG, .OBJ, .PDF/A) and linked to the project's DAAC accession record for consistency and long-term management.

## Data Storage and Preservation

#### How will the data be backed up?

All data will be stored in The University of Bristol Research Data Storage Facility (RDSF), which provides secure, long-term storage for research data. This major investment provides nightly backup of all data, with further resilience provided by three geographically distinct storage locations. A tape library is used for backup purposes and also for long-term, offline data storage. Only authorised users can access data stored within the RDSF. The RDSF is managed by Bristol's Advanced Computing Research Centre (ACRC) which has a dedicated steering group and a rigorous data storage policy ([https://www.acrc.bris.ac.uk/acrc/RDSF\\_policy.pdf](https://www.acrc.bris.ac.uk/acrc/RDSF_policy.pdf)). The RDSF upholds and reinforces Bristol's wider Information Security Policy([www.bris.ac.uk/infosec/policies/docs/isp-01.pdf](http://www.bris.ac.uk/infosec/policies/docs/isp-01.pdf)).

#### Do you have security procedures in place for sensitive data?

No sensitive research data is anticipated for collection.

### What are your plans for long-term storage of the data?

Once archived all data will be stored in The University of Bristol Research Data Storage Facility (RDSF), which provides secure, long-term storage for research data. This major investment provides nightly backup of all data, with further resilience provided by three geographically distinct storage locations. A tape library is used for backup purposes and also for long-term, offline data storage. Only authorised users can access data stored within the RDSF. The RDSF is managed by Bristol's Advanced Computing Research Centre (ACRC) which has a dedicated steering group and a rigorous data storage policy ([https://www.acrc.bris.ac.uk/acrc/RDSF\\_policy.pdf](https://www.acrc.bris.ac.uk/acrc/RDSF_policy.pdf)). The RDSF upholds and reinforces Bristol's wider Information Security Policy ([www.bris.ac.uk/infosec/policies/docs/isp-01.pdf](http://www.bris.ac.uk/infosec/policies/docs/isp-01.pdf)).

### Data Organisation

#### How will data be organised?

| Primary Folder - Level One | Level Two      | Level Three     | Level Four | Level Five | Level Six |
|----------------------------|----------------|-----------------|------------|------------|-----------|
| 3D_MODELING                |                |                 |            |            |           |
|                            | PROJECT FOLDER |                 |            |            |           |
|                            |                | EXPORTED MODELS |            |            |           |
|                            |                |                 | #0         |            |           |
|                            |                |                 |            | CAMERAS    |           |
|                            |                |                 |            | LIGHTS     |           |
|                            |                |                 | REF_DIGI   |            |           |
|                            |                |                 |            | REF_CAD    |           |
|                            |                |                 |            | REF_DIGI   |           |
|                            |                |                 |            | REF_HUMAN  |           |
|                            |                |                 |            | REF_GEOREF |           |
|                            |                |                 | LANDSCAPE  |            |           |
|                            |                |                 |            | PHASE01    |           |

|  |  |  |            |                      |                                                                          |
|--|--|--|------------|----------------------|--------------------------------------------------------------------------|
|  |  |  | COMPONENTS |                      |                                                                          |
|  |  |  |            | PHASE01_STRUCTURE    |                                                                          |
|  |  |  |            |                      | STRUCTURE_STRUCTURAL AREA REINFORCEMENT AREA REIN                        |
|  |  |  |            |                      | STRUCTURE_STRUCTURAL BEAMS SYSTEMS_STRUCTURAL FRAMING                    |
|  |  |  |            |                      | STRUCTURE_STRUCTURAL COLUMNS_STRUCTURAL COLUMNS                          |
|  |  |  |            |                      | STRUCTURE_STRUCTURAL CONNECTIONS_STRUCTURAL CONNECTIONS                  |
|  |  |  |            |                      | STRUCTURE_STRUCTURAL AREA REINFORCEMENT FABRIC REINFORCEMENT FABRIC REIN |
|  |  |  |            |                      | STRUCTURE_STRUCTURAL FOUNDATIONS_STRUCTURAL FOUNDATIONS                  |
|  |  |  |            |                      | STRUCTURE_STRUCTURAL FRAMING_STRUCTURAL FRAMING                          |
|  |  |  |            |                      | STRUCTURE_STRUCTURAL PATH REINFORCEMENT_PATH REINFORCEMENT_PATH REIN     |
|  |  |  |            |                      | STRUCTURE_STRUCTURAL REINFORCEMENT_PATH REINFORCEMENT_PATH REIN          |
|  |  |  |            |                      | STRUCTURE_STRUCTURAL STIFFENERS_STRUCTURAL STIFFENERS                    |
|  |  |  |            |                      | STRUCTURE_STRUCTURAL TRUSSES_STRUCTURAL TRUSSES                          |
|  |  |  |            | PHASE01_ARCHITECTURE |                                                                          |
|  |  |  |            |                      | ARCHITECTURE_CASEWORK_CASEWORK                                           |
|  |  |  |            |                      | ARCHITECTURE_CEILINGS_CEILINGS                                           |
|  |  |  |            |                      | ARCHITECTURE_COLUMNS_COLUMNS                                             |
|  |  |  |            |                      | ARCHITECTURE_DOORS_DOORS                                                 |
|  |  |  |            |                      | ARCHITECTURE_FASCIAES_FASCIAES                                           |
|  |  |  |            |                      | ARCHITECTURE_FLOORS_FLOORS                                               |
|  |  |  |            |                      | ARCHITECTURE_FURNITURE_FURNITURE                                         |
|  |  |  |            |                      | ARCHITECTURE_GUTTERS_GUTTERS                                             |
|  |  |  |            |                      | ARCHITECTURE_LANDINGS_LANDINGS                                           |
|  |  |  |            |                      | ARCHITECTURE_RAILINGS_RAILINGS                                           |
|  |  |  |            |                      | ARCHITECTURE_RAILINGS_STAIRS                                             |
|  |  |  |            |                      | ARCHITECTURE_RAILINGS_STAIRS                                             |
|  |  |  |            |                      | ARCHITECTURE_RAMP_RAMP                                                   |
|  |  |  |            |                      | ARCHITECTURE_ROADS_ROADS                                                 |
|  |  |  |            |                      | ARCHITECTURE_ROOF SOFFITS                                                |
|  |  |  |            |                      | ARCHITECTURE_ROOFS_ROOFS                                                 |
|  |  |  |            |                      | ARCHITECTURE_ROOMS_ROOMS                                                 |
|  |  |  |            |                      | ARCHITECTURE_STAIRS_STAIRS                                               |
|  |  |  |            |                      | ARCHITECTURE_STAIRS_STAIRS                                               |
|  |  |  |            |                      | ARCHITECTURE_SUPPORT_STAIRS                                              |
|  |  |  |            |                      | ARCHITECTURE_SUPPORTS_RAILINGS                                           |
|  |  |  |            |                      | ARCHITECTURE_TERMINATION                                                 |
|  |  |  |            |                      | ARCHITECTURE_WALL SWEEPERS                                               |
|  |  |  |            |                      | ARCHITECTURE_WALLS_WALLS                                                 |
|  |  |  |            |                      | ARCHITECTURE_WINDOWS_WINDOWS                                             |
|  |  |  |            | OTHER                |                                                                          |
|  |  |  |            |                      | OTHER_PIPE ACCESSORIES_PIPE ACCESSORIES                                  |
|  |  |  |            |                      | OTHER_PIPE FITTINGS_PIPE FITTINGS                                        |
|  |  |  |            |                      | OTHER_PIPE INSULATIONS_PIPE INSULATIONS                                  |
|  |  |  |            |                      | OTHER_PIPES_PIPES                                                        |
|  |  |  |            |                      | OTHER_PIPES_PIPE CURVES                                                  |
|  |  |  |            |                      | OTHER_PIPING SYSTEMS_PIPING SYSTEMS                                      |

|              |                                     |                    |         |            |  |
|--------------|-------------------------------------|--------------------|---------|------------|--|
|              |                                     | MATERIAL LIBRARIES |         |            |  |
|              |                                     | RENDER OUTPUT      |         |            |  |
|              |                                     | RENDER PRESETS     |         |            |  |
|              |                                     | SCENE ASSETS       |         |            |  |
|              |                                     |                    | IMAGES  |            |  |
|              |                                     |                    |         | ANIMATIONS |  |
|              |                                     |                    |         | IMAGES     |  |
|              | STRUCTURAL ANALYSIS<br>STUDY FOLDER |                    |         |            |  |
|              |                                     | EXPORT             |         |            |  |
|              |                                     | IMPORT             |         |            |  |
|              |                                     | PARTS              |         |            |  |
|              |                                     | ASSEMBLIES         |         |            |  |
|              |                                     | REPORTS            |         |            |  |
|              | LIGHTING STUDY<br>FOLDER            |                    |         |            |  |
|              |                                     | MODELS             |         |            |  |
|              |                                     | RESULTS            |         |            |  |
|              |                                     |                    | DATA    |            |  |
|              |                                     |                    | FIGURES |            |  |
| 3D_RECORDING |                                     |                    |         |            |  |

|               |                 |                  |  |  |  |
|---------------|-----------------|------------------|--|--|--|
|               | POINT-CLOUDS    |                  |  |  |  |
|               | MODELS          |                  |  |  |  |
|               | CONTROL POINTS  |                  |  |  |  |
|               | CALIBRATIONS    |                  |  |  |  |
| DATA_DATABASE |                 |                  |  |  |  |
| DATA_GEODATA  |                 |                  |  |  |  |
|               | DATA_SHAPEFILES |                  |  |  |  |
|               |                 | EXCAVATION       |  |  |  |
|               |                 | GEOGRAPHY        |  |  |  |
|               |                 | GEOLOGY          |  |  |  |
|               |                 | SURVEY_PROCESSED |  |  |  |

|                 |                     |                      |                          |  |  |
|-----------------|---------------------|----------------------|--------------------------|--|--|
|                 |                     | SURVEY_RAW           |                          |  |  |
|                 |                     | GRIDS                |                          |  |  |
|                 | DATA_RASTERS        |                      |                          |  |  |
|                 |                     | RASTER_DTM           |                          |  |  |
|                 |                     | RASTER_ORTHOPHOTOS   |                          |  |  |
| DATA_GEOPHYSICS |                     |                      |                          |  |  |
|                 | GEOPHYSICS_PROJECT# |                      |                          |  |  |
|                 |                     | DATA_GEOPHYSICS      |                          |  |  |
|                 |                     |                      | WORKING FILES            |  |  |
|                 |                     |                      | PRESERVATION FILES       |  |  |
|                 |                     |                      | IMAGE FILES              |  |  |
|                 |                     | DOCUMENTS_GEOPHYSICS |                          |  |  |
|                 |                     |                      | PROJECT NOTES            |  |  |
|                 |                     |                      | PROJECT REPORT           |  |  |
|                 |                     | METADATA_GEOPHYSICS  |                          |  |  |
|                 |                     |                      | METADATA_GEOPHYSICS      |  |  |
|                 |                     |                      | GEODATA_GEOPHYSICS       |  |  |
|                 |                     |                      | METADATA_PROJECT         |  |  |
|                 |                     |                      | METADATA_FILEDESCRIPTION |  |  |
| DATA_SURVEY     |                     |                      |                          |  |  |

|                     |                  |  |  |  |  |
|---------------------|------------------|--|--|--|--|
|                     | SURVEY_PROCESSED |  |  |  |  |
|                     | SURVEY_RAW       |  |  |  |  |
| DOCUMENTS_FIELDWORK |                  |  |  |  |  |
|                     | MASONRY          |  |  |  |  |
|                     | EXCAVATION       |  |  |  |  |
|                     | BUILDING         |  |  |  |  |
| DOCUMENTS_REPORTS   |                  |  |  |  |  |
|                     | REPORTS_SEASONAL |  |  |  |  |
|                     | REPORTS_BUILDING |  |  |  |  |
|                     | REPORTS_ANALYSIS |  |  |  |  |
|                     | REPORTS_3D       |  |  |  |  |

|                       |                    |  |  |  |  |
|-----------------------|--------------------|--|--|--|--|
|                       | REPORTS_CATALOGUES |  |  |  |  |
| VECTOR_CAD            |                    |  |  |  |  |
| VECTOR_TECHNICAL      |                    |  |  |  |  |
| VECTOR_ILLUSTRATIONS  |                    |  |  |  |  |
| RASTER_ARTEFACTS      |                    |  |  |  |  |
| RASTER_SITEPHOTOS     |                    |  |  |  |  |
| RASTER_UAV            |                    |  |  |  |  |
| RASTER_PHOTOGRAMMETRY |                    |  |  |  |  |
| RASTER_RECTIFIED      |                    |  |  |  |  |

## Data Documentation and Description

### What documentation will you keep?

Data will be stored, recorded, and organised according to the best practices outlined by the Archaeology Data Service (ADS) for the storage and archiving of digital data, including raster and vector data, geophysical data, geospatial data, three-dimensional data, and alpha-numeric documentary data.

#### Project Level Metadata

| Human Name    | Metadata Name       | General Description                                                                                                                                                                   |
|---------------|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Project Title | PROJECT_TITLE       | The title (and any alternatives such as site codes) for the dataset.                                                                                                                  |
| Description   | PROJECT_DESCRIPTION | A brief summary of the main aims and objectives of the research project from which the data collection arose together with a brief summary description of the content of the dataset. |
| Subject       | PROJECT_SUBJECT     | Keywords for the subject content of the dataset (qualified using controlled terms such as those supplied by the Forum on Information Standards in Heritage (FISH))                    |

|                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Coverage          | PROJECT_COVERAGE | <p>This is both spatial and temporal coverage. For spatial coverage it should include the current and contemporary name(s) of the country, region, county, town or village covered by the data collection and, where possible, a standardised reference should be used. If names or administrative units were different during the time period covered by the data they should be recorded separately. Site coordinates can also be entered as a National grid reference in a number of different ways e.g., as a point (useful to describe a small project area via a central coordinate); as a line (e.g., at least two coordinates to represent the linear limits of the site); as a polygon (for a more complex site area, three or more coordinates are used to describe the boundaries). If applicable, the full postal code for the site can be included. For temporal coverage it should include the dates/period covered by the dataset (using existing thesauri where possible such as the Forum on Information Standards in Heritage (FISH) Period List).</p> |
| Projection System | PROJECT_PCS      | Projected Coordinate System used.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Coordinate System | PROJECT_GCS      | Geographic Coordinate System used.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

|              |                      |                                                                                                                                                                                                                                                                  |
|--------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Creators     | PROJECT_CREATORS     | Details of the creator(s), compiler(s), funding agencies, or other bodies or people intellectually responsible for the data collection. Information should include forename, surname, affiliation, address, phone, fax, email, or URL.                           |
| Publisher    | PROJECT_PUBLISHER    | Details about any organisation which has published this data.                                                                                                                                                                                                    |
| Contributors | PROJECT_CONTRIBUTORS | Other individuals or organisations who have contributed to the resource.                                                                                                                                                                                         |
| Identifiers  | PROJECT_PROJECTID    | Project or reference numbers or site codes used to identify the dataset.                                                                                                                                                                                         |
| Dates        | PROJECT_DATES        | Dates indicating when the dataset was created, when the archaeological project was carried out, processing dates, or computerisation dates as appropriate.                                                                                                       |
| Copyright    | PROJECT_COPYRIGHT    | The name of the copyright holder for the dataset. If the collection was created during work by an employee, the copyright holder will normally be the employer. If the material is covered by a specific copyright (e.g., Crown copyright) please indicate this. |

|               |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Relations     | PROJECT_RELATIONS | If the data collection was derived in whole or in part from published or unpublished sources, whether printed or machine-readable, this element should include references to the original material, details of where the sources are held and how they are identified there (e.g., by accession number). If the collection is derived from other sources include an indication of whether the data represents a complete or partial transcription/copy and the methodology used for its digitisation. Also include full references to any publications about or based upon the data collection. |
| Language      | PROJECT_LANGUAGE  | Indication of which language(s) the dataset is in (e.g., English, French, Spanish).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Resource Type | PROJECT_TYPE      | Whether the dataset is best described as primary data, processed data, an interpretation of data, or a final report.                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Format        | PROJECT_FORMAT    | The formats the data within the project is saved in (e.g., WordPerfect 5.1, HTML, AutoCAD).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

**General File Level Metadata.**

| Human Name            | Metadata Name   | General Description                                                                                                                                       |
|-----------------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| File Name             | FILE_NAME       | The name of the file e.g., report.doc                                                                                                                     |
| File Format           | FILE_FORMAT     | The file format e.g., PDF/A or Open Office Document                                                                                                       |
| File Location         | FILE_LOCATION   | The file path i.e. directory and filename e.g.,<br>/adsdata/cottam_ba/jpg/fwking_plan.jpg                                                                 |
| Software Name         | FILE_SOFTWARE   | The software used to create the file e.g., Microsoft Word 2007                                                                                            |
| Hardware used         | FILE_HARDWARE   | The hardware used to create the file, this is more significant when files are created directly by survey equipment such as laser scanners or GPS devices. |
| Operating System Used | FILE_OPSYS      | The operating system under which the file was made e.g., Windows XP or Mac OS X 10.5.                                                                     |
| Date of Creation      | FILE_CREATED    | When the file was made.                                                                                                                                   |
| Date of Last Update   | FILE_UPDATED    | When the file was updated.                                                                                                                                |
| Linked Files          | FILE_LINKED     | This element should be used to highlight relationships between files.                                                                                     |
| Identifiers           | FILE_IDENTIFIER | This element should be used to highlight whether a file is a source file or derived from another.                                                         |
| Creator               | FILE_CREATORS   | The file path i.e. directory and filename e.g.,<br>/adsdata/cottam_ba/jpg/fwking_plan.jpg.                                                                |
| Copyright             | FILE_COPYRIGHT  | Details of copyright or other rights and holder details.                                                                                                  |

**Raster & Vector File Metadata.**

| Human Name              | Metadata Name    | General Description                                                                                                                                                  |
|-------------------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Title                   | FILE_TITLE       | The title of the image or a suitable caption.                                                                                                                        |
| Description             | FILE_DESCRIPTION | Description of the image.                                                                                                                                            |
| Coverage                | FILE_COVERAGE    | Site location and description. The address, or coordinates for the subject and a description of the subject. Coverage should also include any relevant period terms. |
| Projection System       | FILE_PCS         | Projected Coordinate System used.                                                                                                                                    |
| Coordinate System       | FILE_GCS         | Geographic Coordinate System used.                                                                                                                                   |
| Keywords                | FILE_KEYWORDS    | Keywords e.g., period, site or feature terms. Use suitable thesauri where they exist.                                                                                |
| File Format and Version | FILE_VERSION     | e.g., TIFF 6.0.                                                                                                                                                      |
| File Size               | FILE_SIZE        | Size of the file in bytes.                                                                                                                                           |
| Resolution              | FILE_RESOLUTION  | The resolution of the image measured in pixels per inch (ppi).                                                                                                       |
| Dimensions              | FILE_DIMENSIONS  | Dimensions of the image in pixels e.g., 400 x 700px.                                                                                                                 |
| Colour Space            | FILE_COLOUR      | The colour space used in the image e.g., RGB or grayscale.                                                                                                           |
| Bit Depth               | FILE_BITDEPTH    | e.g., 24bit or 8bit.                                                                                                                                                 |

**Three-Dimensional Record File Level Metadata.**

| Human Name        | Metadata Name   | General Description                                                                                                                                                  |
|-------------------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Subject           | FILE_SUBJECT    | Keywords for the subject content of the dataset (qualified using e.g., the English Heritage NMR Monument Type Thesaurus or the MDA Object Type Thesaurus.            |
| Intended accuracy | FILE_Accuracy   | The originally intended accuracy or scale that the survey was to achieve.                                                                                            |
| Coverage          | FILE_COVERAGE   | Site location and description. The address, or coordinates for the subject and a description of the subject. Coverage should also include any relevant period terms. |
| Projection System | FILE_PCS        | Projected Coordinate System used.                                                                                                                                    |
| Coordinate System | FILE_GCS        | Geographic Coordinate System used.                                                                                                                                   |
| Keywords          | FILE_Keywords   | Keywords e.g. period, site or feature terms. Use suitable thesauri where they exist.                                                                                 |
| Dates             | FILE_DATES      | Dates indicating when the dataset was created, when the archaeological project was carried out, processing dates, or computerisation dates as appropriate.           |
| Identifiers       | FILE_PROJECTID  | Project or reference numbers or site codes used to identify the dataset.                                                                                             |
| Resolution        | FILE_RESOLUTION | The resolution of the image measured in pixels per inch (ppi).                                                                                                       |
| Dimensions        | FILE_DIMENSIONS | Dimensions of the image in pixels e.g., 400 x 700px.                                                                                                                 |
| Colour Space      | FILE_COLOUR     | The colour space used in the image e.g., RGB or grayscale.                                                                                                           |
| Bit Depth         | FILE_BITDEPTH   | e.g., 24bit or 8bit.                                                                                                                                                 |

**Three-Dimensional Record Control Point Metadata.**

| Human Name        | Metadata Name                      | General Description                                                                                                                                                     |
|-------------------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Coordinates       | CONTL_X,<br>CONTL_Y,<br>CONTL_Z,   | List the three-dimensional coordinates for each control point.                                                                                                          |
| Covariance        | CONTL_CX,<br>CONTL_CY,<br>CONTL_CZ | Provide full correlation if available (from survey adjustment or GPS baseline solution), otherwise provide estimated standard deviation or variance of each coordinate. |
| Location          | CONTL_Location                     | Textual description of location.                                                                                                                                        |
| Dates             | FILE_DATES                         | Dates indicating when the dataset was created, when the archaeological project was carried out, processing dates, or computerisation dates as appropriate.              |
| Identifiers       | FILE_PROJECTID                     | Project or reference numbers or site codes used to identify the dataset.                                                                                                |
| Coverage          | FILE_COVERAGE                      | Site location and description. The address, or coordinates for the subject and a description of the subject. Coverage should also include any relevant period terms.    |
| Projection System | FILE_PCS                           | Projected Coordinate System used.                                                                                                                                       |
| Coordinate System | FILE_GCS                           | Geographic Coordinate System used.                                                                                                                                      |

**Geographical Information System File Metadata.**

| Human Name        | Metadata Name   | General Description                                                                                                                                                  |
|-------------------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Scale             | FILE_SCALE      | Scale/resolution of data capture, e.g., 1:1250                                                                                                                       |
| Method            | FILE_Method     | Method of original data capture, e.g., Total Station Survey, etc.                                                                                                    |
| Dates             | FILE_DATES      | Dates indicating when the dataset was created, when the archaeological project was carried out, processing dates, or computerisation dates as appropriate.           |
| Identifiers       | FILE_PROJECTID  | Project or reference numbers or site codes used to identify the dataset.                                                                                             |
| Coverage          | FILE_COVERAGE   | Site location and description. The address, or coordinates for the subject and a description of the subject. Coverage should also include any relevant period terms. |
| Projection System | FILE_PCS        | Projected Coordinate System used.                                                                                                                                    |
| Coordinate System | FILE_GCS        | Geographic Coordinate System used.                                                                                                                                   |
| Identifiers       | FILE_PROJECTID  | Project or reference numbers or site codes used to identify the dataset.                                                                                             |
| Resolution        | FILE_RESOLUTION | The resolution of the image measured in pixels per inch (ppi).                                                                                                       |
| Dimensions        | FILE_DIMENSIONS | Dimensions of the image in pixels e.g., 400 x 700px.                                                                                                                 |
| Colour Space      | FILE_COLOUR     | The colour space used in the image e.g., RGB or grayscale.                                                                                                           |
| Bit Depth         | FILE_BITDEPTH   | e.g., 24bit or 8bit.                                                                                                                                                 |

#### Three-Dimensional Model File Metadata.

| Human Name         | Metadata Name | General Description                              |
|--------------------|---------------|--------------------------------------------------|
| Number of Vertices | FILE_VERT     | The number of vertices (points) in the model     |
| Number of Polygons | FILE_POLY     | The number of triangles or polygons in the model |

|                               |                |                                                                                                                                                                                      |
|-------------------------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Geometry Type                 | FILE_GEOMTYPE  | The type of geometry used within the model (wire frame, parametric, etc. if applicable).                                                                                             |
| Scale                         | FILE_UNITSCALE | What scale is represented by 1 unit.                                                                                                                                                 |
| Coverage                      | FILE_COVERAGE  | Site location and description. The address, or coordinates for the subject and a description of the subject. Coverage should also include any relevant period terms.                 |
| Projection System             | FILE_PCS       | Projected Coordinate System used.                                                                                                                                                    |
| Coordinate System             | FILE_GCS       | Geographic Coordinate System used.                                                                                                                                                   |
| Basic, Technical, or Extended | FILE_TYPE      | Is the model the master model produced just after raw data processing, or is it a derived model produced from the master (e.g. after hole filling, simplification, smoothing, etc.)? |
| Level of Detail               | FILE_LOD       | How detailed is the model, what is the resolution of the scan.                                                                                                                       |
| Layers                        | FILE_LAYERS    | Does the model use layers? How many?                                                                                                                                                 |
| Colour and Texture            | FILE_TEXTURES  | Does the model contain colour or texture information? How is this stored? If raster texture files are used then these have to be archived separately.                                |
| Material                      | FILE_MATERIAL  | Information about the material properties of the model and whether they match the physical properties of the actual object.                                                          |

|                 |                |                                                                                                   |
|-----------------|----------------|---------------------------------------------------------------------------------------------------|
| Light Source(s) | FILE_LIGHT     | Number and accuracy of light sources used in the model.                                           |
| Shader          | FILE_SHADER    | Have special or extended shaders been used?                                                       |
| Animation       | FILE_ANIMATION | Whether animation is used in the model along with description of type (keyframe, motion capture). |

**Will you be using any metadata standards?**

Data will be stored, recorded, and organised according to the best practices outlined by the Archaeology Data Service (ADS) for the storage and archiving of digital data, including raster and vector data, geophysical data, geospatial data, three-dimensional data, and alpha-numeric documentary data.

**Data Sharing and Publication**

**What data do you plan to share?**

Data will be published through the University of Bristol Research Data Repository (data.bris). The data.bris. Each deposit is accompanied by appropriate metadata and is assigned a unique Digital Object Identifier (DOI) via the DataCite scheme. All data published by the Repository is available under a permissive re-use license.

**Are there any ethical, commercial, legal or IPR issues which might apply when publishing your data?**

No.

**How will your data be shared?**

Data will be published through the University of Bristol Research Data Repository (data.bris). The data.bris Repository offers a means for Bristol's researchers to openly share non-confidential research data, without the need for external data users to undergo any form of authentication. Each deposit is accompanied by appropriate metadata and is assigned a unique Digital Object Identifier (DOI) via the DataCite scheme. All data published by the Repository is available under a permissive re-use license.

**Will there need to be controlled access procedures in place for your data?**

No.

## Planned Research Outputs

### Event - "Community Engagement Activities"

Public tours led daily by students and staff during the excavation, introducing the site's history and archaeological context. Activities include displays of artefacts from University excavations and guided interpretation of active trenches.

Collaboration with Bristol Grammar School and Willow Park C of E Primary School to align excavation-related activities with curriculum objectives. This may include classroom talks, visits, and opportunities for controlled handling or cleaning of finds within the Department.

A traditional University outreach event featuring guided tours, children's activities, and "mini excavations" to engage staff, families, and visitors with the excavation process and its findings.

### Conference paper - "Conference Presentation (Bristol and Gloucestershire Archaeological Society Archaeology Conference)"

Presentation of results at the Bristol and Gloucestershire Archaeological Society Archaeology Conference, highlighting the Cromwell House findings within the wider regional research framework.

### Event - "Society Lecture (Bristol Avon Archaeology Society)"

Lecture delivered to the Bristol and Avon Archaeological Society (BAAS), disseminating excavation results and promoting engagement with Bristol's post-medieval archaeology.

### Collection - "Physical Archive"

All paper records, registers, drawings, and retained finds or samples will be accessioned into the Department of Anthropology and Archaeology Collections (DAAC) under a designated accession number for permanent curation.

### Publication - "Research Paper"

A research paper drawing together University-led excavations from 2001–2025 will be prepared for submission to the *Transactions of the Bristol and Gloucester Archaeological Society*.

### Report - "Grey Literature Report"

A fully illustrated, peer-reviewed excavation report will be produced, incorporating stratigraphic analysis, artefact and environmental assessments, and contextual interpretation. This will be submitted to the Bristol Historic Environment Record (HER) and uploaded to ADS and the University's Research Repository (*Pure*).

### Dataset - "Digital Site Archive"

A complete digital archive of excavation data, including context records, drawings, plans, 3D photogrammetric models, survey datasets, digital photographs, and associated metadata. This archive will be deposited with the University of Bristol Data Repository (*data.bris*) and, where appropriate, with the Archaeology Data Service (ADS) for long-term curation and open access.

#### Planned research output details

| Title                                                  | DOI | Type             | Release date | Access level | Repository(ies)                           | File size | License                              | Metadata standard(s) | May contain sensitive data? | May contain PII? |
|--------------------------------------------------------|-----|------------------|--------------|--------------|-------------------------------------------|-----------|--------------------------------------|----------------------|-----------------------------|------------------|
| Community Engagement Activities                        |     | Event            | Unspecified  | Closed       | None specified                            |           | None specified                       | None specified       | No                          | No               |
| Conference Presentation (Bristol and Gloucestershi ... |     | Conference paper | Unspecified  | Open         | None specified                            |           | None specified                       | None specified       | No                          | No               |
| Society Lecture (Bristol Avon Archaeology Society)     |     | Event            | Unspecified  | Open         | None specified                            |           | None specified                       | None specified       | No                          | No               |
| Physical Archive                                       |     | Collection       | Unspecified  | Open         | None specified                            |           | Creative Commons Zero v1.0 Universal | None specified       | No                          | No               |
| Research Paper                                         |     | Publication      | Unspecified  | Open         | data.bris Research Data Repository<br>ADS |           | None specified                       | None specified       | No                          | No               |
| Grey Literature Report                                 |     | Report           | Unspecified  | Open         | ADS<br>data.bris Research Data Repository |           | Creative Commons Zero v1.0 Universal | None specified       | No                          | No               |
| Digital Site Archive                                   |     | Dataset          | Unspecified  | Open         | data.bris Research Data Repository        | 25 GB     | Creative Commons Zero v1.0 Universal | None specified       | No                          | No               |