

Dig Digital.

Work Digital. Think Archive. Create Access.

A guide to managing digital data generated from archaeological investigations

Infosheet #6 – selection strategies and digital data

As with all parts of the working project archive, it is unlikely that every digital file generated during a project will need to be retained for long-term preservation in the preserved archaeological archive. Any digital files created through the course of a project should therefore be subject to a selection strategy and the CIfA <u>Selection Toolkit for Archaeological Archives</u> provides practical advice to aid in the creation of sustainable archives (CIfA 2019).

How the digital archive is created, managed, and selected should not be a stand-alone operation, but should sit alongside other decision-making processes in the creation of the final archaeological archive. Reasons for selection of digital components will vary from project to project and should take into consideration the project aims and significance of the results, the research potential and contribution to research frameworks, and ability to provide greater access to heritage information.

Selection of archive material should be based on a process of consultation between the project team and relevant stakeholders – the CIfA Selection Toolkit offers general guidance on this.

This case study provides a fictional example of the types of digital material that can be created through the course of an archaeological project, and the selection processes that can applied to the working project archive.

The Dig Digital resource is an Archaeological Archives Forum guidance document that supports CIfA Standards and guidance. It was created by DigVentures, in partnership with CIfA, and funded by Historic England.

You can find the full resource online at: https://www.archaeologists.net/digdigital



Approaches to selection

It is important to note that each project is unique, and the data management within the project will be determined by a series of factors specific to both that project and the circumstances of its delivery. The selection process for well-preserved site under full excavation will differ to that of a watching brief on a sterile site.

The way that we acquire, modify, manage and then select digital elements for inclusion in an archive will be affected by a range of factors that can change from project to project. Processes which determine how digital data is handled throughout the life of the project will be linked to these factors.

For example, a large-scale excavation project will produce huge quantities of both born-digital data and digitised records and it is likely that the resultant preserved digital archive will be sizeable, even where following a stringent selection process. By comparison, some archaeological projects, such as a watching brief or small-scale evaluation, are unlikely to produce a large digital data archive for deposition. On a site where no archaeological remains were recorded, a technical archaeological report attached to the OASIS record with a selection of images may suffice, if agreed as an appropriate means of archiving by all stakeholders as part of the selection strategy process.

Example

The table below provides an example of digital material relating to a fictional archaeological evaluation at St Cuthbert's Row in South Dreamshire. The <u>selection strategy</u> documenting this process for the complete archaeological archive can be found under the strategy examples tab of the <u>CIfA Selection Toolkit</u>.

This fictional case study has been included to provide a practical and visual example of how the digital files created through the course of a project may be selected for long term preservation as part of a deposited digital archive. Files selected for inclusion in the archaeological archive are highlighted in blue and those combined from individual files into a single PDF/A format are highlighted in yellow and underlined.

Throughout project delivery, particular stages will provide review points where updates to the selection strategy and DMP can be made. These will ideally be linked to key stages that provide an opportunity for review, specialist input and evaluation, such as project planning, data gathering, analysis and reporting, and archive compilation.

This example describes some of the selection decisions made at each of the project review stages and the files selected for inclusion within in the preserved digital archaeological archive.



Archaeological evaluation at St Cuthbert's Row, Gt Lipington, South Dreamshire.

Project SD2367

Project planning

A data management plan (DMP) that articulates the approach to data management through every stage of the project should be created during project planning. The digital element of the selection strategy should align with the DMP and the requirements of the trusted digital repository. The DMP has also been shared with the full project team, including external specialists.

For this project, the selection strategy has been written in line with the project's aims and objectives as outlined in the brief and WSI, The Regional Research Framework for the Imagination Counties, and the deposition requirements for South Dreamshire Museum Service (SDMS). As the SDMS is not a trusted digital repository they cannot accept the digital archive into their care and the project team have therefore contacted the appropriate trusted digital repository (TDR, in this case the ADS) for their deposition requirements and to agree the outline selection strategy for digital material. While SDMS will not be taking the digital element of the archaeological archive into their care, they have asked for a copy of all project planning documentation, finds data and the final report in PDF/A format for their in-house records.

All team members, including external specialists or project partners, should be aware that this data will be deposited with a TDR and made available as part of the archaeological archive. The project team have therefore discussed the archive policy, selection strategy, data sharing and copyright issues with all external specialists.

/ Project folder	Working project files	Selected and converted for archaeological project archive
/ Brief	SD2367 ProjectBriefSDCC2017V1-3.pdf	SD2367ProjectBriefSDCC2017V1-3.pdf/a
		Converted to PDF/A for long-term preservation
/ WSI	/ WSI Drafts	
	SD2367WSIdraftV1-0.docx	(Generally, draft versions do not need to be included in the digital
	SD2367WSIdraftV1-1.docx	archive)
	SD2367OutlineSelectioStrategy1-0.docx	
	SD2367OutlineSelectioStrategySDCCComments1-	
	1.docx	
	SD2367DMPV1-0.docx	
	SD2367DMPV1-1.docx	
	/ WSI Final	
	SD2367WSIV2-0.docx	SD2367WSIV2-0.docx
	SD2367SelectioStrategy2.0.docx	SD2367OutlineSelectionStrategy2.0.docx
	SD2367DMPV2-0.docx	SD2367DMPV2-0.docx
		Final text versions of WSI files
	SD2367WSIV2-0.pdf	
	SD2367SelectionStrategy2-0.pdf	SD2367WSIV2-0.pdf/a
	SD2367DMPV2-0.pdf	Combined pdf text, selection strategy, DMP and illustrations saved
		as PDF/A for long-term preservation
/ Illustrations	/ WSI Drafts	
	SD2367WSIfigure1V1-0.ai	
	SD2367WSIfigure2V1-0.ai	
	SD2367WSIfigure2V1-1.ai	
	SD2367WSIfigure2V1-2.ai	
	/ WSI Finals	
	SD2367WSIfigure1V2-0.ai	SD2367WSIfigure1V2-0.svg
	SD2367WSIfigure2V2-0.ai	SD2367WSlfigure2V2-0.svg
		Converted to svg files for greater interoperability
	SD2367WSIfigure1V2-0.pdf	



Archaeological evaluation at St Cuthbert's Row, Gt Lipington, South Dreams			Project SD2367
	SD2367WSIfigure2V2-0.pdf		
/ Background			
Data	/ References		
	Regional-Research-Framework-Imagination-	Background documents a	nd earlier site reports do not need to be
	Counties-2014.pdf	included in the digital arch	nive if they are properly referenced and
	SD2287GeophysicsReport2.0.pdf	available elsewhere.	
	Medieval-Settlement-GtLiping-Journal Article-		
	2011.pdf		
/ H&S	20111001		
,	SD2367SigninginSheet1-0.docx		
	SD2367RiskEvaluationDraftV1-1.docx		
	SD2367RiskEvaluationV2.0.docx		
	SD2367Heath and Safety manualV3-2.pdf		

Data gathering

The outline selection strategy should be monitored, reviewed and if necessary, amended through the course of the project in agreement with the relevant stakeholders. All members of the project team should be aware of the selection strategy and how it should be applied. In practical terms for the creation of digital material, this could mean training staff on data creation, folder hierarchies and in-house file-naming conventions, all of which should be detailed in the DMP. Therefore, the DMP and selection strategy should be available to all members of the project team, reviewed and amended as necessary.

The archaeological evaluation at St Cuthbert's Row has created both born-digital data (data that is produced in digital form) and data that has been digitised (including records converted from paper or other analogue forms). While draft versions of digital files such as documents and illustrations were useful as part of the working project archive, only the final versions have been selected for inclusion in the preserved archaeological archive.

Decisions around selection of digital material were based around accessibility and re-use: what data needs to be included so future researchers can re-examine and reinterpret the site. It is especially important that the data from this evaluation can be easily accessed and reused in future stages of the project. For this reason, the preserved digital archive includes the survey data and GIS shape files. The images, however, were subjected to a comprehensive selection process, removing all repeat, irrelevant or sub-standard files form the preserved archive.

/ Site Data	/Context Database	
	SD2367AllContextDataWorkingCopyV1-1.xlsx	
	SD2367AllContextDataWorkingCopyV1-1.xlsx	
	/Matrices	
	SD2367MatrixV1-0.xlsx	
	SD2367MatrixV1-1.xlsx	SD2367MatrixV2-1FINAL.xlsx
	SD2367MatrixV2-0.xlsx	Final version of Harris Matrix selected for archiving
	SD2367MatrixV2-1FINAL.xlsx	
/ Registers	/ Photographs	
	SD2367PhotographsV1-0.xlsx	
	SD2367PhotographsV1-1.xlsx	
	SD2367PhotographsV2-0.xlsx	
	/ Drawings	SD2367PhotographRegisterV2-0.csv
	SD2367DrawingsV1-0.xlsx	SD2367DrawingRegisterV2-0.csv
	SD2367DrawingsV2-0.xlsx	SD2367RegisteredFindsListV2-0.csv
		SD2367ContextRegisterV2-0.csv
	/ Registered Finds	Final versions of all registers selected for archiving



Archaeological evaluation at St Cuthbert's Row, Gt Lipington, South Dreamshire. Project SD2367 SD2367Registered-FindsV1-0.xlsx SD2367Registered-FindsV1-2.xlsx SD2367Registered-FindsV2-0.xlsx / Contexts SD2367ContextV1-0.xlsx SD2367ContextV1-1.xlsx SD2367ContextV1-2.xlsx SD2367ContextV2-0.xlsx / Photographs / On Site JPG files: SD2367SitePhoto009.tiff to SD2367SitePhoto027.tiff SD2367SitePhoto001.JPG SD2367SitePhoto030.tiff to SD2367SitePhoto045.tiff SD2367SitePhoto047.tiff to SD2367SitePhoto053.tiff SD2367SitePhoto087.JPG SD2367SitePhoto065.tiff to SD2367SitePhoto085.tiff Selected site photographs x 59 in preservation format (duplicate CR2 files: shots, blurred images and working shots de-selected) SD2367SitePhoto001.CR2 SD2367SitePhoto087.CR2 / Registered Finds JPG files: SD2367RS01V1-0.JPG SD2367RS01V1-1.tiff SD2367RS01V1-1.JPG SD2367RS02V1-2.tiff SD2367RS02V1-0.JPG SD2367RS03V1-0.tiff SD2367RS02V1-1.JPG Selected registered finds photographs in preservation format SD2367RS02V1-2.JPG SD2367RS03V1-0.JPG CR2 files: SD2367RS01V1-0.CR2 SD2367RS01V1-1.CR2 SD2367RS02V1-0.CR2 SD2367RS02V1-1.CR2 SD2367RS02V1-2.CR2 / GIS / Survey SD2367GIS-TrenchOutlines.csv SD2367GIS-TrenchOutlines.csv / Rasters SD2367OSMap1906.pdf SD2367OSMap1906.pdf.aux.xml SD2287GeophysicsData.pdf SD2287GeophysicsData.pdf.aux.xml / Shapefiles SD2367TrenchOutlines.cgp SD2367TrenchOutlines.cgp SD2367TrenchOutlines.dbf SD2367TrenchOutlines.dbf SD2367TrenchOutlines.prj SD2367TrenchOutlines.prj SD2367TrenchOutlines.qpj SD2367TrenchOutlines.qpj SD2367TrenchOutlines.shp SD2367TrenchOutlines.shp SD2367TrenchOutlines.shx SD2367TrenchOutlines.shx All shapefiles selected for long-term preservation



Analysis and reporting

The entire working project archive should be subject to a selection assessment in agreement with the relevant stakeholders. In terms of the digital data this should be informed by the DMP and deposition requirements of the TDR. During an archaeological project many versions of a document, spreadsheet or illustration can be created, and the evaluation at St Cuthbert's Row is no different. While draft versions of the report and finds management database were useful during analysis and reporting, they were considered to be of low intrinsic value, so only the final versions of these files have been retained for inclusion in the preserved archaeological archive.

To facilitate re-use, the data needs to be archived in an appropriate format. The project team have therefore included the 'raw materials' of what makes up the final report as well as a PDF/A version of the combined technical report (text, illustrations and tables) for easy dissemination. The preserved digital archive also includes the full specialist reports and original specialist analysis and data, as well as final versions of the illustrations and databases.

/Reports

/ Eval Draft

SD2367EvaluationReportV1-0.docx SD2367EvaluationReportV1-1.docx SD2367EvaluationReportV2-0.docx SD2367EvaluationReportV2-1.docx

SD2367EvaluationReportV2-0.pdf
Combined PDF for circulation
SD2367EvalReportSDCCCommentsV2-0.pdf

/ Eval Final

SD2367EvalReportV2-2FINAL.docx

Updated final PDF:

SD2367EvalReportV2-2FINAL.pdf

/ Evaluation Appendices

SD2367Appendix1AllContextsTablesV1-0.docx SD2367Appendix1AllContextsTableV2-0.docx

SD2367AllFindsReportsV1-0.docx SD2367AllFindsReportsV2-0.docx

SD2367Appendix1AllContextsTableV2-0.pdf SD2367Appendix2AllFindsReportsV2-0.pdf

/ Photographs

/ Eval Report Images

JPG files:

SD2367SitePhoto011Plate1.JPG SD2367SitePhoto033Plate5.JPG SD2367SitePhoto036Plate7.JPG SD2367SitePhoto042Plate2.JPG SD2367SitePhoto049Plate8.JPG SD2367SitePhoto053Plate4.JPG SD2367SitePhoto058Plate3.JPG SD2367SitePhoto067Plate9.JPG SD2367SitePhoto075Plate6.JPG

CR2 files:

SD2367SitePhoto011Plate1.CR2 SD2367SitePhoto033Plate5. CR2 SD2367SitePhoto036Plate7.CR2 SD2367SitePhoto042Plate2.CR2 Generally, draft versions do not need to be included in the digital archive unless they contain specific/important revisions or comments.

SD2367EvalReportV2-2FINAL.docx

SD2367Appendix1AllContextsTableV2-0.docx SD2367Appendix2AllFindsReportsV2-0.docx

SD2367EvalReportV2-2.pdf/a

Combined pdf text, illustrations and appendices saved as PDF/A for long-term preservation

SD2367SitePhoto011Plate1.tiff

SD2367SitePhoto033Plate5.tiff

SD2367SitePhoto036Plate7.tiff

SD2367SitePhoto042Plate2.tiff SD2367SitePhoto049Plate8.tiff

SD2367SitePhoto053Plate4.tiff

SD2367SitePhoto058Plate3.tiff

SD2367SitePhoto067Plate9.tiff

SD2367SitePhoto075Plate6.tiff

All raster images chosen for the report selected for inclusion in the archive in preservation format



SD2367SitePhoto049Plate8.CR2 SD2367SitePhoto053Plate4.CR2 SD2367SitePhoto058Plate3.CR2 SD2367SitePhoto067Plate9.CR2 SD2367SitePhoto075Plate6.CR2 / Materials / Finds data SD2367FindsManagementV1-0.xlsx SD2367FindsManagementV1-1.xlsx SD2367FindsManagementV1-2.xlsx /Specialists ${\sf SD2367HarryKendtick\text{-}contract\text{-}letter\text{.}docx}$ SD2367EmmaTurner-contract-letter.docx SD2367TamaraGreen-contract-letter.docx SD2367JemmaPalmer-contract-letter.docx SD2367DrFrancisBenjamin-contract-letter.docx / Specialist Reports SD2367MedievalPotteryV1-1.docx SD2367MedievalPotteryV1-2.docx SD2367MedievalPotteryV1-2.docx SD2367MedievalPotteryDataV1-0.xls SD2367MedievalPotteryDataV1-0.xls SD2367MedievalPotteryMetadataV1-0.xls SD2367MedievalPotteryMetadataV1-0.csv SD2376CBMV1-0.docx SD2376CBMV1-0.docx SD2376CBMtablesV1-0.xls SD2376CBMtablesV1-0.xls SD2376CBMMetsdataV1-0.xls SD2376CBMMetsdataV1-0.csv SD2367AnimalBoneReportV1-0.docx SD2367AnimalBoneReportV1-1.docx SD2367AnimalBoneDataV1-0.csv SD2367AnimalBoneReportV1-1.docx SD2367AnimalBoneDataV1-0.xls SD2367AnimalBoneMetadataV1-0.csv SD2367AnimalBoneMetadata.xls SD2367MetalWorkingReportV1-1.docx SD2367MetalWorkingV1-0.docx SD2367MWMetadataV1-1.csv SD2367MetalworkingAnalysisV1-1.docx SD2367MWMetadata.docx SD2376PollenRepportV1-0.docx SD2367PollendataV1-1.xls SD2376PollenReportV1-0.docx SD2367PollenMetadataV1-0.csv SD2376PollendataV1-0.xls SD2367PollendataV1-1xls Select all final versions of specialist reports, data and metadata SD2367PollenMetadataV1-0.csv / Illustrations / Eval Drafts SD2367Figure1V1-0.ai SD2367Figure1V1-1.ai SD2367Figure2V1-0.ai SD2367Figure3V1-0.ai SD2367Figure3V1-1.ai SD2367Figure3V1-2.ai SD2367Figure4V1-0.ai / Eval Final SD2367Figure1V2-0.ai SD2367Figure1V2-0.svg SD2367Figure2V2-0.ai SD2367Figure2V2-0.svg SD2367Figure3V2-0.ai SD2367Figure3V2-0.svg SD2367Figure4V2-0.ai SD2367Figure4V2-0.svg All vector images chosen for the report selected for inclusion in the archive in preservation format SD2367Figure1V2-0.pdf

SD2367FiguresCombinedV2-0.pdf/a

SD2367Figure2V2-0.pdf



SD2367Figure3V2-0.pdf SD2367Figure4V2-0.pdf Combined pdf of vector illustrations saved as PDF/A for long-term preservation

Archive compilation

The final version of the selection strategy (including all amendments and revisions), relevant repository contracts and project metadata have been included in the digital archive to be deposited with the trusted digital repository for long-term preservation. In a similar way to how the context or drawing registers function for other parts of the archive, the metadata tables provide a register and field-level definition of the data collected. While they were finalised during archive compilation, the metadata tables were started earlier in the project and amended as necessary.

General project admin and internal documents have not been selected for inclusion in the preserved digital archive, though they will be retained on the excavating unit's servers for future reference.

/ Admin

/ Tender

T2016-023GuthbertsRowTenderV1-0.docx T2016-023rGuthbertsRowTendeV1-0.pdf

/ Finances

SD2367BudgetV1-0.xls SD2367BudgetV1-1.xls SD2367PaymentScheduleV1-0.xls

/ Delivery

SD2367ClientContractV1-0.docx SD2367ClientContractV1-1signed.docx SD2367GanntV1-0.xls SD2367GanntV1-1.xls

/ Archive

/ Museum Agreements

SD2367SDMSContractV1-0.docx SD2367SDMCContractV2-0.pdf SD2367SDMSTransferTitleV1-0.pdf SD2367SDMSTransferTitleSignedV2-0.pdf SD2367SelectionStrategyFINAL.docx

/ Data Management Plan

SD2367DMPV1-0.docx SD2367DMPV1.1.docx SD2367DMPV1-0.docx SD2367DMPV2-1FINAL.docx

/ Project Metadata

SD2367CollectionLevelMetadataV1-0.doc SD2367CollectionLevelMetadataV1-2.doc

SD2367FileLevelMetadataV1-0.xls

SD2367SDMCContractV2-0.pdf

SD2367SDMSTransferTitleSignedV2-0.pdf SD2367SelectionStrategyFINAL.docx

The final version of the selection strategy should be included in the preserved archive in addition to the outline strategy agreed during project planning

SD2367DMPV2-1FINAL.docx

SD2367CollectionLevelMetadataV1-2.doc

File-level metadata were developed as an .xls spreadsheet through delivery, and individual .txt files will be created from this for submission of data to accompany each element deposited.