**1. Opis danych oraz pozyskiwanie lub ponowne wykorzystanie dostępnych danych**

Sposób pozyskiwania i opracowywania nowych danych i/lub ponownego wykorzystania dostępnych danych

Data will be produced by means of photo/film camera (photographs), gps device, total station, computer (text files). Data will be obtained during the project implementation – text files, photos, drawings, maps will be saved/processed to formats generally available in the MS Office/LibreOffice. Responsible for the assessment of the technical and substantive quality of data is the Principal Investigator. Data will be subject to technical verification also before the process of digital archiving. New, raw data will be collected/produced during field research and office (study) work. These will be the a new, original data.

Pozyskiwane lub opracowywane dane (np. rodzaj, format, ilość)

The data will be obtained or processed in the format of standard text and graphic files as well as mixed documents (.txt, .doc (x), .pdf, .png, .jpg, tiff, csv). In addition to Microsoft Office format files, equivalents in Libre Office format will be provided. The format of all collected files is standard, assuring universal access and opening. Estimated volume of the data set: 4 TB.

**2. Dokumentacja i jakość danych**

Metadane i dokumenty (np. metodologia lub pozyskiwanie danych oraz sposób porządkowania danych) towarzyszące danym

A code book will be developed for files and folders according to the ZENODO standard. Readme files will contain information on the content, ways of using it, as well as the acquisition and processing of data. The metadata will be used for each set of files taking into account a range of information: data of the researcher (with ORCID number), creation date, summary of content, types of files, a note about data processing. Files will be collected on the computer, e.g. in the folder structure - enter the names of files and folders. The descriptive metadata will be ZENODO standard, but there is also metadata sewn into the files.

Stosowane środki kontroli jakości danych

Data will be obtained by qualified researchers using the highest quality research methods. Data obtained during field research in the planned project and their full digital documentation will be compiled according to the instructions published by the National Heritage Institute. Obtained samples will be subjected to specialist analyzes and radiocarbon dating. The results of these studies will be compared to databases available and adequate for a given field of science. In the case of doubts as to the correctness of data obtained as a result of specialist analyzes and radiocarbon dating, due to, for example, from contamination or insufficient sample size the analyzes will be repeated. Data will be released when meet additional quality control and protected against modification. All files will be checked under the aspect of meeting sharing requirements. Data quality will be subject to mutual control.

**3. Przechowywanie i tworzenie kopii zapasowych podczas badań**

Przechowywanie i tworzenie kopii zapasowych danych i metadanych podczas badań

All data, including digitized data from archival research, will be stored in electronic form at mass storage devices of equipment used for data collection in at least 3 locations – notebook and 2 external hard drives. Raw data backup will be made at least once a month using software dedicated to backup and stored on independent data storage device. Administrator of the data, responsible for data backup and recovery will be the Principal Investigator. Individual project participants will transfer the obtained data to the Principal Investigator using a dedicated Pionier Box service or via the WeTransfer platform. These data will be available to all members of the research team.

Sposób zapewnienia bezpieczeństwa danych oraz ochrony danych wrażliwych podczas badań

The data will be secured by backups on at least two separate mobile hard drives; in addition, the Principal Investigator will make periodically current backups using computer equipment physically located at NCU, Faculty of History. Access to all devices used for data generation and storage will be controlled by the Project Leader at individual user level and protected by standard MS Windows domain protocols. If necessary data will be protected by additional password/passwords depending on access levels. Passwords distribution between project workers will take place using other communication channels than used for data transfer. Responsible for password distribution and management is the Principal Investigator.

**4. Wymogi prawne, kodeks postępowania**

Sposób zapewnienia zgodności z przepisami dotyczącymi danych osobowych i bezpieczeństwa danych w przypadku przetwarzania danych osobowych

All data will be produced, stored and processed adherent to the GDPR Directive (Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016). No data production or data processing will commence until the work and data protection plan is approved by the Data Protection Officer. Outside working time the device will be disconnected from LAN, WAN and will be in care of Principal Investigator.

Sposób zarządzania innymi kwestiami prawnymi, np. prawami własności intelektualnej lub własnością. Obowiązujące przepisy

The data will be made available under a CC-BY license. In the case of obtaining results that may be the subject of intellectual property, the rights to them are vested in the party who obtained them. In the event of joint results, individual creative contributions and the rules for the use of results will be governed in a separate agreement.

**5. Udostępnianie i długotrwałe przechowywanie danych**

Sposób i termin udostępnienia danych. Ewentualne ograniczenia w udostępnianiu danych lub przyczyny embarga

Raw data obtained from specialist analyzes will be stored for 10 years. They will be deposited in the ZENODO research repository. At the time of publication of the research results, these data will be available.

Sposób wyboru danych przeznaczonych do przechowania oraz miejsce długotrwałego przechowywania danych (np. repozytorium lub archiwum danych)

Data will be obtained as a result of the project (field research documentation, documentation of archaeological artefacts, results of specialist analyzes) will be stored in a digital data repository for long-term storage (at least 10 years).

Metody lub narzędzia programowe umożliwiające dostęp do danych i korzystanie z danych

Access to the project data will take place through the standard, mainstream software (browser and Libre Office) from the various operating systems (Windows, Linux, MacOS).

Sposób zapewniający stosowanie unikalnego i trwałego identyfikatora (np. cyfrowego identyfikatora obiektu (DOI)) dla każdego zestawu danych

Data deposited in the repository have a permanent URL and DOI ID. Zenodo observes the principles FAIR.

**6. Zadania związane z zarządzaniem danymi oraz zasoby**

Osoba (np. funkcja, stanowisko i instytucja) odpowiedzialna za zarządzanie danymi (np. data steward)

The data steward of the project will manages the data during its implementation.

Środki (np. finansowe i czasowe) przeznaczone do zarządzania danymi i zapewnienia możliwości odnalezienia, dostępu, interoperacyjności i ponownego wykorzystania danych

ZENODO ensures data security, identification and stability even after a possible migration to another platform.