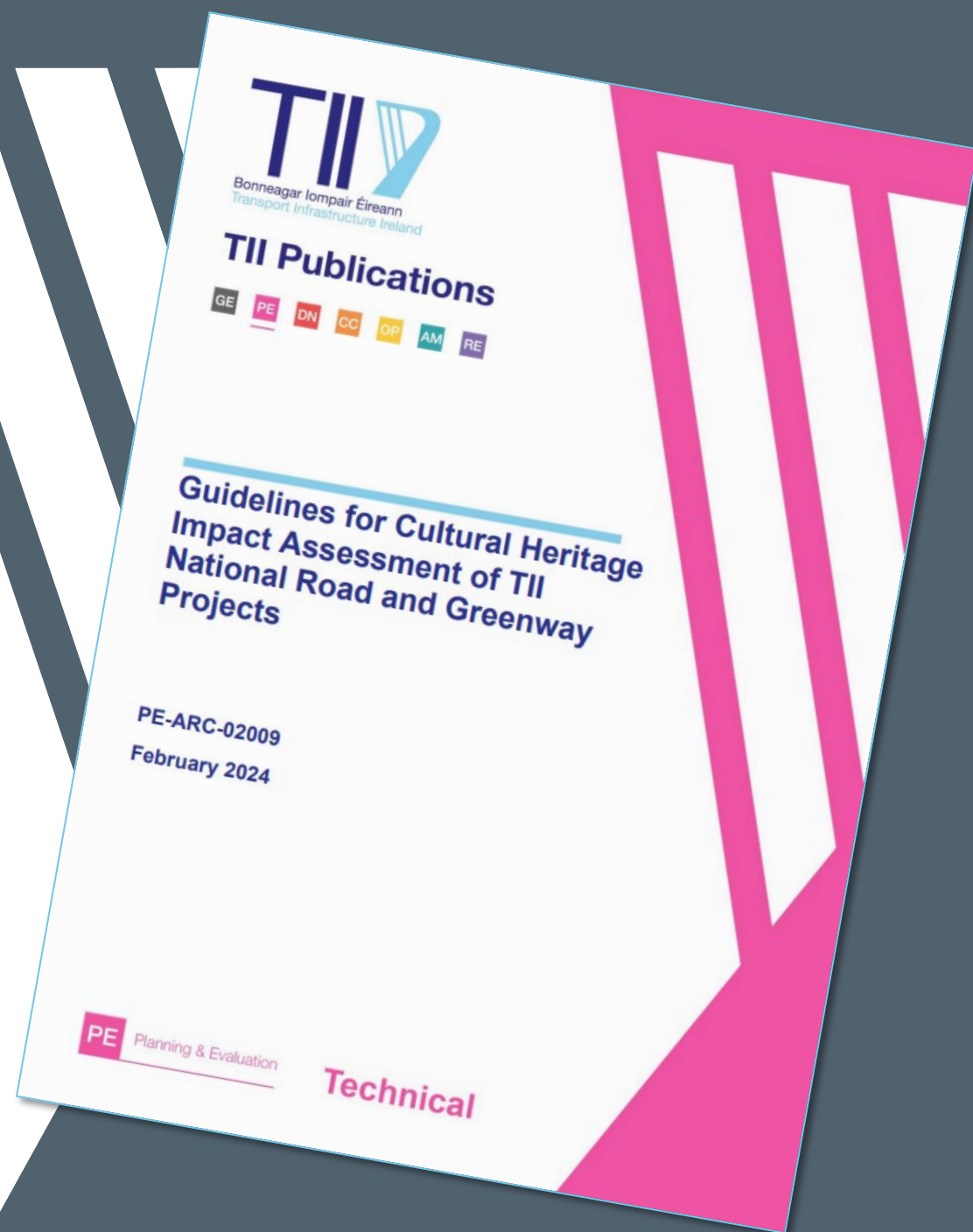


# Guidelines for Cultural Heritage Impact Assessment of TII National Road and Greenway Projects

Michael Stanley and Rónán Swan

TII Standards Roadshow

1<sup>st</sup>/2<sup>nd</sup> May 2024



# Agenda

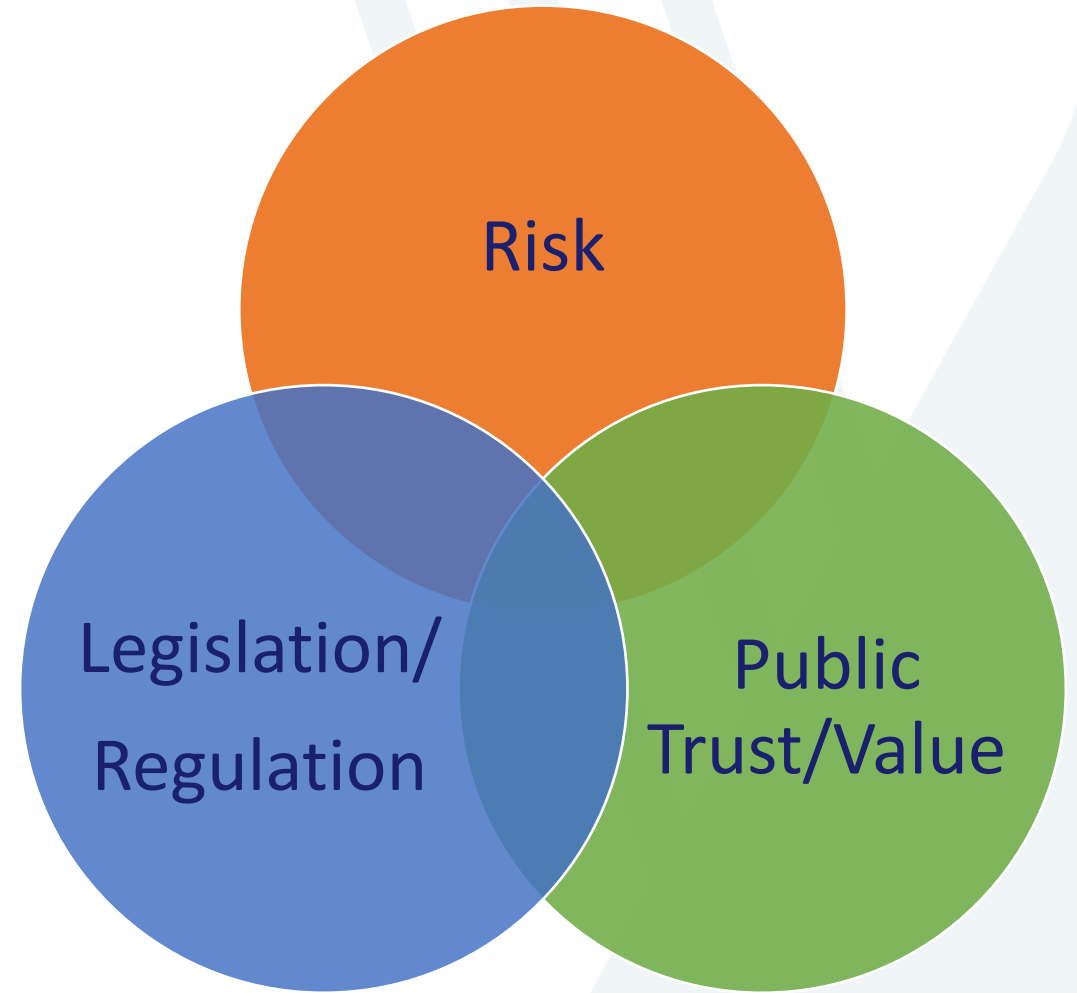
- TII Archaeology & Heritage
- Why are new cultural heritage impact assessment guidelines (CHIAG) required?
- Overview of the new guidelines
- Project Manager roles and responsibilities
- Key implications



# TII Archaeology & Heritage

“TII’s Archaeology and Heritage section’s primary objective is to minimise the archaeological and heritage impacts associated with TII’s capital projects and programmes.”

TII Annual Plan and Budget Annex



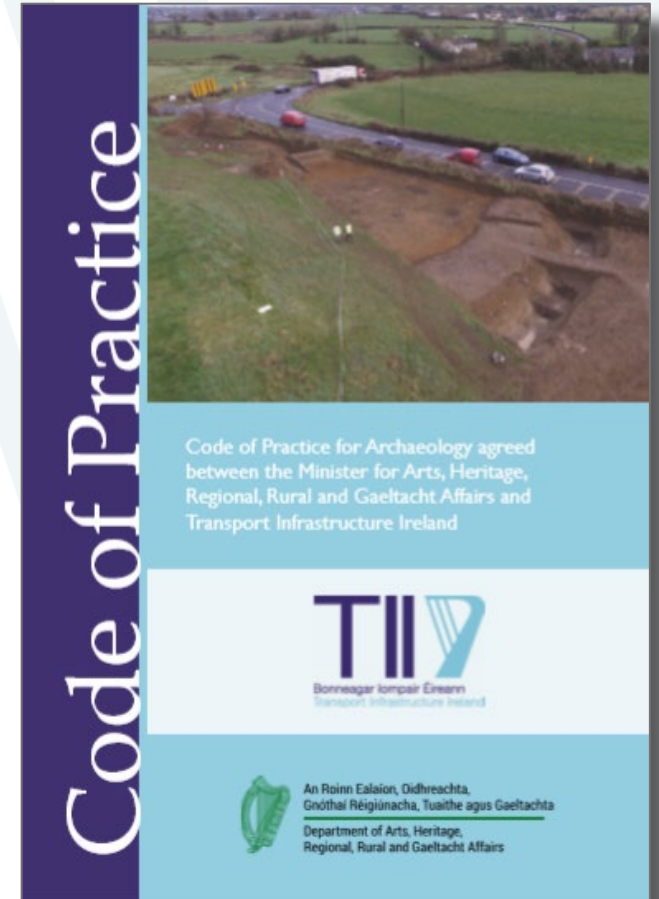
# Code of Practice for Archaeology 2017

Agreed between TII and the Minister (with responsibility for Heritage)

‘a framework ... to enable TII to progress with its programme of work in accordance with the Government’s transport strategy, whilst carrying out appropriate archaeological assessment and mitigation’

Significant changes between 2000 CoP and 2017 CoP:

- TII commitment to assign Project Archaeologist
- applicable to all TII Projects, whether TII is the Sponsoring Agency, Approving Authority or Funding Agency
- provide funding to fulfil the post-excavation and reporting requirements.
- publish and/or disseminate the archaeological results of the TII projects, as appropriate.



# Why new Cultural Heritage Impact Assessment Guidelines?

## Purpose

- supersede 2005 NRA archaeological and architectural heritage guidelines and incorporate cultural heritage more broadly.
- ensure consistent approach to the mitigation of Cultural Heritage impacts of TII national road and greenway projects.
- reflect evolving best practice
- minimise the impact on Cultural Heritage
- enhance the opportunities for Cultural Heritage

## Application

- for projects requiring planning consent with TII as Approving Authority, Sponsoring Agency or funder.

## Reflect wider developments

- Legislation – EIA Directives, Historic and Archaeological Heritage and Miscellaneous Provisions Act 2023.
- Regulation – 2017 Code of Practice for Archaeology, EPA 2022 EIAR guidelines, current TII PMG, PMM and PAGs.
- Methodologies – Digitisation, Lidar, GIS, AI/Machine Learning, TII Digital Heritage Collections.



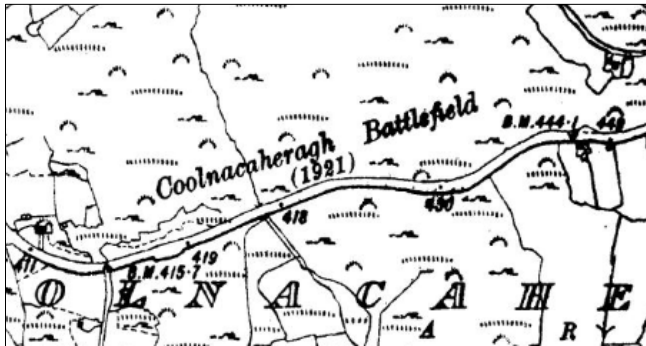


# Overview: CHIA Guidelines (PE-ARC-02009)

## Key principles

- aligns with PMG and PMM
- supports TII's Sustainability Implementation Plan (Principle 3 'Collaborate for a holistic approach' and Principle 6 'Create total value for society')
- codifies best practice developed since 2005
- addresses broader definition of cultural heritage
- provides consistency and clarity of purpose and scope to Technical Advisor (TA) and Cultural Heritage Professional (CHP) duties, thus minimising potential for claims
- applies CHIA proportionately to nature and extent of scheme and importance of CH receiving environment
- emphasises professional judgement of CHP (typically archaeologists and built heritage specialists)
- outlines clear process for determining significance of effect
- requires approval of all CHP outputs by the Project Manager (PM) in conjunction with the Project Archaeologist (PA)
- highlights the relationship between the PM and the PA

# Overview: what is Cultural Heritage?



# Overview: CHIA in practice

**Essential that Cultural Heritage concerns are considered from project outset.**

PA is assigned at outset:

- Phase 0 for Greenways
- Phase 1 for National Roads

PA in consultation with the PM contributes to CH services specification, establishing project 'guard rails' by :

- detailing scheme-specific CH requirements
- setting appropriate qualifications for CHP
- identifying services to be undertaken by TA/CHP in accordance with their tender, including procurement services.

Thus, providing sufficient information for TA to price their tender.





# Overview: key sections for PM

## Executive Summary

### 1. Introduction

### 2. The Value and Importance of Cultural Heritage

### 3. CHIA as part of Approvals Process

### 4. Application of the Guidelines to TII Projects

### 5. Cultural Heritage Impact Assessment Process

### 6. CHIA through Project Phases and Stages

### 7. References

Appendix 1 Definition of a Qualified and Competent CHP

Appendix 2 Glossary of Terms

Appendix 3 Cultural Heritage Regulatory and Policy Framework

Appendix 4 Other Relevant Standards and Guidelines

**Appendix 5 Format of the Cultural Heritage Dataset (CHD)**

**Appendix 6 Information Sources and Repositories**

## INFORMATION BOXES

- What is CHIA
- Objectives of CHG
- CHIA Process
- Key Outputs
- Considerations for including CHR
- Recording Receptors during Phase 3
- Criteria for assessing importance
- Describing Significance of Effect
- Mitigation Measures

## CHIA Step Outputs

- Step 1 – Establish Scope
- Step 2 – Analysis
- Step 3 – Assessment
- Step 4 – Mitigation and Enhancement

## Essential Requirements

- Phase 1
- Phase 2 Stage 1
- Phase 2 Stage 2
- Phase 3
- Phase 4

# Overview: CHIA

## INFORMATION BOX 1: What is Cultural Heritage Impact Assessment (CHIA)?

CHIA is a process for identifying and assessing effects on Cultural Heritage and, where necessary, developing measures to mitigate the adverse effects and/or enhance potential positive effects. The purpose of CHIA is to understand the consequences of change to Cultural Heritage Receptors so that informed decisions can be made about their sustainable management.

CHIA involves:

- identification of Cultural Heritage Receptors,
- identification of potential impacts to those Receptors,
- assessment of the significance of effects resulting from these impacts, and
- formulation of mitigation measures for adverse effects and enhancement measures, where possible.

CHIA is a process that extends across PMG Phases 1–4 and requires the application of various assessment methodologies. CHIA results in the production of different types of outputs at different stages of the process and analysis, including Cultural Heritage Datasets (CHDs), reports, mapping, spatial data (e.g. GIS/CAD vector files), as well as input to other assessment processes such as Multi-Criteria Analysis (MCA).

At all PMG Phases/Stages, CHIA should be undertaken by competent and suitably qualified Cultural Heritage Professionals with sufficient expertise, working under the supervision of a TII-assigned Project Archaeologist or Local Authority assigned Resident Archaeologist, as applicable.

# Overview: CHIA four-step process

## INFORMATION BOX 3: The four-step CHIA process

### Step 1: Establish Scope

Establish scope and confirm Study Area/Assessment Corridors.

### Step 2: Analysis

Compile Cultural Heritage Dataset and analyse data gathered through desktop research, fieldwork and consultation to establish the Cultural Heritage baseline of the receiving environment.

### Step 3: Assessment

Identify and describe the likely direct and indirect impacts on Cultural Heritage Receptors and assess the significance of their effects.

### Step 4: Mitigation and Enhancement

Set out suitable mitigation/enhancement measures to be considered during options selection and design, including the measures to be implemented during construction and operation of the Project.

# Overview: CHIA at Phase 2–3

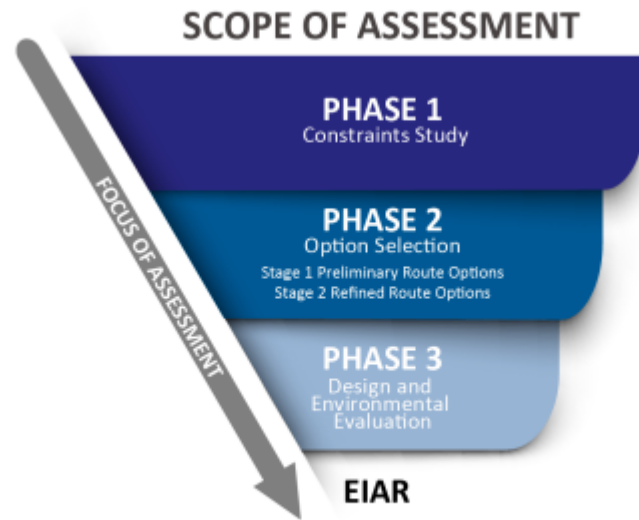
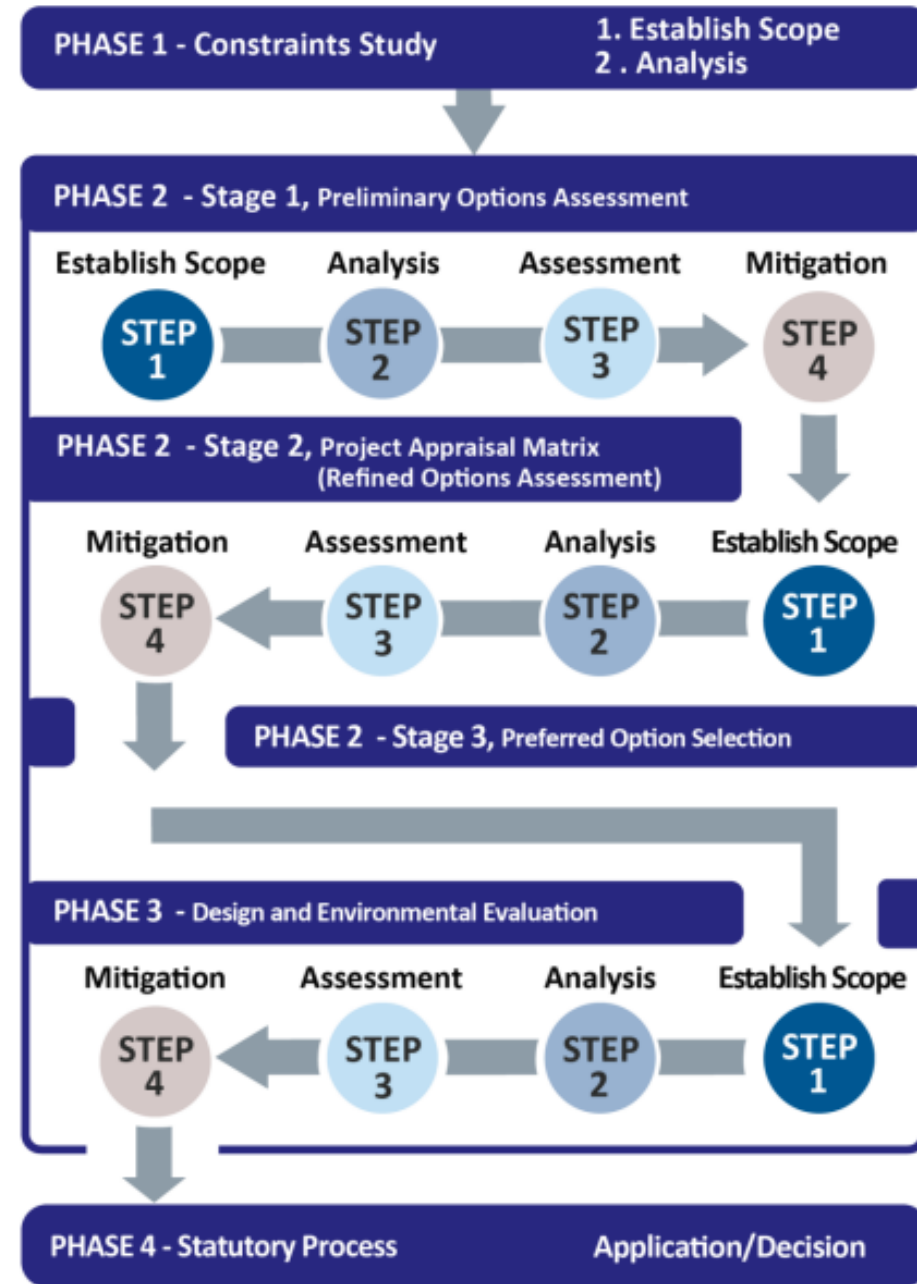


Figure 5.6 - Relationship between scope and focus of the assessment





# Overview: Study area/assessment corridors

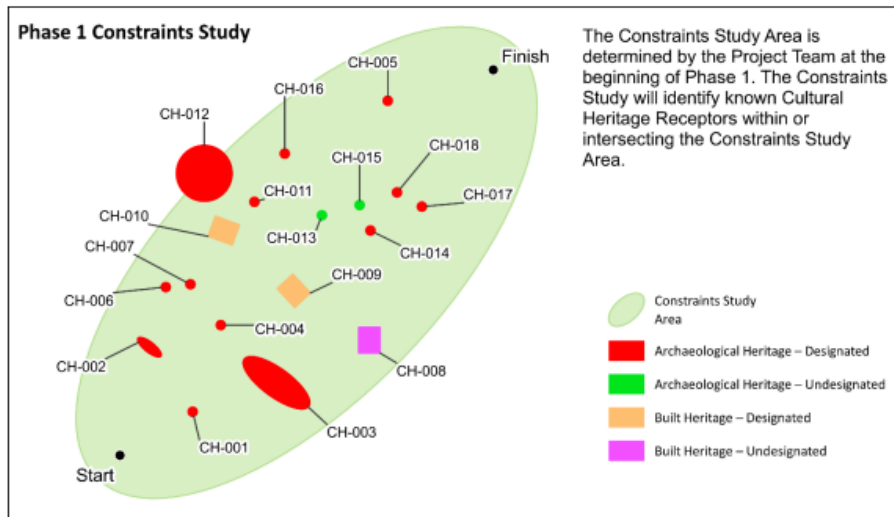


Figure 5.3 - Evolution of the Study Area/Assessment Corridors: Phase 1–Constraints Study

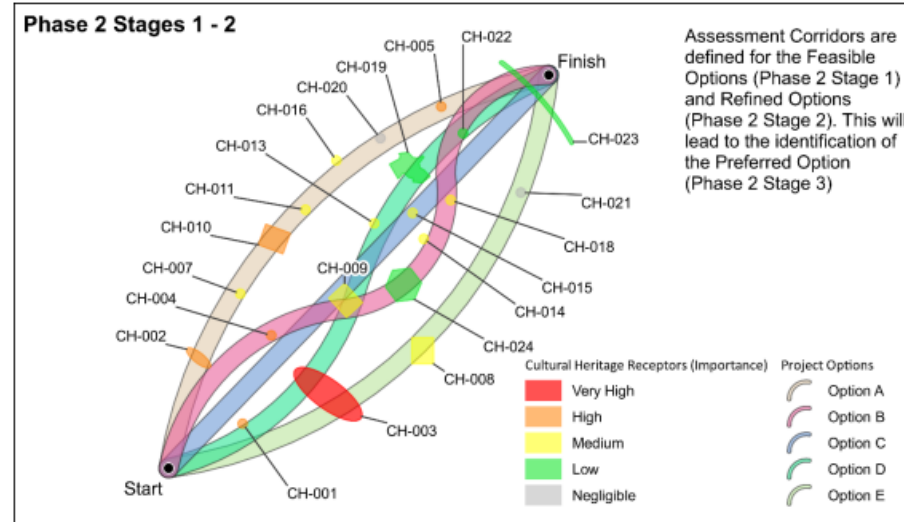


Figure 5.4 - Evolution of the Study Area/Assessment Corridors: Phase 2–Options Selection

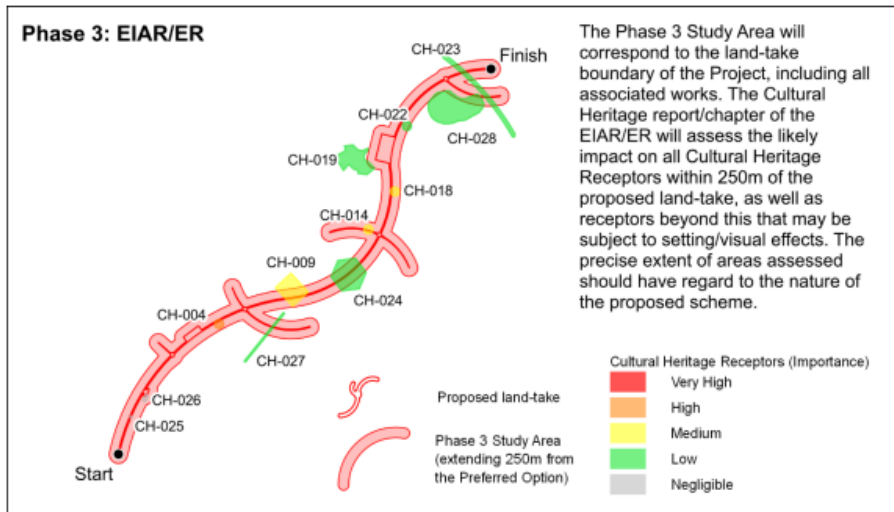


Figure 5.5 - Evolution of the Study Area/Assessment Corridors: Phase 3–Environmental Evaluation

## Key points

PM to confirm study area/assessment corridors at each Phase.

- GIS to be used
- Polygons rather than points
- Phases 2–3 to map baseline Importance

# Overview: Desktop research and Fieldwork through CHIA process

	Constraints Study Phase 1	Preliminary Route Options Phase 2 Stage 1	Project Appraisal Matrix (Refined Route Options) Phase 2 Stage 2	Preferred Option Phase 2 Stage 3	Design and Environmental Evaluation Phase 3
Sources of Information	<ul style="list-style-type: none"> <li>•Archival sources</li> <li>•Cartographic sources (including historic mapping)</li> <li>•Development Plans/Heritage Plans</li> <li>•Online datasets</li> <li>•Published literature/sources</li> <li>•Satellite and aerial imagery/Lidar data</li> <li>•Statutory and non-statutory heritage inventories</li> </ul>	<ul style="list-style-type: none"> <li>•Archival sources</li> <li>•Cartographic sources (including historic mapping)</li> <li>•Development Plans/Heritage Plans</li> <li>•Online datasets</li> <li>•Previous archaeological investigations</li> <li>•Published literature/sources</li> <li>•Satellite and aerial imagery/Lidar data</li> <li>•Statutory and non-statutory heritage inventories</li> </ul>	<ul style="list-style-type: none"> <li>•Archival sources</li> <li>•Cartographic sources (including historic mapping)</li> <li>•Development Plans/Heritage Plans</li> <li>•Environmental Information</li> <li>•Information from public consultations</li> <li>•Online datasets</li> <li>•Previous archaeological investigations</li> <li>•Published literature/sources</li> <li>•Satellite and aerial imagery</li> <li>•Statutory and non-statutory heritage inventories</li> </ul>	Confirm/clarify assessment, as required by the Project Manager	<ul style="list-style-type: none"> <li>•Archival sources</li> <li>•Cartographic sources (including historic mapping)</li> <li>•Development Plans/Heritage Plans</li> <li>•Environmental Information</li> <li>•Historical photographs</li> <li>•Information from public consultations</li> <li>•Online datasets</li> <li>•Previous archaeological investigations</li> <li>•Published literature/sources</li> <li>•Satellite and aerial imagery</li> <li>•Specialist Reports (e.g. geophysical survey reports, Lidar assessment reports)</li> <li>•Statutory/non-statutory inventories</li> </ul>
Fieldwork	N/A	<ul style="list-style-type: none"> <li>•Surveys from accessible land</li> <li>•Targeted site inspections</li> </ul> <p><b>Specialist Surveys/Assessments*</b></p> <ul style="list-style-type: none"> <li>•Application of the TII Automatic Detection of Archaeological Features Lidar software</li> </ul>	<ul style="list-style-type: none"> <li>•Consultations with landowners/special interest groups (e.g. local heritage groups)</li> <li>•Surveys from accessible land</li> <li>•Targeted site inspections and built heritage surveys</li> </ul> <p><b>Specialist Surveys/Assessments*</b></p> <ul style="list-style-type: none"> <li>•Lidar analysis</li> <li>•Geoarchaeological/palaeo-environmental assessments</li> <li>•Geophysical surveys</li> <li>•Targeted test excavations</li> <li>•Topographical surveys</li> <li>•Underwater surveys</li> </ul>	Confirm/clarify assessment, as required by the Project Manager	<ul style="list-style-type: none"> <li>•Consultations with landowners/special interest groups (e.g. local heritage groups)</li> <li>•Full walkovers</li> <li>•Site inspections</li> <li>•Built heritage surveys</li> </ul> <p><b>Specialist Surveys/Assessments*</b></p> <ul style="list-style-type: none"> <li>•Lidar analysis</li> <li>•Geoarchaeological/ palaeo-environmental assessments</li> <li>•Geophysical surveys</li> <li>•Test excavations</li> <li>•Topographical surveys</li> <li>•Underwater surveys</li> </ul>

Cultural Heritage Dataset

## Key point:

Table 5-7 provides list of sources/fieldwork to assist PA/PM preparing TA specification

# Overview: Automatic Detection of Archaeological Features machine-learning tool

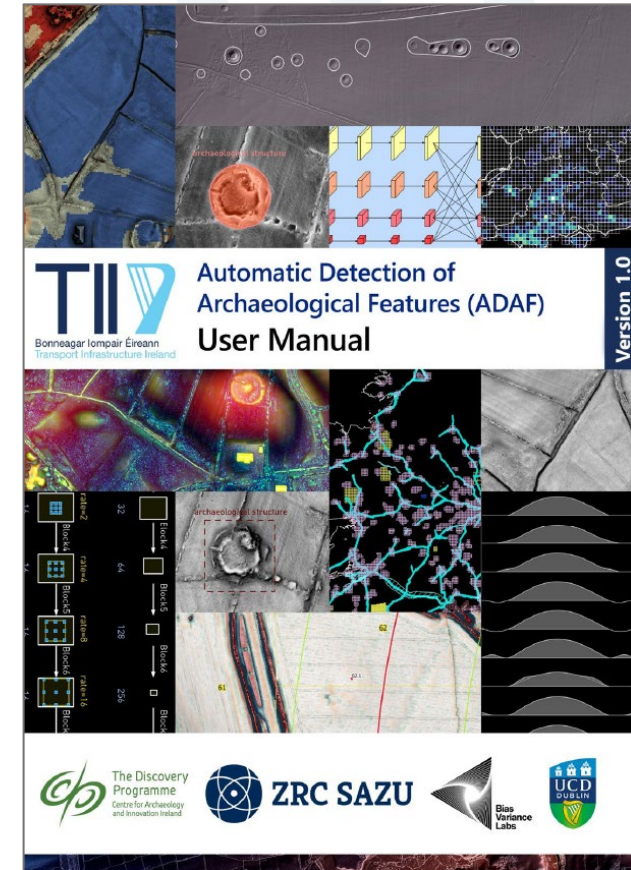
- To be used at **Phase 2** by CHP assessing Lidar data
  - earlier identification of previously unknown sites and potential National Monuments
  - greater opportunity for avoidance through design
  - more informed and robust assessment of route options
  - informs scope of **Phase 3** geophysical survey and targeted testing
- Runs on open-source software
- GIS compatible outputs



# Overview: Automatic Detection of Archaeological Feature machine-learning tool

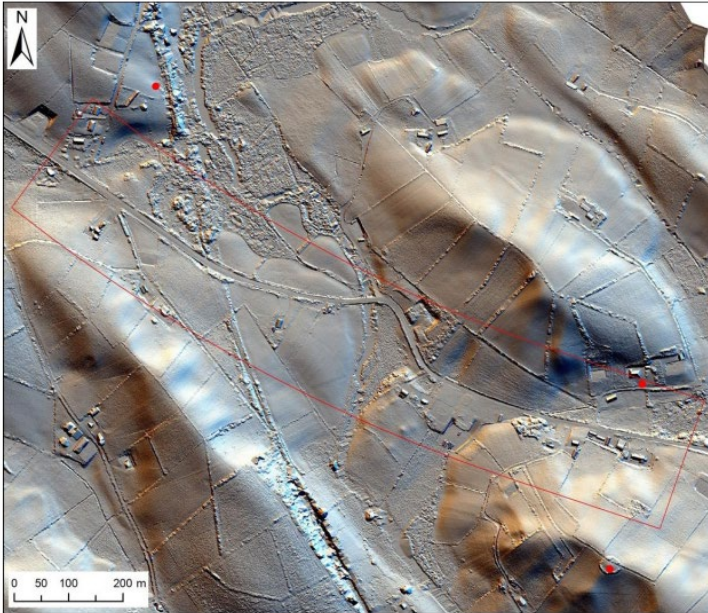


<https://github.com/EarthObservation/adaf>



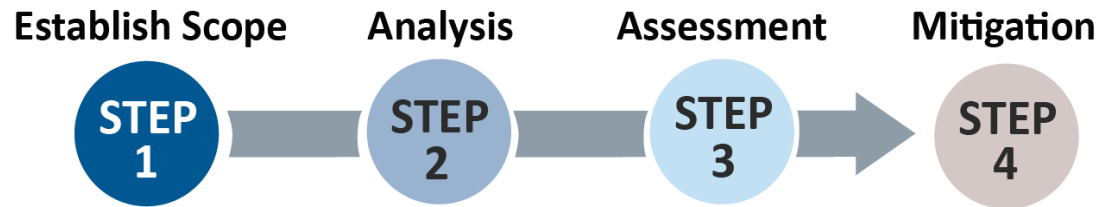


# Overview: typical methodologies Phases 2–3



# Overview: CHIA and four-step process

- Assessment Method Statements
- Cultural Heritage Dataset
- Project Archive
- Cultural Heritage Mitigation Plan



## STEP 1 OUTPUTS

The key output from Step 1 (Study Area and Scope) is an **Assessment Method Statement (Output Refs. 1.0a, 2.0a, 2.1a, 3.0a)** that includes:

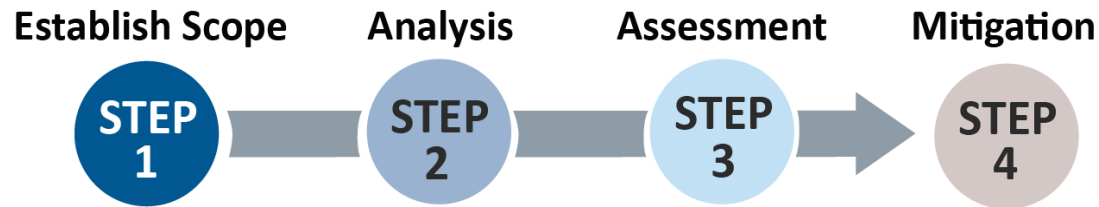
- name(s) of the Cultural Heritage Professional(s) who will undertake the CHIA, including their qualifications, experience, and any professional memberships (where applicable),
- confirmation of the Cultural Heritage objectives for the Phase (i.e. to reduce adverse effects and enhance opportunities for Cultural Heritage),
- assumptions and proposed actions,
- confirmation of the Study Area/Assessment Corridors, and reasonings for any proposed amendments for Cultural Heritage to any given Study Areas/Assessment Corridors,
- level of assessment to be undertaken, commensurate with the nature and scale of the Project, the PMG Phase, the required assessment/approvals processes, and the nature of the receiving Cultural Heritage environment,
- range of Cultural Heritage Receptors to be considered by the nominated Cultural Heritage Professional(s) (i.e. Archaeological Heritage, Built Heritage and/or Intangible Cultural Heritage),
- methodology for desktop research (including main sources of information) and fieldwork,
- details of any specialist surveys/assessments and consultation to be carried out,
- means of coordination with other specialists (e.g. Landscape, Biodiversity, Population and Human Health),
- methodology for measuring distances between Cultural Heritage Receptors and Project Options/Preferred Option,
- criteria for determining the importance of Cultural Heritage Receptors,
- methodology for assessing and describing impacts on Cultural Heritage,
- methodology for Options Appraisal/MCA/impact assessment, etc.
- format and contents of outputs, including CHDs, reports, figures, GIS/CAD files, etc., and
- agreed programme, key milestones, and outputs.

The Assessment Method Statement should be a concise summary of the above matters, for agreement by the Project Archaeologist and Project Manager prior to commencement of the CHIA at each PMG Phase. The final Assessment Method Statement shall be adhered to throughout the relevant Phase, unless otherwise agreed with the Project Archaeologist and approved by the Project Manager.



# Overview: CHIA and four-step process

- Assessment Method Statements
- **Cultural Heritage Dataset**
- **Project Archive**
- **Cultural Heritage Mitigation Plan**



## STEP 2 OUTPUTS

Key outputs from Step 2 (Analysis) are:

- A **Cultural Heritage Dataset** recording relevant information for all potential Cultural Heritage Receptors within the Study Area/Assessment Corridors (**Output Refs. 1.0b, 2.0b, 2.1b, 3.0b**),
- **Mapping/geospatial data** of Cultural Heritage Receptors within the Study Area/Assessment Corridors (**Output Refs. 1.0c, 2.0c, 2.1c, 3.0c**), and
- **Specialist reports** where applicable (e.g. geophysical surveys, Lidar assessments, underwater surveys, test excavation reports).

## STEP 3 OUTPUTS

Key outputs from Step 3 (Assessment) are:

- a **CHIA report or chapter** for inclusion in the overall Options Report and/or EIAR/ER (depending on the PMG Phase), describing the results of desktop research, fieldwork, specialist surveys/assessments, and consultations, including likely effects on Cultural Heritage; for Phase 3 this shall include type, quality, magnitude and significance of impact/effect, cumulative effects, and residual effects (**Output Refs. 2.0d, 2.1d, 3.0d**),
- **updated CHD and mapping/geospatial data** based on additional research, fieldwork, specialist surveys/assessments, consultations, etc. (**Output Refs. 2.0b, 2.0c, 2.1b, 2.1c, 3.0b, 3.0c**),
- completed Receptor Survey Forms, field notes, and photographic records for each Cultural Heritage Receptor to be submitted as part of the **Phase 3 Project Archive** (**Output Ref. 3.0g**), and
- Cultural Heritage input into the **MCA** for the Project (Phase 2) (**Output Refs. 2.0e, 2.1e**).

## STEP 4 OUTPUTS

Key outputs of Step 4 (Mitigation and Enhancement) are:

- **mitigation and enhancement proposals** for consideration by the Project Team set out in the relevant reports/chapters (**Output Refs. 2.0d, 2.1d, 3.0d**), and
- a **Cultural Heritage Mitigation Plan (CHMP)** and Cultural Heritage input to the Schedule of Environmental Commitments and Construction Environmental Management Plan (CEMP), where applicable (**Output Ref. 3.0e**).

# Overview: Determining Significance of Effect (Phases 2 & 3)

Baseline Importance



Magnitude of Impact



Significance of Effect

Importance	Suggested Examples (in alphabetical order)
<b>Very High</b>	Designated Built Heritage Receptors rated as being of international importance, including associated historic gardens and designed landscapes. Designated features of international intangible heritage value. Designated historic landscapes of international value. National Monuments. Other designated Cultural Heritage Receptors of international importance. World Heritage Properties.
<b>High</b>	Architectural Conservation Areas. Built Heritage Receptors rated as being of national importance by the NIAH, including associated historic gardens and designed landscapes. Historic landscapes (designated or undesignated) of outstanding interest and of demonstrable national value. These will be well-preserved historic landscapes exhibiting considerable coherence, time-depth, or other critical factors. Other designated or undesignated Cultural Heritage Receptors of demonstrable national importance. Places or features of national intangible heritage value. Protected Structures. Recorded Monuments (or sites and monuments scheduled for inclusion on the RMP) of high quality and importance. Sites and monuments subject to a Preservation Order or Temporary Preservation Order. Undesignated receptors of high quality and importance. World Heritage Tentative List properties.
<b>Medium</b>	Built Heritage Receptors rated as being of regional importance by the NIAH, including associated historic gardens and designed landscapes. Historic landscapes of regional value (designated or undesignated). Historic townscapes or built-up areas with demonstrable historic integrity in their buildings or built settings (e.g. including street furniture and other structures). Other designated or undesignated receptors of regional Cultural Heritage importance. Places or features of regional intangible heritage value. Recorded Monuments (or sites and monuments scheduled for inclusion on the RMP).
<b>Low</b>	Built Heritage Receptors rated as being of local importance by the NIAH, including associated historic gardens and designed landscapes. Historic landscapes whose value is limited by poor preservation and/or poor survival of contextual associations. Historic townscape or built-up areas of limited historic integrity in their buildings, or built settings (e.g. including street furniture and other structures). Other designated or undesignated Cultural Heritage Receptors of local importance. Places or features of local intangible heritage value. Receptors compromised by poor preservation of contextual associations with inherent, albeit limited, Cultural Heritage value. Undesignated historic buildings of modest quality in their fabric or historical association.
<b>Negligible</b>	Receptors/landscapes with very little surviving Cultural Heritage interest.

Magnitude of Impact	Criteria/Typical Descriptions
<b>Very High</b>	Major alteration to, or complete loss of, a Cultural Heritage Receptor. Effects likely to be experienced at a very large scale; considered permanent and irreversible.
<b>High</b>	Notable or long-term change to a Cultural Heritage Receptor.
<b>Medium</b>	Moderate or long-term change over a restricted area or a moderate change to a Cultural Heritage Receptor.
<b>Low</b>	Minor, short- or medium-term change over a restricted area or a minor change to a Cultural Heritage Receptor.
<b>Negligible</b>	Imperceptible change to a Cultural Heritage Receptor.

## INFORMATION BOX 10: Describing Significance of Effect

**Describing the Significance of Effects (based on EPA 2022, table 3.4, p.50)**  
Cultural Heritage Professionals may adapt these definitions; however, they must define them in their reports.

<b>Profound</b> An effect which obliterates a Cultural Heritage Receptor of high or very high importance.
<b>Very Significant</b> An effect which, by its character, magnitude, duration or intensity considerably alters most of an important aspect of the Cultural Heritage Receptor.
<b>Significant</b> An effect which, by its character, magnitude, duration or intensity alters an important aspect of the Cultural Heritage Receptor.
<b>Moderate</b> An effect that alters the character of the Cultural Heritage Receptor in a manner that is consistent with existing and emerging baseline trends.
<b>Slight</b> An effect which causes noticeable changes in the character of the Cultural Heritage Receptor without affecting its importance.
<b>Not significant</b> An effect which causes noticeable changes in the character of the Cultural Heritage Receptor but without significant consequences.
<b>Imperceptible</b> An effect capable of measurement but without significant consequences.



# Overview: Mitigation Measures

## INFORMATION BOX 11: Mitigation measures

### Mitigation measures can include:

- Primary mitigation measures developed through an iterative design process focused on avoidance and prevention which have become integrated components of the Project design,
- Standard construction practices for preventing and minimising effects on Cultural Heritage (e.g. fencing/barriers), and
- Measures designed to address any adverse effects remaining after primary measures and standard construction practices have been incorporated into the Project (e.g. screening or planting to reduce long-term visual/settling effects).

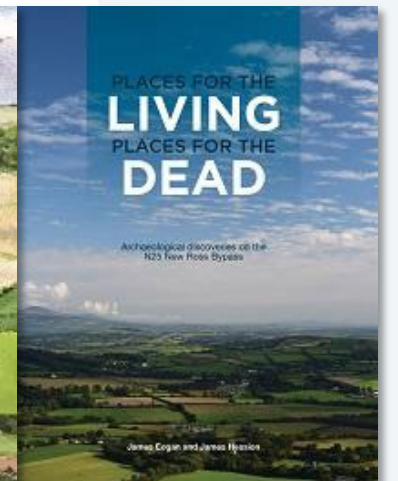
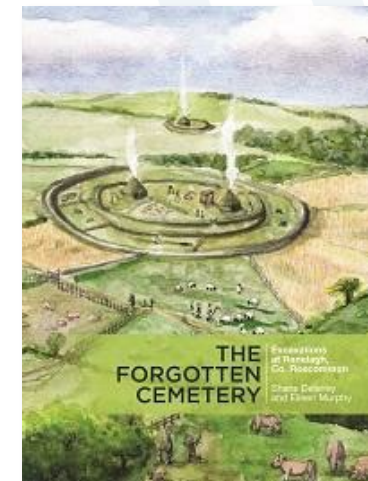
Where significant adverse effects cannot be avoided, these shall be remedied/offset through compensation and enhancement measures such as preservation by record, dissemination of knowledge (e.g. through publication of excavation reports/books), awareness raising, and amenity enhancements, wherever possible, in the interests of community benefit and sustainable development.

# Overview: Mitigation Measures

Avoidance
When no impact is caused, often through consideration of alternatives (i.e. a design solution). Every effort should be made to avoid and preserve Cultural Heritage Receptors <i>in situ</i> , where feasible. Avoidance is generally the most cost-effective form of mitigation and may be viewed as part of the consideration of alternatives.
Prevention
When a potential impact is prevented by a measure to avoid the possibility of the impact occurring. Usually refers to technical measures. Prevention measures are also put in place to prevent the effects of accidental events from giving rise to adverse effects (e.g. fencing off a site to prevent accidental damage during construction).
Reduction
When an impact is lessened. This is a common strategy for dealing with effects which cannot be <u>avoided</u> , and can involve reducing the effect and reducing exposure to the effects (e.g. using barriers or planting to screen off a Project and reduce the visual impact on a Cultural Heritage Receptor).
Remedy/Offset
When adverse effects are compensated for or resolved by a remedial action such as excavation, recording and publishing ('preservation by record'), or when an adverse effect is balanced by a positive effect (e.g. provision of a new amenity area to compensate for the unavoidable loss of access to the grounds of an historic house).



# Overview: Selection of Mitigation Measures (Phases 5–7)



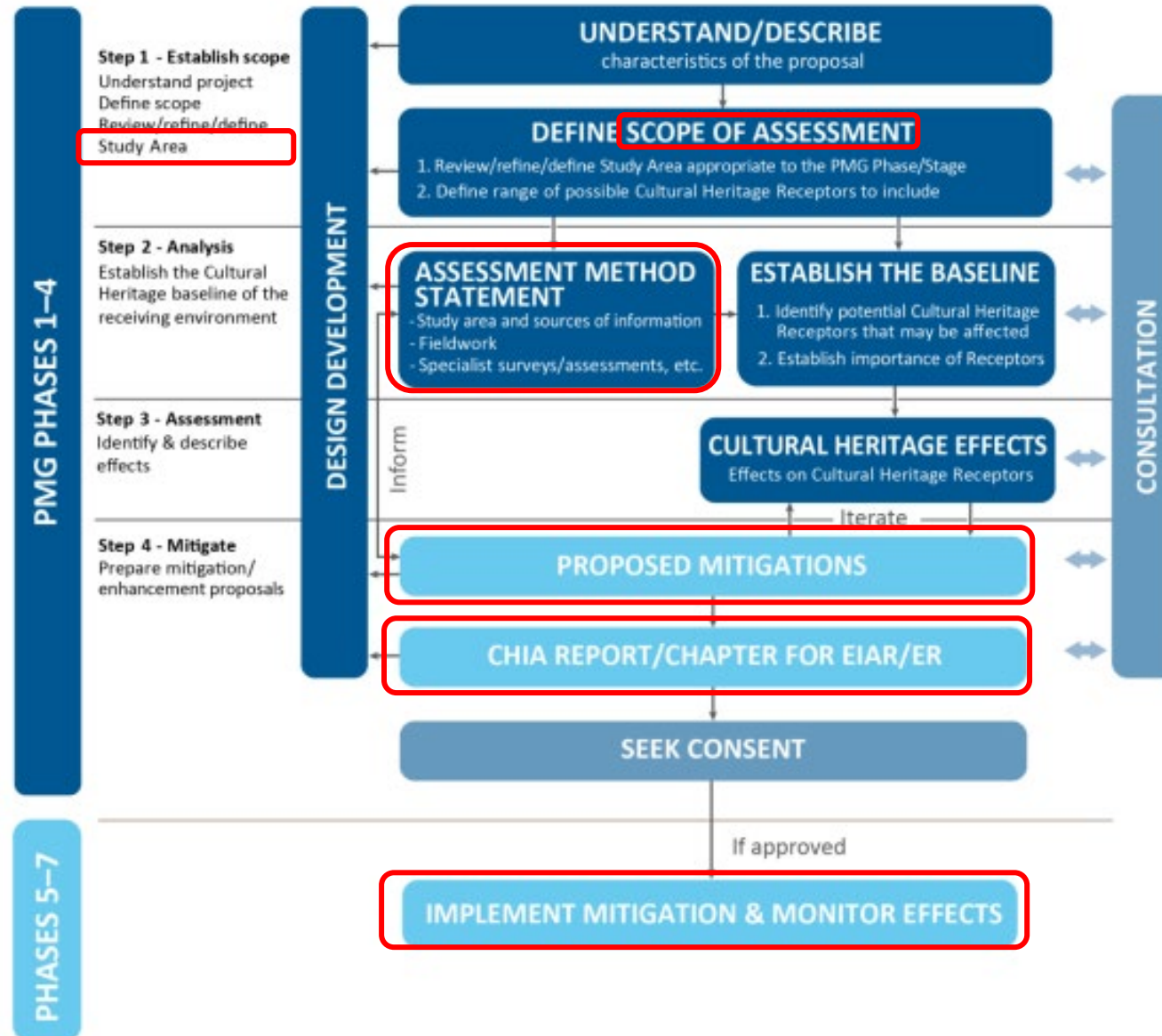
# Overview: Mitigation Stage (i) to (iv)

## Archaeological Services Contract (Phase 5–7)

Stage	Sub-Stage	Type
<b>Stage (i)</b>	<b>Test Excavation &amp; Survey Services</b>	
	Stage (i)a	Standard Test Excavations
	Stage (i)b	Site-Specific Test Excavations
	Stage (i)c	Test Excavations in Wetland/Scrub
	Stage (i)d	Underwater Surveys
	Stage (i)e	Built Heritage Surveys
	Stage (i)f	Townland Boundary Surveys
	Stage (i)g	Topographical Surveys
	Stage (i)h	Metal Detector Surveys
	Stage (i)i	Geophysical Surveys
	Stage (i)j	Aerial Surveys
	Stage (i)k	Monitoring During Construction
	Stage (i)l	Palaeo-environmental/Geoarchaeological Coring, Analysis and Reporting
	Stage (i)m	Test Excavations in Felled Forestry
<b>Stage (ii)</b>	<b>Pre-Excavation Services</b>	
<b>Stage (iii)</b>	<b>Excavation &amp; Post-Excavation Assessment Services</b>	
<b>Stage (iv)</b>	<b>Post-excavation &amp; Dissemination Services</b>	



# PM Roles and responsibilities through Phases 1–7



## Key points

Determine extent of study area/assessment corridor (as appropriate)

Review and approve Assessments Method Statements in conjunction with PA

Review and approve all Phase 1–4 outputs in conjunction with PA

Implementation of mitigations at Phases 5–7

# Overview: Essential Requirements

## Phase 1 and Phase 2 Stage 1

### PHASE 1 OVERVIEW OF ESSENTIAL REQUIREMENTS

#### TASKS

- ✓ Prepare an Assessment Method Statement confirming the Study Area and outlining the scope of the study, including the range of Cultural Heritage Receptors to be considered, methodology to be used, sources of information, and the format of outputs.
- ✓ Carry out desktop research with reference to the sources of information suggested by these guidelines (see **Section 5.4.1**, **Figure 5.7** and **Appendix 6**).
- ✓ Identify and map the Cultural Heritage Receptors within the project study area and identify key constraints.
- ✓ Prepare the CHD containing essential data relevant to each identified Cultural Heritage Receptor.
- ✓ Identify any transboundary issues that need to be considered.
- ✓ Prepare a Constraints Study Report.

#### OUTPUTS

- Phase 1 Assessment Method Statement (**Output Ref. 1.0a**).
- CHD recording the known Cultural Heritage Receptors (**Output Ref. 1.0b**). Mapping/geospatial data for the Cultural Heritage Receptors (**Output Ref. 1.0c**).
- Constraints Study Report (Output Ref. 1.0d; note: for greenways, this may be submitted during Phase 2).

### PHASE 2 STAGE 1: OVERVIEW OF ESSENTIAL REQUIREMENTS

#### TASKS

- ✓ Prepare an Assessment Method Statement confirming the Assessment Corridors and outlining the scope of the study, including the range of Cultural Heritage Receptors to be considered, methodology to be used, sources of information, fieldwork, and the format of outputs.
- ✓ Undertake further research with reference to the sources of information suggested by these guidelines (see **Section 5.4.1**, **Figure 5.7** and **Appendix 6**).
- ✓ Carry out a survey from accessible land and targeted site inspections, where necessary.
- ✓ Update the CHD with additional data for previously identified and newly identified Cultural Heritage Receptors.
- ✓ Liaise with the Project Archaeologist, Project Manager, and other relevant professionals to ensure ongoing communication and identification of interactions.
- ✓ Prepare specification for specialist surveys.
- ✓ Review the Project options against the baseline Cultural Heritage information and assess the likely effects of each option on Cultural Heritage.
- ✓ Compare and rank the identified options from a Cultural Heritage perspective in the Phase 2 Stage 1 MCA.
- ✓ Prepare a Phase 2 Stage 1 CHIA report/chapter on findings.

#### OUTPUTS

- Phase 2 Stage 1 Assessment Method Statement (**Output Ref. 2.0a**).
- Updated CHD (**Output Ref. 2.0b**) and mapping/geospatial data (**Output Ref. 2.0c**) to assist the identification and refinement of options.
- CHIA report/chapter referencing each of the identified options to be included in the Stage 1 Options Report (**Output Ref. 2.0d**).
- Comparative ranking (MCA) of the identified options relative to their likely effects on Cultural Heritage for input under Environment to MCA/Project Appraisal Deliverables (**Output Ref. 2.0e**).

# Overview: Essential Requirements Phase 2 Stage 2, Phase 3 and Phase 4

## PHASE 2 STAGE 2: OVERVIEW OF ESSENTIAL REQUIREMENTS

### TASKS

- ✓ Review the Phase 2 Stage 1 CHIA report/chapter to identify the issues that need to be covered in the Stage 2 assessment.
- ✓ Prepare an Assessment Method Statement confirming the Assessment Corridors and outlining the scope of the study, including the range of Cultural Heritage Receptors to be considered, methodology to be used, sources of information, fieldwork, consultations, specialist surveys/assessments and the format of outputs.
- ✓ Undertake further research with reference to the sources of information suggested by these guidelines (see **Section 5.4.1, Figure 5.7 and Appendix 6**).
- ✓ Carry out survey(s) from accessible land and targeted site inspections, where necessary.
- ✓ Consult with any landowners/occupiers and/or special interest groups identified as having Cultural Heritage knowledge/concerns.
- ✓ Prepare specifications for specialist surveys and assessments.
- ✓ Incorporate the results of any consultations and specialist assessments or surveys commissioned for the Project.
- ✓ Update the CHD with additional data for previously identified and newly identified Cultural Heritage Receptors.
- ✓ Liaise with the Project Archaeologist, Project Manager, and other relevant professionals to ensure ongoing communication and identification of interactions.
- ✓ Review the refined Project options against the baseline Cultural Heritage information and assess the likely effects of each option on Cultural Heritage.
- ✓ Identify enhancement opportunities for important Cultural Heritage Receptors.
- ✓ Compare and rank the identified options from a Cultural Heritage perspective in the Phase 2 Stage 2 MCA.
- ✓ Prepare a Phase 2 Stage 2 CHIA report/chapter on findings, including measures that should be considered by the Design Team to mitigate adverse effects and enhance opportunities.
- ✓ Provide input to the Project Appraisal Deliverables (MCA).

### OUTPUTS

- Phase 2 Stage 2 Assessment Method Statement (**Output Ref. 2.1a**).
- Further refined and updated CHD (**Output Ref. 2.1b**) and associated mapping/geospatial data (**Output Ref. 2.1c**) relevant and scaled to the identified options, and based on additional research, fieldwork, specialist surveys/assessments, consultations, etc.
- CHIA report/chapter referencing each of the identified options to be included in the Options Report (**Output Ref. 2.1d**).
- Comparative ranking (MCA) of the identified options relative to their likely effects on Cultural Heritage for input under Environment to MCA/Project Appraisal Deliverables (**Output Ref. 2.1e**).

## PHASE 3: OVERVIEW OF ESSENTIAL REQUIREMENTS

### TASKS

- ✓ Review the Phase 2 Stage 2 CHIA report/chapter, and other relevant reports to identify the issues that need to be covered in the Phase 3 assessment.
- ✓ Prepare an Assessment Method Statement confirming the Phase 3 Study Area and outlining the scope of the study, including the Cultural Heritage Receptors to be considered, methodology to be used, sources of information, fieldwork, consultations, specialist surveys/assessments and the format of outputs.
- ✓ Undertake further research with reference to the sources of information suggested by these guidelines (see **Section 5.4.1, Figure 5.7 and Appendix 6**).
- ✓ Carry out a full walkover of the proposed Project including junctions, connecting roads, attenuation ponds, site compounds, quarries, etc.
- ✓ Consult with any landowners/occupiers and/or special interest groups identified as having Cultural Heritage knowledge/concerns.
- ✓ Prepare specifications for specialist surveys and assessments.
- ✓ Incorporate the results of any consultations and specialist assessments or surveys commissioned for the Project into the CHIA.
- ✓ Update the CHD with additional data for previously identified and newly identified Cultural Heritage Receptors.
- ✓ Liaise with the Project Archaeologist, Project Manager, and other relevant professionals to ensure ongoing communication and identification of interactions.
- ✓ Assess the importance of and magnitude of impact and likely significance of effect upon the Cultural Heritage Receptors affected by the proposed Project. Consult with the NMS and Local Authority Heritage Office in relation to likely impacts of the proposed Project, particularly likely significant effects, and proposed strategies to mitigate adverse effects.
- ✓ Prepare the CHMP and have input to the Schedule of Environmental Commitments and CEMP, where required.
- ✓ Prepare a Phase 3 CHIA report/chapter on findings, including measures that will be taken to mitigate adverse effects (e.g. avoidance), remedy/offset unavoidable effects (e.g. preservation by record) and enhance opportunities.
- ✓ Compile all relevant data and records (Receptor Survey Forms, field notes, photographs, consultations with third parties, etc.) into a Phase 3 Project Archive.

### OUTPUTS

- Phase 3 Assessment Method Statement (**Output Ref. 3.0a**).
- Detailed and updated CHD based on additional research, fieldwork, specialist surveys/assessments, consultations, etc. (**Output Ref. 3.0b**).
- Updated mapping/geospatial data for Cultural Heritage Receptors (**Output Ref. 3.0c**).
- Detailed CHIA report/chapter for the proposed Project (based on detailed design and updated CHD), including description of baseline; assessment of direct and indirect effects on Cultural Heritage; interactions; cumulative effects; detailing of mitigation measures, etc., either as standalone CHIA Report or, where required, as a chapter of the EIAR (or ER for Part 8 developments) (**Output Ref. 3.0d**).
- CHMP and input to the Schedule of Environmental Commitments and CEMP where required (**Output Ref. 3.0e**).
- CHIA input to Project Appraisal Deliverables, where required (**Output Ref. 3.0f**).
- Phase 3 Project Archive (**Output Ref. 3.0g**).

## PHASE 4: OVERVIEW OF ESSENTIAL REQUIREMENTS

### TASKS

- ✓ Review Cultural Heritage issues raised in submissions to the consenting process, including requests for further information issued by the Competent Authority and concerns raised by the public, and draft responses, where required.
- ✓ Review and, if necessary, update the CHIA and prepare errata for the original EIAR.
- ✓ Prepare a Cultural Heritage Brief of Evidence where a public Oral Hearing is to be held.
- ✓ Present Brief of Evidence and respond to questions at Oral Hearing, where required.
- ✓ Review and, if necessary, update the CHMP and Cultural Heritage aspects of the Schedule of Environmental Commitments.
- ✓ Review and report on any Cultural Heritage aspects addressed in the decision of the Competent Authority and/or planning inspector's report.
- ✓ Provide input to the updated CEMP, where required.
- ✓ Draft the archaeological services Method Statements to accompany a licence application for archaeological works, where required.
- ✓ In the event of a Judicial Review, contribute to affidavits (as may relate to Cultural Heritage) and provide further information/clarification to the legal team, including any additional archaeological sites or monuments that may have been identified since the Project was approved.
- ✓ Compile all relevant data and records (Receptor Survey Forms, field notes, photographs, consultations with third parties, responses to submissions, etc.) into a final Project Archive for use by the Archaeological Consultant and others with responsibility for implementing the Cultural Heritage mitigations/planning conditions.

### OUTPUTS

- Responses to queries and submissions relevant to CHIA, where required (**Output Ref. 4.0a**).
- Draft Brief of Evidence on CHIA for Oral Hearing, where required (**Output Ref. 4.0b**).
- Final Brief of Evidence on CHIA for Oral Hearing, where required (**Output Ref. 4.0c**).
- Present Brief of Evidence and respond to questions at Oral Hearing, where required (**Output Ref. 4.0d**).
- Review CHIA aspects of approval and the Schedule of Environmental Commitments, where required (**Output Ref. 4.0e**).
- Draft Method Statements (including mapping) to accompany a licence application for archaeological works, where required (**Output Ref. 4.0f**).
- Cultural Heritage input to the updated CEMP (**Output Ref. 4.0g**), where required.
- Phase 4 Project Archive (**Output Ref. 4.0h**).



# Summary of Key PM Responsibilities

## In conjunction with PA:

- ensure CHP is competent regarding project type/nature
- approve project study area, programme, key stages, communication protocols
- approve all CHIA outputs including assessment method statements
- agree CHIA scope and application of guidelines commensurate with nature/scale of project
- consult with Local Authority in relation to Protected Structures
- ensure that statutory permissions [archaeology] are obtained
- determine preservation requirements of significant new 'national monuments' in consultation with statutory authorities, potentially requiring new EIA
- consider opportunities, enhancement and mitigations measures
- ensure deposition of archaeological archives/artefacts

## Specific PM responsibilities:

- implement these guidelines
- instruct additional works at Phase 2 Stage 3 should they deem it necessary
- ensure that all relevant stakeholders are consulted
- prepare preliminary Construction Environmental Management Plan (CEMP) incorporating CH commitments





# Key implications

- TA briefs need to reflect changes to CHIAG
- PA involvement required in preparation of TA Brief to set 'guard rails', thus minimising risk of claims
- applicability of CHIAG to projects already underway will need to be decided by PM in discussion with PA and Design Team
- all outputs need to be approved by the PM in conjunction with the PA
- Invite comments and feedback on implementation of the CHIAG in coming months

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