

TOBIN

CONSULTING ENGINEERS

BUILT ON KNOWLEDGE



Comhairle Contae Thiobraid Árann
Tipperary County Council

Tipperary County Council

Templemore Infilling Works

Preliminary Examination and Environmental Impact Assessment (“EIA”) Screening Report



PROJECT NAME: Templemore Infilling Works

REPORT NAME: Preliminary Examination and Environmental Impact Assessment (“EIA”) Screening Report

Document Control Sheet	
Document Reference	11238 Preliminary Examination and “EIA” Screening Report
Report Status	Report
Report Date	January 2024
Current Revision	A1
Client:	Tipperary County Council
Client Address:	Tipperary County Council Civic Offices Emmet Street, Clonmel Co. Tipperary
Project Number	11238

Galway Office Fairgreen House, Fairgreen Road, Galway, H91 AXK8, Ireland. Tel: +353 (0)91 565 211	Dublin Office Block 10-4, Blanchardstown Corporate Park, Dublin 15, D15 X98N, Ireland. Tel: +353 (0)1 803 0406	Castlebar Office Market Square, Castlebar, Mayo, F23 Y427, Ireland. Tel: +353 (0)94 902 1401
---	--	--

Revision	Description	Author:	Date	Reviewed By:	Date	Authorised by:	Date
A1	Report	AM	03/04/2023	LB	11/12/2023	AM	10/01/2024

TOBIN Consulting Engineers

Disclaimer

This Document is Copyright of TOBIN Consulting Engineers Limited. This document and its contents have been prepared for the sole use of our Client. No liability is accepted by TOBIN Consulting Engineers Limited for the use of this report, or its contents for any other use than for which it was prepared.



Table of Contents

1.0	INTRODUCTION	1
1.1	Background	1
2.0	PROPOSED DEVELOPMENT WORKS AND EXISTING SITE.....	1
2.1	Summary of main works	3
2.1.1	<i>Drainage Header Pipe</i>	3
2.1.2	<i>Infilling Works</i>	3
2.1.3	<i>Surface Finishes</i>	3
3.0	ENVIRONMENTAL IMPACT ASSESSMENT (EIA) SCREENING PROCESS.....	4
3.1	Overview.....	4
3.2	Legislative Context	5
3.2.1	<i>EU Legislation</i>	5
3.2.2	<i>Irish Legislation</i>	5
3.3	Preliminary Examination Conclusion	6
3.4	Schedule 5 Project Type Applicability	6
4.0	INFORMATION PROVIDED FOR EIA (SCHEDULE 7A & 7 OF THE REGULATIONS) ...	8
5.0	EIA SCREENING ASSESSMENT.....	11
5.1	Characteristics of Proposed Development.....	11
5.1.1	<i>Size and design of the whole Project</i>	11
5.1.2	<i>Cumulation with other existing and/or approved projects</i>	11
5.1.3	<i>Nature of any associated demolition works</i>	11
5.1.4	<i>Use of Natural Resources, in particular land, soil, water, and biodiversity</i>	11
5.1.5	<i>Production of Waste</i>	12
5.1.6	<i>Pollution and Nuisances</i>	12
5.1.7	<i>Risk of accidents having regard to substances or technologies used including those caused by climate change</i>	13
5.1.8	<i>The risks to human health (for example due to water contamination or air pollution)</i>	13
5.2	Location of Project	13
5.2.1	<i>Existing and approved Landuse</i>	13
5.2.2	<i>The relative abundance, availability, quality, and regenerative capacity of natural resources (including soil, land, water, and biodiversity) in the area and its underground</i>	13
5.2.3	<i>The absorption capacity of the natural environment</i>	14
5.2.4	<i>Designated Sites</i>	14
5.2.5	<i>Population</i>	14
5.2.6	<i>Landscapes of historical, cultural, or archaeological significance</i>	15
5.3	Characteristics of Potential Impacts	16
5.3.1	<i>Magnitude and Extent of Impact</i>	16
5.3.2	<i>The transfrontier nature of the impact</i>	16
5.3.3	<i>Magnitude and Complexity of the Impact</i>	16
5.4	Probability of Impact.....	19
5.5	Onset, Duration, Frequency, and reversibility of the impact.....	19



5.6 Cumulation of the impact with the impact of other existing and/or approved projects .
..... 20

5.7 Possibility of effectively reducing the impact..... 20

6.0 EIA SCREENING DETERMINATION..... 21

Table of Figures

FIGURE 2-1 SURFACE FINISH – SECONDARY PEDESTRIAN AREAS..... 3

Appendices

APPENDIX A PROPOSED SITE LOCATION (DRAWING 11007-2000)

APPENDIX B PROPOSED LANDSCAPE WORKS (DRAWINGS 11007-2036 TO 2039)

APPENDIX C ARCHAEOLOGICAL ASSESSMENT REPORT

APPENDIX D ARCHITECTURAL ASSESSMENT REPORT



1.0 INTRODUCTION

1.1 Background

TOBIN Consulting Engineers have been appointed by Tipperary County Council to prepare a Preliminary Examination and Environmental Impact Assessment (“EIA”) Screening Report for works associated with the infilling of a diverted stretch of the River Mall channel (hereafter referred to as the “old channel”) in the town of Templemore, Co. Tipperary. The site of the old channel is located in the town centre of Templemore, see Drawing 11007_2000 in Appendix A.

There is approximately 805m of the old channel in Templemore, which no longer acts as a functioning watercourse due to diversionary works carried out by the Office of Public Works (OPW) in September 2021. In its current state, the old channel presents a potential health and safety risk, as well as potential pollution and anti-social behaviour risk.

This report outlines the methodology used to screen the proposed development works for the requirement to undertake an EIA. It provides a description of the proposed development works and the receiving environment, and provides an assessment of the potential environmental impacts, outcomes, and conclusions of the screening process.

This EIA Screening Report has reviewed and considered the following documents available for the local area and this project:

- Templemore Infilling Works Planning Report (TOBIN Consulting Engineers, 2023);
- Templemore Infilling Works Natura Impact Statement (NIS) (TOBIN Consulting Engineers, 2024);
- Templemore Infilling Works preliminary Construction Environmental Management Plan (CEMP) (TOBIN Consulting Engineers, 2024);
- Archaeological Assessment at former River Mall channel, Templemore, County Tipperary (IAC Archaeology, 2024);
- Architectural Heritage Assessment for the proposed infill works at Templemore, Co. Tipperary (IAC Archaeology, 2023); and
- River Mall (Templemore) Flood Relief Scheme Environmental Impact Statement (EIS) (TOBIN Consulting Engineers, 2015); Natura Impact Statement (NIS) (TOBIN Consulting Engineers, 2015) and environmental monitoring reports (construction phase) (TOBIN Consulting Engineers, 2017-2024).

2.0 PROPOSED DEVELOPMENT WORKS AND EXISTING SITE

The proposed development is located in the town of Templemore, Co. Tipperary (see Appendix A). The red line planning application area is approximately 3.09 hectares. The old River Mall channel, which is the primary location for the proposed works, is no longer a functioning watercourse following separate flood relief diversion works carried out by the OPW in September 2021.

The old channel is located on the edge of Templemore town centre and runs southwards from opposite the Templemore Town Park to Talavera, just south of Small’s Bridge. The old channel stretch is approximately 805m long. The sides of the channel are predominately stone walls which lie adjacent to the Town Park, roads (i.e., Blackcastle Road, N62, The Mall and Talavera Road) or private properties. Tipperary County Council have confirmed there are 26 surface

water outfalls and existing drains that flow into this old channel area from both the east and west banks.

The Proposed Development will consist of the following works:

- i. The construction of a 900mm drainage header pipe in the existing redundant channel section of the River Mall and manholes.
- ii. Provision for the connection of 26 existing surface water outfalls, currently discharging to the redundant channel section of the River Mall, to the 900mm drainage header pipe along with all accommodation works.
- iii. The infilling of the redundant channel section, including pipe surround of the 900mm drainage header pipe, to match existing ground elevations surrounding the river channel.
- iv. Provision of a footpath and grass area over the infilled river from Templemore Town Park pedestrian entrance to a point 100m south in the direction of the N62, behind an existing stone wall / parapet.
- v. Provision of approximately 100m of new footway adjacent to the Blackcastle Road to the junction of the N62 (at Young's garage), with a footway width by 1.8m which and reduced carriageway width.
- vi. Removal of existing parapet wall to create an AC hardstanding area adjacent to Youngs garage.
- vii. The demolition of approximately 50m of existing stone wall and bridge parapet north of the N62 to allow for the construction of a new proposed footway to match existing from O'Dwyer Bridge.
- viii. Provision of improvement works north of O'Dwyer bridge for approximately 40m to include increasing corner radius, installation of aggregate bollards and hard landscaping area.
- ix. Widening of approximately 30m of the carriageway crossing, by means of removing the existing parapet wall on the north side and realigning the parapet wall on the southern side of O'Dwyer bridge along the N62, whilst maintaining the existing lane configurations.
- x. The demolition of approximately 15m of existing stone wall and bridge parapet south of the N62 to allow for improvement works to include a new footway, increased corner radius and increase sight lines between The Mall Road and the N62.
- xi. Construction of approximately 70m AC hard standing area over the existing channel south of the N62 and maintenance of the existing stone wall / parapet.
- xii. The demolition of sections of existing stone walls to allow for the construction of a new proposed footpath from O'Dwyer Bridge to the Templemore Town Park.
- xiii. Construction of a proposed stone wall separating the property boundaries and the proposed footpath, along with associated streetscape works at O'Dwyer Bridge.
- xiv. Landscape works to match existing surrounding environment at the Templemore town park.
- xv. Construction of proposed hardstand/pavement over existing channel at Youngs Garage and Templemore Motor Works.
- xvi. Demolition of existing bridge structures at residential accesses where existing channel is to be infilled.

- xvii. Landscape works to match existing surrounding environment from Templemore Motor Works, in a southerly direction, to the outfall to the existing River Mall.
- xviii. Construction of discharge headwalls.
- xix. Construct new agricultural entrance approximately 180m south of O'Dwyer's bridge on the western side of the Mall Road.

The proposed landscape works are presented in Appendix B.

The proposed works are scheduled to last for approximately 24 weeks (including environmental pre construction surveys and time for materials procurement).

2.1 Summary of main works

2.1.1 Drainage Header Pipe

A drainage header pipe will be placed within the old section of channel and will collect flows from the outfall pipes along the old channel. This drainage header pipe will then connect into an existing bypass interceptor in Talavera before flows are discharged to the realigned River Mall.

2.1.2 Infilling Works

Where possible, local materials will be used as infill for the old channel.

Placing and compacting of the material shall be as per the Transport Infrastructure Ireland (TII) Publications of Standards for Drainage Design and Construction. Suitability of this material for reuse as infill shall be assessed prior to its use. Classification of the material as non-hazardous inert spoil for reuse shall be required to avoid any requirement for a waste transfer or waste discharge license.

2.1.3 Surface Finishes

Primary Pedestrian Areas: A concrete footpath is proposed to match the existing from O'Dwyer's Bridge to Templemore Town Park.

Secondary Pedestrian Areas/Streetscape: It is proposed to use "Tobermore Fusion" or similar type precast concrete granite aggregate slabs in sizes 600x400x80mm and 400x400x80mm in silver grey and mid grey colour aggregate at streetscape area at O'Dwyer's Bridge.



Figure 2-1 Surface Finish – Secondary Pedestrian areas

Vehicular Trafficked Areas: The areas located at Young's Garage and at Templemore Motor Works have the potential for future vehicular trafficking and as such will have a macadam finish.

Green Areas: The areas located at Templemore Town Park and within existing residential properties to the south of O'Dwyer's Bridge will have a topsoil surface seeded with grass.

3.0 ENVIRONMENTAL IMPACT ASSESSMENT (EIA) SCREENING PROCESS

3.1 Overview

This Preliminary Examination and EIA Screening Report was prepared to document the EIA screening assessment process. The purpose of this screening assessment is to identify the legal need or otherwise for an Environment Impact Assessment Report (EIAR) to be completed for the proposed infill works along a section of old river channel in Templemore, County Tipperary.

Screening is the process of ascertaining whether or not a proposed project or development requires EIA. This is determined by considering mandatory and sub-threshold developments and whether or not the proposed works would or would not be likely to have significant impacts on the environment. Significant impacts may arise as a consequence of the type of works proposed, the scale or extent of works proposed or the location of proposed works to sensitive environments.

EIA is the process by which the anticipated impacts on the environment (positive and negative) of a proposed development or project are measured. If the anticipated impacts are unacceptable, design measures or other relevant mitigation measures can be identified to reduce or avoid those impacts. The purpose of the assessment is to ensure that decision makers consider the environmental impacts when deciding whether or not to proceed with a project.

This preliminary examination and EIA Screening report has been completed by TOBIN Consulting Engineers and it takes due notice of the following regulations and guidance documents:

- Planning and Development Acts and Regulations 2000 – 2021;
- EU Directive 2011/92/EU, as amended by Directive 2014/52/EU (the EIA Directive);
- Department of Housing, Planning and Local Government (August 2018) Guidelines for Planning Authorities and An Bord Pleanála on Carrying out EIA (the 2018 Guidelines);
- Environmental Protection Agency (2022) Revised Guidelines on the Information to be contained in Environmental Impact Assessment Reports;
- European Commission (2017) Environmental Impact assessment of Projects, Guidance on Screening (the EC 2017 Guidance);
- Guidelines issued by the Department of Housing, Planning and Local Government to Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (August 2018);
- Office of the Planning Regulator (“OPR”) Practice Note PN02 on Environmental Impact Assessment Screening (June 2021);
- Roads Act 1993 (as amended), and
- Roads Regulations 1994.

A Construction Environmental Management Plan (CEMP) has also been prepared for the proposed development and is submitted with the planning application pack. This CEMP defines the approach to environmental management at the site during the construction phase and details the project specific environmental measures that are to be implemented and the procedures to be followed for the scope of the constructions works. This document will be updated by the appointed Main Contractor, as required for approval by Tipperary County Council. The CEMP is considered within this report.

3.2 Legislative Context

3.2.1 EU Legislation

The initial Environmental Impact Assessment (EIA) Directive has been in place since 1985 (85/337/EEC). This Directive along with four amendments was amalgamated into Directive 2014/52/EU in May 2014. Directive 2014/52/EU aims to simplify the rules for assessing the potential environmental effects of projects on the environment while improving the level of environmental protection in line with current challenges.

An EIAR is the principle document that the environmental impact assessment process is based on and focuses on describing the existing environment, identifying the potential effects as a result of the proposed development, and describing any mitigation measures required to reduce or eliminate potential effects.

The EIA Directive requires that certain developments be assessed for the likely significant environmental impacts before planning approval can be granted. When submitting a planning application for such a development, the applicant must also submit an EIAR.

The EIA Directive is set out under Annexes I - III of the EU Directive 2014/52/EU (EIA Directive). Annex I lists developments for which EIA is mandatory and Annex II lists projects which require a determination of their likely significant effects. Criteria to determine whether a sub-threshold development should be subject to an EIA is set out in Annex III.

3.2.2 Irish Legislation

The EIA Directive has been broadly transposed into Irish legislation through a variety of Acts and Regulations. For the purpose of the proposed development, the following legislation is relevant:

- The Planning and Development Act 2000 (as amended) (incorporating the Planning and Development Regulations 2001 (as amended)).
- The Roads Act 1993 (as amended)

An EIA is required under the Planning and Development Regulations, 2001 (as amended) for certain projects. Part 1 of Schedule 5 to the Planning and Development Regulations lists projects included in Annex I of the EIA Directive which automatically require EIA, where thresholds are met or exceeded. Part 2 of the same Schedule outlines thresholds for other projects which also require EIA, as per Annex II of the EIA Directive, where national thresholds are met or exceeded.

Under Article 120 of the 2001 Planning and Development Regulations, where a Local Authority proposes to carry out a sub threshold development, the Local Authority must carry out a preliminary examination of, at least, the nature, size, or location of the development.

Where the Local Authority concludes based on that preliminary examination that –

(i) there is no real likelihood of significant effects on the environment arising from the proposed development, it must conclude that any EIA is not required; or

(ii) if it concludes instead that there is significant and realistic doubt in regard to the likelihood of significant effects on the environment arising from the proposed development it must carry out a screening for EIA; or, finally

(iii) where it concludes that there is a real likelihood of significant effects on the environment arising from the proposed development it must at that point conclude that development would be likely to have such effects and prepare or cause to be prepared an EIAR in respect of the development.

In the present case the conclusion at preliminary examination stage was as per (i) above.

3.3 Preliminary Examination Conclusion

As already referred to in Section 3.2.2 the conclusion following preliminary examination in accordance with Article 120(1)(a) of the 2001 Regulations as amended was that there is no real likelihood of significant effects on the environment arising from the proposed development, it must conclude that an EIA is not required.

3.4 Schedule 5 Project Type Applicability

This section considers the proposed development with respect to Schedule 5 of the Planning and Development Regulations 2001, as amended and Sections 50 and 51 of the Roads Act, 1993, as amended.

The proposed works are not a type of development prescribed in Schedule 5 (Parts 1 or 2) of the Regulations and as such EIA is not mandatory.

The proposed development is located in an urban environment and will involve the provision of infrastructure specifically the laying of pipes. Therefore, Part 2 Class 10 (b) Infrastructure Projects, in particular, (iv) Urban development is of relevance. This Class is applicable to urban development “*which would involve an area greater than 2 hectares in the case of a business district, 10 hectares in the case of other parts of a built-up area and 20 hectares elsewhere.*”

The proposed development is not located within a business district, “*a district within a city or town in which the predominant land use is retail or commercial use,*” but it could be classed under “*other parts of a built-up area.*” The size of the proposed application site however is approximately 3.09 hectares and is therefore substantially less than the applicable threshold of 10 hectares.

Also of relevance to the proposed development is Class 10 (f)(ii), which relates to flood relief works. Under this class it states, “*canalisation and flood relief works... where the length of the river channel on which works are proposed would be greater than 2km.*”

The proposed development seeks to infill a diverted stretch of old river channel approximately 805m in length and to provide necessary surface water connections currently feeding into the channel. The old channel in itself does not form part of the development works required under the River Mall (Templemore) Flood Relief Scheme and as such cannot be considered to be “*canalisation and flood relief works.*”

Within the context of the River Mall (Templemore) Flood Relief Scheme, Class 13 (a) & (c) are also relevant for consideration. Class 13 (a) refers to “any change or extension of development already authorised, executed or in the process of being executed (not being a change or extension referred to in Part 1) which would: -

(i) result in the development being of a class listed in Part 1 or paragraphs 1 to 12 of Part 2 of this Schedule, and

(ii) result in an increase in size greater than – 25 per cent, or an amount equal to 50 per cent of the appropriate threshold,

whichever is greater.

As set out above, the old channel in itself does not form part of the development works required under the River Mall (Templemore) Flood Relief Scheme and as such cannot be considered to be “canalisation and flood relief works.” It therefore cannot be considered to be an extension or change to the original River Mall (Templemore) Flood Relief Scheme.

Similarly, Class 13 (c) states “any change or extension of development being of a class listed in Part 1 or paragraphs 1 to 12 Part 2 of this schedule, which would result in demolition of structures, the demolition of which has not previously been authorised, and where such demolition would likely to have significant effects on the environment having regard to the criteria set out under Schedule 7.”

The proposed demolition of approximately 109m of stone walls and bridge parapets in itself does not form part of the development works required under the River Mall (Templemore) Flood Relief Scheme and as such cannot be considered to be part of the “canalisation and flood relief works.” Furthermore, the proposed demolition has been considered against relevant Schedule 7 criteria and will not result in significant effects on the environment.

Class 14 pertains to works of demolition and states, “works of demolition carried out in order to facilitate a project listed in Part 1 and Part 2 of this Schedule where such works would be likely to have significant effects on the environment, having regard to the criteria set out in Schedule 7. As set out above, the proposed demolition of approximately 109m of stone walls and bridge parapets does not form part of the development works required under the River Mall (Templemore) Flood Relief Scheme and is not being proposed to “facilitate” the River Mall (Templemore) Flood Relief Scheme. As above, the proposed demolition has been considered against relevant Schedule 7 criteria and will not result in significant effects on the environment.

Lastly, Class 15 should also be noted as this is applicable to “any project listed in this Part which does not exceed a quantity, area or other limit specified in this Part in respect of the relevant class of development, but which would be likely to have significant effects on the environment, having regard to the criteria set out in Schedule 7.

Under sections 50 and 51 of the Road Act 1993, as amended, an EIA is required for certain types of road development. In relation to sub-threshold road schemes the key requirement is whether the proposed scheme is likely to have a significant environmental effect as set out under Sections 50 (1)(b)&(c). Section 50 (2) of the Roads Act 1993, sets out the specified information to be contained within an Environmental Impact Assessment.

Under Section 50 and 51 of the Road Act 1993 (as amended), an EIA is required in the following circumstance:

S.50.— (1) (a) A road development that is proposed that comprises any of the following shall be subject to an environmental impact assessment:

- (i) the construction of a motorway;
- (ii) the construction of a busway;
- (iii) the construction of a service area;
- (iv) any prescribed type of road development consisting of the construction of a proposed public road or *the improvement of an existing public road*.

Part V of the Roads Regulations 1994 prescribes types of proposed road development for the purpose of subsection (1)(a)(iv) of section 50 of the Act shall be—

- (a) the construction of a new road of four or more lanes, or the realignment or widening of an existing road so as to provide four or more lanes, where such new, *realigned or widened road would be eight kilometres or more in length in a rural area, or 500 metres or more in length in an urban area;*
- (b) *the construction of a new bridge or tunnel which would be 100 metres or more in length.*

The proposed development will involve the provision of approximately 100m of new footway and the widening of approximately 30m of the carriageway crossing, whilst maintaining the existing lane configurations. It does not involve the construction of a motorway, busway or service area and cannot be said to fall within the thresholds of Part V, (1)(a)(iv). The proposal as such does not fall under the classes of development prescribed for under Sections 50 and 51 of the Roads Act 1993 (as amended) and therefore does not require mandatory EIA.

On review, the proposed development will involve infilling the old channel section to match existing ground elevations surrounding the site, the construction of a 900mm drainage header pipe within the old channel, the installation of manholes and connection of 26 existing surface water outfalls, the demolition of approximately 109m of existing stone walls and bridge parapets, the construction of a new proposed footpath from O'Dwyer's Bridge to the Templemore Town Park, construction of a proposed stone wall separating the property boundaries and the proposed footpath, along with associated streetscape works at O'Dwyer's Bridge, associated landscape works, construction of proposed hardstand/pavement over existing channel at Youngs Garage and Templemore Motor Works, demolition of an existing bridge structure at a residential access and associated landscaping works.

Recognising the requirement to apply a 'wide scope,' it is considered the proposed development should be subject to a sub-threshold development, as it is considered to fall within the project meaning of Part 2 Class 10 (b) (iv) and Part V of the Roads Regulations 1994, subsection (1)(a)(iv) of section 50 above. An EIA Screening determination is required for sub-threshold developments as per the 2001 Regulations, as amended and a screening assessment is provided in Section 5 of this report.

4.0 INFORMATION PROVIDED FOR EIA (SCHEDULE 7A & 7 OF THE REGULATIONS)

Under Schedule 7A of the Regulations, as amended, the following information is to be provided by the applicant or development for the purpose of screening sub-threshold development for EIA:

1. A description of the proposed development, including in particular—
 - A description of the physical characteristics of the whole proposed development and, where relevant, of demolition works, and
 - A description of the location of the proposed development, with particular regard to the environmental sensitivity of geographical areas likely to be affected.
2. A description of the aspects of the environment likely to be significantly affected by the proposed development.
3. A description of any likely significant effects, to the extent of the information available on such effects, of the proposed development on the environment resulting from—
 - the expected residues and emissions and the production of waste, where relevant, and
 - the use of natural resources, in particular soil, land, water and biodiversity.
4. The compilation of the information at paragraphs 1 to 3 shall take into account, where relevant, the criteria set out in Schedule 7, which is set out below.

Under schedule 7 of the regulations, as amended, the following criteria should be used for determining whether development listed in part 2 of schedule 5 should be subject to an EIA:

1. Characteristics of proposed development - The characteristics of proposed development, in particular—
 - the size and design of the whole of the proposed development,
 - cumulation with other existing development and/or development the subject of a consent for proposed development for the purposes of section 172(1A)(b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment,
 - the nature of any associated demolition works,
 - the use of natural resources, in particular land, soil, water and biodiversity,
 - the production of waste,
 - pollution and nuisances,
 - the risk of major accidents, and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge, and
 - the risks to human health (for example, due to water contamination or air pollution).
2. Location of proposed development - The environmental sensitivity of geographical areas likely to be affected by the proposed development, with particular regard to—
 - the existing and approved land use,
 - the relative abundance, availability, quality, and regenerative capacity of natural resources (including soil, land, water, and biodiversity) in the area and its underground,
 - the absorption capacity of the natural environment, paying particular attention to the following areas:
 - (i) wetlands, riparian areas, river mouths;
 - (ii) coastal zones and the marine environment;
 - (iii) mountain and forest areas;
 - (iv) nature reserves and parks;

(v) areas classified or protected under legislation, including Natura 2000 areas designated pursuant to the Habitats Directive and the Birds Directive and;

(vi) areas in which there has already been a failure to meet the environmental quality standards laid down in legislation of the European Union and relevant to the project, or in which it is considered that there is such a failure;

(vii) densely populated areas;

(viii) landscapes and sites of historical, cultural, or archaeological significance.

3. Types and characteristics of potential impacts - The likely significant effects on the environment of proposed development in relation to criteria set out under paragraphs 1 and 2, with regard to the impact of the project on the factors specified in paragraph (b)(i)(I) to (V) of the definition of 'environmental impact assessment report' in section 171A of the Act, taking into account—
- the magnitude and spatial extent of the impact (for example, geographical area and size of the population likely to be affected),
 - the nature of the impact,
 - the transboundary nature of the impact,
 - the intensity and complexity of the impact,
 - the probability of the impact,
 - the expected onset, duration, frequency, and reversibility of the impact
 - the cumulation of the impact with the impact of other existing and/or development
 - the subject of a consent for proposed development for the purposes of section 172(1A)(b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment, and
 - the possibility of effectively reducing the impact.

5.0 EIA SCREENING ASSESSMENT

5.1 Characteristics of Proposed Development

There is no likelihood of significant environmental effects arising from the proposed development works having regard to the characteristics of the project, as set out below.

5.1.1 *Size and design of the whole Project*

The project is not significant in terms of design or size. The design of the project is as described in Section 2 of this report and shown on design drawings in the planning application pack. The proposed development application area is 3.09 hectares. The primary focus of the proposed works will be the linear stretch of old river channel, approximately 805m in length. The proposed works will be confined to the immediate area of the old channel. Two potential construction compounds, included within the measured application area, are proposed at Tipperary County Council owned lands in Talavera and at the existing Town Park carpark along Blackcastle Road.

5.1.2 *Cumulation with other existing and/or approved projects*

A review of planning applications within 500 metres of the site indicates that there are no significant development proposals within the vicinity of the site that could act in cumulation with the project. In addition, the small-scale nature and operation of the proposed development is unlikely to give rise to any significant cumulative environmental effects.

The diversion of the River Mall as part of the OPW's River Mall (Templemore) Flood Relief Scheme is now complete (completed in September 2021) and as such cannot interact with the proposed development.

Another scheme by Uisce Éireann to intercept and divert an existing foul sewer on Church Avenue to the Má Teine Pumping Station is also scheduled for completion prior to the commencement of the proposed development.

Lastly, Young's Garage, which is adjacent to the proposed site, has received planning approval for (Reg Ref: 211053) 'as constructed development previously granted under PI/Ref 04530740, also for boundary treatments, security fencing and revised site boundaries and all ancillary site works'. This is not considered a significant development proposal and as such is not anticipated to act in cumulation with the proposed development.

5.1.3 *Nature of any associated demolition works*

Approximately 109m of existing stone walls and bridge parapets as detailed in Section 2 will be removed as part of the project design. Where possible this stone will be reused for the construction of the new stone walls. The remainder will be removed offsite for disposal in a permitted facility. The nature and scale of the demolition works are not considered to have a significant impact on the environment.

5.1.4 *Use of Natural Resources, in particular land, soil, water, and biodiversity*

The infill material required will be locally sourced. Other materials will also need to be sourced such as cement, concrete, top soil, metal grid etc. for construction works and finishings.

5.1.5 Production of Waste

The proposed development will not result in the production of waste other than demolition wastes as outlined above. Any material which cannot be reused on site will be exported to a suitable waste handling facility where it will be disposed of responsibly.

5.1.6 Pollution and Nuisances

The proposed development during construction and operation will not result in significant pollution or nuisance. Construction of the proposed development will be carried out in line with best practice guidance in all areas of potential environmental impact and specific guidance documents are identified within the Construction Environmental Management Plan (CEMP). The Main Contractor will utilise the general guidelines set out in the CIRA C741 publication *Environmental Good Practice on Site (4th Edition)*¹.

It is not anticipated that the scale of operations involved either at construction or operation will generate significant visual intrusion, lighting, or increased traffic.

The proposed development will generate noise during construction associated with construction traffic and from general building works. The permissible hours of operation of a building site are Monday to Friday 07.00 – 18.00, and Saturday 08.00 – 14.00, with no noisy work permissible on Sundays or bank holidays. Any construction activity will be subject to applicable standards including BS 5228:2009 and A1:2014 “Code of Practice for Noise and Vibration Control on Construction and Open Sites” and Tipperary County Council Air Quality Monitoring and Noise Control Unit.

During the construction phase there will be temporary disturbance to traffic passing along the adjacent road network mainly Talavera Road, The Mall, Blackcastle Road and N62. As the development is linear, these roads will not experience disturbance at the same time. There will also be disturbance to businesses and local residences living adjacent to these roads although continued access to properties will be provided.

Tipperary County Council will also prepare a Traffic Management Plan to be in operation during the proposed works to reduce traffic nuisance.

The Main Contractor will have due regard to relevant guidance such as *The Control of Dust and Emissions during Construction and Demolition* published by the Greater London Authority (GLA) in 2014 and *Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes* published by the NRA (now TII) in 2011. The proactive control of fugitive dust, rather than an inefficient attempt to control dust once released will ensure the prevention of significant emissions. In order to ensure mitigation of the effects of dust nuisance, a series of measures will be implemented as detailed in the CEMP.

Any impacts arising from construction relate traffic, noise, dust, and lighting are expected to be short in duration and temporary. The proposed works are scheduled to last for approximately 24 weeks (including environmental preconstruction surveys and time for materials procurement).

¹ CIRA *Environmental Good Practice on Site (4th Edition)* (C741) (2015)

5.1.7 Risk of accidents having regard to substances or technologies used including those caused by climate change

The proposed development will not result in a risk of major accidents and/or disasters including those caused by climate change or flooding.

Prior to construction commencing, the appointed contractor will be required to submit Health & Safety Method Statements for the works proposed, for approval by Tipperary County Council. The appointed Contractor, in liaison with Tipperary County Council, will develop and agree the final CEMP which will detail the procedures and designated areas for storing substances and machinery.

Regarding climate change, the proposed development has been designed to be resilient against flooding.

The proposed development is not a COMAH site (Control of Major Accidents Hazard Involving Dangerous Substances) nor is the site located near a nuclear installation.

5.1.8 The risks to human health (for example due to water contamination or air pollution)

There are no operations on site during construction or operation that could result in a risk to human health.

During operation there are no activities associated with the proposed development that could generate significant air pollution and thereby affect climate change.

5.2 Location of Project

In consideration of the location of the project, there are no anticipated significant environmental effects arising.

5.2.1 Existing and approved Landuse

The proposed development will primarily be undertaken within the old stretch of river channel, which is approximately 805m in length. Previously part of the River Mall, the old channel in its unfilled state presents a potential health and safety hazard, as well as pollution and anti-social behaviour risk. There is no specific proposed change of use other than to make good the unfilled channel with associated works to reinstate boundaries and provide footpaths for pedestrian use. The other proposed street scape improvement works will improve traffic sightlines in the area and local access.

5.2.2 The relative abundance, availability, quality, and regenerative capacity of natural resources (including soil, land, water, and biodiversity) in the area and its underground

The proposed development will not have a significant impact on the relative abundance, availability, quality, or regenerative capacity of natural resources.

Where possible, infill material, other building materials and finishings required will be locally sourced. The design of the proposed works includes for the landscaping of the old channel following infilling. This landscaping will involve a mix of grass and hardstanding/pavement surfaces.

5.2.3 The absorption capacity of the natural environment

No wetlands, coastal zones, mountain or forest areas or nature reserves will be impacted by the proposed works. The Templemore Woods proposed Natural Heritage Area (pNHA) lies adjacent to Templemore Lake, directly north of Templemore Town. The pNHA boundary extends to the Blackcastle Road and includes the Town Park car park. This car park may potentially be used as a construction compound for the storage of materials or machinery or staff parking. No vegetation removal will be undertaken in this car park area. Templemore Town Park is adjacent to part of the proposed works and will see the pedestrian entrance access off Blackcastle Road enhanced.

The River Mall is located near to the proposed development works in the northern and southern areas where the old river channel was diverted. There will be no in stream works within the River Mall as part of the proposed development works.

The proposed development works area does not fall within or adjacent to any European site. The Kilduff, Devilsbit Mountains SAC (Site Code: 000934) is located approximately 6km upstream of the proposed development site. The Lower River Suir SAC (Site Code: 002137) is located approximately 21km downstream of the proposed development site and hence is linked to activities including the proposed works within its catchment.

An Appropriate Assessment (AA) Screening Report and follow on Stage 2 Natura Impact Statement (NIS) has been undertaken for the proposed development works and mitigation measures proposed. The NIS concludes that following the implementation of mitigation measures (as detailed within the NIS and CEMP) for the avoidance of significant effects on the qualifying interests of the Lower River Suir SAC [002137], that the proposed development will not result in direct, indirect, or in-combination effects, therefore, not adversely affecting on the integrity of any European site.

A review of Catchment Flood Risk Assessment and Management Study maps (CFRAMS) confirms that the proposed development area is located within an area that has occasionally flooded since the 1960's. However, the OPW's flood relief scheme has created a new appropriately sized river channel and diverted the river flow out of the old channel stretch which is the subject of this EIA Screening. It is expected that the CFRAMS mapping will be updated (expected 2024) to note that flooding in the proposed development area has been negated.

5.2.4 Designated Sites

The proposed development works area does not fall within or adjacent to any designated site. Templemore Woods is not currently designated (it is a proposed Natural Heritage Area (pNHA)) and its boundary includes the Town Park car park which may potentially be used for a construction compound. The nearest designated site is Kilduff, Devils Bit Mountain (Natural Heritage Area (NHA) / Special Area of Conservation (SAC)), which is located over 2km northwest of the proposed works area. The Lower River Suir (SAC) is approximately 21km downstream of the River Mall.

5.2.5 Population

Having regard to densely populated areas, the project will involve short-term construction work along a linear route. The project therefore is not considered to have a negative impact on local population.

It is planned to give the old channel area back to the businesses and properties which lie adjacent. Consultation between Tipperary County Council and these residents and business owners has taken place. This will be a positive impact for these adjacent residents and businesses as they will obtain more land for their gardens, driveways, or businesses. In addition, the creation of a new pathway from O'Dwyer's Bridge to the Town Park will be a positive impact for pedestrians and park users in the area. Improved traffic sightlines at the N62 will also be a positive impact for road users.

Access to properties and businesses will continue to be provided during the construction works. The small Town Park car park located along Blackcastle Road may be used as a potential construction compound site but alternative car parking facilities will continue to be available to the public at the main Town Park car park site, located off the Main Street.

In the 2016 census Templemore was recorded as having a population of 1,939 people. The proposed works area (i.e., old section of River Mall) does not provide any known employment in the town. Templemore Town Park which is adjacent to part of the proposed works area comprises an athletic track, playing fields and a pitch and putt course. Also located within this park are the ruins of a church and graveyard and a 13th century castle. The lake is utilised by anglers and is host to various bird wildlife. The Slí na Sláinte walking route is already established in Templemore. This route is located within the town centre and is 2.8km in length. This circular route includes Patrick Street, Main Street, Mary Street, Church Avenue and Barrack Street. Templemore Wood and Town Park contains walking paths which traverse the wood and circle around the lake and contains an unmarked Slí na Sláinte route of 1.3km which follows the path along the lakeshore.

5.2.6 Landscapes of historical, cultural, or archaeological significance

IAC Archaeology completed an archaeological survey, including a metal detection survey (under Licence Ref: 22R0025) of the proposed works area. The results of the assessment, and the associated field inspection, have confirmed that there are no known sites of archaeological significance along the route of the proposed pipe or infilling works. Please refer to Appendix C.

IAC Archaeology completed an architectural survey of O'Dwyers Bridge and Small's Bridge in September 2023 (See Appendix D). O'Dwyers Bridge and Small's Bridge under which the pipe will be placed and infilled, are not included in the record of protected structures in Volume 4 of the Tipperary County Development Plan 2022-2028. However, both bridges are included as protected structures in the Templemore and Environs Development Plan 2012-2018 which has been extended until a new area plan is developed.

The Templemore and Environs Development Plan 2012-2018 also defines an architectural conservation area (ACA) along Main Street and Patrick Street and the western boundary of this ACA includes O'Dwyer Bridge. Small Bridge is not within an architectural conservation area.

The two bridges are not included in the www.buildingsofireland.ie website of the National Inventory of Architectural Heritage (NIAH). However, this website does not include those structures that were deemed to be only of local interest.

5.3 Characteristics of Potential Impacts

There are no anticipated likely significant environmental impacts arising from the proposed development.

5.3.1 *Magnitude and Extent of Impact*

The proposed development application area is 3.09 hectares including the proposed construction stage compounds. The proposed development will primarily be undertaken in a stretch of old river channel approximately 805m in length and on lands immediately adjacent. As such, the magnitude and spatial extent of impacts associated with the proposed development are considered not significant.

5.3.2 *The transfrontier nature of the impact*

The proposed development works will be confined to a small area in Templemore, County Tipperary. There will be no transboundary impacts.

5.3.3 *Magnitude and Complexity of the Impact*

The main impacts will be during the construction phase, particularly the laying of the pipes, infilling of the old channel and the finishing works. All works will be undertaken by the appointed Contractor in accordance with the project Construction Environmental Management Plan (CEMP), approved in advance by Tipperary County Council. This CEMP (presented with the planning application) details the appropriate measures to be followed to eliminate or reduce any potential construction impacts. Any impacts arising during construction will be temporary and managed through best practice construction guidelines. Waste generated during the construction phase will be removed off-site and disposed of at an appropriately licensed waste facility.

There are no anticipated operational impacts.

Human Beings

It is planned to give the old channel area back to the resident and business properties which lie adjacent. Consultation between Tipperary County Council and these residents and business owners has taken place. This will be a positive impact for these adjacent residents and businesses as they will obtain more land for their gardens, driveways, or businesses. In addition, the creation of a new pathway from O'Dwyer's Bridge to the Town Park will be a positive impact for pedestrians and park users in the area. Improved traffic sightlines at the N62 will also be a positive impact for road users.

There will be some temporary negative impacts on residents and businesses immediately adjacent to the works area during the construction phase due to increased traffic, noise, dust, nuisance etc. however these issues will be localised and temporary in nature. Road users will also experience negative impacts due to traffic management procedures, when in place. As the project is linear not all areas will be impacted simultaneously. Access will be provided to the adjacent properties at all times and public car parking for the Town Park will continue to be available at the main car park accessed off Main Street. A Traffic Management Plan will be in operation for the proposed works. The proposed works will have minimal impact on tourism and amenities in the area. Impacts to human beings are not likely to be significant and will be temporary in nature (i.e., construction phase).

Biodiversity

The proposed works area does not fall within or adjacent to any designated site. Templemore Woods is not currently designated (it is a proposed Natural Heritage Area (pNHA)) and its boundary includes the Town Park car park which may potentially be used for a construction compound. No vegetation will be removed in this area as part of construction works. The Lower River Suir (SAC) is approximately 21km downstream of the River Mall and the proposed works area.

An Appropriate Assessment Screening Report was completed for the proposed development. The screening assessment determined that, in view of best scientific knowledge and in the absence of mitigation measures, potential likely significant effects from the proposed development cannot be ruled out for the Lower River Suir (Site Code: 002137), in view of the site's conservation objectives. A Stage 2 Natura Impact Statement has therefore also been undertaken for the proposed works and details mitigation measures. These mitigation measures are included in the CEMP. It concludes that following the implementation of mitigation measures for the avoidance of significant effects on the qualifying interests of the Lower River Suir SAC [002137], that the proposed development will not result in direct, indirect, or in-combination effects, therefore, not adversely affecting on the integrity of any European site.

Several bridges cross the old channel. Some of these bridges have potential as bat roosts. Appropriate surveys and mitigation (if required) are to be undertaken at an appropriate time prior to construction works commencing, developed in accordance with relevant environmental guidance. This is detailed in the CEMP. This will ensure the proposed works do not significantly impact these mammals (if present).

No significant impact is determined with regards to aquatic ecology as the river has been diverted as part of the OPW flood relief scheme. Any fish that were present in this stretch of channel have already been translocated by Inland Fisheries Ireland (IFI) in September 2021.

No botanical species of interest have been recorded in this area. Prior to construction works commencing, including the trimming and removal of vegetation, an invasive flora species survey should be undertaken by an Ecologist. This is detailed within the CEMP.

Prior to vegetation removal and trimming, an ecological survey will be undertaken to confirm if any bird nests are present. The bird nesting season runs from the 1st of March to the 31st of August inclusive. Consultation will be undertaken with the National Parks and Wildlife Service (NPWS) if any bird nests are present and if necessary, a derogation licence sought under Regulation 54 of the EC (Birds and Natural Habitats) Regulations 2011 – 2021. This is detailed in the CEMP to ensure the proposed works do not significantly impact bird species.

Soils and Geology

Where possible, local materials will be used for infilling the old channel as part of the works proposed by Tipperary County Council. This will help reduce the distance of traffic journeys, increased noise, and dust levels along haul routes. It is not anticipated that significant impacts on soils and geology will occur.

Water

A drainage header pipe will be placed within the channel and will collect flows from the outfall pipes. This drainage header pipe will then connect into an existing bypass interceptor in Talavera before flows are discharged to the realigned River Mall. It is anticipated that this will

have a positive effect on water quality which will now be treated before entering into the river flow.

Air and Climate

During the construction phase the proposed development works have the potential to lead to increased traffic and dust within the works area and immediate area. This will be localised and temporary in nature. It is anticipated that appropriate control measures, as detailed in the CEMP, will be put in place to reduce any impact which is not expected to be significant.

Noise and Vibration

The proposed development works will occur in an urban environment. During the construction phase the proposed works have the potential to lead to increased noise and vibration within the works area and immediate area. This will be localised and temporary in nature. It is anticipated that appropriate control measures, as detailed in the CEMP, will be put in place to reduce this impact which is not expected to be significant.

Landscape

The infilling of the existing open channel will result in a change from an open (diverted) river channel to a linear strip of land between the road and the town park. This will be experienced by park users, pedestrians, businesses, and residents. It is planned to give the infilled channel area back to the businesses and properties which lie adjacent. This will be a positive impact for these adjacent residents and businesses as they will obtain more land for their gardens, driveways, or businesses. In addition, the creation of a new pathwath from O'Dwyer's Bridge to the Town Park will be a positive impact for pedestrians and park users in the area. Detailed design proposals including the use of sensitive finishing materials and in keeping with the existing environment have been prepared and therefore impacts to landscape are not expected to be significant.

Archaeology, Architecture and Cultural Heritage

As detailed in Section 5.2.6, an archaeology survey (see Appendix C) has confirmed that there are no known sites of archaeological significance along the route of the proposed pipe or infilling works.

An architectural survey (see Appendix D), specifically of O'Dwyer's Bridge and Small's Bridge was also completed. This survey found that although the proposals will retain both bridge arches, there would be a resulting negative impact on the character and setting of the bridges, where the arches would be permanently concealed from view. It should be noted however that the demolition of the bridge is avoided, which will allow for the impact set out above to be reversed i.e. to allow for the arches to be revealed again. Consequently, the impact is considered moderate.

The survey found that while the parapets of O'Dwyer Bridge are not original, they can be considered to be part of the character of the bridge and the most prominent element of the bridge in the public view, marking the presence of the bridge to those passing by on the street. The proposed development seeks the removal of these parapets, which would be considered to have a negative impact. Notwithstanding this, the parapets are not part of the original structure of the bridge and therefore the impact is considered moderate.

The survey noted that prior to the removal of parapets and infilling of the channel, the vegetation in the vicinity of both bridges should be cleared and a full photographic and written

description of the two bridges should be prepared, including examination of the vault and abutments beneath the bridge and any projecting sills on either side of the river channel beneath the bridges. This investigation should include a determination as to whether there are any surviving elements of an earlier bridge within the present bridge structures.

Following mitigation, the residual impact arising from the burial of the lower arches of the bridges is considered a moderate negative impact and the impact arising from the removal of the parapets of O'Dwyer Bridge to be the same. Notwithstanding the compilation of a record of the nature of the bridges, the character and settings of the bridges would be adversely affected.

A georeferenced photogrammetry will also be undertaken of the bridges prior to construction works commencing to record the various phases (even the most recent interventions).

All construction related excavation and ground disturbance works (e.g., any riverbed excavation as part of pipe laying preparation works) will be monitored in full by an appointed Project Archaeologist. The preliminary CEMP includes all archaeology and architectural mitigation measures and procedures proposed in the survey reports to ensure there are no significant archaeological impacts as a result of the proposed works.

Interactions

There may be interactions between several of the environmental aspects such as traffic, noise, and dust but the impact will not be significant as a result of interactions.

Summary

All environmental aspects have been considered. It is anticipated that there will not be significant adverse impacts on the receiving environment as a result of the proposed works providing control measures are implemented where required and as detailed in the CEMP.

5.4 Probability of Impact

It is anticipated that there is a high probability of small, localised increases in noise and vibration and potential for air pollution (increased dust) during construction (as a result of construction vehicles and activities). These are not anticipated to be significant and will be short-term and temporary in nature as the works progress along the linear route. There will also be impacts to the landscape as the land use will change permanently. However, these impacts are not considered to be significant and finishing materials chosen will consider landscape sensitivity. There is a small probability that the proposed works could impact fauna (e.g., any bats under the bridges) although preconstruction bat surveys will be completed as detailed in the CEMP, to ensure significant impacts do not occur. Adverse impacts in terms of architectural heritage will occur with regards to changes made to O'Dwyer's and Small's Bridges but these have been assessed as moderate.

5.5 Onset, Duration, Frequency, and reversibility of the impact

The majority of the impacts will occur during the construction stage. These will be temporary in nature, of short duration and will not reoccur once construction is complete. The exception to this is impact on the existing road bridges. Following the infilling works these will no longer 'bridge' the banks of the old channel. This will be a permanent change. Should any bat roosts be identified in the existing bridges, these can be compensated for, following the appropriate guidance, by creating similar roosting opportunities. The infilling works will be a permanent

change to the land use which will have also undergone recent changes from a river course to a diverted channel following the completion of the neighbouring flood relief scheme.

5.6 Cumulation of the impact with the impact of other existing and/or approved projects

As detailed in Section 4.1.2, the Tipperary County Council planning database was searched and indicates that there are no significant development proposals within the vicinity of the site that could act in cumulation with the project.

There are no anticipated cumulative impacts arising from the proposed development.

5.7 Possibility of effectively reducing the impact

With respect to the possibility of effectively reducing the impact, the design of the project has been optimised to ensure that environmental impacts are minimised as much as possible. A preliminary CEMP has also been prepared for this project and will be developed by the appointed contractor. Any potential impacts identified are not considered significant and do not result in a requirement for EIA.

6.0 EIA SCREENING DETERMINATION

As set out in Section 3.2.2 the conclusion following preliminary examination in accordance with Article 120(1)(a) of the 2001 Regulations as amended was that there is no real likelihood of significant effects on the environment arising from the proposed development, and therefore an EIA is not required.

The proposed development is not a type of project prescribed in Annex I or Annex II of the EIA Directive and therefore does not trigger a mandatory requirement for EIA.

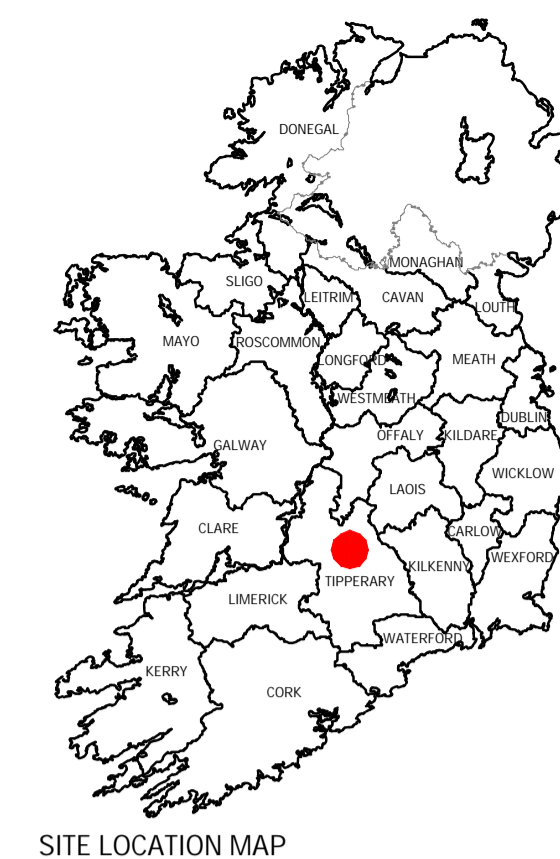
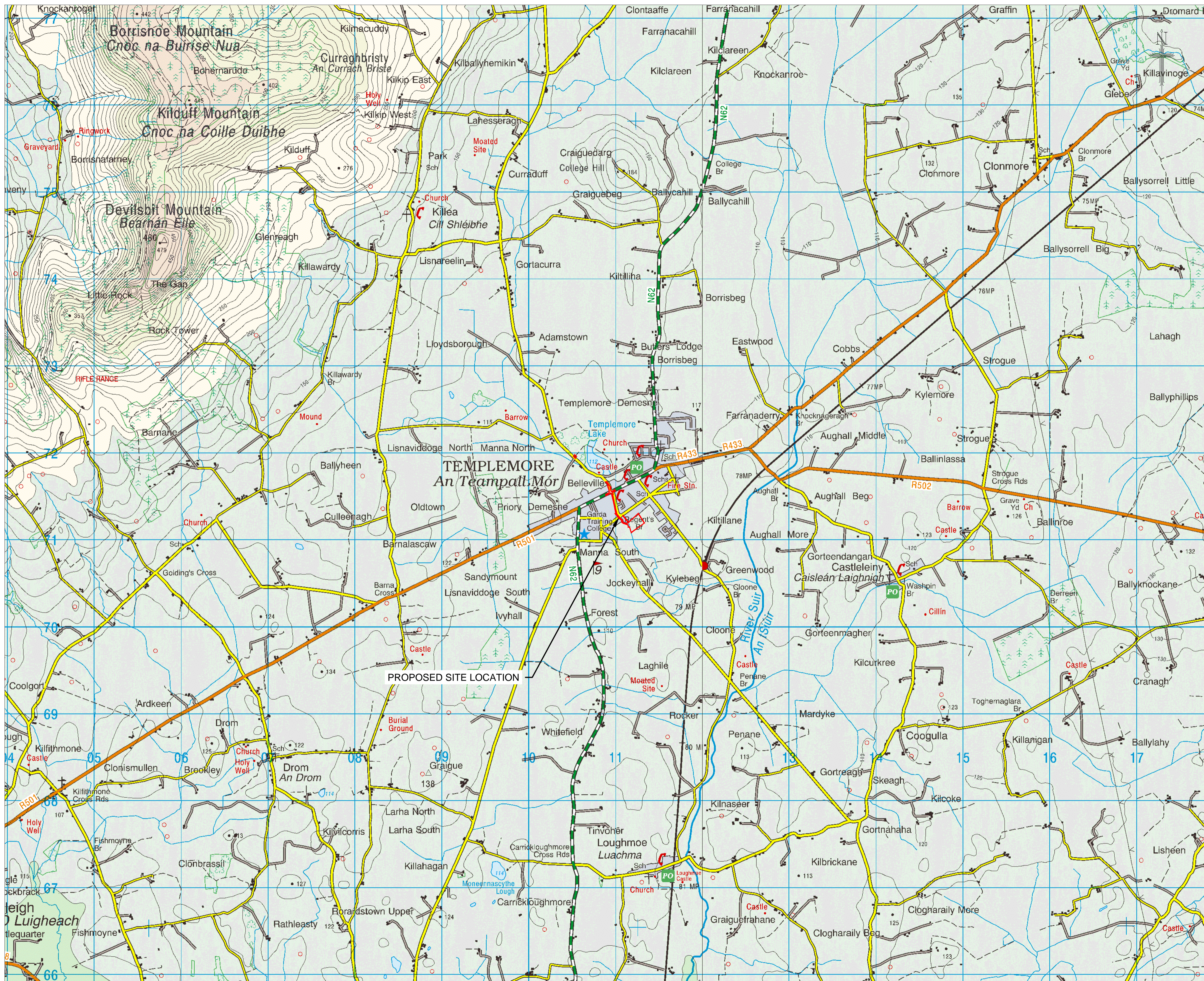
The proposed development is considered a sub-threshold development as it is considered to fall within the project meaning of Part 2 Class 10 (b) (iv) and Part V of the Roads Regulations 1994, subsection (1)(a)(iv) of section 50 above. An EIA Screening determination has been carried out and has considered the nature of the proposed development, its size and location, having due regard to the criteria listed in Schedule 7A of the 2001 Regulations and the relevant information listed in Schedule 7A.

It is concluded that there is no real likelihood of significant effects on the environment arising from the proposed development and that EIA is therefore not required. The main reasons and considerations on which this determination is based are included in Section 5.

Appendix A

-

Proposed Site Location (Drawing 11007-2000)



LEGEND
 PROPOSED SITE LOCATION

- NOTES**
1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING
 2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
 3. ENGINEER TO BE INFORMED BY THE CONTRACTOR OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
 4. ALL LEVELS SHOWN RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD, THE GEOGRAPHIC COORDINATE SYSTEM IS TO IRISH TRANSVERSE MERCATOR (ITM)

Rev.	Date	Description	By	Chkd.
D08	NOV 23	Planning Application	M.C.	P.C.
D07	AUG 23	DRAFT	M.C.	P.C.
D06	JUN 23	DRAFT	M.C.	P.C.

Client
 Comhairle Contae Thiobraid Árann
 Tipperary County Council

Project
 Templemore Infill Works

Title
 Proposed Site Location
 OS MAP - DISCOVERY SERIES
 SERIES 59

Scale: 1:20000

Prepared by:	Checked	Date
M.C.	P.C.	NOV 23
Project Director	B.DOWNES	
Drawing Status	Planning Application	

TOBIN
 CONSULTING ENGINEERS
 Consulting, Civil and Structural Engineers,
 Fairgreen House, Fairgreen Road,
 Galway, Ireland.
 tel: +353 (0)91-565211
 fax: +353 (0)91-565398
 e-mail: galway@tobin.ie
 www.tobin.ie

Appendix B

-

Proposed Landscape Works (Drawings 11007-2036 to 2039)



LEGEND

- PROPOSED RED LINE BOUNDARY
- PROPOSED FOOTPATH
- PROPOSED TOPSOIL / GRASS
- PROPOSED HARDSTAND / AC PAVEMENT
- PROPOSED STONE WALL
- EXISTING STONE WALL
- EXISTING WALL TO BE DEMOLISHED
- PROPOSED GULLY CONNECTED TO PROPOSED HEADER PIPE

- NOTES**
1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING
 2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
 3. ENGINEER TO BE INFORMED BY THE CONTRACTOR OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
 4. ALL LEVELS SHOWN RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD, THE GEOGRAPHIC COORDINATE SYSTEM IS TO IRISH TRANSVERSE MERCATOR (ITM)
 5. EXISTING BRIDGE STRUCTURES MAY CONTAIN UTILITY SERVICES WHICH WILL REQUIRE DIVERSION PRIOR TO DEMOLITION OF EXISTING STRUCTURES

Rev.	Date	Description	By	Chkd.
D08	April' 23	Planning Application	M.C.	P.C.
D07	AUG' 23	DRAFT	M.C.	P.C.
D06	JUN' 23	DRAFT	M.C.	P.C.

Client



Project

Templemore Infill Works

Title

**Proposed Landscape Works
(Sheet 1 of 4)**

Scale **1:250**

Prepared by: M.C.	Checked P.C.	Date AUG' 23
Project Director B.DOWNES		
Drawing Status Planning Application		

TOBIN
CONSULTING ENGINEERS

Consulting, Civil and Structural Engineers,
Fairgreen House, Fairgreen Road,
Galway, Ireland.
tel: +353-(0)91-565211
fax: +353-(0)91-565398
e-mail: galway@tobin.ie
www.tobin.ie

SURFACE WATER COLLECTION SYSTEM IN EXISTING COURTYARD TO BE CONNECTED TO DRAINAGE HEADER PIPE

PROPOSED 1.4m WIDE FOOTPATH AROUND EXISTING STRUCTURES

EXISTING PRIVATE ENTRANCE TO BE RETAINED

EXISTING STONE WALL TO BE REMOVED

PROPOSED AC PAVEMENT SEE DWG. 11007-2018

PROPOSED STONE WALL

EXISTING STONE WALL TO BE REMOVED

PROPOSED FOOTPATH

PROPOSED STREETScape

EXISTING FOOTPATH TO BE REMOVED AND REINSTATED

ROAD REINSTATEMENT TO MATCH EXISTING

JUNCTION AND CORNER RADII TO PROVIDE FOR PEDESTRIAN DESIRE LINES

EXISTING FOOTPATH TO BE REMOVED AND REINSTATED

TEMPLEMORE MOTORS

PROPOSED EXPOSED AGGREGATE BOLLARD Ø550mm x 405mm HIGH SEE DWG. 11007-2019

YOUNG'S GARAGE

O'DWYER BRIDGE

PROPOSED FOOTPATH

EXISTING STONE WALL TO BE REMOVED

PROPOSED STONE WALL

EXISTING STONE WALL TO REMAIN IN PLACE

PROPOSED AC PAVEMENT SEE DWG. 11007-2018

POTENTIAL VEHICULAR ACCESS

PROPOSED CONCRETE HEADWALL DISCHARGING TO EXISTING CHANNEL

LEGEND

- PROPOSED RED LINE BOUNDARY
- PROPOSED TOPSOIL / GRASS
- PROPOSED HARDSTAND / AC PAVEMENT
- PROPOSED FOOTPATH
- PROPOSED STONE WALL
- EXISTING STONE WALL
- PROPOSED STREETScape
- EXISTING WALL TO BE DEMOLISHED
- PROPOSED GULLY CONNECTED TO PROPOSED HEADER PIPE

NOTES

1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING
2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
3. ENGINEER TO BE INFORMED BY THE CONTRACTOR OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
4. ALL LEVELS SHOWN RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD, THE GEOGRAPHIC COORDINATE SYSTEM IS TO IRISH TRANSVERSE MERCATOR (ITM)
5. EXISTING BRIDGE STRUCTURES MAY CONTAIN UTILITY SERVICES WHICH WILL REQUIRE DIVERSION PRIOR TO DEMOLITION OF EXISTING STRUCTURES

Rev.	Date	Description	By	Chkd.
D08	April 23	Planning Application	M.C.	P.C.
D07	AUG 23	DRAFT	M.C.	P.C.
D06	OCT 22	DRAFT	JOF	BM

Client

 Comhairle Contae Thiobraid Árann
 Tipperary County Council

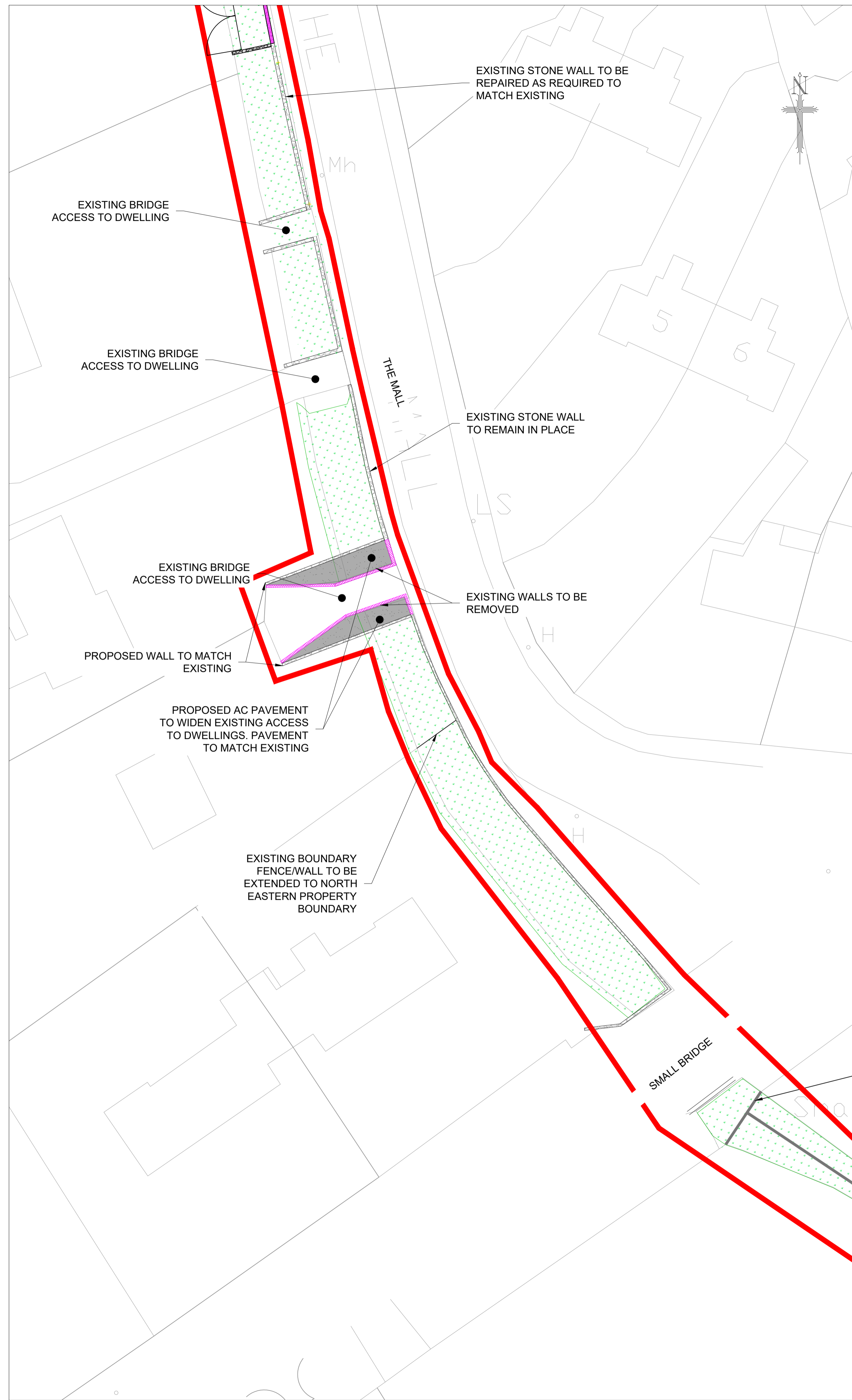
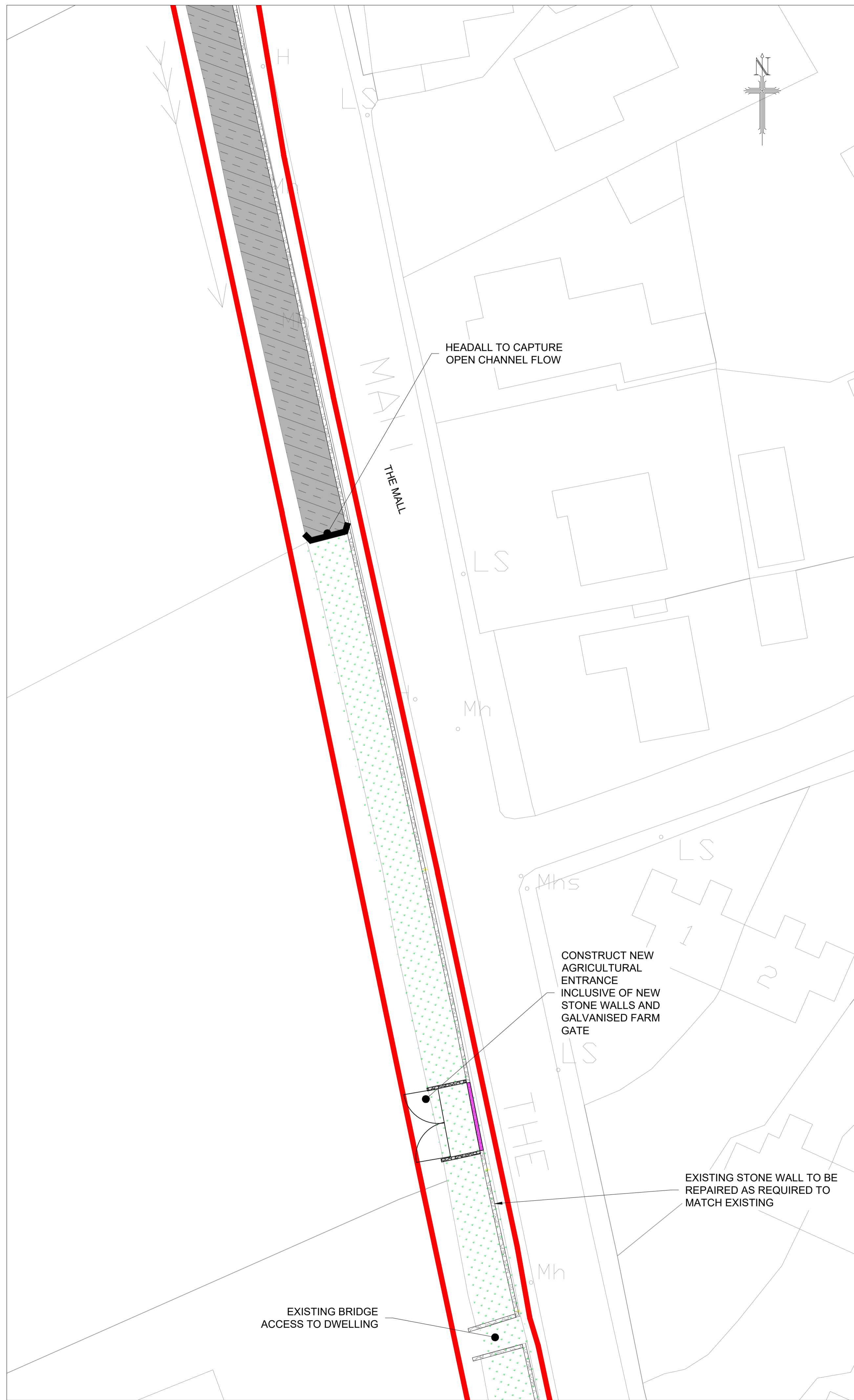
Project
 Templemore Infill Works

Title
 Proposed Landscape Works
 (Sheet 2 of 4)

Scale	1:250	
Prepared by:	Checked	Date
JOF	P.C.	AUG 23
Project Director	B.DOWNES	
Drawing Status	Planning Application	

TOBIN
 CONSULTING ENGINEERS

Consulting, Civil and Structural Engineers,
 Fairgreen House, Fairgreen Road,
 Galway, Ireland.
 tel: +353 (0)91-565211
 fax: +353 (0)91-565398
 e-mail: galway@tobin.ie
 www.tobin.ie



- LEGEND**
- PROPOSED RED LINE BOUNDARY
 - PROPOSED TOPSOIL / GRASS
 - PROPOSED HARDSTAND / AC PAVEMENT
 - PROPOSED FOOTPATH
 - PROPOSED STONE WALL
 - EXISTING STONE WALL
 - EXISTING WALL TO BE DEMOLISHED
 - EXISTING CHANNEL TO REMAIN

- NOTES**
1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING
 2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
 3. ENGINEER TO BE INFORMED BY THE CONTRACTOR OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
 4. ALL LEVELS SHOWN RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD, THE GEOGRAPHIC COORDINATE SYSTEM IS TO IRISH TRANSVERSE MERCATOR (TM)
 5. EXISTING BRIDGE STRUCTURES MAY CONTAIN UTILITY SERVICES WHICH WILL REQUIRE DIVERSION PRIOR TO DEMOLITION OF EXISTING STRUCTURES

Rev.	Date	Description	By	Chkd.
D08	April' 23	Planning Application	M.C.	P.C.
D07	AUG' 23	DRAFT	M.C.	P.C.
D06	JUN' 23	DRAFT	M.C.	P.C.

Client

 Comhairle Contae Thiobraid Árann
Tipperary County Council

Project

Templemore Infill Works

Title

**Proposed Landscape Works
(Sheet 3 of 4)**

Scale **1:250**

Prepared by:	Checked	Date
M.C.	P.C.	AUG' 23

Project Director **B.DOWNES**

Drawing Status	Planning Application
----------------	----------------------

TOBIN
CONSULTING ENGINEERS

Consulting, Civil and Structural Engineers,
Fairgreen House, Fairgreen Road,
Galway, Ireland.
tel: +353-(0)91-565211
fax: +353-(0)91-565398
e-mail: galway@tobin.ie
www.tobin.ie



LEGEND

- PROPOSED RED LINE BOUNDARY
- PROPOSED CONCRETE BLOCK WALL
- PROPOSED TOPSOIL / GRASS

- NOTES**
1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING
 2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
 3. ENGINEER TO BE INFORMED BY THE CONTRACTOR OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
 4. ALL LEVELS SHOWN RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD, THE GEOGRAPHIC COORDINATE SYSTEM IS TO IRISH TRANSVERSE MERCATOR (ITM)

Rev.	Date	Description	By	Chkd.
D08	April '23	Planning Application	M.C.	P.C.
D07	AUG' 23	DRAFT	M.C.	P.C.
D06	JUN' 23	DRAFT	M.C.	P.C.

Client



Project

Templemore Infill Works

Title

**Proposed Landscape Works
(Sheet 4 of 4)**

Scale	1:250	
Prepared by:	Checked	Date
M.C.	P.C.	AUG' 23
Project Director	B.DOWNES	
Drawing Status	Planning Application	

TOBIN
CONSULTING ENGINEERS

Consulting, Civil and Structural Engineers,
Fairgreen House, Fairgreen Road,
Galway, Ireland.
tel: +353 (0)91-565211
fax: +353 (0)91-565398
e-mail: galway@tobin.ie
www.tobin.ie

<small>TOBIN Consulting Engineers will not be liable for any use of this document for any purpose other than that for which it was originally prepared and provided, except when specifically and explicitly agreed in writing by TOBIN Consulting Engineers, as copyright holder, no part of this document may be reproduced or transmitted in any form and this document shall not be relied upon by any third party for any purpose.</small>	Issue
Drawing No. 11007-2039	D08

Appendix C

-

Archaeological Assessment Report

**ARCHAEOLOGICAL ASSESSMENT
AT
FORMER RIVER MALL CHANNEL
TEMPLEMORE
COUNTY TIPPERARY**

**ON BEHALF OF: TOBIN CONSULTING ENGINEERS
FOR: TIPPERARY COUNTY COUNCIL**

DETECTION LICENCE REF: 22R0025

AUTHOR: TIM COUGHLAN

JANUARY 2024

IAC PROJECT REF.: J3920

DOCUMENT CONTROL SHEET

DATE	DOCUMENT TITLE	REV.	PREPARED BY	REVIEWED BY	APPROVED BY
10.01.24	Archaeological Assessment at former River Mall Channel, Templemore	0	Tim Coughlan	Faith Bailey	Faith Bailey

ABSTRACT

This report has been prepared for Tobin Consulting Engineers, on behalf of Tipperary County Council, to study the impact, if any, on the archaeological resource of the proposed infilling works on the former River Mall channel Templemore, Co Tipperary (Figure 1, ITM 610803, 671760 to 611116, 671166). The report was undertaken by Tim Coughlan of IAC Archaeology. A metal detection survey was carried out under licence number 22R0025.

Built Heritage is reported on separately within a report by Rob Goodbody.

The results of the assessment, and the associated field inspection, have confirmed that there are no known sites of archaeological significance along the route of the proposed pipe or infilling works.

The existing canalised channel has resulted in the former riverbed being substantially below existing ground level and that of existing outfalls. It is anticipated that the existing river bed level will be roughly at grade with the formation level for the proposed header pipe, and limited excavation or grading of the existing river bed will be required (Figure 2). It is anticipated that localised grading and vegetation removal will be required along the length of the works but this is not anticipated to involved any significant volume of material, but to facilitate successful completion of pipelaying and infilling works.

The field inspection also confirmed that the channel is highly contaminated with modern debris and will have been substantially impacted by works associated with the building of the canalised walls along much of its length. Given the raised deposits beneath the various bridges along the route, it is likely that much of the river bed has been subject of dredging.

It remains possible that there may be adverse impacts on previously unrecorded archaeological feature or deposits that have the potential to survive beneath the current ground level. This will be caused by ground disturbances associated with the proposed development. It is recommended that all ground disturbances associated with the proposed development be monitored by a suitably qualified archaeologist.

CONTENTS

ABSTRACT	I
CONTENTS	II
List of Figures.....	iii
List of Plates.....	iii
1 INTRODUCTION	1
1.1 General.....	1
1.2 The Development	1
2 METHODOLOGY	3
2.1 Paper Survey.....	3
2.2 Field Inspection.....	4
3 RESULTS OF DESKTOP STUDY	6
3.1 Archaeological and Historical Background	6
3.2 Summary of Previous Archaeological Fieldwork.....	11
3.3 Cartographic Analysis	11
3.4 County Development Plan	12
3.5 Topographical Files of the National Museum of Ireland.....	12
3.6 Aerial Photographic Analysis	13
3.7 Field Inspection and Metal Detection.....	13
4 CONCLUSIONS	17
5 IMPACT ASSESSMENT AND MITIGATION STRATEGY	18
5.1 Impact Assessment.....	18
5.2 Mitigation	18
6 REFERENCES	19
APPENDICES	I
Appendix 1 SMR/RMP Sites within the Surrounding Area	i
Appendix 2 Legislation Protecting the Archaeological Resource	iv
Appendix 3 Impact Assessment and the Cultural Heritage Resource	vii
Appendix 4 Mitigation Measures and the Cultural Heritage Resource.....	ix

FIGURES

PLATES

LIST OF FIGURES

- Figure 1 Site location showing recorded monuments
- Figure 2 Typical proposed cross sections of the assessment area
- Figure 3 Down Survey barony map of Iliogurty 1656-8
- Figure 4 Site location overlain the 1st edition 6" OS map (1843)
- Figure 5 Site location overlain the 3rd edition 25" OS map (1907)
- Figure 6 Site Plan

LIST OF PLATES

- Plate 1 New channel upstream, facing south
- Plate 2 Former Channel Infilled in Bellview, facing northwest
- Plate 3 Pooling south of dam at Lake outfall, facing north
- Plate 4 Walled Channel with overgrowth and bedrock exposed on base, facing south
- Plate 5 Modern Wall bounding river at Young's Garage, facing southeast
- Plate 6 Metal detecting at Young's Garage, facing south
- Plate 7 Modern debris Section 1
- Plate 8 Modern debris Section 1
- Plate 9 Large Stone Arched bridge/structure, facing south
- Plate 10 Timber and steel decked access bridge, facing north
- Plate 11 Overgrown area upstream from O'Dwyer's Bridge, facing north
- Plate 12 Drainage outlet upstream of O'Dwyer's Bridge, facing west
- Plate 13 O'Dwyer's Bridge, facing south
- Plate 14 Boundary Wall on E side of channel, south of O'Dwyer's Bridge, facing northeast
- Plate 15 Cobbled surface at channel boundary, facing south
- Plate 16 Water Pump decorative feature, facing west
- Plate 17 Earthen bank with possible façade walling, facing northwest
- Plate 18 Area of deep-water Chainage 2330, facing north
- Plate 19 Concrete boundary walls and access bridges at houses on The Mall, facing south
- Plate 20 Concrete channel walls and concrete plinth foundation, facing northwest
- Plate 21 Modern debris on The Mall section
- Plate 22 Overgrown area north of Small Bridge, facing north
- Plate 23 Small Bridge, facing north
- Plate 24 Channel Boundary Wall south of Small Bridge, facing southeast
- Plate 25 Heavily overgrown channel south of Small Bridge, facing north
- Plate 26 Modern debris (glass, brick, concrete, metal) in Section 3
- Plate 27 Central Area Section 3, facing southeast
- Plate 28 Southern Area Section 3, facing north

1 INTRODUCTION

1.1 GENERAL

The following report details an archaeological assessment undertaken in advance of proposed infilling works on the former River Mall channel at Templemore, Co. Tipperary (Figure 1; ITM 610803, 671760 to 611116, 671166). This assessment has been carried out to ascertain the potential impact of the proposed development on the archaeological and historical resource that may exist within the area. The assessment was undertaken by Tim Coughlan of IAC Archaeology (IAC), for Tobin Consulting Engineers on behalf of Tipperary County Council. The built heritage resource is reported upon separately within a report authored by Rob Goodbody.

The archaeological assessment involved a detailed study of the archaeological and historical background of the proposed development site and the surrounding area. This included information from the Record of Monuments and Places of County Tipperary, the topographical files within the National Museum and all available cartographic and documentary sources for the area. A field inspection has also been carried out with the aim to identify any previously unrecorded features of archaeological or historical interest. A metal detection Survey was also carried out in conjunction with the field inspection under Licence Ref: 22R0025

1.2 THE DEVELOPMENT

The Proposed Development will involve the following works (Figure 2 and 6):

- I. The construction of a 900mm drainage header pipe in the existing redundant channel section of the River Mall and manholes.
- II. Provision for the connection of 26 existing surface water outfalls, currently discharging to the redundant channel section of the River Mall, to the 900mm drainage header pipe along with all accommodation works.
- III. The infilling of the redundant channel section, including pipe surround of the 900mm drainage header pipe, to match existing ground elevations surrounding the river channel.
- IV. Provision of a footpath and grass area over the infilled river from Templemore Town Park pedestrian entrance to a point 100m south in the direction of the N62, behind an existing stone wall / parapet.
- V. Provision of approximately 100m of new footway adjacent to the Blackcastle Road to the junction of the N62 (at Young's garage), with a footway width by 1.8m which and reduced carriageway width.
- VI. Removal of existing parapet wall to create an AC hardstanding area adjacent to Youngs garage.
- VII. The demolition of approximately 50m of existing stone wall and bridge parapet north of the N62 to allow for the construction of a new proposed footway to match existing from O'Dwyer Bridge.
- VIII. Provision of improvement works north of O'Dwyer bridge for approximately 40m to include increasing corner radius, installation of aggregate bollards and hard landscaping area.
- IX. Widening of the carriageway crossing O'Dwyer bridge along the N62.

- X. The demolition of approximately 15m of existing stone wall and bridge parapet south of the N62 to allow for improvement works to include a new footway, increased corner radius and increase sight lines between The Mall Road and the N62.
- XI. Construction of approximately 70m AC pavement over the existing channel south of the N62 and maintenance of the existing stone wall / parapet.
- XII. The demolition of sections of existing stone walls to allow for the construction of a new proposed footpath from O'Dwyer Bridge to the Templemore Town Park.
- XIII. Construction of a proposed stone wall separating the property boundaries and the proposed footpath, along with associated streetscape works at O'Dwyer Bridge.
- XIV. Landscape works to match existing surrounding environment at the Templemore town park.
- XV. Construction of proposed hardstand/pavement over existing channel at Youngs Garage and Templemore Motor Works.
- XVI. Demolition of existing bridge structures at residential accesses
- XVII. Landscape works to match existing surrounding environment from Templemore Motor Works, in a southerly direction, to the outfall to the existing River Mall.
- XVIII. Construction of a discharge headwalls.
- XIX. Construct new agricultural entrance approximately 180m south of O'Dwyer's bridge on the western side of the Mall Road.

2 METHODOLOGY

Research for this report was undertaken in two phases. The first phase comprised a paper survey of all available archaeological, historical and cartographic sources. The second phase involved a field inspection of the site, which included a metal detection survey.

2.1 PAPER SURVEY

- Record of Monuments and Places for County Tipperary;
- Sites and Monuments Record for County Tipperary;
- National Monuments in State Care Database;
- Preservation Orders List;
- Topographical files of the National Museum of Ireland;
- Cartographic and written sources relating to the study area;
- Tipperary County Development Plan 2022-2028;
- Aerial photographs;
- Excavations Bulletin (1970–2022);

Record of Monuments and Places (RMP) is a list of archaeological sites known to the National Monuments Section, which are afforded legal protection under Section 12 of the 1994 National Monuments Act and are published as a record.

Sites and Monuments Record (SMR) holds documentary evidence and field inspections of all known archaeological sites and monuments. Some information is also held about archaeological sites and monuments whose precise location is not known e.g. only a site type and townland are recorded. These are known to the National Monuments Section as 'un-located sites' and cannot be afforded legal protection due to lack of locational information. As a result, these are omitted from the Record of Monuments and Places. SMR sites are also listed on a website maintained by the Department of Housing, Local Government and Heritage (DoHLGH) – www.archaeology.ie.

National Monuments in State Care Database is a list of all the National Monuments in State guardianship or ownership. Each is assigned a National Monument number whether in guardianship or ownership and has a brief description of the remains of each Monument.

The Minister for the DoHLGH may acquire national monuments by agreement or by compulsory order. The state or local authority may assume guardianship of any national monument (other than dwellings). The owners of national monuments (other than dwellings) may also appoint the Minister or the local authority as guardian of that monument if the state or local authority agrees. Once the site is in ownership or guardianship of the state, it may not be interfered with without the written consent of the Minister.

Preservation Orders List contains information on Preservation Orders and/or Temporary Preservation Orders, which have been assigned to a site or sites. Sites deemed to be in danger of injury or destruction can be allocated Preservation Orders under the 1930 Act. Preservation Orders make any interference with the site illegal. Temporary Preservation Orders can be attached under the 1954 Act. These perform the same function as a Preservation Order but have a time limit of six months, after which the situation must be reviewed. Work may only be undertaken on or in the vicinity of sites under Preservation Orders with the written consent, and at the discretion, of the Minister.

The topographical files of the National Museum of Ireland are the national archive of all known finds recorded by the National Museum. This archive relates primarily to artefacts but also includes references to monuments and unique records of previous excavations. The find spots of artefacts are important sources of information on the discovery of sites of archaeological significance.

Cartographic sources are important in tracing land use development within the development area as well as providing important topographical information on areas of archaeological potential and the development of buildings. Cartographic analysis of all relevant maps has been made to identify any topographical anomalies or structures that no longer remain within the landscape.

Documentary sources were consulted to gain background information on the archaeological and cultural heritage landscape of the proposed development area.

Development Plans contain a catalogue of all archaeological sites within the county. The Tipperary County Development Plan 2022-2028 was consulted to obtain information on cultural heritage sites in and within the immediate vicinity of the proposed development area.

Aerial photographic coverage is an important source of information regarding the precise location of sites and their extent. It also provides initial information on the terrain and its likely potential for archaeology. A number of sources were consulted including aerial photographs held by the Ordnance Survey and Google Earth.

Excavations Bulletin is a summary publication that has been produced every year since 1970. This summarises every archaeological excavation that has taken place in Ireland during that year up until 2010 and since 1987 has been edited by Isabel Bennett. This information is vital when examining the archaeological content of any area, which may not have been recorded under the SMR and RMP files. This information is also available online (www.excavations.ie) from 1970–2023.

2.2 FIELD INSPECTION

Field inspection is necessary to determine the extent and nature of archaeological and historical remains, and can also lead to the identification of previously unrecorded or suspected sites and portable finds through topographical observation and local information.

The field inspection entailed -

- Walking the proposed development and its immediate environs;
- Noting and recording the terrain type and land usage;
- Noting and recording the presence of features of archaeological significance;
- Verifying the extent and condition of any recorded sites;
- Visually investigating any suspect landscape anomalies to determine the possibility of their being anthropogenic in origin; and
- Metal detecting the former river bed and banks.

3 RESULTS OF DESKTOP STUDY

3.1 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The proposed development area is located at the former River Mall channel on the west of the town of Templemore. The proposed development, running from north to south, extends from a point in Belleville/Templemore Demesne townlands northwest of Templemore for approximately 805m to a point in Manna South/Kiltillane townlands (Figure 1). The former river channel forms the townland boundary between Belleville and Templemore Demesne in the north of the development and between Manna South and Kiltillane in the south. The town of Templemore is on the plain beneath the eastern slopes of the Devil's Bit Mountain range, in the centre of the upper Suir Valley, a prosperous agricultural area. The town is defined by the Devil's Bit Mountain range to the west, by Barnalisheen and Baunmore bogs to the east, by Roscrea (17km) town to the north and by Thurles town (12km) to the south. Templemore is situated in the north of Tipperary.

3.1.1 Prehistoric Period

The earliest site in the wider Templemore area (TN029-022) is classified as a boulder burial c. 1km to the northwest of the scheme. This monument type is common in the southwest of the country and likely dates to the Bronze Age (2500-800BC), a period of substantial population growth throughout the county. The boulder burial is located within a field in pasture with views of the Devils Bit Mountain to the north-northwest. These sites are sometimes associated with earlier monuments or can be associated with areas of copper mining as in Cork and Kerry.

As with the rest of the country, evidence of Iron Age (800BC-AD500) occupation is relatively limited, which suggests, as yet, an unexplained decrease in the country's population during this time. The surviving evidence suggests that Iron Age activity is almost exclusively confined to the northern third of the county. A single Roman coin found at Lisbeen near Templemore in 1821 (Raleigh 1985, 29).

3.1.2 Early Medieval Period (AD 500–1100)

Templemore was situated in the ancient kingdom of *Éli*. MacCotter suggests that the *Éli* were originally lords of the Cashel area before the rise of the *Eoganacht* c. AD 500 (MacCotter 2008, 212). After this, the kingdom was split between northern and southern dynasts. It appears that the *Éli* retained control of the area right up to the advent of the Normans at which point the southern kingdom, within which Templemore is located, became the Norman cantred of *Elí Uí Fhócarta* and later barony of Eliogarty.

The ancient name of the district on which the town now stands was *Tuatha Corca Teine*. Templemore was known as Corkatenny (*Corca Teine*) until the 16th century. Tradition maintains that Teine was the son of the King of Connacht, arriving in the district shortly after St. Patrick. A Saint Síoláin, who is reputed to have built a church in the area, accompanied him. The townland in which the town is built is Kiltillane (*Cill*

Síoláin) – this saint is also associated with Kilsheelan in South Tipperary. Ó Riáin equates the name *Síoláin* with *Cillín* and lists several saints named *Cillín*. Only one of these has an association with St Patrick – St Cillín of Tehallan (baronies of Cremore and Monaghan) where he is said to have been installed by Patrick and a church bears his name (Ó Riain 2011, 175). The presumed location of this church is at the location of the later medieval church in Town Park (TN029-062). It is from this church that the town takes its present name *An Teampall Mór* (Templemore).

Habitation and agricultural activity during this period are suggested at by a number of enclosure sites and a ringfort in the vicinity of Templemore (RMP Nos. TN029-041, TN029-043, TN029-044, TN029-052 and TN029-074). The closest of these is located c. 550m west of the scheme (TN029-052). A redundant record (TN029-088) located c. 200m northeast of the scheme is described as follows ‘modern housing development located on site of possible enclosure which is not marked on any edition of the OS 6-inch map’ (archaeology.ie). Further information from the Urban Survey notes that a local informant alleged that ‘a ringfort was destroyed to make way for a housing development.’ As no further corroboration could be gained, it was decided not to include the site on future revision of the RMP (Tipperary Urban Survey, 69; Caimin O’Brien, pers. comm.). Despite the uncertainty surrounding this feature, it may relate to early medieval activity in the immediate area of the scheme and the identified human remains.

3.1.3 Medieval Period (AD 1100–1600)

Gwynn and Hadcock, in their landmark study of Ireland’s medieval religious houses paid undue attention to local tradition and uncritical placename evidence suggesting that Templemore was established by the Order of Knights Templar (1970, 342). Templemore however was founded by secular barons, most likely on a pre-existing locus of settlement comprising a church site and several habitation sites as discussed above.

Following the Norman takeover of the Kingdom of Limerick sometime after AD 1185, the Anglo-Norman Theobald Walter was granted large areas of Northern Tipperary (Bradley 1985, 35). Walter then proceeded to enfeoff his followers with freeholdings throughout the area. One Thomas de Hereford was created the first lord of Corkatenny and Loughmoe sometime before Walter’s death in 1206 (Empey 1985, 85), though it is possible that this grant was made as early as 1190 (as discussed below). Thomas de Hereford is likely to have established a borough at Templemore.

Bradley has noted that, following the Norman takeover of Tipperary, 35 known boroughs were established, although he concedes that there were likely to have been many more of differing scales across the county (1985, 35). These settlements ranged from walled market towns to small farming communities who held land by burgage tenure. There is a record that in 1612 a 'castle (TN029-051001), town and lands of Oldtown (TN029-051) were granted to John Cantwell' (Griffith 1966, 197). The site of this castle and adjacent medieval habitation are located c. 2km west of the scheme and aerial photographs have identified earthworks that represent a series of attached rectangular enclosures that are likely to belong to a medieval field system.

A second possible borough, c. 1km west of the scheme, is suggested in the first edition OS mapping where a series of long, relatively narrow fields run north from a small road within the townland of Manna South. The area is defined on two sides by the townland boundary with Priory Demesne. The fields are at variance with the patchwork pattern of surrounding fields. These could be remnants of burgage plots fronting onto a small lane to the south. 'Manna Cottage' is shown on the first edition map occupying a small demesne comprising the eastern portion of this possible borough. In the Civil Survey (1654-6) Templemore is described as 'The Mannor, Castle Towne, and lands of Tamplemore' (Simington 1931, vol. 1, 78). It is possible that the 'Manna' townland name is a corruption of 'Mannor' as described in the Civil Survey.

A borough of some kind was almost certainly established by Thomas de Hereford in the vicinity of the modern town centre of Templemore – though no evidence for this remains. It is possible that such a borough may have initially occupied the space between the site of the Black Castle and the church associated with St Síoláin although the later creation of the current lake in that area may suggest that it was formerly waterlogged.

The site of the Black Castle, immediately northeast of the scheme is believed to be the site of an early castle and is the site of three recorded monuments – a Tower House (TN029-062002) and associated Bawn (TN029-062004), while a separate stone house is described at this complex in the Civil Survey (TN029-062003; Simington 1931, 78). The Archaeological Survey describes the Black Castle as 'A large rectangular three-storey tower house (ext. dims. c. 17.1m x c. 10.9m) composed of roughly coursed limestone rubble, with substantial base-batter and dressed quoins. Most of the base-batter has been robbed and this has revealed an internal facing. The S and W walls are supported by tall buttresses, the bases of which have also been robbed' (Farrelly and O'Brien 2002, 336).

Previous studies have suggested that the castle was built c. 1450 AD by the Butlers and subsequently leased to the families of Purcell of Loughmore and Morris of Knocka (Walsh 1991, 46-7). James Earl of Ormond is listed as the owner in 1640. While the castle was inhabited and modified into the 18th century, several aspects of the surviving masonry suggest that the castle pre-dates the 15th century. The size and shape of the structure along with the presence of wall pilasters (described as buttresses in the Archaeological Survey) are suggestive of a date early in the 13th century (Tadhg O'Keeffe – pers. comm.). The presence of intramural passages and a dividing wall at first floor level and first floor garderobe add further support to this reading of the building and places Black Castle in context with late 12th/early 13th, single-pile residential donjons identified by O'Keeffe (2021, 93). Donjons with similar dimensions and similar features to those listed above are common in the wider region with possibly the densest concentration of such donjons clustered to the northwest along the Shannon at Ballycapple (33km northwest), Ballylusky (34km northwest), Dromineer (50km northwest), Lisbunny (38km west-northwest) and Clohaskin (38km north-northwest). It is possible therefore that elements of the upstanding structure were constructed close to the outset of the lordship by Thomas de Hereford or by Theobald Walter for his tenant.

In a charter dated from c. 1195–1200, Thomas de Hereford granted all the tithes and benefices ‘in the 15 knight’s fees which I hold in Eliogarty’ to the Augustinian abbey of St Thomas the Martyr in Dublin (Gilbert 1889, 194). It is assumed that his Order built a church (TN029-062001) in the town probably early in the 13th century, although the first reference to it in the abbey register dates to 1240 (Gilbert 1889, 315-16). The abbey was founded in 1177 by Henry II and became a very popular foundation to endow to with the first and second generation of Anglo-Norman aristocracy (see Duffy 2021). The survival of the townland name Priory Demesne is interesting in this context as, in its initial incarnation, the abbey of St Thomas the Martyr was designated a priory. The location of the Priory Demesne townland to the southwest of the castle corresponds to an area designated church land on the Down Survey barony map. Sometime in the later 12th century the priory was upgraded to an abbey. Recent work done by Marie Therese Flanagan on the unpublished register of the abbey has identified a date of 1192 for the upgrade of the priory to an abbey (pers. comm.). Given that the Priory Demesne townland is one of only two in the country to carry the name of priory, it is proposed that Thomas de Hereford’s grant to the canons of St Thomas was affected by 1192, thereby resulting in the townland name.

Thomas de Hereford appears to have relinquished his claims on Templemore as William de Marisco was found to have held land of Theobald Walter, son of the first Theobald, at 'Coredofeney' at the time of his death in 1284 (Sweetman 1875, 510). A Purcell lord of Corketeni was noted in 1356 but the de Marisco family are again associated with the area in the later sixteenth century (Hamilton 1867, 366).

3.1.4 Post-Medieval Period (AD 1600–1800)

During the 17th century Templemore passed through the hands of Purcell, Baron of Loughmoe and Walter Lawless (Walsh 1991, 6-7). In the Civil Survey (1654-6) Templemore is described as 'The Mannor, Castle Towne, and lands of Tamplemore' (Simington 1931, vol. 1, 78). In 1698 John Carden leased 'the Manor Town, Castle and lands of Templemore containing two colpes [c. 2000 acres]' (Walsh 1991, 126). In 1704 Carden bought the freehold to this property from the Duke of Ormond (ibid.). The Carden family lived in Templemore castle until 1740, when it was destroyed by fire (Walsh 1991, 5). The present town of Templemore was built as a market town in the latter half of the 18th century.

Carden applied for a charter to hold cattle fairs, and ever since the town has been synonymous with fairs for cattle sheep, pigs and horses. It is through the holding of fairs that the town developed with its large market square, being attributed to the planning of Carden. In the Civil Survey Templemore is described as 'The Mannor Castle Towne and lands of Tamplemore'. In 1698 John Carden leased 'the Manor Town, Castel and lands of Templemore containing two colpes (c.2acres)'. In 1704 Carden bought the freehold to this property from the Duke of Ormond. The Carden family lived in Templemore Castle until 1740 when it was destroyed by fire. The present town of Templemore was built as a market town in the latter half of the 18th century (Farrelly & O’Brien 2002). The family moved to a new location, c. 600m to the west of Black Castle in the townland of Priory Demesne. They named their new house

'The Priory', though it is unclear whether there was already a building at this location. The house is shown on the first edition Ordnance Survey mapping of 1843. The house was rebuilt in the 1860s and the Carden family undertook largescale landscaping projects around the house. The 1909 25-inch map shows extensive neo-Gothic Garden features to the south of the house in the form of faux-medieval curtain walls and a forework to the main entrance of the house with rounded corner towers and what appear to be columns with moulded gothic profiles. There is a circular tower shown to the east of the house and the Templemore Irish Tourist Association Report, compiled in 1944 notes that the tower was '40 feet high and 15 feet in diameter and was built by the Carden family during the famine period to relieve distress.'

In the early 1800's the British Government opted for Thurles as the location for its new military barracks. However due to its location near the Ursuline Convent and the ensuing furore, the War Office relocated the barracks at Templemore, and this event dominated much of the future development of the town. Sir John Carden donated a 17-acre site and also supplied the adjoining 40 acres for training and recreation. The barracks consisted of 2 squares, surrounded by company lines, stores, married quarters, officer's mess, military prison, church and hospital. Completely surrounded by a high wall, with protective/defensive posts at each corner, it had accommodation for 25 officers, married quarters for 48 other ranks, and 767 unmarried personnel. A total of 36 hospital beds and 15 guardroom cells were located within the complex as well as stabling for 27 officers' horses. The Richmond barracks as it was named, and the surrounding area was quickly developed, with names such as Talevara Place, Vinemara Mall, and Regent Bridge, reminding all and sundry of the ongoing wars with which the barracks had become associated.

During the First World War, German prisoners of war were detained in the barracks. Mostly Prussian Guards, they were considered some of the best soldiers in the German Army. A feature of this period was the unique separate parades on Sundays of the different Faiths marching to Mass or Service while singing their own national songs. During the War of Independence, the Northamptonshire Regiment was based at the Barracks and conducted reprisals in the town on two occasions, once for the shooting of D.I. Wilson in Patrick Street, when the Town Hall was destroyed by fire, and secondly in avenging a successful ambush on a convoy of Crown Troops by Nationalist Forces at Thomastown Castle.

Following the Treaty in 1922, the Richmond Barracks was handed over to the Irish Provisional Government by Major Phibbs of the 10th Battalion, Northamptonshire Regiment, to Commandant Sean Scott, O/C, 2nd Battalion, Mid Tipperary Brigade. Under the command of Brigadier James Leahy, the 2nd Mid Tipperary Brigade now took over the renamed McCan Barracks. Subsequently the troops decided to support the anti-treaty side and a state of defence was in operation within the barracks. Through the intervention of Most Rev Dr Harty, Archbishop of Cashel & Emly, hostilities were avoided and the troops in possession of the barracks were allowed evacuate. The National Army remained there until 1929. World War II commenced in 1939, and the 10th Uisneachs Battalion was garrisoned at McCan Barracks, until the end of hostilities.

3.2 SUMMARY OF PREVIOUS ARCHAEOLOGICAL FIELDWORK

A review of the Excavations Bulletin (1970–2023) has revealed that there have been several archaeological excavations in the wider vicinity of the scheme.

Monitoring was carried out in 2006 and 2007 in Kiltillane townland (Licence Ref.: 06E0790), c. 1.2km to the northeast of the scheme. Nothing of archaeological significance was identified.

A desktop assessment and field survey were carried out by Moore Group in the production of a cultural heritage chapter in the Environmental Impact Statement for the River Mall (Templemore) Drainage Scheme (Tobin, 2015). The field walkover carried out by Moore Group in 2004 and 2014 and covered the entire area to be impacted by the proposed Flood Relief scheme. It noted the proximity of the works to the surrounding RMP sites and also topographical undulations, which may have been indicative of the presence of previously un-recorded archaeological deposits. The field walkover commenced at Templemore Demesne in the northern end of the town and travelled south to the terminus south of Cloone Bridge. It concluded that there were several areas of significance noted along the project route (Sites 1-8). No impacts were noted on any recorded monuments. The report recommended archaeological monitoring of construction works associated with the drainage scheme and archaeological testing of one area in Belleville.

Archaeological monitoring has been ongoing intermittently since 2017 as part of the Flood Relief Scheme works by the Tim Coughlan of IAC Archaeology under Licence 17E0348. Nothing of archaeological significance has been identified during the monitoring works carried out to date.

An underwater archaeological wade survey of the section of the river downstream of the new flood relief channel, and downstream of the current development, was carried out under licence 17D0081 and 17R0206. The work was carried out by Aisling Collins in 2017. The survey concluded that the riverbed has been dredged several times in the last few years so the potential for archaeological finds in the riverbed is low. There is always a possibility of archaeology in the river banks. There were multiple responses to the metal detection but these were all identifiable as modern debris.

Archaeological test trenching was carried out to the west of the current development area in Belleville at the location of a proposed embankment as part of the flood relief scheme project. It was carried out by Tim Coughlan of IAC Archaeology under licence 18E0360 in 2021. Nothing of archaeological significance was identified.

3.3 CARTOGRAPHIC ANALYSIS

Barony Map of Iliogurty 1656-8 (Figure 3)

The barony map shows the parish of Templemore with what is presumably Black Castle a close to the centre of the parish. A small area of land to the southwest of the castle is marked as church land. No other details relating to the study area are shown.

First Edition Ordnance Survey Map, 1843, scale 1:10,560 (Figure 4)

This is the first accurate historic mapping coverage of the area containing the proposed scheme. The river is shown extending along its current course. O’Dwyer’s Bridge is referred to as Kings Bridge, and Small Bridge is referred to as Regent Bridge. The river is depicted as forming the townland boundary between Belleville and Templemore Demesne in the north, and Kiltillane and Manna South in the south of the current scheme. There are no other notable features.

Ordnance Survey Map, 1907, scale 1:2,500 (Figure 5)

The river continues to be shown extending along its current course. Both Bridges are still referred to at Kings Bridge and Regent Bridge. A building is evident extending across the river north of King (O’Dwyer’s) Bridge. This is discussed in the field inspection noted below. Adjacent text refers to “Masonic Hall” but it is not clear which structure the text directly relates to. There are no other notable changes to the earlier maps.

3.4 COUNTY DEVELOPMENT PLAN

The Tipperary Development Plan (2022-2028) recognises the statutory protection afforded to all Record of Monuments and Places (RMP) sites under the National Monuments Legislation (1930–2014). The development plan lists a number of aims and objectives in relation to archaeological heritage.

There are four recorded monuments within 250m of the scheme (Table 1; Figure 1; Appendix 1). The nearest recorded monument consists of the archaeological zone of potential for the Historic Town (RMP TN029-062), which extends into the northern extent of the proposed development.

TABLE 1: Recorded Archaeological Sites

RMP NO.	LOCATION	CLASSIFICATION	DISTANCE FROM SCHEME
TN029-062	Templemore Demesne. 611084,671698	Historic town	0m (northern end of scheme within zone of notification)
TN029-062002	Templemore Demesne. 610743, 672814	Castle - tower house	c. 100m
TN029-062003	Templemore Demesne. 610742, 672819	House - indeterminate date	c. 100m
TN029-062004	Templemore Demesne. 610749, 672808	Bawn	c. 100m

3.5 TOPOGRAPHICAL FILES OF THE NATIONAL MUSEUM OF IRELAND

Information on artefact finds from the study area in County Tipperary has been recorded by the National Museum of Ireland since the late 18th century. Location information relating to these finds is important in establishing prehistoric and historic

activity in the study area. There are no recorded finds from within the study area of the scheme.

3.6 AERIAL PHOTOGRAPHIC ANALYSIS

Inspection of the aerial photographic coverage of the proposed development area held by the Ordnance Survey (1995–2013), Google Earth (2008–2020), and Bing Maps revealed. A review of online images via the OSI website and Google and Bing Maps did not note any additional previously unrecorded sites along the route of the proposed scheme

3.7 FIELD INSPECTION AND METAL DETECTION

The field inspection sought to assess the site, its previous and current land use, the topography and any additional information relevant to the report. During the course of the field investigation the proposed development site and its surrounding environs were inspected (Figure 1).

The field inspection was carried out over the course of two days in March 2022 by Tim Coughlan and Maria Woodlock of IAC Archaeology. The proposed works included a metal detection survey of the former river bed and banks under Detection Licence 22R0025 (Plate 5). A large amount of modern debris was found to be located within the survey area, and as such the metal detection survey was largely abandoned due to multiple and constant detections relating to same.

The field inspection was broken into three main sections – from the outfall from Templemore Lake to north of O’Dwyer’s Bridge, along “The Mall” between O’Dwyer’s Bridge and Small Bridge, and south of Small Bridge. Note the area north of the Templemore Lake outfall in Belleville was not inspected as this area had been previously infilled by the OPW as part of remedial works following the opening of the new Flood Relief Scheme diversion channel (Plates 1 and 2). Much of the channel has been canalised and is mostly walled on both sides until south of Small Bridge when natural river banks are evident.

The built heritage resource, including O’Dwyer’s Bridge and Small Bridge, as described in full within the separate architectural heritage report (Goodbody 2023).

Section 1 – Lake Outfall to O’Dwyer’s Bridge

Field inspection commenced at the lake outfall and proceeded southwards (downstream along the former channel). The channel at the outfall has been dammed to divert lake overflow into the newly constructed channel to the west. Within this northern section there was significant pooling for c. 24m with an average water depth 0.15m (Plate 3). The northeastern side of the channel is bounded by the Townpark (from outfall Chainage 2700 to Chainage 2600) and is defined by a mortared wall, constructed of undressed limestone. The southwestern side of the channel is also defined by a wall which along most of its length has a defined rough concrete plinth and a main construction combined of concrete and mortared undressed limestone. The channel is 6.7m wide from wall to wall. The edges of the channel bed are overgrown with reeds and grasses to c1.5m out from each wall, with the southwest

side consisting a 0.40m high bank. There was a substantial amount of modern debris visible such as plastic bottles and tin cans.

South of the area of pooling the northwestern bank widens to 3.8m into the channel and is heavily overgrown. For 20m the dry river bed is exposed with bedrock visible and extending across the full width of the exposed channel (Plate 4). This bedrock ridge is responsible for the pooling upstream. The concrete foundations of the southwestern boundary wall are clearly visible. In the area of the Rock outcrop there was multiple hits with the metal detector but with no obvious items visible. The metal detector was possibly picking up mineral content in the bedrock. When some of the loose vegetation was cleared and the area assessed fragments of modern glass and debris were visible.

Downstream from the bedrock ridge, the base of the channel flattens out and consists of gravel and stone (Chainage 2600-2550). On the northwest side of the channel the former boundary with the Townpark is replaced by a modern boundary wall with Young's garage which is constructed of concrete block and brick (Plate 5). There is a modern access bridge going into the garage, it is also constructed of concrete and red brick. On the southwest side of the channel the concrete wall with base plinth and mortared stone capping continues. This section is heavily overgrown in places with deposits of soil and debris but the main river bed consists of gravel and silt. The roadside bank (southwest) extends into the river channel 3.8-4.0m and the thalweg is confined to the garage side (northeast) of the channel. Modern debris continued to be identified on the surface (Plates 7 and 8). Under the Young's bridge the thalweg channel meanders towards the southwest/road side.

To the south of Young's Bridge there is a substantial stone bridge/culvert (Plate 9). It is described in the EIS as *"Single-arched bridge with cut stone voussoirs with remains of two-bay stone building surmounting bridge. Carriageway opening to front with cut stone surround and voussoirs. Some patchy remains of lime render to walls. Building may have originally been higher, as it appears to have undergone some demolition. Building is not shown on the 1st edition (1843) OS map; however it is shown on the 2nd (1902-03) edition OS map. The 2nd edition also describes a Masonic Hall in this area but it is not clear as to what structure it is referring to"* (Moore, 2015). It is not listed as an RPS/RMP/NIAH.

There is some localised pooling between Youngs bridge and the large stone bridge, caused by the river bed being raised under both structures. The bank on the road side is silty and soft underfoot. Immediately downstream of the large stone bridge there is a small bridge with a timber and steel deck for local yard access (Plate 10). The stone piers on either side may have originally supported a different deck structure. There was large reinforced concrete slabs and modern debris in the river bed at this location.

Upstream of the O'Dwyer's Bridge the channel was heavily overgrown and in particular on the eastern side there was a substantially overgrown bank (Plate 11). The channel continues to be canalised with a mix of stone and concrete walls

extending to O'Dwyer's Bridge. There was significant pooling in the channel upstream of O'Dwyer's Bridge again caused by higher bed levels beneath the bridge structure. A large volume of modern debris was also evident. Two inlets were noted in the channel walls on the upstream side of O'Dwyer's bridge which are interpreted as being associated with surface water drainage into the channel (Plate 12). O'Dwyer's Bridge itself is shown in Plates 13 and 14.

Section 2 – Along “The Mall” between O'Dwyer's Bridge and Small Bridge

This section extends between O'Dwyer's Bridge and Small Bridge and runs alongside and west of “The Mall”. The channel is largely canalised along this stretch.

Downstream of O'Dwyer's Bridge the channel is defined by a mortared stone wall set on a rough concrete footing on the west side of the channel (Toyota garage side). On the east (town) side the channel is bounded by a wall consisting of a concrete foundation with mortared stone above. A cobbled surface extends (5m N-S x 2m E-W) across the top of this wall to The Mall road boundary wall. South of the raised cobble surface the channel is bounded by the The Mall boundary wall which constructed of mortared undressed limestone. An overgrown bank (1.1m high) extends into the channel at the base of the wall for 2.1m, covering the wall foundation.

At Chainage 2440 (approx.) to the east of the Toyota Garage on the western boundary of the river an iron water pump is evident on top of the river boundary wall (Plate 16). There is a cobbled on the surface of the wall surrounding the pump. To the rear (west) of the pump a domed mortared stone (3m wide x 1.1m high) wall has been built in front of the modern concrete garage wall. It is interpreted that the pump and wall has been set here as a decorative feature

Downstream from the pump (Chainage 2400 approx) the walls on both sides of the channel sit directly on top of bedrock which is also evident at the base of the channel. To the south of the Toyota Garage building on the western boundary the defined boundary wall is replaced by an earthen bank with large trees. There is still some evidence of walling and it is unclear if this banked section may have had walled façade which has now largely collapsed (Plate 17), or whether this portion was not walled. On the east side of the channel the wall construction now consists of a concrete foundation and 4 courses of bonded stone above this (Plate 18).

The section from Chainage 2380 – 2330 was inaccessible due to the excessive depth of pooled water which exceeded 0.40m. the eastern boundary of the channel continues to be walled with a concrete foundation, although much of the upper wall at the road level has collapsed. The western boundary is heavily overgrown with mature trees and this combined with the water depth left it impossible to assess whether any walling was evident, but none was visible from the The Mall to the east.

A number of domestic houses are evident on the west of the river south of Chainage 2300. These are accessed from The Mall by a series of modern concrete access bridges (Plate 19). These bridges are to be removed during construction. The river bed level is higher beneath the bridges which has caused the pooling upstream to the

north. The walls of the channel are of concrete in this section and often sitting on a concrete foundation. The plinth base extends into the river for 0.9-1.1m in places and is 0.2m thick (Plate 20). It is possible that the full bed may once have had a concrete based which has now eroded, but regardless the construction of the walls on both side of the channel would have significantly impacted the original river bed. Modern debris continues to be clearly identifiable along the reiver bed (Plate 21).

At the southern end of the section, north of Small Bridge both sides of the channel are heavily vegetated with trees, bushes and grasses (Plate 22). The fabric of any walls or bank material was not visible. The bank is 0.8m high and 1.3m wide on the approach to Small Bridge. Small Bridge is shown in Plate 23.

Section 3 - South of Small Bridge to the new channel outfall.

This section of the scheme is not canalised and meanders from Small Bridge to the outfall of the new channel into the original channel. This section is heavily overgrown with mature trees and hedges.

There is a boundary wall on the east side of the channel constructed of loosely mortared irregular calp limestone blocks which extends for c 20m. There is no wall visible on the western side of the channel. There is a concrete pipe crossing the river at water level 14m downstream Small Bridge. The river bed is very stony with gravel. Downstream of the pipe there is water pooling for 20m. The banks on both sides are heavily vegetated with brambles and trees. There is modern debris on the river bed and banks such as plastic, concrete blocks and iron bars. The thalweg channel is 2.4m wide with a 3.4m wide raised bank on the west side.

The remainder of this section continues in a meander with no visible features on the river banks of on the river bed. There continues to be intermittent evidence of modern debris and the river bed consists mainly of stone and gravels. The banks are heavily overgrown and largely inaccessible. At the southern end the river bed is notably siltier; however, this is likely associated with the dam placed at the outfall location which allows only a flow through a 4-inch pipe into the open downstream section. This would have allowed for significant pooling and sediment settlement.

4 CONCLUSIONS

This report has been prepared for Tobin Consulting Engineers, on behalf of Tipperary County Council, to study the impact, if any, on the archaeological resource of the proposed infilling works on the former River Mall channel Templemore, Co. Tipperary (Figure 1, ITM 610803, 671760 to 611116, 671166). The archaeological assessment involved a detailed study of the archaeological and historical background of the proposed development site and the surrounding area.

Following the completion of the River Mall (Templemore) Flood Relief Scheme, a section of abandoned dry riverbed channel will remain in Templemore, County Tipperary. There is no river flow in this old channel. It is located on the edge of Templemore town centre and runs southwards from opposite the Templemore Town Park to Talavera, just south of Small's Bridge.

The main construction elements consist of the insertion of a 900mm drainage header pipe in the existing dry river channel section of the River Mall which will be connected to 29 existing surface water outfalls. The infilling of the dry river channel section, including pipe surround of the 900mm drainage header pipe, to match existing ground elevations surrounding the river channel. Demolition of modern bridge access structures and landscaping to match surrounding environment. In the area of retained bridge structures (O'Dwyer's Bridge, Small Bridge, and the large bridge structure north of O'Dwyer's Bridge) it is proposed to install the pipe and infill the area under the structure, surrounding the pipe with a foam concrete as there will be inadequate room to mechanically compact infill material. Due to the impact on sight lines at the intersection located at O'Dwyer's Bridge it has been deemed necessary to remove to parapet walls of the bridge to road surface level.

The existing canalised channel has resulted in the former river bed being substantially below existing ground level and that of existing outfalls. It is anticipated that the existing river bed level will be roughly at grade with the formation level for the proposed header pipe, and limited excavation or grading of the existing river bed will be required (Figure 2). It is anticipated that localised grading and vegetation removal will be required along the length of the works but this is not anticipated to involve any significant volume of material, but to facilitate successful completion of pipelaying and infilling works.

The results of the assessment have confirmed that there are no known sites of archaeological significance along the route of the proposed pipe or infilling works. The field inspection also confirmed that the channel is highly contaminated with modern debris and will have been substantially impacted by works associated with the building of the canalised walls along much of its length. Given the raised deposits beneath the various bridges along the route, it is likely that much of the river bed has been subject of dredging, as indicated in the underwater assessment of the adjacent downstream section by ACAS (2018).

5 IMPACT ASSESSMENT AND MITIGATION STRATEGY

Impacts can be identified from detailed information about a project, the nature of the area affected and the range of archaeological resources potentially affected. Archaeological sites can be affected adversely in a number of ways: disturbance by excavation, topsoil stripping; disturbance by vehicles working in unsuitable conditions; and burial of sites, limiting access for future archaeological investigation. Upstanding archaeology can be affected adversely by direct damage or destruction arising from development, from inadvertent damage arising from vibration, undermining etc. and also by indirect impacts to a building's visual setting, view or curtilage.

5.1 IMPACT ASSESSMENT

- There may be an adverse impact on previously unrecorded archaeological feature or deposits that have the potential to survive beneath the current ground level. This will be caused by ground disturbances associated with the proposed development.

5.2 MITIGATION

- It is recommended that all ground disturbances associated with the proposed development be monitored by a suitably qualified archaeologist. If any features of archaeological potential are discovered during the course of the works further archaeological mitigation may be required, such as preservation *in-situ* or by record. Any further mitigation will require approval from the National Monuments Service of the DoHLGH.

It is the developer's responsibility to ensure full provision is made available for the resolution of any archaeological remains, both on site and during the post excavation process, should that be deemed the appropriate manner in which to proceed.

Please note that all recommendations are subject to approval by the National Monuments Service of the Heritage and Planning Division, Department of Housing, Local Government and Heritage.

6 REFERENCES

- Bennett, I. (ed.) 1987–2010. *Excavations: Summary Accounts of Archaeological Excavations in Ireland*. Bray. Wordwell.
- Bradley J. 1985 'The medieval towns of Tipperary', in William Nolan and Thomas McGrath (eds) *Tipperary: history and society*. Dublin. Geography Publications.
- Chartered Institute for Archaeologists 2020a. Standards & Guidance for Field Evaluation.
- Chartered Institute for Archaeologists 2020b. Standards & Guidance for Archaeological Excavation.
- Chartered Institute for Archaeologists 2020c. Standards & Guidance for an Archaeological Watching Brief (Monitoring).
- Department of Arts, Heritage, Gaeltacht and the Islands. 1999a. *Framework and Principles for the Protection of the Archaeological Heritage*. Government Publications Office, Dublin.
- Department of Arts, Heritage, Gaeltacht and the Islands. 1999b. *Policy and Guidelines on Archaeological Excavation*. Government Publications Office, Dublin.
- Duffy, P. 2021, 'Saint and skinners: excavations along the northern precinct of the Abbey of St Thomas the Martyr, Dublin.' In Seán Duffy (ed) *Medieval Dublin XVIII*. Four Courts Press. Dublin.
- Empey, A. 1984, 'The Norman period: 1185-1500,' in in William Nolan and Thomas McGrath (eds) *Tipperary: history and society*. Dublin. Geography Publications.
- Farrelly, J. and O'Brien, C., 2002 *The Archaeological Inventory of County Tipperary. Vol. 1 - North Tipperary* Stationery Office. Dublin.
- Gleeson, P. 2015 'Kingdoms, Communities and Óenaig: Irish assembly practices in their Northwest European context.' *North Atlantic Journal Special Volume 8: Debating the Thing in the North II: Selected Papers from Workshops Organized by the Assembly Project*
- Goodbody, R. 2023 *Architectural Heritage Assessment of proposed Infill Works at Templemore, Co. Tipperary*. Unpublished report prepared by IAC Archaeology.
- Griffith, M.C. 1966. *Irish patent rolls of James I*. Irish Manuscripts Commission. Dublin.
- Gwynn, A. and Hadcock, 1970, *Medieval Religious Houses in Ireland*. Longman. London.

Hamilton, H. 1867 *Calendar of the State Papers Relating to Ireland, of the Reigns of Henry VIII., Edward VI., Mary, and Elisabeth: Preserved in the Public Department of Her Majesty's Public Record Office. 1574 - 1585, Volume 2*. Longman. London.

Templemore Irish Tourist Association Report, Irish Tourist Association 17 November 1944

Lewis, S. 1837. *Topographical Dictionary of Ireland* (online edition).

MacCotter, P. 2008 *Medieval Ireland: territorial, political and economic divisions*. Dublin. Four Courts Press.

Moore Group, 2015 'Chapter 14 Cultural Heritage' in Tobin Consulting Engineers '*River Mall (Templemore) Drainage Scheme Environmental Impact Statement*'.

National Monuments Service, Department of Housing, Local Government and Heritage. *Sites and Monuments Record*, County Tipperary.

National Museum of Ireland. *Topographical Files*, County Tipperary.

North Tipperary Development Plan 2010 (as varied).

Ó Riáin P. 2011, *A Dictionary of Irish Saints*. Four Courts Press. Dublin.

Tipperary Urban Survey.

Simington, R.C. 1931, *The Civil Survey 1654-1656, County of Tipperary*. Dublin. The Stationary Office.

Sweetman, H.S. 1875 *Calendar of documents, relating to Ireland, preserved in Her Majesty's Public record office 1171-[1307]* vol. 2. Longman. London.

Tobin Consulting Engineers. 2015 *River Mall (Templemore) Drainage Scheme Environmental Impact Statement*.

CARTOGRAPHIC SOURCES

Down Survey Mas 1656-8

Ordnance Survey maps of County Tipperary, 1843, 1901, 1938

ELECTRONIC SOURCES

www.excavations.ie – Summary of archaeological excavation from 1970–2020.

www.archaeology.ie – DoHLGH website listing all SMR sites.

www.heritagemaps.ie – The Heritage Council web-based spatial data viewer which focuses on the built, cultural and natural heritage.

www.googleearth.com – Satellite imagery of the proposed development area.

www.bing.com– Satellite imagery of the proposed development area

www.booksulster.com/library/plnm/placenamesC.php - Contains the text from Irish Local Names Explained by P.W Joyce (1870).

www.logainm.ie –Placenames Database of Ireland launched by Fiontar agus Scoil na Gaelige and the DoHLGH.

APPENDICES

APPENDIX 1 SMR/RMP SITES WITHIN THE SURROUNDING AREA

SMR NO.:	TN029-062002-
RMP STATUS:	Scheduled for inclusion in the next revision of the RMP
TOWNLAND:	Templemore Demesne
PARISH:	Eliogarty
BARONY:	Templemore
I.T.M.:	610737, 671811
CLASSIFICATION:	Castle - tower house
DIST. TO SITE:	c. 100m
DESCRIPTION:	<p>Situated on a natural hillock with good views in all directions. Described in the Civil Survey (1654-6) as 'a Castle and the Walls of a stone house out of repaire' (Simington 1931, vol. 1, 78). James Earl of Ormond is listed as proprietor in 1640 (ibid.). A large rectangular three-storey tower house (ext. dims. c. 17.1m x c. 10.9m) composed of roughly coursed limestone rubble, with substantial base-batter and dressed quoins. Most of the base-batter has been robbed and this has revealed an internal facing. The S and W walls are supported by tall buttresses, the bases of which have also been robbed. The E wall and E end of the N wall have been destroyed. In the interior, at the NW end, there is a raised area formed by a vaulted chamber which was inserted at ground-floor level. This chamber, together with a double bellcote surmounting the S wall and a circular turret on the N wall, were probably built as demesne features of the Carden estate in the nineteenth century. The S wall has been subject to a lot of modification. At the W end of the wall there is a large break which has been infilled. Above this at first-floor level there is an opening, probably a window embrasure. There is a similar embrasure above this at third-floor level from which a mural passage runs westward, continuing into the W wall. The W wall has been partially repaired in recent times. Two embrasures at first-floor level, both containing a single ogee-headed light with punch-dressed limestone jambs. At second-floor level there is a large embrasure, placed S of centre, with a mural passage running N from it. There are three windows in the W wall, the centre window and possibly the N one, providing light exclusively for the mural passage. The remains of an internal dividing wall exist between the S embrasure and the N embrasure on the first floor. This wall continues from the first floor up to the second-floor level. At the N end of the W wall there is a rectangular garderobe chute (dims 1.1m x 0.82m W), surmounted by the circular turret described above, which exits the building at a point 2.6m above ground level in the external face of the N wall. The remains of a bawn wall (T 1.6m) extend N-S from roughly the centre of the N wall and extend E-W from the S wall.</p> <p>The above description is derived from 'The Archaeological Inventory of County Tipperary. Vol. 1 - North Tipperary' compiled by Jean Farrelly and Caimin O'Brien (Dublin: Stationery Office, 2002). In certain instances the entries have been revised and updated in the light of recent research.</p>
REFERENCE:	www.archaeology.ie/SMR file
SMR NO.:	TN029-062003-
RMP STATUS:	Scheduled for inclusion in the next revision of the RMP
TOWNLAND:	Templemore Demesne

PARISH:	Eliogarty
BARONY:	Templemore
I.T.M.:	610742, 671819
CLASSIFICATION:	House - indeterminate date
DIST. TO SITE:	c. 100m
DESCRIPTION:	Situated on a natural hillock with good views in all directions. Described in the Civil Survey (1654-6) as 'a Castle and the Walls of a stone house out of repaire' (Simington 1931, vol. 1, 78). James Earl of Ormond is listed as proprietor in 1640 (ibid.). Though the tower house (TN029-062002) may have been modified and inhabited in the seventeenth century, the reference in the Civil Survey suggests that the stone house was a separate building.
REFERENCE:	www.archaeology.ie/SMR file

SMR NO.:	TN029-062004-
RMP STATUS:	Scheduled for inclusion in the next revision of the RMP
TOWNLAND:	Templemore Demesne
PARISH:	Eliogarty
BARONY:	Templemore
I.T.M.:	610749, 671808
CLASSIFICATION:	Bawn
DIST. TO SITE:	c. 90m
DESCRIPTION:	Situated on a natural hillock with good views in all directions. Described in the Civil Survey (1654-6) as 'a Castle and the Walls of a stone house out of repaire' (Simington 1931, vol. 1, 78). James Earl of Ormond is listed as proprietor in 1640 (ibid.). A large rectangular three-storey tower house (TN029-062002) composed of roughly coursed limestone rubble, with substantial base-batter and dressed quoins. Most of the base-batter has been robbed and this has revealed an internal facing. The S and W walls are supported by tall buttresses, the bases of which have also been robbed. The E wall and E end of the N wall have been destroyed. The remains of a bawn wall (T 1.6m) extend N-S from roughly the centre of the N wall and extend E-W from the S wall.
REFERENCE:	www.archaeology.ie/SMR file

SMR NO.:	TN029-062----
RMP STATUS:	Scheduled for inclusion in the next revision of the RMP
TOWNLAND:	Templemore Demesne
PARISH:	Eliogarty
BARONY:	Templemore
I.T.M.:	610907, 671925
CLASSIFICATION:	Historic town
DIST. TO SITE:	0m
DESCRIPTION:	Situated on flat pasture with good views in all directions. Templemore, known as Corkatenny until the sixteenth century, was granted to Thomas de Hereford by Theobald Walter before his death in 1206. In a series of charters dating to the early thirteenth century de Hereford gave tithes and ecclesiastical benefices of all his lands, including 'Corcateny' to the Augustinian abbey of Saint Thomas in Dublin (Reg. St. Thomas, Dublin 194, 196, 237). This Order built a church (TN029-062001) in the town probably early in the thirteenth century, though the first reference to it in the Abbey register dates to 1240 (Gilbert 1889, 315-16).

	<p>Thomas de Hereford appears to have relinquished his claims on Templemore as William de Marisco was found to have held land of Theobald Walter, son of the first Theobald, at 'Coredofeney' at the time of his death in 1284 (CDI, vol. 2, 510). A Purcell lord of Corketeni was noted in 1356 but the de Marisco family are again associated with the area in the later sixteenth century (CSPI, vol. 2, 366). The castle (TN029-062002) at Templemore dates to this period. During the seventeenth century Templemore passed through the hands of Purcell, Baron of Loughmoe and Walter Lawless (Walsh 1991, 6-7). In the Civil Survey (1654-6) Templemore is described as 'The Mannor, Castle Towne, and lands of Tamplemore' (Simington 1931, vol. 1, 78). In 1698 John Carden leased 'the Manor Town, Castle and lands of Templemore containing two colpes [c. 2000 acres]' (Walsh 1991, 126). In 1704 Carden bought the freehold to this property from the Duke of Ormond (ibid.). The Carden family lived in Templemore castle until 1740 when it was destroyed by fire (Walsh 1991, 5). The present town of Templemore was built as a market town in the latter half of the eighteenth century.</p>
REFERENCE:	<p>www.archaeology.ie/SMR file</p>

APPENDIX 2 LEGISLATION PROTECTING THE ARCHAEOLOGICAL RESOURCE

PROTECTION OF CULTURAL HERITAGE

The cultural heritage in Ireland is safeguarded through national and international policy designed to secure the protection of the cultural heritage resource to the fullest possible extent (Department of Arts, Heritage, Gaeltacht and the Islands 1999, 35). This is undertaken in accordance with the provisions of the *European Convention on the Protection of the Archaeological Heritage* (Valletta Convention), ratified by Ireland in 1997.

THE ARCHAEOLOGICAL RESOURCE

The *National Monuments Act 1930 to 2014* and relevant provisions of the *National Cultural Institutions Act 1997* are the primary means of ensuring the satisfactory protection of archaeological remains, which includes all man-made structures of whatever form or date except buildings habitually used for ecclesiastical purposes. A National Monument is described as ‘a monument or the remains of a monument the preservation of which is a matter of national importance by reason of the historical, architectural, traditional, artistic or archaeological interest attaching thereto’ (National Monuments Act 1930 Section 2). A number of mechanisms under the National Monuments Act are applied to secure the protection of archaeological monuments. These include the Register of Historic Monuments, the Record of Monuments and Places, and the placing of Preservation Orders and Temporary Preservation Orders on endangered sites.

OWNERSHIP AND GUARDIANSHIP OF NATIONAL MONUMENTS

The Minister may acquire national monuments by agreement or by compulsory order. The state or local authority may assume guardianship of any national monument (other than dwellings). The owners of national monuments (other than dwellings) may also appoint the Minister or the local authority as guardian of that monument if the state or local authority agrees. Once the site is in ownership or guardianship of the state, it may not be interfered with without the written consent of the Minister.

REGISTER OF HISTORIC MONUMENTS

Section 5 of the 1987 Act requires the Minister to establish and maintain a Register of Historic Monuments. Historic monuments and archaeological areas present on the register are afforded statutory protection under the 1987 Act. Any interference with sites recorded on the register is illegal without the permission of the Minister. Two months’ notice in writing is required prior to any work being undertaken on or in the vicinity of a registered monument. The register also includes sites under Preservation Orders and Temporary Preservation Orders. All registered monuments are included in the Record of Monuments and Places.

PRESERVATION ORDERS AND TEMPORARY PRESERVATION ORDERS

Sites deemed to be in danger of injury or destruction can be allocated Preservation Orders under the 1930 Act. Preservation Orders make any interference with the site

illegal. Temporary Preservation Orders can be attached under the 1954 Act. These perform the same function as a Preservation Order but have a time limit of six months, after which the situation must be reviewed. Work may only be undertaken on or in the vicinity of sites under Preservation Orders with the written consent, and at the discretion, of the Minister.

RECORD OF MONUMENTS AND PLACES

Section 12(1) of the 1994 Act requires the Minister for Arts, Heritage, Gaeltacht and the Islands (now the Minister for the Department of Housing, Local Government and Heritage) to establish and maintain a record of monuments and places where the Minister believes that such monuments exist. The record comprises a list of monuments and relevant places and a map/s showing each monument and relevant place in respect of each county in the state. All sites recorded on the Record of Monuments and Places receive statutory protection under the National Monuments Act 1994. All recorded monuments on the proposed development site are represented on the accompanying maps.

Section 12(3) of the 1994 Act provides that ‘where the owner or occupier (other than the Minister for Arts, Heritage, Gaeltacht and the Islands) of a monument or place included in the Record, or any other person, proposes to carry out, or to cause or permit the carrying out of, any work at or in relation to such a monument or place, he or she shall give notice in writing to the Minister of Arts, Heritage, Gaeltacht and the Islands to carry out work and shall not, except in case of urgent necessity and with the consent of the Minister, commence the work until two months after giving of notice’.

Under the National Monuments (Amendment) Act 2004, anyone who demolishes or in any way interferes with a recorded site is liable to a fine not exceeding €3,000 or imprisonment for up to 6 months. On summary conviction and on conviction of indictment, a fine not exceeding €10,000 or imprisonment for up to 5 years is the penalty. In addition, they are liable for costs for the repair of the damage caused.

In addition to this, under the *European Communities (Environmental Impact Assessment) Regulations 1989*, Environmental Impact Statements (EIS) are required for various classes and sizes of development project to assess the impact the proposed development will have on the existing environment, which includes the cultural, archaeological and built heritage resources. These document’s recommendations are typically incorporated into the conditions under which the proposed development must proceed, and thus offer an additional layer of protection for monuments which have not been listed on the RMP.

THE PLANNING AND DEVELOPMENT ACT 2000

Under planning legislation, each local authority is obliged to draw up a Development Plan setting out their aims and policies with regard to the growth of the area over a five-year period. They cover a range of issues including archaeology and built heritage, setting out their policies and objectives with regard to the protection and enhancement of both. These policies can vary from county to county. The Planning and Development Act 2000 recognises that proper planning and sustainable

development includes the protection of the archaeological heritage. Conditions relating to archaeology may be attached to individual planning permissions.

APPENDIX 3 IMPACT ASSESSMENT AND THE CULTURAL HERITAGE RESOURCE

POTENTIAL IMPACTS ON ARCHAEOLOGICAL AND HISTORICAL REMAINS

Impacts are defined as ‘the degree of change in an environment resulting from a development’ (Environmental Protection Agency 2022). They are described as profound, significant or slight impacts on archaeological remains. They may be negative, positive or neutral, direct, indirect or cumulative, temporary or permanent.

Impacts can be identified from detailed information about a project, the nature of the area affected and the range of archaeological and historical resources potentially affected. Development can affect the archaeological and historical resource of a given landscape in a number of ways.

- Permanent and temporary land-take, associated structures, landscape mounding, and their construction may result in damage to or loss of archaeological remains and deposits, or physical loss to the setting of historic monuments and to the physical coherence of the landscape.
- Archaeological sites can be affected adversely in a number of ways: disturbance by excavation, topsoil stripping and the passage of heavy machinery; disturbance by vehicles working in unsuitable conditions; or burial of sites, limiting accessibility for future archaeological investigation.
- Hydrological changes in groundwater or surface water levels can result from construction activities such as de-watering and spoil disposal, or longer-term changes in drainage patterns. These may desiccate archaeological remains and associated deposits.
- Visual impacts on the historic landscape sometimes arise from construction traffic and facilities, built earthworks and structures, landscape mounding and planting, noise, fences and associated works. These features can impinge directly on historic monuments and historic landscape elements as well as their visual amenity value.
- Landscape measures such as tree planting can damage sub-surface archaeological features, due to topsoil stripping and through the root action of trees and shrubs as they grow.
- Ground consolidation by construction activities or the weight of permanent embankments can cause damage to buried archaeological remains, especially in colluviums or peat deposits.
- Disruption due to construction also offers in general the potential for adversely affecting archaeological remains. This can include machinery, site offices, and service trenches.

Although not widely appreciated, positive impacts can accrue from developments. These can include positive resource management policies, improved maintenance and access to archaeological monuments, and the increased level of knowledge of a site or historic landscape as a result of archaeological assessment and fieldwork.

PREDICTED IMPACTS

The severity of a given level of land-take or visual intrusion varies with the type of monument, site or landscape features and its existing environment. Severity of impact can be judged taking the following into account:

- The proportion of the feature affected and how far physical characteristics fundamental to the understanding of the feature would be lost;
- Consideration of the type, date, survival/condition, fragility/vulnerability, rarity, potential and amenity value of the feature affected;
- Assessment of the levels of noise, visual and hydrological impacts, either in general or site-specific terms, as may be provided by other specialists.

APPENDIX 4 MITIGATION MEASURES AND THE CULTURAL HERITAGE RESOURCE

POTENTIAL MITIGATION STRATEGIES FOR CULTURAL HERITAGE REMAINS

Mitigation is defined as features of the design or other measures of the proposed development that can be adopted to avoid, prevent, reduce or offset negative effects.

The best opportunities for avoiding damage to archaeological remains or intrusion on their setting and amenity arise when the site options for the development are being considered. Damage to the archaeological resource immediately adjacent to developments may be prevented by the selection of appropriate construction methods. Reducing adverse effects can be achieved by good design, for example by screening historic buildings or upstanding archaeological monuments or by burying archaeological sites undisturbed rather than destroying them. Offsetting adverse effects is probably best illustrated by the full investigation and recording of archaeological sites that cannot be preserved *in situ*.

DEFINITION OF MITIGATION STRATEGIES

ARCHAEOLOGICAL RESOURCE

The ideal mitigation for all archaeological sites is preservation *in situ*. This is not always a practical solution, however. Therefore, a series of recommendations are offered to provide ameliorative measures where avoidance and preservation *in situ* are not possible.

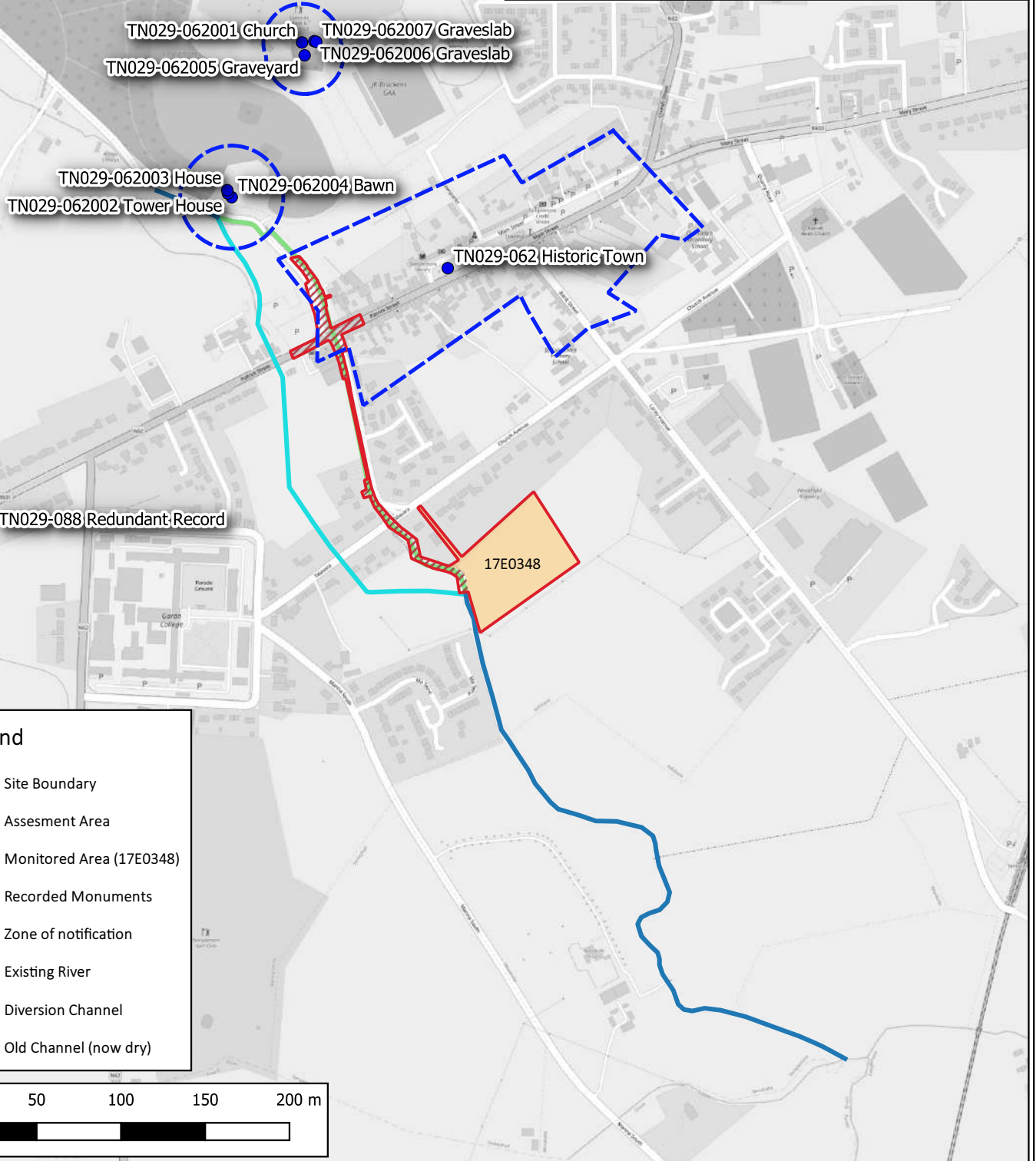
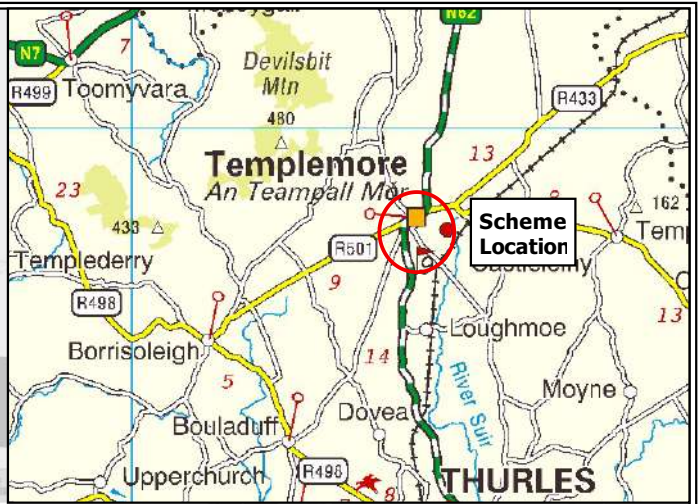
Archaeological Test Trenching can be defined as ‘a limited programme of intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site on land, inter-tidal zone or underwater. If such archaeological remains are present field evaluation defines their character, extent, quality and preservation, and enables an assessment of their worth in a local, regional, national or international context as appropriate’ (ClfA 2020a).

Full Archaeological Excavation can be defined as ‘a programme of controlled, intrusive fieldwork with defined research objectives which examines, records and interprets archaeological deposits, features and structures and, as appropriate, retrieves artefacts, ecofacts and other remains within a specified area or site on land, inter-tidal zone or underwater. The records made and objects gathered during fieldwork are studied and the results of that study published in detail appropriate to the project design’ (ClfA 2020b).

Archaeological Monitoring can be defined as ‘a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons. This will be within a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be

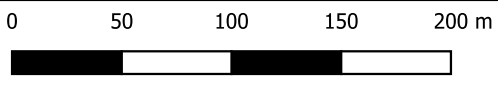
disturbed or destroyed. The programme will result in the preparation of a report and ordered archive (ClfA 2020c).

Underwater Archaeological Assessment consists of a programme of works carried out by a specialist underwater archaeologist, which can involve wade surveys, metal detection surveys and the excavation of test pits within the sea or river bed. These assessments are able to access and assess the potential of an underwater environment to a much higher degree than terrestrial based assessments.



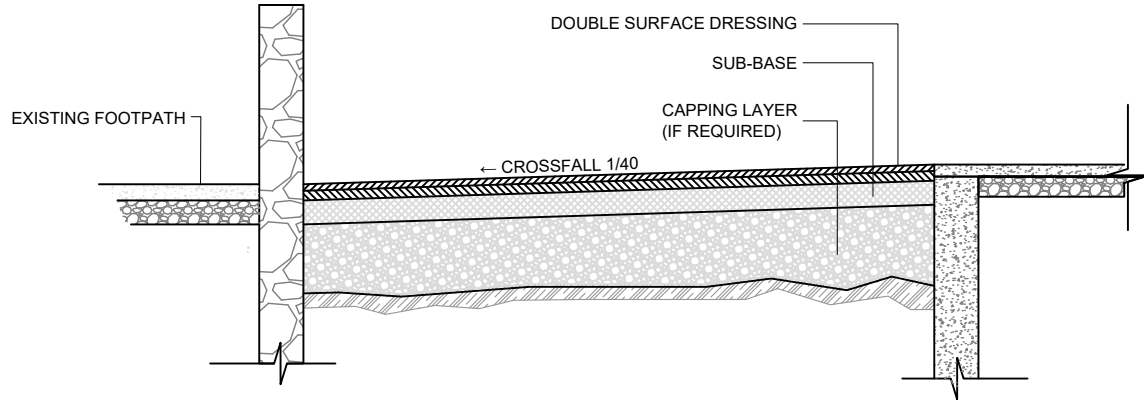
Legend

- Site Boundary
- ▨ Assessment Area
- Monitored Area (17E0348)
- Recorded Monuments
- Zone of notification
- Existing River
- Diversion Channel
- Old Channel (now dry)

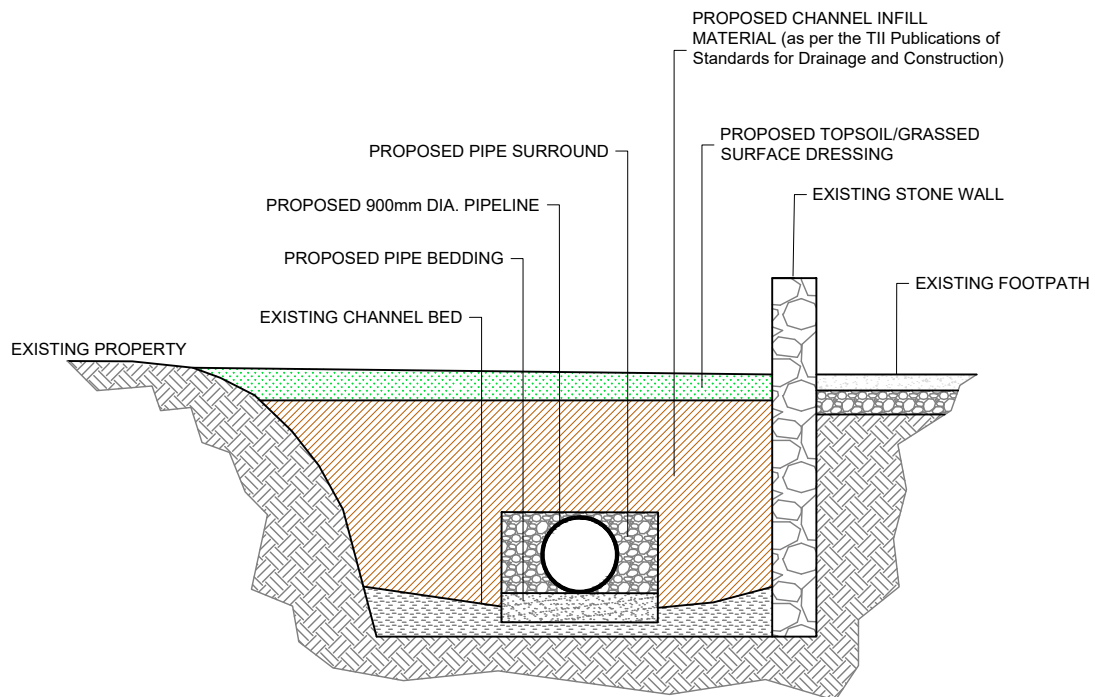


Title: Site location showing recorded monuments	Scale: 1: 9000	Drawn By: RB
Project: Former River Mall Channel (Templemore)	Date: 24/05/23	Checked By: TC
	Job No.: J3920	Fig. 1
		Rev. 1

PROPOSED INFILL DETAIL (PAVED AREAS) - TYPICAL CROSS SECTION



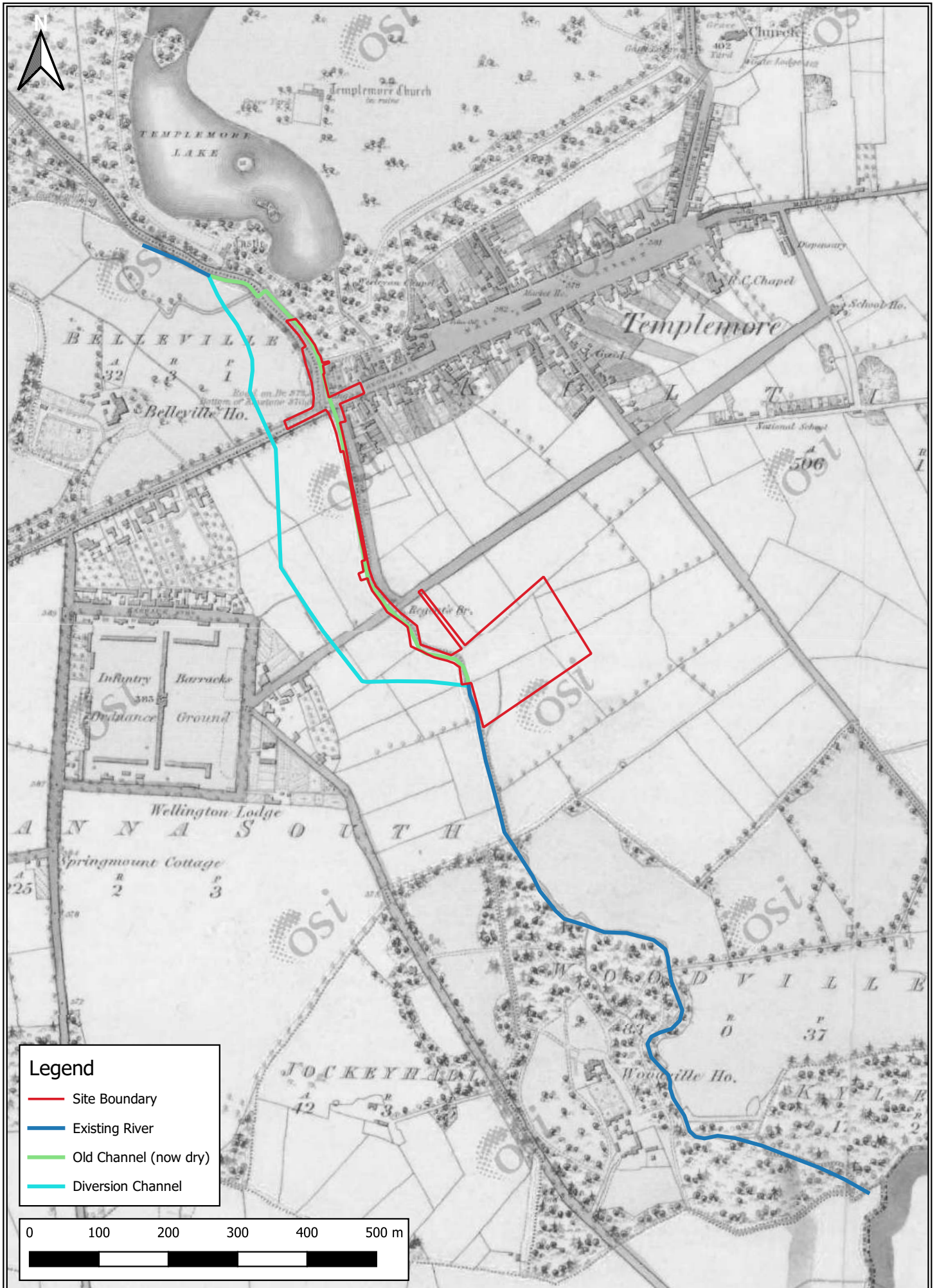
PROPOSED INFILL DETAIL (GRASSED AREAS) - TYPICAL CROSS SECTION





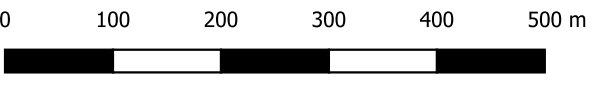
IAC Archaeology

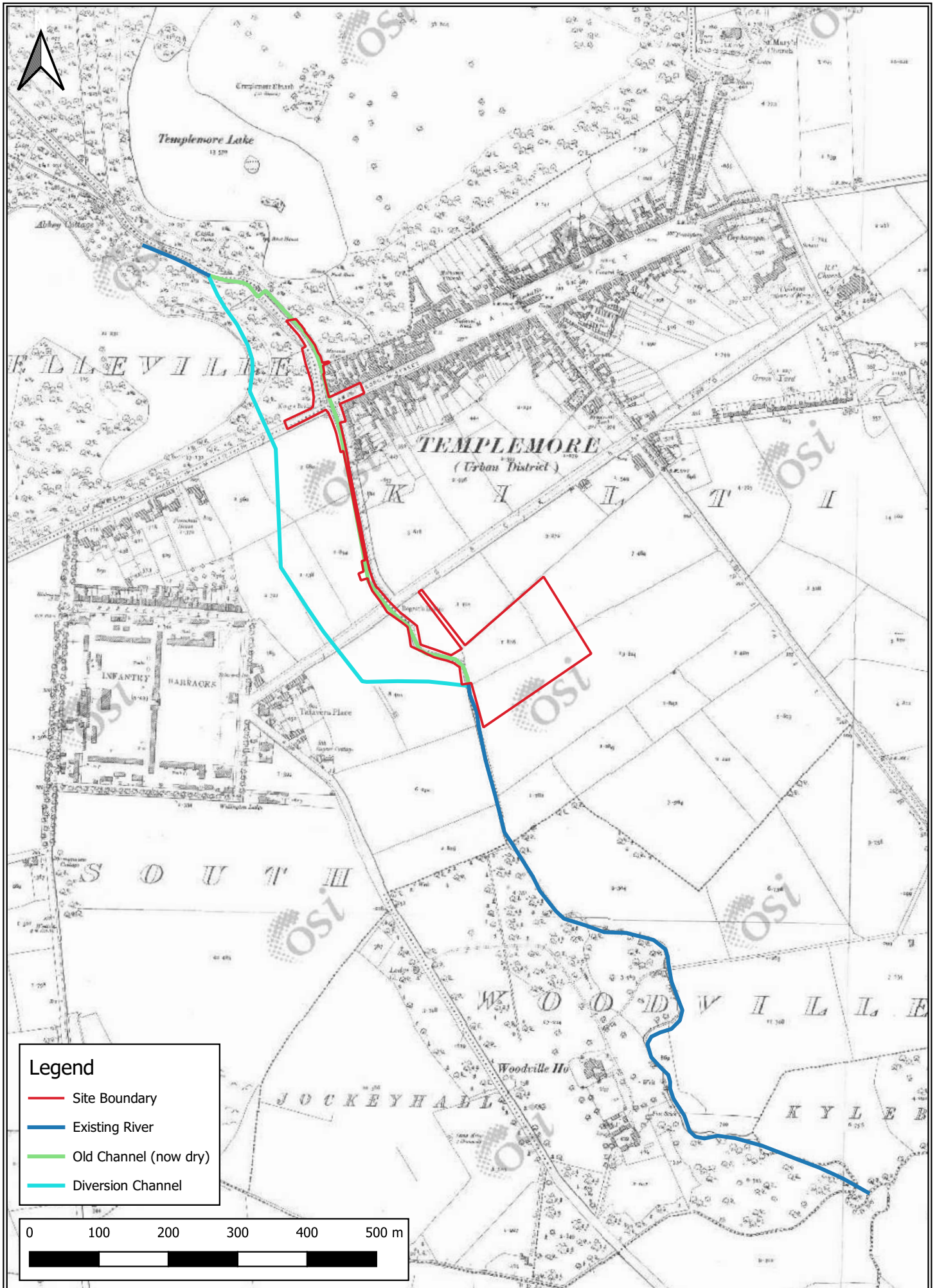
Title: Down Survey barony map of Ilogurty 1656-8	Scale: NTS	Drawn by: RB
Project: Former River Mall Channel (Templemore)	Date: 13/04/22	Checked by: TC
Job no.: J3920	Fig. 3	Rev. -



Legend

- Site Boundary
- Existing River
- Old Channel (now dry)
- Diversion Channel





Title: Site location overlain the 3rd edition 25" OS map (1907)

Scale: 1:7000

Drawn By: RB

Project: Former River Mall Channel (Templemore)

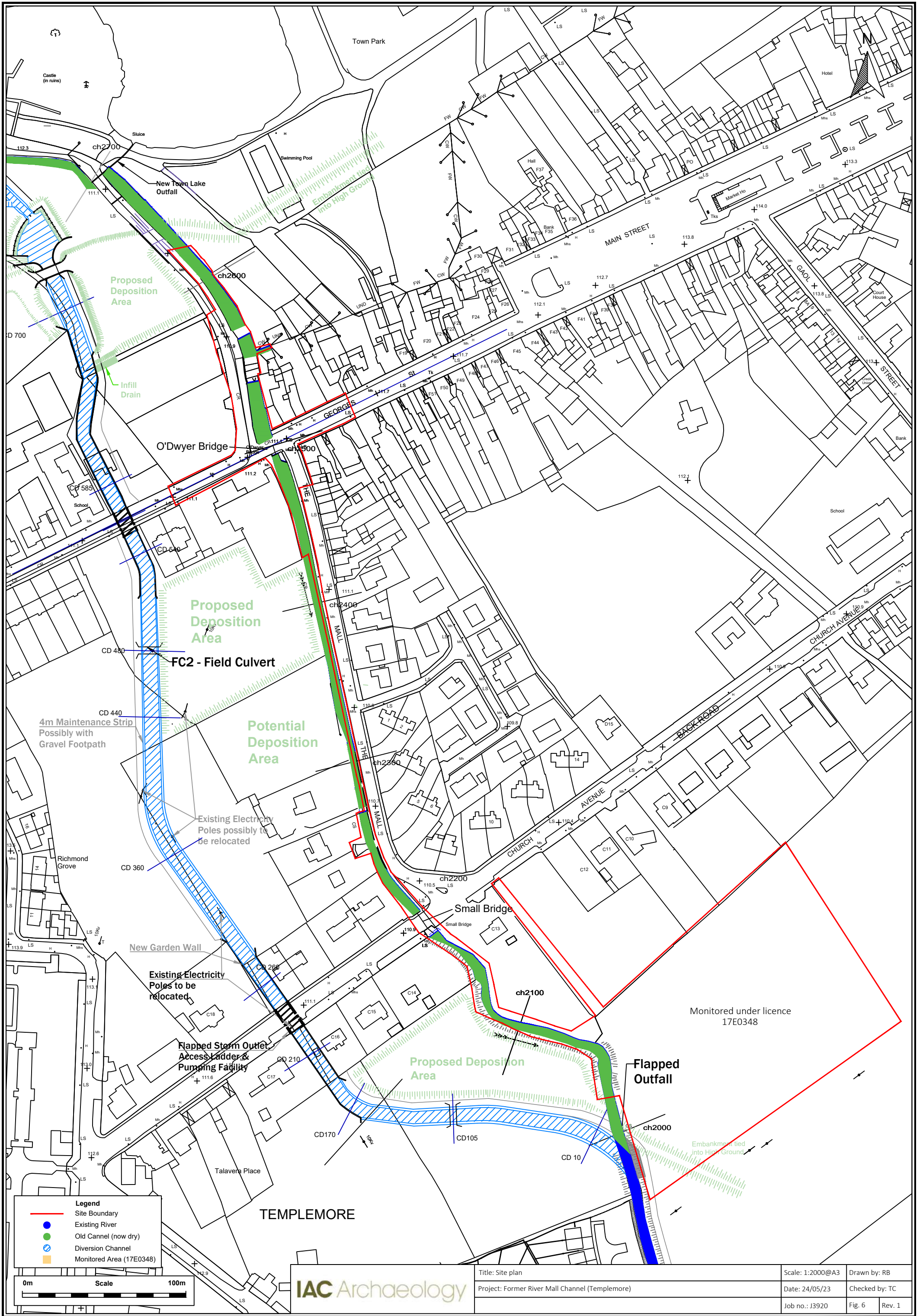
Date: 24/05/23

Checked By: TC

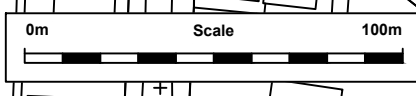
Job No.: J3920

Fig. 5

Rev. 1



- Legend**
- Site Boundary
 - Existing River
 - Old Cannel (now dry)
 - ▨ Diversion Channel
 - ▭ Monitored Area (17E0348)



IAC Archaeology

Title: Site plan	Scale: 1:2000@A3	Drawn by: RB
Project: Former River Mall Channel (Templemore)	Date: 24/05/23	Checked by: TC
Job no.: J3920	Fig. 6	Rev. 1



Plate 1 New channel upstream, facing south



Plate 2 Former Channel Infilled in Bellview,
facing northwest



Plate 3 Pooling south of dam at Lake outfall,
facing north



Plate 4 Walled Channel with overgrowth and
bedrock exposed on base, facing south



Plate 5 Modern Wall bounding river at Young's
Garage, facing southeast



Plate 6 Metal detecting at Young's Garage,
facing south



Plate 7 Modern debris Section 1



Plate 8 Modern debris Section 1



Plate 9 Large Stone Arched bridge/structure,
facing south



Plate 10 Timber and steel decked access bridge,
facing north



Plate 11 Overgrown area upstream from
O'Dwyer's Bridge, facing north



Plate 12 Drainage outlet upstream of O'Dwyer's
Bridge, facing west



Plate 13 O'Dwyer's Bridge, facing south



Plate 14 Boundary Wall on E side of channel,
south of O'Dwyer's Bridge, facing northeast



Plate 15 Cobbled surface at channel boundary,
facing south



Plate 16 Water Pump decorative feature, facing
west



Plate 17 Earthen bank with possible façade
walling, facing northwest



Plate 18 Area of deep water Chainage 2330,
facing north



Plate 19 Concrete boundary walls and access bridges at houses on The Mall, facing south



Plate 20 Concrete channel walls and concrete plinth foundation, facing northwest



Plate 21 Modern debris on The Mall section



Plate 22 Overgrown area north of Small Bridge, facing north



Plate 23 Small Bridge, facing north



Plate 24 Channel Boundary Wall south of Small Bridge, facing southeast



Plate 25 Heavily overgrown channel south of Small Bridge, facing north



Plate 26 Modern debris (glass, brick, concrete, metal) in Section 3



Plate 27 Central Area Section 3, facing southeast



Plate 28 Southern Area Section 3, facing north

Appendix D

-

Architectural Assessment Report

**ARCHITECTURAL HERITAGE
ASSESSMENT
OF PROPOSED INFILL WORKS AT
TEMPLEMORE,
COUNTY TIPPERARY**

**ON BEHALF OF:
TOBIN CONSULTING ENGINEERS**

AUTHOR: ROB GOODBODY

NOVEMBER 2023

ABSTRACT

IAC Archaeology has prepared this report on behalf of Tobin Consulting Engineers to study the impact, if any, on the architectural heritage resource of the proposed works to infill a river channel at Templemore, Co. Tipperary (OS Sheet 29). The report was undertaken by Rob Goodbody for IAC Archaeology.

The river channel runs approximately north to south through the western end of the town of Tullamore and crosses beneath two bridges. O'Dwyer Bridge carries Patrick Street/Richmond Road and Small Bridge carries Church Avenue. Both bridges were included in the record of protected structures in the Templemore and Environs Development Plan 2012-2018, though this plan has now expired.

The brief historical note indicates that the most likely date of construction of the two bridges was around 1812.

The survey shows that both bridges are single-arched with shallow segmental arches having dressed limestone arch rings. In each case the parapets are of rubble limestone and appear to have been rebuilt at some later date. Both bridges have plaques set into the parapets in memory of those for whom the bridges were named.

The report finds that the proposed works would remove the parapets from O'Dwyer Bridge and would result in the bridges no longer being visible due to the backfilling of the former watercourse. This would have moderate impacts on the character and setting of each of the bridges. It is recommended that the two bridges are recorded in detail with written descriptions and photographs by way of mitigation. Following mitigation, the impacts on the bridges would remain as moderate, though there would be a record of the nature of the bridges preserved for posterity.

CONTENTS

ABSTRACT	I
CONTENTS	II
List of Figures.....	iii
List of Plates	iii
1 INTRODUCTION	1
1.1 General	1
1.2 The Development	2
1.3 Conservation status	2
2 HISTORICAL NOTES	4
3 SITE SURVEY	5
3.1 O’Dwyer Bridge.....	5
3.2 Small Bridge	9
4 ANALYSIS	12
5 IMPACT ASSESSMENT AND MITIGATION STRATEGY	14
5.1 Impact Assessment.....	14
5.2 Mitigation	14
5.3 Residual impact	14

LIST OF FIGURES

Figure 1: Location of the bridges showing proposed channel infill in green	1
--	---

LIST OF PLATES

Plate 1: Upstream face of O'Dwyer Bridge.....	5
Plate 2: Downstream face of O'Dwyer Bridge.....	5
Plate 3: Detail of arch ring on upstream side of bridge.....	6
Plate 4: Shelf beneath the bridge.....	6
Plate 5: Upstream parapet on side facing the road.....	7
Plate 6: Detail of eastern end of upstream parapet showing remnants of paint.....	7
Plate 7: Downstream parapet on side facing the road.....	8
Plate 8: Detail of rear of downstream parapet.....	8
Plate 9: Upstream side of Small Bridge	9
Plate 10: Downstream side of Small Bridge.....	9
Plate 11: Upstream parapet of Small Bridge, seen from the road side	10
Plate 12: Upstream face and parapet of bridge	10
Plate 13: Downstream parapet of Small Bridge	11
Plate 14: Downstream face and parapet.....	11

1 INTRODUCTION

1.1 GENERAL

This report has been prepared in response to a request from Tipperary County Council that two bridges in Templemore be assessed in the light of proposals to infill a river channel that both of the bridges cross. O'Dwyer Bridge carries Main Street over the channel, this being the N62 connecting Roscrea with Thurles, via Templemore. Small Bridge carries Church Avenue over the channel, this being a local road connecting Templemore Garda Training College with the town (Figure 1).

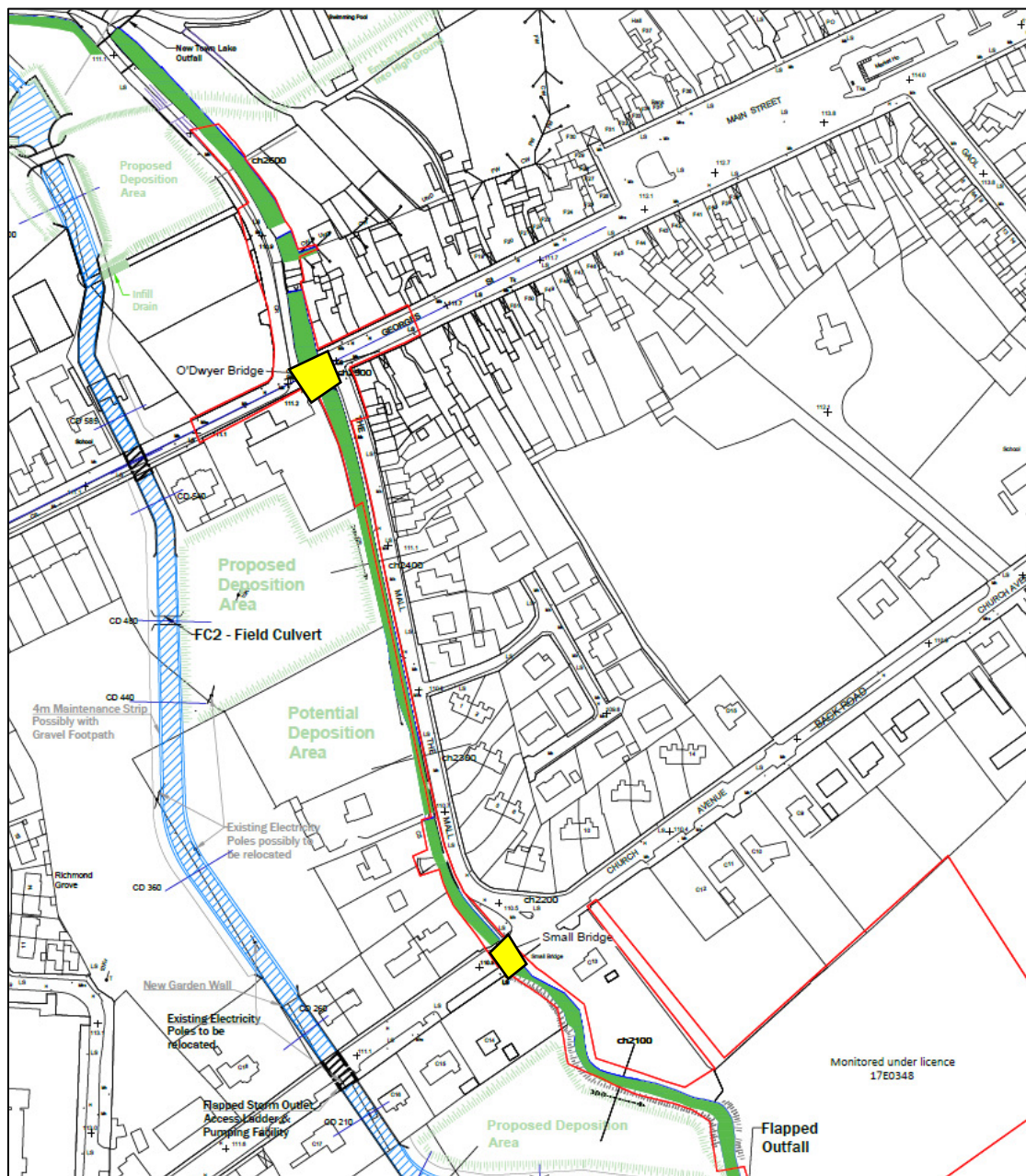


Figure 1: Location of the bridges showing proposed channel infill in green

1.2 THE DEVELOPMENT

It is proposed to infill sections of the river channel, providing for a variety of treatment of the new surface created at ground level, to include streetscape, pavement and topsoil with grass in various locations. The works would involve the removal of the parapets at O'Dwyer Bridge and the infilling of the channel would bury both bridges up to ground level.

A more detailed discussion of the proposals is set down below in the Impact Assessment and Mitigation Strategy section.

1.3 CONSERVATION STATUS

Neither of the two bridges is included in the record of protected structures in Volume 4 of the Tipperary County Development Plan 2022-2028. However, both bridges are included as protected structures in the Templemore and Environs Development Plan 2012-2018 with the following entry in the record of protected structures:

Ref. TMS73: O'Dwyer Bridge, Richmond Road, Patrick Street; Single-arch road bridge over river, build 1850. Segmental arch with ashlar voussoirs with limestone rubble parapet walls, plaque to north parapet.

Ref. TMS89: Small Bridge, Church Avenue; Single-arch road bridge over river, built c.1930. Rebuilt rubble limestone walls with ashlar limestone voussoirs. Plaque to north-west parapet.

Under the legislation that provided for the amalgamation of the county councils of Tipperary North and Tipperary South the development plans for the towns in Tipperary were extended and each of these plans remains in force until new development plans are adopted for the town. As a result the Templemore and Environs Development Plan 2012-2018 remains the development plan for the town and under the provisions of that plan the two bridges are protected structures.

The Templemore and Environs Development Plan 2012-2018 also defines an architectural conservation area (ACA) along Main Street and Patrick Street and the western boundary of this ACA includes O'Dwyer Bridge. Small Bridge is not within an architectural conservation area.

The two bridges are not included in the www.buildingsofireland.ie website of the National Inventory of Architectural Heritage (NIAH). However, this website does not include those structures that were deemed to be only of local interest.

The NIAH survey of Templemore was carried out in 2004 and at that period the NIAH included a wide variety of buildings and other structures, assessing each to be of international, national, regional or local significance. Where a structure was deemed to be of regional significance or higher the relevant minister would request that the planning authority would include that structure in the record of protected structures. No such request would be made where the structure was deemed to be of local

interest. Since that time the NIAH generally no longer includes buildings that are of local interest.

Both O'Dwyer Bridge and Small Bridge were included in the NIAH in 2004, where they were assigned a local significance.

2 HISTORICAL NOTES

The town of Templemore is an eighteenth-century estate town, planned and laid out by the Carden family. The town is centred on Main Street, which is a substantial street, 440 metres long and 48 metres wide, with a market house in the centre. Church Street and Mary's Street approach from angles at the north-eastern end, while Patrick Street is the continuation of Main Street running to the south-west, becoming Richmond Road when it crosses O'Dwyer Bridge.

During the Napoleonic wars and in the aftermath of the 1798 Rebellion the government undertook a programme of barrack construction. An initial intention to site an infantry barracks at Thurles was changed in favour of Templemore and construction commenced in 1809 following donation of the required land by the landowner, Sir John Carden. The site is outside the town to the south-east and the barracks was built to a rectilinear plan orientated slightly off the cardinal points and at odds with the orientation of the town. The barracks was named Richmond Barracks in honour of the then Lord Lieutenant, Charles Lennox, Duke of Richmond and the street exiting the town toward the barracks was named Richmond.

The road to the south of the town centre, Church Avenue – Talavara, was originally known as Barrack Street and was laid out as an alternative approach to the barracks at the time that the barracks was under construction.

3 SITE SURVEY

3.1 O'DWYER BRIDGE



Plate 1: Upstream face of O'Dwyer Bridge

O'Dwyer Bridge carries Patrick Street over the river without any rise in the street level as it crosses. The bridge consists of a single span with a segmental arch and with rubble-faced parapet walls rising on either side of the street and running a short distance beyond the arch in each direction on both sides of the road. At this location the river is running slightly to the east of due south and while the street is not at right angles to the river, the difference in angle is such that this could not be called a skew bridge.



Plate 2: Downstream face of O'Dwyer Bridge



Plate 3: Detail of arch ring on upstream side of bridge

The arch segmental with a very low rise in proportion to the span. The intrados and extrados of the arch ring are parallel, and the voussoirs of limestone are regular in shape and size with hammer-dressed faces and tooled margins.



Plate 4: Shelf beneath the bridge

The river channel beneath the bridge is narrower than the span of the arch, with a stone shelf projecting from the abutments. This suggests that there may have been a narrower bridge at this location previously, with the present bridge built with a shallower arch to remove a hump in the road, while the arch span was made wider to ensure that flood waters would be accommodated.



Plate 5: Upstream parapet on side facing the road

The parapet on the northern side of the street, or the upstream side of the bridge, is faced with limestone rubble and capped with coping stones of limestone. A plaque on the side of the parapet that faces the road records the naming of the bridge after Thomas O'Dwyer. The greater part of the parapet has been rebuilt, apparently with fresh stone rather than stone recycled from the original parapet. At the eastern end of the parapet a small section of earlier wall remains, with the faded remains of painted stripes to alert drivers to the presence of the parapet. The parapet above this painted area and that to the west of it are of later date. The coping stones are reused from the original parapet.



Plate 6: Detail of eastern end of upstream parapet showing remnants of paint



Plate 7: Downstream parapet on side facing the road

The parapet to the south of the road, on the downstream side of the bridge, is similar to that on the northern side. The stonework is of later date in the main, while the coping stones are reused from the original parapet. At the base of the parapet on the side away from the road, the base course of masonry is of limestone ashlar with a rough finish to the stones and this finish is similar to that on the sides of the coping stones. It seems probable that this represents the original nature of the parapet prior to its construction, though it is noted that the part of the northern parapet that retains traces of paint is not constructed with ashlar and may be a remnant of an earlier reconstruction of the parapets.



Plate 8: Detail of rear of downstream parapet

3.2 SMALL BRIDGE



Plate 9: Upstream side of Small Bridge

Small Bridge carries Church Avenue over the river with a slight hump in the road as it crosses. The bridge consists of a single-span arch crossing the river and with rubble-stone-faced parapets on either side. The roadway runs roughly north-east to south-west across the bridge, while the river runs beneath the arch at right angles. The bridge has a superficial resemblance to O'Dwyer Bridge, though there are significant differences. A plaque on the southern parapet is of relatively recent date and records that the bridge was named in honour of Michael Small.



Plate 10: Downstream side of Small Bridge



Plate 11: Upstream parapet of Small Bridge, seen from the road side

The parapet on the upstream, or northern, side of the bridge is faced with limestone rubble and has no coping stones. The rubble stonework is quite different to that on the parapets of O'Dwyer Bridge. The stones of the parapets are laid in a relatively haphazard way with initial approximation to courses soon breaking down and no coursing above the lowest levels. The absence of coping stones is notable, particularly given their presence on the adjacent river walls.



Plate 12: Upstream face and parapet of bridge

The arch is segmental, though it appears to have a greater rise than seen at O'Dwyer Bridge. The arch ring is similar, with parallel voussoirs having hammer-dressed faces with tooled margins. Above the arch ring is a projecting string course of limestone ashlar; this curves slightly in line with the surface of the roadway, though with a much longer radius of curvature than on the arch ring. The spandrels are of rough rubble masonry.



Plate 13: Downstream parapet of Small Bridge

The masonry of the southern parapet is similar to that on the northern parapet, being fashioned with rubble limestone and without coping stones. A square hole at the base of the parapet in the centre is spanned with a stone slab.



Plate 14: Downstream face and parapet

The arch ring is similar to that on the northern face of the bridge, with parallel voussoirs of hammered limestone with tooled margins, above which is a projecting string course.

4 ANALYSIS

The style of the two bridges – O’Dwyer Bridge on Patrick Street – Richmond Road and Small Bridge on Church Avenue – Talavara, is consistent with a late-eighteenth or early-nineteenth century construction. The use of parallel arch rings of cut stone became usual during this period in a form similar to that found on the two bridges. While the two bridges differ in detail, the similarity in the stones of the arch rings suggests that they were built at around the same time.

A clue to a more precise date is in the names of the bridges and the location of the southern bridge. When first built, the bridge on Patrick Street was called King’s Bridge, while the southern of the two was called Regent’s Bridge. This is strongly suggestive of a date of construction during the regency period, which is more likely to be the actual period when the Prince of Wales acted as regent on behalf of his father, King George III, between 1813 and 1820, rather than the architectural period known as the Regency period, which spanned a longer time. Construction commenced on Richmond Barracks in Templemore in 1809, as noted in the historical notes above, and it was completed in 1813. The historical notes also identified the construction of Barrack Street, now Church Avenue – Talavara, as being part of the development of Richmond Barracks and hence a date of around 1811 to 1813, during the regency, is consistent with a date of construction of Regent’s Bridge, now Small Bridge.

While Small Bridge was constructed to facilitate the laying out of a new street, O’Dwyer Bridge was on an existing street. Its style is strongly suggestive of it being contemporaneous, or near contemporaneous, with Small Bridge and it seems probable that it was built or rebuilt at the time that the barracks was built. It is possible that there was no bridge over the river at that time, the road crossing the river via a ford. Given that it was a significant road close to a town, it is more likely that there was a bridge, though hump-backed and possibly narrow. The reconstruction of the bridge would facilitate the movement of heavy goods to supply the barracks through elimination of the slopes on either side of a ford or the hump back of a bridge, while it may also have facilitated movements through the provision of a wider bridge.

It was not possible as part of the survey carried out for the preparation of this report to examine the masonry beneath the bridges and only a slight view is possible when seen from ground level, largely obstructed by vegetation. Given that it is probable that there was a bridge on Patrick Street from an early date and that this may have been a narrower bridge, there may be remnants of an earlier bridge beneath the arch of the present O’Dwyer Bridge. Such remnants could be in the form of abutments on either side of the river, while the survival of an earlier arch within the bridge structure is less likely, as it is probable that any earlier bridge was hump backed rather than the present shallow segmental arch and hence an earlier arch would have been removed as part of the construction of the present bridge.

The survey of O’Dwyer Bridge has shown that the parapets are not original. The memorial plaque is of a relatively recent date and may have been placed on the

northern parapet at the time that the parapet was rebuilt. A small part of the northern parapet was not reconstructed at that time, though the presence of an ashlar base course on the southern parapet suggests that this may have been the form of the parapets originally.

The parapets on Small Bridge differ from those on O'Dwyer Bridge and they lack coping stones, though the adjacent river walls have coping stones, suggesting that the parapets have been rebuilt. It is noted that the record of protected structures in the Templemore and Environs Development Plan 2012-2018 gives a date of circa 1930 for the bridge and refers to the parapets as "rebuilt". It is possible that the parapets were rebuilt in about 1930, though the bridge itself was undoubtedly built in about 1811.

5 IMPACT ASSESSMENT AND MITIGATION STRATEGY

5.1 IMPACT ASSESSMENT

It is proposed that the parapet walls of O'Dwyer Bridge be removed. On the northern side of the street this will include the removal of a section of the wall running northward on the western side of the river. On the southern side the river wall would remain in place, except for a short section near the bridge and a new wall is to be erected, curving at a larger radius around the corner between the bridge and The Mall.

The river channel is to be infilled on either side of the bridge, with a streetscape at ground level to the north of the bridge without any wall to separate it from the adjoining streets to the south and west. To the south of the bridge the surface of the infilled river channel is to be paved.

At Small Bridge the parapets are to be retained, with the river channel infilled and topped with soil and grassed.

While the proposals would retain both bridge arches, they would have a negative impact on the character and setting of both bridges, permanently concealing them from view. As it is intended to retain rather than demolish the bridges it would be possible in the future to reverse the process and reveal the bridges again. Accordingly, this impact is considered to be moderate.

While the parapets of O'Dwyer Bridge are not original, they are part of the character of the bridge and the most prominent element of the bridge in the public view, marking the presence of the bridge to those passing by on the street. The removal of these parapets would be a negative impact, but as the parapets are not part of the original structure this impact is considered to be moderate.

5.2 MITIGATION

Prior to the removal of parapets and infilling of the channel the vegetation in the vicinity of both bridges should be cleared and a full photographic and written description of the two bridges should be prepared, including examination of the vault and abutments beneath the bridge and any projecting sills on either side of the river channel beneath the bridges. This investigation should include a determination as to whether there are any surviving elements of an earlier bridge within the present bridge structures.

5.3 RESIDUAL IMPACT

Following mitigation, the impacts arising from the burial of the two bridges would still be a moderate negative impact and the impact arising from the removal of the parapets of O'Dwyer Bridge would also still be a moderate negative impact. Notwithstanding the compilation of a record of the nature of the bridges, the character and settings of the two bridges would still be adversely affected.

Fairgreen House
Fairgreen Road
Galway
H91 AXK8
Tel: + 353 (0)91
565211
Email: info@tobin.ie

Block 10-4,
Blanchardstown Corporate
Park
Dublin
D15 X98N
Tel: + 353 (0)1 8030401
Email: info@tobin.ie

Market Square
Castlebar
Mayo
F23 Y427
Tel: +353 (0)94 9021401
Email: info@tobin.ie

Ducart Suite
Castletroy Commercial Campus
Limerick
V94 Y6FD
Tel: +353 (0)61 574 413
Email: info@tobin.ie

The Gateway Building,
Floor 3, Northwest Business Park,
Collooney,
Sligo
F91W40H
Email: info@tobin.ie
