Information booklet

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PRELIMINARY SAFETY & HEALTH PLAN

Tooreen Aghamore GWSS Water Meter Upgrade and Network Improvement Works Phase 2

Client:	**Tooreen Aghamore GWSS**
Site Location:	**Aghamore, County Mayo**
Project Supervisor for Design Process:	**Ó Conaire Consulting Engineers**

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Client	Tooreen Aghamore GWSS
Project No.	26043
Project Title	Tooreen Aghamore GWSS Water Meter Upgrade and Network Improvement Works Phase 2
Report Title	Preliminary Safety & Health Plan

Date	Version	Status	Author	Rev by	Apd by	Comment
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PRELIMINARY SAFETY & HEALTH PLAN

Water Meter Upgrade and Network Improvement Works Phase 2 for Tooreen Aghamore Group Water Scheme

This Preliminary Safety & Health Plan has been prepared in accordance with Regulation 12(1)(a) of SI 504 of the Safety, Health and Welfare at Work (Construction) Regulations, 2013.

1. General Description of Project

1.1 Client

Tooreen Aghamore Group Water Scheme Society Ltd

1.2 Project Supervisor Design Process

Ó Conaire Consulting Engineers, Main Street, Ballindine, Co Mayo

1.3 Designer(s)

Ó Conaire Consulting Engineers, Main Street, Ballindine, Co Mayo

1.4 Project Description

The Works to be carried out involve minor earth works, pipe laying, valves, chambers and ancillary works. The works to be carried out are civil engineering works that include excavation of trenches, installation of polyethylene pipes and fitting, and construction of valve chambers and ancillary works.

1.5 Site Location

The works are located in fields, road margins and roads in the townlands adjacent to Tooreen and Aghamore villages in County Mayo. The extents of the proposed pipelines are indicated on the contract drawings key plan

1.6 Drawings/Specifications

See tender

1.7 Existing Records

None available

1.8 Services for Welfare Facilities

The Contractor will need to provide mobile facilities or else make his own local arrangements.

1.9 Liaison and Review

At each site meeting and as required

1.10 Site Restrictions

Minimise disturbance to neighbours and members of the public. Permits required from Mayo County Council if works encroach on public roadway.

1.11 Relevant Adjoining Land Uses

Agricultural and public road

1.12 Storage of Hazardous Materials

Not anticipated at design

1.13 Permits and Authorisation

Site area to be controlled to prevent unauthorised access.

2. Intended Project Completion Time

2.1 Restrictions on Working Hours

The Contractor shall operate a working week no longer than between 08:00 and 1800 hours from Monday to Friday inclusive and 0900 to 1400 on Saturdays unless agreed otherwise with the Engineer.

2.2 Restrictions on Access

The Contractor shall note sections 1.10 and 1.11 above.

2.3 Other Contracts which may affect work

None determined. (See also Part 3 below)

2.4 Intended Contract Commencement Date*

To be confirmed*

2.5 Intended Contract Completion Date*

12 weeks after commencement

2.6 Basis for Time for Completion

The project duration has been set at 12 weeks based on previous experience of projects of similar size and nature.

** Note: The intended commencement and completion dates advised above are provisional and take account of the General Principles of Prevention, pending confirmation by the Project Supervisor Construction Stage that they are practicable.*

3. Other Work Activities

The following other activities, not related to or included within the scope of the project, will be carried on the site during the construction phase.

3.1 Existing Building Activities

Not anticipated at design

3.2 Location of Services e.g. ESB, Eircom, Bord Gais, NTL etc.

The PSCS attention is drawn to the existence of the following services, electricity and telecom. It is the PSCS responsibility to confirm the location of said services and to follow the Code of Practice for Avoiding Danger from Overhead Electricity Lines.

3.3 Any work in progress on site

Not anticipated at design

3.4 Other works or activities

Not anticipated at design

4. Particular Risks Associated with the Works

The following is the non exhaustive list of particular risks to the safety and health of persons as set out in the Schedule 1 of S.I. No. 504 of 2006, together with the opinion of the Project Supervisor for Design Stage on what elements, if any, of the works may fall within each particular risk category. It should be noted that many of the risks on the project may arise out of working methods which are at the discretion at the Contractor and as such cannot be determined by the Project Supervisor for Design Process.

This list does not cover commonplace site hazards, standard construction practice or common construction materials risks, which are routinely controlled by experienced and competent contractors in their application of good construction management. If, during the course of the Works, hazardous materials are discovered or unforeseen conditions are revealed that could have significant impact on the project execution, resulting in substantial design changes or which might affect particular risks, contract period or have other safety and health implications, the PSDP is to be consulted for further guidance.

4.1 Overhead E.S.B. Lines:

Overhead lines pose a particular risk of electrocution to persons on the site. The code of practice for Avoiding Danger from Overhead Electricity Lines must be followed. The location and voltage should be established by the PSCS in consultation with the ESB. The General Principles of Prevention to be followed. Overhead E.S.B. services exist along the site. There are connections to the existing houses, some of which may be underground. The Contractor is obliged to satisfy himself as to the presence and location of all Electrical services.

Liaise with the ESB regarding charted and uncharted services before commencing any work and ensure that adequate protection measures are in place.

Eircom (phone) services exist at this site. There are connections to the existing houses. The Contractor is obliged to satisfy himself as to the presence and location of all Eircom (phone) services

4.2 Underground E.S.B. Lines:

Location of works to be checked for underground ESB and electrical lines (none noted).

4.3 Underground Gas Mains:

Not anticipated at design

4.4 Other Underground Services:

Tooreen Aghamore GWSS water mains traverses the site. The existing Watermains will have to be kept fully operational until completion of the works. It is important to ensure that there is no disruption to water supply during the course of the works.

4.5 Site Entrance/Access & Egress:

See 2.2

4.6 Safety at Road-works:

Works will be required on and adjacent to regional and local roads. Works shall cease in the event that access is required for emergency vehicles. Ensure that construction traffic shall not deposit excess debris on public roads and that the condition of the roads shall not deteriorate due to the presence of construction traffic.

Works in roads shall be carried out in consideration of all conditions laid out in the recommendations of the "*Guidance for the Control and Management of Traffic at Road Works*" as well as any conditions laid out by Mayo County Council (MCC) and transport Infrastructure Ireland (TII) as per the road opening licence and any other recommendations issued.

4.7 Pedestrian Safety:

The Contractor shall prevent access to the works by the Public

4.8 Traffic Management for Site Vehicles & Plant:

A traffic Management Plan (TMP) will have to be approved before the granting of a Road Opening Licence. The Contractor will have at least one full time representative on site who holds a current CSCS Signing Lighting & Guarding (SLG) card to ensure that all traffic management is in accordance with the requirements of the traffic Signs Manual.

All temporary Road Signs shall be in accordance with the Traffic Signs Manual and all related safety legislation and shall be fit for that purpose. Traffic lights and night warning systems shall be considered. Flagmen and Stop/Go controls will be used during part of the works period.

4.9 Excavations:

Excavation for services following Health and Safety Authority guidelines and record on formAF3.

4.10 Manual Handling:

Measures to address manual handling issues is a legal requirement.

Ensure all operatives are trained in Manual Handling techniques. Provide and use appropriate PPE in a proper and safe manner.

4.11 Working at Heights:

The PSCS must carry out site specific working at height risk assessments and make sure that all work is planned, organised and carried out by competent persons. The PSCS must follow the General Principles of Prevention for managing risks from work at height and take steps to avoid, prevent or reduce risks. The PSCS must choose the right work equipment and select collective measures to prevent falls (such as working platforms). The PSCS must ensure that people working at a height are competent. The PSCS must ensure that equipment used for work at height is properly inspected and maintained. Works carried out in deep excavations will create a risk to both construction personnel and general public of falling into these excavations or from heights. Adequate barriers must be placed and maintained at all times around all deep excavations. Warning signs must also be placed in clearly visible locations to ensure that both pedestrians and vehicular traffic are aware of the excavations. Construction personnel must be supplied with appropriate personal protective equipment when working at heights

4.12 Water Safety:

Work will be carried out adjacent to streams, tanks and reservoirs. There is therefore a danger of people falling into water. The Contractor is to ensure that adequate protection measures are in place.

4.13 Site Security:

The site to be left safe at the end of each working day by the PSCS.

4.14 Dangerous Substances:

Where appropriate the PSCS to ensure chemical agent risk assessments are completed and a copy of SDS are available on site. The cutting of precast concrete, ductile iron and other pipework may be required to be carried out. Care should be taken to avoid inhalation of dust from these materials, and the appropriate personal protective equipment must be worn at all times.

The pouring of wet concrete can cause irritation and burns to the skin and appropriate personal protective equipment must be worn at all times when concrete works are being undertaken.

4.15 Falling Material:

Adequate precautions must be in place to protect people from being struck by falling objects. All construction workers must wear appropriate personal protection equipment at all times. Adequate barricades should be placed around constructions, trenches and excavations to ensure that any passer-by is at a sufficient distance from the work area to prevent injury from falling objects.

4.16 Housekeeping and Waste Control

Good housekeeping contributes to a safe site. Ill-considered “dumping” of contaminated waste should not be permitted.

4.17 Mechanical and Electrical Work

Contractors working on site must ensure that all mechanical and electrical equipment supplied and used on site meets the statutory safety requirements for such equipment. Contractors must ensure that all electrical equipment installed meets all current statutory requirements. Contractors must have a documented safe system of work when installing, testing and commissioning electrical systems including a lock out / tag out or other effective isolation procedure when working on electrical installations. All electrical work shall comply with, and be carried out in accordance with the National Rules for Electrical Installations, as prepared by the Electro Technical Council of Ireland (ECTI).

The precise nature of this risk will need to be confirmed by the PSCS by conducting a site audit. Risk assessments are to be conducted to either eliminate any potential hazard or to ensure safe work practices are established and enforced.

4.18 Work involving Heavy Components

Work involving handling and placing of pipes and fitting and other mechanical and electrical equipment and chambers may create a danger of being hurt or hit by falling objects, material, moving plant or unsecured material. The Contractor must ensure that all aspects of heavy lifting and handling are carried out using appropriate plant and by suitably qualified and trained personnel.

4.19 Risks associated with working beside Live Traffic

The contractor shall have to undertake a significant portion of the contracted works on or adjacent to public roadways containing live traffic. The Contractor shall give the utmost consideration to the safety of the staff and all other road users at all times. The roads shall be left in a safe condition upon completion of work each day. The contractor shall have to ensure a CSCS SLG cardholder is present for all works to ensure that all signing, lighting & Guarding (SLG) is to the required standard as per *"Guidance for the Control and Management of Traffic at Road Works"* to eliminate or minimise any risks to the employees and all road users.

4.20 Risk of Burial

For work will be carried out in excavations suitable temporary works must be provided at all times to support exposed trenches and excavations. Safe access must be provided to allow fast and uncomplicated exit from all excavations while work is being carried out.

4.21 Fragile Roofs:

Not anticipated at design

4.22 Asbestos:

Not anticipated at design green field

5. Other Information

- Site Accommodation, storage, delivery & unloading will be addressed in the developed Safety & Health Plan.
- The Site P.P.E. Policy will be outlined in the developed Plan.
- Construction materials shall be used in accordance with the manufacturer's instructions and Safety Data Sheets shall be acquired, made available to all relevant personnel and included in the developed Plan.
- An appropriate system will be put in place to communicate and review Safety & Health issues, with the client, PSDP, etc.
- The Project Supervisor Construction Stage will ensure all certification requirements are complied with and all statutory forms are completed.
- The Project Supervisor Construction Stage shall ensure all site personnel comply with the Safety Health and Welfare at Work Legislation.
- Procedures for dealing with unforeseen eventualities during project execution resulting in substantial design change which might affect contract period and other resources shall be developed when required.

6. Specific Recommendations of the PSDP

It was envisaged in the Design Process that the following non-exhaustive list of specific measures for reducing particular risks will be addressed by the PSCS:-

- The use of appropriate personal protective equipment.
- Measures will be required to identify and locate all services within the sites and take actions to prevent contact with these services. Measures will be required for the safe operations of plant and other construction activities where these are operating in the vicinity of overhead power lines.
- Ensure that all plant and machinery is in good working order appropriate for the activity and is certified for the use and operated by a certified driver.
- Ensure relevant employees have the CSCS Signing, Lighting and Guarding at Roadworks, CSCS Health and Safety at Road Works, Safe Pass and any other relevant CSCS card.
- The PSCS shall ensure the availability of appropriate welfare and washing facilities for personnel.
- The PSCS shall ensure that personnel with First Aid training are present on site during working hours.
- The PSCS shall advise the Employer as soon as possible after the event of any accident, injury, loss or damage to any workman or third party or any property of the third party or to property of the Employer.

6.1 Safety Documentation

Copies of the following documentation shall be produced by the PSCS to the satisfaction of the Employer prior to commencement on site:

- Safety Statement;
- Method Statements including site specific risk assessments;
- Safe Pass and Construction Skills Certification Scheme (CSCS) Cards;
- Where appropriate, lifting Certificates for machines engaged in lifting operations;

For and Behalf of:	Ó Conaire Consulting Engineers Main Street Ballindine Co Mayo
Signed	_____
Name:	Colm Ó Conaire (Project Supervisor for Design Stage)
Qualifications:	BE MEngSc Dip APM MIEI Chartered Engineer
Date:	2 October 2026

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ARCHAEOLOGICAL DESKTOP STUDY OF PROPOSED EXTENSIONS TO THE TOOREEN - AGHAMORE GWS, CO. MAYO

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1. Introduction

This desktop study was commissioned by Ó Conaire Consulting Engineers (OCCE) and undertaken on proposed extensions to the Tooreen Aghamore Group Water Scheme in County Mayo (Figure 1). This report will be forwarded to the local authority for approval.

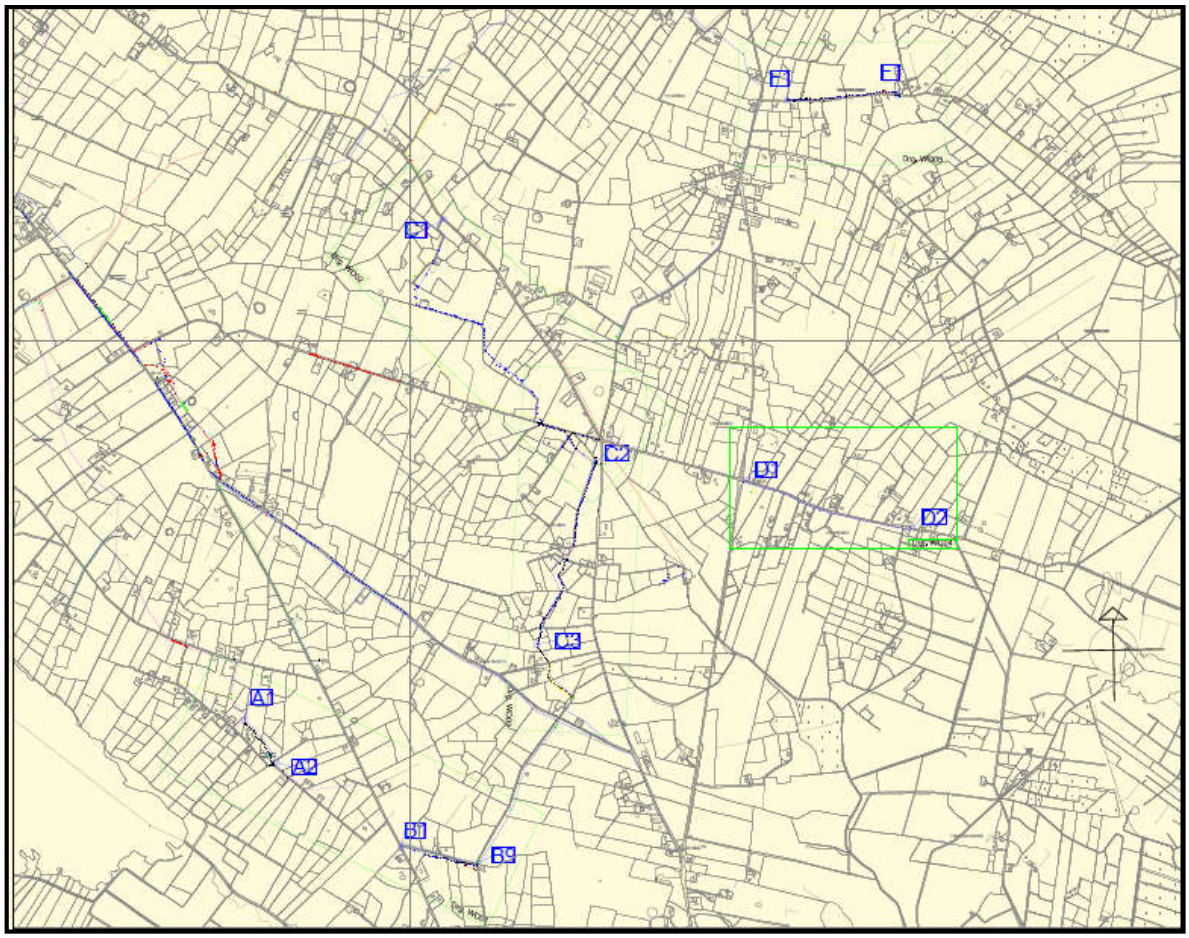


Figure 1 Key Plan with proposed extensions marked in blue (courtesy of OCCE).

2. Research Sources

- Mayo County Development Plan 2022-2028.
- National Monuments Acts 1930 to 2014.
- Ordnance Survey 1:10560 (6-inch) map of County Mayo, Sheet Nos. 81, 82, 92, 93; 1st Edition of 1838.
- Ordnance Survey 1:10560 (6-inch) map of County Mayo, Sheet Nos. 81 (1919 edition), 82 (1916 edition), 92 (1917 edition), 93 (1916 edition).
- Ordnance Survey 1:2500 (25-inch) maps of County Mayo, Late 19th/early 20th century edition.
- Record of Monuments and Places, County Mayo; Dúchas, The Heritage Service; Department of Arts, Heritage, Gaeltacht and the Islands; Dublin 1996.
- Unpublished files of the National Monuments Archive, Department of Housing, Local Government and Heritage.
- www.archaeology.ie (web-site of the National Monuments Service).
- www.excavations.ie (summaries of all excavations carried out in Ireland 1969-2025).
- www.heritage maps.ie (includes National Museum of Ireland finds database).

3. Research Results

Recorded Monuments

There are 51 recorded monuments within 1km of the proposed works (Table 1 and Figures 2-6).

RMP No.	Townland	Classification	Distance to works (sections)
MA082-012	Ballynacloy	Ringfort	*c.*780m (C1-C2)
MA082-013001	Scregg	Enclosure	*c.*500m (C1-C2)
MA082-013002	Scregg	Barrow	*c.*500m (C1-C2)
MA082-014	Ballyhine	Cashel	*c.*350m (C1-C2)
MA082-015001	Cartron North	Rath	*c.*460m (C1-C2)
MA082-015002	Cartron North	Souterrain	*c.*460m (C1-C2)
MA082-016001	Boleyboy	Cashel	*c.*870m (C1-C2)
MA082-016002	Boleyboy	CBG	*c.*870m (C1-C2)
MA082-017	Cappagh	Court tomb	*c.*960m (F1-F2)
MA082-018001	Cappagh	Cashel	*c.*690m (F1-F2)
MA082-018002	Cappagh	Souterrain	*c.*690m (F1-F2
MA082-019	Tooreen	Enclosure	*c.*620m (F1-F2)
MA082-020	Tooreen	Enclosure	*c.*700m (F1-F2)
MA082-021	Cartron North	Enclosure	*c.*900m (C1-C2)
MA082-022	Cloongawnagh (Cosgrave)	CBG	*c.*600m (F1-F2)
MA082-026001	Laralae	Rath	*c.*790m (C1-C2)
MA082-026002	Laralae	Souterrain	*c.*790m (C1-C2)
MA082-028	Scregg	Barrow	*c.*120m (C1-C2)
MA082-029	Ballyhine	Cashel	*c.*70m (C1-C2)
MA082-030	Carn More	Rath	*c.*660m (C1-C2) *c.*880m (C2-C3)
MA082-031	Cartron North	Rath	*c* 320m (C1-C2) *c.*740m (C2-C3)
MA082-032	Cartron North	Rath	*c.*240m (C1-C2) *c.*360m (C2-C3) *c.*850m (D1-D2)
MA082-033	Crossbeg	Barrow	*c.*960m (D1-D2)
MA082-034	Crossbeg	Mound	*c.*840m (C1-C2) *c.*860m (C2-C3) *c.*240m (D1-D2)
MA082-035001	Crossbeg	Church	*c.*860m (C1-C2) *c.*860m (C2-C3) *c.* 90m (D1-D2)
MA082-035002	Crossbeg	Church	*c.*860m (C1-C2) *c.*860m (C2-C3) *c.* 90m (D1-D2)
MA082-035003	Crossbeg	Graveyard	*c.*860m (C1-C2) *c.*860m (C2-C3) *c.* 90m (D1-D2)
MA082-035004	Crossbeg	Ecclesiastical Enclosure	*c.*860m (C1-C2) *c.*860m (C2-C3) *c.* 90m (D1-D2)
MA082-035005	Crossbeg	Bullaun Stone	*c.*860m (C1-C2) *c.*860m (C2-C3) *c.* 90m (D1-D2)

MA082-035006	Crossbeg	Standing Stone	*c.*860m (C1-C2) *c.*860m (C2-C3) *c.* 90m (D1-D2)
MA082-037	Scregg	Enclosure	*c.*970m (C1-C2)
MA082-039	Tooreen	Enclosure	*c.*600m (F1-F2)
MA082-040	Tooreen	Cashel	*c.*600m (F1-F2)
MA082-040001	Tooreen	Souterrain	*c.*600m (F1-F2)
MA082-046	Scregg	Barrow	*c.*60m (C1-C2)
MA082-047	Ballyhine	Standing Stone	*c.*120m (C1-C2)
MA082-048	Crossbeg	Mound	*c.*780m (D1-D2)
MA082-051	Tooreen	Megalithic Structure	*c.*840m (F1-F2)
MA082-059	Ballyhine	Ring-barrow	*c.*880m (C1-C2)
MA082-060	Ballyhine	Burial	*c.*480m (C1-C2)
MA082-062	Cappagh	Standing Stone	*c.*930m (F1-F2)
MA082-063	Cappagh	Structure	*c.*840m (F1-F2)
MA092-019001	Carrowneden	Church	*c.*800m (A1-A2)
MA092-019002	Carrowneden	Graveyard	*c.*800m (A1-A2)
MA092-019003	Carrowneden	Holy Well	*c.*800m (A1-A2)
MA092-019004	Carrowneden	CBG	*c.*800m (A1-A2)
MA093-003	Carrowneden	Enclosure	*c.*540m (A1-A2)
MA093-004	Carrowneden	Enclosure	*c.*420m (A1-A2) *c.* 360m (B1-B2)
MA093-005	Coolnaha North	Possible Enclosure	Redundant Record
MA093-006001	Coolnaha North	Cashel	*c.*700m (A1-A2) *c.* 860m (C2-C3)
MA093-006002	Coolnaha North	Souterrain	*c.*700m (A1-A2) *c.* 860m (C2-C3)
MA093-006003	Coolnaha North	Field Wall (s)	*c.*700m (A1-A2) *c.* 860m (C2-C3)
MA093-007001	Carrowneden	Cashel	*c.*480m (A1-A2) *c.* 680m (B1-B2)
MA093-007002	Carrowneden	Souterrain	*c.*480m (A1-A2) *c.* 680m (B1-B2)
MA093-007004	Carrowneden	Enclosure	*c.*480m (A1-A2) *c.* 680m (B1-B2)
MA093-007005	Carrowneden	Field Wall (s)	*c.*480m (A1-A2) *c.* 689m (B1-B2)
MA093-008001	Coolnaha North	Cashel	*c.*860m (A1-A2) *c.* 860m (B1-B2) *c.* 600m (C2-C3)
MA093-008002	Coolnaha North	Souterrain	*c.*860m (A1-A2) *c.* 860m (B1-B2) *c.* 600m (C2-C3)
MA093-008003	Coolnaha North	Hut Site	*c.*860m (A1-A2) *c.* 860m (B1-B2) *c.* 600m (C2-C3)
MA093-009001	Coolnaha North	Cashel	*c.*750m (C1-C2) *c.*95m (C2-C3)
MA093-009002	Coolnaha North	Souterrain	*c.*750m (C1-C2) *c.*95m (C2-C3)
MA093-010	Coolnaha South	Road/Trackway	*c.*720m (B1-B2) *c.* 480m (C2-C3)
MA093-011001	Coolnaha South	Enclosure	*c.*520m (B1-B2)

MA093-011002	Coolnaha South	Cross Inscribed Stone	*c.*520m (B1-B2)
MA093-013	Crossard	Barrow	*c.*950m (C1-C2) *c.*240m (D1-D2)
MA093-020001	Carrowneden	Mound	*c.*876m (A1-A2) *c.*660m (B1-B2)
MA093-020002	Carrowneden	Souterrain	*c.*876m (A1-A2) *c.* 660m (B1-B2)
MA093-021	Carrowneden	Earthwork	*c.*720m (A1-A2) *c.*360m (B1-B2)
MA093-022	Cartron	Crannog	*c.*600m (B1-B2)
MA093-023	Cartron	Crannog	*c.*700m (B1-B2)
MA093-024	Cartron	Crannog	*c.*780m (B1-B2)
MA093-025001	Coolnaha South	Cashel	*c.*950m (B1-B2)
MA093-025002	Coolnaha South	Souterrain	*c.*950m (B1-B2)
MA093-066	Carn Beg	Souterrain	*c.*770m (C1-C2) *c.*300m (C2-C3)
MA093-077	Carrowneden	Enclosure	*c.*200m (A1-A2) *c.* 900m (B1-B2)
MA093-078	Coolnaha North	Ringfort	*c.*260m (B1-B2) *c.*840m (C2-C3)

Table 1 List of recorded monuments within 1km of the proposed works.

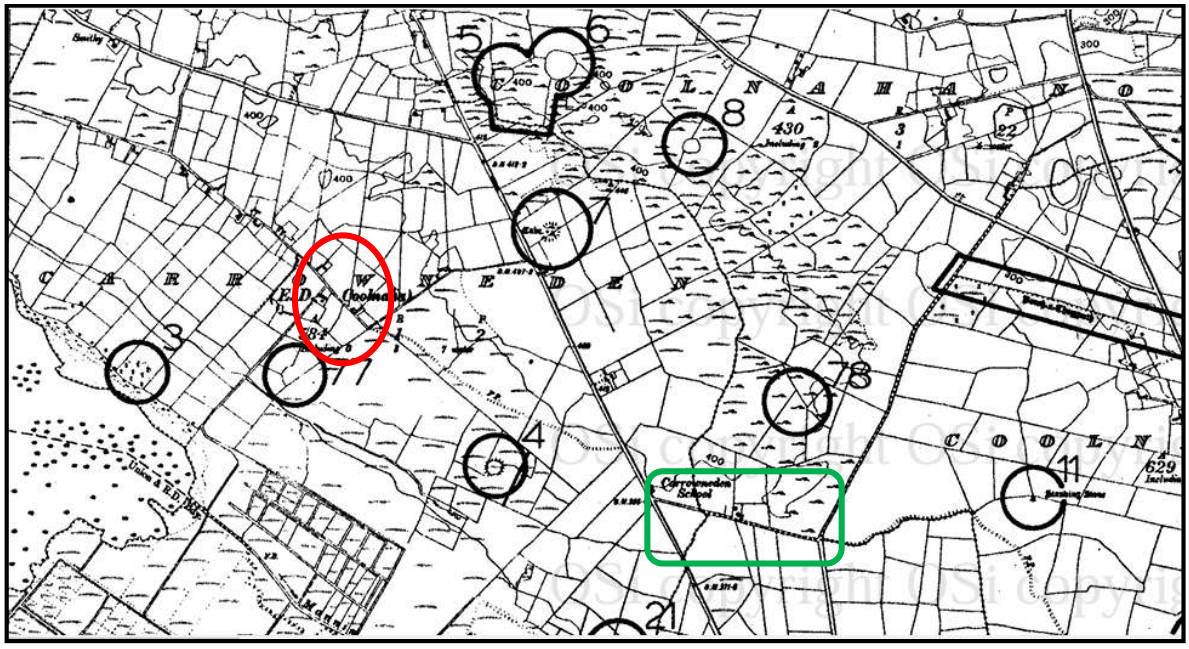


Figure 2 Site Location Map (extract from Mayo RMP, Sheet No. 93) showing recorded monuments and areas of Section A1-A2 outlined in red and Section B1-B2 outlined in green.

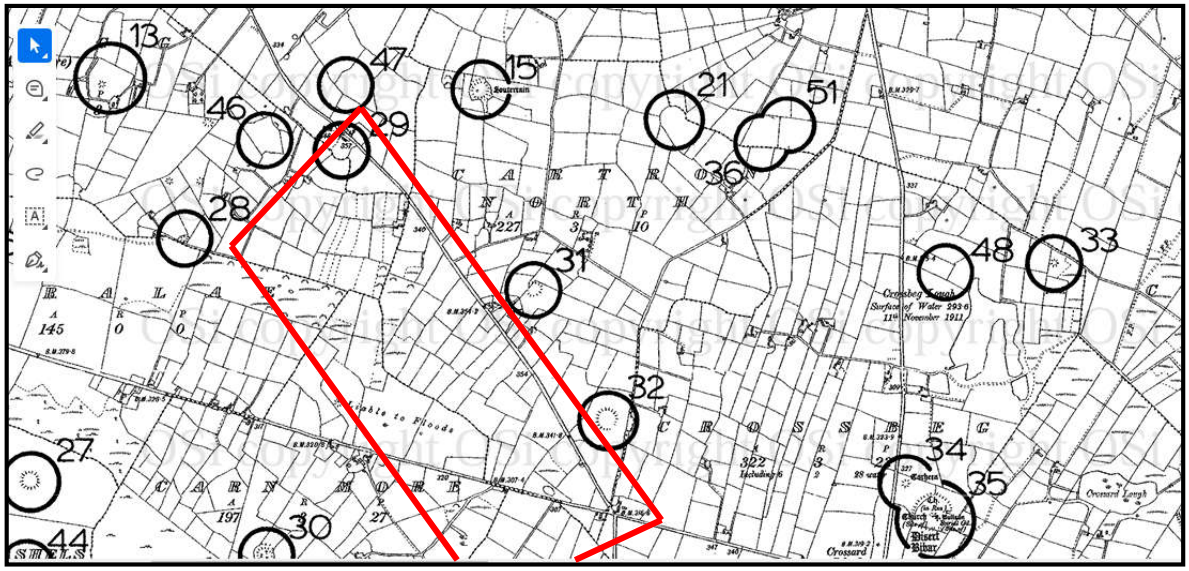


Figure 3 Site Location Map (extract from Mayo RMP, Sheet No. 82) showing recorded monuments and area of Section C1-C2 outlined in red.

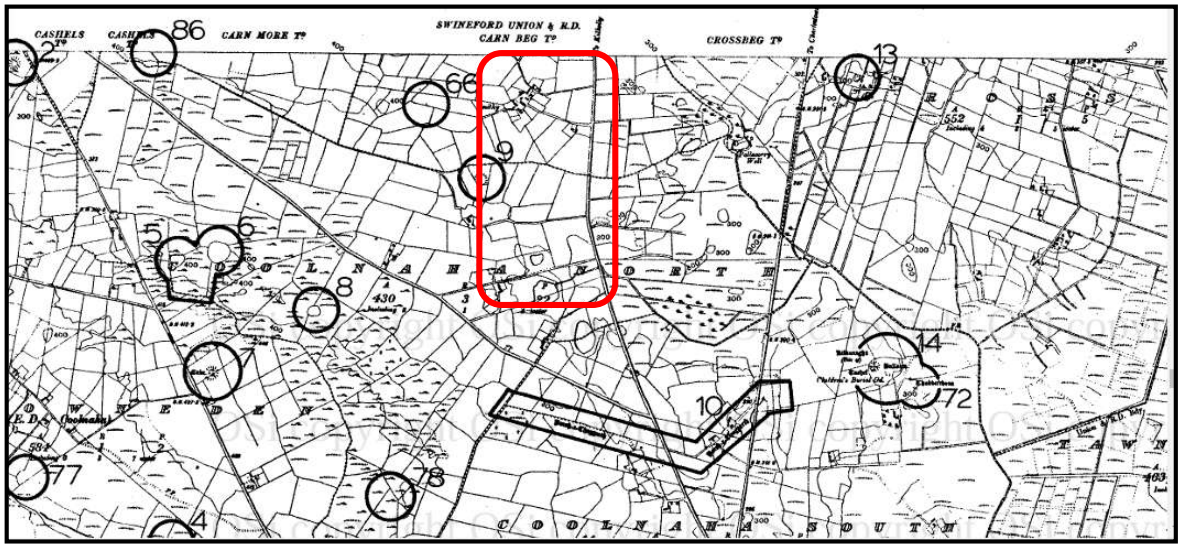


Figure 4 Site Location Map (extract from Mayo RMP, Sheet No. 93) showing recorded monuments and area of Section C2-C3 outlined in red.

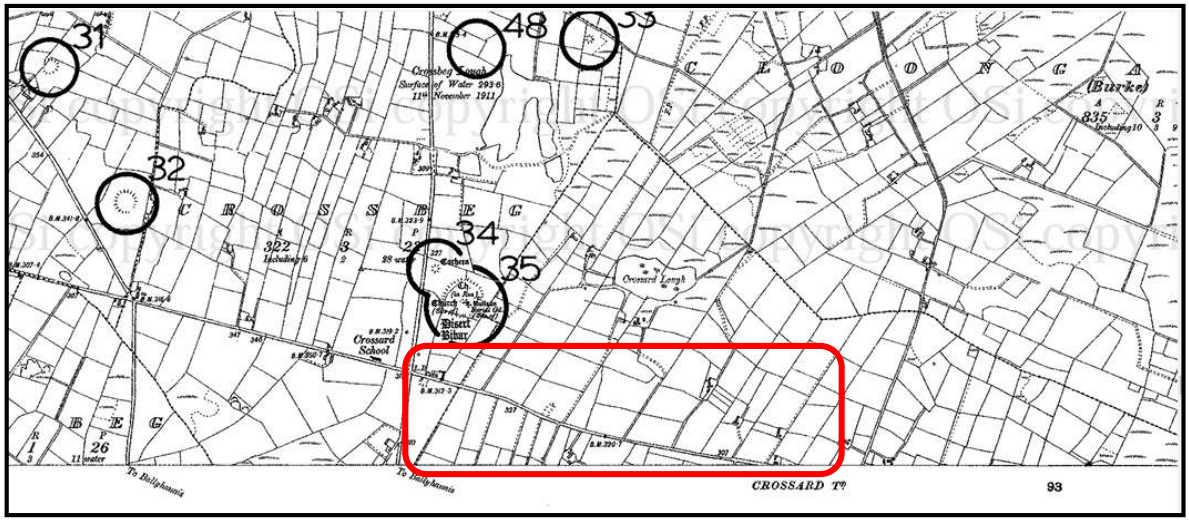


Figure 5 Site Location Map (extract from Mayo RMP, Sheet No. 82) showing recorded monuments and area of Section D1-D2 outlined in red.

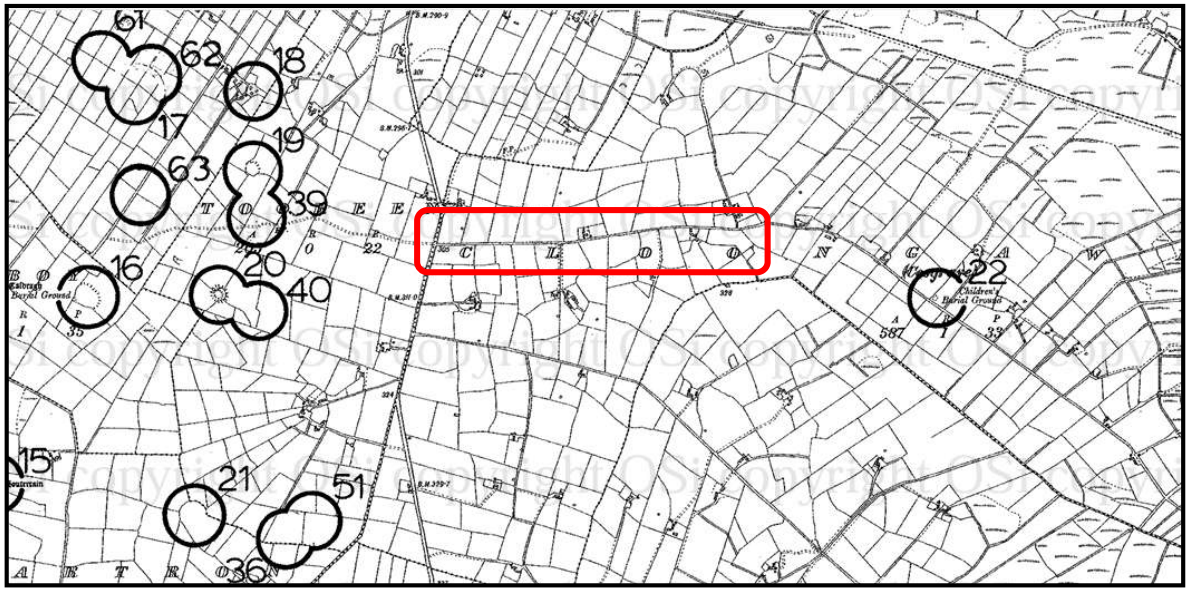


Figure 6 Site Location Map (extract from Mayo RMP, Sheet No. 82) showing recorded monuments and area of Section F1-F2 outlined in red.

Cartographic Evidence

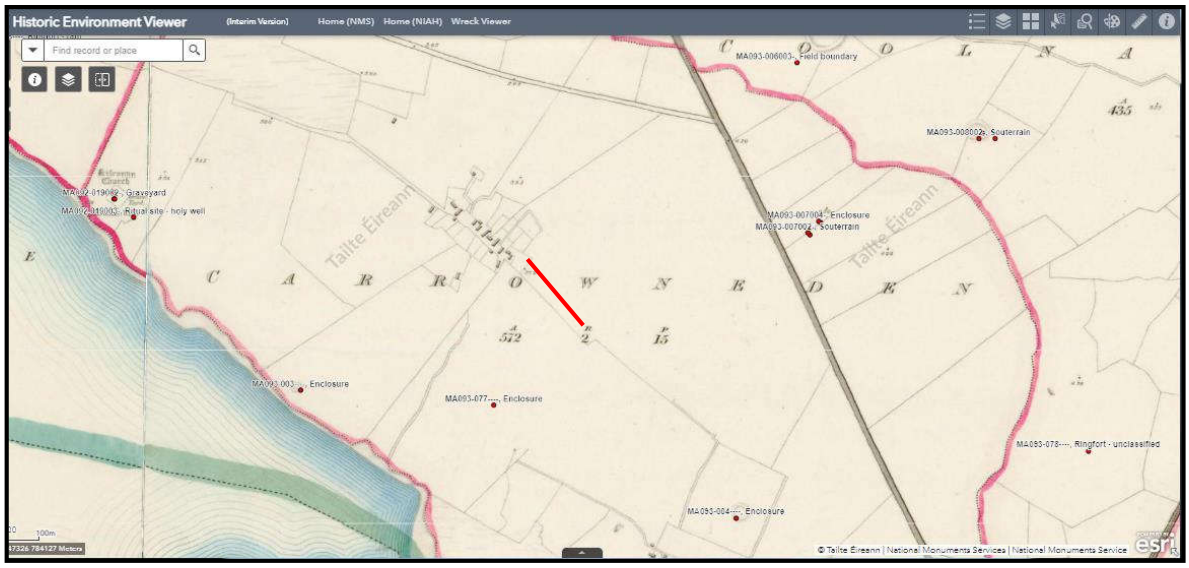


Figure 7 Site Location Map (extract from OS 1st edition 6-inch sheet of 1838) showing approximate line of Section A1-A2 outlined in red (courtesy of Historic Environment Viewer, www.archaeology.ie).

On the 1st edition of the OS six-inch sheet of 1838, Section A1-A2 passes through featureless large fields (Figure 7) and Section B1-B2 is located across two featureless fields and across the townland boundary between Carrowneden and Cartron, just S of a public road (Figure 8).

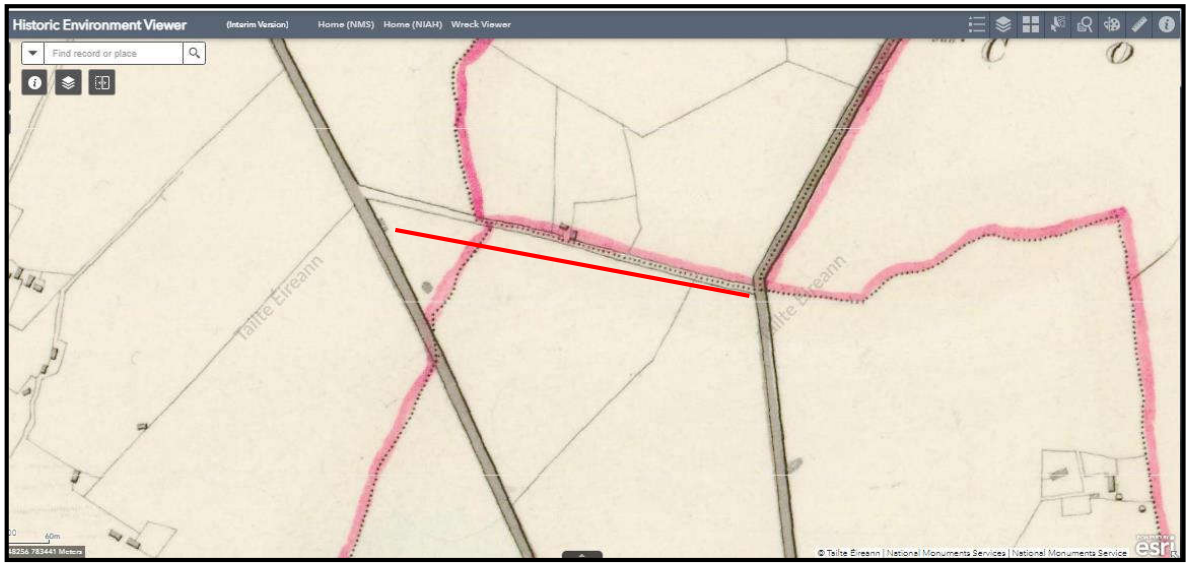


Figure 8 Site Location Map (extract from OS 1st edition 6-inch sheet of 1838) showing approximate line of Section B1-B2 outlined in red (courtesy of Historic Environment Viewer, www.archaeology.ie).

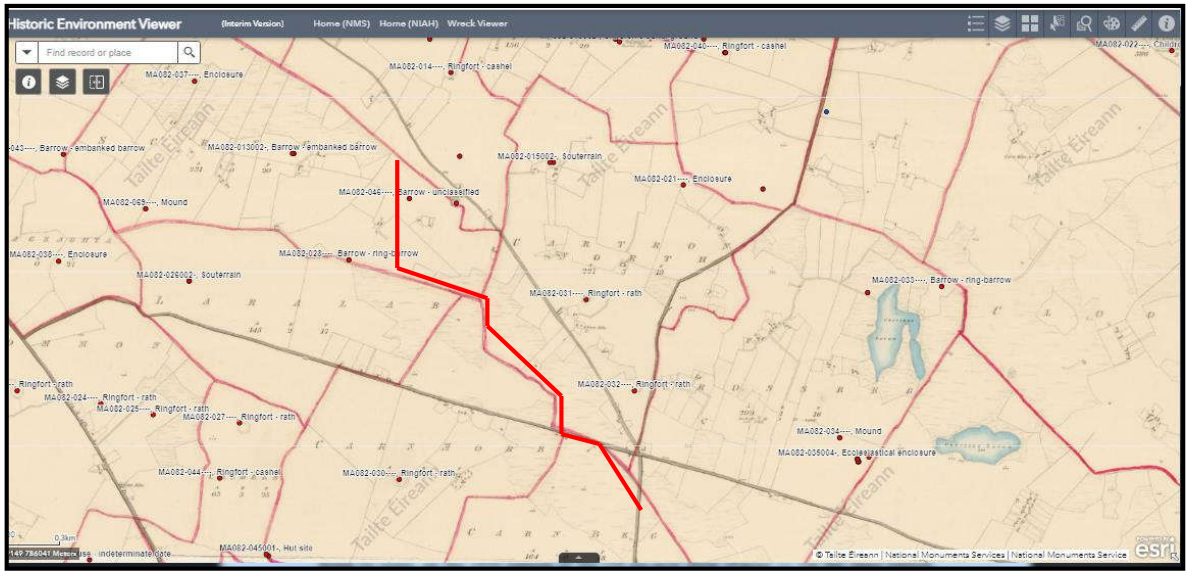


Figure 9 Site Location Map (extract from OS 1st edition 6-inch sheet of 1838) showing approximate line of Section C1-C2 outlined in red (courtesy of Historic Environment Viewer, www.archaeology.ie).

On the 1st edition of the OS six-inch sheet, Section C1-C2 is located along the townland boundaries of Cartron North, Carn Beg, Carn More, Laralae and Scregg and passes between a barrow (RMP No. MA082-046) and a cashel (RMP No. MA082-029) at its NW end (Figure 9). Section C2-C3 is located through a number of large featureless fields and skirts the E sides of two clachans in Carnbeg and Coolnaha North townlands (Figure 10).

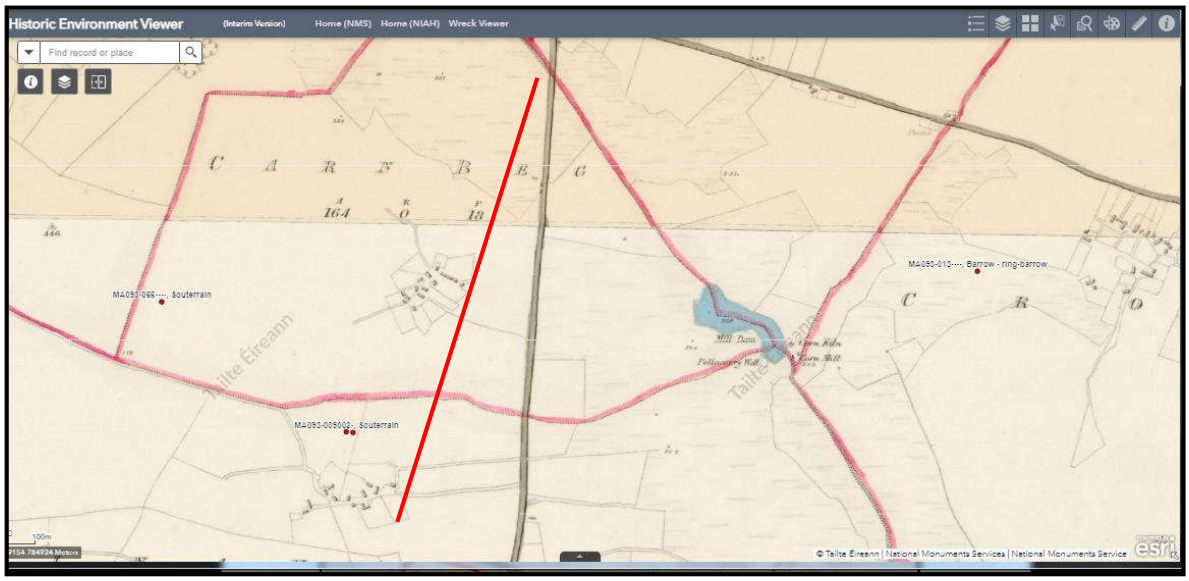


Figure 10 Site Location Map (extract from OS 1st edition 6-inch sheet of 1838) showing approximate line of Section C2-C3 outlined in red (courtesy of Historic Environment Viewer, www.archaeology.ie).

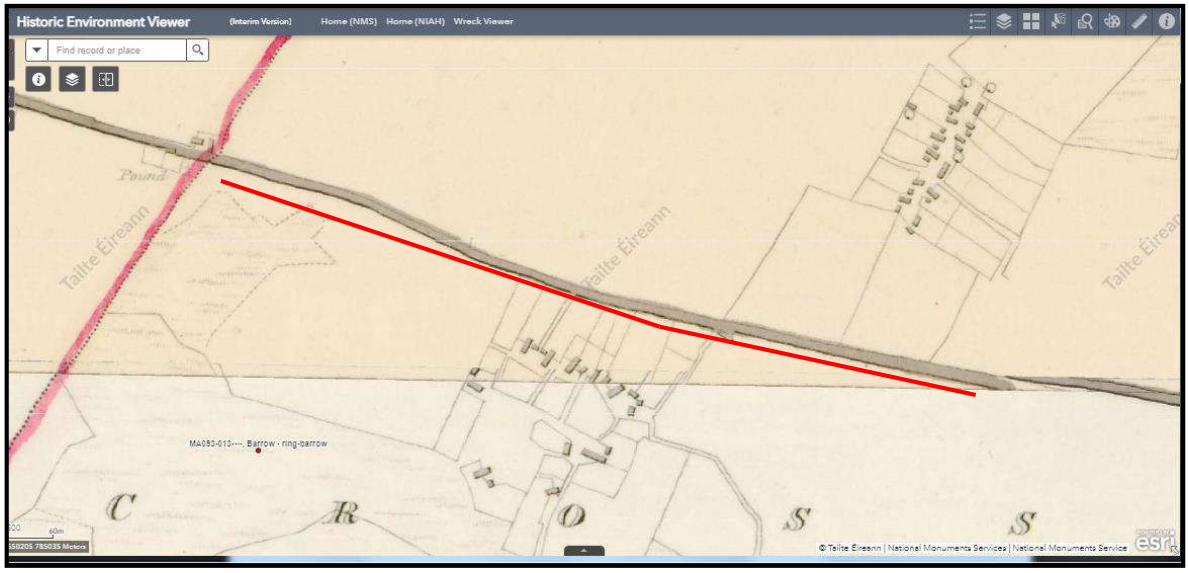


Figure 11 Site Location Map (extract from OS 1st edition 6-inch sheet of 1838) showing line of Section D1-D2 outlined in red (courtesy of Historic Environment Viewer, www.archaeology.ie).

On the 1st edition of the OS six-inch map, Section D1-D2 is located along the southern side of a public road (Figure 11) and Section F1-F2 is located across a large featureless area, at the E end of which is a clachan or village with a corn kiln (Figure 12).

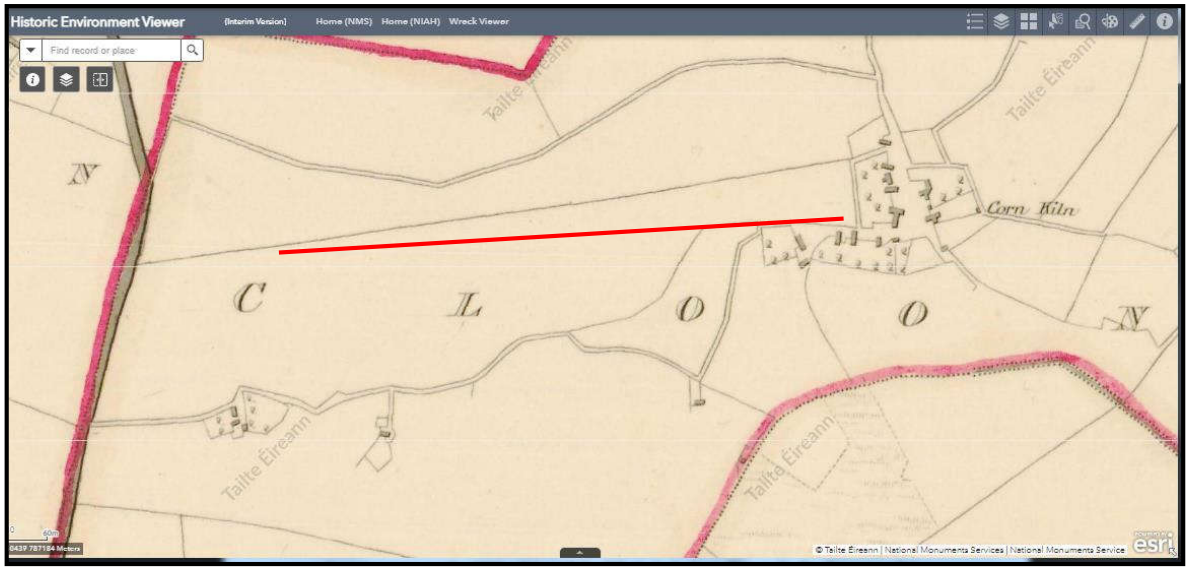


Figure 12 Site Location Map (extract from OS 1st edition 6-inch sheet of 1838) showing line of Section F1-F2 outlined in red (courtesy of Historic Environment Viewer, www.archaeology.ie).

On the OS 25-inch map of the late 19th century/early 20th century, Section A1-A2 is located through three featureless fields to the rear of two properties with limekilns (Figure 13). Section B1-B2 is located across five featureless fields, including crossing the townland boundary between Carrowneden and Cartron (Figure 14).

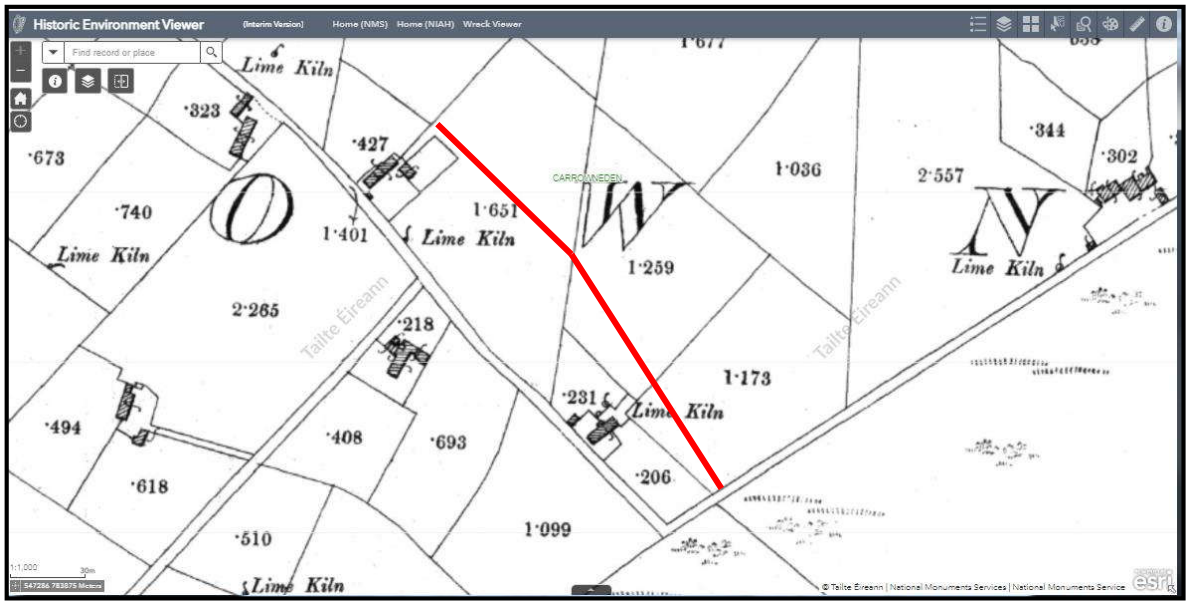


Figure 13 Site Location Map (extract from OS 25-inch sheet of late 19th/early 20th century, showing line of Section A1-A2 outlined in red (courtesy of Historic Environment Viewer, www.archaeology.ie).



Figure 14 Site Location Map (extract from OS 25-inch sheet of late 19th/early 20th century, showing line of Section B1-B2 outlined in red (courtesy of Historic Environment Viewer, www.archaeology.ie).

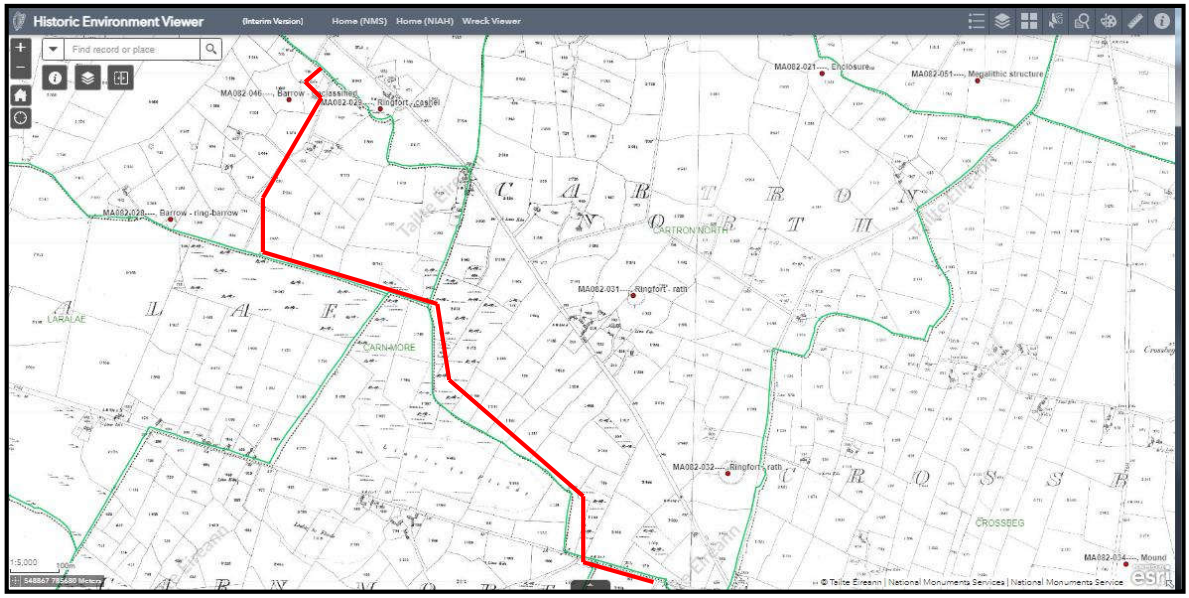


Figure 15 Site Location Map (extract from OS 25-inch sheet of late 19th/early 20th century, showing line of Section C1-C2 outlined in red (courtesy of Historic Environment Viewer, www.archaeology.ie).

Section C1-C2 is located through a number of featureless fields and across a number of townland boundaries (Figure 15). Section C2-C3 crosses a number of fields and the townland boundary between Carm Beg and Coolnaha North, skirting the E side of a clachan in Carn Beg and located close to limekilns in Carn Beg and Coolnaha North (Figure 16).

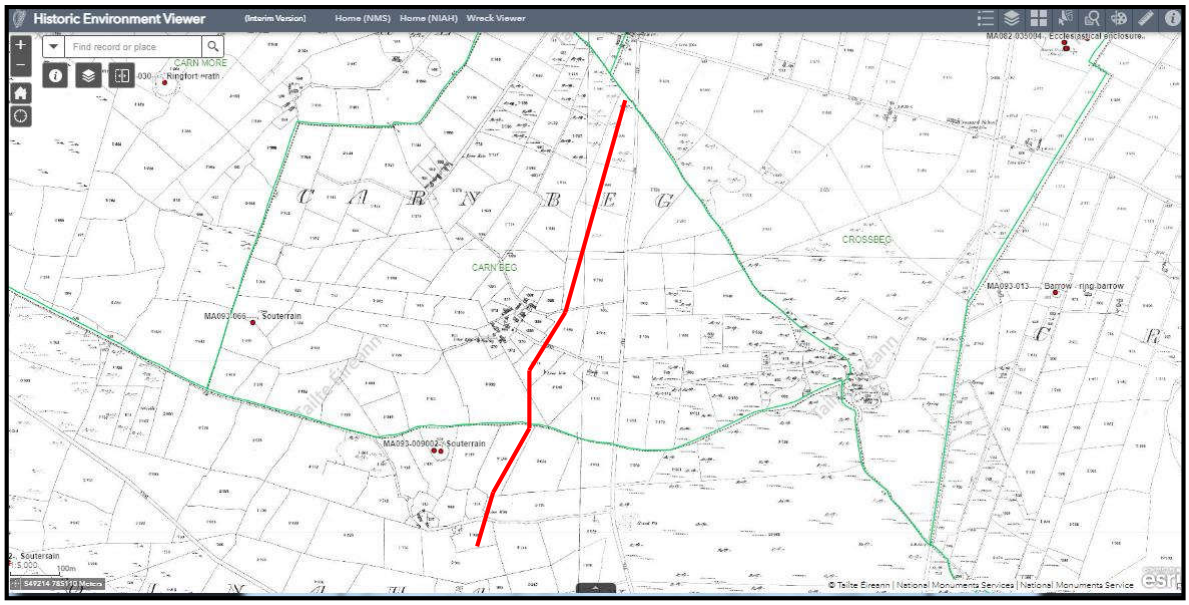


Figure 16 Site Location Map (extract from OS 25-inch sheet of late 19th/early 20th century, showing line of Section C2-C3 outlined in red (courtesy of Historic Environment Viewer, www.archaeology.ie).

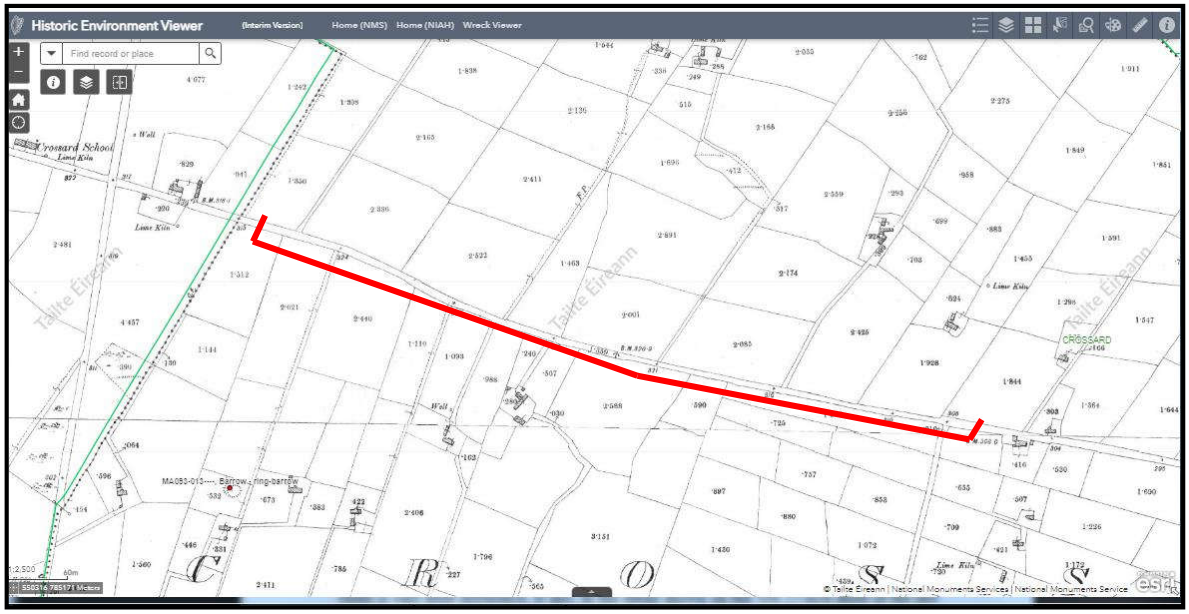


Figure 17 Site Location Map (extract from OS 25-inch sheet of late 19th/early 20th century, showing line of Section D1-D2 outlined in red (courtesy of Historic Environment Viewer, www.archaeology.ie).

Section D1-D2 is located across a number of featureless fields along the southern side of the public road, crossing the townland boundary between Crossbeg and Crossard. The line crosses to the northern side of the road at its E and W ends (Figure 17).

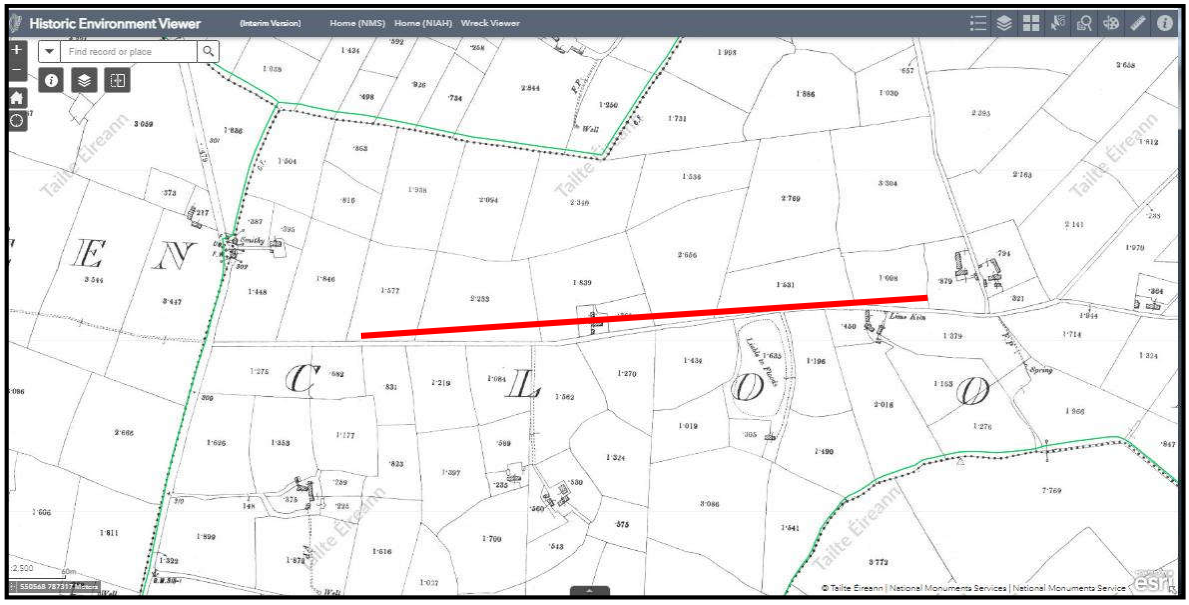


Figure 18 Site Location Map (extract from OS 25-inch sheet of late 19th/early 20th century, showing line of Section F1-F2 outlined in red (courtesy of Historic Environment Viewer, www.archaeology.ie).

Section F1-F2 is located across seven featureless fields, along the northern side of the public road (Figure 18). The route also crosses through the site of three buildings midway along its length. The buildings, possibly a dwelling and two outhouses, are not marked on the 1st edition map of 1838 (Figure 12).

Topographical Files

There is one entry in the Finds Database (2010) of the National Museum of Ireland for this area of County Mayo:

- Reg. No. 1941:1145 Leather shoe found in Carrowneden townland in a rath (RMP No. MA093-001) which is not listed in those monuments located within 1km of the proposed extensions.

Excavations

There is one entry for Carrowneden and one for Cartron townlands, County Mayo in www.excavations.ie, which records summaries of all excavations undertaken on the island of Ireland between 1969 and 2025.

- 03E1978 Testing of a proposed development in Carrowneden townland by Leo Morahan revealed noting of archaeological significance.
- 10E0483 Testing of a proposed extension to Ballyhaunis Golf Club, by Dominic Delaney, in Annagh and Cartron townlands uncovered two burnt spreads and a togher. The two burnt spreads were part of a fulacht fiadh.

4. Description of the Proposed Development

The proposed development consists of six sections of improvement works to the Tooreen Aghamore Group Water Scheme (Figure 1). Section A1-A2 measures 285m long (Figure 19). Section B1-B2 measures 400m long (Figure 19). Section C1-C2 measures 1.865km long (Figure 20). Section C2-C3 measures 1.025km long (Figure 21). Section D1-D2 measures 915m long (Figure 22). Section F1-F2 measures 575m long (Figure 23).

The project consists of the installation of approximately 5.06km of watermains which will be connected to the existing pipe network. The works to be carried out involve minor earth works, pipe laying, valves chambers and ancillary works. The works to be carried out are

civil engineering works that include excavation of trenches, installation of polythene pipes and fitting, and construction of valve chambers and ancillary works.

The works are located in fields with a number of crossings of local and minor roads. There are no pipeline routes proposed on road margins. Pipelines in roads will be at road crossings only. Pipe size will vary at the various locations (100mm diameter will be the maximum pipe size used) and pipes are to have at least 900mm cover at all locations (typical trenches to be 500mm wide and 1150mm deep).

5. Site Description

Section A1-A2 is located across two fields of pasture in the townland of Carrowneden (Figure 19). Section B1-B2 is located across four fields of pasture in the townlands of Carrowneden and Cartron (Figure 19).

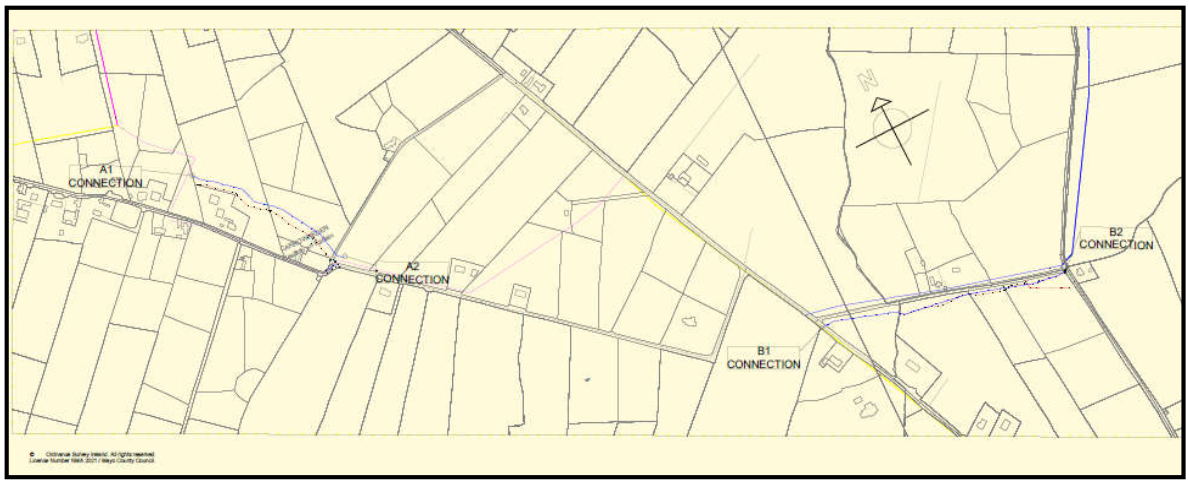


Figure 19 Section A1-A2 and B1-B2 (courtesy of OCCE).

Section C1-C2 is located through a number of fields of pasture in the townlands of Carn Beg, Carn More, Cartron North, Scregg, and Ballyhine (Figure 20).

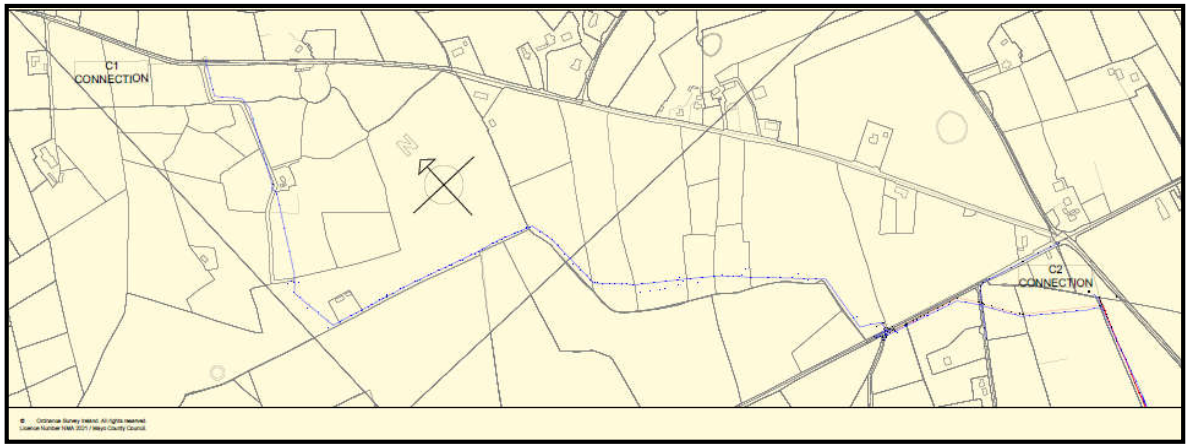


Figure 20 Section C1-C2 (courtesy of OCCE).

Section C2-C3 is located through a number of fields of pasture in the townlands of Carn Beg and Coolnaha North (Figure 21).

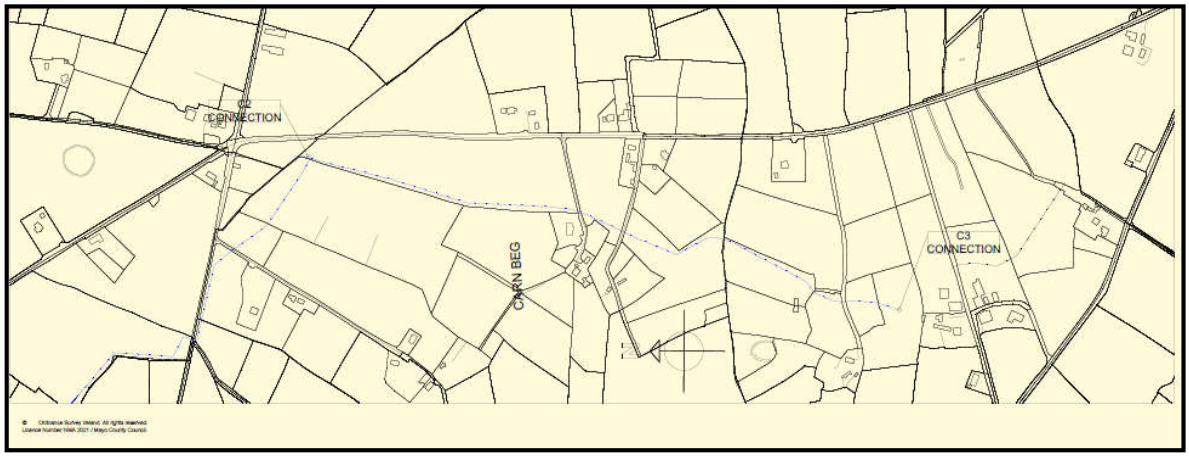


Figure 21 Section C2-C3 (courtesy of OCCE).

Section D1-D2 is located through a number of fields of pasture in the townlands of Crossard and Crossbeg (Figure 22).

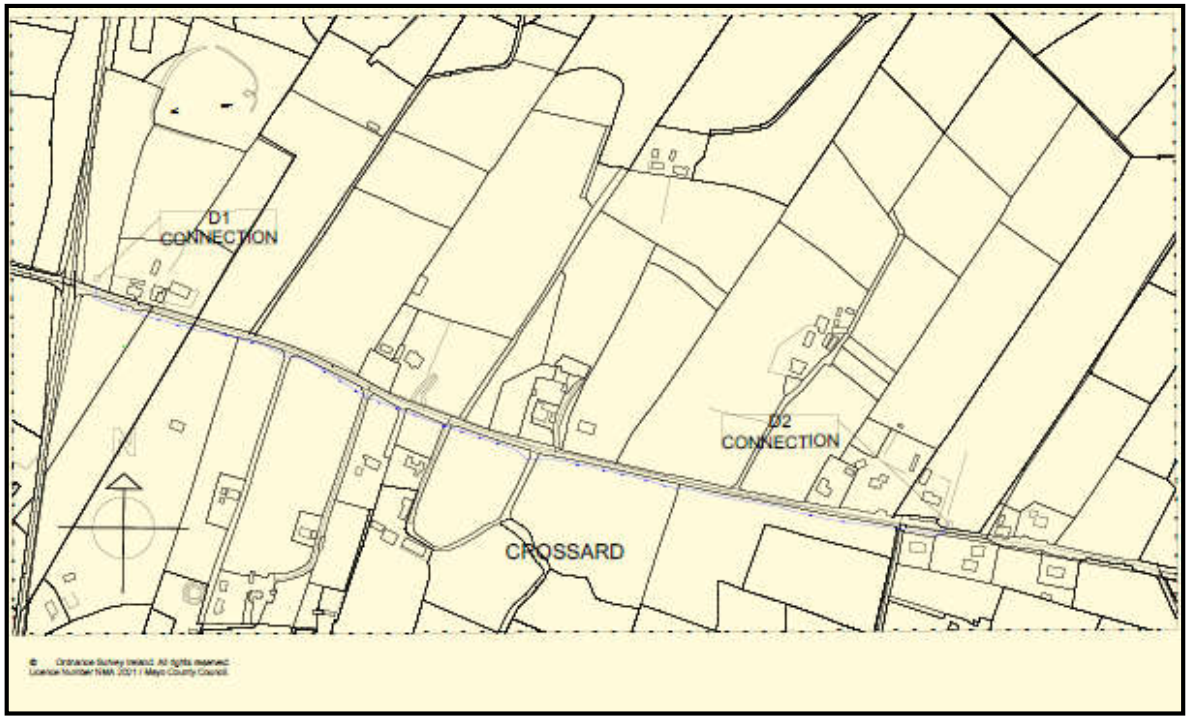


Figure 22 Section D1-D2 (courtesy of OCCE).

Section F1-F2 is located through a number of fields of pasture in the townland of Cloongawnagh (Cosgrave) (Figure 23).

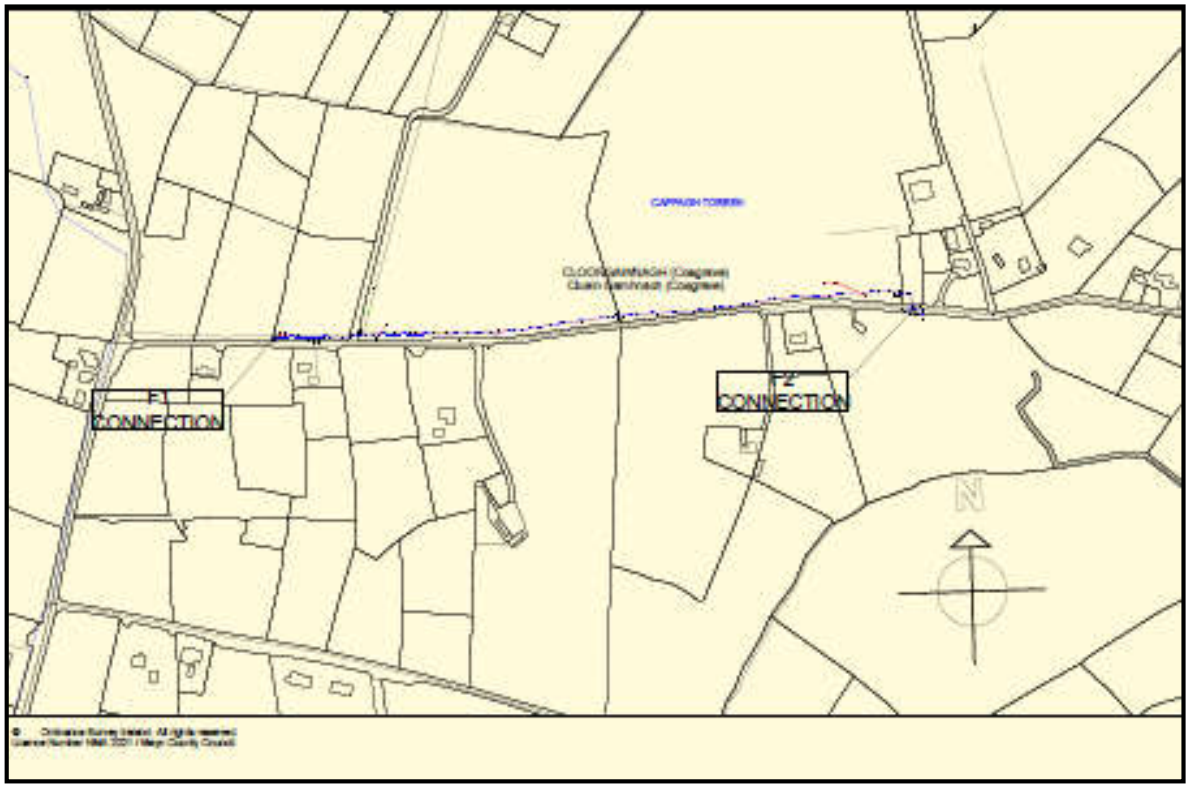


Figure 23 Section F1-F2 (courtesy of OCCE).

6. Legislation and Policy Context

- Cultural Heritage in Ireland and specifically within County Mayo is protected under the National Monuments Acts 1930 to 2014 and the Mayo County Development Plan 2022-2028.

- The National Monuments (Amendment) Act 1994 gave legal protection to recorded monuments through the establishment of the Record of Monuments and Places (RMP), which incorporated the Sites and Monuments Record (SMR) for each county into law.

- Under BEO1 of the Archaeological Heritage Objectives of the Built Environment chapter of the Mayo County Development Plan 2022-2028, it is an objective of the Council 'To Protect the archaeological heritage and sites identified in the Record of Monuments and Places, National Monuments in the ownership or guardianship of the State in addition to National Monuments that are the subject of Preservation Orders, and to safeguard the integrity of the archaeological sites in their setting.'

- Under BEO5 of the Archaeological Heritage Objectives of the Built Environment chapter of the Mayo County Development Plan 2022-2028, it is an objective of the Council 'To protect all sites and features of archaeological interest discovered subsequent to the publication of the Record of Monuments and Places, in situ (or at a minimum preservation by record), having regard to the advice and recommendations of the National Monuments Service of the Department of Culture, Heritage and the Gaeltacht.'

7. Potential Impacts

- Research has shown that two excavations have taken place within two of the townlands. The test excavation in Carrowneden uncovered nothing of archaeological significance. The burnt mound (RMP No. MA093-111) uncovered in Cartron during testing is located over 600m from the nearest extension to the GWS, i.e. Section B1-B2.

- Research has also shown that there is one artefact listed in the National Museum database for one of the townlands, Carrowneden, within which the proposed works are located, however, the artefact was found over 1km away from the proposed route.

- The cartographic evidence shows the proposed routes passing through featureless fields, apart from Section F1-F2 which passes through the site of three small buildings marked on the OS 25-inch sheet of the late 19th/early 20th century (Figure 18) and the subsequent 1916 edition of the OS six-inch sheet (Figure 6), but which are not marked on the 1st edition OS six-inch sheet of 1838 (Figure 12).

- Of the 51 recorded monuments located within 1km of the proposed works, only four (RMP Nos. MA082-029, MA082-035, MA082-046 and MA093-009) are located within 100m with the nearest, a barrow (RMP No. MA082-046) in Scregg townland, located *c.* 60m away.

- As none of the six proposed extensions to the Tooreen-Aghamore GWS are located within the constraints for recorded monuments, as the nearest monument (RMP No. MA082-046) is located *c.* 60m away and given the limited extent of the groundworks (the trenches will typically measure 0.5m wide and 1.15m deep) the potential for adverse impact on the archaeology of the area is negligible.

8. Mitigation

None necessary.

8. List of Abbreviations

c.	circa	**C**	Context
CBG	Children's Burial Ground	**E**	East
GWS	Group Water Scheme	**ha**	hectares
Illus.	Illustration	**ITM**	Irish Transverse Mercator
m	metre	**max.**	maximum
mm	millimetre	**N**	North
NIAH	National Inventory of Architectural Heritage	**NGC**	National Grid Co-Ordinates
NMS	National Monuments Service	**NMI**	National Museum of Ireland
OD	Ordnance Datum	**OS**	Ordnance Survey
RMP	Record of Monuments and Places	**RPS**	Record of Protected Structures
S	South	**SAC**	Special Area of Conservation
SMR	Sites and Monuments Record	**W**	West

ALL RECOMMENDATIONS ARE SUBJECT TO THE FINAL APPROVAL OF THE PLANNING AUTHORITY/ DEPARTMENT OF HOUSING, LOCAL GOVERNMENT AND HERITAGE

OUTLINE TRAFFIC MANAGEMENT PLAN

Tooreen Aghamore GWSS
Water Meter Upgrade and Network Improvement Works Phase

Client:	**Tooreen Aghamore GWSS**
Site Location:	**Aghamore, County Mayo**
Project Supervisor for Design Process:	**Ó Conaire Consulting Engineers**

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Client	Tooreen Aghamore GWSS
Project No.	26043
Project Title	Tooreen Aghamore GWSS Water Meter Upgrade and Network Improvement Works Phase 2
Report Title	Outline Traffic Management Plan

Date	Version	Status	Author	Rev by	Apd by	Comment
02/10/26	1.0	Issue	CC	CC	CC	

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OUTLINE TRAFFIC MANAGEMENT PLAN

Water Meter Upgrade and Network Improvement Works Phase 2 for Tooreen Aghamore Group Water Scheme

1. General Description of Project

1.1 Introduction

The project consists of the installation of approximately 5km of watermains which will be connected to the existing pipe network. The Works to be carried out involve minor earth works, pipe laying, valves, chambers and ancillary works. The works to be carried out are civil engineering works that include excavation of trenches, installation of polyethylene pipes and fitting, and construction of valve chambers and ancillary works.

The works are located in fields, road margins and roads in the townlands adjacent to the villages of Tooreen and Aghamore in County Mayo. The extents of the proposed pipelines are indicated on the contract drawings key plan

1.2 Objective

This Traffic Management Plan provides the basis for the management of traffic anticipated during construction of the Scheme. The Plan shall be developed by the appointed Contractor into a more detailed Construction Stage Traffic Management Plan based on their specific construction proposals. The role of Project Supervisor Design Process (PSDP) will be taken by the Contractor and a Traffic Management Plan, prepared in conjunction with Mayo County Council, is required.

The Contractor will be required to appoint a Temporary Traffic Management Designer for the preparation of a Detailed Traffic Management Plan for all locations where Works may impact on any public road. The appointed PSCS/Contractor is required to carry out a Safety Audit on the Traffic Management Plan prior to commencement of the works. The PSCS shall co-ordinate the implementation of the developed Traffic Management Plan during construction of the works.

1.3 Regulations and Standards

The Contractor shall comply with the requirements of the following documents:

- ***"Traffic Signs Manual – Chapter 8 – Temporary Traffic Measures and Signs for Roadworks"***

  Department of Transport, November 2010

- ***''Guidance for the Control and Management of Traffic at Roadworks''***

  Department of Transport, N.R.A and Local Government Management Services Board, second edition 2010

- ***"Guidelines for Working on Roads;"***

Guide to the Safety, Health and Welfare at Work (Construction)(Amendment)(No. 2) Regulations 2008 (S.I. No. 423 of 2008)

In addition to the above. The contractor shall provide compliance with the requirements of Safety Health & Welfare at Work legislation. including the 2005 Act, the Safety, Health and Welfare (Construction) Regulations 2013, and any amendments thereafter.

The contractor shall liaise with the Roads Department of Mayo County Council Road and shall comply with their requirements for any works which may impact on a public road.

2. Traffic Impact

2.1 Works on Public Roads

Works will take place on public roads at a number of pipeline crossing points as indicated on the drawings.

Should a road be impacted and road users affected, the Contractor shall provide facilities for the safe passage of pedestrian and vehicular traffic. Measures to keep the impact of the works on local roads to a minimum, and to ensure continued access to homes and businesses during road crossing works shall be put in place.

2.2 Construction Traffic

Access to the working areas along the pipeline route will be via the public roads and along the construction wayleaves, where practicable.

Construction site entrances will be signposted appropriately in accordance with Chapter 8 of the Traffic Signs Manual. All entrances will be designed and managed such that HGVs are not forced to queue on the public road network. Gateways for each site access shall be sited to be clearly visible to drivers approaching them for at least the safe stopping distance appropriate for the road in question.

The Contractor shall operate a working week no longer than between 08:00 and 1800 hours from Monday to Friday inclusive and 0900 to 1400 on Saturdays unless agreed otherwise with the Engineer.

3. Particular Requirements

3.1 Traffic Management Plan Principles

Traffic Control measures will be required during any construction works on public roads, and also in relation to access and egress of construction traffic at each of the works areas.

Temporary safety barriers placed around the working areas should be clearly defined by temporary road markings, signage and coning as specified in the Traffic Signs Manual.

Before commencing any works on site the PSCS shall carry out a risk assessment to determine the type of barriers and cones most suitable for the works.
Bespoke site specific Traffic Management Plans shall be prepared where there is any impact on the construction of footpaths and roads, or where there is any interference to their usage. The Contractor shall liaise with Mayo County Council Roads Office to ensure proposed traffic management plans are in accordance with their requirements.

3.2 Communications

The Contractor's PSCS shall liaise with the Employer's Representative, Roads Department of Mayo County Council, Emergency Services (An Garda Siochána, fire and ambulance services), bus services (school, public and private bus operators) in relation to management of traffic.
Liaison/ correspondence shall take place during the development of the Construction Stage Traffic Management Plan.

The PSCS shall take into account the impact of the construction works on traffic, businesses, and local property owners and include in the developed Traffic Management Plan provision of facilities for the safe passage of pedestrian and vehicular traffic and measures to keep the impact of the works on the roads to a minimum.

Where a problem arises with traffic management, the PSCS shall consult with the Employers Representative and Mayo County Council and revise or modify the traffic management plan as necessary. The PSCS shall consult with An Garda Siochána and with fire and ambulance services in the preparation of the Construction Stage Traffic Management Plan and during the implementation of the works.

The Contractor shall liaise with the Roads Authority in relation to any temporary road closures, lane closures or other traffic restrictions/alterations required during the course of the works. Advertising in the local newspapers, on local radio, and/or leaflet drops will be required to advise motorists and local residents of the changes involved and anticipated durations of such changes.

3.3 Signage

All traffic signage for use at roadworks shall be in accordance with Clause 8.2.1 of the Department of Transport Traffic Signs Manual, Chapter 8.

3.4 Road Closures

Applications for Temporary Road Closures shall be made to Mayo County Council. and all required information in the required format shall be included with the application. The Contractor should be aware of the minimum advance notification period required by the Local Authority in advance of any temporary road closure and applications for road closures should be made as early as possible to allow for advertisements etc. and prevent delays.

3.5 Road Opening Licence

All road openings shall be carried out in accordance with the requirements of

"Guidelines for Managing Openings in Public Roads (Guidelines for the Opening, Backfilling and Reinstatement of Openings in Public Roads)".

All road opening licences shall be processed using the Map Road Roadworks Licensing (MRL) system through the Road Management Office (RMO).
The Contractor is responsible for obtaining the required Road Opening Licenses and that a licence is required for tunnelling installation as well as conventional excavations.

3.6 Temporary Road Surfaces

Temporary protection of works with appropriate sized and secured Steel plates, with anti–skid surfaces, will be permitted as temporary protection of works across partially reinstated trenches. Such works will not be permissible for more than 7 days.

Reinstatement works, both temporary and permanent. shall be carried out in accordance with the requirements of the *"Guidelines for Managing Road Openings in Public Roads, Guidelines for the Opening, Backfilling & Reinstatement of Trenches in Public Roads"* (DTTAS, 2015), published by the Department of Transport, Tourism and Sport

3.7 Road Reinstatement

Permanent reinstatement of roads shall be carried out in accordance with the requirements of the *"Guidelines for Managing Road Openings in Public Roads, Guidelines for the Opening, Backfilling & Reinstatement of Trenches in Public Roads"* (DTTAS, 2015), published by the Department of Transport, Tourism and Sport. Permanent reinstatement shall only be carried out after a minimum

consolidation period of six months or such period as conditioned by the Road Opening Licence has elapsed since the temporary reinstatement was placed.

3.8 Wide Loads

The Contractor shall assist the Gardaí in moving wide/abnormal loads through the Works by modifying the signing/coning as necessary. Signs/cones so moved shall be replaced immediately after the abnormal loads have passed through the Works.

An application for an Abnormal Load Permit is required in order to transport an abnormal load on public roads. Transportation of strings of welded pipeline is deemed to be an abnormal load and will require an Abnormal Load Permit.

3.9 Lighting

Any floodlighting required to the works areas shall be positioning such as to prevent glare to drivers.

Reflectors should be used to ensure that the work area is adequately marked if the lighting is vandalised or otherwise fails. Signs, chevrons, barriers and other devices should be reflectorised.

All vehicles and self propelled plant used in the construction works shall be fitted with roof-mounted amber flashing lights whilst in the working areas.

For and Behalf of:	Ó Conaire Consulting Engineers Main Street Ballindine Co Mayo
Signed	_____
Name:	Colm Ó Conaire (Project Supervisor for Design Stage)
Qualifications:	BE MEngSc Dip APM MIEI Chartered Engineer
Date:	2 October 2026



Trial Hole 1 (200mm topsoil, 800mm sandy slay with cobbles)



Trial Hole 2 (200mm top soil, 300mm cobbles, 450mm gravel with cobbles/boulders)



Trial Hole 3 (250mm top soil, 950mm red clayey silt)



Trial Hole 4 Trial Hole 3 (250mm top soil, 250mm red clayey silt, 500mm gravel)



Trial Hole 4 (250mm top soil, 800mm gravel with some cobbles)