



Cavan and Leitrim Railway Proposed Greenway Screening for Environmental Impact Assessment



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Cavan and Leitrim Railway Proposed Greenway

EIA Screening Report

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1. EXECUTIVE SUMMARY

1.1 Introduction

Roughan & O'Donovan (ROD) was appointed by Cavan County Council to prepare a Screening for Environmental Impact Assessment (EIA), Screening for Appropriate Assessment (AA) and preliminary design and for the proposed Cavan and Leitrim Railway Proposed Greenway.

This EIA Screening Report has been prepared by ROD to inform an application for approval under Section 179 of the Planning and Development Act, 2000 (*i.e.* Part VIII) for the Cavan and Leitrim Railway Proposed Greenway (hereafter referred to as "the Project").

1.2 The Proposed Greenway Development

The Project extends from Belturbet, Co. Cavan to Dromod, Co. Leitrim and covers a distance of approximately 54 km, with 7.5 km being on existing roadways and canal towpaths.

The Project will consist of a 5 m wide corridor including a 3 m wide paved carriageway and a 1 m wide verge on each side. The Project will pass through the towns of Ballyconnell, Ballinamore and Mohill (Figure 1). Other elements of the Project include:

- Site clearance of a 5 m envelope, *i.e.* removal of vegetation;
- Fencing of the site;
- Removal of soil to a maximum depth of 500 mm, depending on ground conditions;
- Improvements to the dismantled railway line through the provision of a suitable surface, *i.e.* quarry dust, surface dressing or asphaltic cement, depending on local conditions for pedestrian and cyclists use;
- Improvements to existing track (surface dress) between public roads connecting to the Greenway;
- Provision of traffic safety measures and signage to facilitate safe pedestrian and cycling crossings at bridges and public roads;
- Provision of access controls (pedestrian/cyclist-friendly gates) road makings, traffic calming measures; and,
- Provision of safety railings on bridges.

1.3 Methodology

This screening has been undertaken having regard to the following documents:

- *Environmental Impact Assessment (EIA), Guidance for Consent Authorities regarding Sub-threshold Development* (EPA, 2003);
- *Environmental Impact Assessment of National Road Schemes – A Practical Guide* (NRA, 2008);
- *The European Commission Guidelines on EIA Screening* (June 2001).
- *Guidelines on the Information to be Contained in Environmental Impact Statements* (EPA, 2002).

1.4 Screening Conclusions

The criteria under which the Project must be considered for a full EIA are outlined within Article 27 of the European Communities (Environmental Impact Assessment) Regulations, 1989. The categories of screening criteria include:

- (i) Characteristics of the Proposed Development,
- (ii) Location of the Proposed Development and,
- (iii) Characteristics of Potential Impacts.

The legislative requirements that deem whether an EIA is mandatory for a project are outlined in Schedule 5 of the Planning and Development Regulations 2001–2015. The proposed development does not meet the criteria for which the preparation of an Environmental Impact Statement (EIS) is a mandatory requirement.

There are three sites of national and international importance in proximity to the Project; the Corracramph Bog NHA, the Cashel Bog (Leitrim) NHA and the Lough Oughter and Associated Loughs SAC. There is no potential for localised short-term or long-term interference on any Natura 2000 site.

The area is rich in archaeology and cultural heritage with the former railway stations among many features of interest close to the site. The proposed site is not an archaeologically sensitive area and the Project will not impact directly or indirectly on any historical features as all such features are located at a significant distance from the area of the proposed works.

The majority of the impacts associated with the construction stage will be short-term, and will be reversible over time. However, the Project footprint will result in a loss of habitat and the removal of natural material.

The Project will be designed in accordance with the NRA Design Manual for Roads and Bridges, the NRA Environmental Assessment and Construction Guidelines, and other best practice guidelines. The strict adherence to these guidelines will ensure that the probability of significant environmental effects will be minimised.

Based on the information gathered during this study, Roughan & O'Donovan recommends that Cavan County Council determine that the Project would not be likely to have significant effects on the environment and that the Project does not require an Environmental Impact Assessment.

2. INTRODUCTION

2.1 Project Brief

The County Development Plans for Cos. Cavan and Leitrim list the protection of the dismantled railway corridor as a Walking and Cycling Objective. The project has been reviewed by the Leitrim Recreational Forum and is recommended in the 'Recreational Strategy for County Leitrim', published by the Leitrim Recreational Forum in 2014. Cavan and Leitrim County Councils made a joint but unsuccessful application to the Department of Transport, Tourism & Sport to carry out a Feasibility Study in November 2013.

The six Local Development Committees carried out six Landowner Consultation meetings in the early part of 2014 and the level of engagement from landowners was high and very positive.

The two County Councils acknowledge the merit of the project for the local economy. In October 2014, it was decided in principal that they would jointly fund the Feasibility Study proposed by the Leitrim Recreational Forum subject to acceptable costs from a tender process.

Waterways Ireland and Scouting Ireland have expressed strong support for the project stating that it offers added value to existing local infrastructure. These organisations are working to improve the appeal of the area as a quality visitor destination.

In December 2015, the two County Councils announced that Consultants would commence a Feasibility Study and Preliminary Design for the proposed greenway in February 2016. Funding will be a significant challenge for the project.

This report has been prepared by ROD in accordance with published guidance to document the Screening of whether an EIA is required for the Project.

3. DESCRIPTION OF PROPOSED DEVELOPMENT

3.1 Overview

The Project extends from Belturbet, Co. Cavan to Dromod, Co. Leitrim, passing through the towns of Ballyconnell, Ballinamore and Mohill (Figure 1). It is to be a 3 m wide traffic-free greenway, segregated from vehicular traffic.

It is estimated that approximately 70% of the boundaries of the old railway line remain intact and it is proposed that the Greenway will follow this route where possible. There are a number of areas along the route where the route of the Cavan and Leitrim Railway line is not available and alternative routes need to be considered.

Approximately 7.5 km of the Project may deviate from the footprint of the dismantled railway and travel on existing roads deemed suitable for cycle traffic, including existing mixed-use routes such as the Kingfisher trail (1.1 km) and on canal-side greenways (constructed and managed by Waterways Ireland) that connect Ballyconnell to Ballyheady (3.5 km) and Ballinamore to Aghoo West (1.6 km).

The footprint of the dismantled railway consists of a mix of paved local road, farm track, embankment and cutaway. In some sections the current land use of the railway line has been subsumed into the surrounding landscape and is used as pasture or gardens or is overgrown. The original boundaries are generally well-defined throughout by hedgerows, fencelines and embankments.

During operation, the Project will create a national and international attraction in the region and establish a significant tourism investment. The proposed Greenway has the potential to appeal to regular cyclists, tourists and recreational users. Increased volumes of walking and cycling trips to work would result in direct health and environmental benefits. The Greenway would link towns, heritage sites, employment centres and local amenities.

The construction of the Project will be phased as funding is made available. Access to the works will make use of existing public roads and private tracks. Lighting on the Project will be limited to urban areas.

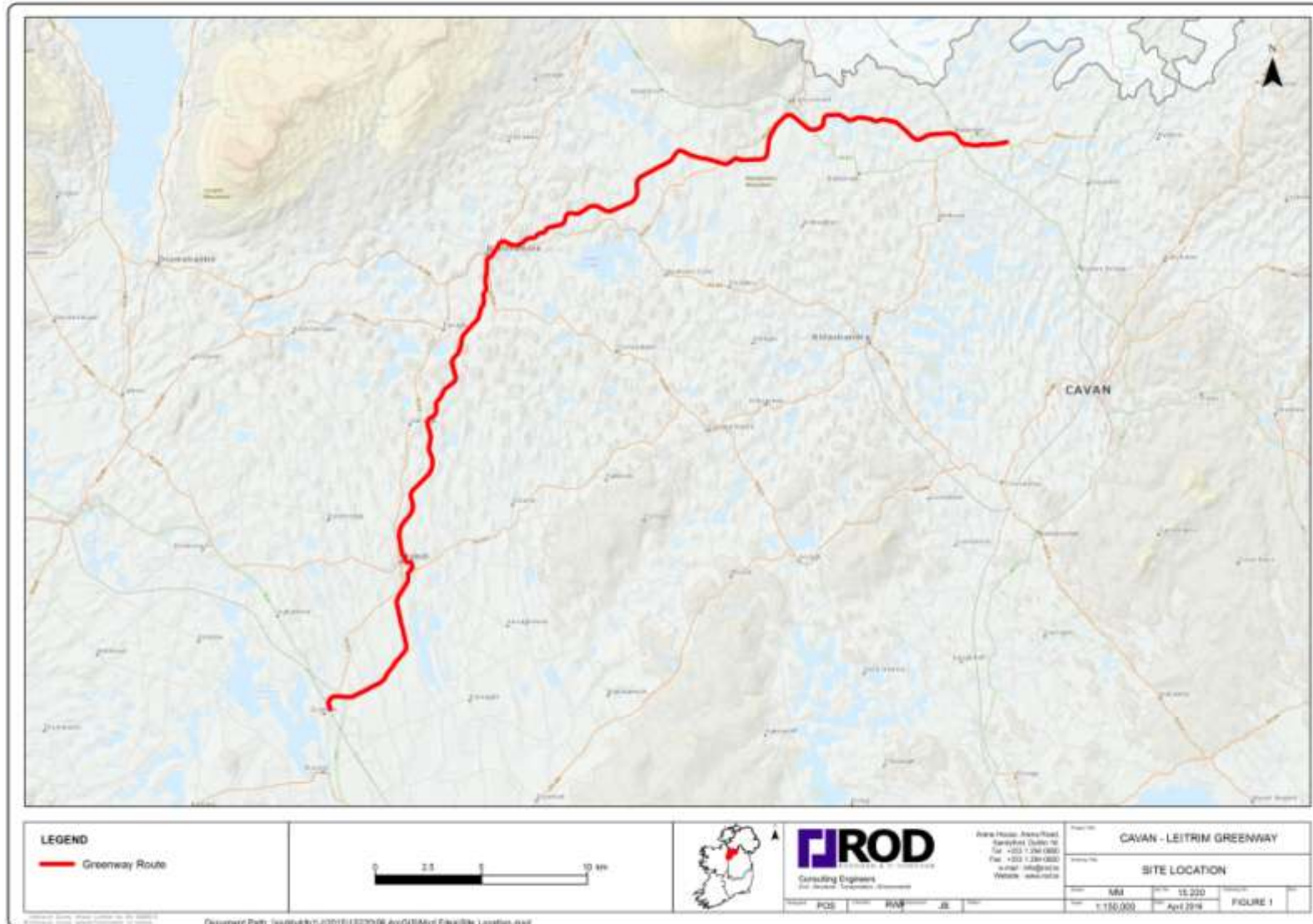


Figure 1. Site Location

3.2 Principal Features of Proposed Development

The Project will be designed in accordance with the NRA Project Management Guidelines, the Project Appraisal Guidelines and the suite of NRA Environmental Assessment and Construction Guidelines. The geometric design of the development is governed by the NRA Design Manual for Roads and Bridges (DMRB).

The Project includes the following principal elements:

- Site clearance of a 5 m envelope, *i.e.* removal of vegetation;
- Fencing of the site;
- Removal of soil to a maximum depth of 500 mm, depending on ground conditions;
- Improvements to the dismantled railway line through the provision of a suitable surface, *i.e.* quarry dust, surface dressing or asphaltic cement, depending on local conditions for pedestrian and cyclists use;
- Improvements to existing track (surface dress) between public roads connecting to the Greenway;
- Provision of traffic safety measures and signage to facilitate safe pedestrian and cycling crossings at bridges and public roads;
- Provision of access controls (pedestrian/cyclist-friendly gates) road makings, traffic calming measures; and,
- Provision of safety railings on bridges.

4. EIA SCREENING PROCESS

4.1 Introduction

This EIA Screening Report has been prepared by ROD on behalf of Cavan County Council.

This report documents the environmental effects that the Project could potentially have on the receiving environment.

Furthermore, this report has been prepared having regard to the following documents:

- Department of the Environment, Heritage and Local Government (August 2003) Environmental Impact Assessment (EIA) Guidelines for Consent Authorities regarding Sub-threshold Development;
- National Roads Authority (2008), Environmental Impact of National Road Schemes – A Practical Guide (Revision 1, November 2008);
- Director General Environment – European Commission (June 2001), Guidance on EIA Screening; and
- Environmental Protection Agency (March 2002), Guidelines on the Information to be Contained in Environmental Impact Statements.

4.2 Relevant Legislation

4.2.1 Legislation

EIA requirements derive from Council Directive 85/337/EEC (as amended by Directives 97/11/EC, 2003/35/EC and 2009/31/EC) and as codified and replaced by Directive 2011/92/EU of the European Parliament and the Council on the assessment of the effects of certain public and private projects on the environment (and as amended in turn by Directive 2014/52/EU).

The legislative requirements which deem whether an EIA is mandatory for a project are outlined in Schedule 5 of the Planning and Development Regulations 2001- 2015.

All Projects can be placed into one of the following two categories:

- those that exceed the thresholds laid down and therefore have a mandatory requirement to prepare an EIS; and
- those projects that are sub-threshold and must be assessed on a case-by-case basis to determine whether or not they are likely to have significant effects on the environment.

4.3 Methodology

4.3.1 Introduction

Screening is the process of deciding whether a development requires an EIA. The mandatory and discretionary provisions within Planning and Development Regulations 2001–2015 allow the requirement for an EIA to be determined.

The methodology for screening developments was based on the following documents:

- Environmental Impact Assessment (EIA), Guidance for Consent Authorities regarding Sub-threshold Development (DoEHLG, 2003);
- Environmental Impact Assessment of National Road Schemes – A Practical Guide (NRA, 2008); and
- The European Commission Guidelines on EIA Screening (June 2001).

The European Commission Guidelines on EIA Screening (June 2001) provide a flow diagram of the screening process and this is the process generally followed in this Screening report (see Figure 4.1).

4.4 Mandatory EIA

The Project does not meet the thresholds to require a mandatory EIA. The legislative requirements which deem whether an EIA is mandatory for a project are outlined in Schedule 5 of the Planning and Development Regulations 2001-2015.

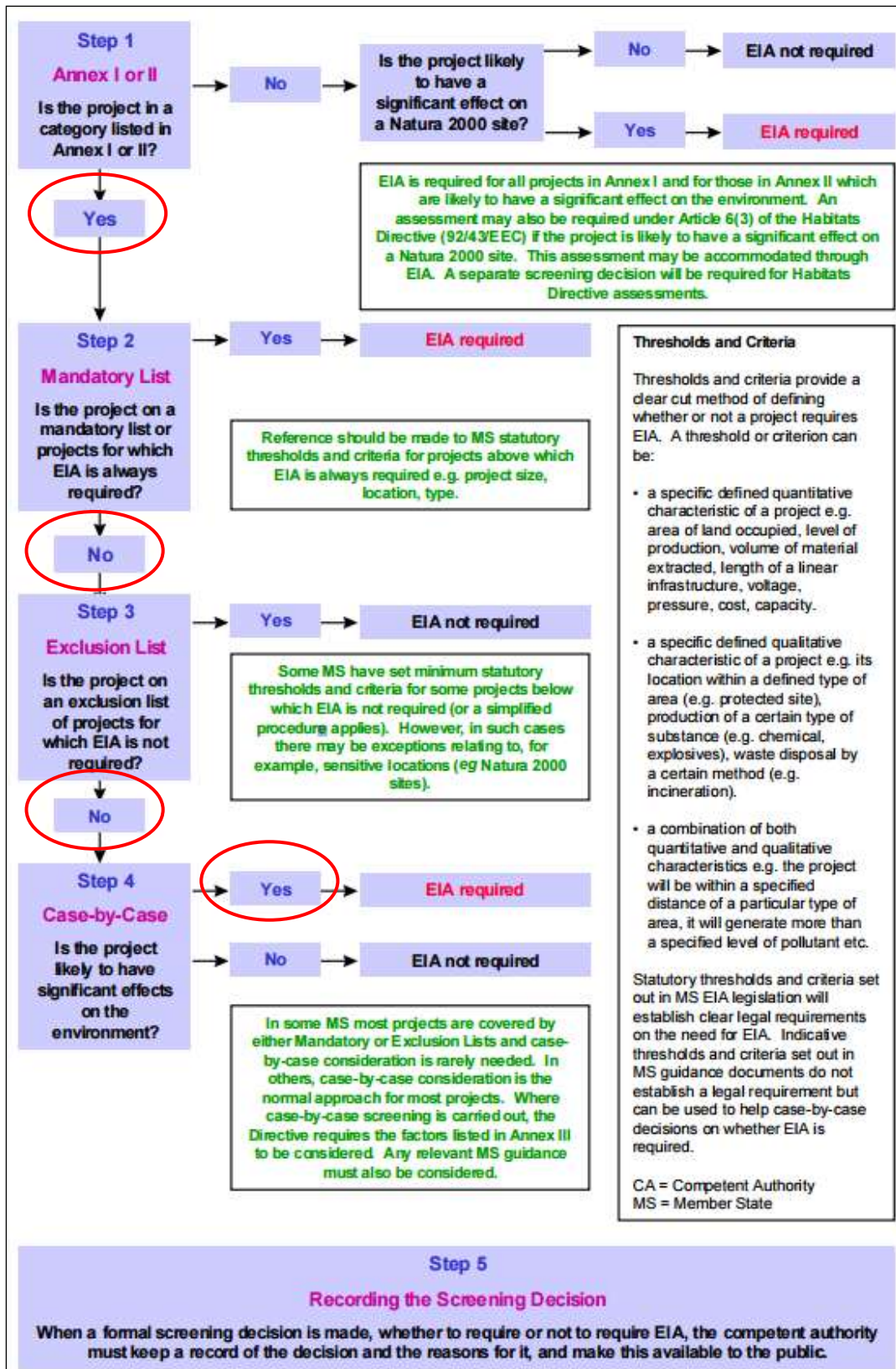


Figure 4.1 The Screening Process (Source: European Commission Guidelines on EIA Screening (June 2001))

4.5 Sub-Threshold Development

Where a decision is being made on whether a proposed development would or would not be likely to have significant effects on the environment, regard must be given to the criteria specified for the purposes of Article 27 of the European Communities (Environmental Impact Assessment) Regulations, 1989 (as amended).

The Article 27 screening criteria are grouped into three categories:

- (i) Characteristics of the Proposed Development,
- (ii) Location of the Proposed Development and,
- (iii) Characteristics of Potential Impacts.

Additionally, the Screening process can be aided using the European Commission publication, Guidance on EIA Screening (June 2001) checklists, particularly the "Screening Checklist" (Annex 1).

The criteria associated with each category, *i.e.* the criteria that must be taken into account when making Screening decisions on a case-by-case basis, is presented in Table 4.1 (below). This has been considered in the context of the Project, and a description of the aspects of the environment likely to be significantly affected by the project are outlined in Sections 4.6, 4.7 and 4.8.

Table 4.1 Article 27 Screening Criteria for Determining Likely Significant Effects

<p>1.Characteristics of proposed development</p> <p>The characteristics of proposed development, in particular:</p> <ul style="list-style-type: none"> • the size of the proposed development, • the cumulation with other proposed development, • the use of natural resources, • the production of waste, • pollution and nuisances, • the risk of accidents, having regard to substances or technologies used.
<p>2. Location of proposed development</p> <ul style="list-style-type: none"> • The environmental sensitivity of geographical areas likely to be affected by proposed development, having regard in particular to: <ul style="list-style-type: none"> • the existing land use, • the relative abundance, quality and regenerative capacity of natural resources in the area, • the absorption capacity of the natural environment, paying particular attention to the following areas: <ol style="list-style-type: none"> (a) wetlands, (b) coastal zones, (c) mountain and forest areas, (d) nature reserves and parks, (e) areas classified or protected under legislation, including special protection areas designated pursuant to Directives 79/409/EEC and 92/43/EEC, (f) areas in which the environmental quality standards laid down in legislation of the EU have already been exceeded, (g) densely populated areas, (h) landscapes of historical, cultural or archaeological significance.
<p>3. Characteristics of potential impacts</p> <p>The potential significant effects of proposed development in relation to criteria set out under</p>

paragraphs 1 and 2 above, and having regard in particular to:

- the extent of the impact (geographical area and size of the affected population),
- the transfrontier nature of the impact,
- the magnitude and complexity of the impact,
- the probability of the impact,
- the duration, frequency and reversibility of the impact.

4.6 Characteristics of the Proposed Development

4.6.1 Cumulation with Other Projects

A number of searches in relation to plans and projects that may have the potential to result in cumulative impacts have been undertaken. Data sources included the following:

- Cavan County Council Website;
- An Bord Pleanála Website (Planning Searches);
- Web Search for major infrastructure projects in Co. Cavan;
- Cavan County Development Plan 2014–2020;

The searches revealed no large-scale projects that have the potential to result in likely significant cumulative impacts. The recent planning applications shown on the Cavan County Council website in the vicinity of the Project were small in scale and domestic.

4.6.2 Use of Natural Resources

Whilst exact quantities of materials required have not been determined at this stage, the amount of aggregates that will be used during construction phase is likely to be small.

4.6.3 Production of Waste

Small quantities of unsuitable material will be excavated and may not be reused during the construction. Whilst the exact amount of this unsuitable material has not been evaluated, any waste produced as part of the Project will be dealt with in a sustainable manner and in accordance with all relevant environmental guidance and policy documents.

4.6.4 Pollution and Nuisances

During construction, polluting material has the potential to cause environmental effects, however the likelihood and severity of these effects will be minimised through compliance with the NRA Environmental and Construction Guidelines and the employment of construction management best practice. During the construction stage, temporary impacts will be experienced by those property owners along the Project and those road users on the existing network.

During the operational phase, there will be no increase in noise and vibration levels or air quality emissions along the route. There is to be a reduction in emissions in urban areas as commuters make use of the Project.

4.6.5 Risk of Accidents

The risk of accidents associated with this development would not cause unusual, significant or adverse effects of a type that would, in themselves, require an EIA.

During operation, earth bunds or a similar means of trapping surface water run-off will be constructed as required to contain run-off and channel it to a silt trap before discharge into watercourses.

Additionally, a Traffic Management Plan will consider the risk of road traffic accidents during the construction phase. It is expected that the risk of accidents would be low during the construction of the Project considering standard construction practices would be used, the scale of the Project would be small and no unusual substances or technologies would be used. The proposed development would provide a safer and more accessible facility for cyclists and pedestrians in comparison with the current environment in the region.

4.7 Location of Project

The second criterion included in Annex III of the EIA Directive relates to the environmental sensitivity of geographical areas likely to be affected by the proposed development, having regard in particular to;

- The existing land use;
- The relative abundance, quality and regenerative capacity of natural resources in the area; and
- The absorptive capacity of the natural environment.

The following sections address each of the above points.

4.7.1 Existing Land Use

The footprint of the dismantled railway consists of a mix of paved local road, farm track, embankment and cutaway. In some sections the current land use of the railway line has been subsumed into the surrounding landscape and is used as pasture or gardens or is overgrown. The original boundaries are generally well-defined throughout by hedgerows, fencelines and embankments.

Approximately 7.5 km of the Project may deviate from the footprint of the dismantled railway and travel on existing roads deemed suitable for cycle traffic, including existing mixed-use routes such as the Kingfisher Trail (1.1 km) and on canal-side greenways (constructed and managed by Waterways Ireland) that connect Ballyconnell to Ballyheady (3.5 km) and Ballinamore to Aghoo West (1.6 km). Approximately 1 km of the disused railway is already paved and used as local road.

Land use along the length of the Project is predominantly agricultural land with several lakes as well as some areas of bog and forestry. The Lough Oughter and Associated Loughs SAC lies in the east of the Project between Ballyconnell and Belturbet. This site is designated for the Natural Eutrophic lakes with *Magnopotamion* or *Hydrocharition*-type vegetation, Bog woodland and Otter.

The main population centres along the proposed development are Belturbet, Ballyconnell, Ballinamore, Mohill and Dromod.

4.7.2 Abundance, Quality and Regenerative Capacity of Natural Resources

The proposed Greenway will have minimum impact on the quality and regenerative capacity of natural resources in the area. Much of the disused railway line is clear of vegetation. However, sensitive landscape design will be incorporated into the overall project design which will assist in replacing any vegetation loss and avoid or reduce potential impacts where possible. A 5 m wide corridor will be lost as part of the development. However, this land is of little or no ecological value. An ecological survey of the study area was carried out and the lands are not considered to be of high quality or of nature conservation importance.

4.7.3 The Absorptive Capacity of the Natural Environment

4.7.3.1 Overview

The rivers and lakes along the existing alignment are located within the North Western River Basin and Shannon International River Basin District (SIRBD). The water quality in each catchment area been classified by the Water Framework Directive as Poor status between Belturbet and Drumanny Heights, Good between Mullanafin and Templeport, Moderate between Gortaclogher and Aughawillin, Good between Lisgruddy and Drumcullion, Poor between Glennanbeg and Drumacattan, Good between Drumroosk South and Annaghderg Lower, Moderate between Annaghderg Lower and Drumcroy and Poor between Gortfadda and Dromod. The groundwater classification for this region is classified as Good.

The EU Water Framework Directive (2000/60/EC) requires all Member States to protect and improve water quality in all waters so that we achieve good ecological status by 2015 or, at the latest, by 2027. It was given legal effect in Ireland by the European Communities (Water Policy) Regulations 2003 (S.I. No. 722 of 2003). The current Risk category between Belturbet and Killyryan is 1A (will not achieve status), between Killyryan and Ballinamore the status is 2A (expected to achieve good status), Between Ballinamore and Drumcattan the status is 1A (will not

achieve status), Between Drumcattan and Dromod the status is 2A (expected to achieve good status).

The geology on the site is identified by the Geological Survey of Ireland (GSI) as Carboniferous Limestones, Shales and Mudstones. There are six aquifers along the scheme, five of which are classified as a Locally Important Aquifer and one as a Regionally Important Aquifer. During the construction phase due to potential pollution incidences, measures must be put in place to protect affected water bodies and to maintain or improve the water quality status.

4.7.3.2 Wetlands and Watercourses

The Project crosses at least 40 rivers and tributaries including the Erne, Rag, Blackwater and Woodford Rivers. The majority of these crossings will take place on existing bridges. At watercourse crossings where the original rail bridges have been removed, new bridges will be constructed taking measures to avoid negative impacts to watercourses. The proposed development also passes through the Corracramph Bog NHA between Dromod and Deereen.

The proposed development also passes adjacent ten Loughs and their associated wetlands. Some of these areas are poorly drained.

Watercourses can be sensitive to pollution, particularly to the potential increased levels of suspended solids during the construction stage. Suspended solids (silt) affect aquatic life particularly larger animals such as fish, most critically when it settles in spawning areas. Other impacts include:

- physical obstructions to upstream and downstream migration both during and after construction;
- disturbance of spawning beds during construction (timing of works is critical); and,
- point-source pollution incidents during construction

Potential impacts to the wetlands are considered low based on the nature of the Project and the existence of the disused railway embankment and associated bridges. Therefore, there will be no wetlands and/or watercourses significantly affected by the Project.

4.7.3.3 Coastal Zones

There are no coastal zones affected by the Project.

4.7.3.4 Mountain and Forest Areas

There are no mountain ranges in the study area. However, there are small areas of forestry. In general, there are no mature trees on the disused railway embankment. Therefore, there will be no areas of mountains and insignificant areas of forest affected by the Project.

4.7.3.5 Nature Reserves and Parks

There are no nature reserves or parks affected by the Project.

4.7.3.6 Nationally Designated Sites

The following is a list of nationally designated sites in proximity to the Project:

- Corracramph Bog NHA

- Cashel Bog (Leitrim) NHA
- Lough Oughter and Associated Loughs pNHA

The EIA Screening process assesses likely significant effects on these nationally designated sites. During the route selection stage, avoidance of these sites has been the primary mitigation measure. However, where necessary, mitigation and control measures will be adopted to ensure avoidance of impacts on these sites.

4.7.3.7 European Sites

The following European site is in close proximity to the Project:

- Lough Oughter and Associated Loughs SAC

The location of this European site within the Study Area is presented in Appendix 2, Figure 2.

Mitigation and control measures will be adopted to ensure avoidance of impacts on the site, the qualifying interests and the conservation objectives as identified in the Screening for Appropriate Assessment.

4.7.3.8 Environmental Quality Standards

There are no known areas in which the environmental quality standards shall be exceeded.

4.7.3.9 Densely Populated Areas

There are no densely populated areas affected by the proposed development. The main areas of population within the study area are Belturbet, Ballyconnell, Ballinamore, Mohill and Dromod, all of which will benefit from improved environmental conditions as a result of a decrease in vehicular traffic. All urban centres on the route will be accessible from the Project.

4.7.3.10 Landscapes of Historical, Cultural or Archaeological Significance

The surrounding area is rich in archaeological, architectural and cultural heritage features. The archaeological record shows that the area has been the focus of human habitation and ritual activity since prehistory and well-preserved archaeological landscapes and structures, including round towers, high crosses, burial sites, ringforts, tower houses, fulacht fia, raths, court tombs, wedge tombs, cairns, earthworks, abbeys and souterraines.

The Project will travel on the footprint of the disused Cavan and Leitrim Railway line and local roads, therefore no archaeological sites will be lost in the process. For this reason the proposed development will have no impact on any heritage assets.

4.7.3.11 Designated Focal Points/ Views

There is no Landscape Character Assessment contained within the Cavan County Development Plan 2014–2020. There are 17 listed scenic views in County Cavan. However, all are considered sufficiently removed from the proposed development so that there will not be a significant landscape or visual impact.

4.8 Characteristics of the Potential Impact

4.8.1 Extent of the Impact

The Project is approximately 54 km in length and 3 m in width. The footprint of the Project will be slightly larger to include for a 1 m verge on both sides of the greenway. Existing embankments, cutaways and access roads will be utilised.

The population affected by the proposed development is relatively small due to the rural nature of the receiving environment and the routes remoteness from major urban areas.

4.8.2 Transfrontier Nature of the Impact

There are no transfrontier impacts associated with the Project.

4.8.3 Magnitude and Complexity of the Impact

Human Beings: During construction, temporary negative impacts are predicted due to noise, dust and visual impacts. These impacts are not considered to be significant. Community severance and land and property acquisition will be kept to a minimum and access to existing roads will be maintained.

Ecology: The NRA Environmental Assessment and Construction Guidelines will be followed to avoid and minimise impacts where possible and specific mitigation measures will be adhered to during the development of the Project in order to reduce the impacts on all ecological receptors, but most particularly the SAC. Mitigation and control measures will be adopted to ensure avoidance of impacts on the SAC, its qualifying interests and conservation objectives, as identified in the Appropriate Assessment Screening.

Soils and Geology: Natural material, construction rubble and general waste will be generated during works. However, given the scale and size of the project, this is not considered to be significant. Any waste produced as part of the project will be dealt with in a sustainable manner and in accordance with all relevant environmental guidance and policy documents. The production of any waste associated with the development will not cause unusual, significant or adverse effects of a type that would, singly or in combination, require an EIA.

Water: Significant impacts on water quality and in particular groundwater quality due to the presence of karst bedrock within the area are unlikely based on the scale and nature of the works including the presence of the existing railway foundations. Best practice standards, environmental guidelines and mitigation measures will be adhered to in order to avoid impacts on water quality.

Air and Climate: No significant impact is anticipated to air and climate as there will no vehicular traffic on the Project.

Noise and Vibration: During the construction there will be temporary disruption to existing traffic and to local land-owners/tenants and property owners/tenants. However, this will be kept to a minimum and will be subject to a Traffic Management Plan that will be prepared by the construction contractor for agreement with Cavan County Council.

There will be no significant increase in noise or vibration emissions during the operation of the scheme. There will be some minor increased emissions during the

construction stage which will be subject to the normal controls; these emissions will, however, be temporary.

Landscape: The proposed development follows the route of the dismantled railway line and existing roads. There are no listed scenic views along the proposed route and therefore will no negative impact on the surround landscape.

Archaeology, Architecture and Cultural Heritage:

The Project will follow the route of the dismantled Cavan and Leitrim Railway line and will use existing access routes. Therefore, there is no significant risk of negative impacts on archaeological, architectural and cultural heritage.

Interactions: No significant impacts on the surrounding environment have been identified from the interactions between the above environmental factors.

Overall: It is anticipated that there will be no notable impacts on the receiving environment or neighbouring areas of environmental significance.

4.8.4 Probability of the Impact

The NRA Environmental Assessment and Construction Guidelines and specific mitigation measures will be adhered to during the development of the Project in order to reduce the probability of impacts on the surrounding environment.

The probability of any environmental impacts is slight/none. The magnitude of any impact is considered minor and temporary in nature. There is no long-term environmental impact.

4.8.5 Duration, Frequency and Reversibility of the Impact

The majority of the impacts are associated with the construction phase and are temporary in nature. The loss of habitat is the only exception to this. However, the type of habitat present on the embankment is not thought to be significant as the area is mainly comprised of agricultural land.

5. CONCLUSION

This screening report has been carried out in accordance with a methodology that is based on *Environmental Impact Assessment (EIA), Guidance for Consent Authorities regarding Sub-threshold Development* (EPA, 2003), *the Environmental Impact Assessment of National Road Schemes – A Practical Guide* (NRA, 2008) and *The European Commission Guidelines on EIA Screening* (June 2001).

Through this Screening process, it is concluded that the proposed greenway development does not exceed any of the thresholds that trigger the mandatory requirement for EIA. As the proposed development is sub-threshold, it has, therefore, been assessed on a case-by-case basis in accordance with the Criteria for Determining Whether or Not a Development Would or Would Not be Likely to have Significant Effects on the Environment as specified in Article 27 of the European Communities (Environmental Impact Assessment) Regulations, 1989.

Having regard to the Article 27 and the guidance contained in the Department's *Environmental Impact Assessment Guidance for Consent Authorities regarding Sub-Threshold Development* (2003), and in particular: -

- The location of the project;
- The scale and extent of the project;
- The characteristics of the potential impacts; and
- The inherent measures to be adopted by the Council in the construction and operation of the proposal with regard to surface water runoff and management of construction.

It is considered that the environmental effects arising from the project will generally be localised, minor impacts and occur principally during the construction period.

Recommendation to Cavan County Council

Based on the information gathered during this study, Roughan & O'Donovan recommends that Cavan County Council determine that the proposed Greenway development would not be likely to have significant effects on the environment and that the project does not require an Environmental Impact Assessment.

Although the need for full Appropriate Assessment has been screened out by the AA Screening Report, due to the proximity of the proposed scheme to the Lough Oughter and Associated Loughs SAC and any minor impacts that may occur on the species that may use the area, an Environmental Impact Report will be completed and submitted alongside any future planning application to ensure that all sensitive environmental receptors, including those outside of the Lough Oughter and Associated Loughs SAC are considered.

Formal Determination by Cavan County Council

In accordance with Section 2 of '*Environmental Impact Assessment of National Road Schemes – A Practical Guide*' which outlines the process for sub-threshold road schemes, the findings of this screening process shall be referred to the Local Authority to determine whether an EIS is required for the development.

APPENDIX 1

EIA Screening Checklist

Questions to be Considered For further guidance on factors to be considered see the more detailed questions listed in the Scoping Guidance	Yes / No / ? Briefly Describe	Is this likely to result in a significant effect? Yes/No/? – Why?
1. Will construction, operation or decommissioning of the Project involve actions which will cause physical changes in the locality (topography, land use, changes in waterbodies, etc)?	Yes Construction of a 54 km long greenway in largely green-field environment.	No The route for the Project is a dismantled railway line with an existing embankment and associated boundaries.
2. Will construction or operation of the Project use natural resources such as land, water, materials or energy, especially any resources which are non-renewable or in short supply?	Yes. Land and natural resources will be required.	No Small amounts of material will be required for the construction of the Project and small amounts of unsuitable material will be excavated on the site.
3. Will the Project involve use, storage, transport, handling or production of substances or materials which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health?	Yes Concrete, bitumen, oils <i>etc.</i> will be used during construction.	No Construction best practice and guidance will be followed in the construction of the Project.
4. Will the Project produce solid wastes during construction or operation or decommissioning?	Yes Unsuitable material will be excavated during construction.	No Small amounts of material will be excavated during the construction. However, much of this will be reusable on-site. Any waste produced as part of the project will be dealt with in a sustainable manner and in accordance with all relevant environmental guidance and policy documents.
5. Will the Project release pollutants or any hazardous, toxic or noxious substances to air?	Yes The construction phase will produce air pollutants.	No Construction traffic is not anticipated to create air pollution that will exceed permitted thresholds. There will be no vehicular access to the greenway during operation therefore there will be no increase in air pollutants.
6. Will the Project cause noise and vibration or release of light, heat energy or electromagnetic radiation?	Yes The construction phase will create noise and vibration and increase lightning in some rural areas.	No Construction traffic levels are not anticipated to create noise and vibration levels that will exceed permitted thresholds. There will be no vehicular access on the greenway during operation therefore there will be no increase in noise, vibration or lighting.

Questions to be Considered For further guidance on factors to be considered see the more detailed questions listed in the Scoping Guidance	Yes / No / ? Briefly Describe	Is this likely to result in a significant effect? Yes/No/? – Why?
7. Will the Project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater, coastal waters or the sea?	Yes The construction phase will have risk of pollutants entering surface and groundwater.	No The Project will be designed and constructed in accordance with the NRA EACG and other best practice guidelines. There will be no vehicular access to the greenway during operation therefore there will be no risk of pollutants entering surface and groundwater.
8. Will there be any risk of accidents during construction or operation of the Project which could affect human health or the environment?	Yes The construction phase will have risk of accidents leading to pollutants entering surface and groundwater.	No The Project will be designed and constructed in accordance with the NRA EACG and other best practice guidelines. There will be no vehicular access to the greenway during operation therefore there will be no risk of pollutants entering surface and groundwater.
9. Will the Project result in social changes, for example, in demography, traditional lifestyles, employment?	No	No
10. Are there any other factors which should be considered such as consequential development which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality	Yes There is potential for consequential development due to improved access to the area previously inaccessible.	No The Project will service cyclists and pedestrians only and therefore access to more rural areas will remain limited.
11. Are there any areas on or around the location which are protected under international or national or local legislation for their ecological, landscape, cultural or other value, which could be affected by the project?	Yes There is one European Site and archaeological sites of importance in proximity to the Project.	No The conclusion of the Screening for Appropriate Assessment was that a Natura Impact Statement is not required. The project will not result in the loss of any archaeological sites.

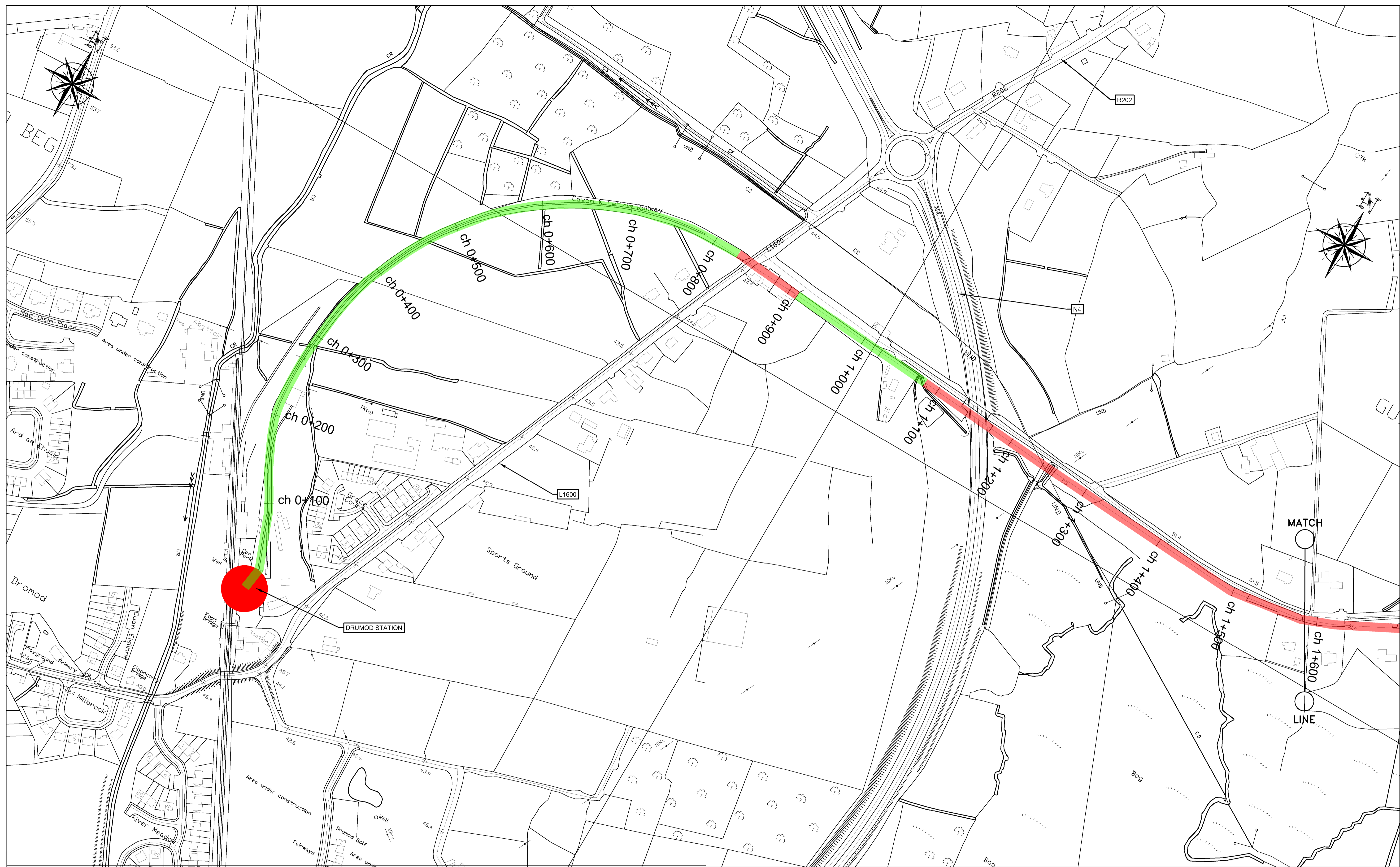
Questions to be Considered For further guidance on factors to be considered see the more detailed questions listed in the Scoping Guidance	Yes / No / ? Briefly Describe	Is this likely to result in a significant effect? Yes/No/? – Why?
12. Are there any other areas on or around the location which are important or sensitive for reasons of their ecology e.g. wetlands, watercourses or other waterbodies, the coastal zone, mountains, forests or woodlands, which could be affected by the project?	Yes As well as the protected sites, there are a number of sensitive wetlands and watercourses. The groundwater in the area is also an important resource to be protected from pollution.	No The Project will be designed and constructed in accordance with the NRA EACG and other best practice guidelines. The conclusion of the Screening for Appropriate Assessment was that a Natura Impact Statement is not required.
13. Are there any areas on or around the location which are used by protected, important or sensitive species of fauna or flora e.g. for breeding, nesting, foraging, resting, overwintering, migration, which could be affected by the project?	Yes The habitats within the corridor are suitable for use by species such as bats, badgers, otters, wintering birds and invertebrates.	No The Project will be designed and constructed in accordance with the NRA EACG and other best practice guidelines.
14. Are there any inland, coastal, marine or underground waters on or around the location which could be affected by the project?	Yes Sections of the Project are located in an area of karst.	No The Project will be designed and constructed in accordance with the NRA EACG. The risk of pollution is minimal based on the Project being constructed on an existing artificial embankment.
15. Are there any areas or features of high landscape or scenic value on or around the location which could be affected by the project?	No	No
16. Are there any routes or facilities on or around the location which are used by the public for access to recreation or other facilities, which could be affected by the project?	Yes The Project will include crossings of several roads along the route.	No Construction of the project will not involve any permanent road closures.
17. Are there any transport routes on or around the location which are susceptible to congestion or which cause environmental problems, which could be affected by the project?	No	No

Questions to be Considered For further guidance on factors to be considered see the more detailed questions listed in the Scoping Guidance	Yes / No / ? Briefly Describe	Is this likely to result in a significant effect? Yes/No/? – Why?
18. Is the project in a location where it is likely to be highly visible to many people?	No	No
19. Are there any areas or features of historic or cultural importance on or around the location which could be affected by the project?	No	No
20. Is the project located in a previously undeveloped area where there will be loss of greenfield land?	No	No
21. Are there existing land uses on or around the location e.g. homes, gardens, other private property, industry, commerce, recreation, public open space, community facilities, agriculture, forestry, tourism, mining or quarrying which could be affected by the project?	Yes Some of the dismantled railway land has been subsumed into the surrounding land including pasture, gardens and/ or overgrown.	No Gates will allow access across the Project to be maintained. The 5 m envelope of the project will ensure minimal impacts on existing land use.
22. Are there any plans for future land uses on or around the location which could be affected by the project?	No	No
23. Are there any areas on or around the location which are densely populated or built-up, which could be affected by the project?	No	No
24. Are there any areas on or around the location which are occupied by sensitive land uses e.g. hospitals, schools, places of worship, community facilities, which could be affected by the project?	No	No
25. Are there any areas on or around the location which contain important, high quality or scarce resources e.g. groundwater, surface waters, forestry, agriculture, fisheries, tourism, minerals, which could be affected by the project?	Yes The road crosses a number of salmonid watercourses and is adjacent to a number of lakes. Groundwater is a major source of drinking water in the area.	No The Project will be designed and constructed in accordance with the NRA EACG and other best practice guidelines. Watercourse crossings will be on existing bridges. During operation the risk of pollution during the operational phase is expected to be minimal due to the absence of vehicular traffic.

Questions to be Considered For further guidance on factors to be considered see the more detailed questions listed in the Scoping Guidance	Yes / No / ? Briefly Describe	Is this likely to result in a significant effect? Yes/No/? – Why?
26. Are there any areas on or around the location which are already subject to pollution or environmental damage e.g. where existing legal environmental standards are exceeded, which could be affected by the project?	No	No
27. Is the project location susceptible to earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions e.g. temperature inversions, fogs, severe winds, which could cause the project to present environmental problems?	No	No

APPENDIX 2

Drawings



No.	Revision	Date	By	Chkd	App'd
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	APPROVAL				
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Designated	Checked	Approved	Status
JB	JB	SMG	FEASIBILITY

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Project Title CAVAN - LEITRIM GREENWAY			
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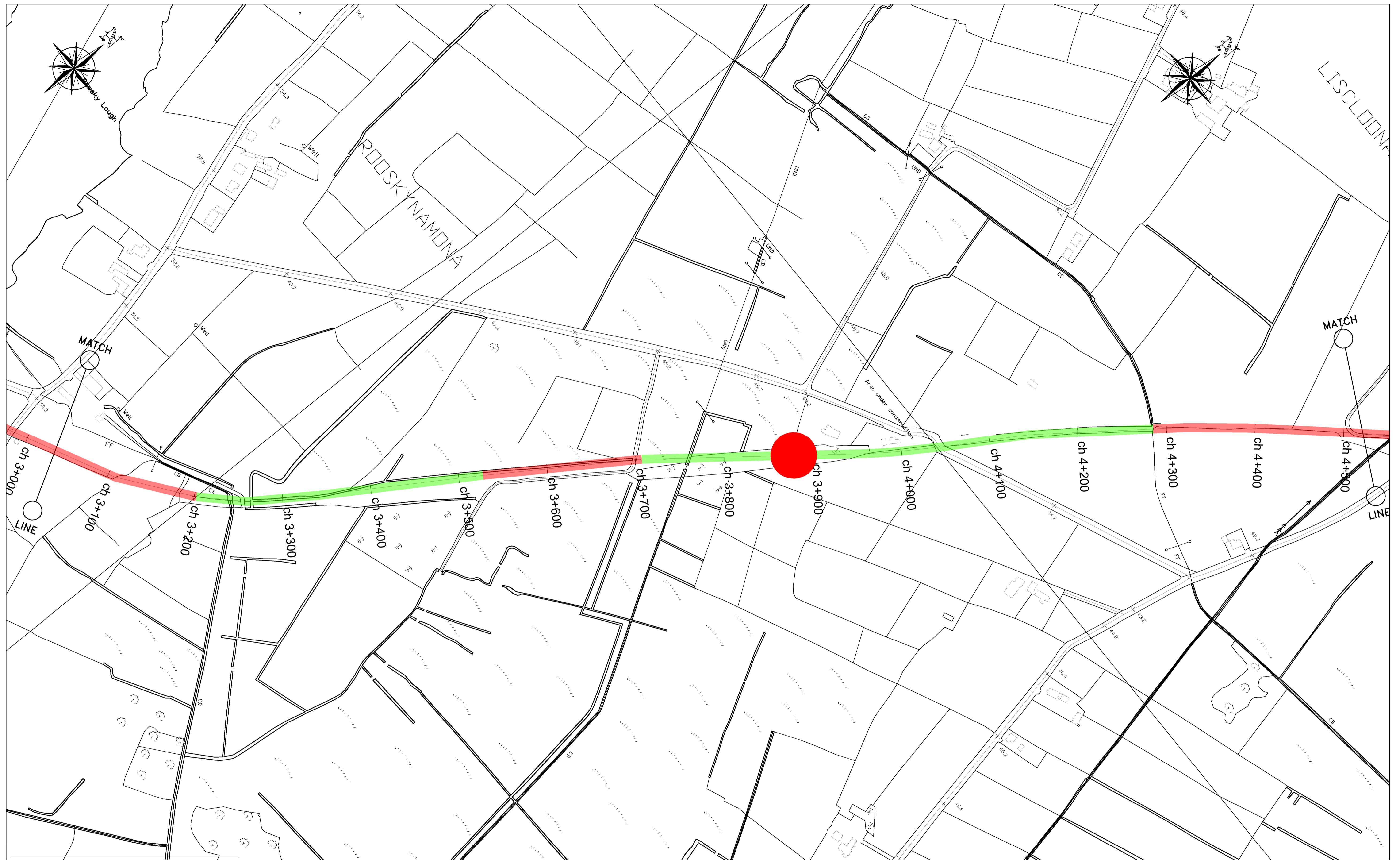
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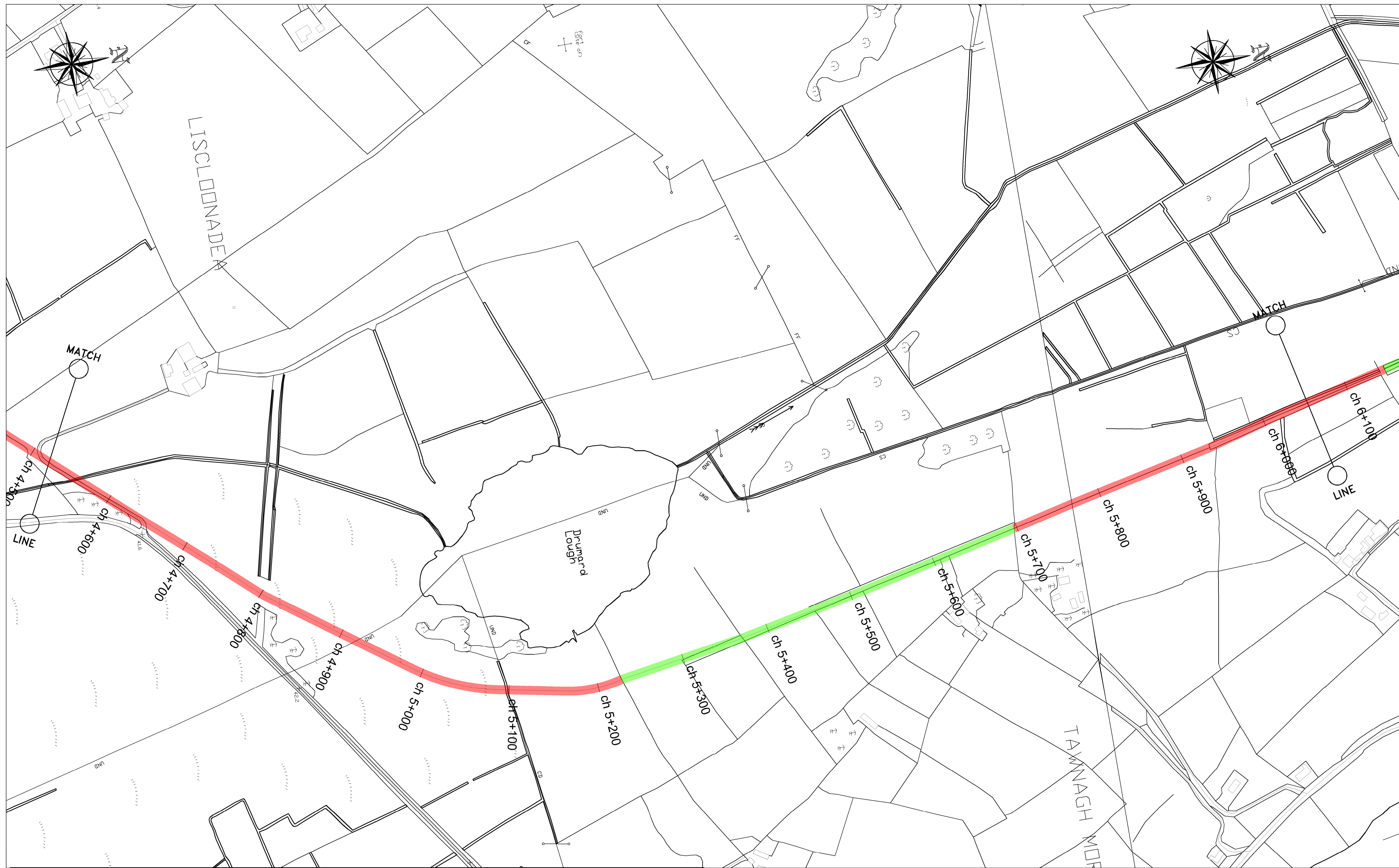
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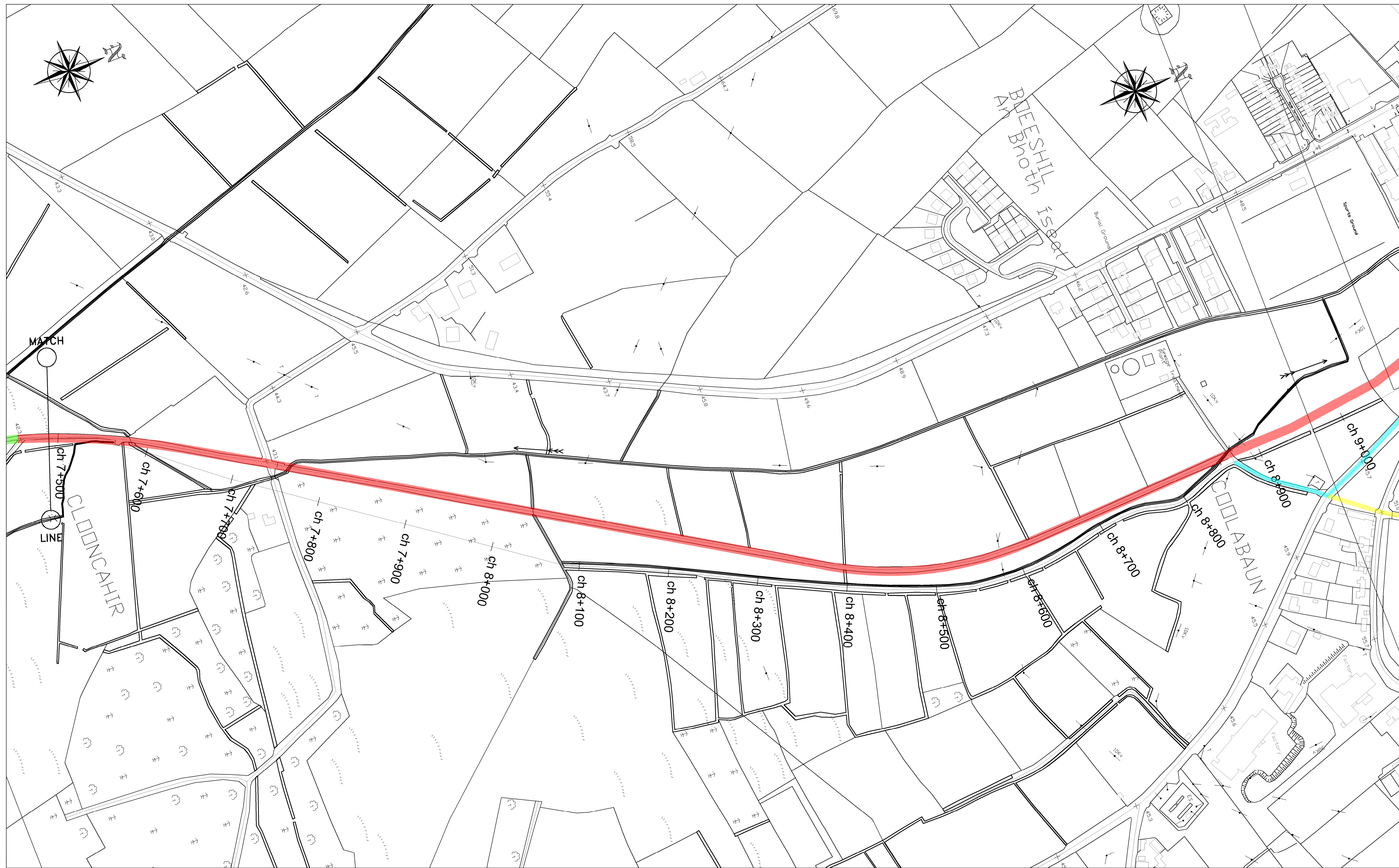


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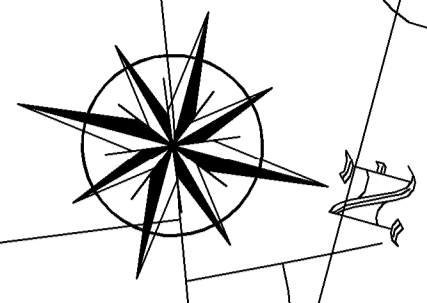
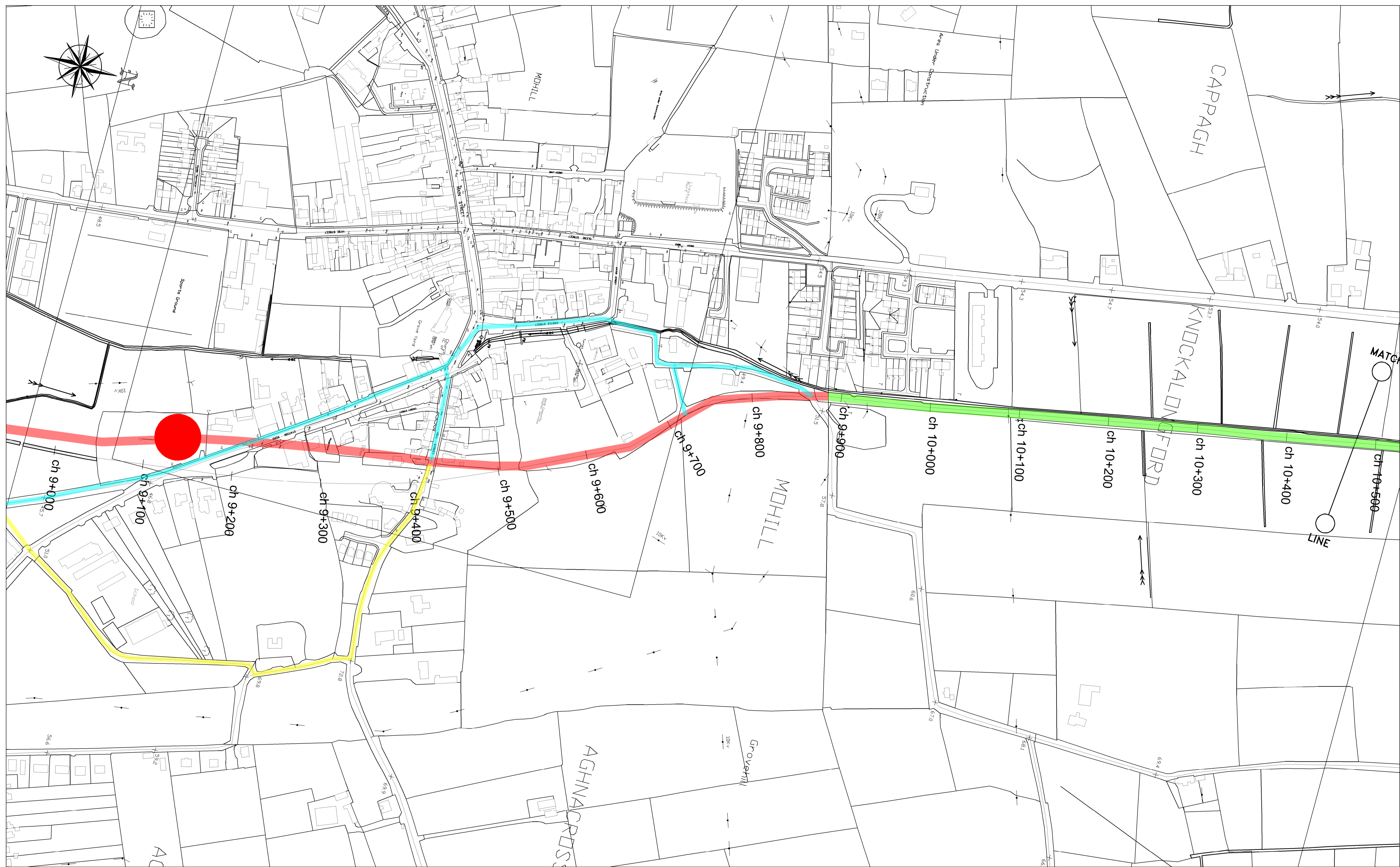


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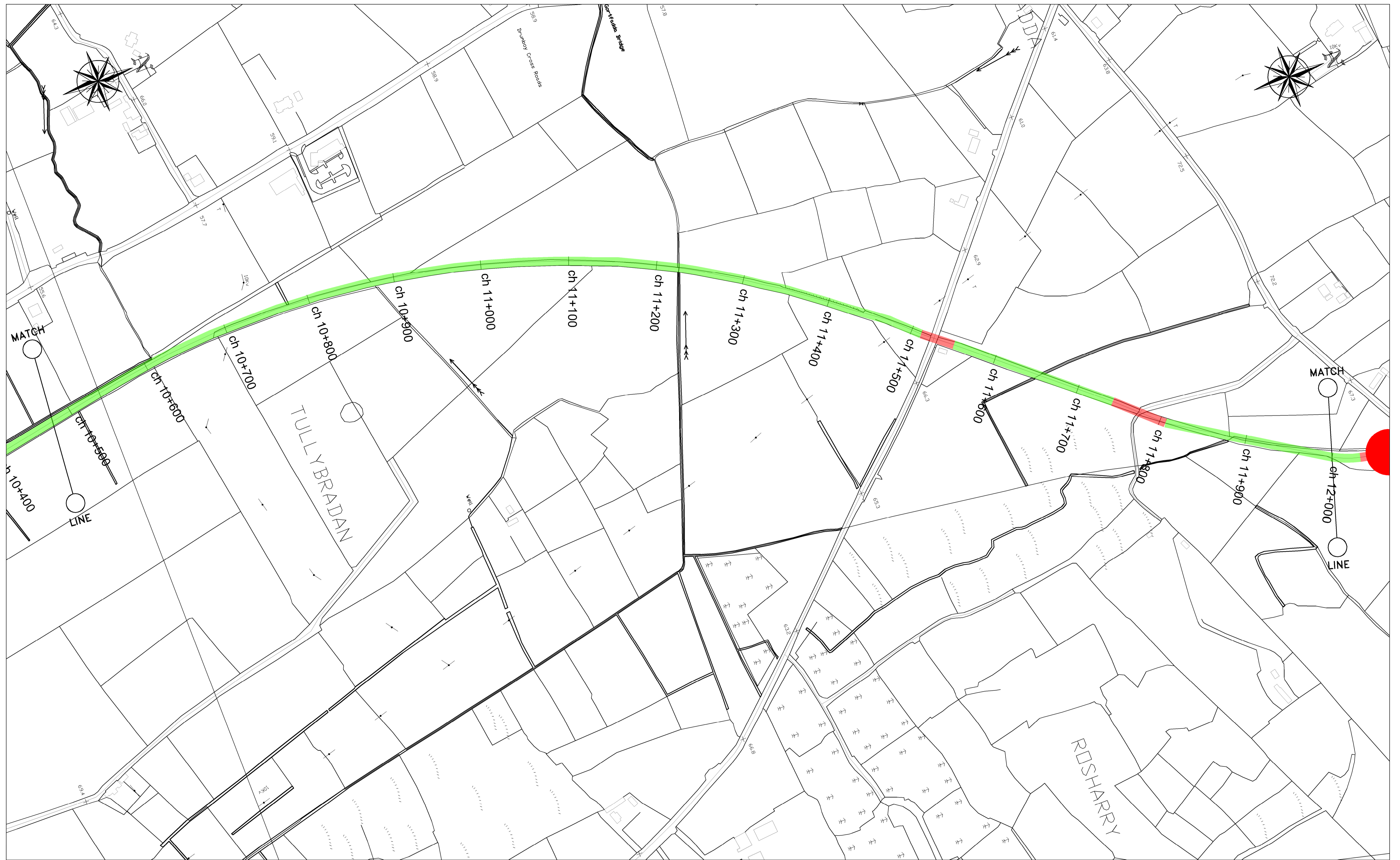


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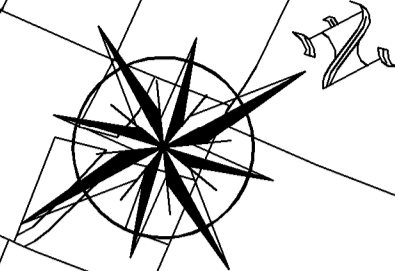
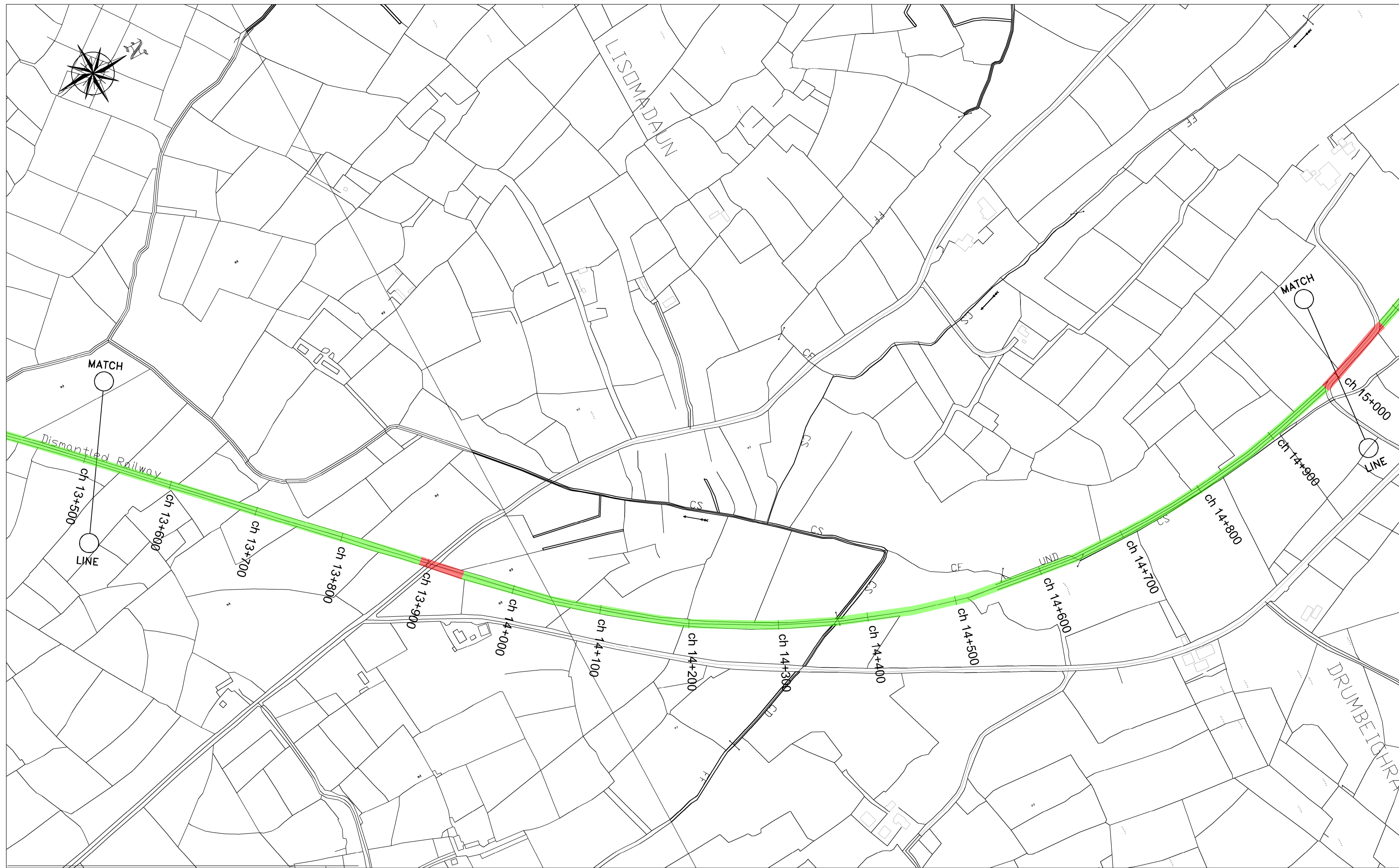


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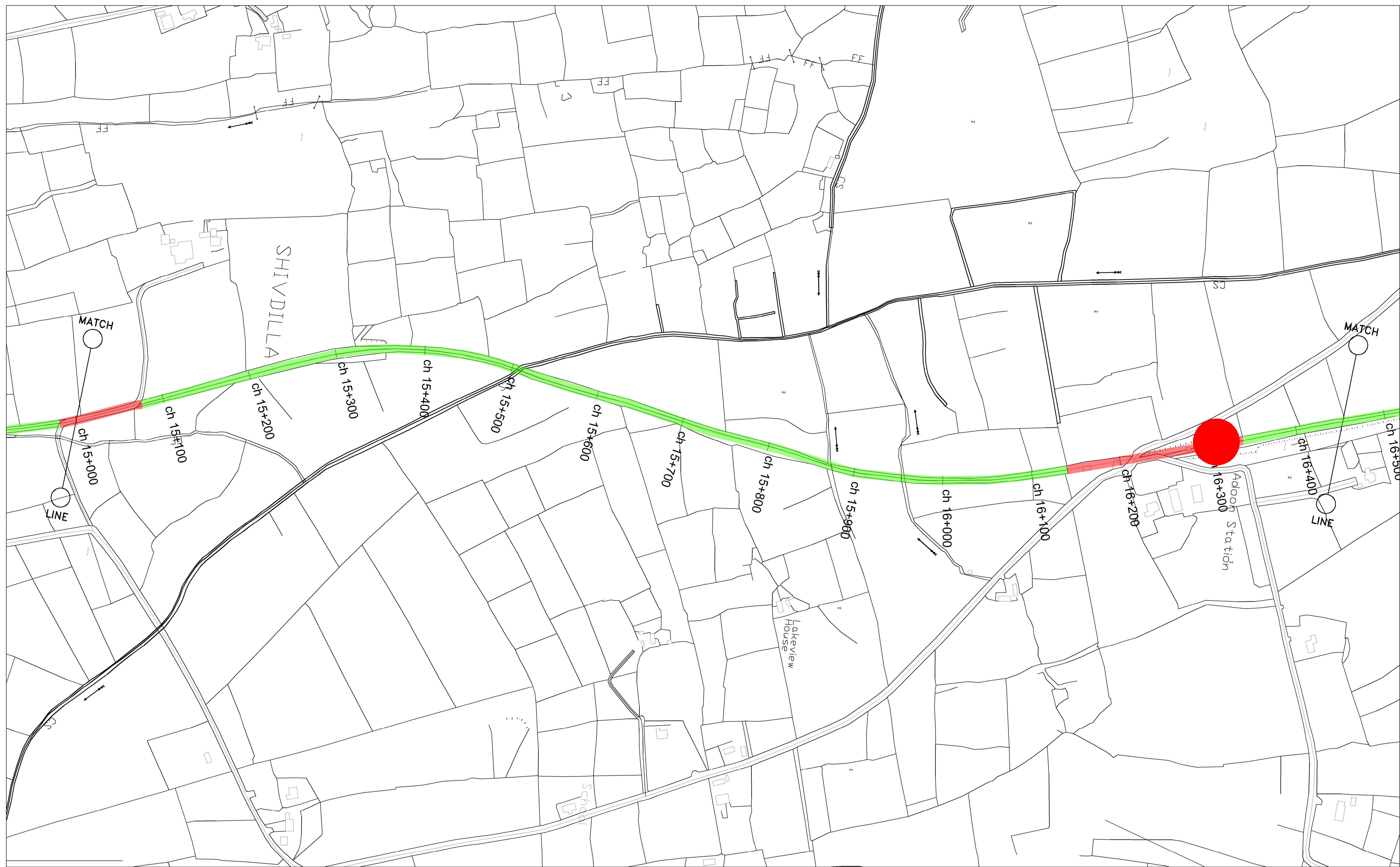


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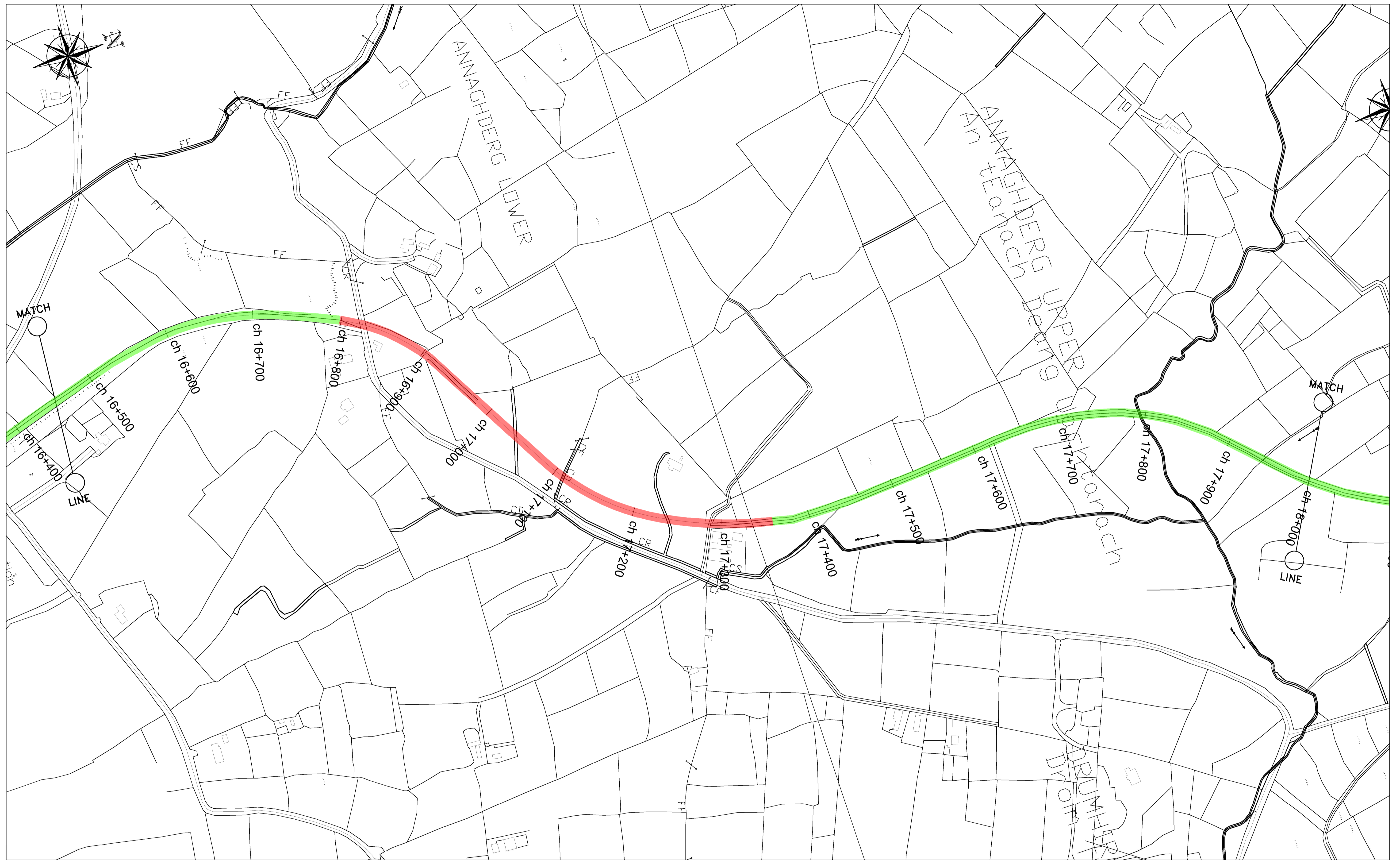


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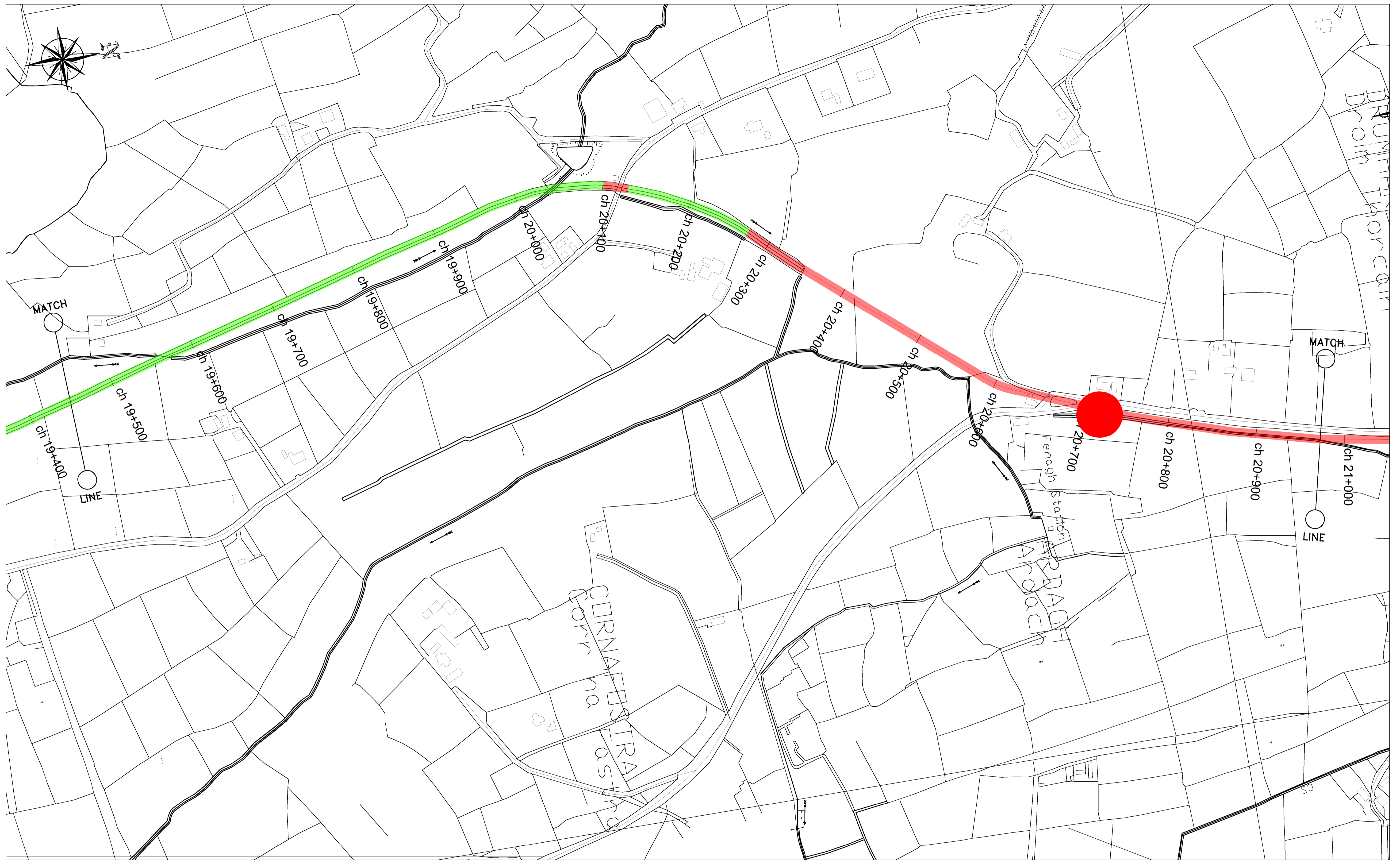
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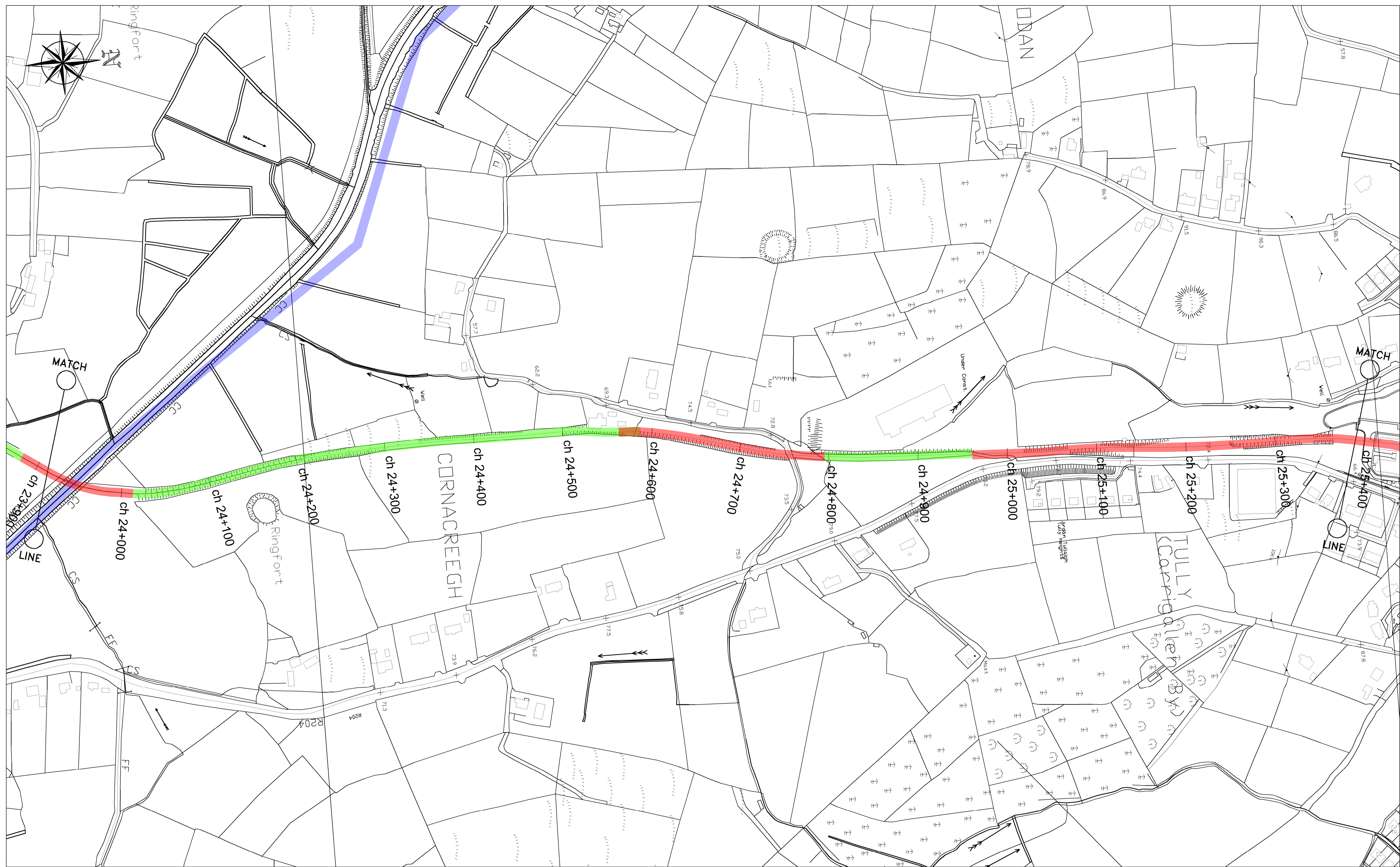


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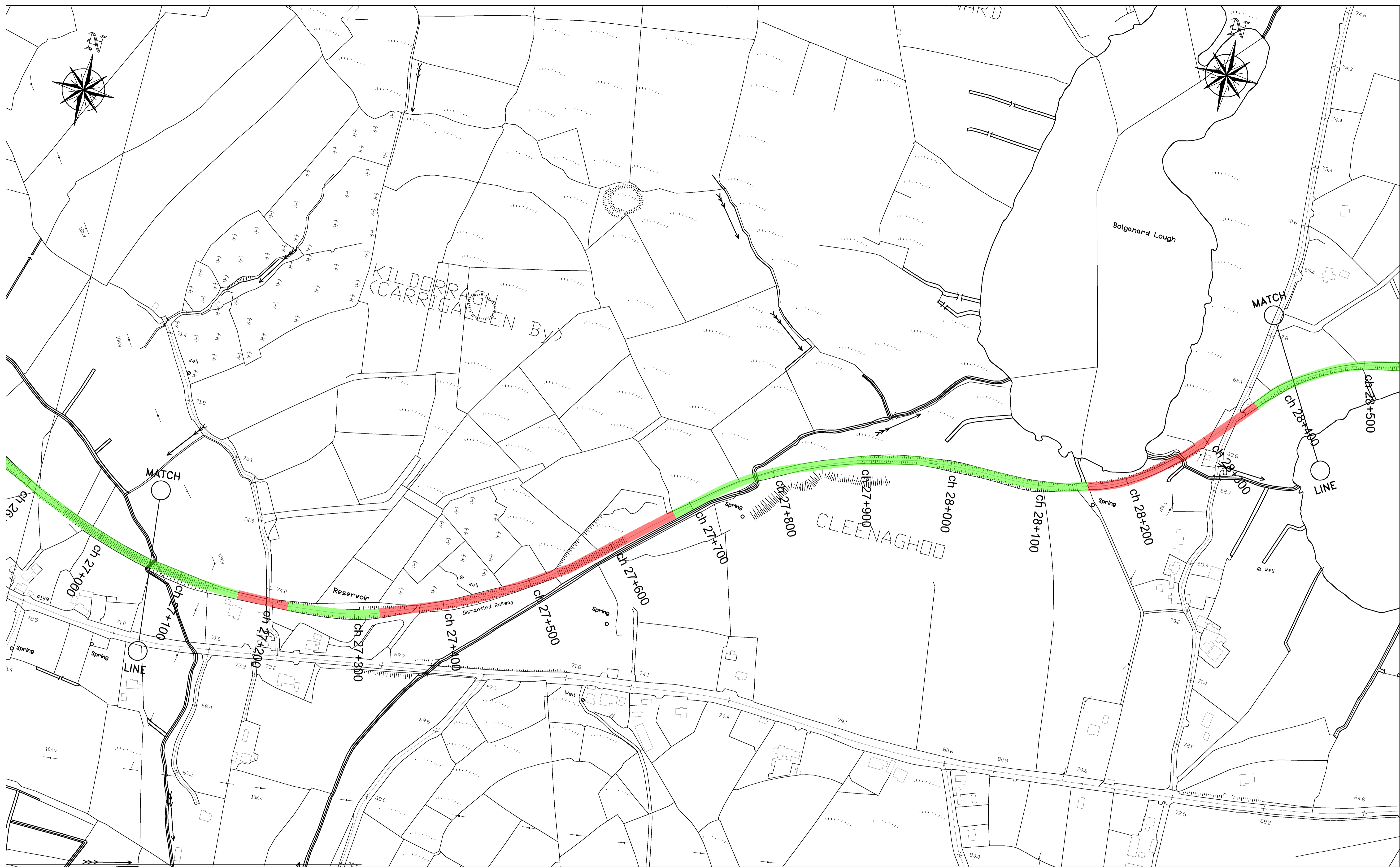


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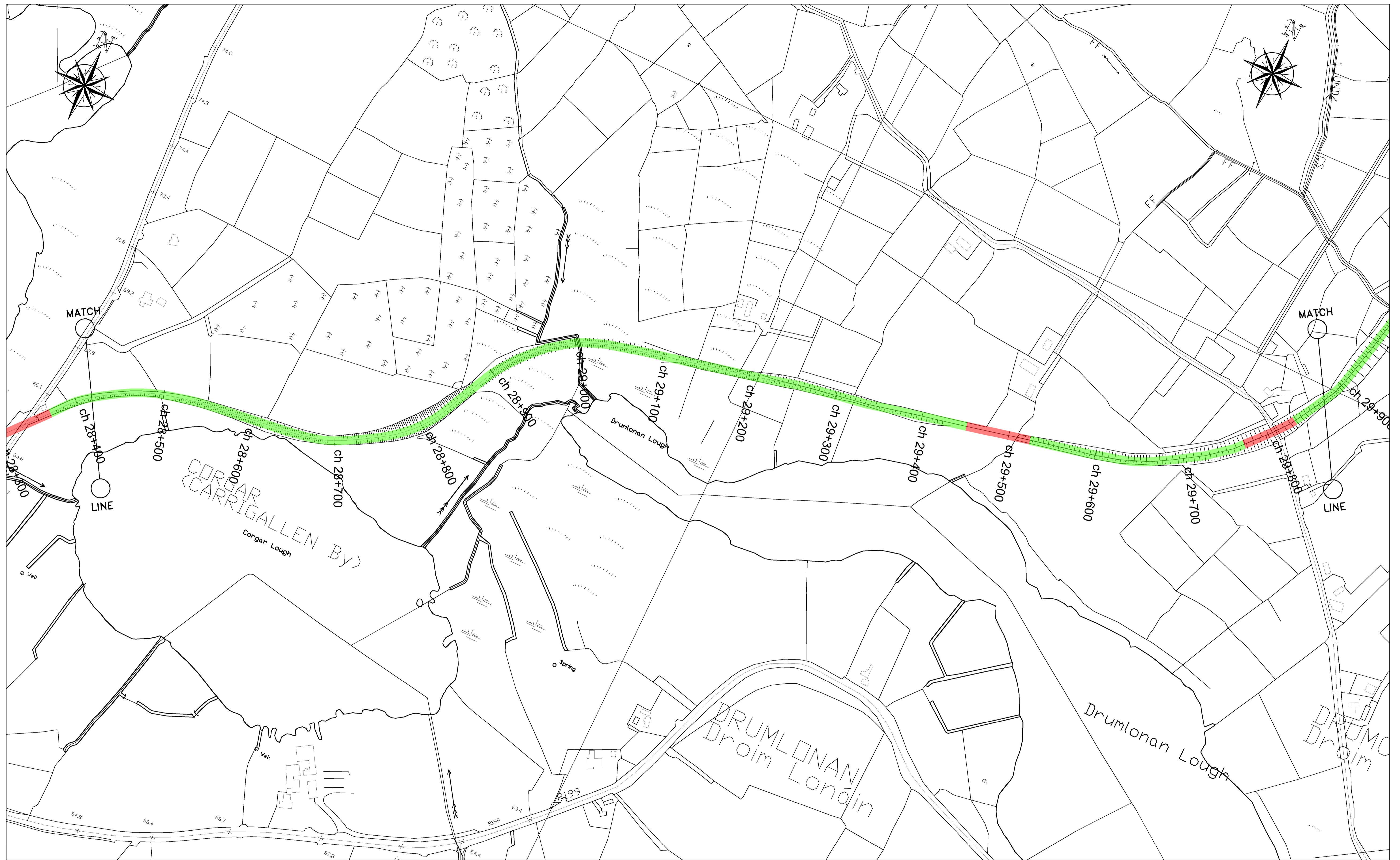


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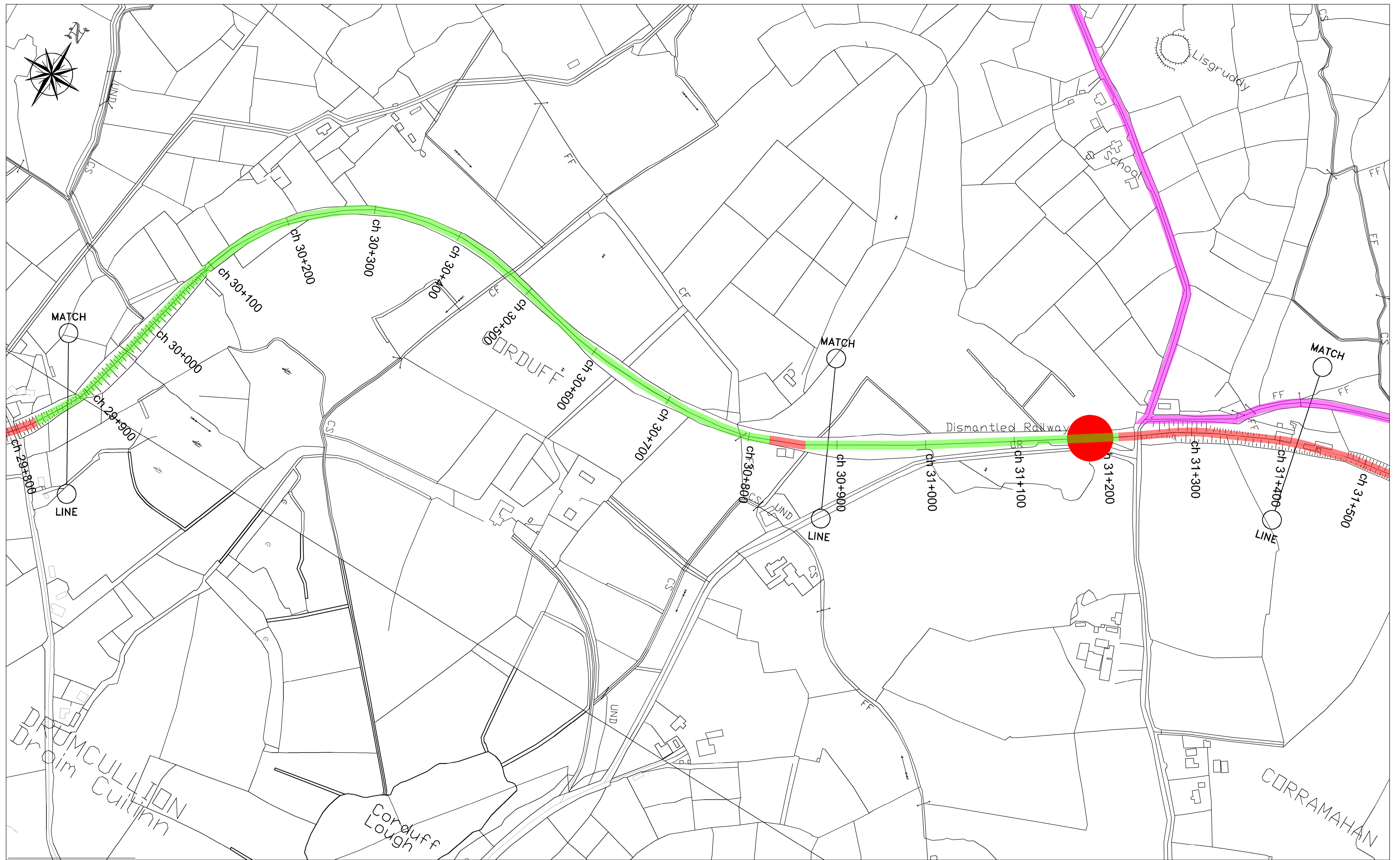


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Project Title				CAVAN - LEITRIM GREENWAY	
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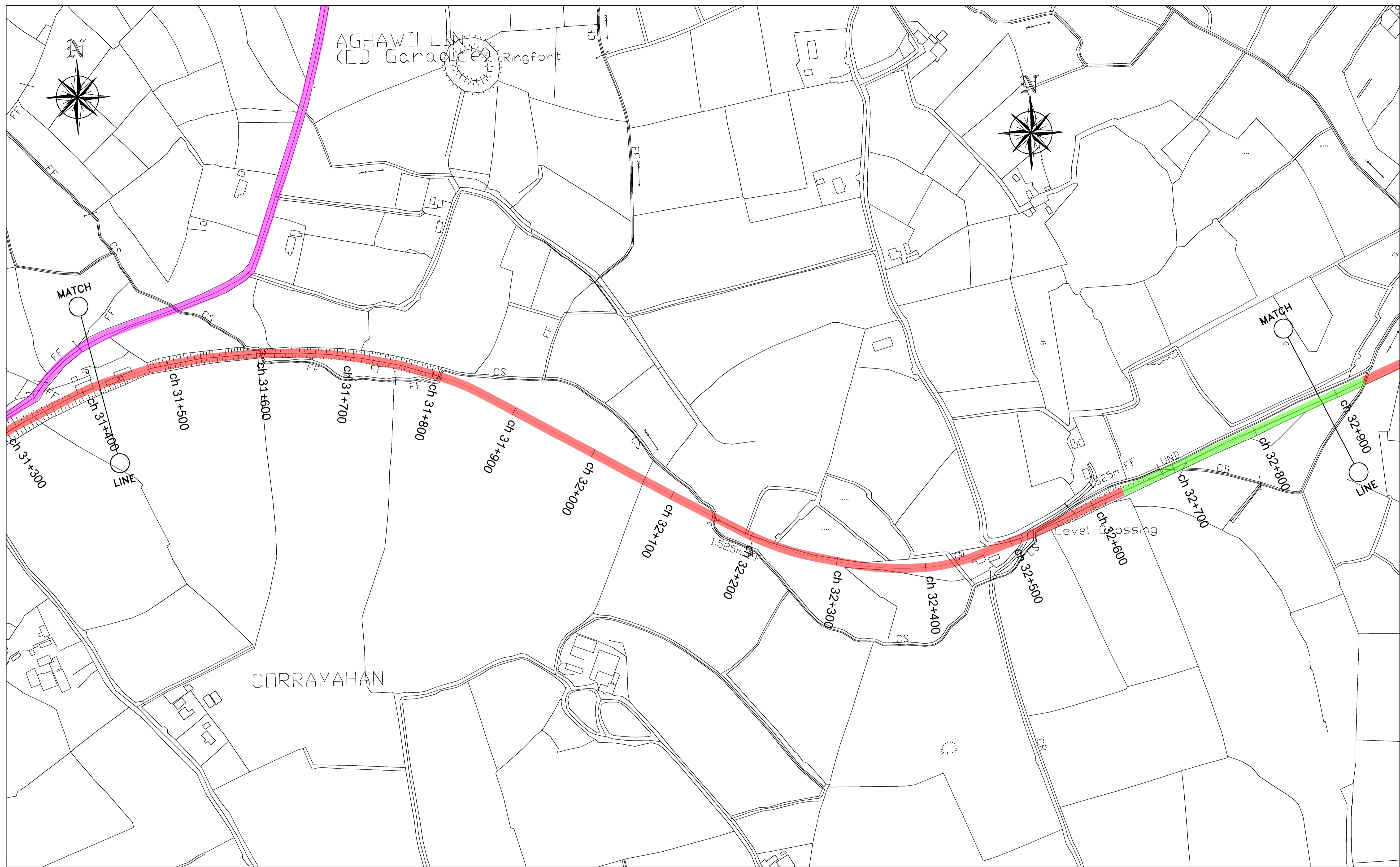


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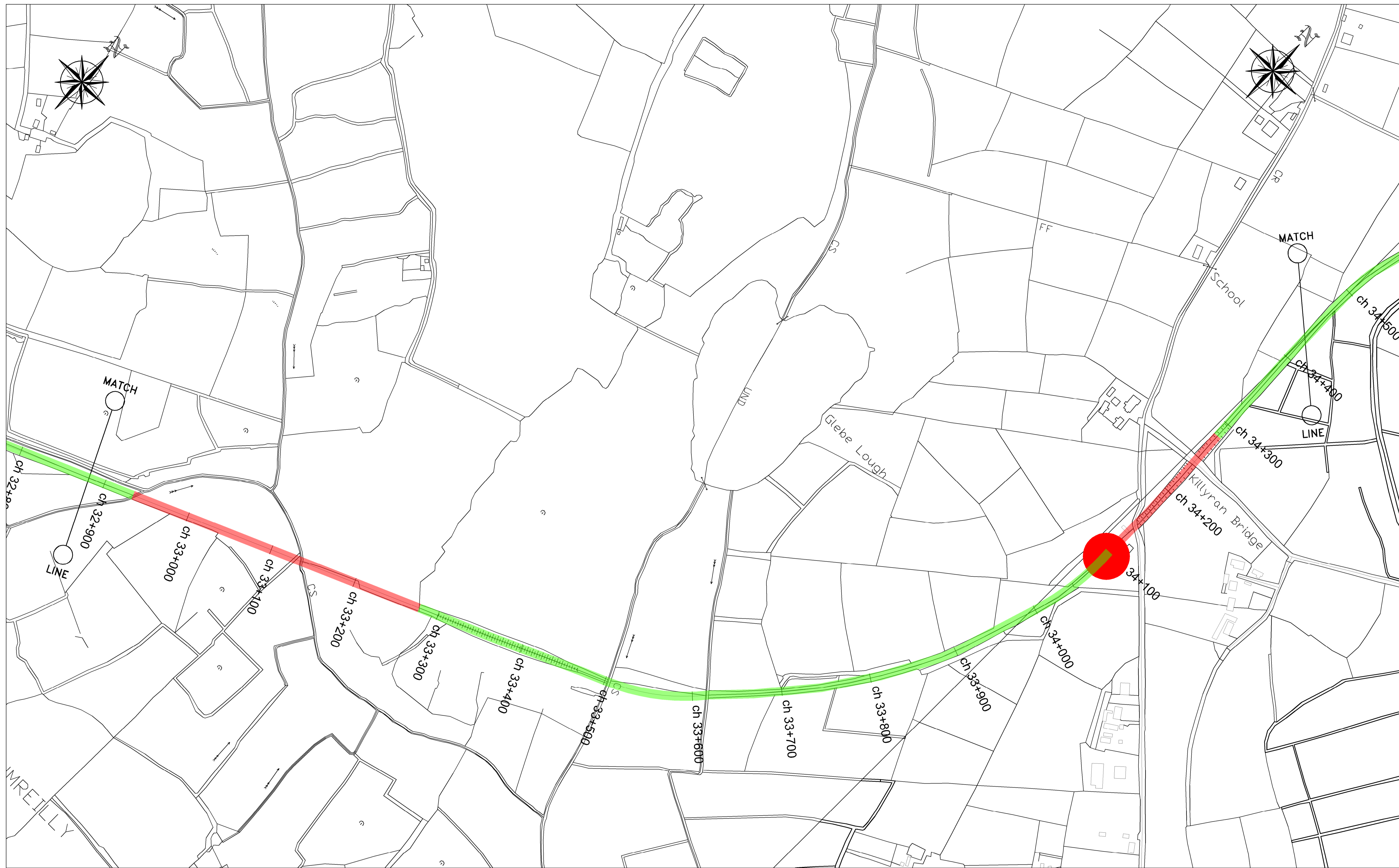


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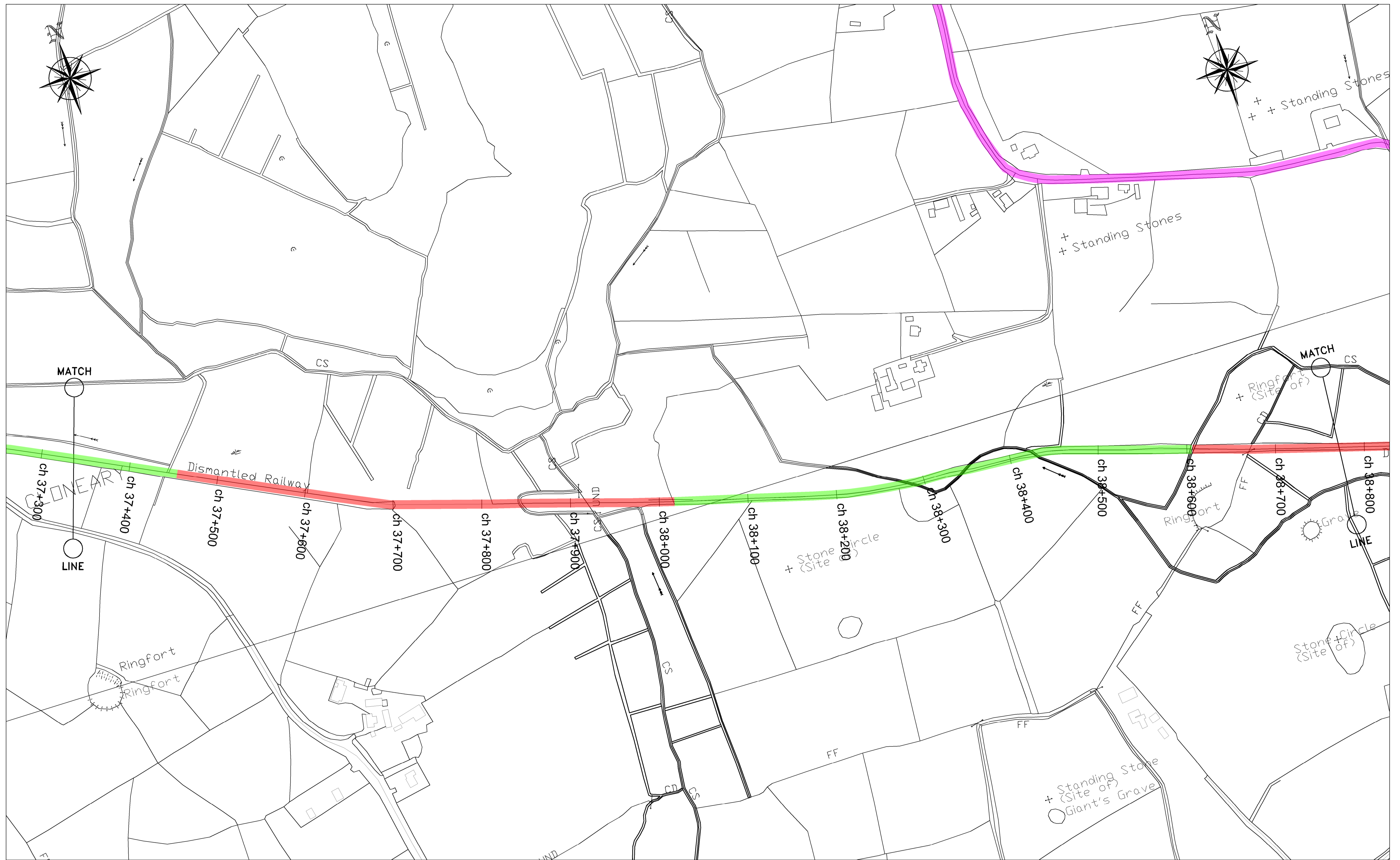
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Designed:	Checked:	Approved:	Status:
JB	JB	SMG	FEASIBILITY

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Project Title		CAVAN - LEITRIM GREENWAY	
Drawing Title		PROPOSED GREENWAY ROUTE SHEET 25 OF 38	
Drawn:	PC	Job No:	15.220
Scale:	1:2000	Date:	JAN 16
		Drawing No:	GR-025



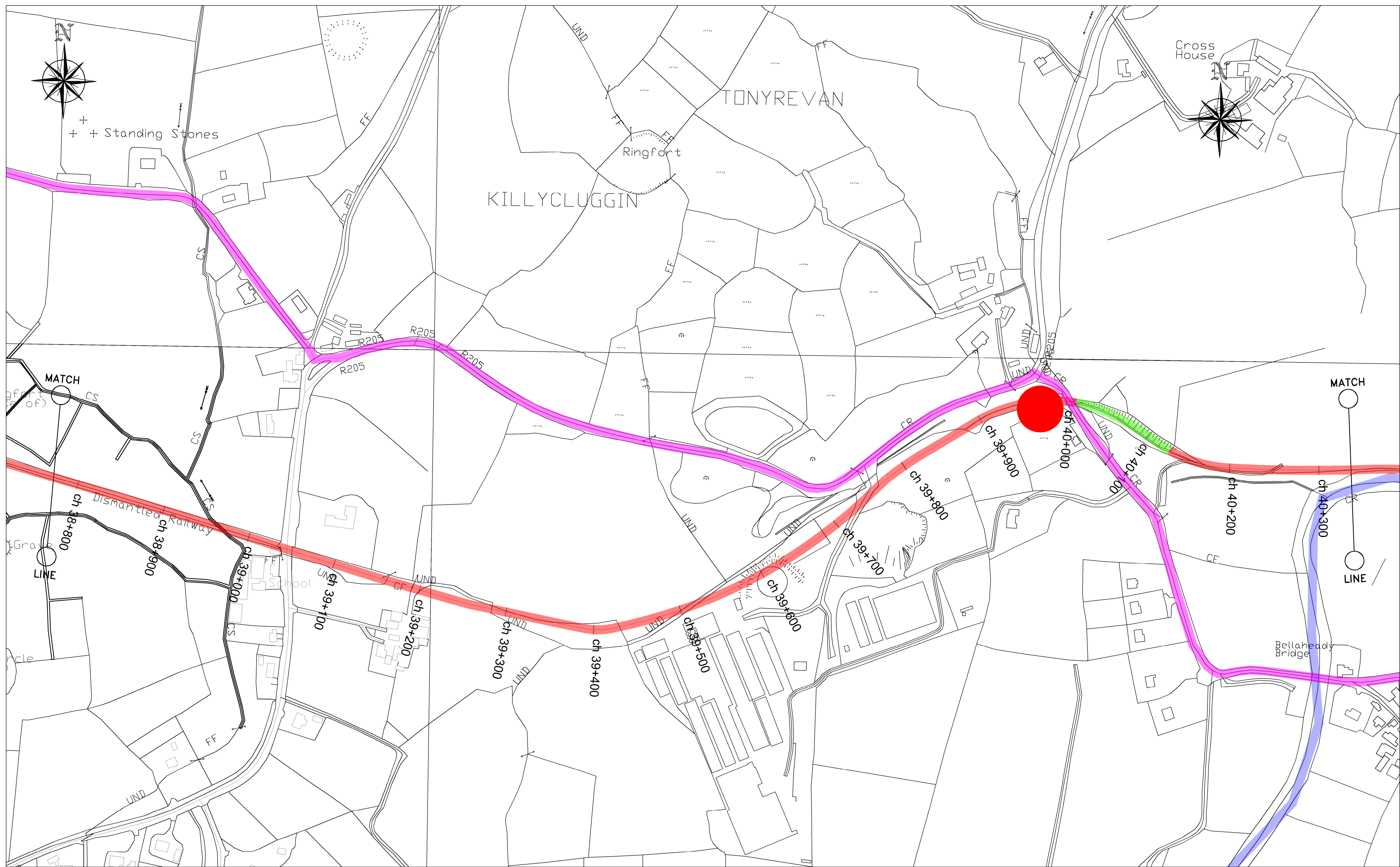
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	Stage				
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	APPROVAL				
	TENDER				
	CONSTRUCTION				

Designated	Checked	Approved	Status
JB	JB	SMG	FEASIBILITY

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Project Title				CAVAN - LEITRIM GREENWAY			
Drawing Title				PROPOSED GREENWAY ROUTE SHEET 26 OF 38			
Drawn:	PC	Job No:	15.220	Drawing No:		Rev:	
Scale:	1:2000	Date:	JAN 16	GR-026			

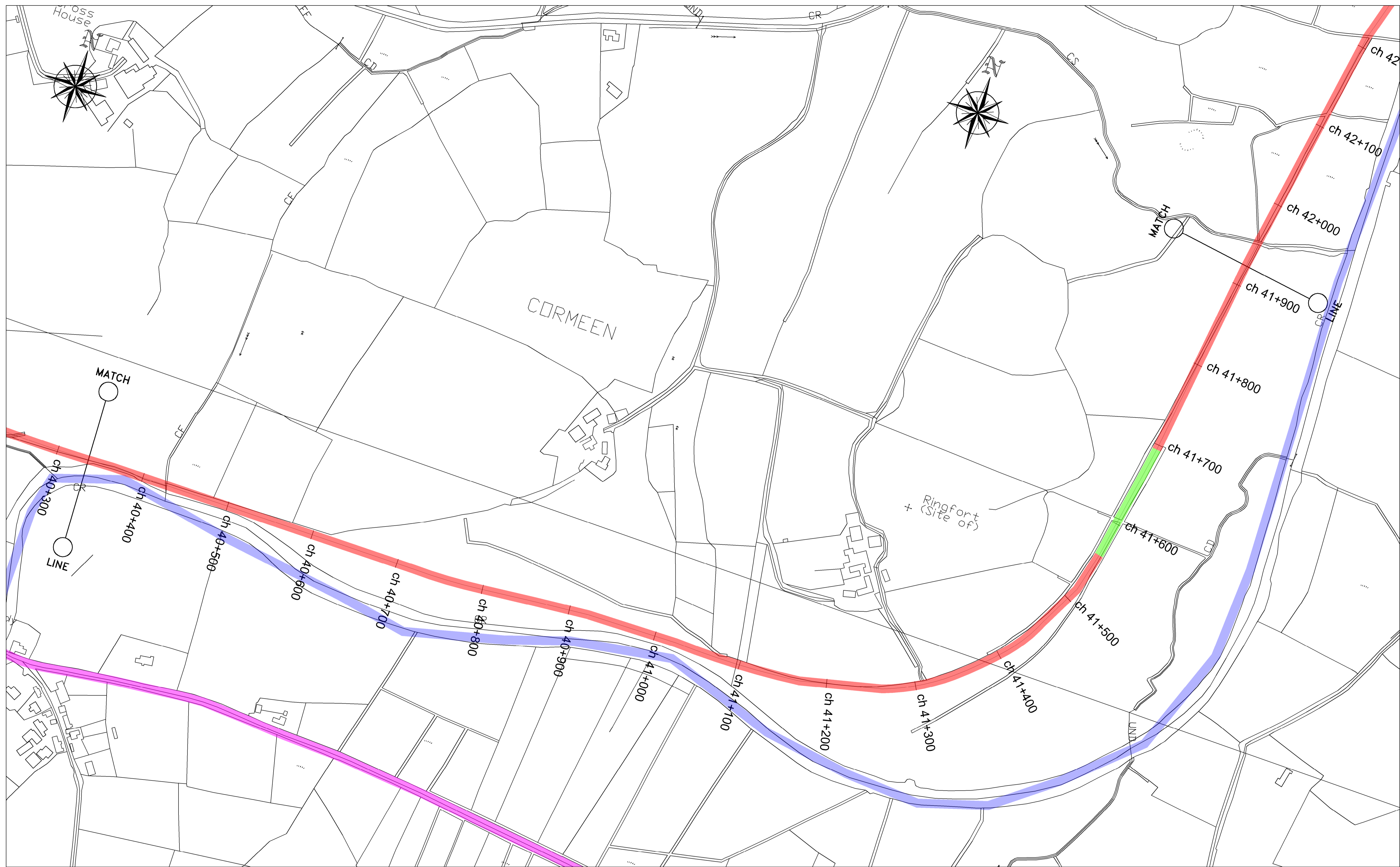


No.	Revision	Date	By	Chkd	App'd
	Stage				
	PRELIMINARY				
	APPROVAL				
	TENDER				
	CONSTRUCTION				



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Project Title				CAVAN - LEITRIM GREENWAY			
Drawing Title				PROPOSED GREENWAY ROUTE SHEET 27 OF 38			
Drawn:	PC	Job No:	15.220	Drawing No:			Rev:
Scale:	1:2000	Date:	JAN 16	GR-027			



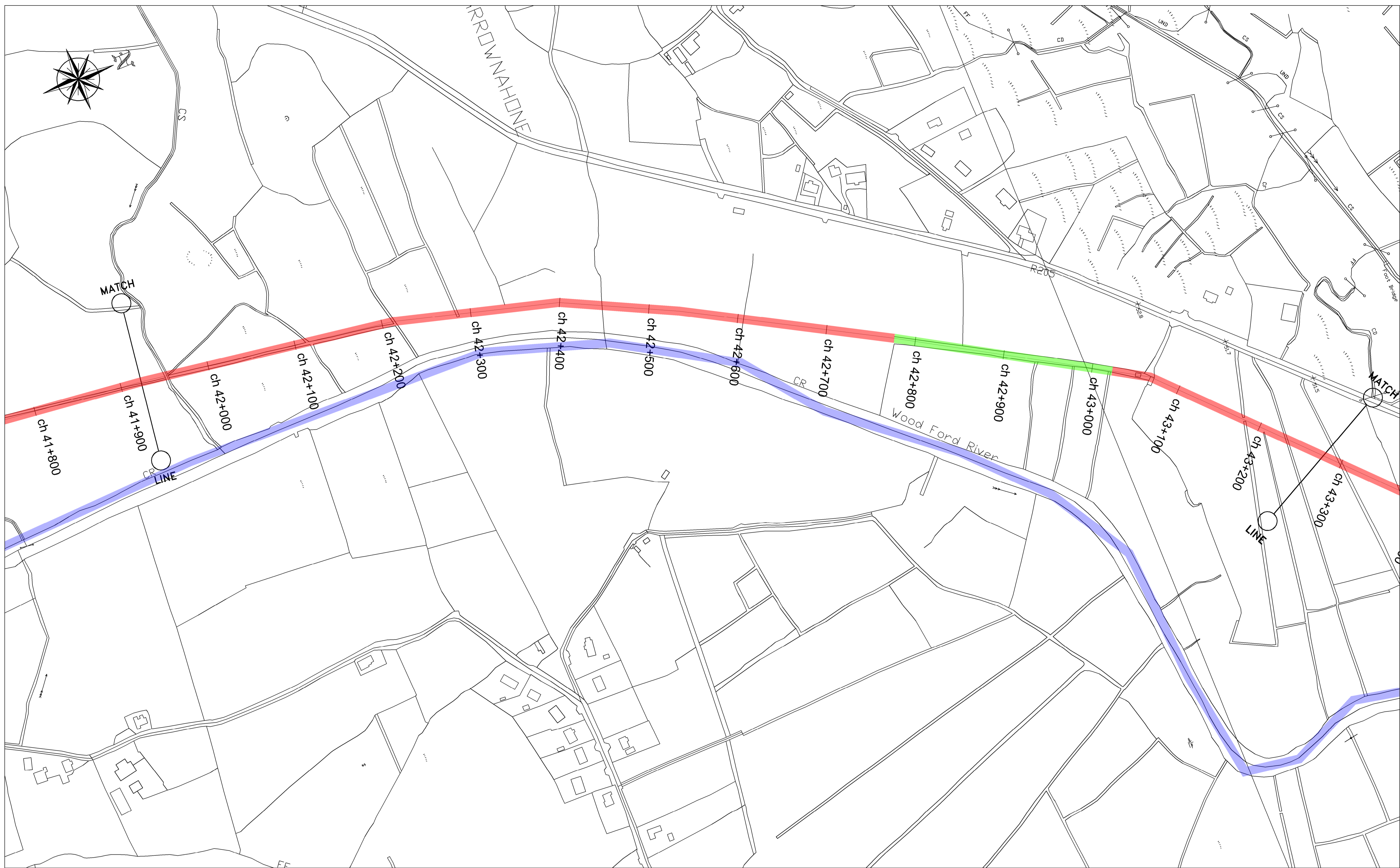
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	Stage				
	PRELIMINARY				
	APPROVAL				
	TENDER				
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Designed:	Checked:	Approved:	Status:
JB	JB	SMG	FEASIBILITY

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Project Title CAVAN - LEITRIM GREENWAY			
Drawing Title PROPOSED GREENWAY ROUTE SHEET 28 OF 38			
Drawn: PC	Job No: 15.220	Drawing No:	Rev:
Scale: (A1) 1:2000	Date: JAN 16	GR-028	



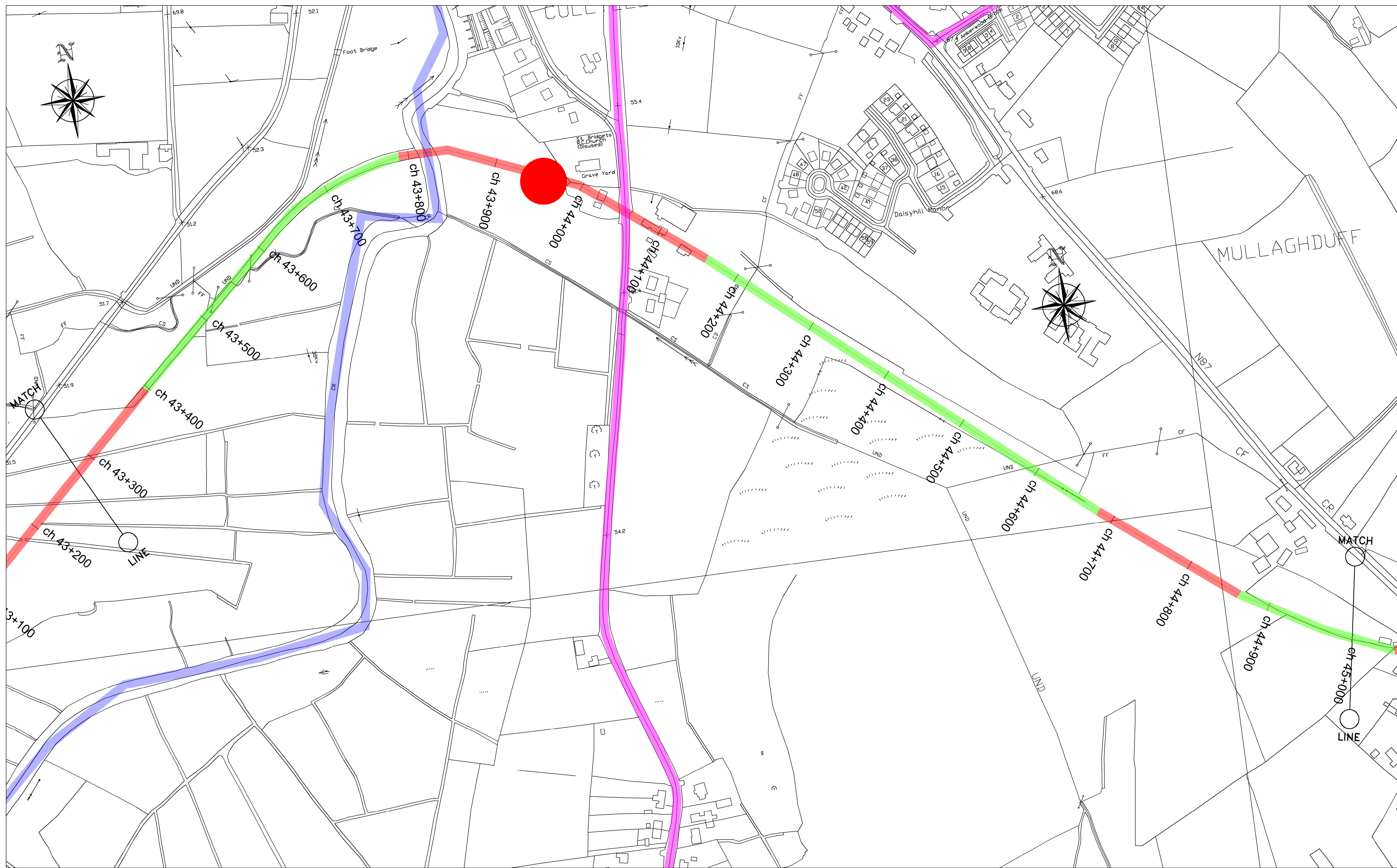
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Project Title				CAVAN - LEITRIM GREENWAY	
Drawing Title				PROPOSED GREENWAY ROUTE SHEET 29 OF 38	
Drawn:	PC	Job No:	15.220	Drawing No:	GR-029
Scale:	1:2000	Date:	JAN 16	Rev:	

Designed: JB Checked: JB Approved: SMG Status: FEASIBILITY

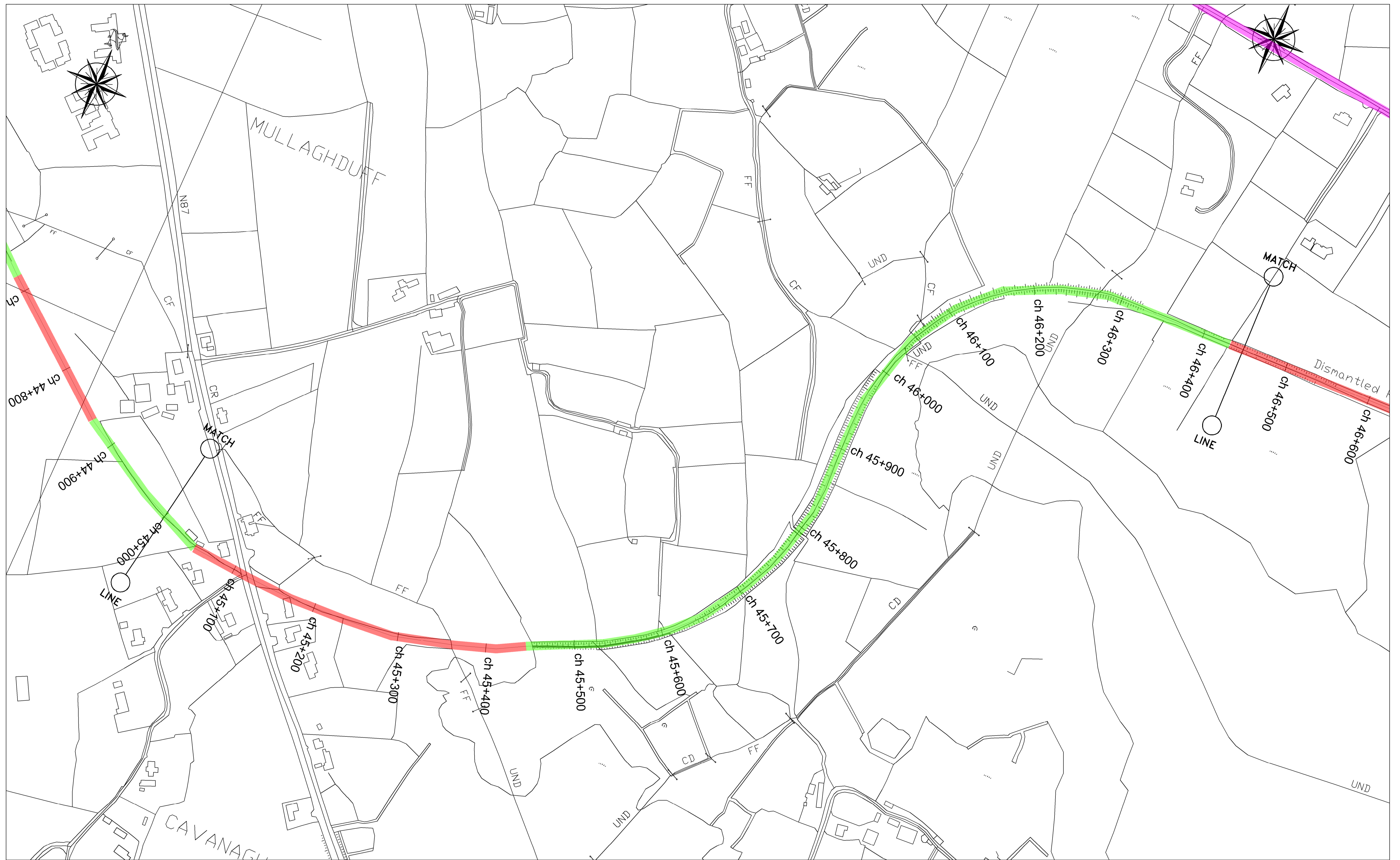


No.	Revision	Date	By	Chkd	App'd
	Stage				
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	APPROVAL				
	TENDER				
	CONSTRUCTION				



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Project Title		CAVAN - LEITRIM GREENWAY	
Drawing Title		PROPOSED GREENWAY ROUTE SHEET 30 OF 38	
Drawn: PC	Job No: 15.220	Drawing No:	Rev:
Scale: 1:2000	Date: JAN 16	GR-030	

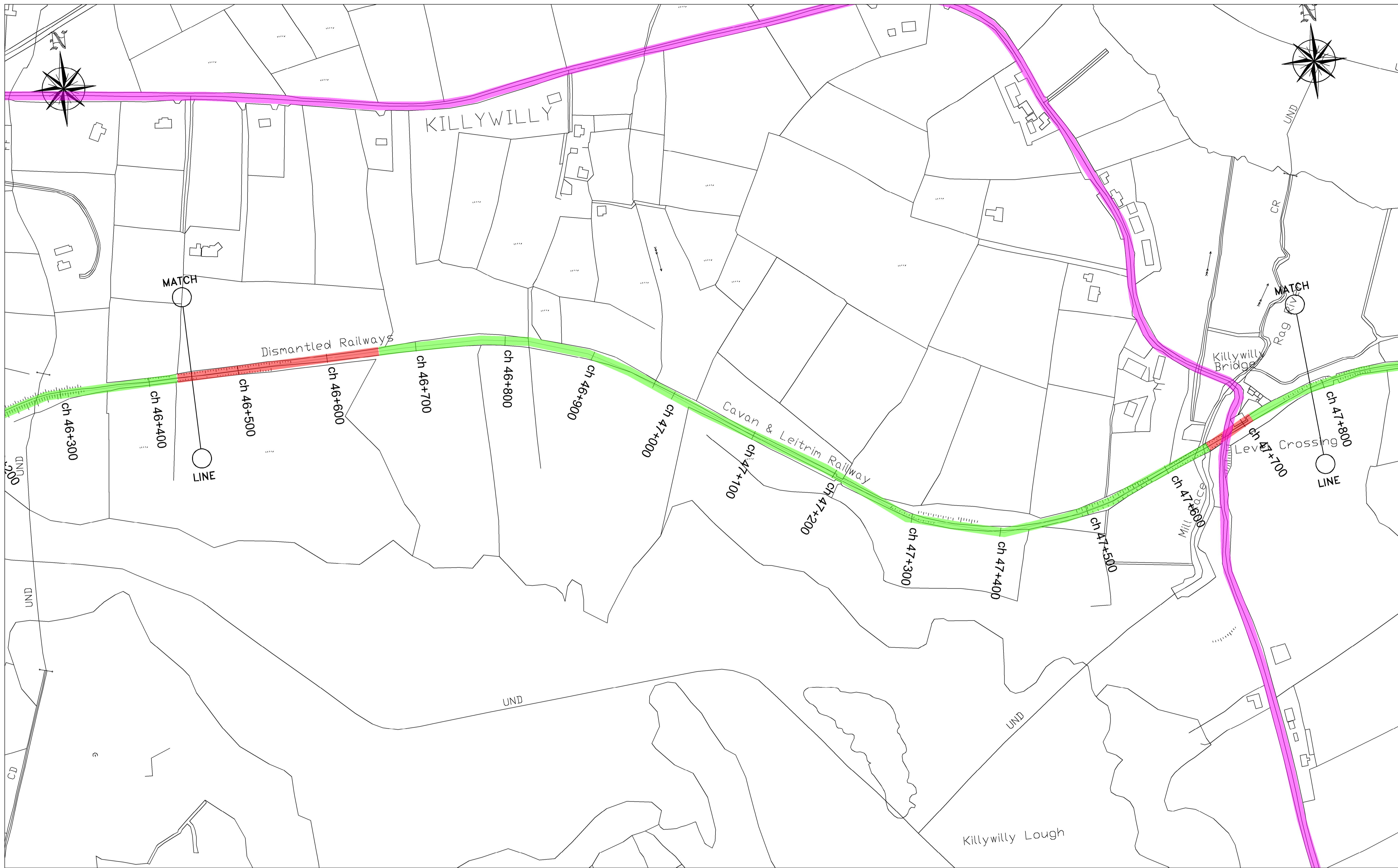


No.	Revision	Date	By	Chkd	App'd
	Stage				
	PRELIMINARY				
	APPROVAL				
	TENDER				
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Project Title		CAVAN - LEITRIM GREENWAY	
Drawing Title		PROPOSED GREENWAY ROUTE SHEET 31 OF 38	
Drawn: PC	Job No: 15.220	Drawing No:	Rev:
Scale: 1:2000	Date: JAN 16	GR-031	



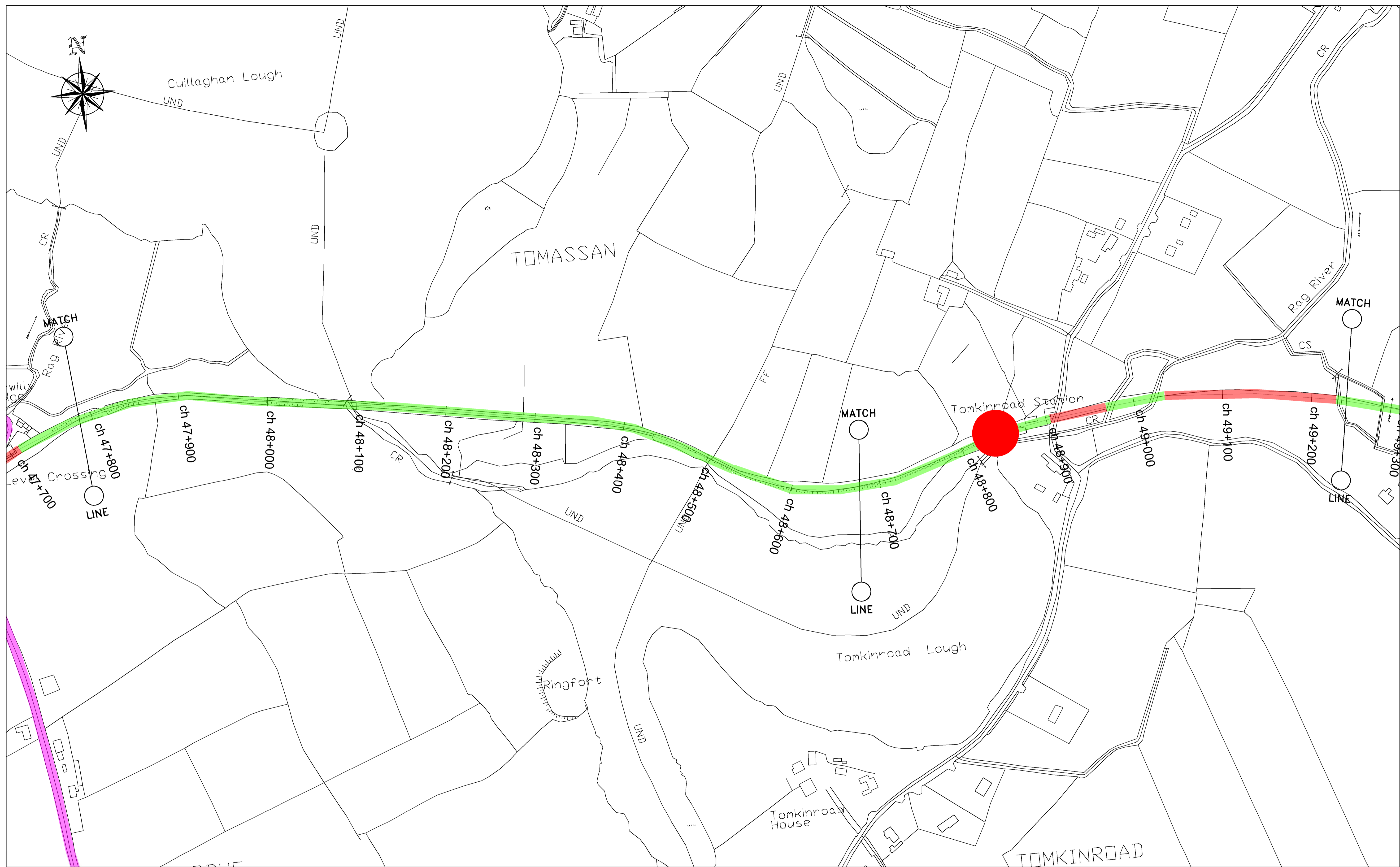
No.	Revision	Date	By	Chkd	App'd
	Stage				
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	APPROVAL				
	TENDER				
	CONSTRUCTION				

Designed:	Checked:	Approved:	Status:
JB	JB	SMG	FEASIBILITY

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Project Title CAVAN - LEITRIM GREENWAY			
Drawing Title PROPOSED GREENWAY ROUTE SHEET 32 OF 38			
Drawn: PC	Job No: 15.220	Drawing No: GR-032	Rev:
Scale: (A1) 1:2000	Date: JAN 16		



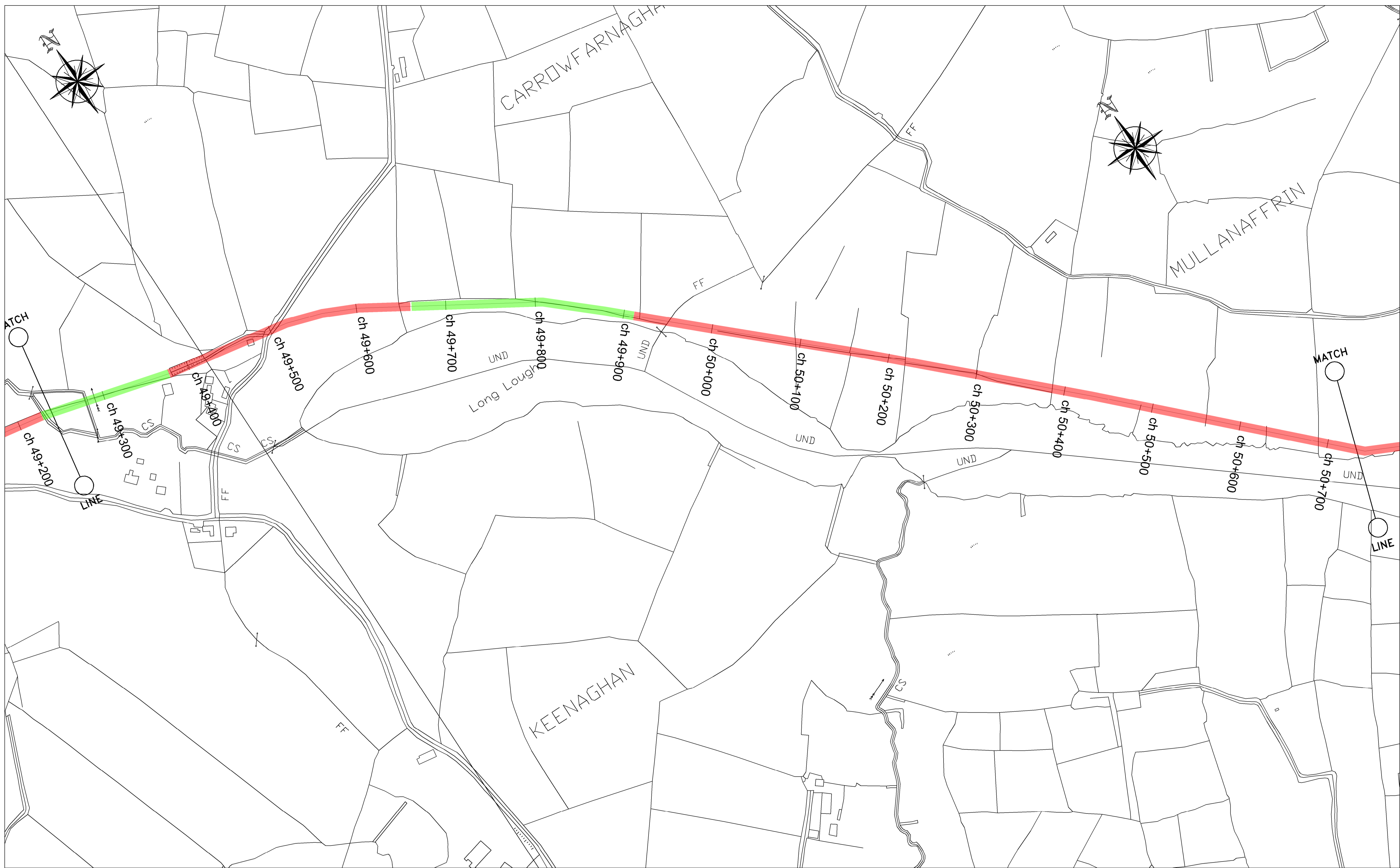
No.	Revision	Date	By	Chkd	App'd
	Stage				
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	APPROVAL				
	TENDER				
	CONSTRUCTION				

Designated	Checked	Approved	Status
JB	JB	SMG	FEASIBILITY

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Project Title				CAVAN - LEITRIM GREENWAY			
Drawing Title				PROPOSED GREENWAY ROUTE SHEET 33 OF 38			
Drawn:	PC	Job No:	15.220	Drawing No:		Rev:	
Scale:	1:2000	Date:	JAN 16	GR-033			

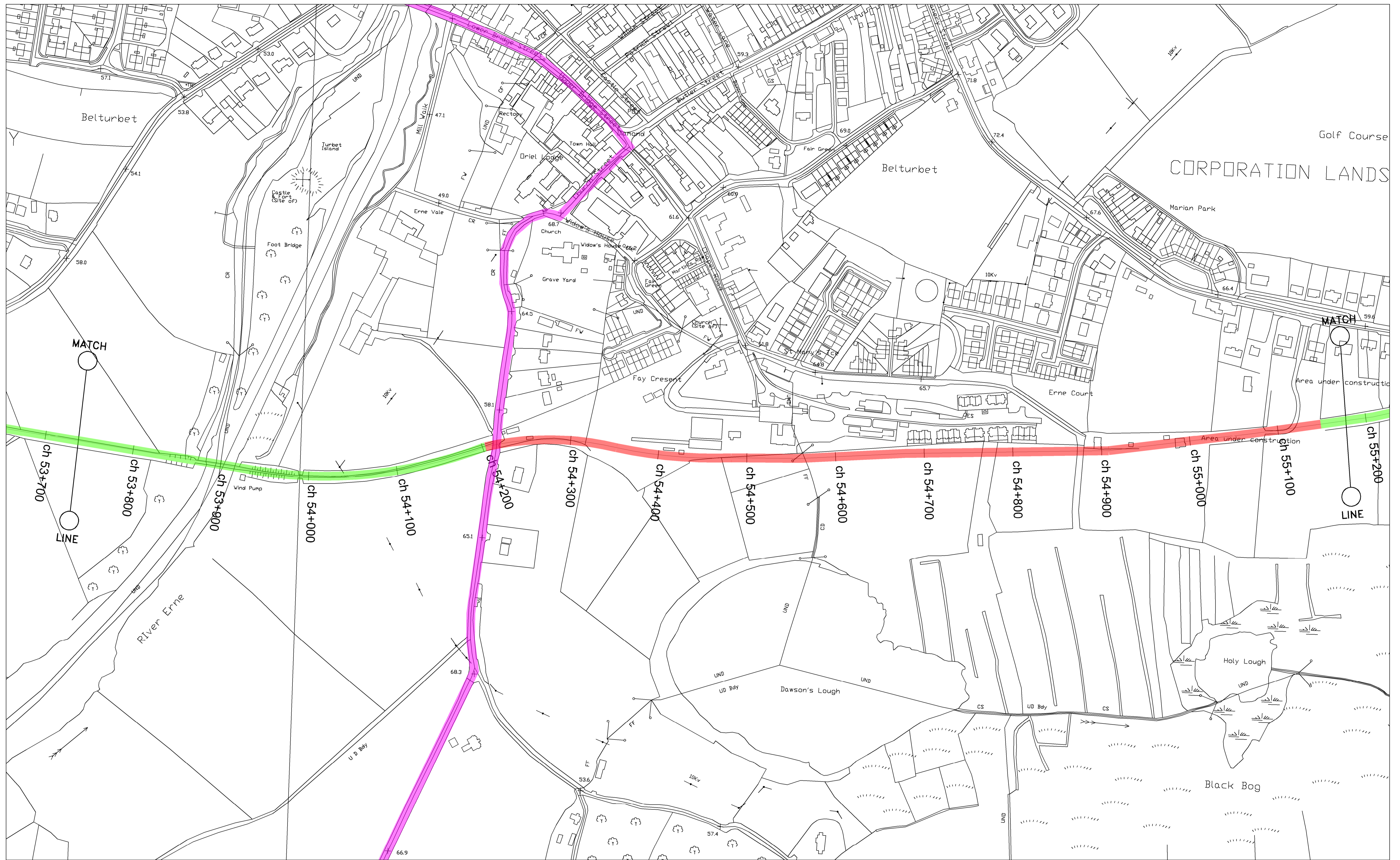


No.	Revision	Date	By	Chkd	App'd
	Stage				
	PRELIMINARY				
	APPROVAL				
	TENDER				
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Project Title				CAVAN - LEITRIM GREENWAY	
Drawing Title				PROPOSED GREENWAY ROUTE SHEET 34 OF 38	
Drawn:	PC	Job No:	15.220	Drawing No:	GR-034
Scale:	1:2000	Date:	JAN 16	Rev:	

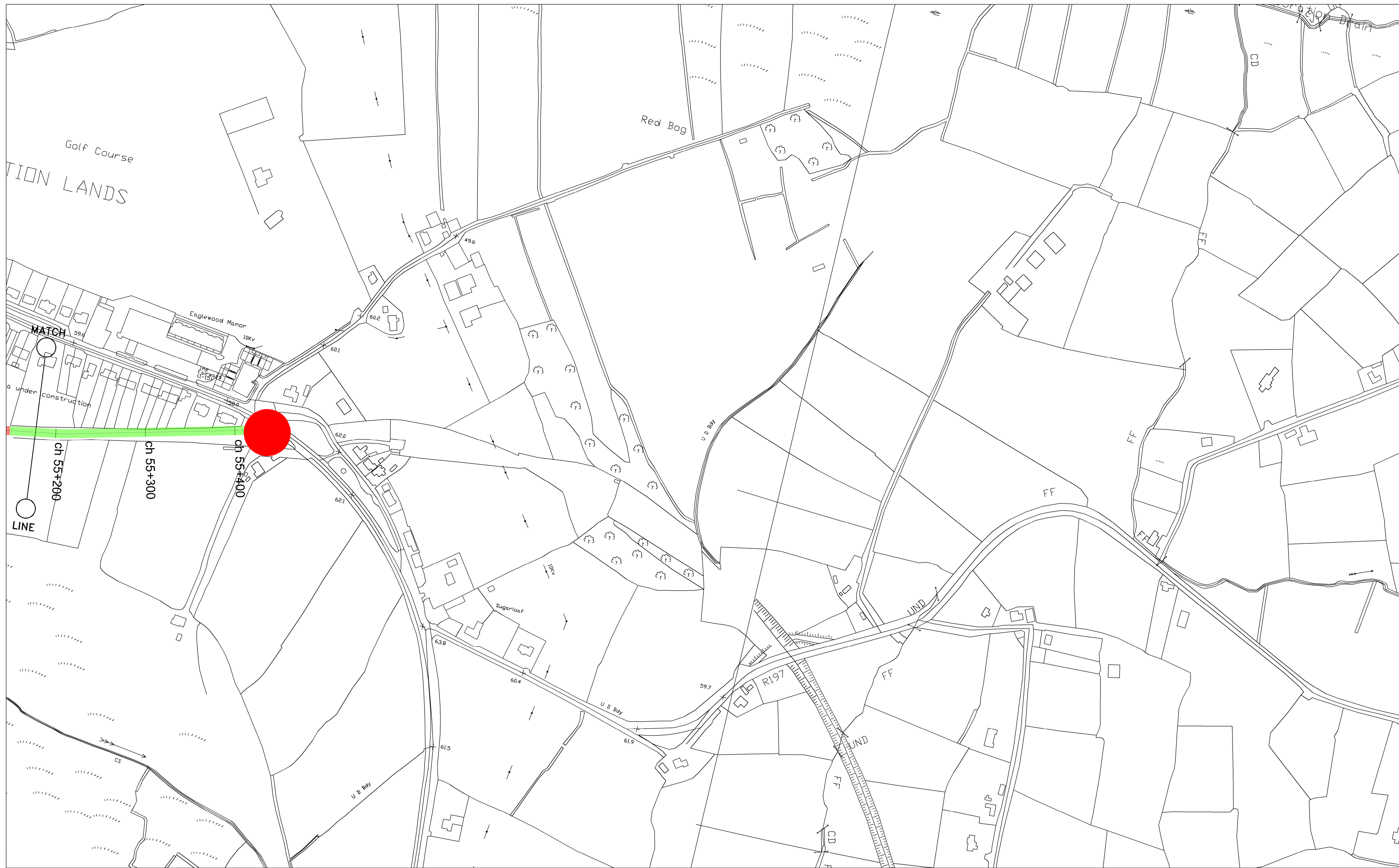


No.	Revision	Date	By	Chkd	App'd
	Stage				
	PRELIMINARY				
	APPROVAL				
	TENDER				
	CONSTRUCTION				



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Project Title				CAVAN - LEITRIM GREENWAY			
Drawing Title				PROPOSED GREENWAY ROUTE SHEET 37 OF 38			
Drawn:	PC	Job No:	15.220	Drawing No:			Rev:
Scale:	1:2000	Date:	JAN 16	GR-037			



No.	Revision	Date	By	Chkd	App'd
	Stage				
	PRELIMINARY				
	APPROVAL				
	TENDER				
	CONSTRUCTION				



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Project Title		CAVAN - LEITRIM GREENWAY	
Drawing Title		PROPOSED GREENWAY ROUTE SHEET 38 OF 38	
Drawn:	PC	Job No:	15.220
Scale:	1:2000	Date:	JAN 16
Design:	JB	Checked:	JB
Approved:	SMG	Status:	FEASIBILITY
		Drawing No:	GR-038

