

N52 Grange to Clontail Scheme

AA Screening Report

Meath County Council

29/09/2020

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1. Introduction

The N52 has been defined as one of the country's most important National Secondary Routes linking the northeast to the southwest of the country. In particular, the N52 serves the towns of Dundalk, Kells, Mullingar, Birr and Nenagh. In 2005 a national infrastructure plan entitled Transport 21 (the plan was later cancelled in 2011 due to economic decline) targeted the N52 for upgrade works including it as a 'strategic linking corridor'. The Westmeath, Meath and Louth County Development plans also earmark the N52 as a high priority component of their respective road networks needing to be upgraded.

Meath County Council (MCC) proposes to realign a section of the existing N52 route between a tie-in point in the townland of Grange in Co. Meath to the west and extend to a tie-in point in the townland of Clontail in Co. Meath to the east. The overall aim of the scheme will be to remove a significantly sub-standard section (approximately 4.5km in total) of the existing N52 route. The overall length of the proposed new route is 4.66km.

Atkins Ireland have been commissioned by Meath County Council to prepare a Screening for Appropriate Assessment (AA) for the preferred route of the N52 Grange to Clontail Scheme. Figure 1.1 below shows the location and alignment of the N52 Grange to Clontail Road Scheme (hereafter referred to as the 'N52 Road Scheme').

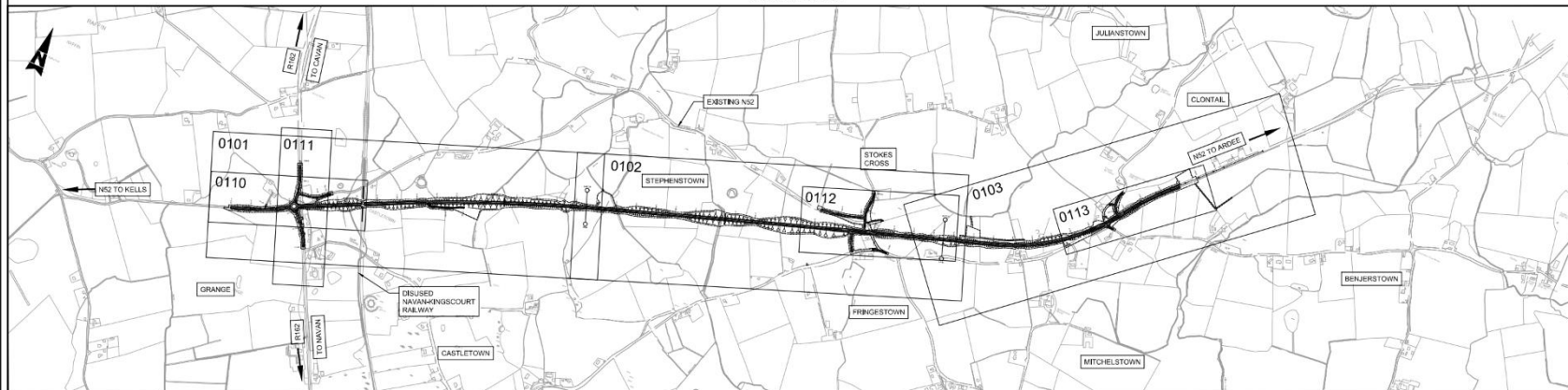
An Environmental Impact Assessment Screening Report has also be prepared for the new route of the N52 Grange to Clontail Scheme and should be read in conjunction with this screening report. (Report No. 5158291DG0148).

Figure 1.1 Site Location



SITE MAP - N52 GRANGE TO CLONTAIL SCHEME

Scale at A1 1:25,000
Scale at A3 1:50,000



SITE PLAN - N52 GRANGE TO CLONTAIL SCHEME

Scale at A1 1:10,000
Scale at A3 1:20,000

						MEATH COUNTY COUNCIL		FOR PLANNING	
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1.1. Proposed Scope of Works

The route of the N52 Grange to Clontail Scheme illustrating the horizontal and vertical alignments along with junction layouts, structures, culverts and drainage outfall locations are provided for reference in Appendix A: N52 Grange to Clontail Scheme Horizontal and Vertical Alignment Mainline.

The N52 Grange to Clontail Scheme will involve the construction of ca. 4.6km of new national secondary roadway predominantly through areas of farmland with a small portion, ca. 460m, at either end of the route aligned along the existing N52 roadway. The new N52 will have one new roundabout, with associated new junctions, at the N52 and R162 intersection at the western extent of the new road scheme. New junctions, with ancillary road upgrades, are also to be constructed within the mid-section of the route in the townland of Stokes Cross to accommodate access to local roads L3046 and L34013. A new junction is also to be constructed on the eastern section of the new alignment to provide access to the L74120 and L5600.

The N52 Road Scheme construction will include the following activities: -

- Site clearance to remove vegetation and topsoil;
- Earthworks involving 'cut and fill' operations to achieve the required road levels;
- Importation of soil and stone materials to be used as 'fill' materials;
- Construction of structures (1 no. farmer's underpass);
- Installation of 4no. watercourse culverts/ pipes;
- Construction of surface water drainage routes and attenuation ponds;
- Construction of road pavement with bituminous materials; and
- Installation of road barriers, fencing, ducting, lighting and signage.

There is one underpass to be constructed for farm access at Chainage 1+050.

There 4 no. culverts to be installed at the following locations: -

- 1200mm pipe/culvert C001 - drainage ditch with flow at Chainage 0+250;
- 1350mm pipe/culvert C002 - Headstown Stream at Chainage 0+950;
- 2000mm pipe/culvert C003 - Stephenstown Stream at Chainage 1+600; and
- 900mm pipe/culvert C004 - Stephenstown Tributary at Chainage 2+130.

Surface water drainage from the N52 Road Scheme is to outfall, through associated hydro brake, petrol interceptors and attenuation ponds, at 4 no. locations as follows: -

- Chainage 0+920 into Headstown Stream;
- Chainage 1+510 into Stephenstown Stream;
- Chainage 3+390 into Carnacop Stream; and
- Chainage 4+570 into Killary Waters.

There are 2 no. building to be demolished noted to be a private dwelling and a farm building.

Blasting activities are not anticipated as part of road construction activities.

1.2. Review of the Aquatic Environment

The route of the N52 Road Scheme lies within the Newry, Fane, Glyde and Dee Water Framework Directive (WFD) catchment area (catchment ID: 06) and the Dee subcatchment area (subcatchment ID: 06_03).

The scheme lies within 2 no. of groundwater bodies, identified by the Environmental Protection Agency (EPA¹) as being the Louth Ground Waterbody (European Code: IEGBNI_NB_G_019) and the Ardee Ground Waterbody (European Code: IE_NB_G_018) and both are noted by the EPA as having a Good status (2013-18).

The route of the new N52 alignment intersects with four small watercourses which are tributaries of the larger River Dee watercourse (Headstown Stream, Stephenstown stream, 2 no. unnamed tributaries). The 4 no. streams flow across the route alignment in a general northerly direction and outfall into the River Dee ca. 1.3km north of the N52 Road Scheme.

There are also 2 no. watercourses which are not intersected by the new road alignment but do come in close proximity to the eastern section of the N52 Road Scheme. These 2 no. watercourses are identified as Carnacop Stream and Killary Waters and both flow in a northerly direction and outfall into the River Dee ca. 2km north of the new N52 alignment.

The River Dee flows in a general easterly direction before outfalling into Dundalk Bay with the bay noted to be ca. 37km downstream of the 4 no. of tributaries intersected by the N52 Road Scheme.

Details of the River Dee and the 6 no. Streams as outlined by the EPA² are summarised in Table 1.1 below.

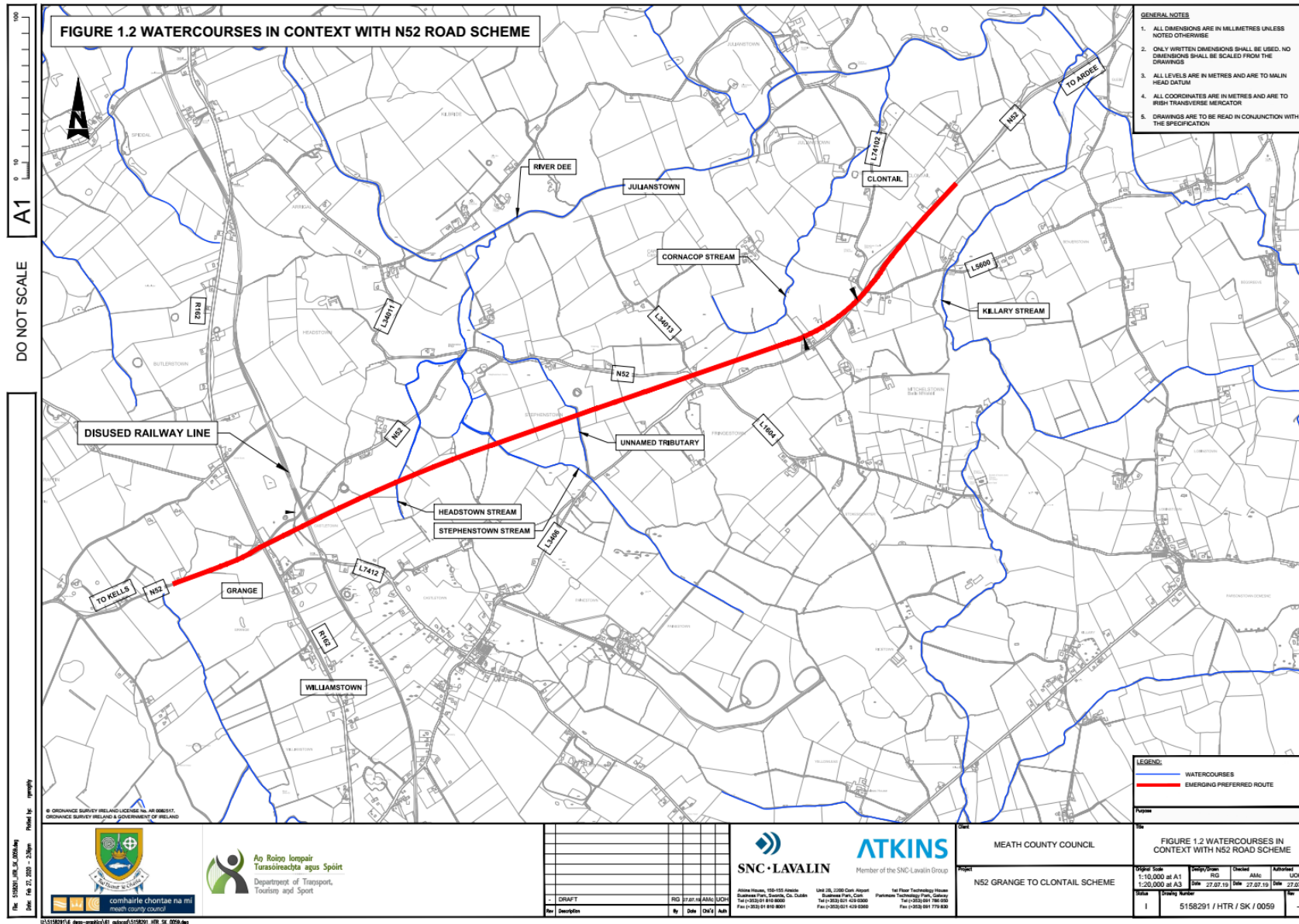
Table 1.1 WFD (2013-18) details of watercourses within or connected to the N52 Road Scheme site.

Watercourse	Code	River Waterbody WFD Status (2013-2018)	River Waterbody Risk
Headstown Stream	IE_NB_06D010360	Good	At Risk
Stephenstown Stream	IE_NB_06D010360	Good	At Risk
Unnamed tributary of the Stephenstown Stream	- no data	- no data	- no data
Unnamed tributary of the Stephenstown Stream	- no data	- no data	- no data
Carnacop	IE_NB_06D010600	Moderate	At Risk
Killary Waters	IE_NB_06K010500	Poor	At Risk
River Dee	IE_NB_06D010360	Good	At Risk

Watercourses in context with the N52 Road Scheme are illustrated in Figure 1.2 below.

¹ <https://gis.epa.ie/EPAMaps/>

² EPA records last accessed 25/02/2020



2. Scope of Study

The purpose of this Screening for AA is to determine the likelihood of significant effects, if any, that the new N52 Road Scheme could have on Natura 2000 sites.

2.1. Aims of the Report

The aim of this report is to provide supporting information to assist the competent authority to carry out a Screening for Appropriate Assessment with respect to the proposed project.

2.2. Legislative Context

Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora, known as the 'Habitats Directive' provides legal protection for habitats and species of European importance. Article 2 of the Directive requires the maintenance or restoration of habitats and species of European Community interest, at a favourable conservation status. Articles 3 – 9 provide the legislative means to protect habitats and species of Community interest through the establishment and conservations of an EU-wide network of sites known as Natura 2000 sites. Natura 2000 sites are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79/409/EEC).

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans or projects that could potentially affect Natura 2000 sites. Article 6(3) establishes the requirement for Appropriate Assessment: -

“Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.”

Article 6 (4) deals with the steps that should be taken when it is determined, as a result of Appropriate Assessment, that a plan or project will adversely affect a European site. Alternative solutions, imperative reasons of overriding public interest (IROPI) and compensatory measures need to be addressed in this case. Article 6(4) states: -

“If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.”

2.3. Appropriate Assessment Process

Guidance on the AA process was produced by the European Commission (EC, 2001), which was subsequently used to develop guidance for Ireland by the Department of Environment, Heritage and Local Government in 2009 (DEHLG, 2009). These guidance documents set out a four-staged approach to complete the AA process and outlines the issues and tests at each stage.

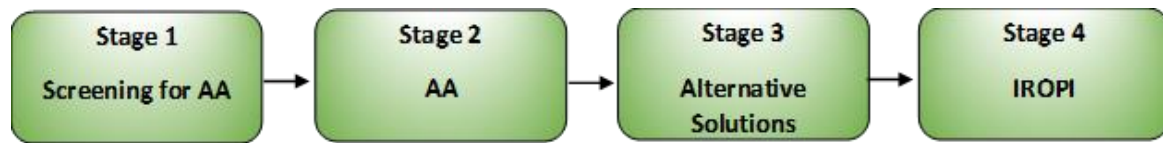


Figure 2.1 Appropriate Assessment Process (Source: DEHLG, 2009).

The stages outlined below are taken from the guidance document Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities (DEHLG, 2009).

2.3.1. Stage 1 – Screening for Appropriate Assessment

Screening is the process that addresses and records the reasoning and conclusions in relation to the first two tests of Article 6(3): -

- Whether a plan or project is directly connected to or necessary for the management of the site, and
- Whether a plan or project, alone or in combination with other plans and projects, is likely to have significant effects on a Natura 2000 site in view of its conservation objectives.

If the effects are deemed to be significant, potentially significant, or uncertain, then the process must proceed to Stage 2 (AA).

2.3.2. Stage 2 – Appropriate Assessment

This stage considers whether the plan or project, alone or in combination with other projects or plans, will have adverse effects on the integrity of a Natura 2000 site, and includes any mitigation measures necessary to avoid, reduce or offset negative effects.

The competent authority can only agree to the plan or project after having ascertained that it will not adversely affect the integrity of the site(s) concerned. If this cannot be determined, and where mitigation cannot be achieved, the alternative solutions need to be considered and the process proceeds to Stage 3.

2.3.3. Stage 3 - Alternative Solutions

This stage examines any alternative solutions or options that could enable the plan or project to proceed without adverse effects on the integrity of a Natura 2000 site. The process must return to Stage 2 as alternatives will require appropriate assessment in order to proceed. Demonstrating that all reasonable alternatives have been considered and assessed, and that the least damaging option has been selected, it is necessary to progress to Stage 4.

2.3.4. Stage 4 – IROPI

Stage 4 examines whether there are imperative reasons of overriding public interest for allowing a plan or project that will have adverse effects on the integrity of a Natura 2000 site to proceed in cases where it has been established that no less damaging alternative solution exists. Compensatory measures must be proposed and assessed, of which the Commission must be informed.

The AA process only progresses through each of the four stages for certain plans and projects. For example, for a project not connected with the management of a site and where no likely significant effects on a Natura 2000 site in view of its conservation objectives are identified, the process stops at Stage 1, Screening for AA. Throughout the process the precautionary principle must be applied, which requires that the conservation objectives of Natura 2000 should prevail where there is uncertainty (EC, 2001). This report is for Stage 1 of the process, Screening for Appropriate Assessment whereby this report provides supporting information to the competent authority in their AA decision.

3. Methods

3.1. Guidance documents

The Screening for Appropriate Assessment was prepared with reference and due consideration to the following documents and case law, including but not limited to: -

- Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild flora and fauna (Habitats Directive);
- Statutory Instrument No. 477/2011 — European Communities (Birds and Natural Habitats) Regulations 2011;
- European Commission (2018). Managing Natura 2000 sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC;
- European Commission (2001). Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Articles 6(3) and (4) of the Habitats Directive 92/43/EEC;
- European Commission (2007). Guidance document on Article 6(4) of the 'Habitats Directive' 92/49/EEC; clarification of the concepts of: Alternative solutions, Imperative reasons of overriding public interest, Compensatory Measures, Overall Coherence, Opinion of the Commission;
- Department of the Environment, Heritage and Local Government (2009). Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities; and,
- Case C-323/17 People Over Wind & anor. V. Coillte.

3.2. Desk Study

A desk study was carried out to collate information available on Natura 2000 sites in the vicinity of the proposed project. These areas were viewed using Google Earth, Google maps³ and Bing maps⁴ (last accessed on (25/02/2020).

The National Parks and Wildlife Service (NPWS) and National Biodiversity Data Centre (NBDC) online databases were reviewed concerning Natura 2000 sites and their features of interest in the vicinity of the proposed project.

The Environmental Protection Agency (EPA) mapping⁵ system was used to identify any hydrological connection between the proposed project and Natura 2000 sites.

Locations and boundaries of all Natura 2000 sites within 15km of the proposed projects were identified and reviewed using the NPWS online map viewer. Boundary shapefiles were also downloaded from this site to facilitate the preparation of project graphics.

Desktop information on relevant Natura 2000 sites were reviewed on the NPWS website, including the site synopsis for each SAC/SPA, the conservation objectives, the site boundaries as shown on the NPWS online map viewer, the standard Natura 2000 Data Form for the SAC/SPA which details conditions and threats of the sites, and published information and unpublished reports on the relevant Natura 2000 sites.

³ <https://www.google.ie/maps>

⁴ <http://www.bing.com/maps/>

⁵ <https://gis.epa.ie/EPAMaps/>

Relevant planning information for the surrounding area was reviewed using the planning enquiry systems of Meath County Council. Search criteria were implemented to determine whether such projects or plans that would not be relevant to this study. This reviewed information (last accessed 25/02/2020) was used to determine potential cumulative impacts from other plans / projects with the proposed works.

3.3. Site Visit

Site walkover surveys were undertaken in autumn 2018 to review sites and habitats of ecological importance along the route corridor which included assessment of watercourses intersected by the route. The site survey findings have been used to inform this screening report.

3.4. Statement of Authority

The Screening for Appropriate Assessment report was prepared by Avril McCollom and Colin Wilson, who also provided peer review support.

Avril McCollom has a BSc (Hons) in Freshwater and Marine Biology. Avril has worked in ecological and environmental consultancy since 2017, working on a wide range of projects including road construction, Strategic Housing Developments and Strategic Infrastructure Developments. A focus of Avril's work to date has been on the preparation of Appropriate Assessments Screenings, Environmental Impact Assessment Screenings and Outline Construction Environmental Management Plans and Construction and Demolition Waste Management Plans.

Colin Wilson (Atkins Dublin) has a BSc (Hons) in Environmental Science. He has over 12 years working in the fields of ecology and environmental management. He is a Senior Ecologist with experience in ecological surveying, environmental assessment, on-site ecological supervision and mitigation. He has experience on multiple road projects regarding all elements of surface and groundwater management, monitoring, sampling and associated reporting. Colin also has a broad range of experience in invasive species management, biosecurity and control. Colin has prepared AA screening reports and has also been involved in the development of Environmental Operating Plans and Construction Environmental Management Plans for a number of national infrastructure projects.

4. Appropriate Assessment Screening

4.1. Connectivity of Works Area to Natura 2000 Sites

The 'zone of influence' (ZoI) for a project is the area over which ecological features may be subject to significant effects as a result of the proposed N52 Road Scheme and associated activities. This is likely to extend beyond the project site, for example where there are ecological or hydrological links beyond the site boundaries. The zone of influence will vary for different ecological features depending on their sensitivity to an environmental change (CIEEM, 2018).

A distance of 15km is currently recommended, in the case of plans or projects, as a potential zone of influence and this distance is derived from UK guidance (Scott Wilson *et al*, 2006). For some projects, the distance could be much less than 15km, and in some cases less than 100m, but National Parks and Wildlife Service guidance⁶ advises that this must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, the sensitivities of the ecological receptors, and the potential for in-combination effects.

It follows that given the nature of the road scheme project the potential zone of influence will be limited to the closest Natura 2000 sites or to those hydrologically connected to the road scheme via surface and groundwater pathways or via landscape features such as linear woodland and treelines.

The route for the N52 Road Scheme does not lie within any Natura 2000 site and there are no ecological corridors present, such as hedgerows or treelines, which could provide direct overland connectivity between the road scheme site and any Natura 2000 site.

There are 3 no. Natura 2000 sites within 15km of the road scheme: Killyconny Bog (Cloghbally) SAC (000006), River Boyne and Blackwater SAC (Site Code: 002299) and River Boyne and Blackwater SPA (Site Code: 004234).

The closest Natura 2000 sites are River Boyne and Blackwater SAC/SPA which is located ca.9.2km south of the proposed route by land and Killyconny Bog (Cloghbally) SAC which is located ca. 14.5km west of the N52 Road Scheme site. There is no hydrological connectivity through surface water pathways between the road scheme site and River Boyne and Blackwater SAC/SPA or Killyconny Bog (Cloghbally) SAC. As well as there being no indirect connectivity through watercourses, the route of the N52 Road Scheme lies within a different Water Framework Directive (WFD) catchment area to the 3 no. Natura 2000 sites; with the Natura 2000 sites noted to lie within the Boyne catchment area and the N52 Road Scheme noted to be within the Newry, Fane, Glyde and Dee WFD catchment area⁷.

Similarly to the lack of surface water connectivity between the 3 no. Natura 2000 sites and the site of the new N52 Road Scheme, there is no groundwater connection between the 3 no. designated conservation sites and the new road scheme site. The N52 is aligned through the Louth and Ardee groundwater bodies whilst the River Boyne and Blackwater SAC crosses a number of groundwater bodies noted to be Drogheda, Donore, Trim, Athboy, Bailieborough, Wilkinstown and Moynalty⁵. Killyconny Bog SAC is a Groundwater Dependent Terrestrial Ecosystem (GWDTE) and lies within its own smaller groundwater body which is entirely surrounded by the Bailieborough ground waterbody. As the new route of the N52 lies within separate groundwater bodies to the Natura 2000 sites, connectivity through groundwater pathways between the road scheme and the SACs/SPA is precluded.

Although not within the recommended 15km zone of influence of the road scheme, a potential indirect connection exists between the N52 Road Scheme site and Dundalk Bay with the bay and estuary accommodating 2 no. Natura 2000 sites namely: Dundalk Bay SAC (Site Code: 000455) and Dundalk Bay SPA (Site Code: 004026). These Natura 2000 sites are located on the east coast ca. 22.6km

⁶ DoEHLG (2009). *Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities*. Department of Environment, Heritage and Local Government, Dublin, Ireland.

⁷ <https://gis.epa.ie/EPAMaps/>

northeast (by land) of the road scheme and are connected to the N52 Road Scheme via the River Dee and its tributaries as detailed below.

The route of the new N52 road is aligned across 3 no. small watercourses namely the Headstown Stream, Stephenstown Stream and an unnamed tributary of the Stephenstown Stream with all three watercourses outfalling ca 1.3km to the north of the route into the larger surface water feature of the River Dee. The Headstown and Stephenstown Streams are to be utilised as outfall locations for the drainage infrastructure of the N52 Road Scheme therefore providing an indirect pathway from the new road to Dundalk Bay SAC/SPA during both the construction and operational phases of the road scheme.

There are a further 2 no. of watercourse, identified as Carnacop Stream and Killary Water which come in close proximity to the route and the two watercourses outfall into the River Dee ca 2km north of the new road alignment and are to be used as drainage outfall locations for the eastern section of the N52 Road Scheme. The River Dee flows in a general easterly direction for ca. 37-38km before outfalling into Dundalk Bay.

The 5 no. tributaries, via the River Dee, form an indirect pathway to the Natura 2000 sites within Dundalk Bay and therefore potential impacts from the N52 Road Scheme upon the downstream SAC and SPA have been discussed further below.

Table 4.1 below lists the designated Natura 2000 Sites located within the zone of influence of the new N52 route and the distance of these sites from the new road scheme along with the features of interest for which these conservation sites have been designated. A screening statement is also presented within this table. Natura 2000 sites within the Zol of the new N52 route are illustrated in Figure 4.1 below.

Table 4.1. Designated Natura 2000 Sites within the Zol of the N52 Road Scheme.

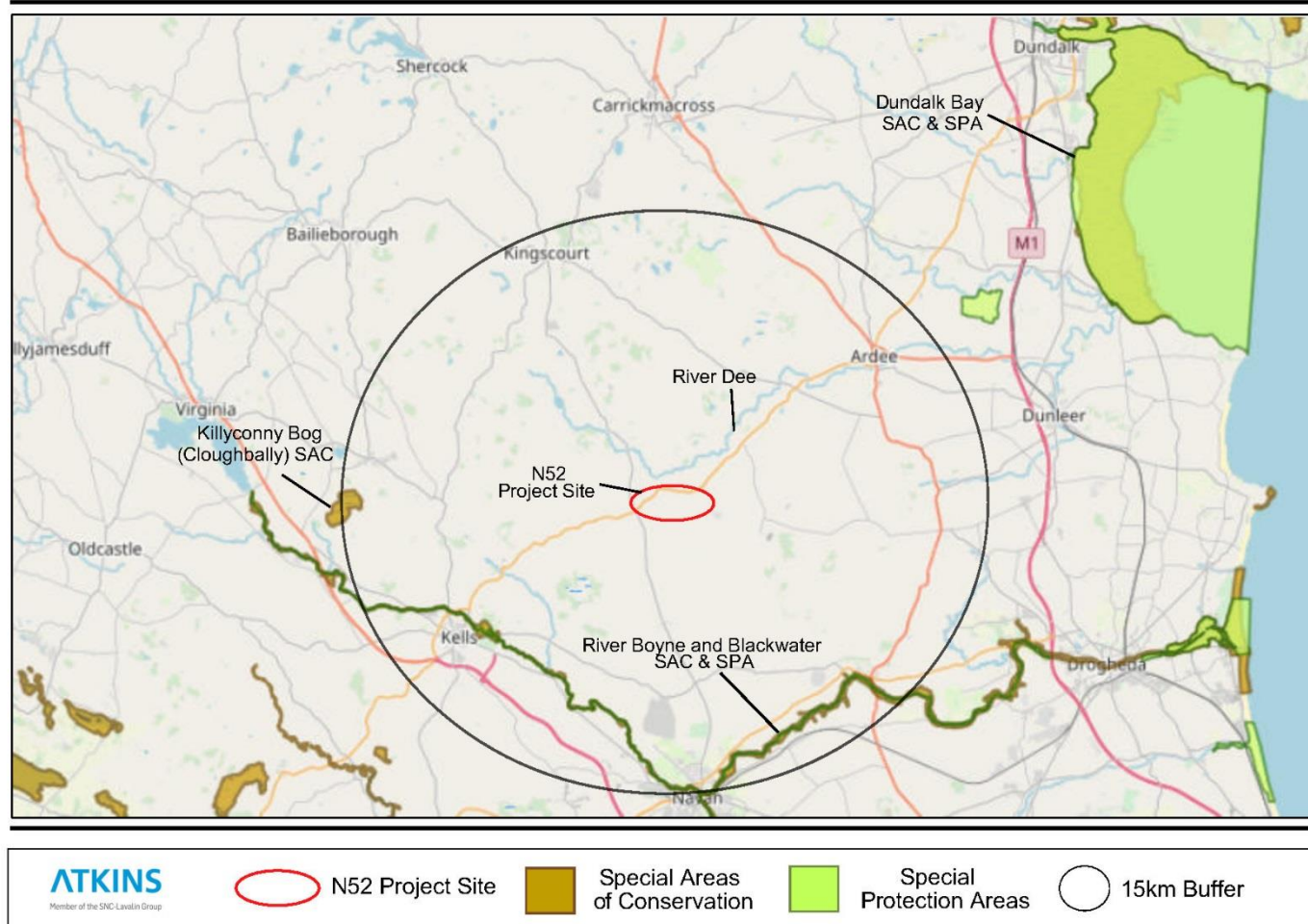
Site Name and Code	Approximate Distance from N52 project site	Features of Interest	Assessment
Special Areas of Conservation			
River Boyne and Blackwater SAC (002299)	9.2km	<ul style="list-style-type: none"> Alkaline fens [7230] Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) [91E0] <i>Lampetra fluviatilis</i> (River Lamprey) [1099] <i>Salmo salar</i> (Salmon) [1106] <i>Lutra lutra</i> (Otter) [1355] 	<p>River Boyne and Blackwater SAC is designated for fen and forest habitats, freshwater species and otter.</p> <p>There is no direct overlap between the proposed works and River Boyne and Blackwater SAC, nor do any of these habitats occur within or close to the works area.</p> <p>The watercourses potentially impacted by the N52 route flow into the River Dee and have no connectivity with the River Boyne or the Blackwater River, therefore no surface water connectivity exists between the N52 project site and this SAC.</p> <p>The N52 Road Scheme lies within a separate groundwater body to that of the SAC and therefore connectivity through groundwater pathways is precluded.</p> <p>This site is not considered further.</p>
Killyconny Bog (Cloghbally) SAC (000006)	14.5km	<ul style="list-style-type: none"> Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] 	<p>Killyconny Bog (Cloghbally) SAC is designated for a series of bog habitats. There is no direct overlap between the proposed works and Killyconny Bog (Cloghbally) SAC, nor do any of these habitats occur within or close to the works area.</p> <p>The N52 Road Scheme is located within a different groundwater body and there are no surface water features which flow from the proposed works to this SAC.</p> <p>The location and scale of the construction of the N52 Road Scheme is such that it will not contribute to direct, indirect or in-combination impacts on habitats and / or species for which the SAC has been designated and the scheme does not have the potential to affect the conservation objectives of these habitats /</p>

Site Name and Code	Approximate Distance from N52 project site	Features of Interest	Assessment
			species. Similarly the operational phase of the road will not impact the SAC as connecting pathways are precluded. This site is not considered further.
Dundalk Bay SAC (000455)	22.6km	<ul style="list-style-type: none"> • Estuaries [1130] • Mudflats and sandflats not covered by seawater at low tide [1140] • Perennial vegetation of stony banks [1220] • Salicornia and other annuals colonising mud and sand [1310] • Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330] • Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] 	<p>Dundalk Bay is located 22.6km east of the N52 Road Scheme site by land. The SAC is designated for a series of coastal, estuarine and dune habitats.</p> <p>There is no direct overlap between the N52 Road Scheme and Dundalk Bay SAC, nor do any of these habitats occur within or close to the N52 Road Scheme site.</p> <p>The N52 Road Scheme is located within the Newry, Fane, Glyde and Dee surface water catchment area which feeds into Dundalk Bay SAC.</p> <p>There are 5 no. watercourses which are potentially impacted by the new N52 route which are tributaries of the River Dee. The River Dee flows in an easterly direction and outfalls ca. 38km downstream of the N52 Road Scheme site into Dundalk Bay SAC.</p> <p>A hydrological link therefore exists between the proposed works area and Dundalk Bay SAC.</p> <p>Dundalk Bay SAC is discussed further below.</p>
Special Protection Areas			
River Boyne and Blackwater SPA (004232)	9.2km	<ul style="list-style-type: none"> • Kingfisher (<i>Alcedo atthis</i>) [A229] 	<p>River Boyne and Blackwater SPA is designated for the Kingfisher population found along the river corridor.</p> <p>There is no direct overlap between the new N52 route and the SPA. The N52 Road Scheme site is sufficiently remote so as to negate potential risk of disturbance to Kingfishers accommodated by the SPA.</p>

Site Name and Code	Approximate Distance from N52 project site	Features of Interest	Assessment
			<p>The location, scale and operation of the new road scheme is such that it will not contribute to direct impacts on bird species for which the SPA has been designated and the construction and operation of the new road does not have the potential to affect the conservation objectives of this species.</p> <p>The SPA is not hydrologically or hydro-geologically connected to the N52 Road Scheme site.</p> <p>This site is not considered further.</p>
Dundalk Bay SPA (004026)	22.6km	<ul style="list-style-type: none"> • Great Crested Grebe (<i>Podiceps cristatus</i>) [A005] • Greylag Goose (<i>Anser anser</i>) [A043] • Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] • Shelduck (<i>Tadorna tadorna</i>) [A048] • Teal (<i>Anas crecca</i>) [A052] • Mallard (<i>Anas platyrhynchos</i>) [A053] • Pintail (<i>Anas acuta</i>) [A054] • Common Scoter (<i>Melanitta nigra</i>) [A065] • Red-breasted Merganser (<i>Mergus serrator</i>) [A069] • Oystercatcher (<i>Haematopus ostralegus</i>) [A130] • Ringed Plover (<i>Charadrius hiaticula</i>) [A137] • Golden Plover (<i>Pluvialis apricaria</i>) [A140] • Grey Plover (<i>Pluvialis squatarola</i>) [A141] • Lapwing (<i>Vanellus vanellus</i>) [A142] • Knot (<i>Calidris canutus</i>) [A143] 	<p>Dundalk Bay SPA is designated for a range of waders and wildfowl that frequent coastal estuaries.</p> <p>There is no direct overlap between the N52 Road Scheme and the SPA.</p> <p>The N52 alignment has indirect connectivity to Dundalk Bay SPA via surface water features, i.e. tributaries of the River Dee and the River Dee outfalls into the Dundalk Bay designated site.</p> <p>Dundalk Bay SPA is discussed further below.</p>

Site Name and Code	Approximate Distance from N52 project site	Features of Interest	Assessment
		<ul style="list-style-type: none"> • Dunlin (<i>Calidris alpina</i>) [A149] • Black-tailed Godwit (<i>Limosa limosa</i>) [A156] • Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] • Curlew (<i>Numenius arquata</i>) [A160] • Redshank (<i>Tringa totanus</i>) [A162] • Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] • Common Gull (<i>Larus canus</i>) [A182] • Herring Gull (<i>Larus argentatus</i>) [A184] • Wetland and Waterbirds [A999] 	

Figure 4.1. Natura 2000 Sites within the Zol of the N52 Road Scheme.



4.2. Brief Description of Dundalk Bay SAC

A synopsis of the SAC, as detailed by NPWS, is as follows⁸: -

“Dundalk Bay, Co. Louth, is a very large open, shallow sea bay with extensive saltmarshes and intertidal sand/mudflats, extending some 16 km from Castletown River on the Cooley Peninsula in the north, to Annagassan/Salterstown in the south. The bay encompasses the mouths and estuaries of the Rivers Dee, Glyde, Fane, Castletown and Flurry. The site is a SAC selected for the following habitats listed on Annex I / II of the E.U. Habitats Directive: [1130] Estuaries, [1140] Tidal Mudflats and Sandflats, [1220] Perennial Vegetation of Stony Banks, [1310] Salicornia Mud, [1330] Atlantic Salt Meadows and [1410] Mediterranean Salt Meadows.

Saltmarsh vegetation occurs in four main areas: at Lurgangreen, Marsh South, Dundalk Harbour and Bellurgan. Two types are represented – Atlantic and Mediterranean salt meadows. Shingle beaches are particularly well represented in Dundalk Bay, occurring more or less continuously from Salterstown to Lurgan White House in the south bay, and from Jenkinstown to east of Giles Quay in the north bay.

Extensive sandflats and mudflats (over 4,000 ha) occur and are comprised of ecological communities such as muddy fine sand communities and fine sand community complexes. In the centre of Dundalk Bay there is a gravel community dominated by polychaetes. These habitats host a rich fauna of bivalves molluscs, marine worms and crustaceans and are the main food resource of the tens of thousands of waterfowl which feed in the intertidal area of Dundalk Bay. The site is internationally important for waterfowl because it regularly holds over 20,000 birds. This is a site of significant conservation value because it supports good examples of a range of coastal habitats listed on Annex I of the E.U. Habitats Directive, as well as large numbers of bird species, some of which are listed in the Birds Directive.”

Dundalk Bay SAC has a total size of 5,232 hectares of which an estimated 92.64% is noted as a marine area.

4.3. Conservation Objectives

The conservation objectives of Dundalk Bay SAC (000455), as detailed by NPWS⁹, are as follows: -

- To maintain the favourable conservation condition of Estuaries [1130] in Dundalk Bay SAC, which is defined by a specific list of attributes and targets.
- To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide [1140] at Dundalk Bay SAC, which is defined by a specific list of attributes and targets.
- To maintain the favourable conservation condition of Perennial vegetation of stony banks [1220] in Dundalk Bay SAC, which is defined by a specific list of attributes and targets.
- To restore the favourable conservation condition of Salicornia and other annuals colonizing mud and sand [1310] in Dundalk Bay SAC, which is defined by a specific list of attributes and targets.
- To maintain the favourable conservation condition of Atlantic salt meadows [1330] in Dundalk Bay SAC, which is defined by a specific list of attributes and targets.

⁸ <https://www.npws.ie/sites> (2011)

⁹ <https://www.npws.ie/sites> (2011)

- To maintain the favourable conservation condition of Mediterranean salt meadows [1410] in Dundalk Bay SAC, which is defined by a specific list of attributes and targets.

4.4. Brief Description of Dundalk Bay SPA

A synopsis of the SPA, as detailed by NPWS¹⁰, is as follows: -

“Dundalk Bay is a large open shallow sea bay with extensive saltmarshes and intertidal sand / mudflats, extending some 16km from Castletown River on the Cooley Peninsula, in the north, to Annagassan / Salterstown in the south. The extensive sand flats and mud flats have a rich fauna of bivalves, molluscs, marine worms and crustaceans which provides the food resource for most of the wintering waterfowl. The outer part of the bay provides excellent shallow-water habitat for divers, grebes and sea duck. In summer, it is thought to be a major feeding area for auks from the Dublin breeding colonies. The bay is used at night for roosting by wintering flocks of Greylag Goose, Greenland White-fronted Goose and Whooper Swan from Stabannan / Braganstown (inland of Castlebelligham) and other inland sites.

Dundalk Bay SPA is one of the most important wintering waterfowl sites in the country and one of the few that regularly supports more than 20,000 waterbirds. Four species occur in numbers of international importance and a further 19 species in numbers of national importance. The regular occurrence of Golden Plover, Bar-tailed Godwit, Red-throated Diver, Great Northern Diver and Little Egret is of particular note as these species are listed on Annex I of the E.U. Birds Directive. Dundalk Bay is a Ramsar Convention site and parts of Dundalk Bay SPA are designated as Wildfowl Sanctuaries.”

4.5. Conservation Objectives

The Conservation Objectives for Dundalk Bay SPA are to maintain the favourable conservation condition of the bird species as Special Conservation Interests for this SPA.

The favourable conservation status of a species is achieved when: -

- Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

The conservation objective for non-breeding birds of Dundalk Bay SPA are summarised below.

Table 4.2 Conservation objectives of the SPA.

Objective 1: To maintain the favourable conservation condition of the non-breeding waterbird Special Conservation Interest species listed for Dundalk Bay SPA, which is defined by the following list of attributes and targets:

Parameter	Attribute	Measure	Target
Population	Population Trend	Percentage change as per population trend assessment using waterbird count data collected through the Irish	The long term population trend should be stable or increasing.

¹⁰ <https://www.npws.ie/sites> (2014)

Objective 1: To maintain the favourable conservation condition of the non-breeding waterbird Special Conservation Interest species listed for Dundalk Bay SPA, which is defined by the following list of attributes and targets:

		Wetland Bird Survey and other surveys	
Range	Distribution	Range, timing or intensity of use of areas used by waterbirds, as determined by regular low tide and other waterbird surveys	There should be no significant decrease in the range, timing or intensity of use of areas by the waterbird species of Special Conservation Interest other than that occurring from natural patterns of variation.

Objective 2: To maintain the favourable conservation condition of the wetland habitat at Dundalk Bay SPA as a resource for the regularly-occurring migratory waterbirds that utilise it, which is defined by the following list of attributes and targets:

Parameter	Attribute	Measure	Target
Area	Wetland habitat	Area (Ha)	The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 8136 Ha, other than that occurring from natural patterns of variation.

4.6. Likelihood of Potential Impacts on Natura 2000 Sites

The available information on Dundalk Bay SAC and SPA was reviewed to establish whether or not the new N52 Road Scheme works are likely to have a significant effect on the conservation objectives of the SAC/SPA. The likelihood of impacts on the features of interest of the Dundalk Bay SAC/SPA identified in this report is based on information collated from the desk study, site plans and other available existing information.

The likelihood of impacts occurring are established in light of the type and scale of the proposed works, the location of the proposed works with respect to Natura 2000 sites and the features of interest and conservation objectives of the Natura 2000 sites.

This screening report is prepared following the Cause – Pathway – Effect model. The potential impacts are summarised into the following categories for screening purposes.

- Direct impacts refer to habitat loss or fragmentation arising from land-take requirements for development or agricultural purposes. Direct impacts can be as a result of a change in land use or management, such as the removal of agricultural practices that prevent scrub encroachment.
- Indirect and secondary impacts do not have a straight-line route between cause and effect. It is potentially more challenging to ensure that all the possible indirect impacts of the plan/project – in combination with other plans and projects - have been established. These can arise, for example, when a development alters the hydrology of a catchment area, which in turn affects the movement of groundwater to a site and the qualifying interests that rely on the maintenance of water levels. Deterioration in water quality can occur as an indirect consequence of development, which in turn changes the aquatic environment and reduces its capacity to support certain plants and animals. The introduction of invasive species can also be defined as an indirect impact. Disturbance to fauna can arise directly through the loss of habitat (e.g. displacement of roosting bats) or indirectly through noise, vibration and increased activity associated with construction and operation.

4.7. Identification of Potential Impacts on Natura 2000 Sites

Dundalk Bay SAC covers a significant geographical area and the qualifying habitats for which it is designated are also spread widely throughout. For example, an area of approximately 4,374.9 hectares of mudflats and sandflats not covered by seawater at low tide is noted to be within the bay, a habitat listed with priority status on Annex I /II of the E.U. Habitats Directive. Therefore, designated SAC features which have no potential of being impacted by the construction or operation of the N52 Road Scheme, either because these features do not occur within the project area likely to be affected or the scale, extent, location of the construction works negates potential impacts or because there is a lack of connectivity from the new N52 road alignment to these features, are listed below. Table 4.2 below presents an overview of the potential for impacts on the habitats listed as features of interest within the SAC.

Dundalk Bay SPA is designated for a range of wintering waders and wildfowl that frequent coastal estuaries. Direct impacts on the species associated with the SPA are not anticipated as there is no direct overlap of N52 works area with the SPA. Bird species associated with the SPA, such as Lapwing and Light-bellied Brent Goose for example, do feed in the wider landscape in fields outside the boundary of the conservation area, however the N52 project site is sufficiently remote (ca. 22.6km by land) that there is no risk of disturbance to waders and wildfowl using the SPA. It is considered that the location, scale and operation of the road scheme is such that it will not contribute to direct impacts on bird species for which the SPA has been designated.

As there is indirect connectivity from the N52 Road Scheme site to Dundalk Bay SAC/SPA through the 5 no. tributaries of the River Dee, namely Stephenstown Stream, Headstown Stream, Stephenstown tributary, Carnacop Stream and Killary Waters there is the potential for the road scheme to impact the Natura 2000 sites within the bay during both the construction and operational phases of the project if the watercourses intersected by the new N52 route are impacted. Potential impacts on the 5 no. watercourses could be through a contamination event during the construction phase, for example during the construction of drainage infrastructure or the installation of culverts at Stream crossings, or through hydrocarbon contamination from road traffic sources during the operation of the road.

Due to the significant distance from the N52 project site to Dundalk Bay and also due to the dilution factor that ca. 38-39km of watercourses would present, significant impacts through surface water pathways on the ecological features of interests of Dundalk Bay SAC/SPA are precluded.

The construction of the new N52 roadway will involve significant amounts of earthworks activities including 'cut and fill' construction activities which have the potential to have a negative impact on local groundwater sources. It is considered that any potential impacts on groundwater sources in the area of the N52 Road Scheme, from either the construction or operational phases of the road, will not affect the qualifying interests of the Natura 2000 sites within Dundalk Bay due to the significant distance from the N52 route to Dundalk Bay which is noted to be 22.6km.

Due to either lack of direct or indirect connectivity or due to the significant distance of the scheme to any Natura 2000 site, it is considered that the N52 Road Scheme, either during the construction or operational phase of the project, will not result in negative impacts on any of the features of interest for which any of the noted SACs and SPAs have been designated.

Table 4.2 Screening of SAC's qualifying habitats for Dundalk Bay SAC.

Habitat	Comment	Screening Statement
Estuaries [1130]	<p>The environs of the N52 Road Scheme are dominated by agricultural grassland.</p> <p>Estuarine habitat does not occur within or adjacent to the project site extents.</p>	Screened out.

Habitat	Comment	Screening Statement
	Due to the distance from the road scheme site to Dundalk Bay, and the dilution factor presented by ca. 38km of watercourse, significant impacts on the qualifying interests of Dundalk Bay SAC are not anticipated.	
Mudflats and sandflats not covered by seawater at low tide [1140]	<p>The environs of the N52 Road Scheme are dominated by agricultural grassland.</p> <p>Mud and sand habitat with salt tolerant floral species is not located on or close to N52 Road Scheme site.</p> <p>Due to the distance from the road scheme site to Dundalk Bay, and the dilution factor presented by ca. 38km of watercourse, significant impacts on the qualifying interests of Dundalk Bay SAC are not anticipated.</p>	Screened out.
Perennial vegetation of stony banks [1220]	<p>The environs of the N52 Road Scheme are dominated by agricultural grassland.</p> <p>This habitat does not occur within or adjacent to the N52 Road Scheme site.</p> <p>Due to the distance from the road scheme site to Dundalk Bay, and the dilution factor presented by ca. 38km of watercourse, significant impacts on the qualifying interests of Dundalk Bay SAC are not anticipated.</p>	Screened out.
Salicornia and other annuals colonising mud and sand [1310]	<p>The environs of the N52 Road Scheme are dominated by agricultural grassland.</p> <p>This habitat does not occur within or adjacent to the N52 Road Scheme site.</p> <p>Due to the distance from the road scheme site to Dundalk Bay, and the dilution factor presented by ca. 38km of watercourse, significant impacts on the qualifying interests of Dundalk Bay SAC are not anticipated.</p>	Screened out.
Atlantic salt meadows (Glaucopuccinellietalia maritimae) [1330]	<p>The environs of the N52 Road Scheme are dominated by agricultural grassland.</p> <p>This habitat does not occur within or adjacent to the N52 Road Scheme site.</p> <p>Due to the distance from the road scheme site to Dundalk Bay, and the dilution factor presented by ca. 38km of watercourse, significant impacts on the qualifying interests of Dundalk Bay SAC are not anticipated.</p>	Screened out.
Mediterranean salt meadows (Juncetalia maritimi) [1410]	<p>The environs of the N52 Road Scheme are dominated by agricultural grassland.</p> <p>This habitat does not occur within or adjacent to the N52 Road Scheme site.</p> <p>Due to the distance from the road scheme site to Dundalk Bay, and the dilution factor presented by ca. 38km of watercourse, significant impacts on the qualifying interests of Dundalk Bay SAC are not anticipated.</p>	Screened out.

4.8. Cumulative Impacts

Available information and records from Meath County Council were reviewed with respect to other projects which have the potential to occur during the same period as the N52 Road Scheme to determine if there is the potential for works or projects to act in combination and give rise to potential cumulative impacts on the designated sites.

The Meath County Development Plan 2013-2019 was reviewed to determine if there are any developments proposed to be undertaken during the N52 Road Scheme construction period. The Navan to Kingscourt Greenway project is in the process of being designed with the greenway route being aligned along a disused railway line which intersects the N52 Road Scheme at Chainage 0+330. The N52 Road Scheme has been designed to facilitate and incorporate the proposed greenway route. As the greenway route is to be aligned along the existing disused railway line, construction activities associated with the 5m wide pedestrian and cycle route are not considered likely to in act in combination with the N52 Road Scheme to give rise to cumulative impacts on any Natura 2000 sites.

A search of Meath County Council Planning Applications has been undertaken for applications submitted within the last 7 years in the vicinity road scheme (last accessed 25/02/2020). This search identified 7 no. developments within the vicinity of the proposed N52 project, as listed in Table 4.3. Based on the fact that all of these developments are small scale projects consisting of private property extension works, single dwelling houses and farm developments, no in-combination impacts which could give rise to cumulative impacts are anticipated on Dundalk Bay SAC/SPA or any other European site as a result of the proposed local plans and the construction and / or operation of the N53 Road Scheme.

It is considered that the construction of the N52 Road Scheme will not result in negative impacts on any of the features of interest for which any of the SACs and SPAs have been designated. In the absence of any potential impacts as a result of the road scheme there is no pathway for other projects to act in combination with the N52 Road Scheme to give rise to cumulative effects on any Natura 2000 sites.

Table 4.3. Planning applications near the new N52 alignment.

Planning Ref	Location	Description	In-combination assessment
KA190193	Headstown, Castletown, Navan, Co. Meath	Proposed walled silage pit and all associated works to existing farm complex. Planning was granted on the 25/2/2019. This site is accessed off an existing agricultural access on to the N52. The proposed silage pit is to be located to the north of the existing farmyard and has a concrete apron with a central dividing wall which creates two pits. This development is located ca. 330m north of the proposed scheme.	Due to the small size and small scale of this silage pit construction project it is considered that there is no potential for it to act in combination with the N52 road construction project to give rise to cumulative impacts on the qualifying interest of any Natura 2000 sites.
KA150927	Castletown, Kilpatrick, Navan, Co. Meath	The development will consist of construction of a two-storey dwelling with detached domestic garage, install a septic tank and percolation area and form new entrance from public road. Planning was granted on the 04/05/2015. This development is located ca. 230 m south of the proposed scheme.	Due to the small size and small scale of this residential construction project it is considered that there is no potential for it to act in combination with the N52 road construction project to give rise to cumulative impacts on the qualifying interest of any Natura 2000 sites.
KA161212	Castletown, Kilpatrick, Navan, Co. Meath	The development will consist of the reclamation of land by the importation and re-use of soil and sub-soil for the benefit of agricultural activity and all associated site works including wheel wash and temporary site office. Planning was granted in 10/11/2016. This development is located ca. 440m south of the proposed scheme.	Due to the small size and small scale of this agricultural development it is considered that there is no potential for it to act in combination with the N52 road construction project to give rise to cumulative impacts on the qualifying interest of any Natura 2000 sites.
NA121054	Carnacop, Castletown K.P, Navan, Co. Meath	The planning application is for the construction of an extension of a dormer bungalow, entrance and puraflo wastewater treatment system to the existing house and demolition of existing garage. Permission was granted on the 10/12/2012. This development is located ca. 180m north of the proposed scheme.	Due to the small size and small scale of this residential construction project it is considered that there is no potential for it to act in combination with the N52 road construction project to give rise to cumulative impacts on the qualifying interest of any Natura 2000 sites.
KA180040	Penrose Cottage, Fringestown, Castletown, Navan, Co. Meath.	Construction of a single storey side extension to existing detached bungalow and all associated site works Permission was granted on the 19/01/2018. This development is located ca. 120m south of the proposed scheme.	Due to the small size and small scale of this residential construction project it is considered that there is no potential for it to act in combination with the N52 road construction project to give rise to cumulative impacts on the qualifying interest of any Natura 2000 sites.

Planning Ref	Location	Description	In-combination assessment
SA130005	Mitchelstown, Castletown, Navan, Co. Meath	Extension of duration of planning permission Ref. No. SA/70268 - to create an enterprise with a view to enhancing public awareness of environmental benefits of farming and nature, etc. Permission was granted on the 07/01/2018. This development is located ca. 55m south of the proposed scheme.	Due to the small size and small scale of commercial project it is considered that there is no potential for it to act in combination with the N52 road construction project to give rise to cumulative impacts on the qualifying interest of any Natura 2000 sites.
LB140797	Benjerstown, Lobinstown, Navan, Co Meath	Demolition and replacement of existing dwelling with proposed two storey dwelling, and detached domestic garage, served with proprietary waste water treatment system, required percolation area together with relocation and upgrade to existing site entrance and all associated site works. This development is located ca. 340m south of the proposed scheme.	Due to the small size and small scale of this residential construction project it is considered that there is no potential for it to act in combination with the N52 road construction project to give rise to cumulative impacts on the qualifying interest of any Natura 2000 sites.

4.9. Likelihood of Significant Effects on Natura 2000 Sites

Due to the location of the proposed N52 Grange to Clontail Road Scheme, it is considered unlikely that the proposed project will negatively impact Dundalk Bay SAC/SPA nor any other Natura 2000 site. Given that the watercourses are the only connecting pathway from the N52 Road Scheme site, and given the location and distance of the scheme from Dundalk Bay it is considered that there will be no likely significant effects on the integrity of Dundalk Bay SAC/SPA from the N52 Road Scheme through hydrological pathways.

4.10. Consideration of Findings

This Screening for Appropriate Assessment report is based on the best available scientific information. It is concluded by the authors of this report that the proposed N52 Grange to Clontail Scheme project, either individually or cumulatively, poses no likely significant effects on Natura 2000 sites. Thus, it is recommended that it is not necessary for the proposed project to proceed to Appropriate Assessment.

The screening for Appropriate Assessment for the N52 Grange to Clontail Scheme is based on current and available information. Should the scope, nature or extent of the proposed N52 Road Scheme change, a new Screening for Appropriate Assessment report may be required.

5. Appropriate Assessment Screening Matrix

1. Description of the project or plan

Location	N52 Grange to Clontail Scheme, Co. Meath
Distance from designated site	ca. 22.6 from Dundalk Bay by land
Brief Description of the project or plan	See Section 1.1
Is the plan directly connected with or necessary to the site management for nature conservation?	No

2. Brief Description of the Natura 2000 site(s)

Name	Dundalk Bay
Site designation status	SAC/SPA
Qualifying interests	See Table 4.1
Unit size	SAC: 5234.05 hectares, 92.64% marine area SPA: 13237.9 hectares, 97.58% marine area

3. Assessment Criteria

Other plans or projects which may have a cumulative impact	There are no likely impacts arising from the proposed works on the Natura 2000 sites and there are no other plans or projects ongoing at the same time that would contribute to a cumulative impact on the Natura 2000 sites. Therefore, cumulative impacts with other projects will not occur.
Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on the Natura 2000 sites.	See Section 1.1 for description of the proposed project.
Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the Natura 2000 site by virtue of: Size and scale Land-take Distance from Natura 2000 site or key features of the site Resource requirements	No land take is required. No emissions / effluents will impact on the Natura 2000 Sites. There are no likely direct impacts to the SAC/SPA as a result of the N52 Road Scheme works due to the distance from the site and the dilution factor of the River Dee.

3. Assessment Criteria

<p>Emissions</p> <p>Excavation requirements</p> <p>Transportation requirements</p> <p>Duration of construction, operation etc.</p> <p>Others</p>	
<p>Describe any likely changes to the site arising as a result of:</p> <p>Reduction of habitat area</p> <p>Disturbance of key species</p> <p>Habitat or species fragmentation</p> <p>Reduction in species density</p> <p>Changes in key indicators of conservation value</p> <p>Climate change</p>	<p>There are no likely changes to the site as a result of the proposed works.</p> <p>There shall be no reduction of habitat area as a result of the proposed project.</p> <p>There shall be no habitat or species fragmentation or reduction in species density as a result of the works.</p>
<p>Describe any likely impacts on the Natura 2000 site as a whole in terms of:</p> <p>Interference with the key relationships that define the structure of the site</p> <p>Interference with key relationships that define the function of the site.</p>	<p>There are no likely changes to the site as a result of the proposed works with respect to the key relationships that define the structure or function of the SAC/SPA.</p>
<p>Provide indicators of significance as a result of the identification of effects set out above in terms of:</p> <p>Loss</p> <p>Fragmentation</p> <p>Disruption</p> <p>Disturbance</p> <p>Change to key elements of the site</p>	<p>There is no potential for impact to qualifying interests of the SAC/SPA given the location, nature and scale of the works.</p>
<p>Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale of magnitude of impacts is not known.</p>	<p>No significant impacts are likely as a result of the proposed works.</p>

Data collected to carry out the assessment

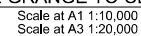
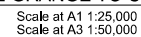
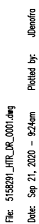
Who carried out the assessment	Sources of data	Level of assessment completed	Where can the full results of the assessments be accessed and viewed?
Atkins 150 Airside Business Park Swords Co. Dublin	Desktop data derived from the NPWS – Natura 2000 form, site synopsis, SAC/SPA reports etc. National Biodiversity Data Centre online data. EPA Envision Mapping system; Google maps; Bing Maps etc. Meath County Council Planning Enquiry System	Screening	Atkins 150 Airside Business Park Swords Co. Dublin

6. References

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Appendices

Appendix A. N52 Grange to Clontail Scheme Horizontal and Vertical Alignment Mainline



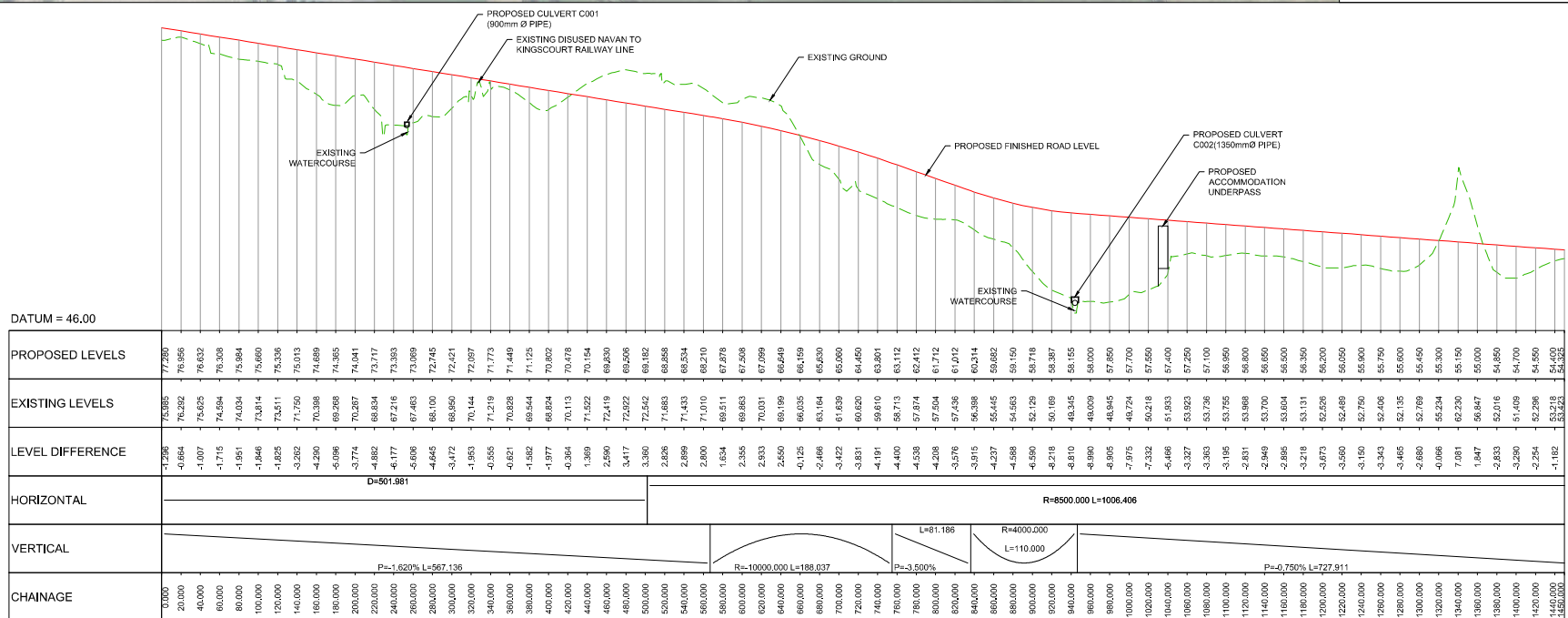
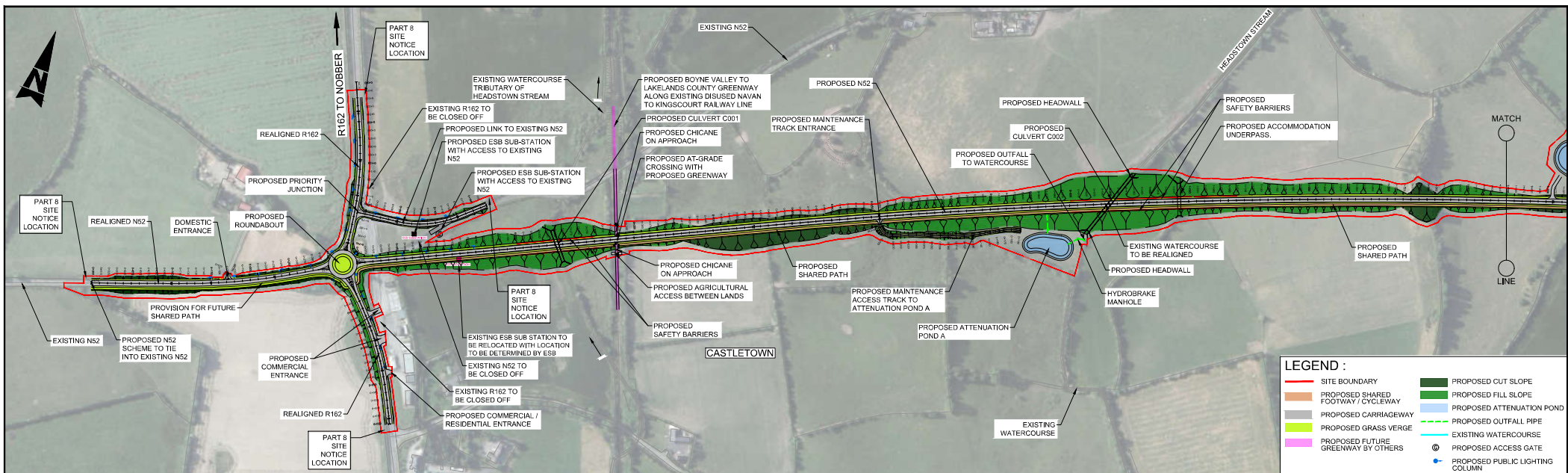
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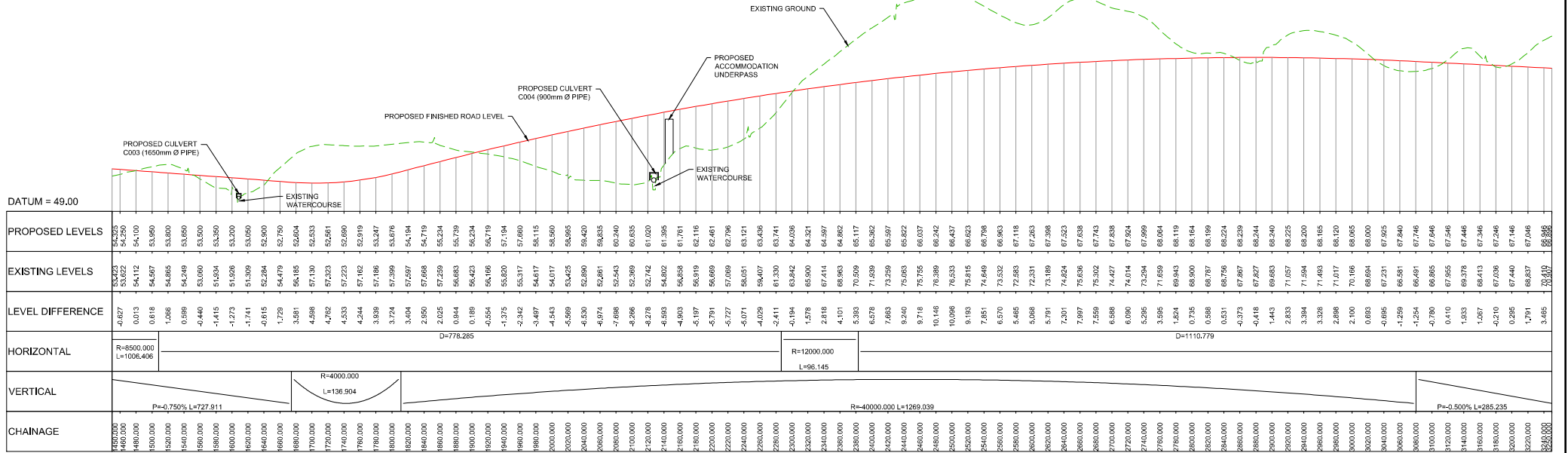
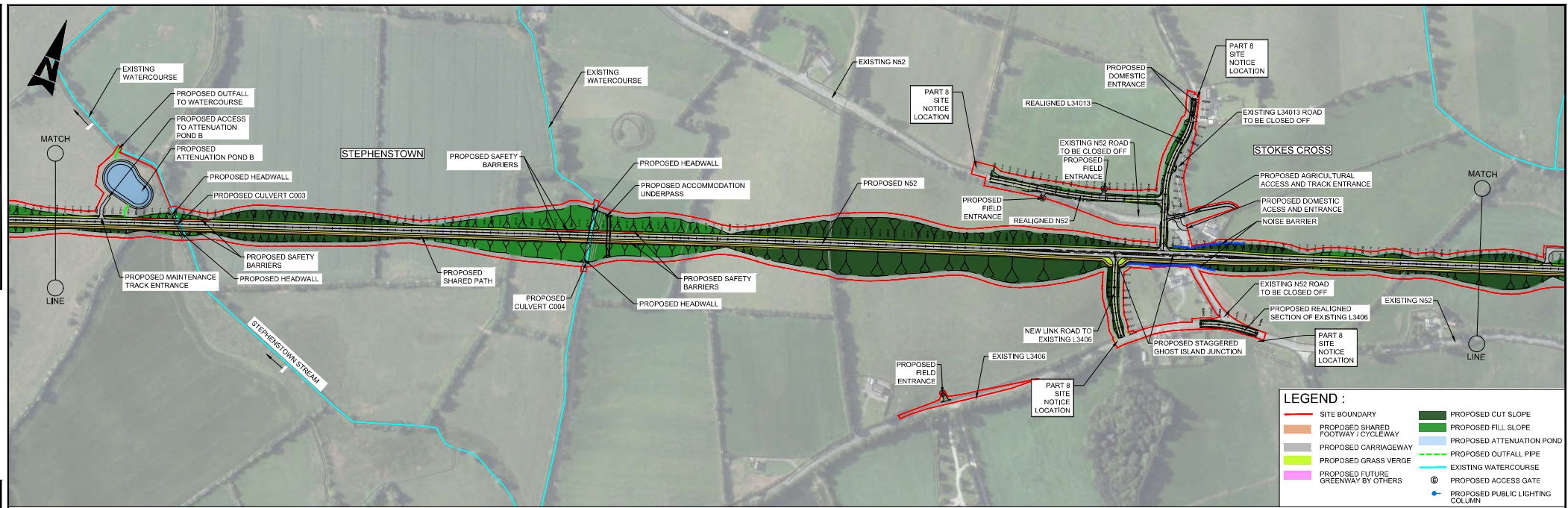
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N52 GRANGE TO CLONTAIL SCHEME

AS SHOWN	AK	ST	UOH
	Date 17.05.19	Date 17.05.19	Date 17.05.19
Status	Drawing Number		Rev
P	5158291 / HTR / DR / 0001		D



PROPOSED LEVELS	77.280 76.985 76.956 76.932 76.908 76.884 76.860 76.836 76.812 76.788 76.764 76.740 76.716 76.692 76.668 76.644 76.620 76.596 76.572 76.548 76.524 76.500 76.476 76.452 76.428 76.404 76.380 76.356 76.332 76.308 76.284 76.260 76.236 76.212 76.188 76.164 76.140 76.116 76.092 76.068 76.044 76.020 75.996 75.972 75.948 75.924 75.900 75.876 75.852 75.828 75.804 75.780 75.756 75.732 75.708 75.684 75.660 75.636 75.612 75.588 75.564 75.540 75.516 75.492 75.468 75.444 75.420 75.396 75.372 75.348 75.324 75.300 75.276 75.252 75.228 75.204 75.180 75.156 75.132 75.108 75.084 75.060 75.036 75.012 74.988 74.964 74.940 74.916 74.892 74.868 74.844 74.820 74.796 74.772 74.748 74.724 74.700 74.676 74.652 74.628 74.604 74.580 74.556 74.532 74.508 74.484 74.460 74.436 74.412 74.388 74.364 74.340 74.316 74.292 74.268 74.244 74.220 74.196 74.172 74.148 74.124 74.100 74.076 74.052 74.028 74.004 73.980 73.956 73.932 73.908 73.884 73.860 73.836 73.812 73.788 73.764 73.740 73.716 73.692 73.668 73.644 73.620 73.596 73.572 73.548 73.524 73.500 73.476 73.452 73.428 73.404 73.380 73.356 73.332 73.308 73.284 73.260 73.236 73.212 73.188 73.164 73.140 73.116 73.092 73.068 73.044 73.020 72.996 72.972 72.948 72.924 72.900 72.876 72.852 72.828 72.804 72.780 72.756 72.732 72.708 72.684 72.660 72.636 72.612 72.588 72.564 72.540 72.516 72.492 72.468 72.444 72.420 72.396 72.372 72.348 72.324 72.300 72.276 72.252 72.228 72.204 72.180 72.156 72.132 72.108 72.084 72.060 72.036 72.012 71.988 71.964 71.940 71.916 71.892 71.868 71.844 71.820 71.796 71.772 71.748 71.724 71.700 71.676 71.652 71.628 71.604 71.580 71.556 71.532 71.508 71.484 71.460 71.436 71.412 71.388 71.364 71.340 71.316 71.292 71.268 71.244 71.220 71.196 71.172 71.148 71.124 71.100 71.076 71.052 71.028 71.004 70.980 70.956 70.932 70.908 70.884 70.860 70.836 70.812 70.788 70.764 70.740 70.716 70.692 70.668 70.644 70.620 70.596 70.572 70.548 70.524 70.500 70.476 70.452 70.428 70.404 70.380 70.356 70.332 70.308 70.284 70.260 70.236 70.212 70.188 70.164 70.140 70.116 70.092 70.068 70.044 70.020 69.996 69.972 69.948 69.924 69.900 69.876 69.852 69.828 69.804 69.780 69.756 69.732 69.708 69.684 69.660 69.636 69.612 69.588 69.564 69.540 69.516 69.492 69.468 69.444 69.420 69.396 69.372 69.348 69.324 69.300 69.276 69.252 69.228 69.204 69.180 69.156 69.132 69.108 69.084 69.060 69.036 69.012 68.988 68.964 68.940 68.916 68.892 68.868 68.844 68.820 68.796 68.772 68.748 68.724 68.700 68.676 68.652 68.628 68.604 68.580 68.556 68.532 68.508 68.484 68.460 68.436 68.412 68.388 68.364 68.340 68.316 68.292 68.268 68.244 68.220 68.196 68.172 68.148 68.124 68.100 68.076 68.052 68.028 68.004 67.980 67.956 67.932 67.908 67.884 67.860 67.836 67.812 67.788 67.764 67.740 67.716 67.692 67.668 67.644 67.620 67.596 67.572 67.548 67.524 67.500 67.476 67.452 67.428 67.404 67.380 67.356 67.332 67.308 67.284 67.260 67.236 67.212 67.188 67.164 67.140 67.116 67.092 67.068 67.044 67.020 66.996 66.972 66.948 66.924 66.900 66.876 66.852 66.828 66.804 66.780 66.756 66.732 66.708 66.684 66.660 66.636 66.612 66.588 66.564 66.540 66.516 66.492 66.468 66.444 66.420 66.396 66.372 66.348 66.324 66.300 66.276 66.252 66.228 66.204 66.180 66.156 66.132 66.108 66.084 66.060 66.036 66.012 65.988 65.964 65.940 65.916 65.892 65.868 65.844 65.820 65.796 65.772 65.748 65.724 65.700 65.676 65.652 65.628 65.604 65.580 65.556 65.532 65.508 65.484 65.460 65.436 65.412 65.388 65.364 65.340 65.316 65.292 65.268 65.244 65.220 65.196 65.172 65.148 65.124 65.100 65.076 65.052 65.028 65.004 64.980 64.956 64.932 64.908 64.884 64.860 64.836 64.812 64.788 64.764 64.740 64.716 64.692 64.668 64.644 64.620 64.596 64.572 64.548 64.524 64.500 64.476 64.452 64.428 64.404 64.380 64.356 64.332 64.308 64.284 64.260 64.236 64.212 64.188 64.164 64.140 64.116 64.092 64.068 64.044 64.020 63.996 63.972 63.948 63.924 63.900 63.876 63.852 63.828 63.804 63.780 63.756 63.732 63.708 63.684 63.660 63.636 63.612 63.588 63.564 63.540 63.516 63.492 63.468 63.444 63.420 63.396 63.372 63.348 63.324 63.300 63.276 63.252 63.228 63.204 63.180 63.156 63.132 63.108 63.084 63.060 63.036 63.012 62.988 62.964 62.940 62.916 62.892 62.868 62.844 62.820 62.796 62.772 62.748 62.724 62.700 62.676 62.652 62.628 62.604 62.580 62.556 62.532 62.508 62.484 62.460 62.436 62.412 62.388 62.364 62.340 62.316 62.292 62.268 62.244 62.220 62.196 62.172 62.148 62.124 62.100 62.076 62.052 62.028 62.004 61.980 61.956 61.932 61.908 61.884 61.860 61.836 61.812 61.788 61.764 61.740 61.716 61.692 61.668 61.644 61.620 61.596 61.572 61.548 61.524 61.500 61.476 61.452 61.428 61.404 61.380 61.356 61.332 61.308 61.284 61.260 61.236 61.212 61.188 61.164 61.140 61.116 61.092 61.068 61.044 61.020 60.996 60.972 60.948 60.924 60.900 60.876 60.852 60.828 60.804 60.780 60.756 60.732 60.708 60.684 60.660 60.636 60.612 60.588 60.564 60.540 60.516 60.492 60.468 60.444 60.420 60.396 60.372 60.348 60.324 60.300 60.276 60.252 60.228 60.204 60.180 60.156 60.132 60.108 60.084 60.060 60.036 60.012 59.988 59.964 59.940 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49.620 49.596 49.572 49.548 49.524 49.500 49.476 49.452 49.428 49.404 49.380 49.356 49.332 49.308 49.284 49.260 49.236 49.212 49.188 49.164 49.140 49.116 49.092 49.068 49.044 49.020 48.996 48.972 48.948 48.924 48.900 48.876 48.852 48.828 48.804 48.780 48.756 48.732 48.708 48.684 48.660 48.636 48.612 48.588 48.564 48.540 48.516 48.492 48.468 48.444 48.420 48.396 48.372 48.348 48.324 48.300 48.276 48.252 48.228 48.204 48.180 48.156 48.132 48.108 48.084 48.060 48.036 48.012 47.988 47.964 47.940 47.916 47.892 47.868 47.844 47.820 47.796 47.772 47.748 47.724 47.700 47.676 47.652 47.628 47.604 47.580 47.556 47.532 47.508 47.484 47.460 47.436 47.412 47.388 47.364 47.340 47.316 47.292 47.268 47.244 47.220 47.196 47.172 47.148 47.124 47.100 47.076 47.052 47.028 47.004 46.980 46.956 46.932 46.908 46.884 46.860 46.836 46.812 46.788 46.764 46.740 46.716 46.692 46.668 46.644 46.620 46.596 46.572 46.548 46.524 46.500 46.476 46.452 46.428 46.404 46.380 46.356 46.332 46.308 46.284 46.260 46.236 46.212 46.188 46.164 46.140 46.116 46.092 46.068 46.044 46.020 45.996 45.972 45.948 45.924 45.900 45.876 45.852 45.828 45.804 45.780 45.756 45.732 45.708 45.684 45.660 45.636 45.612 45.588 45.564 45.540 45.516 45.492 45.468 45.444 45.420 45.396 45.372 45.348 45.324 45.300 45.276 45.252 45.228 45.204 45.180 45.156 45.132 45.108 45.084 45.060 45.036 45.012 44.988 44.964 44.940 44.916 44.892 44.868 44.844 44.820 44.796 44.772 44.748 44.724 44.700 44.676 44.652 44.628 44.604 44.580 44.556 44.532 44.508 44.484 44.460 44.436 44.412 44.388 44.364 44.340 44.316 44.292 44.268 44.244 44.220 44.196 44.172 44.148 44.124 44.100 44.076 44.052 44.028 44.004 43.980 43.956 43.932 43.908 43.884 43.860 43.836 43.812 43.788 43.764 43.740 43.716 43.692 43.668 43.644 43.620 43.596 43.572 43.548 43.524 43.500 43.476 43.452 43.428 43.404 43.380 43.356 43.332 43.308 43.284 43.260 43.236 43.212 43.188 43.164 43.140 43.116 43.092 43.068 43.044 43.020 42.996 42.972 42.948 42.924 42.900 42.876 42.852 42.828 42.804 42.780 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Rev	Description	By	Date	Chk'd	Auth
D	FOR PLANNING	JD	18.09.20	ST	UOH
C	FOR PLANNING	DB	13.08.20	ST	UOH
B	FOR PLANNING	DB	26.02.20	ST	UOH
A	UPDATES	DB	03.07.18	ST	UOH
-	FOR PLANNING	AK	17.05.18	ST	UOH

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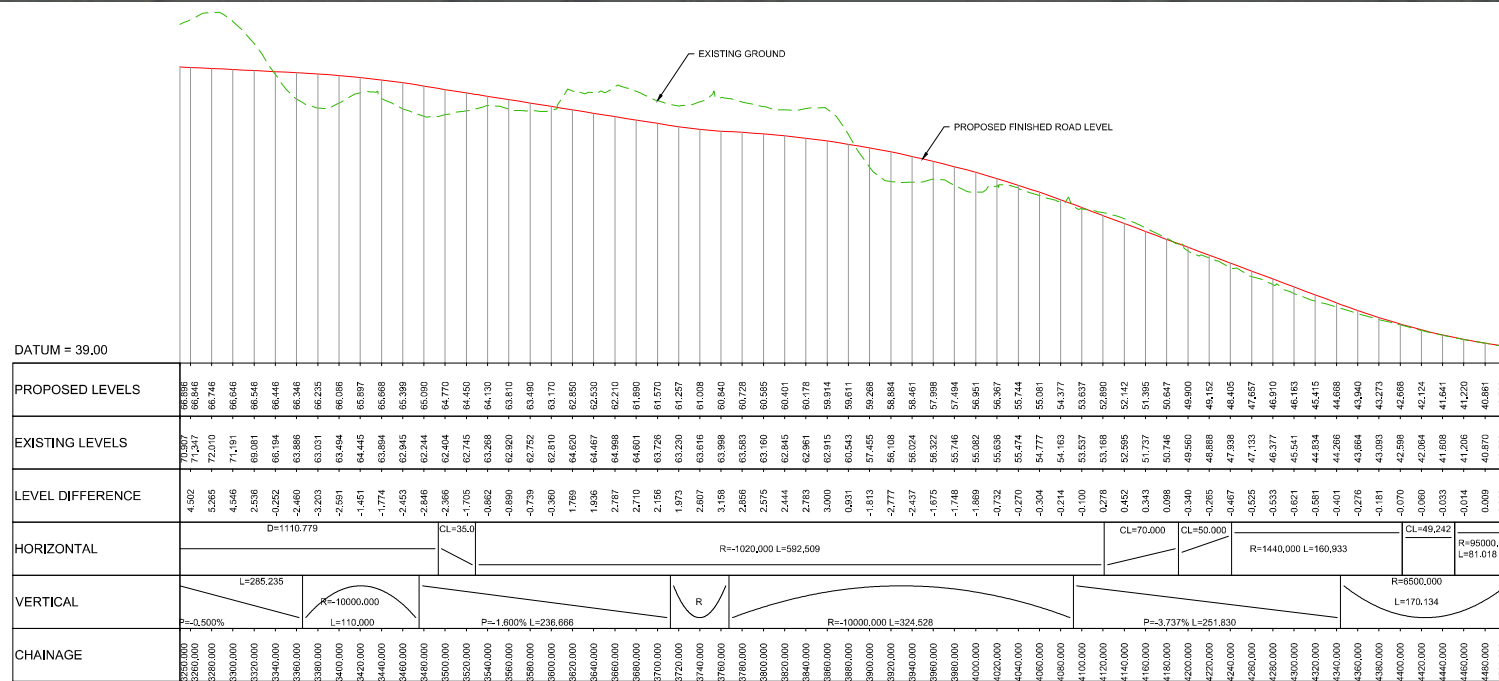
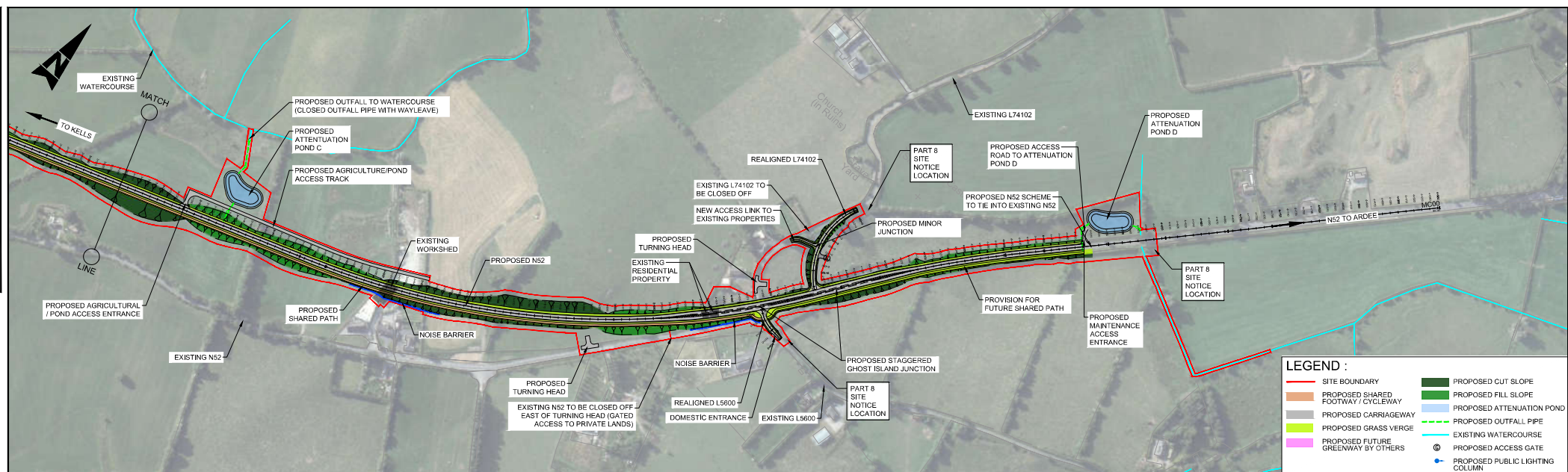
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Client	MEATH COUNTY COUNCIL
Project	N52 GRANGE TO CLONTAIL SCHEME

Purpose	FOR PLANNING
Title	PART 8 HORIZONTAL AND VERTICAL ALIGNMENT MAINLINE - SHEET 2 OF 3
Original Scale	1:1000 at A1
Design/Drawn	AK
Checked	ST
Authorised	UOH
Date	17.05.19
Date	17.05.19
Date	17.05.19
Status	P
Drawing Number	5158291 / HTR / DR / 0102
Rev	D



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D	FOR PLANNING	JD	18.09.20	ST	UOH	
C	FOR PLANNING	DB	13.08.20	ST	UOH	
B	FOR PLANNING	DB	26.02.20	ST	UOH	
A	FOR PLANNING	DB	23.07.19	ST	UOH	
	- FOR PLANNING	AK	17.05.19	ST	UOH	
R#	Description	P#	Date	Qty	Unit	



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Client	MEATH COUNTY COUNCIL
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N52 GRANGE TO CLONTAIL SCHEME

Purpose	FOR PLANNING
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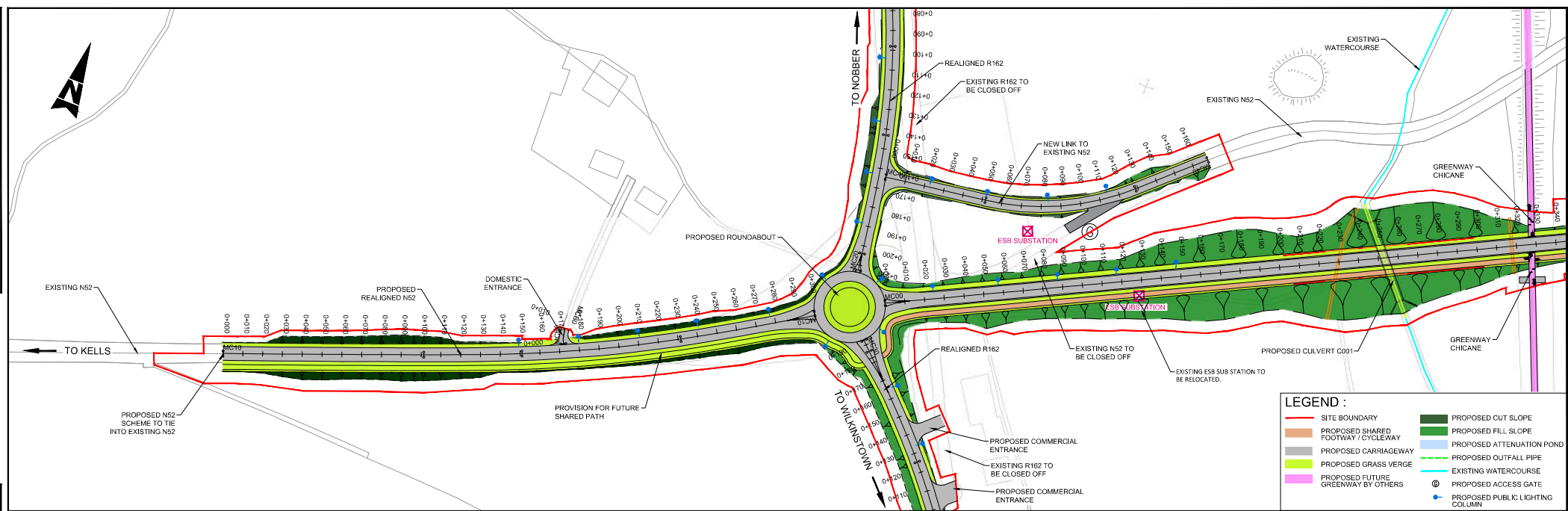
Title	PART 8 HORIZONTAL AND VERTICAL ALIGNMENT MAINLINE - SHEET 3 OF 3
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Original Scale	Design/Drawn	Checked	Authorised
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1:1000 at A1	AK	ST	UOH
1:2000 at A3	Date 17.05.19	Date 17.05.19	Date 17.05.19

Status	Drawing Number	Rev
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P	5158291 / HTR / DR / 0103	D
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DATUM = 71.00

PROPOSED LEVELS	75.145 75.133 75.146 75.196 75.264 75.346 75.499 75.616 75.730 75.671 75.189 75.297 75.445 75.583 75.711 75.829 75.908 77.036 77.194 77.202 77.270 77.328 77.376 77.414 77.442 77.460 77.468 77.496 77.495 77.453 77.400
EXISTING LEVELS	75.145 75.127 75.099 75.071 75.039 75.064 75.150 75.280 75.345 75.538 75.798 75.651 75.341 75.611 75.669 77.102 77.462 77.670 77.853 78.049 78.197 78.228 78.220 78.344 78.438 78.452 78.464 78.447 78.449 78.259 77.453
LEVEL DIFFERENCE	0.000 -0.006 -0.046 -0.115 -0.215 -0.295 -0.320 -0.337 -0.387 -0.433 -0.341 -0.246 -1.105 0.027 0.187 0.362 0.525 0.535 0.729 0.847 0.927 0.984 0.984 0.992 0.992 1.015 1.006 0.955 0.937 0.951
HORIZONTAL	R=8771.903 L=87.080 CL=45.982 R=720.000 L=82.795 CL=49.509 D=24.744
VERTICAL	R=3700.000 L=75.723 R=10000.000 L=221.793
CHAINAGE	0+000 10+000 20+000 30+000 40+000 50+000 60+000 70+000 80+000 90+000 100+000 110+000 120+000 130+000 140+000 150+000 160+000 170+000 180+000 190+000 200+000 210+000 220+000 230+000 240+000 250+000 260+000 270+000 280+000 290+000 300+000

LONGITUDINAL SECTION - MC10
SCALE 1:1000 Horizontal, 1:200 Vertical @ A1
SCALE 1:2000 Horizontal, 1:400 Vertical @ A3

DATUM = 67.00

PROPOSED LEVELS	77.075 75.626 75.597 75.290 75.694 75.681 75.349 74.699 74.631 74.631 74.644 73.840 73.417 72.976 72.525 72.115 71.796 71.445 71.425
EXISTING LEVELS	77.023 77.261 77.001 76.445 76.010 75.702 75.422 75.177 75.001 74.697 74.322 73.864 73.417 72.779 72.403 72.032 71.712 71.440 71.425
LEVEL DIFFERENCE	0.048 0.425 0.435 0.155 0.015 0.021 0.073 0.179 0.371 0.453 0.463 -0.554 -0.197 -0.122 -0.084 -0.043 -0.004
HORIZONTAL	D=51.729 R=127.000 L=77.859 D=39.295
VERTICAL	R=5500.000 L=115.141 R=2000.000 L=38.010
CHAINAGE	0+000 10+000 20+000 30+000 40+000 50+000 60+000 70+000 80+000 90+000 100+000 110+000 120+000 130+000 140+000 150+000 160+000 170+000 180+000 190+000 200+000

LONGITUDINAL SECTION - MC40
SCALE 1:1000 Horizontal, 1:200 Vertical @ A1
SCALE 1:2000 Horizontal, 1:400 Vertical @ A3

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Rev	Description	By	Date	Chk'd	Auth
D	FOR PLANNING	JD	18.09.20	ST	UOH
C	FOR PLANNING	DB	13.08.20	ST	UOH
B	FOR PLANNING	DB	26.02.20	ST	UOH
A	FOR PLANNING	DB	03.07.18	ST	UOH
-	FOR PLANNING	AK	17.05.18	ST	UOH

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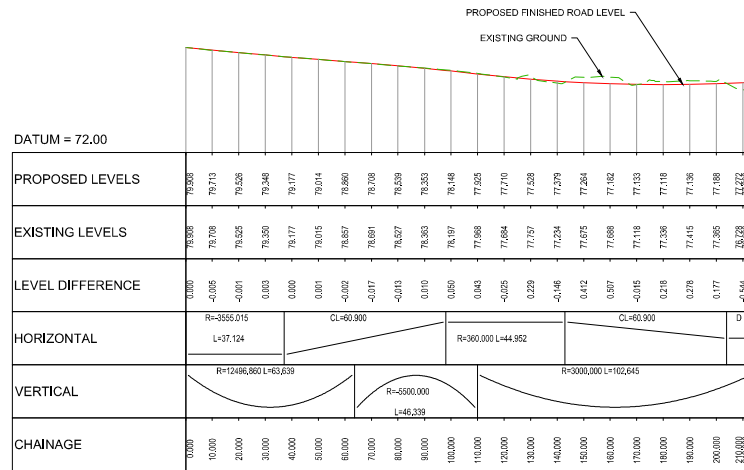
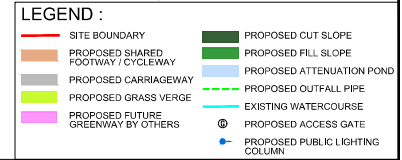
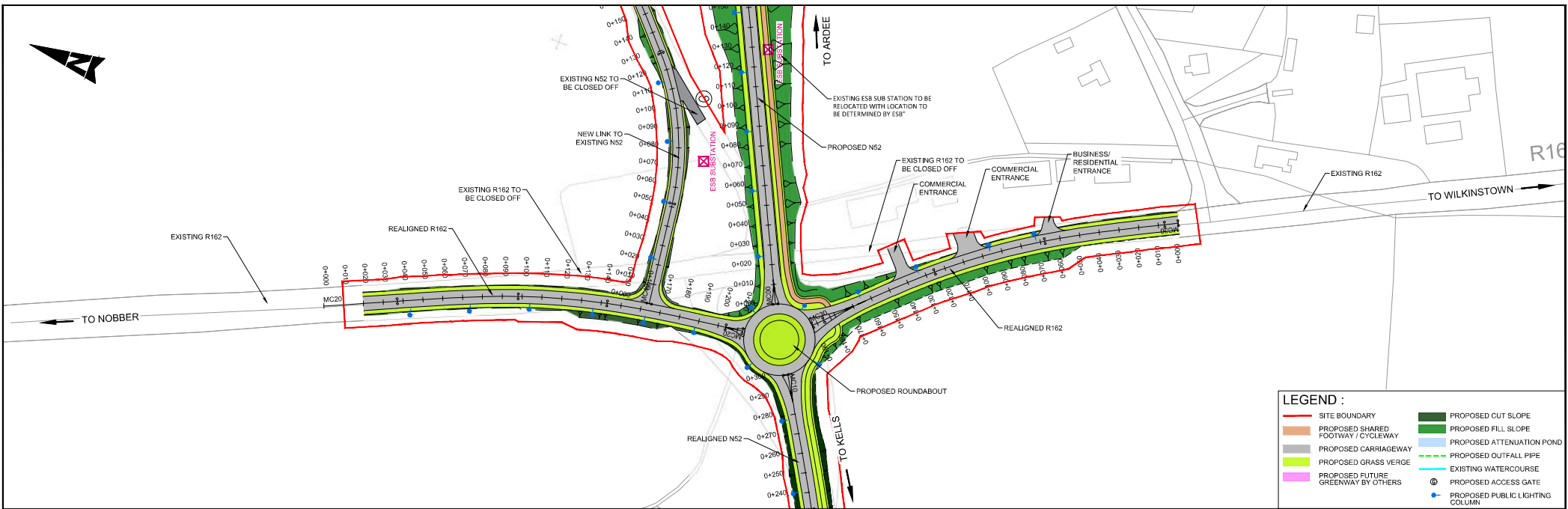
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Unit 2B, 2200 Cork Airport
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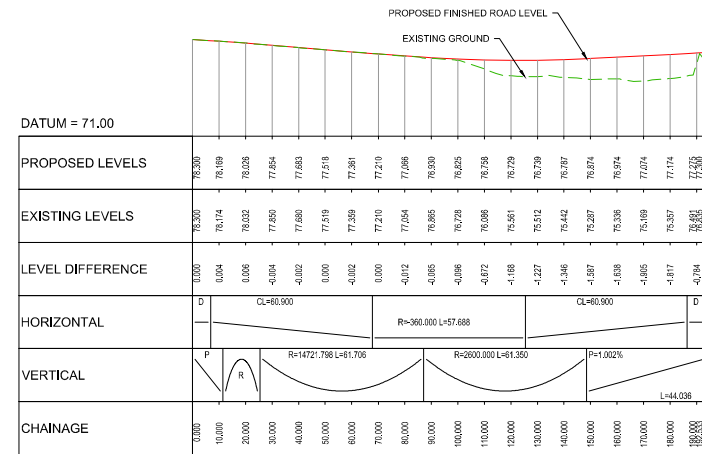
1st Floor Technology House
Parkmore Technology Park, Galway
Tel (+353) 091 786 050
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Client	MEATH COUNTY COUNCIL
Project	N52 GRANGE TO CLONTAIL SCHEME

Purpose	FOR PLANNING
Title	PART 8 HORIZONTAL AND VERTICAL ALIGNMENT SIDE ROADS - SHEET 1 OF 4
Original Scale	1:1000 at A1 1:2000 at A3
Design/Drawn	AK
Checked	ST
Authorised	UOH
Date	17.05.19
Date	17.05.19
Date	17.05.19
Status	P
Drawing Number	5158291 / HTR / DR / 0110
Rev	D



LONGITUDINAL SECTION - MC20
SCALE 1:1000 Horizontal, 1:200 Vertical @ A1
SCALE 1:2000 Horizontal, 1:400 Vertical @ A3



LONGITUDINAL SECTION - MC30
SCALE 1:1000 Horizontal, 1:200 Vertical @ A1
SCALE 1:2000 Horizontal, 1:400 Vertical @ A3

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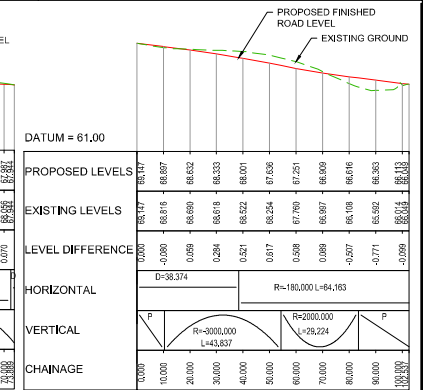
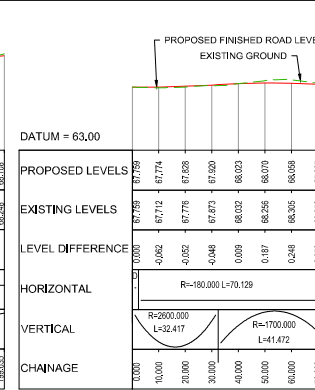
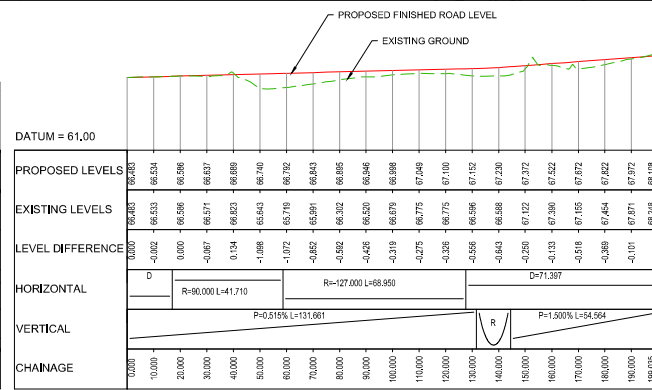
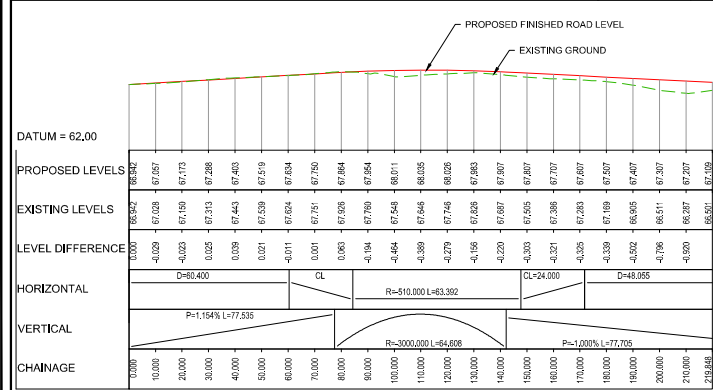
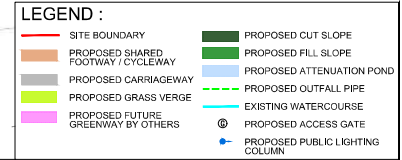
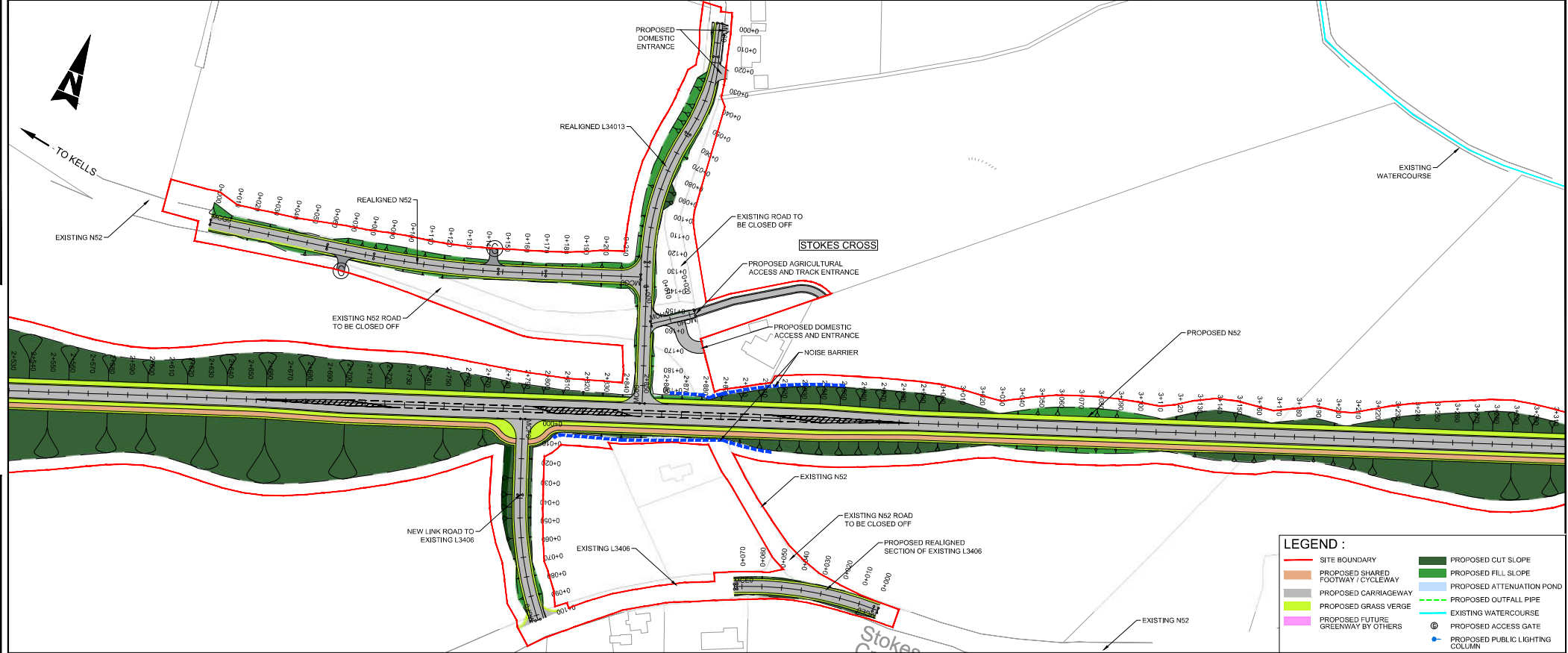


Rev	Description	By	Date	Chk'd	Auth
D	FOR PLANNING	JD	18.09.20	ST	UOH
C	FOR PLANNING	DB	13.08.20	ST	UOH
B	FOR PLANNING	DB	26.02.20	ST	UOH
A	FOR PLANNING	DB	20.07.19	ST	UOH
-	FOR PLANNING	AK	17.05.18	ST	UOH



Client	MEATH COUNTY COUNCIL
Project	N52 GRANGE TO CLONTAIL SCHEME

Purpose	FOR PLANNING
Title	PART 8 HORIZONTAL AND VERTICAL ALIGNMENT SIDE ROADS - SHEET 2 OF 4
Original Scale	1:1000 at A1
Design/Drawn	AK
Checked	ST
Authorised	UOH
Date	17.05.19
Date	17.05.19
Date	17.05.19
Status	P
Drawing Number	5158291 / HTR / DR / 0111
Rev	D



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comhairle chontae na mí
meath county council

An Roinn Iompair
Turasóireacht agus Spóirt
Department of Transport,
Tourism and Sport

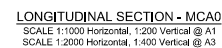
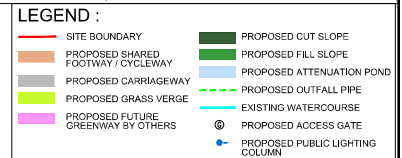
Rev	Description	By	Date	Chk'd	Auth
D	FOR PLANNING	JD	18.09.20	ST	UOH
C	FOR PLANNING	DB	26.07.20	ST	UOH
B	FOR PLANNING	DB	26.02.20	ST	UOH
A	FOR PLANNING	DB	20.07.19	ST	UOH
-	FOR PLANNING	AK	17.05.18	ST	UOH

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Client	MEATH COUNTY COUNCIL
Project	N52 GRANGE TO CLONTAIL SCHEME

Purpose	FOR PLANNING
Title	PART 8 HORIZONTAL AND VERTICAL ALIGNMENT SIDE ROADS - SHEET 3 OF 4
Original Scale	1:1000 at A1 1:2000 at A3
Design/Drawn	Date: 17.05.19
Checked	ST
Authorised	UOH
Status	P
Drawing Number	5158291 / HTR / DR / 0112
Rev	D



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