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MULTIDISCIPLINARY CONSULTING ENGINEERS

W383: THE SOUTH-NORTH ACCESS ROAD

OPTION SELECTION REPORT

For

Kilkenny County Council

9 September 2024

NOTICE

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DOCUMENT CONTROL & HISTORY

OCSC Job No: W383	Project Code	Originator	Zone Volume	Level	File Type	Role Type	Number	Status / Suitability Code	Revision
	W383	OCSC	XX	XX	RP	C	0002	S4	P03

Rev.	Status	Authors	Checked	Authorised	Issue Date
P01	S2	Wian Marais	Patrick Raggett	Anthony Horan	20/10/2023
P02	S2	Wian Marais	Patrick Raggett	Anthony Horan	26/10/2023
P03	S4	Wian Marais	Patrick Raggett	Anthony Horan	9/09/2024

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1 INTRODUCTION

PROJECT BRIEF

Kilkenny County Council has identified the need to engage the services of an engineer-led multi-disciplinary consultant team to advance the preliminary design, detailed design, statutory planning requirements, enabling and procurement, construction, and handover to complete the South-North Access Road (Abbey Road to Belmont Road), including PSDP Consultancy Services along with the procurement of specialist services and all other services as prescribed to advance the Scheme.

PROJECT BACKGROUND AND STUDY AREA

The proposed development location is in Ferrybank within the Municipal District of Piltown in South Kilkenny. The Ferrybank area is located to the north of the river Suir and bounds Waterford City and has a population of approximately 6,000 people. The existing road network needs to be built upon to facilitate the continuing development of zoned lands as a key objective as well as the provision of enhanced sustainable transport infrastructure and connectivity to the Southeast Greenway.

Presently the nearest access from the Abbey Road (LP3412) area to the Belmont Road (R711) is via the existing R711/LP3412 Junction at Ferrybank, located within the Waterford City & County Boundary. This is a signal-controlled junction which, since its installation several years ago, has facilitated improved pedestrian safety and capacity in comparison to its former priority-controlled junction layout.

The proposal to be developed will provide an additional new access road and improved connectivity between the R711 Belmont Road (Old N25) and the L3412 Abbey Road.

Whilst facilitating the opening up of zoned lands for development, the proposed infrastructure will also facilitate active travel with improved pedestrian & cycling infrastructure and connectivity within the Ferrybank area. The pedestrian and cycling facilities shall also provide a direct connection point to the Southeast Greenway which is complete in sections with the remainder currently under construction. Provision for a bus stop on both sides of the access road within the extent of the road shall also be provided.

It has been noted on the on-site walkover that some invasive species have been observed in proximity to the scheme and this shall need to be considered. The lands immediately to the north and south of the Southeast Greenway are in the ownership of private developers.

The study area for the scheme is shown in the figure overleaf.

Figure 1-1: South-North Access Road Study Area (Source: Google Earth)

2 PROJECT NEED AND OBJECTIVES

PROJECT NEED

The statutory objective underpinning the delivery of this Scheme is provided for in the Ferrybank- Belview Local Area Plan 2017, extract provided hereunder:

10.8 Transport Objectives

10F To provide a link northward across the New Ross railway line/Greenway at the Ross Abbey housing development to connect through to the Belmont Road (R711) and to Clover Meadows development.

This objective is also restated in the Kilkenny City & County Development Plan 2021-2027.

12S Develop the Link Road from the Abbey Road to the Belmont Road.

PROJECT OBJECTIVES

The objectives of the scheme are as follows:

- To facilitate the orderly development of the zoned lands.
- To provide a car park for the Southeast Greenway with both pedestrian/cyclist and vehicular links to the proposed access road and to create a pedestrian/cyclist link from the car park to the Southeast Greenway.
- To prioritise the needs of Vulnerable Road Users and facilitate the implementation of public transport and active travel solutions.
- To create a road to link the Abbey Road and Belmont Road.
- To create a suitable streetscape in accordance with the requirements of DMURS.
- To facilitate as far as reasonably practicable the inclusion of SUDS technologies and limit the discharge of surface water to the receiving environment.

3 DESIGN GUIDANCE

The roads, structure and traffic elements of the scheme will be designed in accordance, as appropriate, with the TII Design Manual for Roads and Bridges, the DTTaS Design Manual for Urban Roads and Streets (DMURS), the DoT Traffic Signs Manual 2019, and all other relevant national policy & guidance documents and updates thereof.

TII DESIGN MANUAL FOR ROADS & BRIDGES

The manual supports policy, administrative and technical procedures which are required to ensure that the Overseeing Organisations operate in an efficient and effective manner. Particular volumes and documents contain technical requirements and guidance on a wide range of topics, such as:

(a) technical and other procedures and
(b) methods to be employed;
(c) analytical criteria to be used;
(d) appraisal requirements;
(e) dimensional requirements;
(f) numerical and statistical data.

The documents give guidance and set technical requirements for the economic and engineering criteria which apply to the national road network and are an essential component in obtaining quality. They:

(a) define the quality of the national road network in terms of value for money consistent with adequate safety and durability, while taking into account the impact on the environment and costs;
(b) provide a sound and rational basis on which competitive tenders can be sought;
(c) develop and promulgate good practices whilst encouraging innovation;
(d) facilitate quality control of design, construction and maintenance;
(e) define methods for assessing maintenance requirements when evaluating options;
(f) define methods for monitoring the performance of the network.

DESIGN MANUAL FOR URBAN ROADS AND STREETS (DMURS)

The Design Manual for Urban Roads and Streets (DMURS) also issued by the NTA (Version 1.1, 2019) provides guidance relating to the design of urban roads and streets. It presents a series of principles, approaches and standards that are necessary to achieve a balanced and best-practice design outcome with regard to street networks and individual streets. The manual discusses the dominance of car use in Ireland

and the implications this has had regarding the pedestrian and cycle environment. The four key design principles of DMURS include:

- Design Principle 1: Support the creation of integrated street networks which promote higher levels of permeability and legibility for all road users, and in particular more sustainable forms of transport.
- Design Principle 2: The promotion of multi-cultural, place-based streets that balance the needs of all users within a self-regulating environment.
- Design Principle 3: The quality of the street is measured by the quality of the pedestrian environment.
- Design Principle 4: Greater communication and cooperation between design professionals through the promotion of a plan-led, multidisciplinary approach to design.

The document encourages more sustainable travel patterns and safer streets by proposing a hierarchy for user priorities. This hierarchy places pedestrians at the top, indicating that walking is the most sustainable form of transport and that by prioritising pedestrians first, the number of short car journeys can be reduced, and public transport made more accessible. Second in the hierarchy are cyclists with public transport in third place, and private motor vehicles at the bottom. By placing private vehicles at the bottom of the hierarchy, the document indicates that there should be a balance on local road networks and that cars should no longer take priority over the needs of other users.

DMURS acknowledges the challenges of retrofitting permeability to existing built-up areas, whereby the dendritic nature of some street patterns makes it difficult to retrofit as there are very few connection opportunities. A number of processes and design principles are suggested by DMURS to assist in successfully retrofitting permeability to existing built-up areas, including:

- Rather than seeking to retrofit a fully permeable network, focus on key desire lines where maximum gain can be achieved throughout the minimum amount of intervention.
- Ensure any plan highlights reductions in journey times, walking distances, etc.
- Identify potential reduction in private vehicle use or increases in cycling and walking.
- Ensure links are short, have clear sight lines and are well-lit to mitigate anti-social behaviour. Longer links should be limited to those which go through areas of open space.
- Implement a package of landscape improvements that will directly add to the attractiveness of an area.
- Where possible focus on formalising routes which are currently used by more able-bodied pedestrians but are not suitable for use by the mobility impaired and disabled.

The focus of DMURS is to promote an integrated approach towards creating and designing local road/street networks which are simpler in structure, with higher levels of connectivity in order to reduce travel distances on foot or by bike, but which also incorporate elements of urban design and landscaping to help manage behaviours and provide high-quality street environments.

TRAFFIC SIGNS MANUAL (TSM)

The Traffic Signs Manual (TSM) is published by the Department of Transport and was last updated in October 2021. It identifies that clear and effective traffic signs and road markings are essential for the efficient operation of the road network, for the enforcement of traffic regulations, and for road safety. The TSM provides details of the traffic signs and road markings which may be used in Ireland, including their layout and symbols, the circumstances in which each sign may be used, and the rules for positioning them. The manual also provides guidance on the temporary traffic measures and signs required at roadworks.

Traffic signs (and road markings) are divided into three broad categories:

- Information Signs: These are signs which give directions and distances to destinations, or which provide other information that may be relevant to travellers.
- Regulatory Signs: These are signs which give instructions or indicate prohibitions/restrictions which travellers must obey.
- Warning Signs: These are signs which warn travellers of hazards ahead.

To be effective, traffic signs must be readily recognised, and as such they must:

- Have messages which can quickly be read and understood.
- Be coordinated with the geometric layout so they are conspicuous by day and night.
- Be located far enough in advance of the situation to give sufficient time for the traveller to take the appropriate action.

Signs should only be erected where there is a demonstrable need because unnecessary, incorrect, or inconsistent signs detract from the effectiveness of those that are required and tend to lead to disrespect for all signs.

The TSM includes guidance on the sizing of signs and markings. However, given that the signs and markings will be placed on the greenway for the most part, these will be scaled accordingly to an appropriate size for pedestrians and cyclists, taking cognisance of the design speed and stopping sight distance (SSD) available at the particular location on the route. At tie-in points with streets and local roads, signs and markings will be sized appropriately for road traffic.

4 EXISTING CONDITIONS AND CONSTRAINTS

As referred to previously, the proposed scheme will cross the Southeast Greenway which has been partially completed with sections of the overall route still presently under construction along the former railway line under the control of Iarnród Éireann. Irish Rail have confirmed in writing to Kilkenny County Council that the route will not revert to use as a railway line at any point in its future.

There are a number of existing masonry arch bridges over the proposed Greenway in the vicinity of the site, but these are not deemed fit for purpose to accommodate an access road to the required standards and thus a new bridge structure will form part of the proposed scheme.

On the southern side of the Greenway, a pond feature has developed over the past 10-15 years. This is located in a low-lying area and was discovered to have been supplemented by leakage of drinking water from failed watermain infrastructure. The pond encompassed a wide area but since the leak has been addressed, it has shrunk but not been eliminated given surface water will naturally gravitate towards this lower-lying area from the areas surrounding, considered to be as a result of changes to local hydrogeology. It has also been observed that some seepage of water is evident in the Greenway cutting to the northwest of the pond. The pond as it has developed over recent times has become a quasi-habitat and as per the initial ecological assessment, is considered to be of environmental value.

Under previously granted residential and commercial planning permissions the following infrastructure was provided by private developers:

- R711 Belmont Road Roundabout and a section of Link Road from the Belmont Road Roundabout passing the southern entrance into the Clover Meadows development;
- L3412 Abbey Roundabout and a section of the Link Road from Abbey Roundabout within the Ross Abbey/Abbeygate development.

The existing cross-sections for these respective roads, which have the potential to form part of the proposed Link Road, are shown in the table overleaf.

Table 4-1: Existing Link Road Cross-Sections

Location	Element	Left-Hand Side	Right-Hand Side
Ross Abbey /Abbeygate - Existing Cross-section	Verge	1m - Varies	1m - Varies
	Footpath (Conc.)	1.80m	1.80m
	Cycle track (DBM)	1.50m	1.50m
	Verge	1.20m	1.20m
	Carriageway	3.00m	3.00m
Clover Meadows - Existing Cross-section	Verge	1m - Varies	0m - 1m - Varies
	Footpath (Conc.)	1.80m	1.80m
	Cycle track (DBM)	1.50m	1.50m
	Verge	1.20m	1.20m
	Carriageway	3.25m	3.25m

The total length of the existing roadway provided either fully or partly completed is approximately 400m. The length of the new road and bridge structure required is approximately 950m.

Junctions will be required to be positioned along the extent of proposed roads to facilitate access to the zoned lands and the greenway car park.

5 OPTION DEVELOPMENT

At this stage of the project, a robust number of options have been identified which offer tangible differences but which are considered to align with the project objectives outlined earlier. These are summarised as follows:

1. Do Nothing – no additional road infrastructure is constructed and no links and parking area is provided for the Greenway.
2. Option 1 (Green Route) – a relatively direct link joining to the existing Clover Meadows and Abbeygate sections of road (outside of the respective estates) and traversing the pond feature identified on the site;
3. Option 2 (Red Route) – similar to the Green Route but avoiding the pond feature;
4. Option 3 (Purple Route) – the most direct route linking to the existing external section of road adjacent Clover Meadows and the existing and proposed internal roads of the Abbeygate estate;
5. Option 4 (Orange Route) – similar to the northern section of the Green Route but veering west between the adjacent industrial park and existing/approved development, forming a new junction on Abbey Road;
6. Option 5 (Blue Route) – linking to the existing external section of road adjacent Clover Meadows and veering east, following the route of the existing agricultural access road before linking to the existing external section of road at Abbeygate; and
7. Option 6 (Yellow Route): Similar to the blue route but following the Greenway alignment and existing boundaries more closely.

These routes are described in more detail in the next chapter of this report.

6 OPTION ASSESSMENT

APPRAISAL METHODOLOGY

The structure and methodology used for the assessment of the various route options are outlined in this chapter. In order to determine a preferred route option, it is necessary to undertake an options appraisal. This route option appraisal consists of a detailed qualitative and quantitative assessment, using criteria established to compare the options. These criteria are set out in the 'Project Appraisal Guidelines for National Road Unit 7.0 Multi-Criteria Analysis (PE-PAG-02031) published by TII in October 2016. These guidelines detail the steps involved in performing a 'Multi-Criteria Analysis' (MCA). An appreciation of constraints and opportunities within the study area as well as the project objectives, has led to the establishment of the following project-specific assessment criteria:

- Economy;
- Safety;
- Environment;
- Accessibility & Social Inclusion;
- Integration; and
- Physical Activity.

A number of sub-criteria are defined under each of these criteria, as detailed in the table below.

Table 6-1: Assessment Criteria for Multi-Criteria Analysis (MCA)

Main Assessment Criteria	Sub-Criteria
Economy	Transport Efficiency and Effectiveness
	Wider Economic Impacts
	Funding Impacts
Safety	Collision Reduction
	Security
Environment	Air Quality & Climate
	Noise
	Waste
	Biodiversity (Flora and Fauna)
	Agriculture
	Non-Agricultural Properties
	Architectural Heritage
	Archaeological & Cultural Heritage
	Landscape & Visual (including light)
	Soils and Geology
	Hydrology
	Hydrogeology

Main Assessment Criteria	Sub-Criteria
Accessibility & Social Inclusion	Deprived Geographical Areas
	Vulnerable Groups
Integration	Transport Integration
	Land Use Integration
	Geographical Integration
	Other Government Policy Integration: Regional Balance
Physical Activity	Health
	Recreation

The scoring procedure is defined under Section 2.4 - *Step 4: Establish a Scoring Procedure* of PE-PAG-02031. Each impact is scored based on a seven-point scale, as shown below:

7 – Major or highly positive;
6 – Moderately positive;
5 – Minor or slightly positive;
4 – Not significant or neutral;
3 – Minor or slightly negative;
2 – Moderately negative; or
1 – Major or highly negative.

STAGE 1 – LONG-LIST OF OPTIONS

The following options have been identified and assessed as part of this report:

- Option 0 - Do Nothing
- Option 1: Green Route
- Option 2: Red Route
- Option 3: Purple Route
- Option 4: Orange Route
- Option 5: Blue Route
- Option 6: Yellow Route

These routes are shown in the figure overleaf. It is stressed that the routes show represent corridors and the exact alignment of any particular route is subject to change of up to approximately 50m based on the design development and identification of localised constraints and opportunities.

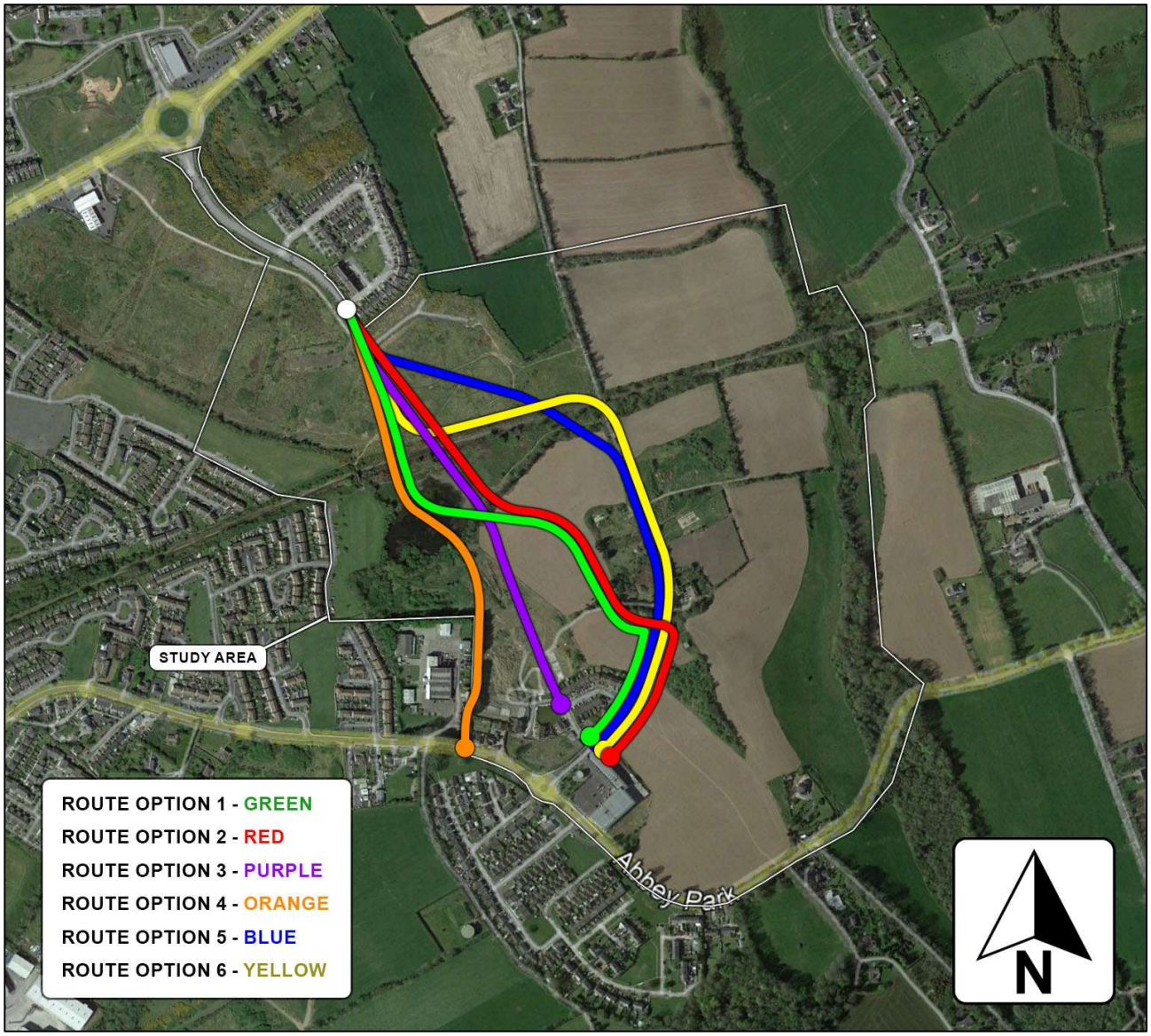

Figure 6-1: Route Options

GREEN ROUTE

This alignment begins as a continuation of the existing Clover Meadows access road and continues south in a direct manner, bridging over the Greenway and traversing through the existing pond feature on the site. It deviates east and then south again via a number of bends and junctions before turning south to link to link with the existing section of the Abbeygate access road which is external to the estate itself.

RED ROUTE

This route is very similar in nature to the alignment of the Green Route with the key difference being a shift east along its central portion to avoid routing through the existing pond feature. The route outside of this is effectively identical to the Green Route.

PURPLE ROUTE

This route follows the same alignment as the Red Route from Clover Meadows as far as the existing pond feature but from this point it continues south. It proposes to link with the existing internal access road serving the Abbey Gate development and in turn will route through a permitted housing development to the north of this. This tie-in point differs slightly from the Green, Blue & Yellow Routes which tie into the external section of the access road serving Abbeygate.

ORANGE ROUTE

The Orange Route follows the same alignment as the Green Route from its initial section north, crossing through the existing pond. However, rather than diverting to the east, it continues southbound, following the existing property boundary between the existing industrial estate and the existing and permitted future housing until it ties in with the Abbey Road via a new junction.

BLUE ROUTE

This alignment begins as a continuation of the existing Clover Meadows access road but veers southeast, crossing the Greenway at a more pronounced angle until meeting the local access/agricultural route. It then continues south along this route before rejoining the Red Route and linking to the external section of the Abbeygate access road.

YELLOW ROUTE

Similar in principle to the Blue Route, this alignment begins as a continuation of the existing Clover Meadows access road and continues south to the boundary of the Greenway before turning east, travelling parallel to the Greenway until meeting the local access/agricultural route. It then turns south along this route, crossing the Greenway before rejoining the Red Route and linking to the external section of the Abbeygate access road.

STAGE 2 – MULTI-CRITERIA ANALYSIS (MCA) OF OPTIONS

This section defines the MCA for each criterion and Sub-Criteria as defined in **Error! Reference source not found.** under the seven-point scoring system.

ECONOMY

Transport Efficiency and Effectiveness

Economic efficiency and effectiveness are measured by the willingness-to-pay of the consumer, the financial impact on transport providers and the effects on government finance. These factors analyse how projects could increase overall welfare, after allowing for economic costs. If benefits exceed costs, then the project should add to overall welfare of society.

The following table shows the qualitative assessment and scoring for each of the route options under the *Transport Efficiency and Effectiveness* sub-criteria:

Table 6-2: Transport Efficiency and Effectiveness

Transport Efficiency and Effectiveness		
Route	**Qualitative Assessment**	**Score**
Do Nothing	This option does not provide improved connectivity and will require all traffic that would benefit from a connection to continue to use the junctions of Abbey Road and the R711 and the N29. This does not reduce journey time and gives no linkage to the Southeast Greenway (New Ross to Waterford City).	1
Green	This option provides a new south-north link which is co-ordinated with existing communities to the north and south and will also provide a new link to the town centre and N29 for some. It also provides a direct link to the Greenway and is well co-ordinated with the development potential for the adjacent zoned lands	7
Red	This option provides a new south-north link which is co-ordinated with existing communities to the north and south and will also provide a new link to the town centre and N29 for some. It also provides a direct link to the Greenway and is well co-ordinated with the development potential for the adjacent zoned lands	7
Purple	This option provides a new south-north link which is co-ordinated with existing communities to the north and south and will also provide a new link to the town centre and N29 for some. It is the most direct of the routes and links with existing and proposed infrastructure, though the latter will potentially conflict with the cross sectional requirements. It also provides a direct link to the Greenway	6
Orange	This option provides a new south-north link which is co-ordinated with existing communities to the north and south and will also provide a new link to the town centre and N29 for some. It also provides a direct link to the Greenway. However, this option does require the provision of a new junction on Abbey Road instead of using existing suitable infrastructure and the route is remote from significant portions of the zoned lands meaning considerable additional linkage will be required.	5
Blue	This option provides a new south-north link which is co-ordinated with existing communities to the north and south and will also provide a new link to the town centre and N29 for some. It also provides a direct link to the Greenway. However, it is less well co-ordinated with the development potential for the adjacent zoned lands leaving larger sections remote and requiring additional linkages	6
Yellow	This option provides a new south-north link which is co-ordinated with existing communities to the north and south and will also provide a new link to the town centre and N29 for some. It also provides a direct link to the Greenway. However, it is less well co-ordinated with the development potential for the adjacent zoned lands leaving larger sections remote and requiring additional linkages	6

Wider Economic Impacts

The analysis considers areas of competition in the market, agglomeration, inward investment, labour Supply and Urban Regeneration.

The following table shows the qualitative assessment and scoring for each of the route options under the *Wider Economic Impacts* sub-criteria:

Table 6-3: Wider Economic Impacts

Wider Economic Impacts		
Route	**Qualitative Assessment**	**Score**
Do Nothing	A do nothing option will not facilitate the development of the lands to the south of the existing railway and will lead to under development of zoned land and limit population growth and investment	1
Green	This option will facilitate the maximum development potential of the adjacent lands, providing much needed housing which will in turn increase the local population, spending, and work force to the benefit of the local and wider economy	7
Red	This option will facilitate the maximum development potential of the adjacent lands, providing much needed housing which will in turn increase the local population, spending, and work force to the benefit of the local and wider economy	7
Purple	This option will facilitate the maximum development potential of the adjacent lands, providing much needed housing which will in turn increase the local population, spending, and work force to the benefit of the local and wider economy	7
Orange	This option will facilitate some development potential of the adjacent lands but is remote from large portions of same meaning the full potential may not be realised. This will provide much needed housing which will in turn increase the local population, spending, and work force to the benefit of the local and wider economy. The potential impact on the existing industrial estate has the potential to be negative.	5
Blue	This option will facilitate some development potential of the adjacent lands but is remote from large portions of same meaning the full potential may not be realised. This will provide much needed housing which will in turn increase the local population, spending, and work force to the benefit of the local and wider economy.	6
Yellow	This option will facilitate some development potential of the adjacent lands but is remote from large portions of same meaning the full potential may not be realised. This will provide much needed housing which will in turn increase the local population, spending, and work force to the benefit of the local and wider economy.	6

Funding Impacts

Where non-exchequer funding is available for the project, this should be recorded in the MCA process. Schemes without non-exchequer funding should be ranked as Neutral.

The following table shows the qualitative assessment and scoring for each of the route options under the *Funding Impacts* sub-criteria:

Table 6-4: Funding Impacts

Funding Impacts		
Route	**Qualitative Assessment**	**Score**
Do Nothing	No impact of funding.	4
Green	All options do not have non-exchequer funding	4
Red	All options do not have non-exchequer funding	4
Purple	All options do not have non-exchequer funding	4
Orange	All options do not have non-exchequer funding	4
Blue	All options do not have non-exchequer funding	4
Yellow	All options do not have non-exchequer funding	4

Economic Summary

The following table shows the summary of the economic analysis for each of the route options.

Table 6-5: Economic Summary

Do Nothing	Green	Red	Magenta	Orange	Cyan	Yellow
6	18	18	17	14	16	16

SAFETY

Collision Reduction

Collision data is not currently available for the area but it is noted that the study area is largely greenfield in nature.

The following table shows the qualitative assessment and scoring for each of the route options under the *Collision Reduction* sub-criteria:

Table 6-6: Collision Reduction

Collision Reduction		
Route	**Qualitative Assessment**	**Score**
Do Nothing	As there will be no change in the road network here will be no change to collision rates expected.	4
Green	This option proposes extension of/tying into existing roads with a new section of road which will not alter the existing junctions. The route will provide a higher quality alternative for a small portion of locals trips. There are no notable safety concerns at the existing junctions that would be exacerbated by additional traffic.	5
Red	This option proposes extension of/tying into existing roads with a new section of road which will not alter the existing junctions. The route will provide a higher quality alternative for a small portion of locals trips. There are no notable safety concerns at the existing junctions that would be exacerbated by additional traffic.	5
Purple	This option proposes extension of/tying into existing roads with a new section of road which will not alter the existing junctions. However, the southern portion of this route will be through an approved housing estate fronted directly by houses and represents a more residential area which raises some potential increased safety concerns.	3

Collision Reduction		
Route	**Qualitative Assessment**	**Score**
Orange	This option creates a new junction to the south with Abbey Road in close proximity to a number of existing junctions rather than using existing infrastructure. This increases the potential for collisions.	3
Blue	This option proposes extension of/tying into existing roads with a new section of road which will not alter the existing junctions. The route will provide a higher quality alternative for a small portion of locals trips. There are no notable safety concerns at the existing junctions that would be exacerbated by additional traffic.	5
Yellow	This option proposes extension of/tying into existing roads with a new section of road which will not alter the existing junctions. The route will provide an alternative for a small portion of locals trips but does include a number of severe bends. There are no notable safety concerns at the existing junctions that would be exacerbated by additional traffic.	3

Security

The security objective is concerned with improving the personal security of travellers and their property. Security should also take into account the security of vulnerable road users, such as pedestrians and cyclists.

The following table shows the qualitative assessment and scoring for each of the route options under the *Security* sub-criteria:

Table 6-7: Security

Security		
Route	**Qualitative Assessment**	**Score**
Do Nothing	No dedicated space for cyclists on Abbey Road or on the lower sections of the R711. Doing nothing misses an opportunity to link cyclists to the Greenway and to provide segregated facilities to Ferrybank Library and public facilities, St. Mary's National School, and Primary Care Centre of non-motorist users.	2
Green	The scheme is expected to provide segregated facilities for all road users along its entirety.	7
Red	The scheme is expected to provide segregated facilities for all road users along its entirety.	7
Purple	The scheme is expected to provide segregated facilities for all road users along the majority of its length, but the southernmost section would route through an approved housing estate which may limit the potential for full segregation over a short distance.	6
Orange	The scheme is expected to provide segregated facilities for all road users along the majority of its length, but the southernmost section would route between an existing industrial estate and existing/approved residential units which may limit the potential for full segregation over a short distance.	6
Blue	The scheme is expected to provide segregated facilities for all road users along its entirety.	7
Yellow	The scheme is expected to provide segregated facilities for all road users along its entirety.	7

Safety Summary

The following table shows the summary of the safety analysis for each of the route options.

Table 6-8: Safety Summary

Do Nothing	Green	Red	Magenta	Orange	Cyan	Yellow
6	12	12	9	9	12	10

ENVIRONMENTAL

The consideration of environmental impacts as part of the development of road schemes is an area of significant importance. The appraisal of environmental criteria and sub-criteria at the various project stages, including MCA, should reflect the outputs of the specific assessments undertaken as part of the EIA process.

Air Quality & Climate

The following table shows the qualitative assessment and scoring for each of the route options under the *Air Quality & Climate* sub-criteria:

Table 6-9: Air Quality & Climate

Air Quality & Climate		
Route	**Qualitative Assessment**	**Score**
Do Nothing	No change to existing baseline conditions.	4
Green	The main sensitive receptors within the area are the existing housing estates to the north (Clover Avenue), west (The Avenue, Fiodh Mor etc.) and south (Abbeygate). All routes have equal proximity to the development to the north and this route is relatively remote from the developments to the west. It links with an existing carriageway routed directly adjacent the development to the south.	3
Red	The main sensitive receptors within the area are the existing housing estates to the north (Clover Avenue), west (The Avenue, Fiodh Mor etc.) and south (Abbeygate). All routes have equal proximity to the development to the north and this route is relatively remote from the developments to the west. It links with an existing carriageway routed directly adjacent the development to the south.	3
Purple	The main sensitive receptors within the area are the existing housing estates to the north (Clover Avenue), west (The Avenue, Fiodh Mor etc.) and south (Abbeygate). All routes have equal proximity to the development to the north and this route is relatively remote from the developments to the west. It runs directly along the route of a main road of a proposed housing estate to the south which has received planning permission with units fronting directly onto same and the access road which is directly fronted by another house.	2
Orange	The main sensitive receptors within the area are the existing housing estates to the north (Clover Avenue), west (The Avenue, Fiodh Mor etc.) and south (Abbeygate). All routes have equal proximity to the development to the north. Its south portion will run directly behind a number of housing units in a proposed development which has received planning permission and a number of existing houses on Abbey Road. It will likely result in the loss of boundary trees for and encroachment into the adjacent industrial park, reducing the existing protection from same for existing and proposed residences.	2
Blue	The main sensitive receptors within the area are the existing housing estates to the north (Clover Avenue), west (The Avenue, Fiodh Mor etc.) and south (Abbeygate). All routes have equal proximity to the development to the north and this route is relatively remote from the developments to the west. It links with an existing carriageway routed directly adjacent the development to the south.	3
Yellow	The main sensitive receptors within the area are the existing housing estates to the north (Clover Avenue), west (The Avenue, Fiodh Mor etc.) and south (Abbeygate). All routes have equal proximity to the development to the north and this route is relatively remote from the developments to the west. It links with an existing carriageway routed directly adjacent the development to the south. This route includes a longer stretch running parallel to the Greenway bisecting the site.	2

Noise

The following table shows the qualitative assessment and scoring for each of the route options under the *Noise* sub-criteria:

Table 6-10: Noise

Noise		
Route	**Qualitative Assessment**	**Score**
Do Nothing	No change to existing baseline conditions.	4
Green	The route is largely through greenfield lands to facilitate future development. All routes have equal proximity to the development to the north which was always intended to operate as a through route. This route is relatively remote from the developments to the west. It links with an existing carriageway routed directly adjacent the development to the south but with an existing buffer between same which could be further mitigated.	4
Red	The route is largely through greenfield lands to facilitate future development. All routes have equal proximity to the development to the north which was always intended to operate as a through route. This route is relatively remote from the developments to the west. It links with an existing carriageway routed directly adjacent the development to the south but with an existing buffer between same which could be further mitigated.	4
Purple	The route is largely through greenfield lands to facilitate future development. All routes have equal proximity to the development to the north which was always intended to operate as a through route. This route is relatively remote from the developments to the west. It runs directly along the route of a main road of a proposed housing estate to the south which has received planning permission with units fronting directly onto same and the access road which is directly fronted by another house.	2
Orange	The route is largely through greenfield lands to facilitate future development. All routes have equal proximity to the development to the north which was always intended to operate as a through route. Its south portion will run directly behind a number of housing units in a proposed development which has received planning permission and a number of existing houses on Abbey Road. It will likely result in the loss of boundary trees for and encroachment into the adjacent industrial park, reducing the existing noise protection from same for existing and proposed residences.	2
Blue	The route is largely through greenfield lands to facilitate future development. All routes have equal proximity to the development to the north which was always intended to operate as a through route. This route is relatively remote from the developments to the west. It links with an existing carriageway routed directly adjacent the development to the south but with an existing buffer between same which could be further mitigated.	4
Yellow	The route is largely through greenfield lands to facilitate future development. All routes have equal proximity to the development to the north which was always intended to operate as a through route. This route is relatively remote from the developments to the west. It links with an existing carriageway routed directly adjacent the development to the south but with an existing buffer between same which could be further mitigated. This route includes a longer stretch running parallel to the Greenway bisecting the site.	3

Waste

The following table shows the qualitative assessment and scoring for each of the route options under the *Waste* sub-criteria:

Table 6-11: Waste

Waste		
Route	**Qualitative Assessment**	**Score**
Do Nothing	No Waste generated.	7
Green	Due to the nature of lands contamination is not expected with the exception of the existing pond feature which has indicated microbial contamination and which this option routes through. The saturated nature of the soil quality in and around this pond feature is likely to limit its potential for reuse. This option will result in a slight cut excess subject to the suitable testing for reuse of material meaning material will need to be transported to the site.	4
Red	Due to the nature of lands contamination is not expected. This option will result in a slight cut excess subject to the suitable testing for reuse of material meaning material will need to be transported to the site.	6
Purple	Due to the nature of lands contamination is not expected. This option will result in a slight cut excess subject to the suitable testing for reuse of material meaning material will need to be transported from the site. This option will require digging up section of existing road to the south.	4
Orange	Due to the nature of lands contamination is not expected with the exception of the existing pond feature which has indicated microbial contamination and which this option routes through. The saturated nature of the soil quality in and around this pond feature is likely to limit its potential for reuse. This option will potentially result in encroachment into the existing industrial estate to the south and encounter further contaminated land as a result. This option will result in a slight cut excess subject to the suitable testing for reuse of material meaning material will need to be transported to the site.	3
Blue	Due to the nature of lands contamination is not expected. This option will result in a slight cut excess subject to the suitable testing for reuse of material meaning material will need to be transported to the site.	6
Yellow	Due to the nature of lands contamination is not expected. This option will result in a slight cut excess subject to the suitable testing for reuse of material meaning material will need to be transported to the site.	6

Biodiversity (Flora and Fauna)

The following table shows the qualitative assessment and scoring for each of the route options under the *Biodiversity (Flora and Fauna)* sub-criteria:

Table 6-12: Biodiversity (Flora and Fauna)

Biodiversity (Flora and Fauna)		
Route	**Qualitative Assessment**	**Score**
Do Nothing	No impact to existing Flora & Fauna	4
Green	Line of trees north of the Greenway embankment but is fragmented so subject to alignment refinement its manageable. Carries though pond feature which is locally important with an approximate 50-100m wetland boundary. Testing has indicated microbial contamination which could be from foul water discharge or agricultural runoff. Tree line east of pond feature has potential to house bats, but appropriate mitigation can offset any impact. Area to southwest of walled garden is of local importance and should be avoided.	2
Red	Line of trees north of the Greenway embankment but is fragmented so subject to alignment refinement its manageable. Avoids the local pond feature. Tree line east of pond feature has potential to house bats, but appropriate mitigation can offset any impact. Area to southwest of walled garden is of local importance and should be avoided.	3
Purple	Line of trees north of the Greenway embankment but is fragmented so subject to alignment refinement its manageable. Avoids the local pond feature. Tree line east of pond feature has	4

Biodiversity (Flora and Fauna)		
Route	**Qualitative Assessment**	**Score**
	potential to house bats, but appropriate mitigation can offset any impact. Avoids the area to the south of the walled garden	
Orange	Line of trees north of the Greenway embankment but is fragmented so subject to alignment refinement its manageable. Carries though pond feature which is locally important with an approximate 50-100m wetland boundary. Testing has indicated microbial contamination which could be from foul water discharge or agricultural runoff. The tree line adjacent the business park is likely to be lost. It will likely result in the loss of boundary trees for and encroachment into the adjacent industrial park, reducing the existing noise protection from same for existing and proposed residences.	2
Blue	Line of trees north of the Greenway embankment but is fragmented so subject to alignment refinement its manageable. Avoids the local pond feature. Tree line east of pond feature has potential to house bats, but appropriate mitigation can offset any impact. Tree line adjacent agricultural access road is of highest value from a bat perspective, but impact will be minimal as the route runs parallel. Area to southwest of walled garden is of local importance and should be avoided.	2
Yellow	Line of trees north of the Greenway embankment but is fragmented so subject to alignment refinement its manageable. Avoids the local pond feature. Tree line east of pond feature has potential to house bats, but appropriate mitigation can offset any impact. Tree line adjacent agricultural access road is of highest value from a bat perspective, but impact will be minimal as the route runs parallel. Area to southwest of walled garden is of local importance and should be avoided.	2

Agriculture

The following table shows the qualitative assessment and scoring for each of the route options under the *Agriculture* sub-criteria:

Table 6-13: Agriculture

Agriculture		
Route	**Qualitative Assessment**	**Score**
Do Nothing	No identified impact	4
Green	The route is through existing greenfield lands, some of which appear to be in use for agricultural purposes but through discussions with landowners the intention is to develop these lands on completion of the new link road.	4
Red	The route is through existing greenfield lands, some of which appear to be in use for agricultural purposes but through discussions with landowners the intention is to develop these lands on completion of the new link road.	4
Purple	The route is through existing greenfield lands, some of which appear to be in use for agricultural purposes but through discussions with landowners the intention is to develop these lands on completion of the new link road.	4
Orange	The route is through existing greenfield lands, some of which appear to be in use for agricultural purposes but through discussions with landowners the intention is to develop these lands on completion of the new link road.	4
Blue	The route is through existing greenfield lands, some of which appear to be in use for agricultural purposes but through discussions with landowners the intention is to develop these lands on completion of the new link road.	4
Yellow	The route is through existing greenfield lands, some of which appear to be in use for agricultural purposes but through discussions with landowners the intention is to develop these lands on completion of the new link road.	4

Non-Agricultural Properties

The following table shows the qualitative assessment and scoring for each of the route options under the *Non-Agricultural Properties* sub-criteria:

Table 6-14: Non-Agricultural Properties

Non-Agricultural Properties		
Route	**Qualitative Assessment**	**Score**
Do Nothing	No identified impact	4
Green	This option will not directly affect any other non-agricultural properties, existing or approved.	4
Red	This option will not directly affect any other non-agricultural properties, existing or approved.	4
Purple	This option will have to be co-ordinated with an existing planning permission for a residential development at its south end adjacent to the Abbeygate development. This would have potential implications on the approved development as the road cross section proposed does not include the required cycle infrastructure for this project.	2
Orange	This option will impact on non-agricultural properties at its southern end where it links to Abbey Road. These include the existing industrial development immediately west of this option (potential loss of boundary, parking, and existing structures) and/or the existing and approved future residential units immediately to the east (potential loss of garden space and viability of units)	2
Blue	This option will not directly affect any other non-agricultural properties, existing or approved.	4
Yellow	This option will not directly affect any other non-agricultural properties, existing or approved.	4

Architectural Heritage

The following table shows the qualitative assessment and scoring for each of the route options under the *Architectural Heritage* sub-criteria:

Table 6-15: Architectural Heritage

Architectural Heritage		
Route	**Qualitative Assessment**	**Score**
Do Nothing	No identified impact	4
Green	This option routes through existing Greenfield space and over the disused railway line recently converted to a Greenway. There are no specific features of architectural heritage value impacted by this route.	4
Red	This option routes through existing Greenfield space and over the disused railway line recently converted to a Greenway. There are no specific features of architectural heritage value impacted by this route.	4
Purple	This option routes through existing Greenfield space and over the disused railway line recently converted to a Greenway. There are no specific features of architectural heritage value impacted by this route.	4
Orange	This option routes through existing Greenfield space and over the disused railway line recently converted to a Greenway. There are no specific features of architectural heritage value impacted by this route.	4
Blue	This option routes through existing Greenfield space and over the disused railway line recently converted to a Greenway. There are no specific features of architectural heritage value impacted by this route.	4
Yellow	This option routes through existing Greenfield space and over the disused railway line recently converted to a Greenway. There are no specific features of architectural heritage value impacted by this route.	4

Archaeological & Cultural Heritage

The following table shows the qualitative assessment and scoring for each of the route options under the *Archaeological & Cultural Heritage* sub-criteria:

Table 6-16: Archaeological & Cultural Heritage

Archaeological & Cultural Heritage		
Route	**Qualitative Assessment**	**Score**
Do Nothing	No identified impact	4
Green	This option routes through existing Greenfield space and over the disused railway line recently converted to a Greenway. There are no specific features of archaeological nor cultural heritage value impacted by this route.	4
Red	This option routes through existing Greenfield space and over the disused railway line recently converted to a Greenway. There are no specific features of archaeological nor cultural heritage value impacted by this route.	4
Purple	This option routes through existing Greenfield space and over the disused railway line recently converted to a Greenway. There are no specific features of archaeological nor cultural heritage value impacted by this route.	4
Orange	This option routes through existing Greenfield space and over the disused railway line recently converted to a Greenway. There are no specific features of archaeological nor cultural heritage value impacted by this route.	4
Blue	This option routes through existing Greenfield space and over the disused railway line recently converted to a Greenway. There are no specific features of archaeological nor cultural heritage value impacted by this route.	4
Yellow	This option routes through existing Greenfield space and over the disused railway line recently converted to a Greenway. There are no specific features of archaeological nor cultural heritage value impacted by this route.	4

Landscape & Visual (including light)

The following table shows the qualitative assessment and scoring for each of the route options under the *Landscape & Visual* sub-criteria:

Table 6-17: Landscape & Visual

Landscape & Visual		
Route	**Qualitative Assessment**	**Score**
Do Nothing	No identified impact	4
Green	The site is largely hidden from the surrounding areas due to a combination of topography and existing development. The north section of the route travels through lands that would be classed as a low landscape and visual rating (unmaintained, passive) with the south section travelling through lands with a medium/low rating (agricultural/passive). A key objective of the link road is to facilitate development of the surrounding lands	3
Red	The site is largely hidden from the surrounding areas due to a combination of topography and existing development. The north section of the route travels through lands that would be classed as a low landscape and visual rating (unmaintained, passive) with the south section travelling through lands with a medium/low rating (agricultural/passive). A key objective of the link road is to facilitate development of the surrounding lands	3
Purple	The site is largely hidden from the surrounding areas due to a combination of topography and existing development. The north section of the route travels through lands that would be classed as a low landscape and visual rating (unmaintained, passive) with the south section	3

Landscape & Visual		
Route	**Qualitative Assessment**	**Score**
	travelling through lands with a medium/low rating (agricultural/passive). A key objective of the link road is to facilitate development of the surrounding lands	
Orange	The site is largely hidden from the surrounding areas due to a combination of topography and existing development. The north section of the route travels through lands that would be classed as a low landscape and visual rating (unmaintained, passive) with the south section travelling through lands with a medium/low rating (agricultural/passive). A key objective of the link road is to facilitate development of the surrounding lands	3
Blue	The site is largely hidden from the surrounding areas due to a combination of topography and existing development. The north section of the route travels through lands that would be classed as a low landscape and visual rating (unmaintained, passive) with the south section travelling through lands with a medium/low rating (agricultural/passive). A key objective of the link road is to facilitate development of the surrounding lands	3
Yellow	The site is largely hidden from the surrounding areas due to a combination of topography and existing development. The north section of the route travels through lands that would be classed as a low landscape and visual rating (unmaintained, passive) with the south section travelling through lands with a medium/low rating (agricultural/passive). A key objective of the link road is to facilitate development of the surrounding lands	3

Soils and Geology

The following table shows the qualitative assessment and scoring for each of the route options under the *Soils and Geology* sub-criteria:

Table 6-18: Soils and Geology

Soils and Geology		
Route	**Qualitative Assessment**	**Score**
Do Nothing	No identified impact	4
Green	GSI records indicate the route travels through an area underlain by the Campile Formation and deep, well-drained, mainly acidic mineral soils with no areas of geological interest impacts.	4
Red	GSI records indicate the route travels through an area underlain by the Campile Formation and deep, well-drained, mainly acidic mineral soils with no areas of geological interest impacts.	4
Purple	GSI records indicate the route travels through an area underlain by the Campile Formation and deep, well-drained, mainly acidic mineral soils with no areas of geological interest impacts.	4
Orange	GSI records indicate the route travels through an area underlain by the Campile Formation and deep, well-drained, mainly acidic mineral soils with no areas of geological interest impacts.	4
Blue	GSI records indicate the route travels through an area underlain by the Campile Formation and deep, well-drained, mainly acidic mineral soils with no areas of geological interest impacts.	4
Yellow	GSI records indicate the route travels through an area underlain by the Campile Formation and deep, well-drained, mainly acidic mineral soils with no areas of geological interest impacts.	4

Hydrology

The following table shows the qualitative assessment and scoring for each of the route options under the *Hydrology* sub-criteria:

Table 6-19: Hydrology

Hydrology		
Route	**Qualitative Assessment**	**Score**
Do Nothing	No identified impact	4
Green	The route does not directly interact with any EPA designated surface pond features. Surface water discharge may be required to the nearby Ferrybank Stream which discharges to the Lower Suir Estuary but subject to appropriate design and mitigation should have no impact on same. The route does pass through the existing pond immediately south of the Greenway.	3
Red	The route does not directly interact with any EPA designated surface pond features. Surface water discharge may be required to the nearby Ferrybank Stream which discharges to the Lower Suir Estuary but subject to appropriate design and mitigation should have no impact on same.	4
Purple	The route does not directly interact with any EPA designated surface pond features. Surface water discharge may be required to the nearby Ferrybank Stream which discharges to the Lower Suir Estuary but subject to appropriate design and mitigation should have no impact on same.	4
Orange	The route does not directly interact with any EPA designated surface pond features. Surface water discharge may be required to the nearby Ferrybank Stream which discharges to the Lower Suir Estuary but subject to appropriate design and mitigation should have no impact on same. The route does pass through the existing point immediately south of the Greenway.	3
Blue	The route does not directly interact with any EPA designated surface pond features. Surface water discharge may be required to the nearby Ferrybank Stream which discharges to the Lower Suir Estuary but subject to appropriate design and mitigation should have no impact on same.	4
Yellow	The route does not directly interact with any EPA designated surface pond features. Surface water discharge may be required to the nearby Ferrybank Stream which discharges to the Lower Suir Estuary but subject to appropriate design and mitigation should have no impact on same.	4

Hydrogeology

The following table shows the qualitative assessment and scoring for each of the route options under the *Hydrogeology* sub-criteria:

Table 6-20: Hydrogeology

Hydrogeology		
Route	**Qualitative Assessment**	**Score**
Do Nothing	No identified impact	4
Green	The route is underlain by a regionally important, fissured bedrock aquifer with the area classed as having moderate groundwater vulnerability with reasonably good groundwater recharge.	4
Red	The route is underlain by a regionally important, fissured bedrock aquifer with the area classed as having moderate groundwater vulnerability with reasonably good groundwater recharge.	4
Purple	The route is underlain by a regionally important, fissured bedrock aquifer with the area classed as having moderate groundwater vulnerability with reasonably good groundwater recharge.	4
Orange	The route is underlain by a regionally important, fissured bedrock aquifer with the area classed as having moderate groundwater vulnerability with reasonably good groundwater recharge.	4
Blue	The route is underlain by a regionally important, fissured bedrock aquifer with the area classed as having moderate groundwater vulnerability with reasonably good groundwater recharge.	4
Yellow	The route is underlain by a regionally important, fissured bedrock aquifer with the area classed as having moderate groundwater vulnerability with reasonably good groundwater recharge.	4

Environmental Summary

The following table shows the summary of the environmental analysis for each of the route options.

Table 6-21: Environmental Summary

Do Nothing	Green	Red	Magenta	Orange	Cyan	Yellow
51	43	47	41	37	46	44

ACCESSIBILITY & SOCIAL INCLUSION

Deprived Geographical Areas

Transport investment has a major role in improving access to employment, education, essential services and amenities. Therefore, the focus of analysis regarding social inclusion should be to establish whether the proposal manages to improve accessibility for residents of socially excluded areas.

The following table shows the qualitative assessment and scoring for each of the route options under the *Deprived Geographical Areas* sub-criteria:

Table 6-22: Deprived Geographical Areas

Deprived Geographical Areas		
Route	**Qualitative Assessment**	**Score**
Do Nothing	Generally, this option will have negative impact on the deprived geographical areas compared to the other options.	3
Green	The residential areas to the south of the study are classed as marginally below average and some areas to the north of the study area are classed as disadvantaged as per the Pobal HP Deprivation Indices. The new link will provide improved connectivity to local education, commercial and public services.	5
Red	The residential areas to the south of the study are classed as marginally below average and some areas to the north of the study area are classed as disadvantaged as per the Pobal HP Deprivation Indices. The new link will provide improved connectivity to local education, commercial and public services.	5
Purple	The residential areas to the south of the study are classed as marginally below average and some areas to the north of the study area are classed as disadvantaged as per the Pobal HP Deprivation Indices. The new link will provide improved connectivity to local education, commercial and public services.	5
Orange	The residential areas to the south of the study are classed as marginally below average and some areas to the north of the study area are classed as disadvantaged as per the Pobal HP Deprivation Indices. The new link will provide improved connectivity to local education, commercial and public services.	5
Blue	The residential areas to the south of the study are classed as marginally below average and some areas to the north of the study area are classed as disadvantaged as per the Pobal HP Deprivation Indices. The new link will provide improved connectivity to local education, commercial and public services.	5
Yellow	The residential areas to the south of the study are classed as marginally below average and some areas to the north of the study area are classed as disadvantaged as per the Pobal HP Deprivation Indices. The new link will provide improved connectivity to local education, commercial and public services.	5

Vulnerable Groups

To assess the wider impacts of the project in delivering improved accessibility for communities, this analysis considers the project impacts for vulnerable groups focussing on whether the project increases access to jobs, key facilities and social opportunities. Emphasis is placed on the different impacts that occur for people of varying income groups, car ownership levels and mobility or sensory impairment.

The following table shows the qualitative assessment and scoring for each of the route options under the *Vulnerable Groups* sub-criteria:

Table 6-23: Vulnerable Groups

Vulnerable Groups		
Route	**Qualitative Assessment**	**Score**
Do Nothing	This option is largely neutral and is primarily intended to facilitate development of zoned lands and linkage to existing infrastructure. It will not significantly alter accessibility for vulnerable groups	4
Green	This option is largely neutral and is primarily intended to facilitate development of zoned lands and linkage to existing infrastructure. It will not significantly alter accessibility for vulnerable groups	4
Red	This option is largely neutral and is primarily intended to facilitate development of zoned lands and linkage to existing infrastructure. It will not significantly alter accessibility for vulnerable groups	4
Purple	This option is largely neutral and is primarily intended to facilitate development of zoned lands and linkage to existing infrastructure. It will not significantly alter accessibility for vulnerable groups	4
Orange	This option is largely neutral and is primarily intended to facilitate development of zoned lands and linkage to existing infrastructure. It will not significantly alter accessibility for vulnerable groups	4
Blue	This option is largely neutral and is primarily intended to facilitate development of zoned lands and linkage to existing infrastructure. It will not significantly alter accessibility for vulnerable groups	4
Yellow	This option is largely neutral and is primarily intended to facilitate development of zoned lands and linkage to existing infrastructure. It will not significantly alter accessibility for vulnerable groups	4

Accessibility & Social Inclusion Summary

The following table shows the summary of the accessibility & social inclusion analysis for each of the route options.

Table 6-24: Accessibility & Social Inclusion Summary

Do Nothing	Green	Red	Magenta	Orange	Cyan	Yellow
7	9	9	9	9	9	9

INTEGRATION

Transport Integration

This element addresses the promotion of the integration of transport infrastructure and services by focusing on gaps in the existing network and improving opportunities for interchange between modes.

The following table shows the qualitative assessment and scoring for each of the route options under the *Transport Integration* sub-criteria:

Table 6-25: Transport Integration

Transport Integration		
Route	**Qualitative Assessment**	**Score**
Do Nothing	The do nothing option is negative as it does not provide connection to the greenway, integration of the bus services with the greenway or the linkage of existing roads on an established desire line in accordance with the County Development Plan.	2
Green	This option provides segregated pedestrian and cycle facilities, will improve access to the N29, includes linkage to the Greenway bisecting the site with a new car park also proposed and includes facilities for buses including stops and coach parking in the Greenway car park.	7
Red	This option provides segregated pedestrian and cycle facilities, will improve access to the N29, includes linkage to the Greenway bisecting the site with a new car park also proposed and includes facilities for buses including stops and coach parking in the Greenway car park.	7
Purple	This option provides segregated pedestrian and cycle facilities (though these may be limited on the southern section), will improve access to the N29, includes linkage to the Greenway bisecting the site with a new car park also proposed and includes facilities for buses including stops and coach parking in the Greenway car park.	6
Orange	This option provides segregated pedestrian and cycle facilities (though these may be limited on the southern section), will improve access to the N29, includes linkage to the Greenway bisecting the site with a new car park also proposed and includes facilities for buses including stops and coach parking in the Greenway car park.	6
Blue	This option provides segregated pedestrian and cycle facilities, will improve access to the N29, includes linkage to the Greenway bisecting the site with a new car park also proposed and includes facilities for buses including stops and coach parking in the Greenway car park.	7
Yellow	This option provides segregated pedestrian and cycle facilities, will improve access to the N29, includes linkage to the Greenway bisecting the site with a new car park also proposed and includes facilities for buses including stops and coach parking in the Greenway car park.	7

Land Use Integration

Clarification of the compatibility between adopted land use objectives and the proposed scheme are investigated through this element.

The following table shows the qualitative assessment and scoring for each of the route options under the *Land Use Integration* sub-criteria:

Table 6-26: Land Use Integration

Land Use Integration		
Route	**Qualitative Assessment**	**Score**
Do Nothing	This option is not compatible with Development Plan which aims to connect lands north and south of the greenway and open up land for development. The lack of linkage here would encourage urban sprawl as this zoned land would not be available to fulfil demand for housing in the area.	1
Green	This option is considered to maximise the development potential of the adjacent zoned lands and the delivery of a link is in line with the Development Plan objectives.	7
Red	This option is considered to maximise the development potential of the adjacent zoned lands and the delivery of a link is in line with the Development Plan objectives.	7
Purple	This option is considered to maximise the development potential of the adjacent zoned lands and the delivery of a link is in line with the Development Plan objectives.	7
Orange	This option is considered to facilitate the development potential of the adjacent zoned lands, but its alignment veering west may not maximise same. The delivery of a link is in line with the Development Plan objectives.	5
Blue	This option is considered to facilitate the development potential of the adjacent zoned lands, but its alignment veering east may not maximise same. The delivery of a link is in line with the Development Plan objectives.	5
Yellow	This option is considered to facilitate the development potential of the adjacent zoned lands, but its alignment veering east may not maximise same. The delivery of a link is in line with the Development Plan objectives.	5

Geographical Integration

Improving connectivity within Ireland and to other parts of the world is the key objective of national transport policy. Three factors are considered through the MCA in this regard including: connectivity between Hubs and Gateways to improve integration of rural and local services, connectivity with Northern Ireland and access to links with Europe/rest of the world.

The following table shows the qualitative assessment and scoring for each of the route options under the *Geographical Integration* sub-criteria:

Table 6-27: Geographical Integration

Geographical Integration		
Route	**Qualitative Assessment**	**Score**
Do Nothing	As this is a local linkage it has little impact on geographical integration.	4
Green	This project largely fulfils a local access need.	4
Red	This project largely fulfils a local access need.	4
Purple	This project largely fulfils a local access need.	4
Orange	This project largely fulfils a local access need.	4
Blue	This project largely fulfils a local access need.	4
Yellow	This project largely fulfils a local access need.	4

Other Government Policy Integration: Regional Balance

The main potential contribution to Government policy from transport investment is in relation to achieving the goals of the National Planning Framework.

The following table shows the qualitative assessment and scoring for each of the route options under the *Other Government Policy Integration: Regional Balance* sub-criteria:

Table 6-28: Other Government Policy Integration: Regional Balance

Other Government Policy Integration: Regional Balance		
Route	**Qualitative Assessment**	**Score**
Do Nothing	The do nothing option is not significant in relation to policy integration for Regional Balance; however, it would prevent the development of housing facilities in a regional centre.	4
Green	This project largely fulfils a local access need.	4
Red	This project largely fulfils a local access need.	4
Purple	This project largely fulfils a local access need.	4
Orange	This project largely fulfils a local access need.	4
Blue	This project largely fulfils a local access need.	4
Yellow	This project largely fulfils a local access need.	4

Integration Summary

The following table shows the summary of the integration analysis for each of the route options.

Table 6-29: Integration Summary

Do Nothing	Green	Red	Magenta	Orange	Cyan	Yellow
11	22	22	21	19	20	20

PHYSICAL ACTIVITY

This section focuses on physical activity impacts including impacts on particular groups of road users such as pedestrians and cyclists.

Health

The following table shows the qualitative assessment and scoring for each of the route options under the *Health* sub-criteria:

Table 6-30: Health

Health		
Route	**Qualitative Assessment**	**Score**
Do Nothing	The do nothing does not improve access to facilities which would encourage additional movement such as high quality pedestrian and cycle paths linking Abbey Road to the R711 and similar facilities linking to the Greenway.	2
Green	This option is expected to provide segregated cycle and pedestrian facilities along its length, providing a link between Abbey Road & Belmont Road which will accommodate some active travel desire lines while also linking to the Greenway bisecting the site encouraging further physical activity.	7
Red	This option is expected to provide segregated cycle and pedestrian facilities along its length, providing a link between Abbey Road & Belmont Road which will accommodate some active	7

	travel desire lines while also linking to the Greenway bisecting the site encouraging further physical activity.	
Purple	This option is expected to provide segregated cycle and pedestrian facilities along its length but with a potential restriction on the southern section due to routing through an approved housing estate. This will provide a link between Abbey Road & Belmont Road which will accommodate some active travel desire lines while also linking to the Greenway bisecting the site encouraging further physical activity.	6
Orange	This option is expected to provide segregated cycle and pedestrian facilities along its length but with a potential restriction on the southern section due to routing between an industrial estate and existing/approved houses. This will provide a link between Abbey Road & Belmont Road which will accommodate some active travel desire lines while also linking to the Greenway bisecting the site encouraging further physical activity.	6
Blue	This option is expected to provide segregated cycle and pedestrian facilities along its length, providing a link between Abbey Road & Belmont Road which will accommodate some active travel desire lines while also linking to the Greenway bisecting the site encouraging further physical activity.	7
Yellow	This option is expected to provide segregated cycle and pedestrian facilities along its length, providing a link between Abbey Road & Belmont Road which will accommodate some active travel desire lines while also linking to the Greenway bisecting the site encouraging further physical activity.	7

Recreation

The following table shows the qualitative assessment and scoring for each of the route options under the *Recreation* sub-criteria:

Table 6-31: Recreation

Recreation		
Route	**Qualitative Assessment**	**Score**
Do Nothing	The do nothing misses the opportunity to link the existing communities locally to the Greenway.	1
Green	This option provides a direct link to the Greenway bisecting the site.	7
Red	This option provides a direct link to the Greenway bisecting the site.	7
Purple	This option provides a direct link to the Greenway bisecting the site though segregated facilities on a small section of the south of the link road may be limited.	6
Orange	This option provides a direct link to the Greenway bisecting the site though segregated facilities on a small section of the south of the link road may be limited.	6
Blue	This option provides a direct link to the Greenway bisecting the site.	7
Yellow	This option provides a direct link to the Greenway bisecting the site.	7

Physical Activity Summary

The following table shows the summary of the physical activity analysis for each of the route options.

Table 6-32: Physical Activity Summary

Do Nothing	Green	Red	Magenta	Orange	Cyan	Yellow
3	14	14	12	12	14	14

MCA MATRIX

Taking all of the above into consideration, the MCA matrix is as follows:

Table 6-33: MCA Matrix

Criterion	Sub-Criteria	Do Nothing	Green Route	Red Route	Purple Route	Orange Route	Blue Route	Yellow Route
Economy	Transport Efficiency and Effectiveness	1	7	7	6	5	6	6
	Wider Economic Impacts	1	7	7	7	5	6	6
	Funding Impacts	4	4	4	4	4	4	4
Economy Sub-Total Score		**6**	**18**	**18**	**17**	**14**	**16**	**16**
Safety & Design Standards	Collision Reduction	4	5	5	3	3	5	3
	Security	2	7	7	6	6	7	7
Safety Sub-Total Score		**6**	**12**	**12**	**9**	**9**	**12**	**10**
Environment	Air Quality & Climate	4	3	3	2	2	3	2
	Noise	4	4	4	2	2	4	3
	Waste	7	4	6	4	3	6	6
	Biodiversity (Flora and Fauna)	4	2	3	4	2	2	2
	Agriculture	4	4	4	4	4	4	4
	Non-Agricultural Properties	4	4	4	2	2	4	4
	Architectural Heritage	4	4	4	4	4	4	4
	Archaeological & Cultural Heritage	4	4	4	4	4	4	4
	Landscape & Visual (including light)	4	3	3	3	3	3	3
	Soils and Geology	4	4	4	4	4	4	4
	Hydrology	4	3	4	4	3	4	4
	Hydrogeology	4	4	4	4	4	4	4
Environment Sub-Total Score		**51**	**43**	**47**	**41**	**37**	**46**	**44**

Criterion	Sub-Criteria	Do Nothing	Green Route	Red Route	Purple Route	Orange Route	Blue Route	Yellow Route
Accessibility & Social Inclusion	Deprived Geographical Areas	3	5	5	5	5	5	5
	Vulnerable Groups	4	4	4	4	4	4	4
Accessibility & Social Inclusion Sub-Total Score		**7**	**9**	**9**	**9**	**9**	**9**	**9**
Integration	Transport Integration	2	7	7	6	6	7	7
	Land Use Integration	1	7	7	7	5	5	5
	Geographical Integration	4	4	4	4	4	4	4
	Other Government Policy Integration: Regional Balance	4	4	4	4	4	4	4
Integration Sub-Total Score		**11**	**22**	**22**	**21**	**19**	**20**	**20**
Physical Activity	Health	2	7	7	6	6	7	7
	Recreation	1	7	7	6	6	7	7
Physical Activity Sub-Total Score		**3**	**14**	**14**	**12**	**12**	**14**	**14**
Route Option Total Score		**84**	**118**	**122**	**109**	**100**	**117**	**113**

7 EMERGING PREFERRED OPTION

Based on the Multi-Criteria Analysis (MCA) detailed in the previous section, the Emerging Preferred Option (EPO) is the Red Route. This route scored higher on average than all the other routes. The route can be seen in the figure below.

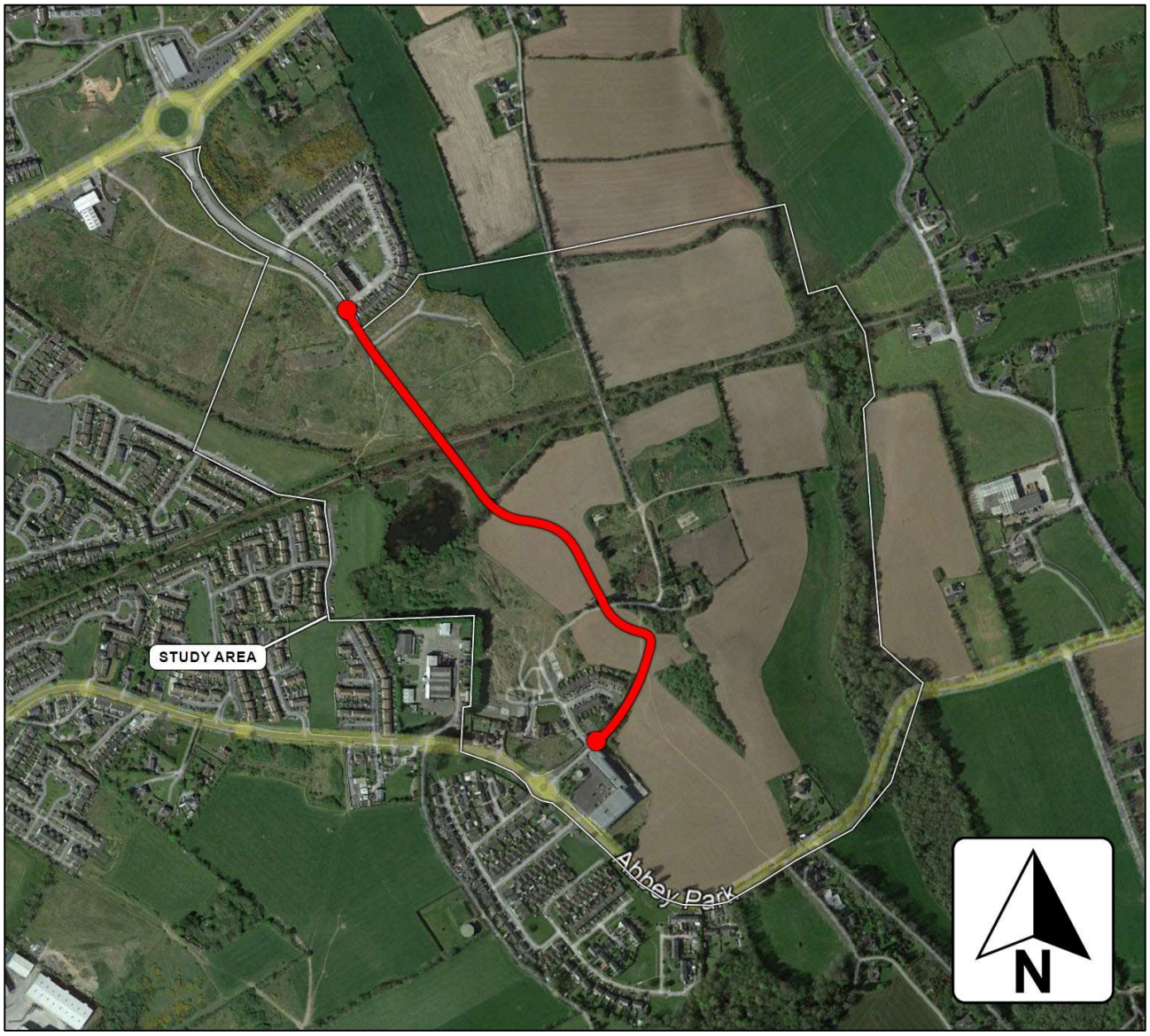

Figure 7-1: Emerging Preferred Option

The alignment begins as a continuation of the existing Clover Meadows access road and continues south in a direct manner, bridging over the Greenway east of and avoiding the existing pond feature. It turns east and then south again via a number of bends and junctions before turning south to link to link with the existing section of the Abbeygate access road which is external to the estate itself.

The PABS for this option can be seen in the table overleaf.

Table 7-1: Emerging Preferred Route - PABS

Criterion	Sub-Criteria	Qualitative Statement	Sub-Criteria Performance Description	Sub-Criteria Score	Appraisal Criteria Score
Economy	Transport Efficiency and Effectiveness	This option provides a new south-north link which is co-ordinated with existing communities to the north and south and will also provide a new link to the town centre and N29 for some. It also provides a direct link to the Greenway and is well co-ordinated with the development potential for the adjacent zoned lands	Highly Positive	7	Moderately Positive
	Wider Economic Impacts	This option will facilitate the maximum development potential of the adjacent lands, providing much needed housing which will in turn increase the local population, spending, and work force to the benefit of the local and wider economy	Highly Positive	7	
	Funding Impacts	All options do not have non-exchequer funding	Neutral	4	
Safety	Collision Reduction	This option proposes extension of/tying into existing roads with a new section of road which will not alter the existing junctions. The route will provide a higher quality alternative for a small portion of locals trips. There are no notable safety concerns at the existing junctions that would be exacerbated by additional traffic.	Slightly Positive	5	Moderately Positive
	Security	The scheme is expected to provide segregated facilities for all road users along its entirety.	Highly Positive	7	
Environment	Air Quality & Climate	The main sensitive receptors within the area are the existing housing estates to the north (Clover Avenue), west (The Avenue, Fiodh Mor etc.) and south (Abbeygate). All routes have equal proximity to the development to the north and this route is relatively remote from the developments to the west. It links with an existing carriageway routed directly adjacent the development to the south.	Slightly Negative	3	Neutral
	Noise	The route is largely through greenfield lands to facilitate future development. All routes have equal proximity to the development to the north which was always intended to operate as a through route. This route is relatively remote from the developments to the west. It links with an existing carriageway routed directly adjacent the development to the south but with an existing buffer between same which could be further mitigated.	Neutral	4	
	Waste	Due to the nature of lands contamination is not expected. This option will result in a slight cut excess subject to the	Moderately Positive	6	

Criterion	Sub-Criteria	Qualitative Statement	Sub-Criteria Performance Description	Sub-Criteria Score	Appraisal Criteria Score
		suitable testing for reuse of material meaning material will need to be transported to the site.			
	Biodiversity (Flora and Fauna)	Line of trees north of the Greenway embankment but is fragmented so subject to alignment refinement its manageable. Avoids the local pond feature. Tree line east of pond feature has potential to house bats, but appropriate mitigation can offset any impact. Area to southwest of walled garden is of local importance and should be avoided.	Slightly Negative	3	
	Agriculture	The route is through existing greenfield lands, some of which appear to be in use for agricultural purposes but through discussions with landowners the intention is to develop these lands on completion of the new link road.	Neutral	4	
	Non-Agricultural Properties	This option will not directly affect any other non-agricultural properties, existing or approved.	Neutral	4	
	Architectural Heritage	This option routes through existing Greenfield space and over the disused railway line recently converted to a Greenway. There are no specific features of architectural heritage value impacted by this route.	Neutral	4	
	Archaeological & Cultural Heritage	This option routes through existing Greenfield space and over the disused railway line recently converted to a Greenway. There are no specific features of archaeological nor cultural heritage value impacted by this route.	Neutral	4	
	Landscape & Visual (including light)	The site is largely hidden from the surrounding areas due to a combination of topography and existing development. The north section of the route travels through lands that would be classed as a low landscape and visual rating (unmaintained, passive) with the south section travelling through lands with a medium/low rating (agricultural/passive). A key objective of the link road is to facilitate development of the surrounding lands	Slightly Negative	3	
	Soils and Geology	GSI records indicate the route travels through an area underlain by the Campile Formation and deep, well-drained, mainly acidic mineral soils with no areas of geological interest impacts.	Neutral	4	
	Hydrology	The route does not directly interact with any EPA designated surface pond features. Surface water discharge may be required to the nearby Ferrybank Stream which discharges to the Lower Suir Estuary but subject to appropriate design and mitigation should have no impact on same.	Neutral	4	

Criterion	Sub-Criteria	Qualitative Statement	Sub-Criteria Performance Description	Sub-Criteria Score	Appraisal Criteria Score
	Hydrogeology	The route is underlain by a regionally important, fissured bedrock aquifer with the area classed as having moderate groundwater vulnerability with reasonably good groundwater recharge.	Neutral	4	
Accessibility & Social Inclusion	Deprived Geographical Areas	The residential areas to the south of the study are classed as marginally below average and some areas to the north of the study area are classed as disadvantaged as per the Pobal HP Deprivation Indices. The new link will provide improved connectivity to local education, commercial and public services.	Slightly Positive	5	Slightly Positive
	Vulnerable Groups	This option is largely neutral and is primarily intended to facilitate development of zoned lands and linkage to existing infrastructure. It will not significantly alter accessibility for vulnerable groups	Neutral	4	
Integration	Transport Integration	This option provides segregated pedestrian and cycle facilities, will improve access to the N29, includes linkage to the Greenway bisecting the site with a new car park also proposed and includes facilities for buses including stops and coach parking in the Greenway car park.	Highly Positive	7	Moderately Positive
	Land Use Integration	This option is considered to maximise the development potential of the adjacent zoned lands and the delivery of a link is in line with the Development Plan objectives.	Highly Positive	7	
	Geographical Integration	This project largely fulfils a local access need.	Neutral	4	
	Other Government Policy Integration: Regional Balance	This project largely fulfils a local access need.	Neutral	4	
Physical Activity	Health	This option is expected to provide segregated cycle and pedestrian facilities along its length, providing a link between Abbey Road & Belmont Road which will accommodate some active travel desire lines while also linking to the Greenway bisecting the site encouraging further physical activity.	Highly Positive	7	Highly Positive
	Recreation	This option provides a direct link to the Greenway bisecting the site.	Highly Positive	7	
Overall Description of Scheme:			**Moderately Positive**		

8 NON-STATUTORY PUBLIC CONSULTATION

A public consultation was conducted for this scheme, with a total of 14 no. submissions received. These submissions are appended to the report under *Appendix A*. A summary, as well as a response to each submission, is shown in the table below.

No.	1 - Resident
Date Received	Thursday 21 September 2023
Submission	I think that the road connecting Abbey Road with Belmont Road in Ferrybank is a great idea, and I support it. I live with my family on Fiodh Mór.
Response	**Support for the scheme is noted.**
No.	**2 - Resident**
Date Received	Friday 22 September 2023
Submission	Will the crossing over the old railway will be keeping our wildlife in mind in this area?
Response	**The design will include the appropriate environmental and ecological considerations.**
No.	**3 - Resident**
Date Received	Friday 22 September 2023
Submission	The new road is very welcome and badly needed, however, Option 4 (Orange Route) is a concern. This option cuts into the Abbeylands Business Park. Construction will impact the businesses in the area. The option will also run adjacent to an elderly couple's property, which might impact them negatively. Is there a possibility for Abbey Road to be resurfaced as part of this scheme?
Response	**The multi-criteria analysis has indicated that Option 4 is not the preferred option. The existing Abbey Road is outside of the scope of works for this project.**
No.	**4 - Resident**
Date Received	Tuesday 26 September 2023
Submission	Options 1, 2, 5 and 6 (Green, Red, Blue, and Yellow) are the only realistic options. Option 4 (Orange) will go straight through the Abbey Business Park and border an elderly couple's home. Option 3 (Purple) goes through Abbeygate Housing Estate which poses a danger to the children playing in the estate. The existing road to which the route will connect is also not sufficient for heavy traffic.
Response	**Option 2 has been identified as the Preferred route as per the multi-criteria analysis.**
No.	**5 - Resident**
Date Received	Wednesday 27 September 2023
Submission	Route 4 (Orange) is preferred as it is a shorter distance and will have a lower impact on the environment.
Response	**The multi-criteria analysis has indicated that Option 4 is not the preferred option.**
No.	**6 - Whitebox Property Developments Ltd.**
Date Received	Monday 2 October 2023
Submission	Option 1 (Green) - supported as the preferred option. It will connect and carry the greenway at the appropriate location and via the open space and wetlands area. It will also ensure an urban feel and align best with the masterplan for the site which it traverses. Option 2 (Red) - second preferred option. It accords with all aspirations as set out above. Would prefer to work the route through the wetlands as it is a great transitional area between the urban development and the greenway. Option 3 (Purple) - this route is not a preferred option as it will traverse through an existing housing estate and through phases of planned development. Option 4 (Orange) - this route is not a preferred option as its traversal through an industrial estate will present difficulties. Option 5 (Blue) - third preferred option as it pushes the new urban road away from the heart of the urban village and proposes a difficult crossing point to the greenway.

	Route 6 (Yellow) - this route is not a preferred option as its alignment will be invasive to the users of the greenway.
Response	**Option 2 has been identified as the Preferred route as per the multi-criteria analysis which is noted as a preferred option of this submission.**
No.	**7 - Fewer Harrington & Partners**
Date Received	Monday 2 October 2023
Submission	Option 1 (Green) - supported as the preferred option. It provides clear alignment between the existing main roundabouts and best aligns with our client's masterplan for the lands. Option 2 (Red) - there are serious concerns about this route once it crosses the Greenway to the north and enters our client's lands. The alignment would be detrimental to the masterplan and affect the potential of the site. The route could potentially be realigned to curve around the wetland and cross the greenway at the same point as Option 1, enhancing green space and benefitting pedestrians and cyclists. Option 3 (Purple) - not a preferred option as it traverses a granted planning permission in Abbeygate and would impact the existing layout. It would be detrimental to the overall masterplan and affect the potential of the site. Option 4 (Orange) - second preferred option. This route aligns with our client's masterplan and could create a beautiful transition space with the wetlands area between the urban developments and the greenway. Option 5 (Blue) - least preferred option. This route would be the most detrimental to our client's lands as it dissects the land diagonally. It would be detrimental to the overall masterplan and affect the potential of the site. Route 6 (Yellow) - there are serious concerns about this route once it crosses the Greenway to the north and enters our client's lands. The alignment would be detrimental to the masterplan and affect the potential of the site. It also appears to be a long and tortuous route with straights and sharp changes.
Response	**Option 2 has been identified as the Preferred route as per the multi-criteria analysis. As noted, the routes represent corridors subject to further design development. Due consideration will be given to the potential to accommodate the issues raised in this submission as part of stakeholder consultation and detailed design at the next stage of the project.**
No.	**8 - Resident**
Date Received	Monday 2 October 2023
Submission	I am against the construction of a road in close proximity to the Clover Meadows Estate as it would impact the safety of children in the area, increase noise levels and lower house prices.
Response	**The objective of this project is to provide a link from Abbey Road to Belmont Road. The Clover Meadows access road was always intended to operate as a through route and is facilitated by a large capacity junction on Belmont Road. This section of road has good quality pedestrian and cycle infrastructure, which will be reviewed and upgraded as part of the subsequent stages of this project as appropriate and is external to the adjacent housing estate.**
No.	**9 - Resident**
Date Received	Tuesday 3 October 2023
Submission	I am in favour of the scheme but concerned about the potential impact on the Clover Meadows Estate. If the road was on the outside of the current fence (field area), it could be a huge benefit to the residents for a number of reasons, such as increased security for residents, no impact on the harmony and privacy element or property valuations of the estate, etc. Two roads should be considered, one for estate residents only and another for the through road. I believe the best option would be the road arriving at the Abbey Park roundabout.
Response	**The objective of this project is to provide a link from Abbey Road to Belmont Road. The Clover Meadows access road was always intended to operate as a through route and is facilitated by a large capacity junction on Belmont Road. This section of road has good quality pedestrian and cycle infrastructure, which will be reviewed and upgraded as part of the subsequent stages of this project as appropriate and is external to the adjacent housing estate.**
No.	**10 - Resident**
Date Received	Tuesday 3 October 2023
Submission	All route options will be close to the Clover Meadows Estate's two green areas which are used as a play area for kids. The road would create a safety risk in this regard. Several houses are adjacent to this road and their safety and noise exposure will also be compromised. There is also a concern regarding the smells originating from trucks destined for the ABP meat factory which will impact residents living

	adjacent to the road. The increased traffic and how cars will enter the housing estates along the road is also a concern.
Response	**The objective of this project is to provide a link from Abbey Road to Belmont Road. The Clover Meadows access road was always intended to operate as a through route and is facilitated by a large capacity junction on Belmont Road. This section of road has good quality pedestrian and cycle infrastructure, which will be reviewed and upgraded as part of the subsequent stages of this project as appropriate and is external to the adjacent housing estate. Appropriate measures will be considered to ensure the integrity and safety of the estates green spaces is maintained through stakeholder consultation at the next project stage.**
No.	**11 - Resident**
Date Received	Saturday 30 September 2023
Submission	We would object to the road proposed at Newtown Glen and the Purple Route as this proposed road would be detrimental to us due to the noise, petrol fumes and pollution.
Response	**The multi-criteria analysis has indicated that Option 3 is not the preferred option**
No.	**12 - Resident**
Date Received	Wednesday 4 October 2023
Submission	I would like to submit an objection to all routes aside from Route 3 (Purple) as this route is the most direct. The other routes will affect the natural lay of the land relating to wildlife.
Response	**The multi-criteria analysis has indicated that Option 3 is not the preferred option, in part due to the impact on the existing and permitted residential access roads it aligns with which would have a negative impact on residents and/or limit the potential provision of high quality pedestrian cycle infrastructure. The preferred option (Option 2) scored the highest under the environmental section of the multi-criteria analysis.**
No.	**13 - Resident**
Date Received	Wednesday 4 October 2023
Submission	The road alignment will impact the safety of children playing in the area of Clover Meadows as it will lead to an increased traffic flow over our estate. I would appreciate it if the road connection could start from Maxol Petrol station and connect to Abbey Road, which will not affect our estate.
Response	**The objective of this project is to provide a link from Abbey Road to Belmont Road. The Clover Meadows access road was always intended to operate as a through route and is facilitated by a large capacity junction on Belmont Road. This section of road has good quality pedestrian and cycle infrastructure, which will be reviewed and upgraded as part of the subsequent stages of this project as appropriate and is external to the adjacent housing estate. Appropriate measures will be considered to ensure the integrity and safety of the estates green spaces is maintained through stakeholder consultation at the next project stage.**
No.	**14 - Trans-stock Warehousing and Cold Storage Ltd.**
Date Received	Thursday 5 October 2023
Submission	We welcome the development of the access road as it will greatly assist access to the area for heavy goods vehicles.
Response	**Support for the scheme is noted.**

9 PREFERRED OPTION

PREFERRED OPTION RECOMMENDATION

Based on the results of the Multi-Criteria Analysis (documented in Chapter 6) and the submission made as part of the public consultation (documented in Chapter 8), the preferred option for the South-North Access Road is the Red Route, shown below.

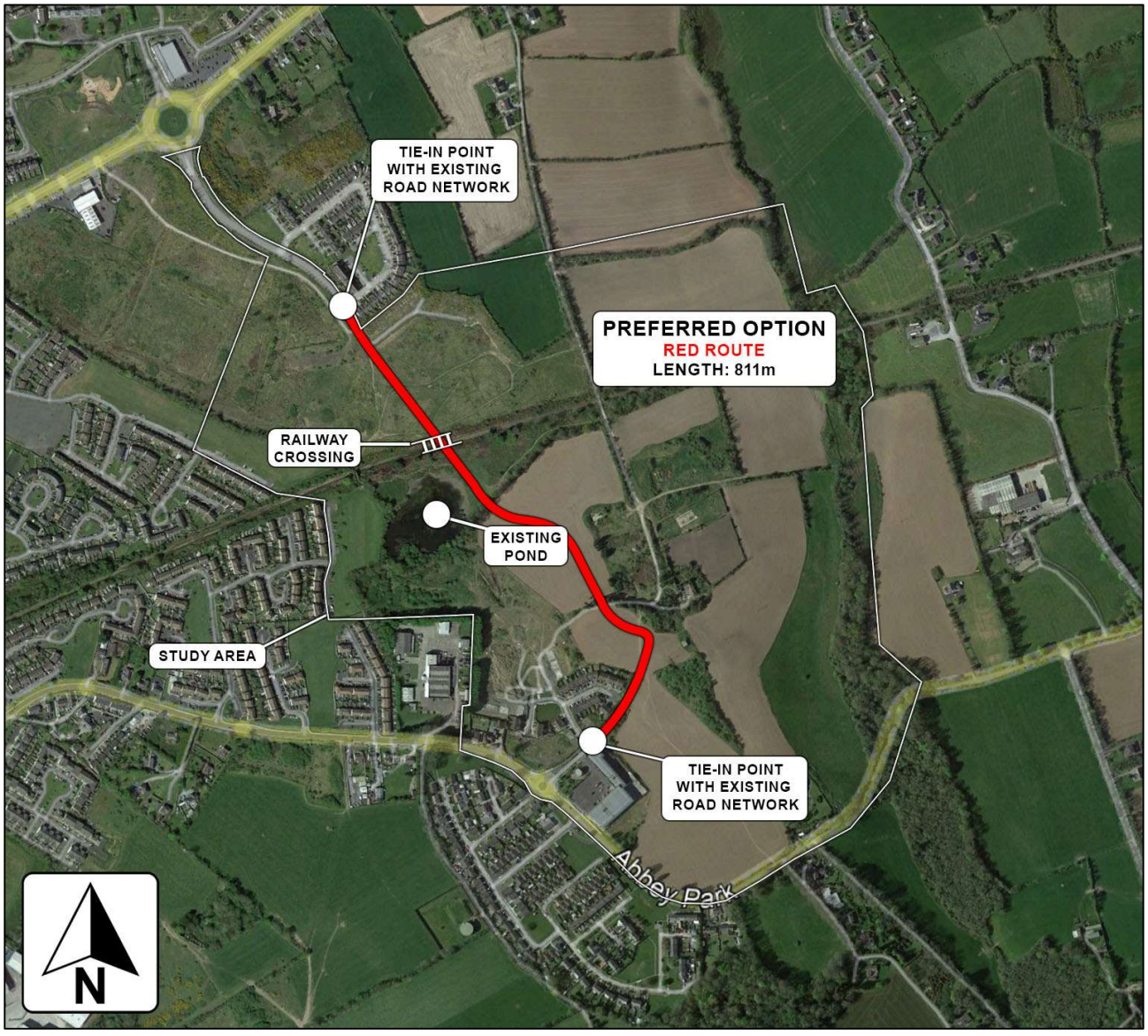

Figure 9-1: South-North Access Road Preferred Option (Source: Google Earth)

SUMMARY AND CONCLUSION

The results from the Option Selection Report conclude that the previously identified Emerging Preferred Route (EPO) should be adopted as the Preferred Option, which has been identified as the Red Route, shown in Figure 9-1.

NEXT STEPS

It is recommended that the identified preferred option be advanced to the subsequent phase of the project, which entails further development of the design along the preferred corridor prior to the lodgement of a planning application.

10 VERIFICATION

This report was compiled and verified by:

Wian Marais BE (US), BE (Hons Transportation), CEng

Chartered Civil Engineer

O'Connor Sutton Cronin & Associates

Appendix A PUBLIC CONSULTATION SUBMISSIONS

[redacted]

From: Joanna B. [redacted]
Sent: Thursday 21 September 2023 22:22
To: South North Access Road Ferrybank
Subject: South – North Access Road (Abbey Road to Belmont Road

Dear Mr/Msr
I think that the road connecting Abbey Road with Belmont Road in Ferybank is a great idea, I support it. I live with my family on Fiodh Mór.
Regards
Joanna Baldowska

[redacted]

From: james hennessy [redacted]
Sent: Friday 22 September 2023 13:16
To: South North Access Road Ferrybank
Subject: Wildlife

To who it may concern.
I would really like to know will crossing over the old railway will ye be keeping our wildlife in mind in this area.

[redacted]

From: Damien Donoghue <[redacted]>
Sent: Friday 22 September 2023 13:43
To: South North Access Road Ferrybank
Subject: Abbey Rd to Belmont Rd concern
Attachments: IMG_4602.jpg; IMG_4601.jpg

Good afternoon,

I am emailing you today as a LE24 candidate, as I am talking to the people of Ferrybank and listening to their concerns. This new road is very welcome news and badly needed however I must stress that one of the options is a no go and should not be considered. That is option 6 (orange). This option is cutting into Abbeylands business park. There will be too much going on with all the machines going in there and this will affect their businesses. Also this option will be running down the side of an old couple's house in their late 80's and at their back garden. They don't need that going on.

I urge you please DO NOT consider this as an option.
I can meet the council at any time to discuss.

Also I wish to point out as I am canvassing on the abbey Rd, people are asking for this road to be resurfaced as there are so many potholes and dips that cause flooding. Can the council look at doing this road up along with doing this new road.

Look forward to hearing from you.

Damien.

[redacted]

From: Peter Roche <[redacted]>
Sent: Tuesday 26 September 2023 10:50
To: South North Access Road Ferrybank
Subject: South-North Access Road (Abbey Rd. to Belmont Rd.)

Dear Sir/Madam,
I feel that options 1,2,5,and 6 are the only realistic options for the new road. Option 4, the orange route, is going straight through the Abbey Business park and borders on an elderly couples house. Option 3 goes through Abbeygate housing estate. Apart from the dangers of traffic to children playing in the estate, the existing road which will meet up with the new proposed road is not sufficient for heavy traffic.

Kind regards,
Peter Roche

[redacted]

From: Danny Scannell [redacted]
Sent: Wednesday 27 September 2023 15:08
To: South North Access Road Ferrybank
Subject: South-North access road (Abbey road to Belmont road)

Sent from my iPad Hi everyone I prefer route 4 because it's shorter and will have less impact on the environment, that's my opinion. I would like to congratulate Waterford council and Kilkenny council on the wonderful work being carried out also the lovely greenway which will make Waterford and south Kilkenny the in place to go. Daniel Scannell

[redacted]

From: Niall Harrington <niall@whiteboxltd.ie>
Sent: Monday 2 October 2023 18:29
To: South North Access Road Ferrybank
Cc: Martin White; Eamonn Power
Subject: FW: North Abbey Road (Abbey Road to Belmont Road)

Dear Sirs,

As the major landholder that the prosed North Abbey Road proposes to transverse, we fully endorse the project and the opportunity it will bring to support the development of Abbeygate and the wider Belmont/ Ferrybank and South Kilkenny Area. We are hugely excited and enthused that the planned road connection will bring easier and direct access to the Greenway and open that up as a pedestrian /Cycle connection direct to the City Center and we applaud your progressive and joined up thinking.

We at Whitebox have master planned our circa 75 acre landholding to deliver a significant number of new homes that will underpin this strategic investment and bring new families into Ferrybank to support the local community and business's, service the new business district and job creation envisaged by the development of the North Quays and the growth of Bellview Port as the off shore wind energy should be transformational for the Port and the area.

With regard to the proposed routes identified we would advise of the following comments

Route Option 1- Green Route- we would fully support this as the preferred route, it provides a clear road alignment between the 2 existing main road roundabouts. The road will connect and carry the greenway at the appropriate location and via the open space and wetlands areas. The alignment of the road will ensure it has an urban feel and we would fully endorse this route that we feel best aligns with our master plan and the ability for us to deliver a new urban village in Ferrybank

Route Option 2- Red Route- This would be our second favourite route and it accords with all our aspirations outlined in option 1 above, however, if it is possible to work the route through the wetlands I believe that this is a great transitional area between the urban development and the greenway and could be a key design feature of the new road.

Route Option 3- Purple Route- This route does not work for us as the new urban road will transverse through an existing housing estate and through phase 1 and 2 of our development that both has planning permission and we intend staring development on site on phase 1 and 2 in the next 4-6 weeks. This would be hugely detrimental to our overall plans , our plans to commence construction and will significantly impact on existing families and the investment they have made in their homes in Abbeygate.

Route Option 4- Amber Route- This would not be a preferred option and we feel it will be hugely difficult to deliver through an existing industrial estate, but equally difficult and unnecessary to have to development a major road junction at Abbey Road when one already exists at Ross Abbey Neighbourhood Center.

Route Option 5- Blue Route- This route would be our third choice, after the green route and the red route. Whilst it is a strong option it pushes the new urban road away from the heart of the urban village and proposes a difficult crossing point to the greenway. We have allowed for this future road alignment in our master plan as in the longer

term a secondary route such as this can be delivered, but the primary focus should, in our opinion be on the delivery of the appropriate road solution now.

Route Option 6- Yellow Route- This in our opinion is a poor option of the blue route and the road alignment to run parallel with greenway will be invasive to the users of the greenway and counter-intuitive as the purpose of the greenway is to move away and distance the users from vehicular traffic. We would not be in favour of this route.

We again fully support your endeavours and forward thinking and we look forward to working with you collaboratively in the future to achieve all our end goals.

Yours

Niall Harrington
Creative Director
Whitebox Property Developments Ltd.

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[redacted]

From: Darryl O'Neill <Darryl.O'Neill@fhp-architects.com>
Sent: Monday 2 October 2023 11:23
To: South North Access Road Ferrybank
Cc: Paul Cummins; Andrew Hayden; William West
Subject: South – North Access Road (Abbey Road to Belmont Road) - Submission Response
Attachments: South – North Access Road (Abbey Road to Belmont Road) - Submission Response.pdf

Importance: High

Dear Sir/Madam,

Please find attached our submission on the corridor options for the South – North Access Road (Abbey Road to Belmont Road) on behalf of our client.

If you have any further questions please do not hesitate to contact me.

Thank you in advance.

Kind Regards,

Darryl O'Neill

Prof. Dip. Arch, BA Arch (Hons), MRIAI

Architect

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FEWER HARRINGTON & PARTNERS
ARCHITECTS, PLANNERS & PROJECT MANAGERS

Fewer Harrington & Partners,
Studio 14, The Atrium,
Maritana Gate, Canada St,
Waterford, Ireland
Date: 28th Sept 2023

Kilkenny County Council,
Freepost KK 26,
Road Design Section,
1A Dean Street, Kilkenny.

South – North Access Road (Abbey Road to Belmont Road)

A Chara,

As the Architects for the landholder that the South - North Abbey Road proposal, proposes to transverse, we are very pleased to endorse the project and the opportunity it brings to support the development of Abbeylands and the wider Belmont/ Ferrybank area. We have been awaiting progress on this proposed route as it has directly impacted on the development of our clients lands which were refused permission in 2022 (planning ref. no. 22/336) on the grounds that the application was deemed premature due to route for this road not been finalised.

We are delighted that the planned road connection will bring direct access to the Greenway and open that up pedestrian & Cycle connection direct to the City Centre and Beyond and we support your intention fully.

The client has substantial landholdings in this area and wishes to deliver significant number of new homes that will bring new families into Ferrybank to support the local community and business's, service the new business district and further enhance the development of the North Quays and the growth of Bellview Port.

We have overlaid the route options on our clients planning permission proposal (planning ref. no. 22/336). See fig. 01 below.

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Fig. 01

With regard to the proposed routes identified our comments are as follows:

Route Option 1- Green Route- we would fully support this as this is our preferred route, it provides a clear road alignment between the 2 existing main road roundabouts. The road will connect and cross the greenway at the appropriate location and via the open space and wetlands areas. The alignment of the road will ensure it has an urban feel and we would fully endorse this route. We feel best aligns with our Clients master plan for the lands and this route will the ability for us to deliver a new urban village. Option 1 would also provide a more clearly defined trunk route for traffic without meandering through housing areas. This would provide a clear delineation between the housing developments and the main road and present better opportunities for creating home zones within the developments that would improve pedestrian and traffic safety.

Route Option 2- Red Route- We have serious concerns with regards to this route once it crosses the Greenway to the north and enters our clients lands. This would be detrimental to our overall masterplan and significantly effect the potential of our site it would substantially reduce the efficiency of the site and directly reduce our potential to achieve the required appropriate density for housing on this site. We believe the route could be realigned to curve around the wetland and cross the greenway at the same location as option 1 (the green route) this we believe would enhance the green space and be beneficial to pedestrians, cyclists & local users this could be a beautiful transition space with the wetlands area between the urban development and the greenway and could be a key design feature that enhances the new roadway.

Route Option 3- Purple Route- This route does not work at all for our clients, it transverses a granted planning permission in Abbeygate and would have substantial implications on the existing layout. We have serious concerns with regards to this route once it crosses the Greenway to the north and enters our clients lands. This would be detrimental to our overall masterplan and significantly effect the potential of our site it would substantially reduce the efficiency of the site and directly reduce our potential to achieve the required appropriate density for housing on this site.

Route Option 4- Amber Route- We would support this route this could be a beautiful transition space with the wetlands area between the urban developments and the greenway and could be a key design feature that enhances the new roadway. This route north of the greenway aligns with our Clients masterplan for the lands and link in fluidly with the existing road structure. but it has some difficulties with delivery through the existing industrial estate. Option 4 would also provide a more clearly defined trunk route for traffic without meandering through housing areas. This would provide a clear delineation between the

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housing developments and the main road and present better opportunities for creating home zones within the developments that would improve pedestrian and traffic safety.

Route Option 5- Blue Route- This route would be the most detrimental to our clients lands as it dissects these land diagonally, we have serious concerns with regards to this route once it crosses the Greenway to the north and enters our clients lands. This would be detrimental to our overall masterplan and significantly effect the potential of our site it would drastically reduce the efficiency of the site and directly reduce our potential to achieve the required appropriate density for housing on this site. This option pushes the new urban road away from the heart of the urban village and proposes a difficult crossing point to the greenway. We would not be in favour of this route.

Route Option 6- Yellow Route- We have serious concerns with regards to this route once it crosses the Greenway to the north and enters our clients lands. This would be detrimental to our overall masterplan and significantly effect the potential of our site it would substantially reduce the efficiency of the site and directly reduce our potential to achieve the required appropriate density for housing on this site. This also appears to be a long and tortuous route with straights and sharp changes in direction with the road alignment running parallel with greenway which will detract and impose on the greenway and its users and will be contrary to the idyllic purpose of the greenway. We would not be in favor of this route.

We are very supportive of this scheme and hope it progresses in a timely fashion.

[redacted]

From: Niebko Niebuszewski <[redacted]>
Sent: Monday 2 October 2023 19:27
To: South North Access Road Ferrybank
Subject: SOUTH-NORTH ABBEY ROAD TO BELMONT ROAD ROUTE

Hello, I am a resident of the Clover Meadows estate and I am against the construction of a road in such close proximity to the estate.
This will have an impact on the noise and safety of children playing on the grass by the road.
It will also lower house prices due to its proximity to the main road.
Best regards,
Marcin Popielarczyk

[redacted]

From: Tom Mullally <[redacted]
Sent: Tuesday 3 October 2023 10:35
To: South North Access Road Ferrybank
Subject: South – North Access Road (Abbey Road to Belmont Road)

Good Morning,

I trust this email finds you well.

I just noted yesterday evening the proposal for the South – North Access Road (Abbey Road to Belmont Road) in Ferrybank. I have been a resident of CloverMeadows since 2013, but I was unaware this proposal was going ahead until last night to be honest.

Firstly, I believe the access road should bring great value to the local area and in particular businesses on Abbey Road in Ferrybank and I would be very much in favour of it's benefits to the area.

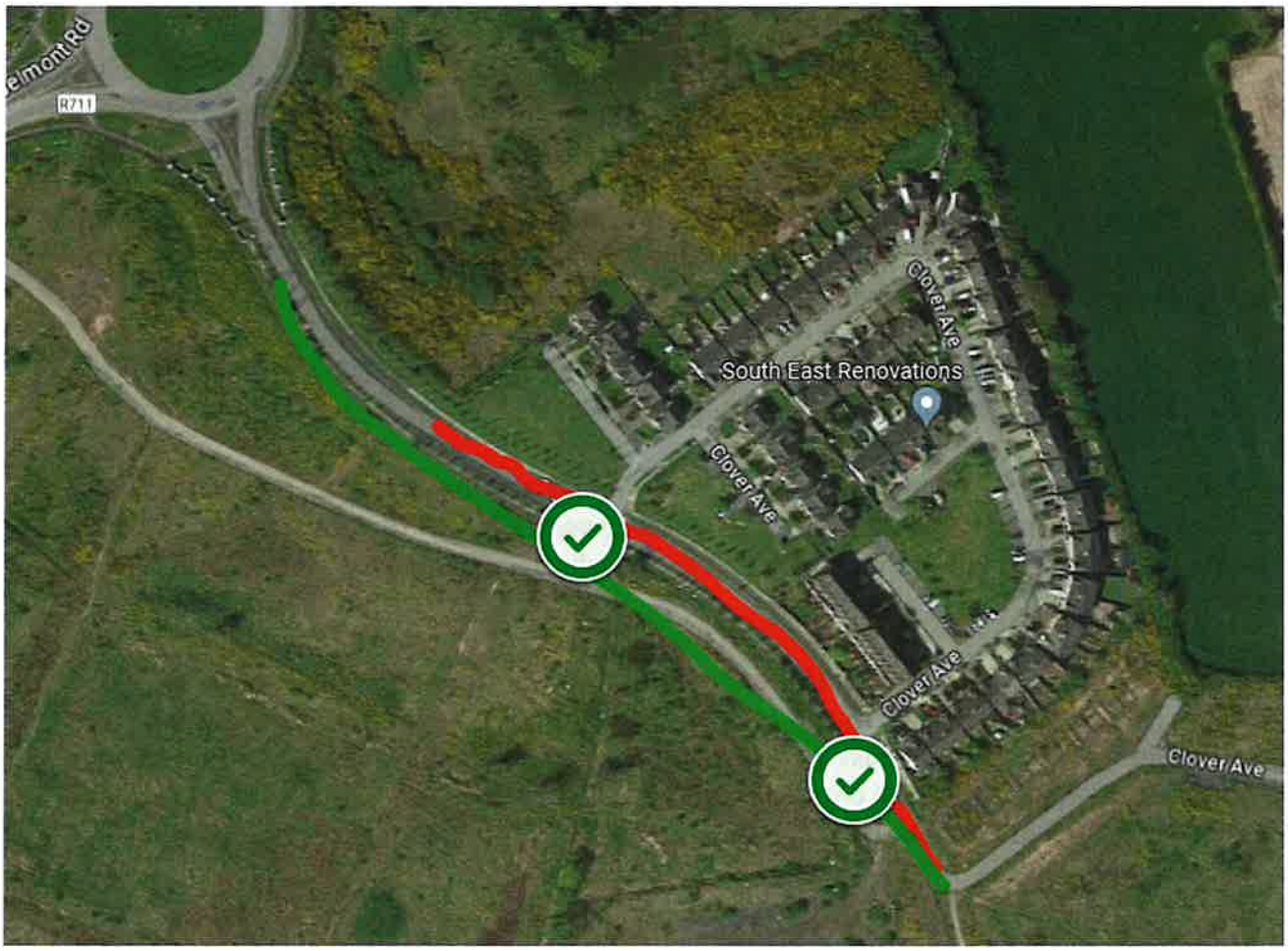
As I live in Clovermeadows, however, I am slightly concerned by any impact this could have on the residents of our estate, especially from a safety and security point of view. To date access to the estate has been through one access road from the roundabout at Aldi which has helped with the security and harmony of the estate.

I detect from the W383 Route Options brochure that the intention is to extend the current road with the various options linking to Abbey Road. As this road is almost right outside my front door I would have major reservations and concerns with using this road, in full, as part of the access road to link with Abbey Road. If, however, the road was on the outside of the current fence (field area) I think this would be a huge benefit to the residents in Cloivermeadows for the following reasons:

- Current road and access would remain providing security for residents. I think this is an important consideration, especially being on the outskirts of Waterford city and the fact the access road, as well as providing great options for locals, will also provide options for sinister activities if not taken into account. We don't need to start hearing Garda sirens on the road and close to our front doors.
- The distance from properties at the southern point of Clovermeadows to the Access Road would be good, instead of having the access road on the doorstep of households.
- The harmony and privacy element of the current estate would not be impacted upon which will benefit all residents and indeed any possible future developments in the area
- The current access road from the roundabout would not require any " speed bumps " etc as the traffic on it would remain the same.
- Would maintain property valuations and the knock on effect of property taxes etc.
- The new access road I assume will have a cycle lane on it and the current road to Clovermeadows is not wide enough for this and would require altering which, again, would impact the living conditions in the estate.

I would ask consideration of the following:

- The red line, current road for Clovermeadows residents only, and possibly any future developments either side of the current estate.
- Green line (approximately) could be new road and may be at a better angle for drivers coming from the roundabout itself. The turn down the hill can be quick and is downhill. This would also minimise construction traffic which would impact on the estate itself.
- The two arrows could be access point to Clovermeadows, although one would suffice I would imagine, with possibly a bus stop.



In relation to the route options provided, I would believe the road arriving at the Abbey Park roundabout would be the best option for the area.

Should you wish to discuss any of the above points, I remain at your disposal.

I conclude that I firmly believe this access road should benefit everyone locally, but I have concerns that our estate and the impact it may have ahs not been taken into account with what is in the brochure. I trust this will be considered as we have all invested in Clovermeadows as an estate to date, including Kilkenny County Council, and we don't want this to negatively impact as the results could be disasterous.

Regards and thanks,
Thomas

[redacted]

From: Laszlo Feher [redacted]
Sent: Tuesday 3 October 2023 18:31
To: South North Access Road Ferrybank
Subject: Submissions

Dated 03/10/2023

Reference the South-North Access Road (Abbey Road to Bemont Road)

To Kilkenny County Council

I would like to make some comments and observations regarding the route corridor referenced above

According to the 6 route options you have chosen for the selection process, all have started at the roundabout on the Belmont road and use the existing road in the Clover Meadow's housing estate, would like to highlight this will be close to the two green areas of Clover Meadows estate which is used as a play area for kids of all ages who live within the estate and as there would be a large amount of cars busses and trucks using this road my concern is that this would be a safety issue as kids would no longer be able to use the green areas as it would no longer be safe, I would also like to highlight that there is several houses and apartments adjacent to this road which will also have these safety issues as they would be verry close to the road and they will also have a massive increase in noise during the whole day. I think these factors should be taken into account regarding the new road selection

I would also like to comment regarding trucks which will more than likely be using this new link road to get to ABP meat factory in Ferrybank, As this is already a known issue in the Ferrybank area regarding smells from these trucks passing through my concern is that most houses along the new route and in the clover meadows estate will suffer from this as they will be very close to the road, this will be a massive problem for the residents in the immediate aera of the new road and not just the clover meadows housing estate

Also as there will be a massive increase in traffic using the new link road I would like to comment on how cars will enter into the housing estates along this new route, As it would be dangerous for cars crossing the road with the higher volume of traffic the provision of roundabouts must be taken into account

Yours sincerely,

Laszlo Feher, Erika Nagy

[redacted]

Androidos Outlookból küldve

[redacted]

Newpark Lodge
Ferrypark
Waterford
30-9-2023

To Kilkenny Co Council. Road Design Sec.

Dear Sirs Madam.

With Reference to Proposed Abbey Road To Belmont Road Connection, there is only one option for Connecting the Two areas. Connecting the Entrance to Mr Price stops Direct to the Aldi Roundabout on the Belmont Rod.

We would Object to the Road Proposed at Newtons Glen and the Purple line on your map as this Proposed Road would have a Detrimental Effect on our Dwellings.

The Noise and Petrol fumes and Pollution would have a health Effect on us.

Yours sincerely,

Helen Joe Mc Loughlin

Mrs Maureen Scully

Newpark Cottage

[redacted]

From: tony keogh <[redacted]>
Sent: Wednesday 4 October 2023 19:22
To: South North Access Road Ferrybank
Subject: Proposed South - North Access Road Ferrybank

Hi, I'd like to register a submission on be half of myself and family living in fiodh mor abbeylands ferrybank very near to the proposed routes for the new access road, I'd like to submit an objection to all other proposed routes except route 3 on your plan. This route is the most direct route on the proposal and makes the most sense. I also feel the other routes will effect the natural lay of the land relating to wildlife. A direct route is the best option in my opinion.

Regard,

Tony keogh

[redacted]

From: Constantin Volovei [redacted]
Sent: Wednesday 4 October 2023 10:41
To: South North Access Road Ferrybank
Subject: The South – North Access Road (Abbey Road to Belmont Road)

Hi my name is Constantin, owner of the house located at 4 the Lawn Clover Meadows Ferrybank Waterford. As we have kids that are playing in the area that is designed to become a road that will connect Belmont road to Abbey road and will significantly increase the traffic flow over our estate, I would appreciate if the road connection can start from Maxol Petrol station and connect to Abbey Road which will not affect the our Estate.
This decision is based on our childrens safety.

Regards
Constantin Volovei

[redacted]

From: Colm Browne <colmbrowne@trans-stock.com>
Sent: Thursday 5 October 2023 09:34
To: South North Access Road Ferrybank
Subject: South-North Access Road (Abbey Road to Belmont Road)

To Whom it may concern

Trans-stock Warehousing and Cold Storage Ltd , Christendom , Ferrybank, Co Kilkenny, X91 N283

Welcome the development of the access road from Abbey Park to Belmont Road which will greatly assist the access for Heavy good vehicles to the area.

Thank you

Sent from Mail for Windows

OCSC

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