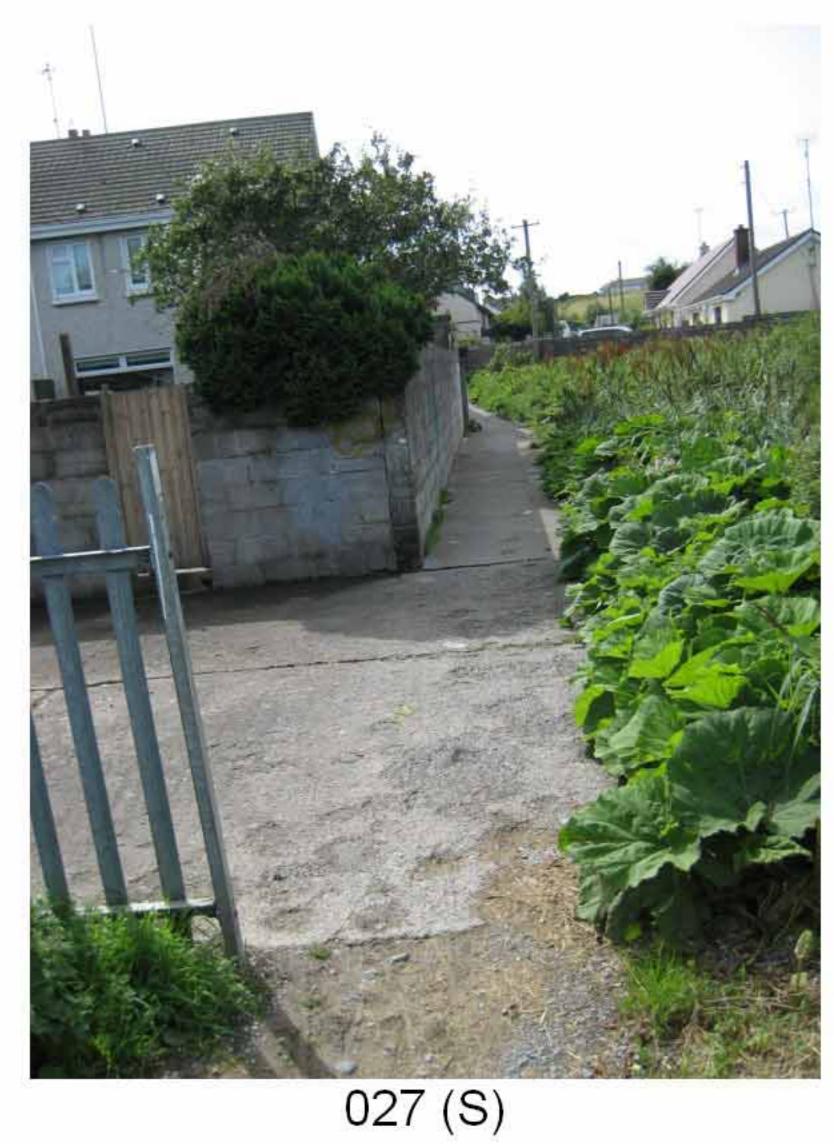




024 (S) 025 (N)



026a (N) 026b (E)



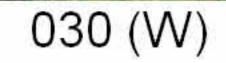


028 (N)



029 (W)







030 i (E) 031 (W)



032 (S) 033 (N) 034 (S)





037 (N) 037 i (W) 037 ii (S)







038 (E) 039 (W) 040 (N)



041 (NE) 042 (NE) 043 (E)





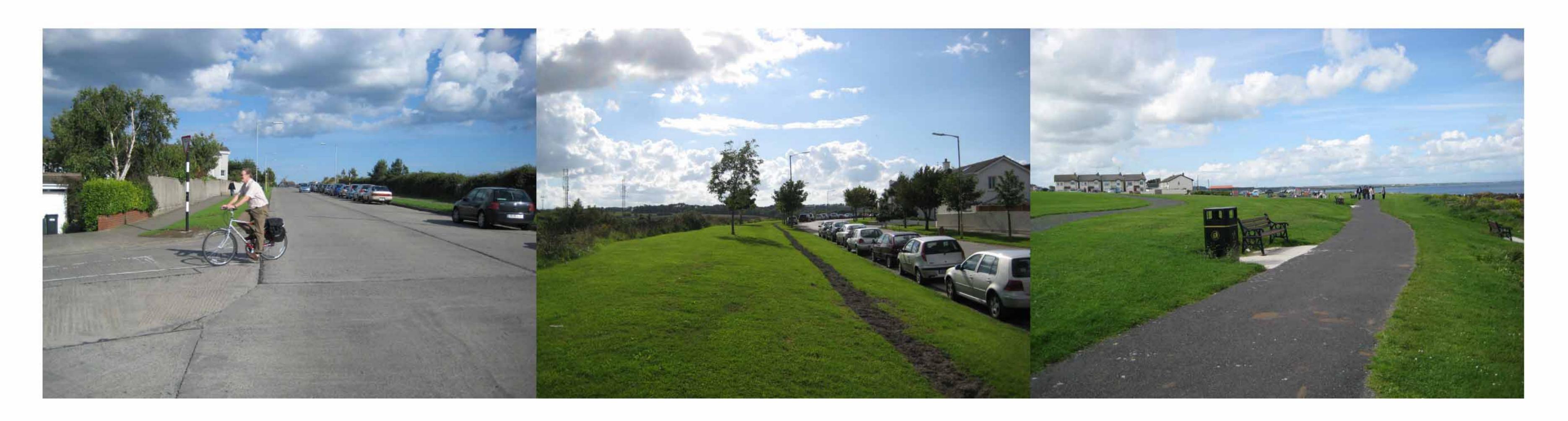
045 i (N) 046 i (N)





050 (N) 053 i (NW)





061 (E) 062 (W) 064 (W)





066 (S) 067 (E)



068 (S) 068 i (N)

4.8 Delivery: Prioritization and Costings

In Section 4.7 above, Skerries Route Options Spreadsheet, the fourth column from the left reads "Priority", which is populated with the letters "H" (High), "M" (Medium) and "L" (Low) for each route section described. The basis for deciding if a route section is classified as "H", "M" or "L" is summarized in Table 4.5 below. It should be noted however that while the table below (and assignment of letters to the table in Section 4.7) aims to be as objective as possible, ultimately a judgement call needs to be made on the basis of many inputs.

Table 4.5: Broad Basis for Prioritization of Routes

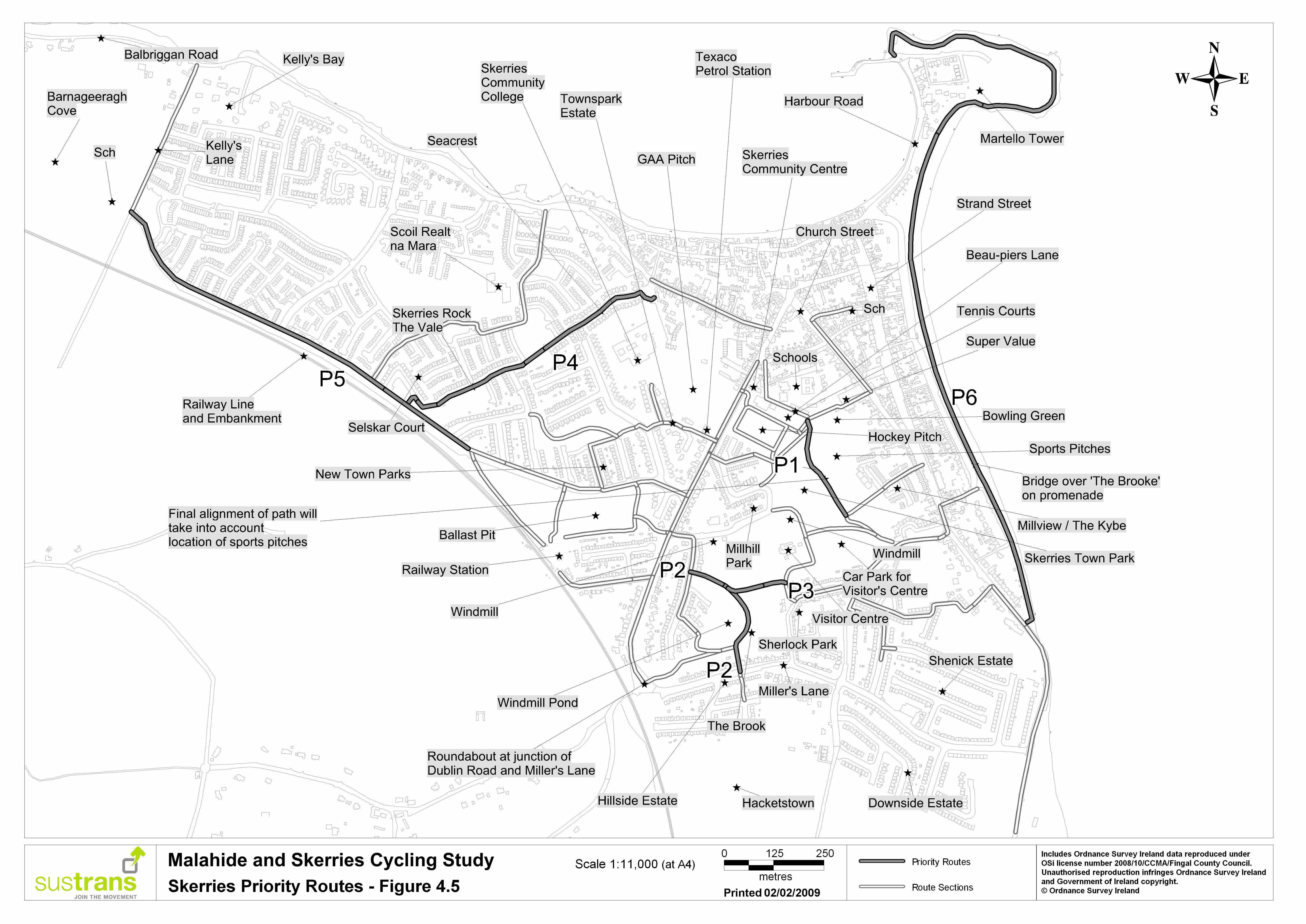
Priority	Basis for Priority Category
High Priority	Provision of new links which lie along existing strong desire lines and which improve the permeability of an area for cyclists / link with important destinations.
	Upgrading of existing links which lie along existing desire lines and which link with important destinations.
	Crossings / Junctions where no adequate crossing is provided but where there is a current demand and possibly safety issues.
	Schemes which are thought to be easily progressed – i.e. there are few difficulties with land ownership / rights of way issues.
	Value for Money and expected highest levels of usage relative to investment
Medium Priority	Upgrading of existing links which lie along existing desire lines and for which greater use is expected with better quality facilities. Often the current paths are in good condition if a little narrow and widening can be best justified at time of resurfacing – if current budgets are limited.
Low Priority	Most quiet residential roads which are quite cycling friendly and only need directional signage.
	Very expensive schemes. While usage could be high there will be a need to prove the success of previous phases of investment.

- 4.8.2 Table 4.6 below summarizes the priority for provision of traffic-free routes in the Skerries area using the above basis.
- 4.8.3 Figure 4.3 below illustrates these Priority Routes. The spreadsheet with details of costings in Section 4.7 above highlights in a yellow colour the priority route sections.
- 4.8.4 The scope of this study did not include making definitive recommendations or providing indicative costings for the provision of other cycling friendly interventions on busier roads in the town such as traffic calming, on-road cycle-lanes, advanced stop lines / cycle boxes, junction treatments etc.

- 4.8.5 Therefore it is not possible to give a prioritization and cost estimate in Table 3.5 above for the following elements which are thought to be high priorities for Skerries:
 - Signallised crossing of Dublin Road from Millhill Park towards St. Patrick's Close.
 - Junction of Miller's Lane and Dublin Road
 - Dublin Road from Southern end at roundabout to North of Community Centre.
- 4.8.6 Note that in Chapter 6 below, there is a discussion about the broader interventions that are required to make Skerries a showcase cycling friendly town. It must not be assumed that the implementation of the prioritized measures below is a sufficient response to the existing challenges to cycling in Skerries.

Table 4.6: Prioritization of (Traffic Free) Interventions in Skerries

Priority Number	Description of Link / Route	Route Section Numbers (as per Section 4.7)	Estimate of Cost (based on calculations in Appendix A)	Comments.
P1	N-S Links New proposed traffic-free path across town park from East end of (Visitor Centre) Car Park running Northwards as far as South corner of Tennis Courts.	033	<u>Total €55,200</u>	Evidence for there already being a desire line here is the numbers of pedestrians and cyclists using this link.
P2	E-W Links Upgrading of existing "Interim Standard" path that runs from Miller's Lane and around the East side of "Windmill Pond" + new proposed traffic-free link from Northern end of pond to Greenlawns.	003+ 004	€30684+ €15444 <u>Total €46,128</u>	This is an existing established route that needs to be upgraded and extended. The newly proposed section runs across a public open space with an existing track worn in the grass from use.
P3	Link between N-S Route and E-W Route Provision of new link "D", acknowledging environmental sensitivities	030 + 031	Bespoke Cost for boardwalk + €15,660	Bespoke cost required for boardwalk.
P4	Link from Distributor Rd to Skerries CC Provision of continuous cycle link from Skerries Court via Skerries Rock/The Vale to SCC	055 057	€10849+ €9600 <u>Total €20449</u>	The full link will encompass quiet residential roads and new traffic free paths across public open spaces. Costs provided for traffic free sections only.
P5	Distributor Rd: Barnageera Cove to Dublin Road	053, 059, 060 (plus 061, 062, 063)	Not possible within the scope of this study.	Requires further study. See discussion in Section 4.5.
P6	South Strand Track From Red Island to junction of South Strand with Holmpatrick.	064+ 065+ 066	€122240+ €0+ €206880 Total €329,120	This route would be a top class recreational cycling route.



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5. Recreational routes beyond Skerries and Malahide towns

5.1 Overview

Figure 5.1 below shows some suggested routes that could make up a longer distance signed network. These routes were not surveyed in detail but have been suggested following discussions with Hugh Halpin and Ray Ryan of the Skerries Cycling Initiative and Ken O'Connor of Fingal Safe Cycling Action Group. Enormous gratitude is expressed by the consultants to these gentlemen. Hugh Halpin has written books on the subject of leisure cycling and most of the on road routes that are plotted here have identified in his book "Leisure Cycling Near Dublin" 12.

5.2 Routes around Skerries

- 5.2.1 The coastal setting of Skerries makes it a very scenic place for recreational cycling. However the regional road network is terribly busy with much fast moving traffic. In addition to making interventions to reduce vehicle speeds, interventions will be required to create traffic-free paths alongside the busy coastal road. This will not be easy.
- 5.2.2 Circular routes are proposed from Skerries town using the minor road network and this could help Skerries become a cycle hub town. A link to Ardgillan Demesne is an obvious route but it is essential that special attention is paid to the topography from the point of view of high expected cycle speeds.


5.3 Broadmeadow Estuary

- 5.3.1 This route would be extremely popular with cyclists and walkers as is it level, waterside, circular and traffic-free. What a resource this would be for Malahide! It needs to be designed in detail but the main components are:
 - The upgrading of the existing coastal path on the south side which has an unbound surface which is damaged during flooding periods;
 - Linking this to Malahide including the Caves Marsh bridge;
 - The completion of a waterside route along the North side which will involve some use of land currently in private ownership;
 - The development of a new path and bridge alongside the railway line as it crosses the estuary;
- This route would not be cheap but is very strategic, being so close to Dublin and on the costal route of the proposed National Cycle Network along the east coast of Ireland. It would also link Newbridge and Malahide Demesnes.

¹² Gill & MacMillan, 2006.

5.4 Rogerstown Estuary

- 5.4.1 Like Broadmeadow this route has similar appeal. There is also a need for a path alongside the railway line. The Council has developed plans under the "Nature on Display" proposal and this proposes a network of pathways. However the concerns expressed in responses to the consultation process were that cycling had not been included and that paths were designed in a dust finish for walkers only.
- 5.4.2 It is recommended that the plans are revisited to include a circular route for shared use.



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6. Conclusions

6.1 Malahide (Demesne)

- Malahide is well placed to become a cycle-friendly town both for its local people and for visitors. The two main areas in which cycling could thrive are the Demesne and the Broadmeadow Estuary. The estuary route plans sit comfortably within the plans for a coastal route along the coast of the greater Dublin area, and indeed this sits within the framework of a longer distance touring network on the East coast of Ireland linking with Britain via the ferries. Commuting between Swords and Malahide could flourish with cycling friendly infrastructure as the terrain is fairly level.
- 6.1.2 As there is a ban on cycling in the Council park lands, this needs to be addressed as a matter of urgency.
- The Demesne offers good opportunities and 'quick wins' and a moderate level of investment would deliver the North-South and East-West routes. The circular route would also be an excellent resource. At all times consideration needs to be given to the views of pedestrians.
- 6.1.4 Given the usage of the Demesne by school children it would seem sensible to work with Scoil Íosa on educational initiatives alongside the provision of infrastructure.
- Work on the Broadmeadow routes, including a link to Swords, is another obvious choice and designs should be progressed to take it to the next stage as early as is feasible.

6.2 Skerries Town

- 6.2.1 Skerries has enormous potential to become a showcase cycling town. It is compact, flat and already has a culture of cycling. In order to improve the permeability of the town for cyclists, new links need to be created and existing ones upgraded. This is the main subject of this study. In order to make the town much more cycling friendly, some of the existing roads will need to be traffic calmed. The Dublin Road is of pivotal importance here.
- A high quality traffic-free cycling facility needs to be provided on a N-S axis through the Town Park linking important amenities at the Northern end with residential areas in the South. It is recommended that this is a 4.0m wide shared use facility. See Section 4.3 for discussion and Section 4.10 for prioritization of interventions.
- A high quality traffic-free route needs to be provided to cater for the E-W movement between the train station and the residential areas to the South and East of Miller's Lane. Of the options considered, the route hugging the East side of the Windmill Pond is likely to become the most popular route. See Section 4.2 for discussion and Section 4.10 for prioritization of interventions.
- 6.2.4 A link between the N-S route and the E-W route should be provided so as to improve the permeability of the town for cyclists. See 3.7 above.

6.3 Wider Interventions to Promote Cycling in Study towns

- 6.3.1 Many interventions will be required to make Skerries and Malahide showcase cycling towns in addition to those covered in previous sections. While it is beyond the scope of this study to cover these in any detail, the following points can be made.
- 6.3.2 Planning and Urban Design. Ensure that all new Local Area Plans provide for a permeable development layout and good connectivity to adjacent developments. Continue to retrofit existing developments so as to improve their permeability and connections.
- 6.3.3 Identify those roads for which traffic calming is required. A good example of cycling-friendly traffic calming is at Main Street / Balbriggan Road in Skerries town.
- 6.3.4 Work closely with An Garda Síochána on matters of traffic law enforcement, especially speeding and dangerous overtaking issues and in the vicinity of schools.
- 6.3.5 Identify junctions and crossings which may need to be upgraded to become cycling friendly.
- 6.3.6 Identify locations which require more cycle parking provision.
- 6.3.7 Develop promotional activities such as maps, events and a website.
- 6.3.8 Provide on-road cycling training for those who want it. See next section.
- 6.3.9 Continue research into usage levels and barriers to cycling.

6.4 Cycle Training

- As the consultant is of the opinion that there is significant merit in cycle training, we include here details of the three levels of the "Bikeability Programme" being implemented in Britain. This gives young people training to develop their on-road skills in cycling. If cycling is to be promoted, so must safe on-street cycling, and playground-based initiatives do not adequately prepare children for the roads.
- 6.4.2 There are three levels of Bikeability training. They are:
 - Level 1 Beginner: The cyclist has the skills and understanding to be able to make a trip and undertake activities safely in a motor traffic-free environment. This is a pre-requisite to carrying out an on-road trip.
 - Level 2 Introduction to Riding on the Road: The cyclist has the skills and understanding to be able to make a trip safely to school, work or for leisure on quiet roads.

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- Level 3 Advanced: The cyclist has the skills and understanding to be able to make a trip safely to school, work or leisure on busy roads and using complex junctions and road features.
- 6.4.3 It is understood that the Department of Transport is currently on the point of publishing a National Cycling Policy and cycling training will play an important part in this.

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Appendix A - Basis For Calculation of Unit Costs					

APPENDIX G - BASIS OF COST ESTIMATES FOR CONSTRUCTION OF TRAFFIC FREE ROUTES IN MALAHIDE / SKERRIES

	Estimate #1 based on Skerries Coastal Path 2007. See Footnote 1 below.	Euro	Estimate #2 based on New traffic free path - Based on Dublin Park 2008. See Footnote 2 below.				Euro
				(m2)	(m3)	unit	
·			Sub base	5.7		1	5.7
			100mm bitmac	15.25		1	15.3
			Excavation		7.2	0.5	3.6
			Disposal		8	0.5	4.0
Total incl Vat @ 13%	Per Square Metre	€80	Per Square Metre (inc)				29.0
Total incl Vat @ 13%	Per Kilometre (3 m path)	€240	Per Linear Metre (3 m path)				87.0

Scott Wilson costs based on works in Dublin June 2008.

Extract from email sent by Terry Rogers on 15/10/2008 to Steven "Wrt to cycletrack unit costs A figure of 80 euro per square metre

given the present construction downturn would seem appropriate. This figure is based on an off road 2.5m wide (approx 1.3km) long

track on the seafront in Skerries built in

2007. It includes vat but not kerbing, lighting or drainage or contingencies."

(3) Estimate for upgrading existing (Interim Standard) Path to Full Standard Finish where no widening is required.

Cost for upgrading an existing interim standard track to full standard, where no widening takes place, is estimated to be 50% of cost of building new track. i.e. 50% of €60/sqm.

€30

(2) Estimate for upgrading existing (Interim Standar Finish where widening is required.	rd) Path to Full Star	ndard
New path is estimated to cost €60/m2. If new path is created alongside existing path, then cost of new part of path is based on building up to a base layer of bitmac and overlaying entire path with one layer of 25mm bitmac. Total estimate is €38.5m2.		
Estimate Upgrading existing path is taken as 1 1/3 (€60)		

	_					
Estimates for Interim traffic free path Cost for widening 2.0m tarmac path						
to 3.0 m						
	(m2)	(m3)	unit	total Euro		
Sub base	5.7		1	5.7		
75mm bitmac	12.6		1	12.6		
Excavation		7.2	0.5	3.6		
Disposal		8	0.5	4.0		
25mm bitmac	4.2		3	12.6		
Per Linear Metre (3 m path) 38.5						