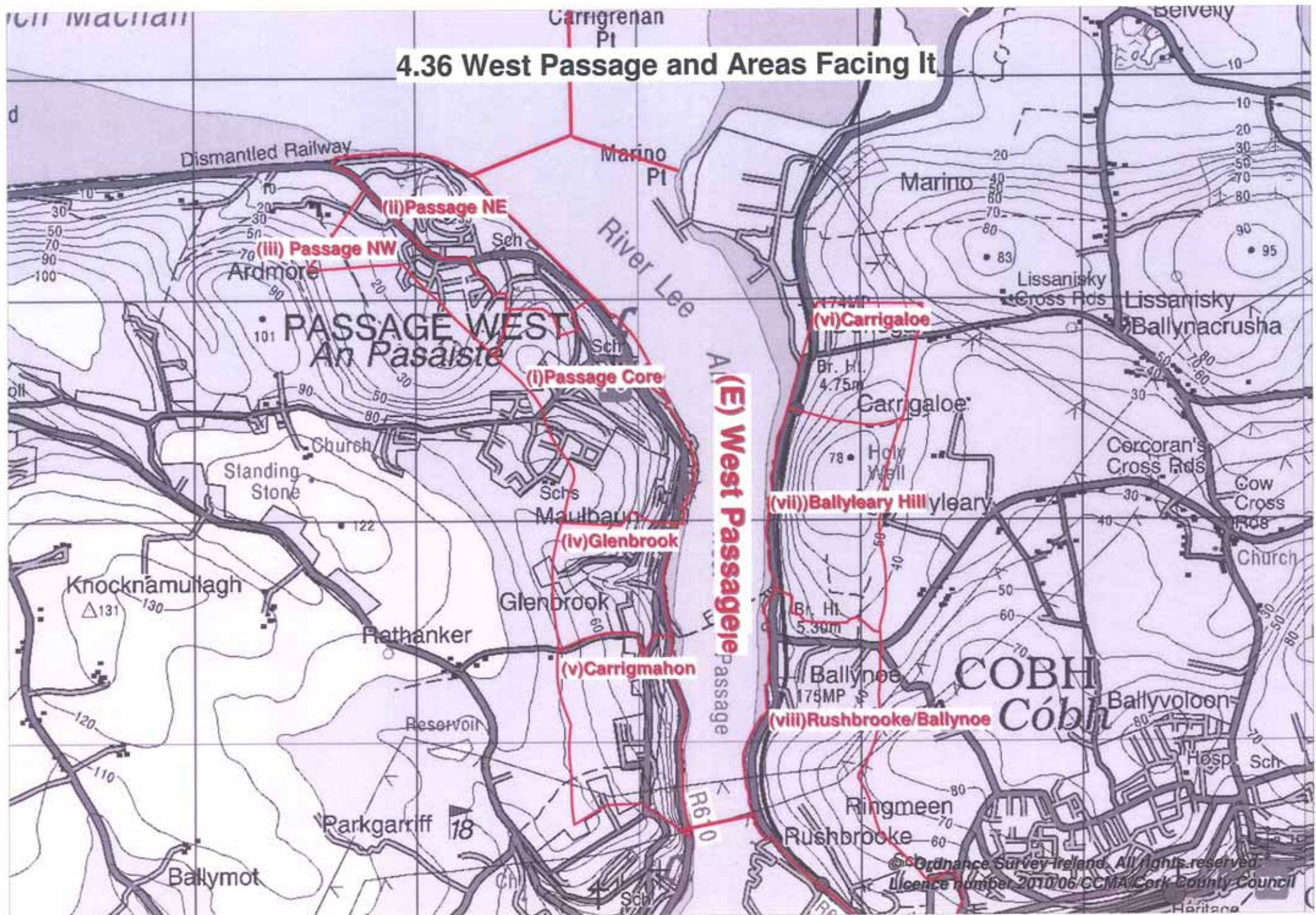


4.36 West Passage and Areas Facing It



E. The West Passage

The West Passage is a deep 3km long, $\frac{1}{4}$ - $\frac{1}{2}$ km wide channel connecting Lough Mahon to the Lower Harbour. Functionally, it is primarily a shipping channel, though this may change as shipping activity is transferred to the Lower Harbour.

As hills rise steeply on both sides of the channel to c.80m, before giving way to more level plateau areas, the main developed areas are linear coastal hillside settlements. The topography shapes the character of the settlements, which typically have a narrow nineteenth century core built on a narrow level area near the shoreline, behind which hillsides which have been developed to varying extents rise quite steeply. This influences the residential character of the settlements, with many of the houses on the hillsides looking over those lower down, and across the channel at settlements and undeveloped areas on the far side. As usual, there are transport corridors at shoreline level on both sides of the channel, with periodic barriers created by port related or other development on their seaward side, and steep slopes accessible only via narrow, angled roads on the landward side.

The visual attractions of the West Passage are reflected in the designation of the regional roads as scenic routes, and the classification of areas as scenic landscape, on both sides of the channel in successive development plans.

As a narrow section of the Harbour, it is a natural location for ferries. The current vehicle ferry linking Glenbrook and Ballynoe is a successor to earlier passenger ferries, such as the one linking Monkstown and Verolme until the 1980s, and a earlier one linking Passage and Carrigaloe. The narrow channel also means deep water comes close to the shore at a number of points, and made establishment of dockyards on reclaimed land at Passage and Verolme possible, as well as the creation of a jetty to serve Marino Point. The value of this advantage has been declining, though all three facilities are still in use.

Despite the tradition of port related industries, the areas facing the West Passage are predominantly residential in character:

Table 4.6 Estimated Employment and Population Densities in areas overlooking the West Passage

Area	Population per km ²	Jobs per km ²
Passage (core)	2150	450
Passage (NE)	1300	400
Passage (NW)	3850	80
Glenbrook	1000	30
Carrigmahon	450	>20
Carrigaloe	150	>20
Ballyleary Hill	60	>20
Rushbrooke/ Ballynoe	2250	120
Rushbrooke Dockyard	240	1500

Fig. 4.37 West Passage Scenic Routes and Landscape

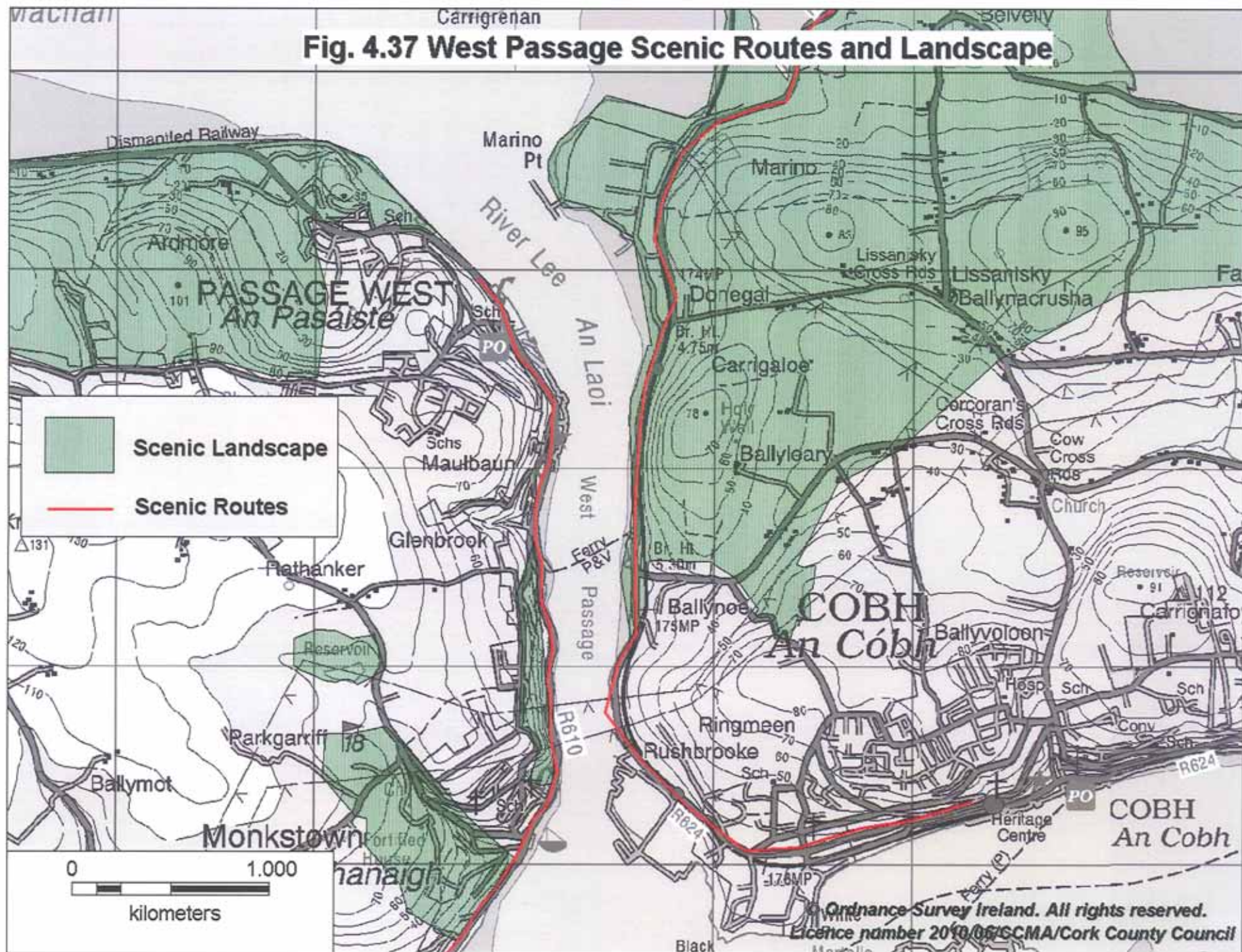
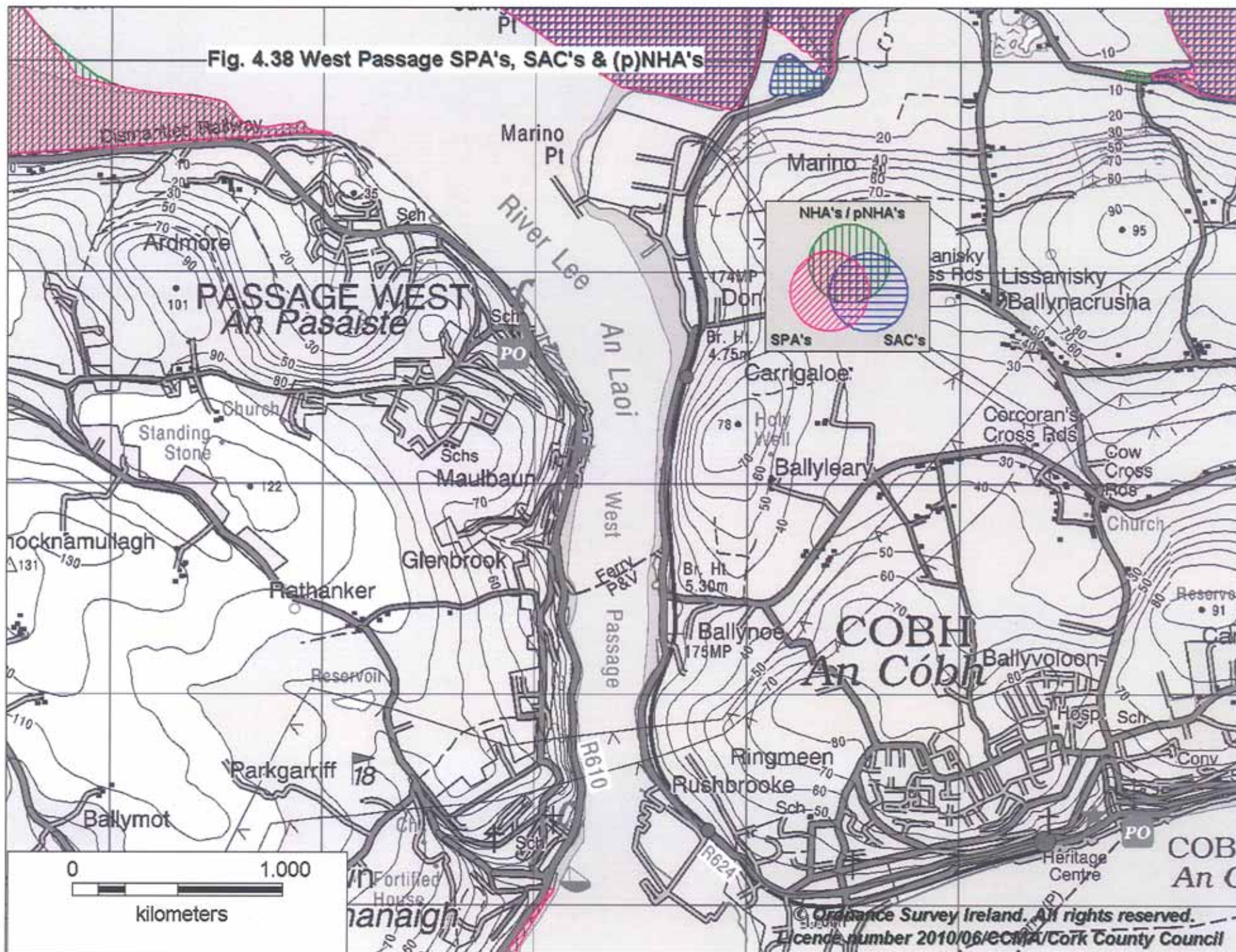
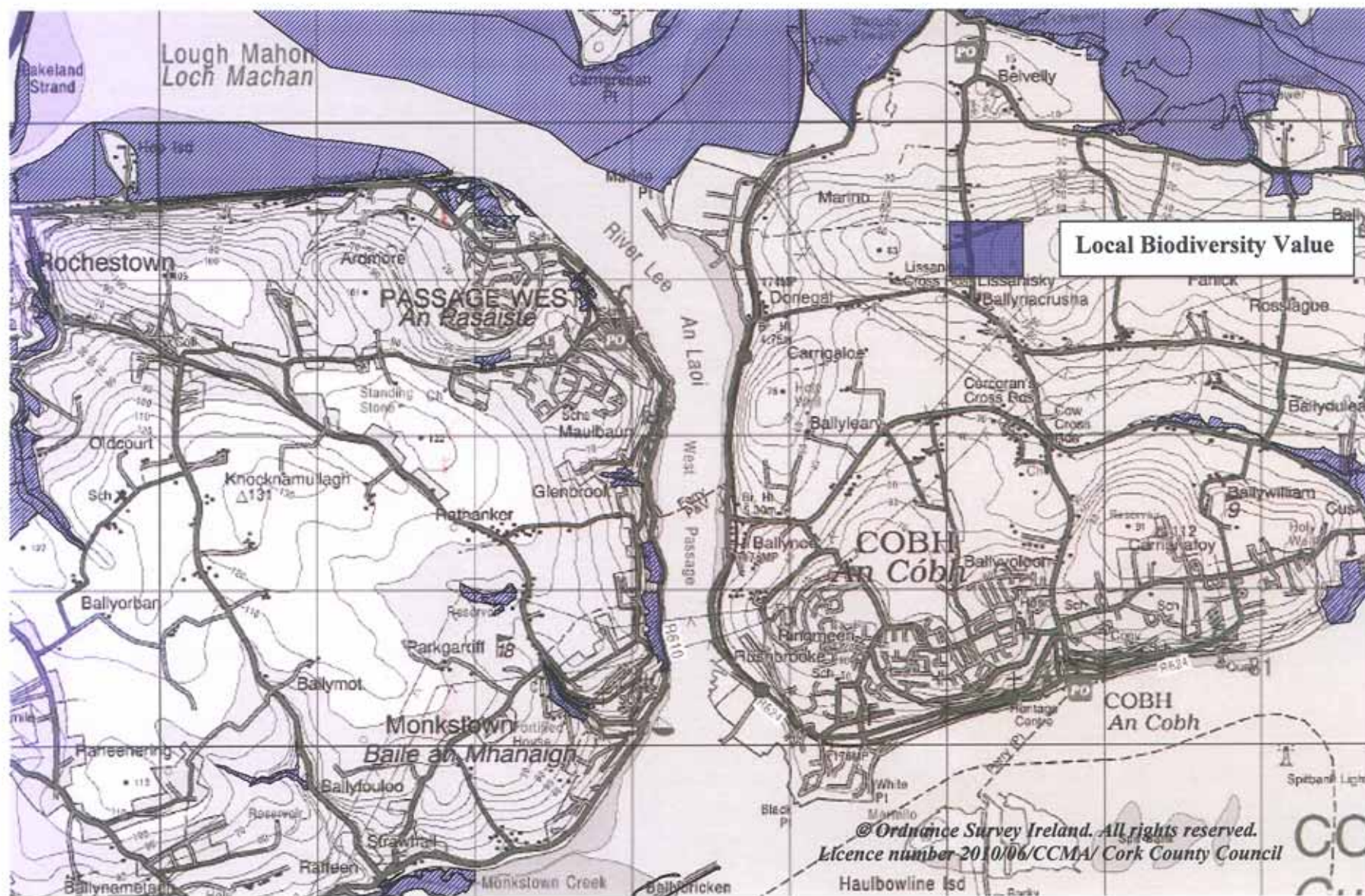


Fig. 4.38 West Passage SPA's, SAC's & (p)NHA's



4.39 West Passage Areas of Local Biodiversity Value



(i) Passage West (Town Core)

The regional road (R610) runs close to the original shoreline for almost the whole of its way through Passage, Glenbrook and Monkstown. In the centre of Passage, the Dockyard and other groups of buildings north and south of it form a fairly continuous barrier between the road and the sea, almost 1 km long. The rear elevations of buildings on the opposite (western) side of the R610 also often face back into steep slopes or cliffs, and the combination of parking and traffic in restricted street widths creates congestion. All of this contributes to a sense of the town centre being hemmed in, which depresses the residential and commercial potential of the town centre and increases the tendency to urban decay there. Town centres are disproportionately important to the overall image of a town, so this has a negative effect on Passage as a whole.

Much of the area on the seaward side of the R610 in the town centre was designated for Urban Renewal Incentives (now expired) following a 1998 Integrated Area Plan (IAP) prepared by Benson Associates. The IAP took a broad socio-economic view of the needs of Passage, and did not confine itself to physical renewal. In particular, it focused on future employment in the town, under three heads: inward investment, tourism, and local indigenous business.

The main area redeveloped with the benefit of designation was the block bounded by Main Street, Steam Packet Quay and Railway Street, with retail services on the Main Street side, and 2 apartment blocks on the quayside. The block is approximately 70m x 40m, with access to the Quay available

both from Railway Street and the park to the north. Two other apartment complexes were developed at the southern end of the town centre in the late 1990s, at Granary Wharf and Glenbrook Wharf. The first of these incorporates a small square designed to open up a view of the sea and Ballyleary Hill from the main road, in accordance with a proposal in the 1996 County Development Plan; the latter is a gated development, with a long new building running parallel to the shore and reproducing the barrier effect.

However, these were all developments on relatively small sites. The dominant site on the seaward side of the R610 is the Dockyard site. This was developed in the nineteenth century as the Royal Victoria Dockyard, and incorporated a number of dry docks, which have since been filled in. The site is now used mainly for the handling of dry bulk goods from ships. Like other docks, it is designed to allow movement between ships and buildings/yards on shore, with any conflicting movement excluded in this case by a 0.5 km perimeter wall to the R610.

The Dockyard Site

The existing size of this town centre site (excluding proposals to reclaim further land) is c.3 ha/8 acres. This would be exceptionally large for a central main street redevelopment site even in Dublin or Cork cities. It was the subject of two major but unsuccessful applications in the last 10 years. The first of these was never determined, partly because it was considered to be within the area at risk from the IFI plant under the SEVESO directive; the second was granted by Cork County

**Fig 4.40 Passage West
Town Core**



Council, but refused on appeal by An Bord Pleanála. These applications are summarised below

Table 4.7: Summary of Applications on Passage Dockyard Site

		S/00/3960	S/08/4086
Site Area:	Existing Land	3.1 ha	3.2 ha
	To be reclaimed	1.0 ha	1.3 ha
	Total (land)	4.1 ha	4.5 ha
	Marina (in water)	-	6.2ha/293bths
Seaward reclamation	At Strand Street	55-80m	35-50m
	At Lucia Place	-	18-30m
Land Uses:	Retail	2700m ²	6650m ²
	Offices	4370m ²	4440m ²
	Technology Centre	1895m ²	-
	Hotel	72 bedrooms	100 bedrooms
	Apartments	264	405
Gross Floor Area excl. parking		52,600m ²	73,641m ²
Parking spaces		892	1196

The 2008 application was refused by An Bord Pleanála, on the following grounds

- (1) excess height and scale, detrimental to character of Passage and residential amenities
- (2) Not satisfied that land reclamation and the proposed marina would not prejudice use of channel by shipping
- (3) Overprovision of retail space, no adequate locational justification for amount of office space proposed
- (4) Prematurity pending adoption of an agreed traffic management plan for the town

The 2005 Local Area Plan zoned the site for “Mixed retail, commercial, service, civic and residential uses to facilitate town centre expansion” and included a reference to it accommodating “up to 160 new dwellings” (the Council advised the Board that this latter comment was “not an objective or policy of the LAP”). The earlier 1998 IAP prepared for the Council by Benson Associates was more detailed, but this was not explicitly referred to in the LAP.



Options on the Future of the Passage Dockyard Site

The Council saw the 2008 application as conforming to the CDP/LAP, and as having merit in the way it opened up the town centre to the water. The zoning was indicative and broadly phrased, as it is for most zoned land. In response to a Bord Pleanála refusal in these circumstances, the Council normally advises applicants or their successors to revise their proposal, to take full account of the Board's refusal reasons.

On the other hand, the site is of pivotal importance of the site for the future of Passage, and may justify a more detailed type of plan-led approach. Where scale of development is a prime issue, optimistic developers are liable to outbid others, and this can result in a lengthy trial and error process, whereby successive applicants submit applications and see whether An Bord Pleanála is prepared to approve them. There is a window of opportunity at present, as pre-existing property values will have to be reset at lower levels anyway. A clearer indication of the appropriate scale and type of development could minimise uncertainty for a developer, and delay to actual development.

An intermediate position is possible. It is not desirable to be too prescriptive, as there may be an alternative view of the site which more accurately assesses needs and potential. To allow for this, the views set out below on the appropriate form and content of development on the site can be treated either as suggested guidance or as a test. The 'test' function might consist in an expectation that alternative views would provide an equally or more persuasive and coherent approach to the issues discussed under (a)-(e) below).

(a) Permeability and Orientation: At present, Passage suffers from the barrier effect of having a walled dockyard between the town centre and the sea. It also has a problem of orientation, in that the town faces NE, and has steep slopes and cliffs to the SW, leading to lack of sunlight in winter. Orientation cannot of course be changed, but the disposition of new buildings can ameliorate or reinforce the problem.

The 1998 IAP commented that *"The permeability of the site is... of vital importance... The urban form of any proposed redevelopment should be designed to... optimise both the visual and physical permeability of the site, thereby maximising the accessibility of the water edge to the public"*. It also considered that *"Great care should be taken to maximise sunlight penetration, views.."*

The 2008 application met these requirements more fully than the 2000 one. The 2000 one positioned 10 out of the proposed 13 blocks on the seawall, where they formed a fairly continuous perimeter of buildings, mostly aligned N-S and 6 storeys in height, with gaps of c.10m between them. The advantage of this layout was that 85-90% of apartments were on the seafront looking straight out to sea. The disadvantage was that it if anything exacerbated the current barrier effect.

The 2008 application provided full public access to the shoreline of the site, and also offered greatly improved visual permeability. It sought to avoid the barrier effect by aligning most of the buildings NE-SW (ie end on to the sea), and providing streets, collective gardens and public spaces between

them, typically 15-20m wide, but also including a public plaza 30-40m wide, and conventional streets of c.10m width. Most of the proposed buildings were 4-6 storey, with higher parts usually stepped back from the (existing) street. As a result of the NE-SW orientation of buildings, most apartments had angled rather than 'straight ahead' views of the sea.

In order to accommodate buildings aligned NE-SW on the southern part of the site, opposite Lucia Place and Somerville Terrace, the 2008 application proposed relocating the quay wall seawards by 18-30m, in an area the water is currently c.10m deep.

The broadly NE-SW orientation of most of the open areas within the 2008 application had 3 consequences:

- (i) existing terraces W. of the R.610 formed the western end of these open areas, requiring compatibility between existing and new buildings
- (ii) the open areas are mostly at 90 degrees to the R.610. For the pedestrian or vehicle user, they are likely to be perceived as periodic 'windows' onto the sea. This effect can be observed at present at Granary Wharf and the inlet which ends at Tom Fahy Park, at 90 degrees to Strand Road.
- (iii) a normal benefit of NE-SW spaces is that they are open to evening sunlight from the SW, but in Passage this is limited by the steep hillside in that direction

These effects could be eased if more use were made of open spaces which were at an angle of say 45 degrees to the R610, rather than at right angles to it. There would be more of a tendency for views from the existing streets to 'flow' into the new public spaces and through them to the sea, and there would be less sense that existing terraces were forming the western side of a square, whose northern and southern sides were necessarily of a different architectural character¹.

There would also be orientation advantages in running some of the buildings and open spaces at less of an angle to the road, and closer to NW-SE. This would admit more low angle morning sun across the Harbour, into the open spaces, and through them to existing houses behind. Reorientation south-eastwards would also increase views of Ballyleary Hill on Great Island (see section (vii) below), and reduce those of Marino Point.

Buildings which do not have direct sunlight for most of the day due to orientation and blocking slopes or cliffs, may nevertheless get some benefit from sunlight reflected off suitably oriented new buildings. In particular, new buildings on the Dockyard site with a high proportion of glazing and light coloured wall facing S to SW, would be well placed to reflect light back into existing NE facing buildings and open areas, subject to appropriate positioning and building height.

¹ There is one 4 bay 3 storey Georgian house of exceptional architectural quality near the northern end of the site, which has obvious potential as the western end to an E-W street.

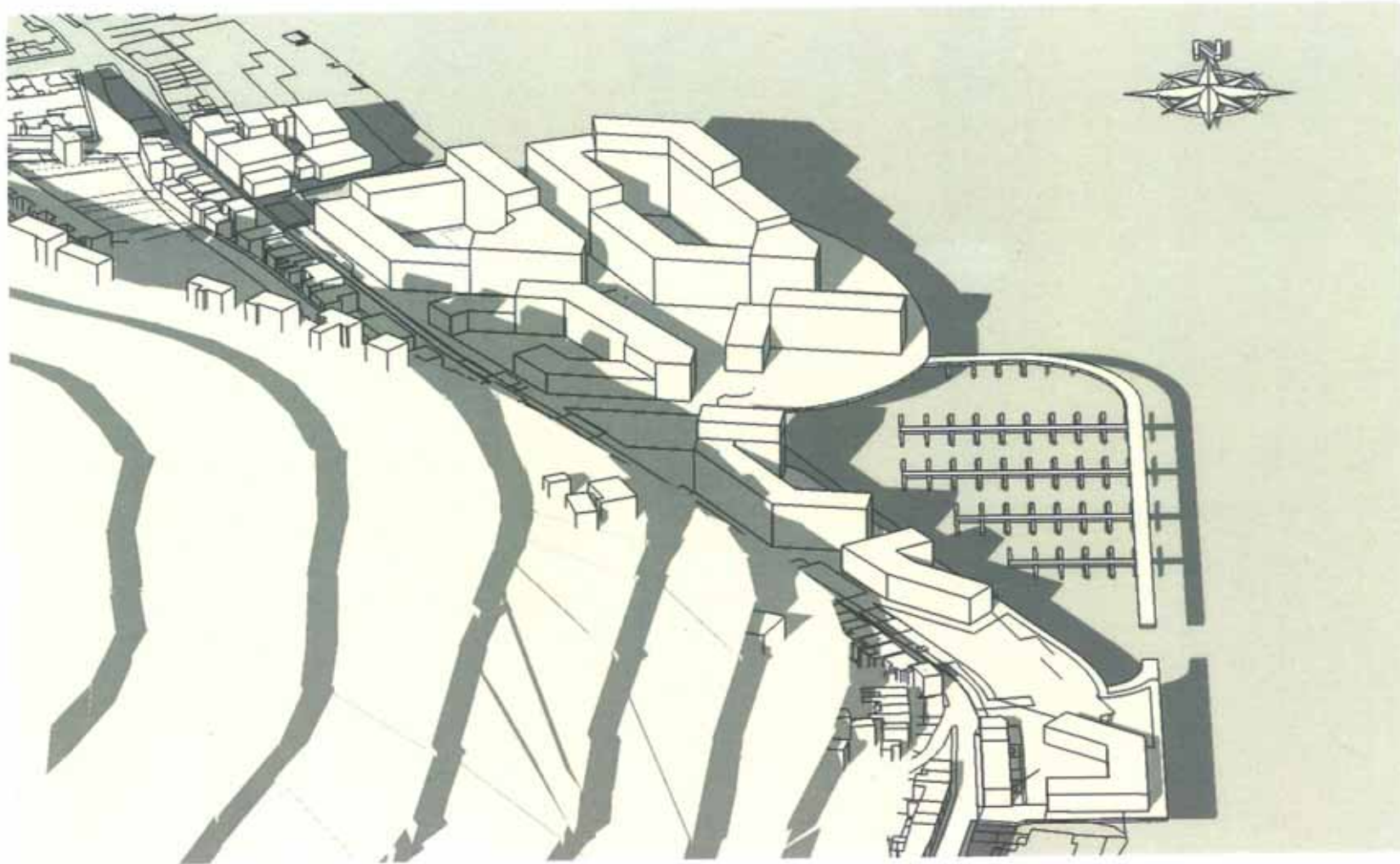


Figure 4.41 Outline of possible Dockyard redevelopment in Passage, seen from south. Shadow effects are set to c.2pm in early October, to illustrate potential for reflection of sunlight from buildings facing between west and south

The combined net effect of the above points would be to favour parallelogram type blocks, with streets and open spaces oriented WNW-ESE and NNW-SSE. This would be more complicated for a developer than a straightforward rectilinear grid, and would require special design treatments near corners. On the other hand, it would make fuller use of the 'once in a century and a half' opportunity to overcome Passage's inherited layout disadvantages.

For illustrative purposes, Figures 4.41-42 outline a possible layout which conforms to the above criteria, shown respectively from the SE and S. This outline layout is also broadly consistent with the points made under (b)-(f) below.

(b) Grouping, Building Form, Views across water: Design of larger developments on the Harbour is complicated by their visual impact being seen from very different distances, ie:

- (i) across the harbour, at distances of 0.5-1km or more
- (ii) close up, from adjoining streets and public areas

Strongly repetitive features, like a series of gables, or a line of similar buildings at similar intervals, rarely look well from a distance over water. However, it can be difficult to avoid such features, in a development where many of the buildings are of similar height. Both applications showed most of the proposed on site rising to 5-6 storeys, and in both case this led to a relatively horizontal roof line when from across the Harbour, and repetitive features.

Theme 5 'Virtual Hills' on Large Urban Sites

The traditional arrangement of settlements in Cork Harbour suggests an alternative. Many of its settlements and suburbs are on quite steep hills, so even where the various buildings are of much the same height, they are stepped up above one another, and the resulting roofscape reflects the rise in the ground. On a large level site, this gradual stepping upwards buildings behind each other can be recreated by allowing the height of the buildings rise gradually to a local high point, to create the impression of 'virtual' hill. Externally, this would come closer to reflecting the character of established urban areas, and internally, it avoids abrupt changes of building height. This approach could have application in other Harbour side sites, such as the IFI one, if it were decided to redevelop it for primarily residential uses.

If one applied this approach to the Passage Dockyard site, the higher buildings would need to be at a distance from the existing terraces, which are mostly 2 or 3 storey. Opportunities for a modest localised high point may arise near the NE corner of the site, where the Dockyard site is deeper, and new buildings would be at a distance from existing ones, allowing space for gradual stepping down. A high point at the NE corner could also fit in with recent apartment development on Steam Packet Quay, and trying to compensate to the limited extent possible for the orientation problems of the site by maximising reflected evening light.

In order to avoid the repetitive effect a series of freestanding buildings end on to the sea may create from the other side of

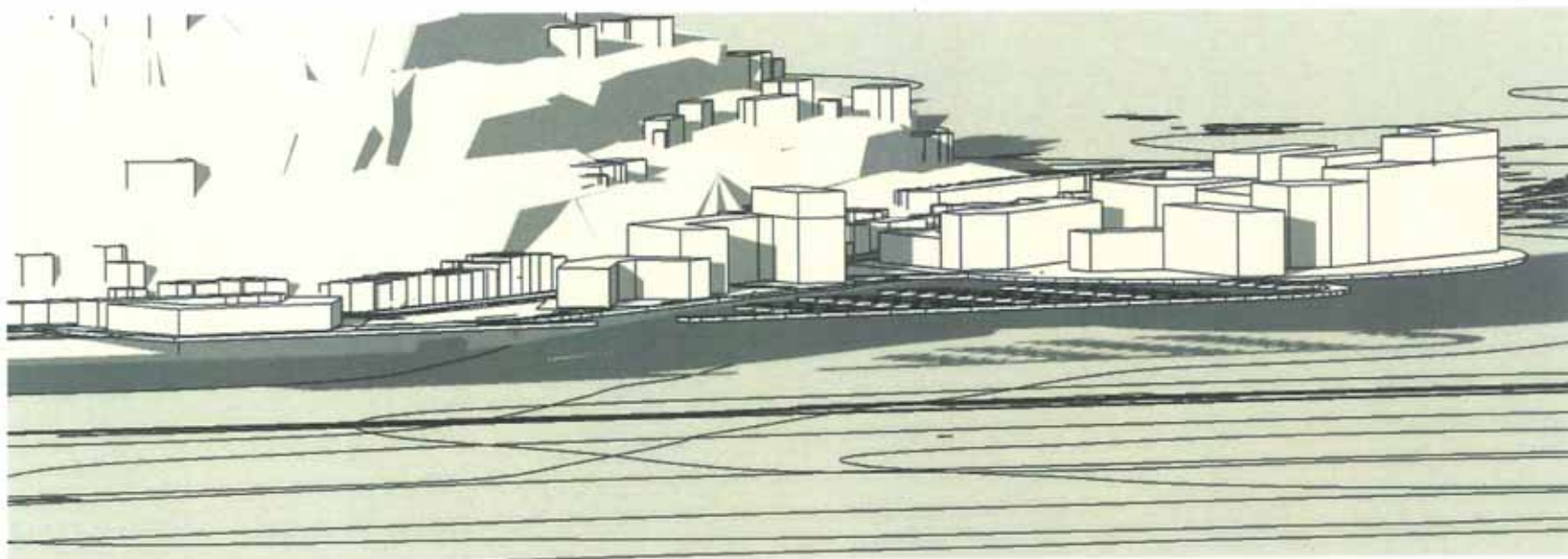


Figure 4.42 Outline of possible Dockyard redevelopment in Passage, seen from SE, and designed to be open to that direction. Shadow effects are set to c.9 am in early November

the Harbour, grouping of some of the buildings at the southern end of the site into something closer to street blocks may be desirable. The most obvious opportunity arises opposite the 100m gap between existing buildings between the S. end of Dock Street and the N. end of Lucia Place.

(c) Development Content - Employment: The Passage Dockyard is one of a number of sites on the Harbour which were a major source of port/industrial employment, but which may now be possible future sites for Docklands type redevelopment. In the case of Passage, the 2003 County Plan effectively committed itself to the redevelopment option. Apartments are normally a major use in Docklands redevelopments, and they are only compatible with a limited range of employment uses, typically offices or office based industry, or tourist uses. Some employment content is usually regarded as necessary to achieve adequate vitality in such areas, and both applications on the Passage site envisaged substantial office and/or technology space. However, An Bord Pleanála regarded the proposed c.4,400m² office content in the 2008 application as excessive and unsustainable, and cited CASP (section 6.6) in relation to the need for the city centre to function as the main office location.

This raises the issue of whether Passage should aim to have any significant employment, other than the consumer and social services necessary even in a dormitory settlement. Unlike most other satellite towns, Passage does not have substantial employers or an industrial estate, and it is not easy to change this in view of the difficult topography of the area. The Dockyard site is the most credible site for future

employment. The 2-300 jobs which might be accommodated in 4,400m² of floorspace are not of great strategic importance within the overall CASP area, but would be significant for Passage. It is doubtful in any case how easily conventional high street type offices could be attracted to Passage, and the 'enterprise' category used in the 2003 County Development Plan might be a more realistic approximation to its potential.

From the point of view of access by sustainable forms of transport, the Dockyard site has some worthwhile advantages. It is in a town centre, within walking distance of most of Passage, and with the advantage of the walk in the morning being downhill. The most likely source of workers from outside Passage is the SE suburbs of the City. Passage is connected to this area by the (recently upgraded) foot/cycle path along the old Passage rail line, and by a bus route. The proposed Harbour CAT Ferry service would provide another form of public transport access, from Cobh as well as from the City.

While the Board had a valid concern that the application might form a precedent for further new office development, this concern could be addressed by providing for a specified amount of office based industry or enterprise floorspace similar to that applied for, in the LAP, on the basis outlined above.

(d) Retail content: While An Bord Pleanála regarded the 6650m² of retailing sought in the 2008 application as likely to lead to overprovision, retail provision in the centre of Passage is very limited at present, and a certain minimum critical mass there is necessary for it to function as a retail centre. The Cork

Strategic Retail Study 2008 (CSRS) treated (p.27) the smaller satellite towns (Glanmire, Tower, Passage) as tier 4 centres which should grow in line with their existing and projected populations. Table 4.8 summarises the implications of aiming for a retail floor area in Passage proportionate to its share of urban population in the outer part of the Cork Metropolitan area:

Table 4.8 Retail Projections for Smaller Satellite Towns

Town	Population in 2006	Projected Population: 2020 - no	2020 -% of CMA towns	Net Retail m2 - 2007	Implied net m2, 2020
Passage	5203	5286	4.4	240	4319
Glanmire	6853	8385	6.9	2635	6851
Tower	3032	3102	2.6	3075	2534
CMA towns	71818	120841	100	49205	98728

In addition to the 240m² net retail floorspace recorded in the 2008 CSRS, there is also around 1000m² net floorspace in the new Eurospar and associated units at Ardmore, and an allowance of say 500m² should be made for growth other than on the Dockyard site. This would leave a maximum of c. 2580m² net for the Dockyard site, or c.3,500m² gross.

Retailing should be at the northern end of the Dockyard site, adjoining and reinforcing the existing cluster of businesses there. The cluster is there for a reason: it adjoins the junction between the R610 and Church Hill, where the main routes north and south, and to the suburbs and rural areas uphill to the west of the town centre converge.

(e) Land Reclamation and Marina Provision: There is more of a case for reclamation of the northern part of the site (provided for in both applications) than on the southern part (only proposed in the 2008 one), as:

(i) in the S. part, the existing quay wall has deep water (c.10m) immediately alongside, and is c.40m from Lucia Place, and 50m from the 15 houses on its W. side. Widening the reclaimed area is questionable if one is trying to minimise any perceived barrier between the latter and the sea.

(ii) In the N. part of the site, existing land extends c.100m E. from the R610, so there is already room for development 1-2 street blocks deep on this land, even without reclamation. Substantial separation between the main street and the sea will thus occur in this area anyway.

(iii) There is no quay wall on this N. section of shoreline at present, only a filled slope. If a quay wall is to be built, an obvious position for it would be at the base of this slope, where it meets the seabed. This point is typically at c.-7m OD, and 20-30m E. of the top of the slope.

Leaving the S. section of quay wall in its current position would also make it easier to accommodate a marina without coming close to the shipping channel. However, in addition to refusal reason (2) of An Bord Pleanála's decision on the 2008 application (reclamation and the marina might prejudice the shipping channel) their Inspector also considered the marina element of the 2008 application premature pending the integrated Study of Cork Harbour referred to in para 4.17.3 of the County Development Plan (ie this Study), and questioned

whether the scale and single use nature of the marina was the best way of serving local recreational needs.

This question has a Harbour wide dimension, as Passage is one of a number of possible sites on which marina capacity could be expanded. There are 4 existing marinas in Cork Harbour, with an aggregate capacity of c.480 berths. In addition to the 293 berth marina proposed in the 2008 application, there is a current application for a 285 berth marina at Monkstown, and the Draft Cobh Urban Design Feasibility Study (Scott Tallon Walker, 2009) proposes a total of 600 berths in 3 locations in Cobh. This Harbour wide dimension is discussed in more detail in the next chapter, and in Chapter 7.

At a more site specific level, the relationship between marinas and development on adjoining land varies. In some cases, development on land is proposed partly to help finance construction of a marina; in others, the purpose of the marina is more to make a development on adjacent land more attractive. For example, the 2001 application for a 120 berth marina, 126 apartments and hotel at East Beach in Cobh seems to have been in the first category, and the 2004 one for a 60 berth marina at Fota more into the second.

The 2008 application involved a marina 2/3 km long. While a moderately sized marina would add greatly to the interest of the seafront, one on the scale proposed is in excess of what is necessary to achieve that. It could in fact become another version of the shoreline barrier effect, and interfere with one of the other recreational selling points of the 2008 application - the extension of the pedestrian route which runs from

Rochestown to the Town Hall southward, to within 250m of a further long section of coastal footpath open to the sea south through Monkstown.

From a site specific perspective, the alternative of providing a marina of the current average size for Cork Harbour (c.120 berths) could secure the added variety and interest a marina brings, while reducing its length to c.¼ km. By not reclaiming land on the shoreline of most of the southern part of the site, the marina could be better protected by land and fitted into an indentation in the coastline in a more natural manner.

(f) *Parking provision and Scale of Development:* The size and content of any development on the Dockyard site will determine the amount of parking needed and the extra traffic generated. The EIS for the 2008 application estimated that 2 way evening peak hour flows along the R610 in the centre of Passage were 530 vehicles per hour, and that the proposed development would generate c.430 in each direction, increasing flows by around 80%. This is not surprising, as under that application the Dockyard site would have had the largest covered car park in the Cork area, and also the only one in which residentially generated peak flows (out in the morning, in in the evening) balanced employment/retail ones (in in the morning, out in the evening). The car park proposed in the 2008 application would have been efficient, in the sense of making dual use of spaces, but this, in combination with its size would have risked overloading the R610 from an environmental point of view. Increasing road capacity through traffic management and local road improvements would not prevent traffic unduly dominating the narrow level coastal strip

area containing the historic cores of Passage, Glenbrook and Monkstown. The coastal strip is shared space, in which a balance between functions needs to be maintained.

Having regard to the points made under (a)-(f) above, as well as parking, the realistic capacity of the site is estimated at 85-90% of the gross floorspace and parking provision proposed in the 2000 application. This assumes the parking is in a lower ground floor, as in the 2008 application, but with the reduced number of parking spaces allowing moderately sized parking areas, and avoiding the need for a single large garage nearly ½ km long.

Areas west and north of the Dockyard site

There are other substantial sites in the centre of Passage, including the Convent building west of Main Street, which has a 2005 permission for 48 dwellings, including townhouses, apartments, and converted units within the old Convent building. There is also a quayside site south of Railway Street, currently in industrial use.

If the Dockyard is redeveloped, this could lead to an unduly stark contrast between the eastern and western sides of the R610 at Strand Street and Dock Street, particularly as the whole of the western side is protected through inclusion in the Passage Architectural Conservation Area (ACA). However, this section of the ACA has a different character from its northern and southern ends, where nineteenth century seaside terrace type buildings dominate, whereas the central part is more mixed and less formal. The buildings there include some

modern or single storey buildings, which would not have any particular heritage value, and some of these could be redeveloped in ways which helped integrate the two sides of the street. Similarly, the contrast could be softened by the inclusion of some buildings in the Dockyard side frontage, of modern design but reflecting plot widths and building heights on the other side of the street.

The finish to most buildings in Passage is painted plaster, and a minority of buildings in the centre of Passage are painted in relatively strong colours in the West Cork manner. Redevelopment of the dockyard and widening of the street might offer a opportunity to extend this approach, and to use colour as way of integrating old and new development.

Narrow street widths in the centre of Passage create some congestion, parking difficulties, and a traffic canyon effect, but also have the more positive effect of controlling vehicle speeds. This latter feature needs to be designed into any improvement to the road.

The LeeCFrams Study suggests that there is some risk of tidal flooding in Main Street, Strand Street and Dock Street. New development on the seaward side of these streets would obviously need to have habitable floors above flood level, but could also be designed to act as part of a barrier protecting these streets. If this approach were followed, additional protection would be needed where flooding could occur through public quays, open spaces and slips at the town hall end of the town centre. Passage is quite well served by slips

used by local small boats. There is also a slip at Railway Quay, used by the Passage Rowing Club.

The proposed Harbour CAT ferry would serve Passage, and planning permission has been granted for a ferry landing and pontoon, alongside the play ground and public amenity area by the Town Hall. This could have particular importance for Passage, in helping it to develop a tourism role. Both applications on the Dockyard site proposed a hotel. Assuming that the current oversupply of hotels is temporary, a hotel at Passage might operate as an outlying competitor to Maryborough House and Rochestown Park Hotels, like them well placed for business users and functions, due to good access to the southern ring road. To develop a stronger and more specifically tourist role, a hotel would need to be supplemented by a number of other facilities and attractions. A marine public transport link to the city centre, Cobh and possibly to Spike Island or Camden Fort in the longer term, would be a very helpful addition.

Passage has substantial disused or little used nineteenth century transport heritage, which could acquire a new role in future. The proposed Harbour CAT Ferry terminal would involve re-use of Railway Quay, which was built in 1851. Immediately to the south of it is Steam Packet Quay, originally designed by the Pain brothers - distinguished architects of the time who built widely in the Cork area - and largely rebuilt in the 1860s. This latter quay has deteriorated in recent decades. Quays exposed to continual tidal and wave action are liable to develop structural problems, which in some cases can become disproportionately expensive to remedy if left unaddressed.



Fig 4.43 Passage (North East)

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For key to CMRC Coastal Inventory data,
see inside of back cover



The former Cork-Passage-Crosshaven rail line ran through a tunnel under the hillside west of the town centre, reflecting the competition for shoreline space between transport corridors, the town centre and the Dockyard. This tunnel still exists, and is worth protecting from development above it or blocking its ends, partly for prudential and heritage reasons, and partly because it is difficult to be sure it will not be needed as an additional route for some infrastructural function at some point in the future.



(ii) Passage (North East)

One of the main existing attractions in Passage is the sea front area north of the Town Hall. On the landward side of the road, there are fine late Georgian terraces such as Bellevue Place and Toureen Terrace, and individual houses of exceptional architectural quality in well treed grounds, such as Rockenham. On the seaward side of the road, there are seafront park areas and small harbour areas accessible by bridges under the old rail line, and still used by small boats. The rail line walk ties these attractions together.

For c.0.7 km north of Railway Quay, the seaward boundary of the former railway line is a stone sea wall. Parts of this wall are protected from wave action by a secondary batter at the base of the wall. Perhaps because of this, the wall itself seems to be still in reasonable condition, though the secondary defence has become eroded. It forms a northward continuation of the true quay walls at Railway and Steam Packet Quays.

This part of Passage, being open to the sea, has good views of Lough Mahon, but also directly faces the former IFI plant across the Harbour, and the large industrial structures on it detract from the amenities of the area. Visual and possibly also noise impacts should be a relevant factor in consideration of future uses on the IFI site, though not necessarily a decisive one.

Fig 4.44 Passage (North West)



For key to CMRC Coastal Inventory data,
see inside of back cover

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(iii) Passage (North West)

Ten parcels of land totalling 56 hectares, mostly on the periphery of Passage, were zoned for residential development in the 2003 County Development Plan. The majority of this land has not yet been developed. The largest parcel accounts for 1/3rd of the total, and is in Ardmore at the northern end of Passage. It has been partially developed as the Harbour Heights estate. The overall permission provides for c.570 dwellings, though at least half of these have yet to commence

The largest block zoned in the previous 1996 County Development Plan was also on the north-western side of Passage, and was developed as the Pembroke Wood group of housing estates. As a result, over the last 15 years, the growth of Passage has become somewhat lop-sided, and this is perhaps reflected in the position of the largest supermarket in the town at its northern edge. This north-western expansion has had some practical advantages, including more manageable topography and traffic movements (Cork bound commuters do not have to drive through the congested centre of Passage). However, further expansion in this direction may pose risks for the overall cohesion of the settlement, particularly if occurred prior to more substantial renewal in the town centre. The 2009 County Development Plan does not require such expansion.



Fig 4.45 Glenbrook

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(iv) Glenbrook

Glenbrook is now a southern extension of Passage, but like Passage and Monkstown, originated at a point where a stream had cut a minor valley – the Glen – in the steep slope descending to the sea, up which a minor road could be provided. This configuration led to a dangerous flood caused by heavy rain on the plateau behind flowing down the Glen Road in November 2009, carrying parked cars with it. Apart from the need for works to the road and storm drainage system, this event also implies a need to look carefully at the implications of any further development in the catchment area of the stream.

The 2003 County Development Plan zoned a 17 acre block of steeply sloping farm and other land north of the Glen and west of the northern part of Glenbrook as passive open space which should remain open and rural in character. The land slopes downward in a SE direction, and any development there would be particularly prominent from Rushbrooke.

It also zoned 12 ha. of land running NW-SE along the western edge of Glenbrook for medium density housing, to be served by an improved access running north from Laurel hill to connect with the Passage road system at the Maulbawn Estate. This access road has not so far been provided, and the land has not been developed.

Glenbrook is at the western end of a cross Harbour Ferry service connecting it with Ballynoe on Great Island. While the prime users are those who live or work on Great Island, it also

has some tourism significance, as a relatively rural route from the South East and east Cork through to Ringaskiddy and West Cork. The scenic routes which run north and south from both ends of the ferry route have practical tourism significance.

Glenbrook deserves scenic route status. As at the northern end of Passage, the R610 is open to the sea on its way through the southern part of Glenbrook, and has attractive early-mid nineteenth century terraces on the landward side of the road.



Fig 4.46 Carrigmahon

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(v) Carrigmahon

Carrigmahon Wood lies between Glenbrook and Monkstown, and between the upper and coast roads connecting them. The hillside between the two roads has a gradient of c.1 in 3. From outside, the appearance of the wood is dominated by large, mature, mostly deciduous trees. It is an important feature almost 1km long running parallel to the West channel, and is classified as scenic landscape in the 2009 County Development Plan. Like Ballyleary Hill on the opposite side of the channel, it provides a highly attractive break between settlements, which enhances their natural context and avoids continuous urban development along the West channel.

The continued survival of a coherent wood at Carrigmahon cannot be taken for granted. Comparison of the 2000 and 2005 aerial photos shows significant loss of vegetation in a number of areas. While there appears to have been significant felling, some trees have fallen in storms (including one which fell across the coast road in 2007), and there was a land slip in 2008. The wood is in multiple ownership, and levels of management vary. Active and sustained management promotes a good age mix - so that there are always semi-mature trees growing up to take over from over-mature one which are lost - and may also help ensure that the soil is well anchored by trees and plants, and so less vulnerable to erosion or slippage.

The 2007-8 Habitat Survey saw the wood as being an important wildlife corridor of local biodiversity value. The northern part of the wood contains a wider range of forest size

native broadleaf species, and has grey herons and foxes, but is also more subject to invasive species.

The range of support for the type of woodland regeneration and underplanting needed in parts of the wood is limited. Parts of the wood may be eligible for assistance under the conservation element of the Native Woodlands Scheme. A more ambitious approach might seek to make use of the provision inserted into the Planning Acts in 2006, whereby community gain conditions can be imposed in permissions for strategic infrastructure projects.

Quite complex negotiations would be needed to realise any community gain in this form, as the agreement of the developer and some or all of the landowners would be required. The possibility is raised because of the importance of the wood to this part of the Harbour, and the paucity of methods for resolving this type of issue. The Council does not have a parks or forestry section, current conditions are not favourable to it acquiring one, and Ireland does not have the tradition of local trusts which look after such amenities in some other European countries. Other planning powers include Special Amenity Areas (procedurally complex and rarely undertaken) and Tree Preservation orders (simpler and frequently used). Both are essentially more regulatory tools which prevent certain actions, rather than positive ones which ensure appropriate management.

As in other parts of the Harbour, the original main road was uphill and inland, before it was replaced by the coast road, and this original road runs on the upper side of Carrigmahon Wood.

A block of 6.5 ha on the western side of this upper road was zoned for medium density housing in the 2003 County Development Plan, but the Council refused an application there for 120 houses there in 2008 for layout and visual impact reasons.

The lower, coast road has a particularly attractive section of the seaward side footpath which runs through Glenbrook, Carrigmahon and Monkstown. The footpath follows the old rail line through a rock cut passage below road level with open arches looking east over the sea, just north of Monkstown.





Fig 4.47 Carrigaloe



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(vi) Carrigaloe

Carrigaloe is a small, attractive linear coastal settlement, which shares a narrow level area between the sea and the NW flank of Ballyleary Hill with two transport corridors: the regional road to Cobh, and the Cork-Cobh rail line. There is a row of nineteenth century houses located along the waterfront opposite the station, which give a distinctive character to Carrigaloe and parts of Rushbrooke.

The two transport corridors cross each other at the northern end of Carrigaloe, resulting in a tight S-bend in the road. The train station is the main facility in Carrigaloe, but is lightly used, because of the small size of the settlement, and the absence of any station parking. Neither the absence of parking nor the size of the settlement is likely to change much, due to physical constraints imposed by the rail line and steeply sloping ground above it.

Carrigaloe will however interact with neighbouring areas where larger scale development is more likely. It is also c.1km SE of the IFI site, and may be affected if that site is seen as requiring better passenger rail access (see section on Marino Point). Part of the IFI site is viewed across water from Carrigaloe, as is the Dockyard site in Passage directly across the channel $\frac{1}{2}$ km away. Carrigaloe and adjoining sections of scenic route are the areas from which visual effects resulting from viewing building groups at a distance across water described in the section on Passage Town centre will be most evident.

From the opposite perspective, the attractiveness of Carrigaloe as a small seaside village at the base of a large hill makes a favourable impression from Passage.



Fig 4.48 Ballyleary Hill

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(vii) Ballyleary Hill

Ballyleary hill is a steep gorse covered hillside adjoining Carrigaloe, which rises steeply from the sea and the regional road to a height of 78m (250 ft). The importance of Ballyleary as an undeveloped hillside is best appreciated when viewed from Glenbrook and Passage across the channel. From Glenbrook, the dramatic hillside forms an important strategic break between the industrial site at Marino point and the elevated suburban development at Rushbrooke. This hillside makes an important contribution to the harbour setting and western channel.

While the steep topography has in general protected the hill from development, the height of its summit has attracted a hilltop group of mobile phone masts and dishes, for which permission for retention for 7 years was granted in November 2006. These have a significant negative effect visually.

The January 2010 Outline Strategy for the Midleton Area suggested the possibility of future housing on the eastern side of Ballyleary Hill. In order to avoid compromising the scenic value of the hill from the across the Harbour, any development should be sufficiently far below and to the east of the north-south ridge line running through the hill to be not visible from higher level housing areas on the other side of the harbour.

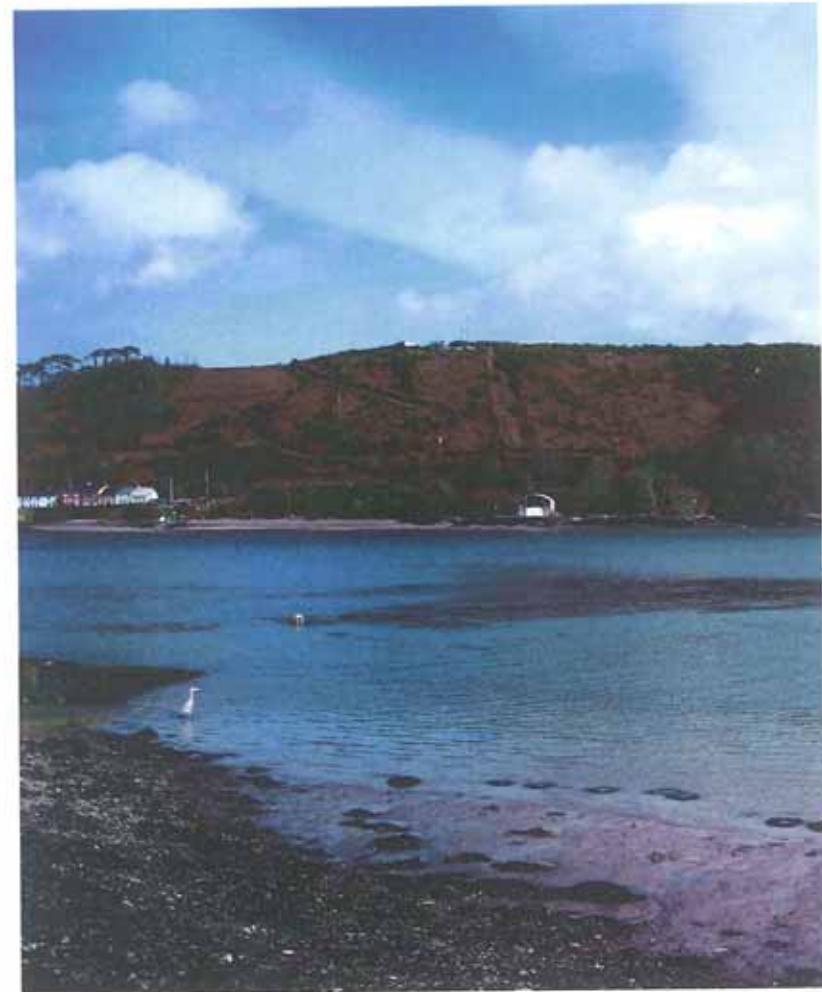
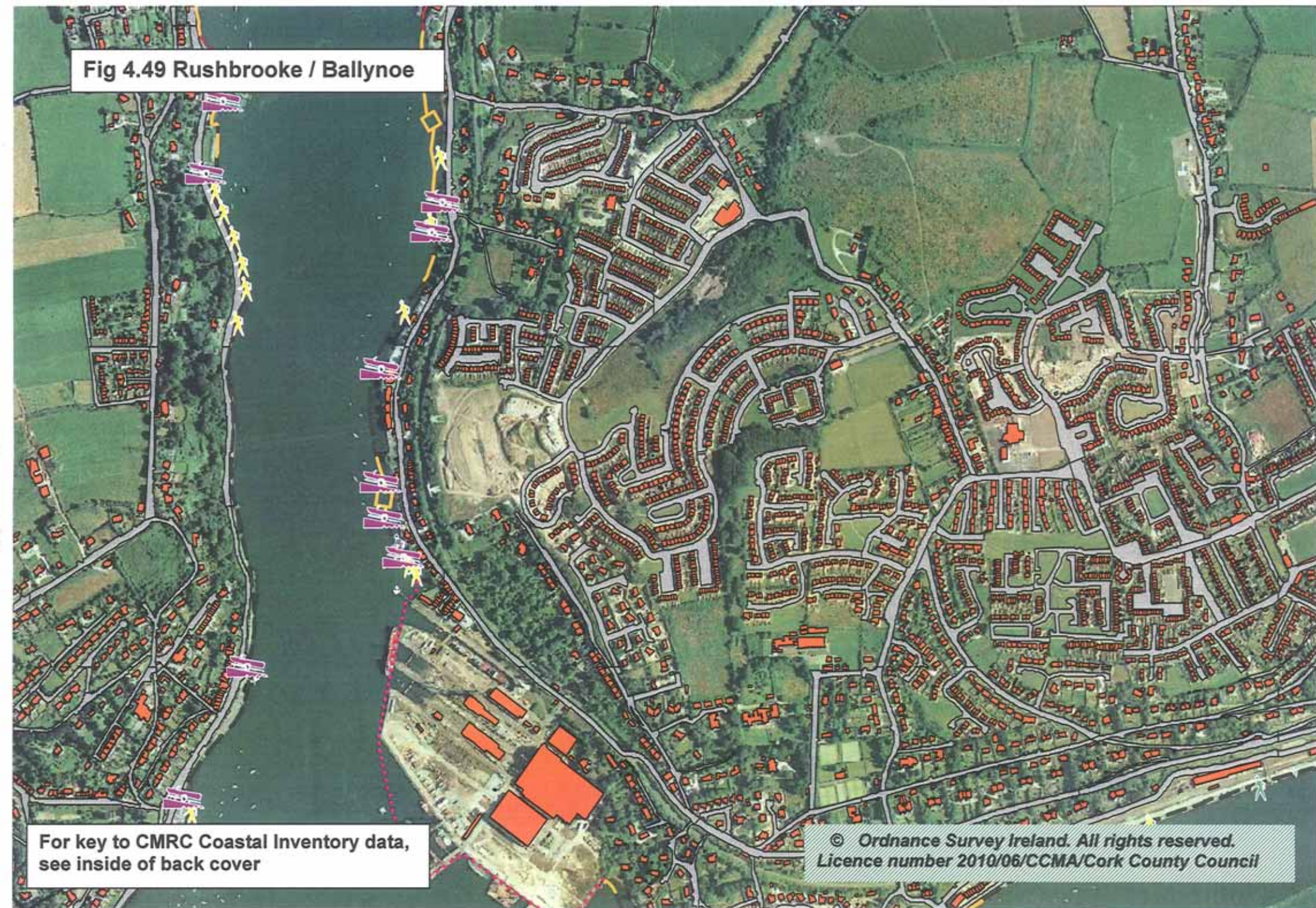


Fig 4.49 Rushbrooke / Ballynoe



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(viii) Rushbrooke/Ballynoe

Rushbrooke is the western suburb of Cobh. Much of it is mature, and relatively low density. It already extended round the SW corner of Great Island to the area above Rushbrooke station in the late nineteenth century. Since the mid 1990s, it has extended further north, to Ballynoe bridge, and also uphill and inland towards the top of Ringmeen hill.

The logic of expanding Cobh in this direction was to increase the population living within walking distance of the Cobh rail line. The 1978 LUTS Plan recommended population growth to c.12,500 by 1991 in Cobh, partly because its rail service was expected to encourage use of public transport. In fact, there was no population growth there during the 1980s, and the rail line was close to closure. The 1992 LUTS Review recommended interventions to boost Cobh's population and develop the rail service (p.130-2), by the following methods:

- (i) *"Retention of the railway line and upgrading of rolling stock*
- (ii) *Designation of parts of Cobh under the Urban Renewal Act, to encourage refurbishment of existing buildings and new apartment construction on sea front sites*
- (iii) *increased accessibility to Cobh via the proposed vehicle ferry from Glenbrook...*
- (iv) *restoration of architecturally significant buildings for housing or other purposes on a revolving fund basis*
- (v) *measures to open up development land on the north west of the town, where attractive development land convenient to the railway line is available"*

The significant visual impact (v) was going to have from the opposite side of the channel was accepted in the context of this wider effort to increase population and retain the rail line, most of which was implemented. In the more detailed proposals on how the residential development envisaged under (v) were to be carried out in the 1996 County Development Plan, retention of wooded areas and the open heathlike area under the electricity pylons were seen as softening the overall effect.

Connectivity in and across the Harbour is a key issue for this Study, and one of particular importance for Cobh, because of its relatively isolated position on Great Island. While measures (i) and (iii) were implemented in 1993-4, there have been recurrent proposals affecting or requiring connectivity at Ballynoe (ie immediately south of the Great Island end of the ferry service). Specifically:

- (a) Both the LUTS Review (p.141) and CASP (p.34, 45) envisaged a new station at Ballynoe to help serve the new residential area created under (v), with CASP identifying it as a station connecting to the Cross Harbour Ferry. However, the 2002 Faber Maunsell Rail Feasibility Study concluded use of a station there would be low, it would never cover its operating costs, and the capital costs of a station would be high because of site constraints. As at Marino Point, an additional station would not be compatible with the clockface timetable and other assumptions of the 2002 Study, and the option could only meet that test if there was a departure from the current pattern whereby all trains stopped at all stations on the Cobh line
- (b) Ballynoe was also the site of a planning application for a landing station to be served by the proposed Harbour CAT Ferry in 2008,

which included substantial foreshore reclamation, mainly to create a car park. The application was deemed withdrawn as no reply was received to a further information request, which referred *inter alia* to the effects of its scale on adjoining residential development and the scenic route, and how the Harbour CAT ferry would interact with the existing Cross River one.

- (c) the informal January 2010 Outline Strategy for the Middleton Area suggested the eastern side of Ballyleary Hill as a possible future housing area. This area is over 1km from Rushbrooke station, and so does not fit comfortably into a strategy of developing the NW side of Cobh to promote public transport use, unless (a) or (b) were implemented. On the other hand, it would increase the proportion of the circle within 1km from the Ballynoe station site which was potential housing land from c.1/4 of the area within 1km of the proposed station at the time of the 2002 Feasibility Study to over 1/3rd. This is not too different from other existing or proposed stations.
- (d) A further area for possible future housing c.1 mile inland from Ballynoe Bridge, and south of the Tay Road, is also suggested in the Outline Strategy, though as this area is also around c.1 mile from Cobh station, it may be more readily served on a park and ride basis. As there may be a reluctance to drive to Cobh station, in the opposite direction from one's destination, this implies a need for another park and ride location on Great Island, to serve the northern fringes of Cobh.

These various possibilities converge on the same physical area at Ballynoe, because it has water deep enough for a ferry, adjoins the rail line and is close to a substantial existing housing area and possible future housing land. As we have

seen, such shoreline locations are physically constrained, and may become more so with the passage of time. Without necessarily being in a position to define the precise public transport/interchange facility needed, there are some needs common to the various possibilities. For instance, a rail station, a landing stage, or both, would require parking, with suitable access arrangements.

There is a derelict waterside site (part of the former Maritem boatyard) immediately adjoining the existing cross harbour ferry to the north and the station site previously identified to the west. It was zoned in the 2003 CDP for high density residential development including parking for a rail station, but permissions (for 48 apartments on the site in 2003 and 72 in 2007) did not insist on the rail parking element in view of the negative views of the Faber Maunsell Study on prospects for the station. Neither permission has been implemented.

Expansion of the population of Cobh increases the need for improved sewage treatment. At present, untreated sewage from Cobh flows into the Harbour, though flows from the northern part of the town are treated in a temporary treatment plant, which is capable of being upgraded to serve a population equivalent of 8,000. The SW River Basin Management Plan notes that Cobh is not in compliance with the Urban Waste Water Treatment regulations. Implementation of the Lower Harbour Sewerage Scheme is necessary to rectify this.

Transport Options at Ballynoe

Ballynoe is

- 1 of 2 possible sites between Rushbrooke and Fota for a rail park and ride site serving recent and possible future development to its SE & E. (the other being Marino Point)
- Capable of improving access between the E & W sides of the Harbour, through the Harbour CAT Ferry, or a rail connection to the existing car ferry, or both

To fulfil either role, it would need a car park on the seaward side of the road. There is choice on how far it is appropriate for the Council to be proactive in providing for this, and how far it would be wiser to await signs of renewed interest from transport operators. The former could involve changing the current zoning on the boatyard/apartment site, to reserve it for a passenger transport/park and ride facility, if current permissions expired unimplemented. This would minimise land reclamation, and use land on which there were already derelict buildings and existing planning permissions.

An alternative would be to recognise the practical difficulties of providing improved connectivity at Ballynoe, and to adjust possible zoning changes accordingly. Over the last 30 years, the main strategic argument for expansion of Cobh's residential function has been access to public transport. This argument is weaker in relation to the lands E of Ballyleary Hill or S of the Tay Road referred to in the Outline Strategy, as they are at present remote from public transport.

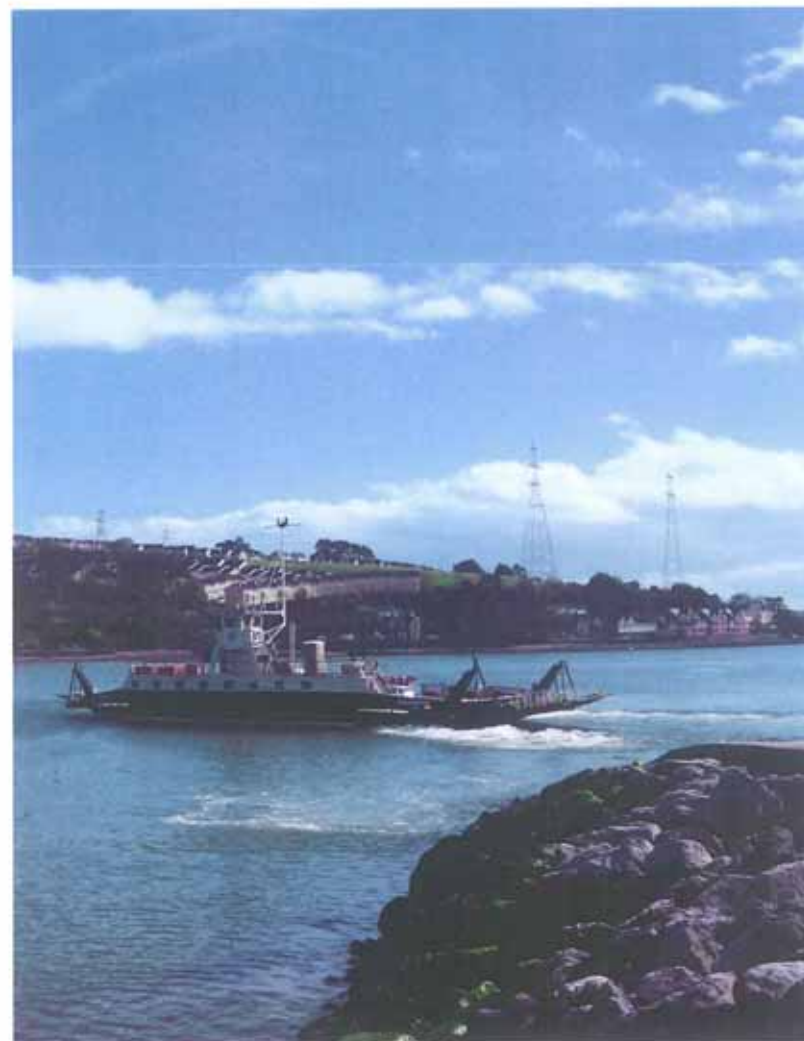
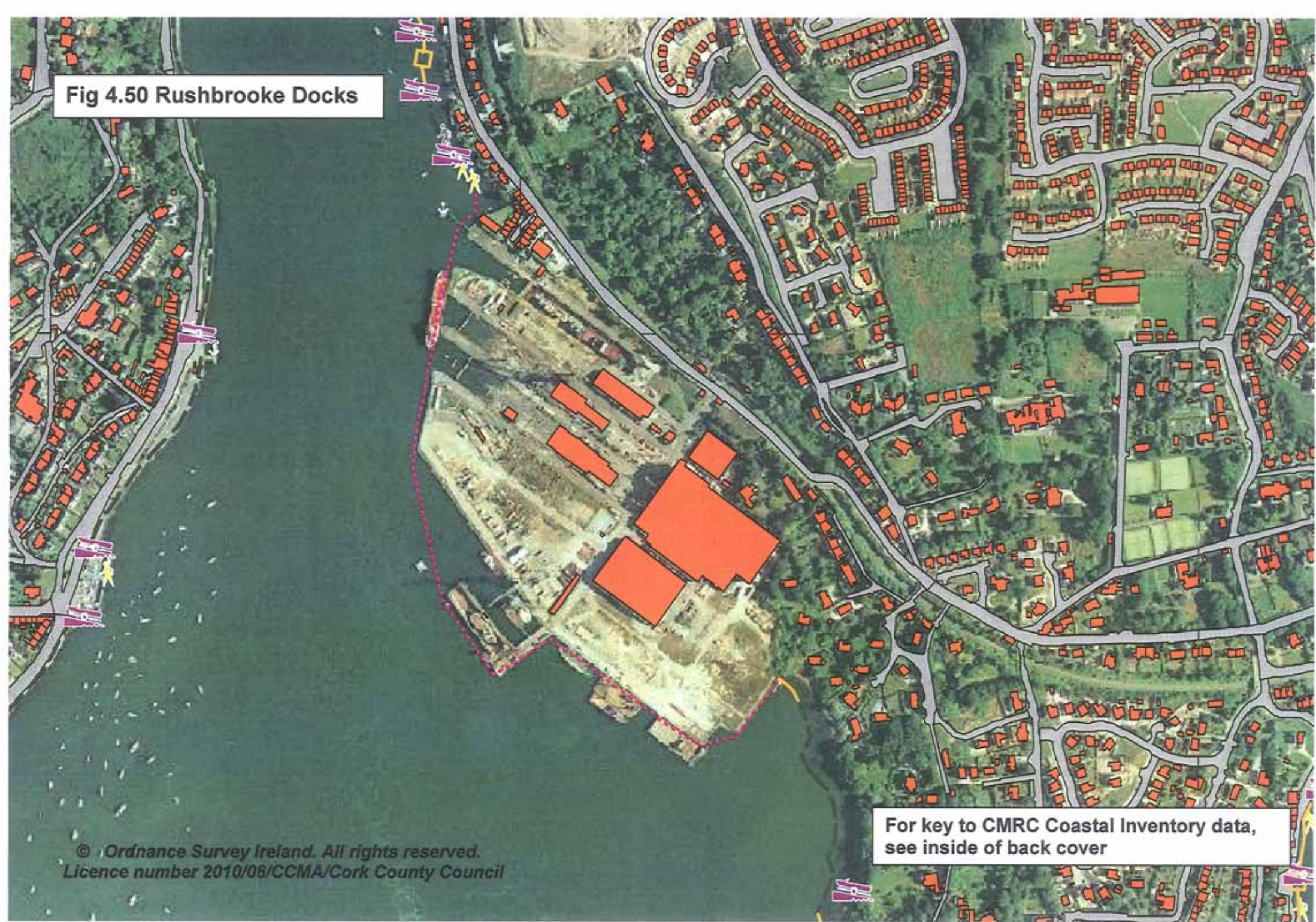


Fig 4.50 Rushbrooke Docks



(ix) Rushbrooke Dockyard

Rushbrooke Dockyard covers c.15 hectares, and was the site of a full scale shipbuilding operation run by the Dutch firm Verolme, until its closure in 1984. Substantial facilities remain on site, including a floating dock on the W. side, and a graving dock at the NE corner. There are 2 other dry docks on the N. side which do not appear to be in use. Cranes on site are capable of lifting loads of up to 40 tons, and large doorway sheds and workshops are also still on site. These facilities are operated as a ship repair and marine engineering facility by Cork Dockyard Ltd, and are capable of handling ocean going and coastal vessels for planned and emergency repairs. They are used *inter alia* by the Naval service.

Cork Dockyard Ltd now only use part of the site, and other parts are rented out to c.30 businesses of various types. Around half of these are storage facilities without associated on-site employment, and a further quarter are small businesses with no relation to the original functions of the dockyard. There are also substantial unused open areas. However, there remain a number of marine and engineering firms, which still account for most of the 250 jobs on the overall site, with MSL Mechanical Engineering being much the largest individual employer.

Although the overall site is underused, and only provides around a quarter of the employment it did as a shipyard, it has strategic importance and scarcity value from several different points of view:

- (1) it maintains a nucleus of ship repair and marine engineering facilities and skills in the Harbour and the State. This role ensures that these services are available to vessels based in or visiting Cork Harbour.
- (2) It may also support a developing marine energy function for the Harbour. The dockyard has already been used to produce experimental prototype wave energy devices, and in this respect it complements the growing cluster of marine research activities on the Harbour, including UCC's Hydraulics and Maritime Research Centre, and the emerging Maritime and Energy Cluster (MERC).
- (3) It is the main surviving focus for industrial employment in Cobh, with the spare capacity to accommodate suitable new businesses. For topographical reasons, there is limited level and easily accessible land suitable for industrial purposes, and this is the only established location. An 11 ha. inland site at Ballynoe was acquired by Cobh Town Council and zoned by the county council for small to medium sized industries, but it has not so far been developed. New industrial estates take time to become established and to have a range of buildings available.
- (4) The Cobh Urban Design Feasibility Study (Draft, April 2009) was commissioned by the Cobh Town Council to provide an urban framework for the future planning and development of the waterfront. In Rushbrooke Dockyard, its main aim is to create employment close to Rushbrooke station. Proposed or possible uses suggested for the site are summarised in Table 4.9

Given the resources currently being channelled into developing a marine/energy cluster on the Harbour, (2) could be regarded as a higher order objective, seeking to develop a new source of competitive advantage for Cork Harbour and the wider Cork area as a whole. The analogy could be drawn with the policy of attracting Harbour related industry in the early 1970s, which had a somewhat different outcome than originally intended, but nevertheless contributed greatly to the creation of Cork's pharmachem sectoral cluster.

Many of the possible uses of the site may be mutually compatible, as maintenance of worthwhile marine engineering capacity on Cork Harbour does not necessarily conflict with a variety of other uses on the overall site. A study of the growth of hi-tech activities in the Cambridge area in the late 1970s and early 1980s found that a key asset was the presence of small precision engineering firms who could produce experimental prototype computer components¹². These were often located in small, low-rent premises on upper floors, which were a by-product of local property market conditions, and the result of policy only in the sense that it had allowed those conditions to continue.

Marine engineering obviously takes place at a larger physical scale than precision engineering, and with more effects on its neighbours. Of the possible uses outlined in Table 4.9, only R7-8 pose definite problems of compatibility. Uses like winter boat storage and repair (from R4 and R6), retention of the

existing large industrial buildings on site and other dockyard facilities (R5 and R10), and park and ride (R1) have obvious advantages, in intensifying the use of the site, without losing longer term flexibility and adaptability.

Table 4.9 Land Uses Proposed for Rushbrooke Docks in Cobh Urban Design Feasibility Study

	Proposed Land Uses:
R1	Park and Ride (2 level)
R2	Incubation/Innovation Cluster for start ups, small businesses
R3	Maritime Museum and Refurbishment of Historic Dock
R4	Maritime Business Park (eg design/build/repair of leisure craft) with 3 rd level institution in a related sector
R5	Flexible large spaces (eg for assembly/ fabrication, film production, music venue etc)
R6	200 berth Marina, winter boat storage, clubhouse
R7-8	Hotel, conference facilities, shopping, restaurants, service apartments
R9	Ferry stop on Cork-Cobh Ferry
R10	Dockyard Facilities

If, as suggested in the next chapter, there is a case for giving Cobh priority as a location for additional marina capacity, this has implications for winter boat storage. Boat storage capacity on the Harbour is slightly greater than marina capacity, and like marina capacity is primarily concentrated in Crosshaven. While the case for a marina closer to the centre of Cobh may be stronger, boatyards require substantial sites on land, which are more readily available away from town centres. The Dockyard site appears suitable for such a use.

¹²Segal Quince Wicksteed *The Cambridge Phenomenon*, Cambridge, 1985, p.29, 51

Redevelopment & Incremental Options at the Dockyard

The broader choice on future development of the Dockyard could be expressed in terms of process – in other words, how far changes of use are seen as involving its redevelopment, and how far a more incremental approach with limited new construction is envisaged, and with more of the site remaining open.

Redevelopment is usually associated with more intensive use, partly because new purpose built buildings tend to be more efficient than adapted ones, and partly because it is not undertaken unless sufficient demand to support this is anticipated. The Dockyard is currently underused, so more intensive use is attractive, but it is not clear that the necessary demand and public funding to support this is likely to be available.

Incremental development is more flexible, and more compatible with continued or expanded use of the ship repair facilities.

Flood risk is a relevant factor, as the Lee CFRAMS draft flood maps have identified c. 60 % of the Dockyard as at risk of tidal flooding, with the N. end having a 10% chance of flooding in any given year. Incremental change would allow this issue to be considered on an individual sub area/use level. More generally, an incremental approach would be easier to finance,

and more likely to maintain the flexibility necessary to ensure that the existing potential of the site is protected.

