

Bettystown/Laytown Beach Recommendations Report

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1 Background and Report Purpose

This report is being prepared as a supporting document to the Bettystown Beach Management Plan (BMP). The BMP will act as the main reference document for the day to day management of the beach and will be proactively and reactively updated as and when required.

This report covers some of the background information and consultation undertaken during the development of the BMP.

The following elements are discussed in more detailed within this report. As per the brief, the existing issues and potential opportunities associated with issues such as Littering have been compiled and are presented.

- Consultation
- Traffic Management and Parking
- Alternative Car Parking
- Improvements to Beach Access and Provision of Public Toilets
- Litter Management
- Environmental
- Beach Tourism and Activities
- Blue Flag Status
- Signage

2 Methodology

The methodology for the scheme consists fundamentally of three phases:

Phase 1: Review of Existing Situation and Background Data

Phase 2: Concept Design, Preliminary Design and Consultation

Phase 3: Recommendations and BMP Report.

Phase 1 consists mainly of the project team familiarising themselves with the existing issues on the beach through site visits, meetings with MCC engineers and local councillors as well as reviewing all available background data.

To compliment this and to guide the path of the option development, a workshop was held with local councillors and an open evening was organised in Bettystown where members of the public were invited to input into the plan. It was appreciated that local knowledge would be key to establishing the extent of the existing issues on the beach as well as in the general area.

Phase 2 sees the application of the knowledge and familiarity of the area gained in Phase 1. Conceptual designs and high level recommendations for the main issues raised in the project brief will be developed during this phase, in particular changes to the parking arrangements on the beach, improvements to the existing beach access and the provision of amenities / public toilets on the beach.

Phase 3 combines everything that was learned in phases 1 and 2 and forms the output stage of the study. A draft BMP is produced during this phase. Following this, the BMP will be sent out for public consultation.

Separately but in parallel with the BMP, proposals for the revision of the beach parking arrangements and proposals for the improvement to the beach access and provision of public toilets have been developed and are contained within the Recommendations Report.

3 Consultation

Phase 2 of the delivery of the BMP consisted of a significant degree of consultation with MCC engineers, local councillors as well as local residents and other members of the public. While the design team carried out site visits and conducted a significant amount of desktop research, it was acknowledged that there are other issues which can only be fully understood through consultation with local residents and other members of the public who use the beach on a regular basis.

During the first two phases of the study, particularly Phase 2, the following stakeholders were consulted:

- MCC Officers: A number of meetings have been held with MCC Officers throughout the life of the project.
- Local Councillors: A presentation was made and workshop held with a number of local councillors to discuss existing issues on the beach and to explore potential opportunities. These councillors also attended the open evening held on 22nd July 2015.
- Local residents and other members of the public: An open evening was held on the 22nd July 2015 in the Neptune Hotel in Bettystown to which members of the public were invited and all feedback and suggestions were welcome.
- Benone Strand Beach Manager: The Beach Manager of Benone Strand in Co. Derry was also consulted as part of Phase 2 of the study.

Photo 3.1: Open Evening in Neptune Hotel



The outcome of the open evening and all comments and submissions received can be found in the '*Public Open Evening; Feedback Summary*' note which has been appended to this report.

4 Alternative Car Parking

Overview

This section has been prepared following discussions with MCC officials, local engineers and members of the public. The following sets out the existing issues associated with the car parking on Bettystown Beach and outlines proposals and recommendations for future beach related parking in the area.

Existing Parking

The MCC Foreshore Bye-Laws (2010) allows parking within a designated area on the beach. At present this permits vehicles to access and park on the beach all year round in the area between River Nanny in Laytown to a point 150m north of the Seaview Terrace in Bettystown. The majority of motorists currently park within a 150m long area to the north of Seaview Terrace entrance. North of this area is a lifeguard patrol zone where vehicles are not permitted to enter.

Existing Parking Demand

For the majority of the year the number of vehicles parking on the beach is low. On a typical, dry, warm, summers day there may be up to several hundred vehicles parked on the beach. During periods of exceptionally warm weather however, there may be a demand of over a thousand vehicles on the beach.

The primary issue associated with these times of exceptionally high parking demand is the safety of beach users, children in particular, interacting with vehicles on the beach. Traffic congestion in the town was also flagged as a significant issue when the beach is this busy.

Currently, parking capacity on the beach is dependent on the tide and how many cars can be accommodated on a given day. There is no set parking capacity. Counts of parked vehicles were carried out by the Beach Warden on the beach between the 13th and 26th of August 2015. These counts were carried out three times daily at 11am, 3pm and 6pm. The counts showed a high of 450 vehicles parked on the beach at 3pm on both the 13th and the 18th. On these days, the temperatures were 21°C and 18°C and sunny. The average numbers of parked vehicles on the beach on these two days were also high at 252 and 250 vehicles. Aside from these two days the numbers of vehicles parking on the beach are relatively modest with the next highest number being 150 at 3pm on the 16th and 24th of August.

Parking on the beach is pay and display and is charged at a rate of €2.50 per visit. It is proposed to keep this parking charge in place for future beach parking proposals.

Future Beach Parking Proposals

From discussions with MCC officials, local engineers and the general public, the consensus is that the existing parking situation on the beach is not a sustainable long term solution. This was also highlighted in the SRUNA report. However, it was also considered that removing car parking from the beach entirely is not an achievable target in the short or medium term. With this in mind it is thought that complete removal of car parking from the beach needs to be viewed as a long term objective. In the shorter term, parking volumes will be reduced and better managed with a view to continually reducing parking capacity over time as alternative parking sites arise and behaviours change.

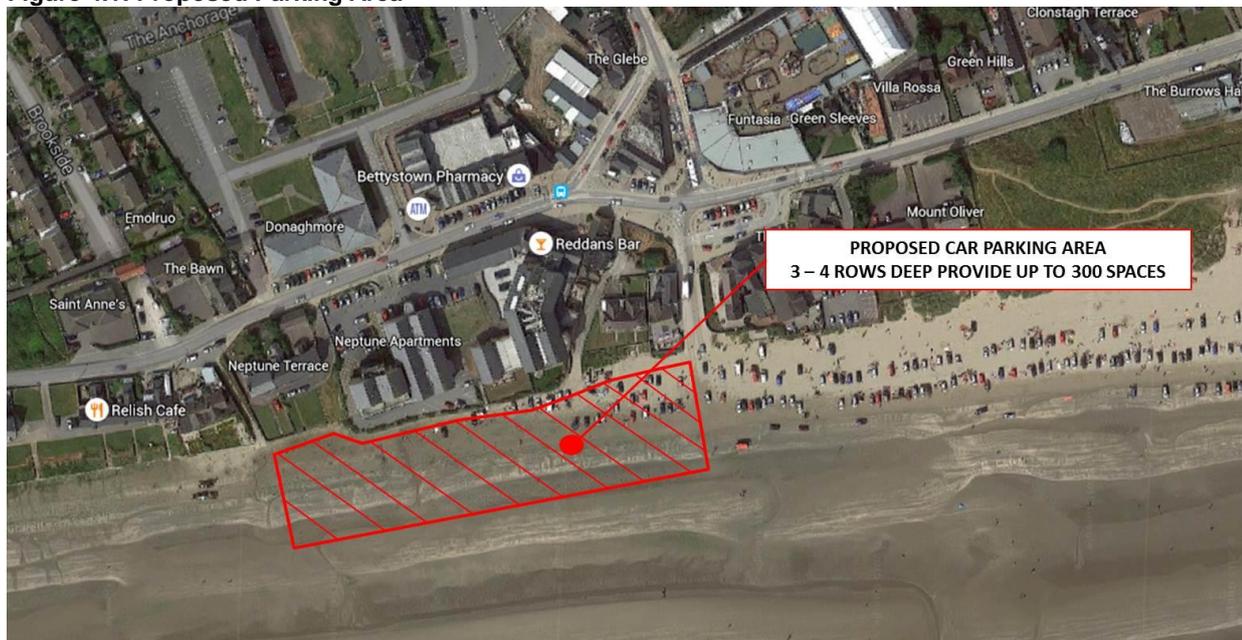
Revised Parking Layout and Volumes on the Beach

Based on the current levels of parking demand and the expected number of spaces which will be made available in the alternative parking sites (see Section on Alternative Parking Locations below) it is considered that maintaining a quantum of parking on the beach of between 200 and 300 vehicles strikes a good balance between continuing to cater for demand whilst also offering a significant reduction in the existing on beach parking.

In addition to limiting the level of parking on the beach, it is also proposed to move the area of parking from north of Seaview Terrace to an area between Seaview Terrace and Neptune Terrace. It has been noted by MCC that members of the public enjoy parking close to, and north of, the Seaview Terrace entrance as the sand is softer in this area. Moving the car parking to the area of harder sand between Seaview Terrace and Neptune Terrace, which is less coveted by beach users, will ensure that this area of soft sand will be available for all beach users to enjoy. Moving the area of parking also presents the possibility of extending the Lifeguard patrol zone further south as far as the Seaview Terrace entrance where the majority of beach users congregate.

Figure 4.1 below illustrates the approximate area where the car parking will be contained. This area will be flexible in terms of the amount of cars which can be parked here, with lines of approximately 70 vehicles parked three or four rows deep.

Figure 4.1: Proposed Parking Area



The proposed parking area would be set out by bollards, located immediately north of Seaview Terrace and just south of Neptune Terrace. Motorists would be discouraged from travelling outside the parking area with a line of bollards which would extend towards the shoreline, setting out a location for four rows of vehicles to park.

There are a number of bollard options available. A composite bollard with a wooden finish would be the best option as the plastic finish would be less susceptible to corrosion.

Some of the bollards could be made to look aesthetically pleasing or an artistic feature, an example of bollards found in a beach in Geelong, Australia shown below.



Figure: 4.2: Geelong Bollards¹



Figure: Geelong bollards²



Figure 4.3: Composite Square Bollards

At the location where the car parking is proposed, there is an issue of surface water flowing on to the beach. It is recommended that this be examined with a view to intercepting and finding an alternative type outfall

Alternative Parking Locations

Alternative parking locations are required to ensure that haphazard and illegal parking does not become an issue in the town when the volume of parking on the beach is reduced.

The following objectives have been identified for these alternative car parking sites:

- 1) Good access from the local road network.
- 2) An adequate number of spaces must be provided.
- 3) MCC have control over the site or at least an agreement is in place between MCC and the owner / operator.
- 4) Site is within walking distance of beach or a convenient method of accessing beach can be provided.
- 5) It should be sustainable to provide parking on the site in the long term and offer good value for money.

Table 4.1 outlines the possible alternative parking sites which have been identified and the approximate number of spaces in these locations. It should be noted that the existing car parks, such as The Anchorage, also service existing developments and that the number of spare parking spaces in these car parks is significantly less than the capacity. Figures 4.4 to 4.6 show the location of these sites.

¹ "Geelong Bollards" by Kevin Tostado from San Diego, USA - Geelong BollardsUploaded by Closedmouth. Licensed under CC BY 2.0 via Commons -

https://commons.wikimedia.org/wiki/File:Geelong_Bollards.jpg#/media/File:Geelong_Bollards.jpg

² <http://www.intown.com.au/locals/geelong/attractions/bollards/gallery.htm>

Table 4.1: Car Parking Locations and Approximate Parking Numbers

Location	Car Parking Numbers (Capacity)
1. Greenfield Site North*	200-395
2. Funtasia	174
3. Anchorage	128
4. Tesco	185
5. Greenfield Site South*	270-540
6. Schools (Colaiste na hInse)*	325
7. Schools (Scoil Oilibheir Naofa)	46
8. Train Station Car Park	95
9. Greenfield Site – Laytown*	95

*Approximate - based on area of site



Figure 4.4: Existing Car Parks and Greenfield Sites in Bettystown



Figure 4.5: School Car parks in Bettystown



Figure 4.6: Potential Car Parking in Laytown

Car Parking Summary

Table 4.2 below shows the list of sites considered as alternative parking locations in the town and whether the sites meet the objectives identified as part of this study. As shown in the Table, only the schools sites meets all five objectives, while the greenfield site in Laytown meets 4 out of 5 objectives.

Table 4.2: Objectives met by Alternative Car Parking Locations

	1	2	3	4	5	Objectives
Greenfield Site North*	↓	↑	↓	↑	↓	2/5
Funtasia Car park	↑	↓	↓	↑	↑	3/5
Anchorage (Two Car Parks)	↑	↓	↓	↑	↑	3/5
Tesco Car Parking	↑	↓	↓	↓	↑	2/5
Greenfield Site South*	↑	↑	↑	↓	↓	3/5
Schools (Colaiste na hInse and Scoil Oilibheir Naofa)	↑	↑	↑	↑	↑	5/5
Train Station Car Park	↑	↓	↓	↑	↑	3/5
Greenfield Site - Laytown	↑	↓	↑	↑	↑	4/5

Emerging Preferred Option

The emerging preferred option is to utilise the school car parks in Colaiste na hInse and Scoil Oilibheir Naofa in combination with the existing greenfield site in Laytown which is currently utilised on the day of the Laytown Races. The quantum of parking in each site is noted below.

- Schools (Colaiste na hInse)
 - 325 car parking spaces
- Schools (Scoil Oilibheir Naofa)
 - 46 car parking spaces
- Greenfield Site – Laytown
 - 95 car parking spaces

This combined with the parking on the beach will be more than sufficient to accommodate the demand in most circumstances.

All sites are within the control of MCC or, in the case of the schools, can be controlled in cooperation and consultation with the boards of managements of the schools. These sites also meet the other criterion in that they provide good access to/from the local road network.



It is noted that the site in Laytown is a significant distance from Bettystown Beach and is outside of the distance that people would usually walk. In order to mitigate this it is proposed to provide a shuttle bus service during periods of good weather in the summer months. This bus will pick up at Laytown, Inse Bay and the schools and drop off at Bettystown. It is estimated that the shuttle bus will be required for around ten days during the summer months of July and August each year to cope with peak demand.

This bus service would be appointed through a tender process. The bus would operate in a loop and would also allow for people to be dropped down to the Laytown beach area as well as to the Bettystown beach area.

It is anticipated that traffic will park on the beach until the number of parking spaces there is exhausted. At this time, motorists will be directed to the schools and finally, if required, the greenfield parking site in Laytown. In conjunction with this strategy, signage will need to be provided. Ideally this signage would consist of Variable Message Signs which would be used to inform drivers of parking availability in the town so they don't automatically proceed to the beach if there are no spaces available.

It is recommended that 'car free days' are trialled at the beach in order to introduce the new parking strategy, in order to see how the beach, and the wider town area, operates with the beach parking removed. The aim of 'car-free days' would be to demonstrate to the local residents how the beach can be a more attractive and safer environment with the parking removed and to garner support for further parking restrictions on the beach in the future. These 'car-free days' could run concurrently with beach events such as a sand yachting competition, for example, where the car parking would be removed to facilitate the competition.

Other Potential Opportunities / Risks

Limiting the parking on the beach will result in motorists searching for alternative locations close to Bettystown Beach. Therefore, on days when the shuttle bus is not running or days when the car parking demand is greater than expected, motorists will seek alternative car parking locations closer to the beach access in Bettystown.

In order to improve parking availability within the town centre it is recommended that new signage to private car parks is introduced. This will help increase driver awareness of town centre parking.

The other car parks that could be utilised are the following;

- **Funtasia Car park** – 174 car parking spaces
- **Anchorage (Two Car Parks)** – 128 car parking spaces
- **Train Station Car Park (Weekends Only)** – 95 car parking spaces

Beach Car Parking Management

The time of year and weather very much dictates parking demand and it will be up to the Beach Manager and/or Beach Warden to coordinate with his/her staff regarding the need for additional parking provision. The Beach Manager will be responsible for checking if the good/exceptional weather is expected over the following 3/5 days and planning appropriately.

MCC staff will be required to manage the car parking at the two locations and to enforce the Foreshore Bye-Laws with regards to parking on the beach.

5 Improvement to Beach Access and Provision of Public Toilets

Introduction

This section has been prepared to investigate the possibilities for the improving/enhancing of the existing beach access at Seaview Terrace. The section reviews the existing situation, identifies deficiencies with the existing arrangement and outlines potential solutions which will improve the access for all users.

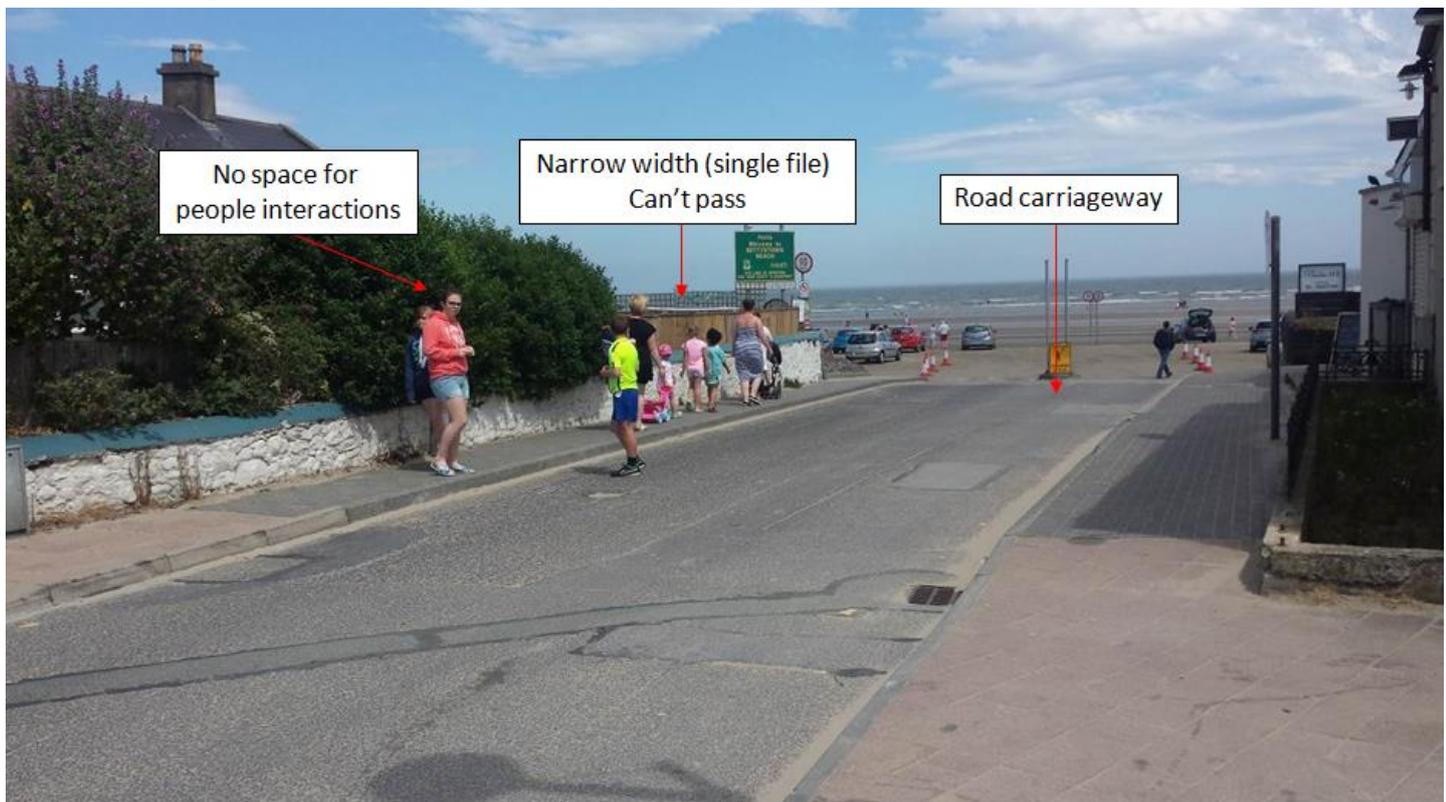
Beach Access - Existing Situation.

The existing beach access in Bettystown is located on Seaview Terrace in the centre of the town and is the primary access point onto the beach for both vehicles and pedestrians. Figure 5.1 illustrates the location of Seaview Terrace. Photo 5.1 shows a ground level view of the beach access.

Figure 5.1: Existing Beach Access in Context of Bettystown (© Google Streetview)



Photo 5.1: Existing Beach Access at Seaview Terrace



Some of the main issues with the current access include:

- Narrow footpaths (pedestrians walk in single file).
- Pedestrians walking on road and potential interaction with vehicles.
- Existing space underutilised (Buildings not interacting with street).
- Vehicles blocking back through access during periods of high demand.
- Vehicles double parking or delivery vehicles serving surrounding restaurants and take aways parking on-road / footpath on southern side of road (photo 5.2).
- No means of controlling access to beach, beach accessible 24/7.
- Inadequate amenity provision, no public toilets.
- Generally unattractive access and unwelcoming.
- No space for interactions for people.
- Mix of materials, street furniture and signage.

Photo 5.2: Delivery Vehicle Unloading on Seaview Terrace



The current beach access is constrained in terms of space with a limited cross section existing between the property boundaries on Seaview Terrace. The existing width (including footpaths) varies from approximately 7m at its narrowest point to around 8.5m at the widest point approaching the beach. With both pedestrians and vehicular traffic entering at this point, there is limited space to appropriately accommodate different users and the area feels uninviting.

Access Improvements

The objectives of improving the existing beach access are:

- Improve accessibility and functionality for all users, especially pedestrians.
- Improve the aesthetics of the area.
- Improve the amenities available at, or adjacent to, the entrance to the beach.

Following the stakeholder consultation and by assessing the existing issues/conditions the following proposals were identified.

Proposal 1: Purchase land on Seaview Terrace. Upgrade access to improve pedestrian route and public realm space. Construct a purpose built seafront building and provide for a range of facilities/services in the new building.

Proposal 2: Create one-way system with one-way in from Seaview Terrace and outbound from laneway near Neptune Terrace.

Proposal 3: Controlling Access to the Beach during Off-Peak hours.

Consideration was given to providing a shared space area on Seaview Terrace. However, as the street is narrow there would be high level of pedestrian and vehicle interaction which is considered a safety risk. Also queuing has

been noted on Seaview Terrace during busy periods increasing this risk. It was therefore concluded that this location would not be suitable as a shared space environment.

Proposal 1: Purchase Land and Houses on Seaview Terrace

There is currently housing on Seaview Terrace at the entrance to the beach. There is the potential to acquire these buildings and incorporate this within the improvement plan for the beach access and the provision of beach facilities.

The acquisition of additional land would offer the potential to significantly improve the existing beach access and provide for a purpose built seafront building that could offer a range of amenities for beach users.

The following benefits could be achieved:

- Provide a purpose built seafront building with a mixed use facility that would provide a range of facilities to beach users. These amenities would generate revenue, some of which could be reinvested in the maintenance and upkeep of the beach. Alternatively, this revenue could be invested in additional resources for policing of foreshore bye laws or cleaning of the beach.
- Provide for a greatly improved access, which is attractive and accommodates the needs of all users, in particular pedestrians.
- Provide improved public realm / civic space at the entrance to beach.
- Provide a potential location for public toilets, showers and changing facilities (with a view to increasing the attractiveness of the beach as a destination for beach activities and events)
- Any facilities provided where people may congregate e.g. a café, will provide a form of passive surveillance and help deter anti-social behaviour in the vicinity of any public toilets.

Photo 5.3: Existing Terrace of Houses on Seaview Terrace (© Google Streetview)



Photo 5.4: Available Space at Front of Properties



A lifeguard's tower could be accommodated on the upper floor of a seafront building. This would provide improved lifeguard facilities over those currently provided on the beach and a more centralised location to observe beach activities. Currently, lifeguards located away from where the majority of activity is occurring. The property could be used by MCC to store equipment relating to upkeep and maintenance of the beach and could also be used to securely store beach wheelchairs if available. Beach wheelchairs should become available when a purpose built seafront building becomes available. A summary of the advantages and disadvantages of this option are summarised in Table 5.1 below. Photo 5.5 provides an example of a beach café in the UK and closely resembles how such a facility could sit on the context of Bettystown beach if developed.

Photo 5.5: Café/Restaurant at Beach Entrance



Table 5.1: Proposal 1 - Advantages and Disadvantages

Advantages	Disadvantages
Improved amenities	High initial capital cost
Provision of public toilets	Development costs
Income stream for MCC	Finding and retaining tenants for potential commercial and residential space
Passive surveillance of area	
Widened footpaths	
Generally improved aesthetics	
Safety improvement by not having to walk to Funtasia to use toilets	

Proposal 2: Create one-way system with one-way in from Seaview Terrace and outbound from laneway near Neptune Terrace.

An additional proposal would be to introduce a one-way system on the beach.

Figure 5.3: Potential Location of Public Toilets (© Google Maps)

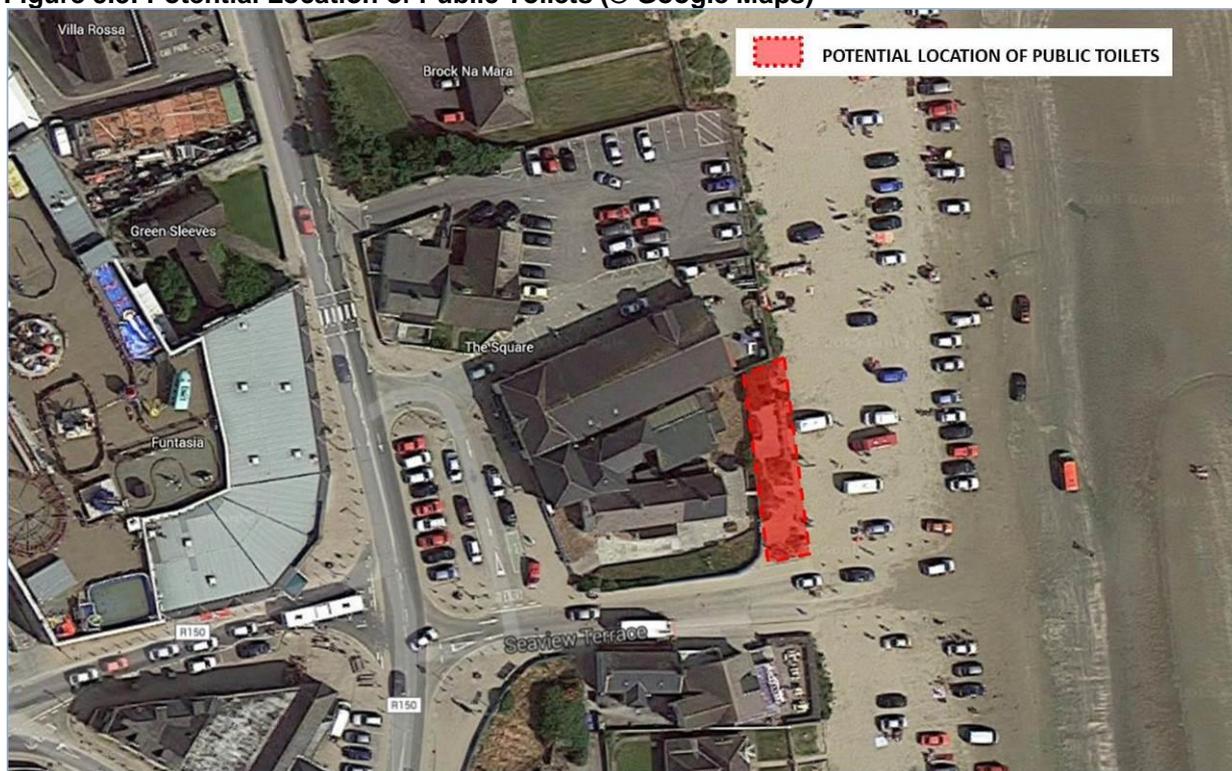


Photo 5.6: Ground Level View of Potential Toilet Location (© Google Streetview)



Pedestrian facilities can be improved on Seaview Terrace with the introduction of a one-way system on the beach. By converting Seaview Terrace to one-way, there is an opportunity to reallocate some of the existing road space for pedestrians. The existing road carriageway width on Seaview Terrace is approximately 5m wide. With the introduction of a one-way system there is the opportunity to reduce the road carriageway to 3.0m wide. The remaining 2.0m can be redistributed as footpath, thus providing an improved facility for pedestrians.

The proposed one-way system on the beach is shown in Figure 5.8, with motorists accessing the beach via Seaview Terrace, parking in the new parking zone to the south of the access, and exiting through Neptune Terrace to the south. The laneway on Neptune Terrace will require minor improvement works in order to provide for vehicular traffic. Photos of the existing laneway are shown below.

Photo 5.6: Neptune Terrace / R150



Photo 5.7: Neptune Terrace / Bettystown Beach



Figure 5.8: Proposed One-way System on Bettystown Beach



Proposal 3: Controlling Access to the Beach during Off-Peak hours

A number of local residents raised concerns regarding anti-social behaviour on the beach, in particular during the night time period. People bring their cars onto the beach to drive dangerously and recklessly causing concern to local residents, and posing a safety risk to all on the beach.

In order to control the access to the beach it is proposed to provide a rising bollard to prevent vehicles entering the beach during the night time. MCC and the beach wardens will have control of the raising bollard and the time that the access to the beach is open. Bollards will be required at Seaview Terrace and Neptune Terrace. Emergency vehicles will also be able to gain access by a variety of means that activate the control feature, such as on-board electronic devices or card keys.

Conclusions

Based on the consultation and existing situation, three viable options to improve the beach access have been identified:

- Purchase houses on Seaview Terrace and provide a range of amenities within a custom built building.
- Create one-way system with one-way in from Seaview Terrace and outbound from laneway near Neptune Terrace.
- Control access to the beach with a rising bollard.

It is recommended that the provision of the one way system is assessed in further detail, including the bollards required to set out the parking zone, and the upgrades required at Neptune Terrace to provide a safe road access.

Progress

The buildings on Seaview Terrace have been purchased by Meath County Council. The acquisition of these buildings offers the potential to significantly improve the existing beach access. The council are in the process (as of 24th February 2017), of inviting architects to provide designs for a purpose built seafront building, either by using the existing buildings or a new building to provide for a purpose built seafront building that could offer a range of amenities for beach users.

6 Litter Management

Throughout Phase 2 of the study, littering on the beach was consistently raised as an issue by local residents. Many local residents who attended the open evening are regular beach users and also volunteer litter pickers. There are currently 18 litter bins provided on the beach which are emptied on a daily basis by MCC during the summer. Figure 6.1 below is typical of the standard of bin provided by MCC on the beach. These bins are provided at the back of the beach and are primarily concentrated within the car parking area. No litter bins are provided between the Seaview Terrace entrance as far south as the Sacred Heart Church, approximately 1km in distance.

Following the review of the existing situation and the consultation process the following issues in relation to litter have been identified:

- No recycling facilities (on the beach or nearby).
- Over-flowing bins
- Horse and Dog fouling
- Litter on Beach
- Dumping of litter beside bins.

Figure 6.1: Litter Bin on Beach



Dog fouling was a problem on the beach that was raised by a number of local residents during the open evening with the public. The potential opportunities for dealing with dog fouling on the beach are:

- Increase the fine for dog fouling to the maximum that is permissible under either the Section 22 of the Litter Pollution Act or MCC Foreshore Bye-Laws.
- Introduce a campaign and clamp down of offenders by MCC officials and beach wardens during the summer months.
- Provide a Litter Hotline phone number.
- New signage campaign regarding Dog Fouling.



Furthermore, it is proposed to provide a dog free zone on the beach. The dog free zone would be located in the lifeguard patrol area. This area is the most popular area for children to play. Between the hours of 11:00 a.m. and 6:00 p.m. during the Summer Season dogs should not be permitted in the lifeguard patrol area. This is similar to the beach bye laws in place in Co. Clare, which have been in place for the last 7 years.

Whilst the immediate response to litter may be to provide for more bins on the beach, this may not be the most appropriate response. The responsibility for the creation of rubbish lies with the people who visit the beach and these people should be encourage to take their rubbish with them. The potential opportunities for dealing with litter on the beach are:

- Provision of more bins
- Adopt 'Leave –no-trace' policy for the beach or for a section of the beach.
- Provide for recycling facilities, either nearby or on the beach.
- Encourage greater community involvement
- Run awareness campaigns regarding waste
- Provide for smart bins with larger capacity, such as Big Belly.



7 Coastal Erosion

Introduction

AECOM completed a survey of Laytown Beach, Bettystown Beach and Morningtown Beach in order to identify areas where coastal erosion is evident and also areas at high risk of coastal erosion within the extents of the beach management plan area. The survey involved walking and photographing these stretches of beach on 09 September 2015 between 3pm and 6pm. High tides on this date were at 10.03 and 22.23 and the survey was completed during low tide conditions.

Background

Assessments of erosion at this stretch of beach had previously been reported in the following documents:

- RPS, Drogheda Port Company/Meath County Council; Beach Restoration Laytown/Bettystown Feasibility Study dated August 2005; and
- RPS, Meath County Council, Laytown to Bettystown Beach Replenishment Scheme, Coastal Protection Study, dated November 2006.

These reports identified that the effects of erosion and longshore drift are threatening the amenity value of these beaches, particularly at Laytown where the underlying stone basement is exposed for considerable periods.

The reports identified that sand from Laytown/Bettystown is being carried north where it is captured by the training walls at Mornington (River Boyne outflow), which were constructed in the early 1970's. This has resulted in a wide beach south of the wall at Morningtown and formation of embryo dunes along this stretch.

The reports identified that the coastline at Bettystown/Laytown has been relatively stable since 1882 due to the presence of sea defences in the area but identified that the area of dry beach in this section has significantly reduced.

Under normal circumstances a shoreline will adjust to align itself according to dominant wave conditions. The sea walls at Bettystown & Laydown have prevented the natural retreat in this area and have cut off the natural transfer of sediment between beach and the dune system, therefore beach levels have dropped and a net loss of sand has occurred from the system to such an extent that the sand on the upper beach barely dries.

These reports also identified and assessed a number of options for protection of the beaches or beach renewal designed to preserve the amenity value of this stretch of shoreline.

Findings

The findings of the AECOM survey of Laytown Beach, Bettystown Beach and Mornington Beach are presented in Figure 7.1 and are described as follows:

- The southern portion of Laytown beach from River Nanny Estuary to the slipway at Station Road does not appear to be subject to significant erosion with soft dry sand and a small dune system present. The dune system in this area is under pressure from people with many tracks and paths present through the dunes.
- There is an increase erosional pressure north of Railway Road slip with a decline in the extent of dry sand present, erosion of existing dune bluff and the underlying stone basement exposed in the intertidal zone.
- Coastal protection measures are present from the southern end of Laytown beach carpark (see Photograph 7.1) and include relatively recently constructed gabion stone cages with stone toe protection present along this stretch of shoreline to the southern end of Netterville Terrace. While these measures protect the shoreline, they also exert pressure on the beach with no dry sand present in this area and extensive stretches of the underlying stone basement exposed in the intertidal zone.
- Coastal protection measures consisting of stone armour are present from Netterville Terrace as far as the southern end of Laytown Racecourse with similar pressure to the beach as outlined above.

Photograph 7.1: View of Laytown Beach looking north (Note Gabion Stone Cages, limited extent of upper beach and exposed stone basement)



- Erosional pressure on the beach appears slightly reduced from Laytown Racecourse as far north as the discharge of a small stream south of Bettystown, although the extent of dry sand on the upper beach is limited in this area. Coastal protection measures in this area consist of a low concrete wall but they appear sufficient and there is a greater extent of sandy beach present with the underlying stone basement not exposed along this stretch of coast
- There is a considerable increase in erosional pressure and a reduction in the amenity value of the beach north of the stream discharge point extending as far north as the beach entrance road at Bettystown. There is an absence of soft sand in this area with beach conditions damp or wet in the majority of places
- Erosion of the shoreline is prevalent in this area and coastal protection measures are limited to a low concrete wall which is broken or crumbling in places. One particular property has been cordoned off due to erosion of the sea wall at the front of the property. Erosion appears to be partly due to coastal erosion but may also be due to groundwater pressure building up behind the wall (Photographs 7.2, 7.3 and 7.4).

Photograph 7.2: Collapse of property boundary wall (note - may be partly due to coastal erosion but partly due to groundwater pressure building up behind the wall)



Photograph 7.3: Collapse of sea wall (note wet sand conditions)



Photograph 7.4: View looking south showing collapse of sea wall (note wet sand conditions)



- There is an improvement in beach conditions north of the main access roadway to the beach at Bettystown, although the immediate vicinity of the roadway is used to a large extent for car parking. Erosional pressure on the shoreline appears reduced in this area with dunes present north of the lifeguard station (Photograph 7.5).



Photograph 7.5: View of access to Bettystown Beach looking south from Lifeguard Station

- Deposition rather than erosion is present from the southern end of Laytown and Bettystown Golf Course as far north as the training walls at the Boyne entrance. There appeared to be embryo dunes forming along this stretch of coast which may be reversion of erosion which reportedly occurred during the storms of January 2014 (Photograph 7.6).
- Pressure on the dune system is most prevalent at the northern and southern ends of the system due to greatest public access to these areas. There does not appear to be significant pressure to the central proportion of the dune system, likely due to their isolation from public access and the golf course on the landside.
- The extent of soft beach sand is greatest immediately adjacent to the training wall at the Boyne entrance. The low tide water line in this area extends almost to the end of the training wall (Photograph 7.7).

Photograph 7.6: View of dune system and beach north of Bettystown looking north. (Note embryo dunes at foot of dune system)



Photograph 7.7: View of deposited sand extending out towards seaward end of training walls



In summary, the findings of the site survey confirm the findings of the previous reports completed on the area, with evidence of coastal erosion observed in two sections of the study area (shown in red bracketing on Figure 7.1 below); (a) on the southern portion of the site from Railway Road slip to Laytown Racecourse and (b) on the central portion of the site from south of Bettystown (where surface water discharge was observed) to the access road to Bettystown Beach.

Beach replenishment measures discussed in previous reports do not appear to have been implemented or have little lasting impact. Further studies to develop a way forward with regard to the prevention of coastal erosion should be progressed.

Figure 7.1: Survey Findings



Meath County Council Project Partner in EU Sustainable Atlantic Shorelines Project

The aim of the sustainable Atlantic Shorelines Project is to fundamentally change shoreline management in the Atlantic Region by overcoming the barriers to implement sustainable and resilient alternatives. (alternatives to Armoring etc)

This can be achieved by combining practical implementation of new approaches (demonstration projects) and sharing lessons from past experiences, establishing new methods to create more resilient coastlines-10 case studies will investigate different issues.

The 13 Partners involved are the following;

1. East Border Region Lead Partner
2. Lorient Agglomeration France
3. University of South Brittany France
4. Meath County Council / Louth County Council (LCC)
5. Environment , Energy and Sustainability Foundation Province of Cadiz Spain
6. Ulster University
7. University of Cadiz
8. Northern Ireland Local Government Association
9. University of the Algarve Portugal
10. Institute for Nature Conservation and Forests Algarve Portugal
11. Algarve Interactive Science Museum
12. Tavira Ciencia Viva Science Centre Portugal
13. National Trust Northern Ireland

The project has obtained Phase 1 approval (from 400 applications). Phase 2 of the application has been submitted and a decision is due by the end of March 2017.

The work packages agreed including Project Management (EBR), Communications Strategy, and Demonstration Sites. The Universities will be responsible for other packages.

Meath County Council is mostly tied into demonstration site packages. While MCC are regarded as a small player in the overall context of the project (21 KM coastline), the University of Ulster are assessing of whether MCC (and LCC) could point to demonstration projects either completed, proposed or the subject of a study/investigation in relation to the coast for inclusion in the overall project.

8 Beach Tourism and Activities

Bettystown Beach possesses significant potential as a destination for beach tourism and beach activities and events. The beach itself is already extremely popular with beach goers. Anecdotally as well as from consultation, it is clear that potential exists to attract a different kind of user to the beach, a more active beach goer who wants to exploit its potential as a destination to participate in beach events.

With its lengthy, uninterrupted stretch of sandy beach it is considered to have significant, currently unexploited, potential as a destination for leisure events such as sand yachting and kite landboarding. These types of events are already held successfully in other locations in Ireland such as on Dollymount Strand.

There are a number of events which take place on Bettystown Beach throughout the year. These include the following;

- Sand yachting – held Feb/March
- Cricket Ireland Competition (held midsummer)
- Sand Castle Competition – held June
- Laytown Horse Races – held 10th September.

Sand castle building took place in June 2015, on the same weekend a beach cricket competition took place.

Figure 8.1: Sandcastle Building Competition on Bettystown Beach in 2011



The following potential future opportunities for tourism and activities on the beach were identified during the development of the BMP:

- Car Free Days
- Canoeing with jetties on the River Nanny
- Beach Football
- Creating designated area for sports.
- Swimming lessons / Life saving programs for all.
- Attraction of Maidens Tower of Mornington
- East Coast Cycle Route

- Tara Brooch
- Greenway Mornington to Drogheda
- Fishing
- Eco-tourism
- Kiting – festivals
- Fishing
- Volleyball
- Sailing
- Sandyachting
- Sandcastles
- Bird watching with the erection of bird watching huts/stands.
- Provision of space for clubs to meet/change etc.

9 Blue Flag Status

The Blue Flag programme is operated by An Taisce on behalf of the international, non-governmental, non-profit organisation the Foundation for Environmental Education (FEE). A Blue Flag is awarded to beaches that comply with 33 criteria under the following headings:

- Environmental Education & Information Provision;
- Water Quality;
- Environmental Management; and
- Safety & Services.

It is understood that a previous application was made for a Blue Flag for Bettystown Beach in February 2007. The application was subsequently withdrawn in March 2007 due to opposition amongst local residents and business owners to the restriction of parking on the beach, which was proposed in the application. The following sets out the current identified obstacles for Bettystown / Laytown beaches in achieving Blue Flag status, as requested in the brief for these works.

Identified Obstacles

The criteria for awarding Blue Flag status are presented in a document entitled "Blue Flag Beach Criteria and Explanatory Notes 2015", available from the website www.blueflagireland.org, run by An Taisce. A table presenting all 33 criteria required to achieve Blue Flag status and whether potential obstacles were identified to satisfying these criteria is presented in the Appendix. As outlined in the table, potential obstacles were identified for two of the listed criteria. These are discussed further below.

Water Quality – Clarifications from An Taisce are required in relation to the period of water quality data that is needed to demonstrate compliance with Criteria 2.10. In addition, it is likely that water quality data will be required from surface water discharge points to the sea along the beach.

Environmental Management - Any future plans for the beach will need to address the prevention of damage to the local natural environment. This will likely comprise measures to limit parking on the beach and limit access to the dune system.

Clarification from An Taisce should be sought in relation to the identified obstacles. Following on from this, a programme of works can be developed to address data gaps and prepare for a Blue Flag application.

Recommendation.

The potential opportunities to achieve a blue flag include:

- Clarify the existing water quality issues with An Taisce;
- Implement the car parking proposals as outlined in this Recommendations Report. These proposals will reduce and manage the parking on the beach, with the future aim of removing all parking on the beach in the future.
- Limit the access to the dunes in Mornington by closing off the vehicular access to the parking area to better control and manage vehicle movements in the area. Consider providing a limited number of car parking spaces on the adjacent road.
- Assess whether access to the Mornington Beach for horses should be restricted further.

Photo 9.1: Existing Access to Mornington Beach should be closed off to vehicular traffic.



10 Signage

There is a wide variety of signage provided along the coastline in Bettystown at present on the R150 / R151 Coast Road as well as the beach itself.

Road Signage

On the Coast Road, on both the northern and southern approaches, there is an obvious lack of signage with the only information on either approach to the town informing people that parking is available on the beach at a cost of €2.50 per day. This same sign can be found on all three approaches to the town from the north, west and south. There are also brown information signs welcoming people to Bettystown on both the northern and southern approaches to the town. Figures 10.1 and 10.2 illustrate these two signs.

Figure 10.1: Beach Parking Charge (Google)



Figure 10.2: Information Signage (Google)



There is a lack of information signage on the approaches to the town in relation to car parking on the beach aside from the above pay and display sign.

On the beach itself there is an assorted array of signage. Upon entrance to the beach there are a number of signs outlining the foreshore bye laws and the various restrictions on the beach. On the beach itself, there is signage specifying the 10kph speed limit and delineating the extent of the car parking area and the beginning of the Lifeguard patrol zone.

Figure 10.3 overleaf illustrates the approximate location and the extent of the various signs on the beach.

Figure 10.3: Location and Extent of Signage on the Beach



Proposal for Signage

The proposal for signage at Bettystown beach is to provide for a co-ordinated and consistent suite of signage in Bettystown. This signage would cover information signs, way finding signage and interpretative signage.

The signage must be consistent with the style of other Meath County Council interpretative signage and wayfinding signage. (as recommended in the Meath Tourism Strategy).

The following signage would be provided in line with the design style of the overall signage suite:

- Wayfinding signage - with walking and cycling times
- Parking (including cycle parking)
- Bio-Diversity Interpretative signage at the following locations – Seaview Terrace, Mornington, Laytown
- Heritage Interpretative signage – Bettystown and Laytown
- Information signage at Seaview Terrace and Laytown

Some signage such as regulatory signage in relation of the Fore Shore Bye Laws and parking will have to be provided in accordance with the relevant regulatory requirements.

Figure 10.4: Potential Bettystown Signage



Appendix

