

Bridgend County Borough Council

7 Bays Project - Porthcawl Waterfront

Visitor Parking

July 2007

Halcrow Group Limited

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Contents Amendment Record

This report has been issued and amended as follows:

Issue	Revision	Description	Date	Approved by
1	01	Draft Report	02/07/07	HJDavies 13400
1	02	Draft Report	12/07/07	P Day
1	03	FINAL	17/07/07	P Day

Contents

1	Introduction	1
	1.2 <i>Aims of the study</i>	1
	1.3 <i>Tasks in Detail</i>	2
2	Assessment of Unmet Demand	3
	2.1 <i>Introduction</i>	3
	2.2 <i>Visitor Parking Capacity</i>	3
3	Appraisal Assumptions	5
	3.1 <i>Introduction</i>	5
	3.2 <i>Assumptions</i>	5
	3.3 <i>Methodology</i>	6
	3.4 <i>Sensitivity analysis</i>	7
4	Appraisal	9
	4.1 <i>Introduction</i>	9
	4.2 <i>Boulevard de St. Sebastian sur Loire.</i>	9
	4.3 <i>Newton Nottage – north east of roundabout</i>	11
	4.4 <i>Newton Nottage –south west of roundabout</i>	13
	4.5 <i>Heol-y-Goedwig</i>	15
	4.6 <i>Rest Bay</i>	16
	4.7 <i>Newton beach</i>	17
	4.8 <i>Stormy Down</i>	19
	4.9 <i>Sandy Bay – Interim Site</i>	21
5	Conclusion	24

1 Introduction

- 1.1.1 In 2006, Halcrow Group Ltd with CDN Planning, were commissioned by Bridgend County Borough Council to prepare Planning Guidance the 7 Bays Project - Porthcawl Waterfront.
- 1.1.2 In parallel with that work Halcrow were also commissioned to prepare a supporting Transport and Access Strategy (TAS) for the regeneration.
- 1.1.3 The Brief for the TAS required the preparation of a Parking Strategy, which included review of opportunities to provide for peak levels of visitor parking.
- 1.1.4 The Draft Final TAS issued on 4 June 2007 concluded that on a few peak weekends each year there would be a shortfall of public parking available for use by visitors to the town and that this shortfall could potentially be met by the provision of seasonal facilities.
- 1.1.5 The document also included an investigation of a number of specific opportunities for additional temporary provision identified during the course of the study.
- 1.1.6 BCBC required that additional consideration be given to these and other opportunities. As a consequence Halcrow were commissioned to carry out a simplified appraisal of potential opportunities to provide the additional parking capacity. This short study was to consider the potential constraints to use of the sites, and to identify the costs and implications of the options.
- 1.1.7 A draft Brief was prepared in discussion between Council transport officers and Halcrow. The study was to focus on a number of potential sites that had been identified by the authority.

1.2 *Aims of the study*

- 1.2.1 The key aims to the study were:
- *To estimate the likely demand for additional parking in Porthcawl over and above that which can be supplied within the regeneration area.*
 - *To provide a comparative analysis of options to satisfy the excess demand associated with visitors and tourism, including the identification of appropriate sites for additional or temporary parking, traffic and parking management systems, access arrangements, construction, maintenance and operating costs.*

1.3

Tasks in Detail

1.3.1

In summary the Brief required the study to address the following:

1.3.2

The level of unmet demand for visitor parking

Estimate the likely demand for additional parking provision generated by visitors and tourism, including the numbers of occasions each year when that demand is likely to occur;

1.3.3

Prepare a parking 'balance sheet' for the regeneration area comparing existing and proposed supply and demand for town centre, tourism and visitor parking, and identifying the potential shortfall. This 'balance sheet' to exclude residential parking needs which will be deemed to be met within the development plots and/or residential areas.

1.3.4

Comparison of the options

Consider the type and quality of provision of facilities that might be appropriate to provide additional seasonal parking capacity, and the management systems that will be required.

1.3.5

The following sites, which are shown on Figure 1.1, were identified by the authority for comparative analysis:

- Newton Nottage – north east of roundabout;
- Newton Nottage – south west of roundabout;
- Boulevard de St. Sebastian sur Loire;
- Heol-y-Goedwig;
- Rest Bay;
- Newton beach;
- Sandy Bay (interim); and
- Stormy Down (or A N Other remote site).

1.3.6

For each site consider the following:

- Existing land–uses and means of access;
- The number of cars and coaches that can be accommodated;
- The cost of providing the required access and facilities;
- How people will get safely between the site and the trip destination(s);
- Additional transport requirements associated with the above;
- The potential traffic impact of each site;
- The role for management systems in directing traffic to available space;
- The costs of construction, operation and maintenance; and
- Environmental issues.

2 Assessment of Unmet Demand

2.1 *Introduction*

2.1.1 The 7 Bays Project - Porthcawl Waterfront Transport and Access Strategy (TAS) has considered the parking requirements for the proposed development and includes a Parking Strategy. To underpin the sustainability of the project the parking provision for each element of the development is proposed to meet the average demands with no further capacity to meet the exceptional demands which occur on a limited number of days each year. Additional parking capacity will be required to meet the demands of visitors on these days.

2.1.2 Historically Porthcawl had a significant influx of seasonal visitors but, with shift in holiday aspirations of the public, the increasing focus on foreign travel, and the passing of the traditional “miners fortnight”, the town’s role has changed significantly. Nevertheless there are peak visitor demands which occur on summer weekends and Bank Holidays and typically these total up to 10 days per year. To accommodate these occasions there are a number of car park facilities. In addition the aspiration is that the resort, through quality regeneration initiatives, will become increasingly popular to visitors.

2.2 *Visitor Parking Capacity*

2.2.1 Whilst there are other parking facilities in the town, current provision within the study area is met by the following car parks:

- Hillsboro Place – a surfaced car park on the eastern edge of the town centre which also serves the adjacent Health Centre;
- Salt Lake – an open area in private control and having a part gravel/ part grass surface. It provides the main capacity for seasonal peak parking;
- Eastern Promenade – a wide single carriageway road to the west of Sandy bay that accommodates parallel parking on both sides;
- Cosy Corner – adjacent to the harbour at the junction of the Esplanade and Eastern Promenade. It has a small capacity for sea front/promenade parking; and
- Mackworth Road – parking facility at its southern end; adjacent to the eastern boundary of the fun fair.
- West Drive - on highway parking

2.2.2 The Planning Guidance envisages that the major parking facility at Porthcawl Waterfront will be in the commercial core, adjacent to the proposed superstore. The Eastern Promenade, will be re-constructed with a lower parking capacity than at present, some being lost to provide appropriate coach drop off/pick up facilities. Cosy Corner will remain in its current form. The sites of the Salt Lake and Mackworth Road car parks will be redeveloped whilst some additional facilities will be provided along the seafront and at Foreshore Park.

2.2.3 It is accepted that there is a shortfall in the provision needed to accommodate the seasonal peaks in parking demand. Table 2.1 below gives a comparison of the existing and future parking capacities and identifies the shortfall that will need to be provided outside the regeneration area.

Table 2.1: Comparison of Existing and Future Parking Capacity

CAR PARK	CURRENT			FUTURE			
	Capacity	Average Demand	Peak Demand	Proposed Capacity	Average Demand	Peak Demand	Shortfall
Hillsboro	340	175	340	-	-	-	
Salt Lake	1330*	100	1000**	-	-	-	
Eastern Promenade/Cosy Corner	165	70	165	63	63	63	
Mackworth Road	100	20	100	-	-	-	
West Drive	170	100	170	170	100	170	
New Superstore	-	-	-	350	425	350	
New Town Centre Car Park	-	-	-	340		340	
Seafront	-	-	-	35	25	35	
Foreshore Park	-	-	-	51	33	51	
Existing Leisure Demand	-	-	-	-	100	1000	1000
New Leisure Demand	-	-	-	-	100***	250***	250
TOTAL	2105	465	1775	1009	846	2259	1250

* The estimated capacity of Salt Lake is 1773 spaces if it were re-surfaced and formally marked. This has been reduced by 25% to 1330 spaces to account for ad hoc parking due to non-marking of spaces and gravel/grass surface.

** Current peak use that occurs on up to 10 days/year suggested from survey by BCBC and data from site owners.

*** Assumes that the new leisure facility will increase current leisure element by 100% and 25% during average weekdays and seasonal peaks respectively. These figures will need to be revisited when greater detail of the precise nature of the proposed tourist use is available.

2.2.4 The table shows that at times of average demand there is likely to be an excess of supply when compared to demand of 16%. An excess of 10% is usually considered to be a reasonable operating reserve which avoids excess circulation and waiting for spare spaces to become available.

2.2.5 At peak times and allowing a generous increase of 25% visitor parking over and above current demand, there would be a shortfall of 1250 spaces which would need to be provided in temporary facilities outside the regeneration area.

3 Appraisal Assumptions

3.1 Introduction

3.1.1 This section defines the assumptions and methodology used to assess the means of access between the temporary visitor parking areas (at peak periods) and the seafront and the operating costs of providing a shuttle bus service to make that trip.

3.2 Assumptions

Generic

3.2.1 **Destination:** the destination of these trips is assumed to be the junction of the Eastern and Sandy Bay Promenades. This is considered to be the most convenient and appropriate point of arrival for the majority of day visitors and tourists.

Walking

3.2.2 **Average walking speed:** 4 kph. This is based on typical walking speeds with a slight factoring down to account for accompanying small children and carrying typical sea-side possessions.

3.2.3 **Walking threshold:** 20 minutes or less is within most people's walking threshold; 21-29 minutes is borderline; whilst more than 30 minutes is beyond the threshold for most. These assumptions based on the limited data that is available on this topic

3.2.4 **Maximum walking distance:** 150 metres between parked vehicle and bus stop.

Shuttle bus

3.2.5 **Average vehicle operating speed:** is considered to be 20kph (inclusive of stops). This is based on typical average speeds for buses in urban areas. In this situation it may be lower because many passengers will be carrying belongings and looking after children, and the roads may be congested or there may be conflicting parking manoeuvres. However, other factors could facilitate a quicker average speed such. These could include tidal flow, no fare collection and highway arrangements that do not require buses to re-enter the flow of traffic each time they stop.

3.2.6 **Bus Frequency:** a 10 minute frequency (i.e. 10 minute intervals between each bus service at any particular bus stop on route). However, this will be increased up to 13 minute intervals where this facilitates the reduction in number of vehicles required.

3.2.7 **Days of operation:** 49 days per year based on the following:

- Easter, Spring and May Bank Holiday weekends 7 days
- Summer holiday period July and August 42 days

This is considered to be particularly generous but the cost estimates will, as a consequence, be robust. All anecdotal evidence suggests that 10 – 12 days per year are more likely.

- 3.2.8 **Hours of operation:** 10 hour day approximating 9am to 7pm (may need to vary between April and September or extend into evening depending on site attractions)
- 3.2.9 **Minimum number of drivers:** 2 - this provides cover for driver breaks and is only relevant to total costs and service frequency assumptions.
- 3.2.10 **The vehicle:** a new low floor single deck vehicle. It is considered that ease of access, inclusiveness and attractiveness will be important to the Council.
- 3.2.11 **Operator:** the service would be contracted from a local bus operator, and there will be the ability for the contract to operate for a limited time period each year.
- 3.2.12 **Cost per vehicle:** £200 per day (10 hours) including drivers and fuel. Conservative estimate based on high quality vehicle. Vehicles and drivers are likely to be available as peak demand being during the working week and outside school holidays.
- 3.2.13 **Contract type:** Guaranteed cost service as typical for Park and Ride facilities. There will be no fare revenue as earnings will come from parking charges.

3.3 *Methodology*

Mode of travel between car park and Eastern Promenade

- 3.3.1 The approach to determining appropriate means of access to the Eastern Promenade involved the following factors:

- Maximum and minimum walking distance from parking area to Eastern Promenade;
- Distance from parking area to Eastern Promenade by bus;
- Maximum wait for bus;
- Maximum walking distance from parking space to bus stop;
- Journey time threshold assumptions for walking;
- Average walking speed;
- Average bus speed; and
- Maximum and minimum journey times by bus and foot

- 3.3.2 The journey time calculation is as follows:

$$\text{Journey Time} = \text{Distance (metres)} / \text{Average Speed (metres/second)}$$

However, journey time additionally incurs 2.5 minute walk time for 150 metre walk to bus stop + 10 minutes representing maximum waiting time for 10 minute service frequency.

Operating Costs

3.3.3 The approach to calculating total annual operating costs is based on the following key factors:

- Distance of round - trip on bus route
- Journey time of round-trip
- Daily contract cost per vehicle (including driver, fuel etc)
- Number of buses required for operation at required frequency
- Cost per day
- Total days operation.

3.3.4 Table 4.8 shows the calculation of total annual cost for operating the bus service on the basis of the above assumptions between each identified visitor parking locations and the site.

3.3.5 Using the journey time calculation the number of buses is determined based on the journey time of completing the bus route from the car park to the site and back. If the journey time is 10 minutes then the vehicle requirement is 1. If the journey time is 20 minutes, vehicle requirement is 2 and so on.

3.4 Sensitivity analysis

Mode of travel between car park and Eastern Promenade

3.4.1 There is significant sensitivity to access requirements and likely preference in relation to the following variables:

- Average speed assumptions (walking and bus)
- Service level requirements in relation to frequency, and public awareness of this
- Propensity to walk rather than wait for the shuttle (dependent on many factors including quality of walking route, reliability of bus service, amount of possessions to carry etc).

Operating Costs

3.4.2 There is significant sensitivity to costs in relation to the following:

- Average speed assumption
- Service level requirements in relation to frequency.

3.4.3 If average speed turns out to be 28kph or above, the Newton Nottage, Boulevard de St. Sebastian sur Loire and Heol-y-Goedwig sites could be served with a single vehicle at a 10 minute service frequency. In addition, Stormy Down could then be operating a 9 minute service frequency with three vehicles.

3.4.4 If average speed is assumed at 15kph, the Newton Nottage, Boulevard de St. Sebastian sur Loire and Heol-y-Goedwig sites would require two vehicles to operate within a 10 minute service frequency. The Stormy Down site would then require a fourth vehicle to operate the same level of service.

3.4.5 If a service level frequency of 15 minutes was accepted, the Newton, Boulevard de St. Sebastian sur Loire, Rest Bay and Heol-y-Goedwig sites could be comfortably served with a single vehicle operating at an average speed of 20kph.

Capital Costs

3.4.6

An indicative estimate of likely capital costs has been included in the assessment, with the exception of land costs.

4 Appraisal

4.1 Introduction

- 4.1.1 This chapter considers the type and quality of provision of facilities that might be appropriate to provide the additional parking capacity, needed at seasonal peak periods. It identifies the number of spaces, that could be provided at each site and the parking management systems that may be required.
- 4.1.2 The following sections describe the sites and the main issues associated with use of each them. A table showing the comparison of the features of each site is included at the end of the chapter.
- 4.1.3 Some aspects of the assessments are based on travel to a destination at the junction of the Eastern and Sandy Bay Promenades. This has been assumed as a suitable point for a shuttle bus to set down and pick up passengers and the most popular or convenient point of arrival for those visiting the town for the day.
- 4.1.4 The sites considered in the comparative assessment are:
- Boulevard de St. Sebastian sur Loire;
 - Newton Nottage – north east of roundabout;
 - Newton Nottage –south west of roundabout;
 - Heol-y-Goedwig;
 - Rest Bay;
 - Newton beach;
 - Stormy Down; and
 - Sandy Bay – Interim Site.

4.2 *Boulevard de St. Sebastian sur Loire.*

- 4.2.1 The potential facility is the A4061 Boulevard de St. Sebastian sur Loire between the Newton Nottage roundabout and the Boulevard de St. Sebastian sur Loire/Lias Road roundabout.
- 4.2.2 This section of route is a dual carriageway and in order to facilitate use as a parking area the left lane of each carriageway would be converted for use for kerbside parallel parking. To restrict use of the carriageway a series of build-outs are proposed that where appropriate will also form bus stopping points as shown on Figure 4.1. Due to the longitudinal form of the parking facility and to regulate its use the site could be split into sections with four appearing to be an optimal number as follows:
- **Section A** – a length from The Boulevard de St. Sebastian sur Loire/Lias Road roundabout northwards for a distance of approximately 160m would provide approximately 25 parking spaces per carriageway. The distance to the western end of Sandy Bay varies from 330m to 490m

- **Section B** – from Section A northwards for a distance of 300m, providing approximately 47 spaces per carriageway. The distance to the western end of Sandy Bay varies from 490m to 790m
- **Section C** – from the northern end of Section B northwards for a distance of 300m, providing approximately 48 spaces per carriageway. The distance to the western end of Sandy Bay varies from 790m to 1090m.
- **Section D** – from the northern boundary of section C northwards for a distance of 275m would provide approximately 45 parking spaces per carriageway. The distance to the western end of Sandy Bay varies between 1090m and 1365m.

4.2.3 In total the four sections would provide 334 parking spaces.

4.2.4 Should the need for a shuttle bus be identified, bus stops located at the boundary of each section would result in a maximum walking distance to any stop of 150m, approximately 2.5 minutes walk time.

Means of access to the site

4.2.5 Journey time analysis suggests that means by which people would travel to the site from Boulevard de St. Sebastian sur Loire will depend on:

- The availability of a shuttle bus;
- The frequency of the service (analysis based on 10 minute frequency); and
- Parking position along the route.

4.2.6 Table 4.1 shows the maximum and minimum journey times to the site from each section of Boulevard de St. Sebastian sur Loire, by bus and foot:

Table 4.1
Journey time comparison (Boulevard de St. Sebastian sur Loire)

Journey Time	Boulevard de St. Sebastian sur Loire			
	Section A (mins)	Section B (mins)	Section C (mins)	Section D (mins)
Bus - Minimum	1	2	3	4
Bus - Maximum	14	15	16	17
Foot - Minimum	5	7	12	16
Foot - Maximum	7	12	16	20

4.2.7 Minimum journey times are significantly lower by bus but these are based on the fortunate occurrence of parking right by a bus stop and getting straight out of the car onto the bus. The difference between minimum and maximum walking times is far less than those for bus, depending purely on the parking position within the section of the route.

4.2.8 From Sections A and B the maximum journey time by foot is less than that by bus, while for Section C the times are the same. From Section D the maximum journey time is higher by foot than by bus, but still within the 20 minute threshold.

- 4.2.9 The conclusion is that a linear parking facility on Boulevard de St. Sebastian sur Loire could operate without the need for a bus service and that, even if a service was provided, the majority of those parking on the route may still choose to walk based purely on journey time analysis. Clearly there are other factors to take into account such as what people are carrying, the prevailing weather conditions, and how these affect their propensity to wait rather than walk. These factors are important but outside the scope of this study.
- 4.2.10 The northern part of the Boulevard de St. Sebastian sur Loire is within a Landscape Conservation Area according to the proposals maps of Bridgend County Borough UDP (PDF Southern Porthcawl). This area is likely to refer to the Pant-yr-iarde Landscape Conservation Area.
- 4.2.11 Use of the parking facility could be implemented sequentially with the use of a suitable system of signing. However such a system would require a monitoring capability to oversee use. Essential to safe operation will be that use of the nearside lane by through traffic is prevented. Regular build-outs and marking of parking spaces should convey the necessary information to motorists. Access to parking spaces and use of the bus stops will impede through traffic but will also act as traffic calming thus moderating vehicle speeds.
- 4.2.12 A potential disadvantage of the proposal is that motorists may circulate in the hope of finding the nearest available space to their destination rather than making use of the first available space that they find. This could lead to unnecessary traffic movement around the local network.
- 4.2.13 The estimated costs of implementing these works as a complete facility are £496,000. Should the carriageway be converted for parking section by section as described above the corresponding costs are Section A - £117,500; Sections B and C - £141,000 each and Section D - £126,000; giving a total cost of £525,500.

Operational costs

- 4.2.14 The operational costs of providing a shuttle service between the parking on Boulevard de St. Sebastian sur Loire and the Eastern Promenade is £9,800 per annum. This is based on a single vehicle operation and a compromise of service frequency to 13 minute intervals. In order to get the target 10 minute shuttle frequency, the operational cost doubles to £19,600 with the requirement of a second vehicle. The service frequency would then be every 6.5 minutes. Demand flow is outside the scope of this study but it is considered doubtful that this level of service could be justified.

4.3 *Newton Nottage – north east of roundabout*

- 4.3.1 The site is comprised of a series of grassed fields, surrounded by trees, to the north-east of the roundabout of the A4229 and the A4106 and is easily accessible from all directions. The site is approximately 1600m by bus from the western end of Sandy Bay, with a walking route that is approximately 1400m in length. The site covers a total area of approximately 32,400m² with the possibility of expansion into an additional area to the north if necessary. The site as proposed has a potential parking capacity in the region of 685 vehicles.

Means of access to the site

4.3.2 Journey time analysis suggests that how people would to travel to the site from Newton Nottage depends on the following:

- The availability of a shuttle bus
- The frequency of the service (analysis based on 10 minute frequency)

4.3.3 The table below shows the maximum and minimum journey times to the site from Newton Nottage – north east, by bus and foot:

Table 4.2 – Journey time comparison (Newton North East)

Journey Time	Journey time (mins)
Bus minimum	5
Bus maximum	17
Foot minimum	21
Foot maximum	25

4.3.4 It is considered that if a shuttle service was provided from Newton Nottage to the site at a 10 minute frequency, most people would use it rather than walk. If the parking was provided without a shuttle service, in the absence of nearer parking alternatives, people may be willing to walk to the Eastern Promenade.

4.3.5 The site is not in the ownership of BCBC. Previous consideration of a facility in this location considered only the field adjacent to the A4106/ A4229 Newton Nottage roundabout, which provided approximately 150 spaces. As this is insufficient to satisfy potential demand an increased area that includes the field to the north has been considered, and this gives a total area of approximately 32,400m². Access to the area can be gained from the roundabout, as shown on Figure 4.2, and information regarding availability and operation could be provided by a system of variable message and static signing.

4.3.6 If a shuttle bus is not provided to transport visitors to the town centre and beach, pedestrians would need to cross A4106 Newton Nottage Road to access a new footpath to be provided alongside Boulevard de St Sebastian sur Loire.

4.3.7 The site is within a Landscape Conservation Area according to the proposals maps of Bridgend County Borough UDP (PDF Newton Nottage). This area is likely to refer to the Pant-yr-iarde Landscape Conservation Area.

4.3.8 It has been assumed that beyond provision of a surfaced and kerbed access to the site other works would be limited to preparation of the area by re-grading the surface to remove peaks and troughs. Some additional and revised signing will be required to advise motorists of the operation of the site. The estimated costs of these works are £171,500.

Operational costs

4.3.9 The operational costs of providing a shuttle service between the parking at Newton Nottage and the site is £9,800 per annum. This is based on a single vehicle operation and a compromise of service frequency to 13 minute intervals. In order to get the target 10 minute shuttle frequency, the operational cost doubles to £19,600 with the requirement of a second vehicle. The service frequency would then be every 6.5 minutes. Demand flow is outside the scope of this study but it is considered doubtful that this level of service could be justified.

4.4 *Newton Nottage –south west of roundabout*

4.4.1 The site is a single grass field to the south west of the roundabout of the A4229 and A4106 and is easily accessible from all directions. The site is approximately 1550m by bus from the western end of Sandy Bay, with a walking route of around 1350m. The site covers an area of approximately 20,000m² providing for a capacity of approximately 490 vehicles on an informal arrangement.

Means of access to the site

4.4.2 Journey time analysis suggests that how people would to travel to the site from Newton Nottage depends on the following:

- The availability of a shuttle bus
- The frequency of the service (analysis based on 10 minute frequency)

4.4.3 The table below shows the maximum and minimum journey times to the site from Newton Nottage – south west, by bus and foot:

Table 4.3 – Journey time comparison (Newton South West)

	Journey time (mins)
Bus minimum	5
Bus maximum	18
Walking minimum	18
Walking maximum	23

4.4.4 It is considered that if the shuttle service was provided from Newton Nottage to the site at a 10 minute frequency, most people would use it rather than walk. However, if the parking was provided without the shuttle service, in the absence of nearer parking alternatives, people may be willing to walk to the site from Newton Nottage.

4.4.5 Access to the site for both visitors and, if provided, a shuttle bus service is from the A4106/A4229 Newton Nottage roundabout. An indicative layout is shown on Figure 4.3. Pedestrian access to the site could be via a footpath link through Heol-y-Goedwig to Northways and Eastern Promenade, which would require a crossing facility at the northern end of Boulevard de St Sebastian sur Loire. Some additional and revised signing will be required to advise motorists of the operation of the site. The estimated cost of establishing this facility is £160,800.

4.4.6 This site is located within the conservation area of Nottage Court., which is identified as a Landscape Conservation Area in the Bridgend County Borough Unitary Development Plan. (See Newton Nottage PDF). It is not in the ownership of BCBC.

Operational costs

4.4.7 The operational costs of providing a shuttle service between the parking at Newton Nottage and the site is £9,800 per annum. This is based on a single vehicle operation and a compromise of service frequency to 13 minute intervals. In order to get the target 10 minute shuttle frequency, the operational cost doubles to £19,600 with the requirement of a second vehicle. The service frequency would then be every 6.5 minutes. Demand flow analysis is outside the scope of this study but it is considered doubtful that this level of service could be justified.

4.5***Heol-y-Goedwig***

4.5.1

The site is directly to the south east of the roundabout of the Newton Nottage roundabout junction of the A4229 and the A4106. It is currently used as a scenic park incorporating a lake and children's play area. The area under consideration is 1400m by bus from the western end of Sandy Bay beach, which is a walking distance of approximately 1300m. The site covers an area of 15077m², which has a potential capacity of 390 vehicles. A possible expansion of the area to include that around the children's play area would provide for an additional 470 vehicles on an informal facility.

Means of access to the site

4.5.2

Journey time analysis suggests that how people would to travel to the site from Heol-y-Goedwig depends on the following:

- The availability of a shuttle bus
- The frequency of the service (analysis based on 10 minute frequency)

4.5.3

The table below shows the maximum and minimum journey times to the site from Heol-y-Goedwig, by bus and foot:

Table 4.4 – Journey time comparison (Heol-y-Goedwig)

	Journey time (mins)
Bus minimum	5
Bus maximum	17
Walking minimum	15
Walking maximum	20

4.5.4 It is considered that if shuttle service was provided from Heol-y-Goedwig to the site at a 10 minute frequency, most people would use it rather than walk. However, if the parking was provided without the shuttle service, in the absence of nearer parking alternatives, people may be willing to walk to the site from Heol-y-Goedwig.

4.5.5 Access to the facility can be gained from the south eastern side of the Newton Nottage roundabout. An indicative access arrangement that includes access for a shuttle bus service is shown on Figure 4.4. Pedestrian access to the beach area is available via the existing footpath links past the lake to Northways and Eastern Promenade. Similar signing arrangements to those for the other possible sites that are adjacent to the roundabout. The estimated cost of providing these facilities are £78,500 for the area adjacent to the roundabout with a further sum of £56,200 required to provide the additional area.

4.5.6 The site is not in the ownership of BCBC and is within a Landscape Conservation Area according to the proposals maps of Bridgend County Borough UDP (see PDF Southern Porthcawl). This area is likely to refer to the Pant-yr-iards Landscape Conservation Area.

Operational costs

4.5.7 The operational costs of providing a shuttle service between the parking at Heol-y-Goedwig and the site is £9,800 per annum. This is based on a single vehicle operation and a compromise of service frequency to 13 minute intervals. In order to get the target 10 minute shuttle frequency, the operational cost doubles to £19,600 with the requirement of a second vehicle. The service frequency would then be every 6.5 minutes. Demand flow analysis is outside the scope of this study but it is considered doubtful that this level of service could be justified.

4.6 Rest Bay

4.6.1 The site is situated along the coastline approximately 1.7km to the northwest of Porthcawl town centre and is comprised of an existing gravel car park, a sports field and part of a surrounding grass field. The sports field is currently used for peak visitor use and there is the potential to increase the capacity with use of the adjoining fields to the east, an additional area of approximately 22,300m². The most convenient bus route to the assumed destination point at Sandy Bay is approximately 3.1km long and runs along the coastline. There are two possible walking routes to site; the shortest, which involves walking through the town centre, is 2.74km

long, whereas a longer, but more attractive route follows the coastline via Cosy Corner and on to Sandy Bay is 3.25km long. The site covers a total area of 72,700m² that could accommodate approximately 1575 vehicles in its current format with the majority of the area subject to ad hoc parking. The currently used areas are estimated to accommodate 1085 vehicles; the additional fields therefore able to provide space for an additional 490 vehicles set out either as an additional sports pitch or retained as agricultural grazing.

Means of access to the site

4.6.2 The table below shows the maximum and minimum journey times to the site from Rest Bay, by bus and foot:

Table 4.5 – Journey time comparison (Rest Bay)

	Journey time (mins)
Bus minimum	8
Bus maximum	20
Walking minimum	41
Walking maximum	46

4.6.3 It is considered that Rest Bay is beyond the walking threshold. A shuttle service would therefore be required to provide access to and from the site.

4.6.4 Current access to the car park from Newton Nottage is via Fulmar Road and Mallard Way to the coast road. Use of an additional parking area will significantly increase traffic along Fulmar Road, which is the main access route to the residential area on its north side and has residential frontages on both sides. Some preparation of the additional area proposed for parking use has been assumed, although only a limited amount of improvement works to the entry and exit tracks is envisaged to accommodate a shuttle bus service. The proposed access arrangements are indicated on Figure 4.5. Site access information is assumed would be imparted by a combination of variable message and fixed signing. The estimated cost of extending the existing area that is used for parking and providing an enhanced system of signing is £77,500

4.6.5 This site is not within a designated area; however it borders an Amenity Open Space. (See PDF Rest Bay)

Operational costs

4.6.6 The operational costs of providing a shuttle service between the parking at Rest Bay and the site is £19,600 per annum. This is based on a two vehicle operation at a 10 minute service frequency.

4.7 Newton beach

4.7.1 The site is approximately 2km east of Porthcawl town centre and is currently an area of wasteland. It is understood that BCBC are currently

progressing proposals to develop enhance the area, which include for the provision of a formal car park. There are two possible walking routes to the site; the first, which is substantially shorter, cuts through the Trecco Bay caravan park and the eastern section of the proposed development area, a distance of approximately 1.62km. The second is a more attractive route along the coastline via Rhych Point and is approximately 2.24km long. Any shuttle buses serving the site would have a difficult, indirect route along New Road with a distance of 3.3km. The site covers an area of 9,500m² and has the capability of providing for 290 vehicles as a formal car park. Means of access to the site

4.7.2 Journey time analysis suggests that how people would to travel to the site from Newton Beach depends on the following:

- The availability of a shuttle bus
- The frequency of the service (analysis based on 10 minute frequency)

4.7.3 The table below shows the maximum and minimum journey times to the site from Newton Beach, by bus and foot:

Table 4.6 – Journey time comparison (Newton Beach)

	Journey time (mins)
Bus minimum	9
Bus maximum	21
Walking minimum	24
Walking maximum	27

4.7.4 It is considered that if shuttle service was provided from Newton Beach to the site at a 10 minute frequency, most people would use it rather than walk. The route that a shuttle bus would take is in part that which visitor traffic will use, therefore at times of peak use the desired 10 minute frequency of the service may be compromised. However, if the parking was provided without the shuttle service, in the absence of nearer parking alternatives, some people may be willing to walk to the town from Newton Beach.

4.7.5 The suggested site is located at the southern end of Beach Road, which runs along the eastern boundary of Trecco Bay Caravan Park. Access to Beach Road for visitor traffic to Porthcawl would be via the A4106 Newton Nottage Road to Bridgend Road roundabout and then via Bridgend Road and Clevis Hill to Beach Road. Clevis Hill and Beach Road are both fronted by residential properties and would suffer an increase in traffic during operation of the car park. The site would require the construction of a suitable access and bus turning/pick up facility as shown on Figure 4.6. It is estimated that a cost of £450,000 is required for a fully developed car park.

4.7.6 This site is within the Glamorgan Heritage Coastline alongside the SSSI of Newton Burrows, shown in the Bridgend County Borough UDP (see Southern Porthcawl).

Operational costs

4.7.7 The operational costs of providing a shuttle service between the parking at Newton Beach and the site is £19,600 per annum. This is based on a two vehicle operation at an 8.5 minute service frequency. Alternatively, service levels could be compromised to operate the shuttle service with a single vehicle. Service frequency would then be 17 minutes and operating costs halved to £9,800 per annum.

4.8 Stormy Down

4.8.1 The site, which is approximately 8km north east of Porthcawl Town Centre, is currently used as an airfield. This distance makes walking from the site an unlikely proposition; therefore a shuttle bus service would be required although the route any bus would need to take is long and convoluted. The site covers an area of 198,246m², which is sufficient space to accommodate over 5000 vehicles. However, consideration of an area sufficient to cater for the required level of additional parking only has been considered.

Means of access to the site

4.8.2 The table below shows the maximum and minimum journey times to the site from Stormy Down, by bus and foot:

Table 4.7 – Journey time comparison (Stormy Down)

	Journey time (mins)
Bus minimum	17 minutes
Bus maximum	30 minutes
Walking minimum	1 hour 21 minutes
Walking maximum	1 hour 25 minutes

4.8.3 It is considered that Stormy Down is way beyond the walking journey time threshold. A shuttle service would therefore be required to provide access to and from the site.

4.8.4 The site suggested for use is close to the A48, approximately 2km from the M4 motorway junction 37. Visitor traffic would be required to leave the M4 to travel north on the A4229 to access the A48. The route then crosses the M4 before turning right within a dual carriageway section on to an unclassified lane that leads to the site. The route necessary for a shuttle bus service is the reverse of the foregoing to M4 junction 37 then via the A4229 to Newton Nottage roundabout and the A4106 Boulevard de St Sebastian sur Loire to the town and beach area. The estimated cost of £135,500 includes for the preparation of an area of the site sufficient to provide the parking capacity required and a bus turning area as shown on Figure 3.7, together with variable message and static signing to advise of the use of the site.

4.8.5 Although this site is not within any designated area, a review of the UDP has highlighted that the site includes a Future Mineral Development Safeguarded Area (M4) an Area of Research (M5) and a Mineral Plan Retention of Land (M12).

Operational costs

4.8.6 The operational costs of providing a shuttle service between the parking at Stormy Down and the site is £29,400 per annum. This is based on a three vehicle operation at just over a 10 minute service frequency.

4.9***Sandy Bay – Interim Site***

4.9.1

The former Sandy Bay caravan site forms part of the 7 Bays Project - Porthcawl Waterfront. It is currently disused and has a system of access routes that served its former use. The potential exists to utilise the site for some level of visitor parking during the early stages of the proposed development. The site gives easy walking access to the beach and town centre and could provide for significant parking in the short term.

4.9.2

As the site could only be used as interim provision prior to the development of the eastern regeneration area it has not been included in the comparative assessment.

Table 4.8 Comparison of Sites

Comparison Criteria	Comparator	Boulevard de San Sebastian sur Loire	Newton Nottage - North East	Newton Nottage - South West	Heol-y-Goedwig	Rest Bay	Newton Beach	Stormy Down
Location	Description (e.g. adjacent to Sandy Road)	Along main route to Eastern Promenade	North East of A4229/A4106 Roundabout	South west of A4229/A4106 Roundabout	South East of A4229/A4106 Roundabout	Western edge of Nottage	East of Trecco Bay Caravan Park	8km North East of Porthcawl town centre
Current land usage		Dual carriageway	Grass field	Grass field	Scenic park	car park/playing field/grass field	wasteland	Temporary Use - Car Boot Sales Sunday Market Go-Karting
Size of site	m ²	19677m ²	8294m ²	20,003m ²	Section A - 15077m ² Section B - 22448m ² Total - 37525m ²	50401m ²	9,500m ²	38,250m ²
Number of car parking spaces - formal	no of spaces	334	915	650	Section A - 480 Section B - 625 Total - 1105	650	290	-
Number of car parking spaces - informal	no of spaces	334	685	490	Section A - 360 Section B - 470 Total - 830	490	185	1250
Suitability for coach parking	Yes/No	No	Yes	Yes	Yes	Yes	No	Yes
Maximum distance from car park to trip destination on foot	km	1407m	1691m	1563m	1354m	3086m	1783m	5390m
Minimum distance from car park to trip destination on foot	km	540m	1367m	1193m	975m	2740m (3250m along coast)	1623m (2235m along coast)	5750m
Length of complete bus route	m	4250m	4450m	4400m	4350m	6500m	5700m	18000m
Minimum Journey time by bus	Mins	1	5	5	5	8	9	17

Table 4.8 Comparison of Sites

Comparison Criteria	Comparator	Boulevard de San Sebastian sur Loire	Newton Nottage - North East	Newton Nottage - South West	Heol-y-Goedwig	Rest Bay	Newton Beach	Stormy Down
Maximum Journey time by bus	Mins	4	17	18	17	20	21	30
Minimum journey time by foot*	Mins	5	21	18	15	41	24	unrealistic
Maximum journey time by foot*	Mins	20	25	23	20	46	27	unrealistic
Requirement of shuttle bus	yes/no	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Distance from car park to trip destination by bus	km	446m to 1497m	1628m	1731m	1660m	2553m	2867m	TBC
Vehicular access to site - Highway Engineering	Description (e.g. via Sandy Road)	From Newton Nottage Roundabout	From Newton Nottage Roundabout	From Newton Nottage Roundabout	From Newton Nottage Roundabout	Via Newton Nottage Road West, Fulmar Rd, Mallard Way	Via Newton Nottage Road East, Bridgend Road, Clevis Crescent, Rhych Road	M4 Junction 37, A4229, A48 to Mount Pleasant Lane
Vehicular access to site - impact on (residential streets)		None	None	None	None	Increased	Increased	None
Capital Costs	£	£496,000	£171,500	£160,800	Section A - £78,500 Section B - £56,000 Total - £134,500	£77,500	£450,000	£196,000
Operating costs	£/annum	£9,800 - single vehicle £19,600 - two vehicles	£9,800 - single vehicle £19,600 - two vehicles	£9,800 - single vehicle £19,600 - two vehicles	£9,800 - single vehicle £19,600 - two vehicles	£19,600 - two vehicles	£19,600 - two vehicles	£29,400 - three vehicles
Ownership		BCBC	Private	Private	Section A – Private Section B - BCBC	BCBC	BCBC	BCBC
Environmental Impact	SSSI or not?	North Section part of L'scape Conservation Area	Landscape Conservation Area	Landscape Conservation Area	Landscape Conservation Area	Adjacent to Amenity Open Space	Glamorgan Heritage Coast	Mineral safeguarded area

5 Conclusion

- 5.1.1 The assessment undertaken in this study provides a robust analysis of the quantum of seasonal peak parking that needs to be provided outside the Porthcawl Waterfront area. It shows that good options are available to provide that parking to meet the needs of the town. Finally it provides an objective assessment of the options which can inform Council decisions on which schemes should be taken forward to implementation.
- 5.1.2 It is understood that BCBC are progressing proposals to provide a new formal car park at Newton Beach that will provide 290 of the required shortfall parking spaces. If Newton Beach is upgraded to become more of an attraction in its own right, it has been assumed that only 145 of those spaces would form part of the required peak visitor parking provision.
- 5.1.3 With the exception of Stormy Down none of the remaining potential facilities are able to provide all of the necessary parking capacity individually. However, several of the sites in combination could provide the 1105 spaces required as shown in the following tables. The combinations assume that the whole length of Boulevard de St Sebastian sur Loire would be made available for parking:

Table 5.1

SITES	SPACES
Boulevard de St Sebastian sur Loire + Heol-y-Goedwig	1164
Boulevard de St Sebastian sur Loire + Newton Nottage South West + Heol-y-Goedwig Section A	1184
Newton Nottage North East + Newton Nottage South West	1175
Newton Nottage North East + Heol-y-Goedwig	1515
Newton Nottage South West + Heol-y-Goedwig	1320

Should use of an expanded facility at Rest Bay be progressed then the following combinations would provide the capacity required:

Table 5.2

SITES	SPACES
Rest Bay + Boulevard de St Sebastian sur Loire + Heol-y-Goedwig Section A	1184
Rest Bay + Boulevard de St Sebastian sur Loire + Newton Nottage South West	1314
Rest Bay + Newton Nottage North East	1175
Rest Bay + Newton Nottage South West + Heol-y-Goedwig Section A	1340
Rest Bay + Heol-y-Goedwig B	960

Recommendation

The combinations suggested in Table 5.1 above have the advantage that they could be served by a single bus service, which would give an economy of operating costs without introducing additional traffic on to unsuitable routes. Provision of parking along Boulevard de St Sebastian sur Loire has the highest capital cost of all of the facilities due to the current lack of footway. Therefore it is recommended that a visitor parking facility based on a combination of the Newton Nottage North East, South West and Heol-y-Goedwig sites should be investigated further.