Transport Statement

in support of an application for Outline Planning by

Sunrise Renewables (Barry) Limited

under

the Town and Country Planning Act 1990



Transport Statement

1. Introduction

- 1.1 The Applicant, Sunrise Renewables (Barry) Limited, is developing a renewable energy plant based on an advanced conversion technology (ACT) at Woodham Road, Barry, CF63 4JE within the Port of Barry (the "Project"). The Applicant has retained UK Power Development Partners (UKPDP) to prepare the present report into changes to on-site access and traffic considerations external to the Project site.
- 1.2 The principle of establishing a wood fuelled power plant at the Project site was established by planning permission reference 2008/01203/FUL, as approved by appeal reference APP/Z6950/A/09/2114605 on 2nd July 2010 (the "2010 Permission").
- 1.3 With regard to principle of establishing a biomass powered renewable energy plant at the site it should be recognised that the site is located on an existing allocated industrial site which is well served by links to the primary road network. It should also be recognised that the levels of traffic generated by the original proposals are similar to or potentially less than the levels which would be expected if an equivalent business use such as warehousing and distribution were to become established at the site instead. This is having regard to the size of the site and its well-connected location in an industrial setting between the primary road network and a major port facility.
- 1.4 A comprehensive suite of traffic and access conditions was imposed under the 2010 Permission:
 - 15) No development shall take place until there has been submitted to and approved in writing by the local planning authority details of secure parking on site for bicycles. The bicycle parking spaces shall remain available for their designated use for as long as the development hereby permitted remains in existence.
 - 19) The measures incorporated into the Green Travel Plan accompanying the application shall be implemented when the development is brought into use and thereafter monitored and reviewed in accordance with the Green Travel Plan.
 - 20) Deliveries to the site, and all other external operations, shall not take place outside the hours of 07.00 to 19.00 Monday to Saturday and 08.00 to 16.00 on Sundays, Bank and Public Holidays."

This demonstrates the level of control available to the Local Planning Authority in seeking to ensure that the Project continues to comply fully with relevant planning policies and guidance regarding traffic and access issues.

1.5 This Transport Statement is being submitted as a consequence of the final choice on technologies for the Project and the requirement to effect such selection by resubmitting the planning application. It is appropriate therefore to assess the implications of this change in terms of highway and access considerations. In this regard it is to be considered an update of the Transport Assessment prepared for the purposes of the 2010 Permission, a copy of which is annexed to this report.

2. The Site

The application site is located on a vacant brownfield plot at David Davies Road, Port of Barry and forms part of a property owned by Associated British Ports. The site access (from David Davies Road) is unchanged relative to the 2010 Permission. The site will be occupied by the Applicant under the terms of a lease with the landowner, Associated British Ports.

3. Transport Assessment at the Site

Operational times and material volumes

- 3.1 The details of plant operation for the revised scheme will remain the same as for the previous approval. The plant will operate continuously in order to generate electricity with the exception of routine maintenance and other downtime. The following time limits will however continue to apply for the receipt of fuel and general access:
 - Weekdays 07 00 19 00;
 - Saturdays 07 00 19 00;

Sundays and Bank/Public holidays 08 00 - 16 00.

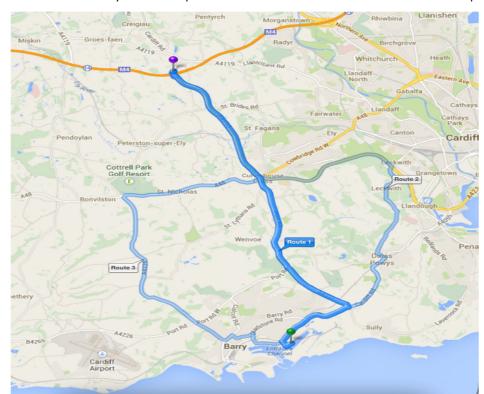
The entrance gates will be closed outside of these hours to prevent unauthorised access.

- 3.2 Output calculations/projections are based on:
 - delivery of waste wood at a frequency sufficient to enable the Plant to operate with a processing capacity of 72,000 dry tonnes of wood biomass;
 - 52 weeks' operation as a 24 hour process, subject to planned/unplanned outages (8,000 operational hours out of 8,760 hours per year.
 - Feedstock is expected to be delivered to site by road and/or sea according to source.
- 3.3 The proposed scheme continues to involve off-site pre-processing of wood waste by the feedstock supplier for delivery in a chipped state ready for processing by the plant. This in turn removes the need to store and remove large volumes of contamination such as ferrous, non-ferrous metals, plastics and fines on-site.
- 3.4 Ash is a by-product of the gasification process and the majority of it can be used for building products such as block manufacture. It will be removed from site in separate contained loads by the feedstock supplier for recycling. Backloading is not possible due to the need to avoid contamination of incoming feedstock. However, there is a substantial reduction (over 94%) between the weight of wood fuel processed and the weight of ash requiring removal from the site. Therefore the total amount of ash removed from the site per annum will not exceed 2200 tonnes.
- 3.5 The filter/abatement process designed to control emissions also produces a low volume of waste residues (fly-ash) which will be transported to specialist landfill in sealed containers by the feedstock supplier. The exact tonnage will depend on the abatement technology which the Environment Agency requires, but is unlikely to exceed 1500 tonnes per annum.

Internal parking, manoeuvring and surfaces

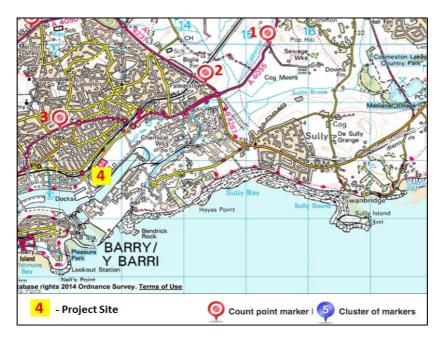
- 3.6 The Planning Statement submitted in support of the application for the 2010 Permission identified that when the plant became operational it would employ the equivalent of 8 full time employees and have a small number of visitors to the plant approximately 4 cars (8 movements through the working day). The revised scheme will increase the level of full time employees to 12, with 10 at site and two clerical workers located off site. This in turn equates to approximately 5 visits by staff cars (10 movements) through the working day and is not a material change.
- 3.7 Proposed internal parking provision would be agreed with the Local Planning Authority in accordance with the 2010 Permission: the current layout plan shows the number of formal spaces as remaining unchanged at 5 spaces plus 1 disabled space and 4 cycle parking spaces. It is considered that the proposed level of parking provision remains appropriate for the number of staff and visitors likely to be using the facility. This is given that staff can share vehicles in accordance with the requirements of the current planning permission.
- 3.8 Vehicular access to the outline site from David Davies Road is gained over the existing property. HGV movements at the site are illustrated in Appendix 1.5. The amendment to the layout of buildings and structures under the present application has necessitated some changes to internal circulation space within the wider site. Most notably, access to the wood fuel storage building would now be obtained from the western elevation rather than the eastern elevation as previously.
- 3.9 Access would be maintained to all areas of the site for fire-fighting purposes, but the main fuel store and feed hoppers would remain readily accessible, close to the entrance to the site. Detailed circulation and parking provisions within the site will also be controlled by the Health and Safety Executive.
- 3.10 Internal surfaces will continue to drain to a sealed sump or foul sewer. External surfaces will drain to a sustainable surface water system. Roof water will drain to a soakaway or be reused in the process.
- 3.11 Measures will be put in place to prevent any deposit of debris on the highway. There will be regular visual inspection and a road sweeper will be deployed as necessary, including during the construction phase.

4. Transport Assessment external to the Site



4.1 Deliveries of feedstock by road are expected to follow the course of Route 1 shown in the plan below:

- 4.2 In connection with the 2010 Permission, the Applicant commissioned a Transport Assessment and this is attached as Appendix 2.12. This incorporated traffic count analysis carried out by Vale of Glamorgan in 2008 and the principal conclusions were as follows:
 - 4.1 The application proposals are to import fuel by road between the hours of 07:00 and 22:00, which is a 15 hour day. 11 deliveries per 15 hour day would average out at one every 82 minutes. If the deliveries were restricted to the times during which the survey was carried out deliveries would average out at one every 65 minutes.
 - 4.2 The overall impact in terms of additional traffic is low and the increase in heavy vehicle traffic on the 3 routes presented in the table above range from 2.91 to an 8.08 % increase in movements. The 8.08% increase would not occur as most traffic arriving at the site would arrive from the Cardiff Road direction (route B) with the impact being an increase in HCVs of 3.8%. The increase in HCVs entering/leaving the Dock would be 4.69%. These figures are reduced further if buses are added to the heavy vehicle count.
 - 4.3 The majority of HCV traffic coming from Cardiff Road towards Millennium Way (route B) enters the Dock so 22 additional movements added to the existing 469 is not considered significant."
- 4.3 The present application envisages that the maximum average weekly deliveries by road will remain unchanged from the 2010 Permission at 77. However, the Applicant is considering restricting deliveries to weekdays in normal operation which will improving the impact for the local community at weekends so that the number of deliveries on a single weekday will increase from 11 to 15 or one every 48 minutes during site opening times of 07:00 to 19:00.
- 4.4 In 2013 the Vale of Glamorgan conducted updated traffic surveys including on the principal arterial roads coming in to Barry Docks (including the routing from the M4 along the A4231):



4.5 The 2013 survey results showed average daily traffic flows (single direction) for Heavy Goods Vehicles (HGVs) through the three counter points on the above map into the Barry Docks area (which encompass Cardiff Road) as follows:

Year	2 Axle (rigid HGV)	3 Axle (rigid HGV)	4/5 Axle (rigid HGV)	3/4 Axle (Artic HGV)	5 Axle (Artic HGV)	6+ Axle (Artic HGV)	All HGVs	All Traffic
1: A4050 t	/	,		1.00,		,		
2000	337	64	61	33	314	224	1033	14,627
2001	333	74	61	30	279	260	1037	15,093
2002	342	82	67	28	249	293	1061	15,493
2003	355	90	76	27	223	326	1097	15,979
2004	308	72	53	36	137	354	960	17,753
2005	310	70	56	32	121	379	968	17,722
2006	319	70	61	29	109	411	999	18,092
2007	311	93	86	25	104	401	1020	17,928
2008	302	102	89	23	98	422	1036	17,840
2009	318	58	49	38	89	181	733	16,114
2010	333	58	42	45	85	183	746	15,843
2011	327	62	47	34	83	190	743	15,802
2012	324	66	53	26	82	200	751	15,791
2013	258	48	45	36	163	148	698	15,589
2: A4231 t	o Cross-Comi	mon Rd						
2000	161	34	16	28	18	1	258	17,756
2001	248	30	37	12	38	23	388	16,068
2002	254	33	42	12	34	26	401	16,496
2003	264	36	48	12	30	29	419	17,032
2004	250	63	53	21	33	59	479	19,144
2005	250	61	56	19	29	63	478	19,099
2006	129	302	63	32	6	15	547	17,979
2007	131	307	70	28	6	16	558	18,079
2008	127	338	73	27	6	17	588	18,008
2009	118	340	71	25	6	17	577	17,889
2010	254	45	37	14	25	32	407	17,276
2011	249	48	41	11	25	33	407	17,230
2012	247	51	46	8	25	35	412	17,205

Year	2 Axle (rigid HGV)	3 Axle (rigid HGV)	4/5 Axle (rigid HGV)	3/4 Axle (Artic HGV)	5 Axle (Artic HGV)	6+ Axle (Artic HGV)	All HGVs	All Traffic		
2013	252	56	53	7	24	37	429	17,175		
3: Park Ave/Harbour Rd/St Nicholas Rd triangle to A4231										
2000	224	16	5	1	21	4	271	12,395		
2001	101	2	2	2	3	2	112	10,065		
2002	96	2	2	2	3	2	107	10,273		
2003	59	4	0	1	1	0	65	10,147		
2004	71	5	0	1	1	0	78	10,353		
2005	50	5	3	2	1	7	68	10,639		
2006	48	5	3	1	1	7	65	10,455		
2007	192	69	2	0	1	0	264	8,723		
2008	192	78	2	0	1	0	273	8,564		
2009	175	78	2	0	1	0	256	8,725		
2010	186	80	2	0	1	0	269	8,750		
2011	189	88	2	0	1	0	280	8,811		
2012	191	96	2	0	1	0	290	8,719		
2013	193	104	3	0	1	0	301	8,705		

- 4.6 The survey results above demonstrate that daily traffic flows through the Barry Docks area/Cardiff Road conduit remain significant relative to the 15 deliveries per day envisaged by the Applicant and UKPDP is of the view that the findings of the Planning inspector during the appeal prior to the 2010 Permission continue to be applicable today:
 - "16. The transport assessment submitted by the appellant (accepted by the Highway Authority) records around 469 HGV movements on Cardiff Road each day. The Highway Authority is satisfied that the road network has the capacity to accommodate the proposed development and no technical evidence is submitted to lead me to a different view. With regard to the impact of these additional movements on residents of Cardiff Road, I can put it no better than officer's did in their report to committee; 'The amount of traffic generated by this process, in comparison with the existing local and industrial traffic on the network (particularly Ffordd Y Milleniwm) is not considered to be great, and in this respect there are not considered to be any substantive reasons to object to the proposal on the grounds that there would be an unacceptable increase in noise or activities from lorry movements, not least because the site is located in an industrial area (notwithstanding proximity to dwellings) where such activities are not uncommon."
- 4.7 The preferred fuel supplier for the Project has confirmed that for road haulage it uses vehicles with a delivery load of 22 tonnes for all its deliveries. It is noted that the Transport Assessment supporting the application for the 2010 Permission and reviewed by the Highways Agency contemplated vehicle loads in the range 20 to 25 tonnes and therefore the current proposal, at 22 tonnes per load, is slightly less than the previous average and should not therefore have a material impact on the road infrastructure, wear and tear etc.
- 4.8 A suite of planning conditions covering highway and access matters was imposed under the 2010 Permission. This includes amongst other matters:
 - "15) No development shall take place until there has been submitted to and approved in writing by the local planning authority details of secure parking on site for bicycles. The bicycle parking spaces shall remain available for their designated use for as long as the development hereby permitted remains in existence.
 - 19) The measures incorporated into the Green Travel Plan accompanying the application shall be implemented when the development is brought into use and thereafter monitored and reviewed in accordance with the Green Travel Plan.
 - 20) Deliveries to the site, and all other external operations, shall not take place outside the hours of 07.00 to 19.00 Monday to Saturday and 08.00 to 16.00 on Sundays, Bank and Public Holidays."

If permission is granted for the current proposals it is assumed that these conditions would be reimposed.

5. Conclusions

- 5.1 The principle of establishing a waste wood powered renewable energy plant at the site has been established by the previous planning consent. The current proposals represent material amendments to the approved scheme but the application area and the nature of the process would remain essentially the same. The site is on allocated industrial land and can be accessed by an approach route from the primary road system which is appropriate for the type of traffic proposed. An alternative business / industrial use would have the potential to generate equivalent or greater traffic levels than that currently proposed.
- 6.2 There would be no increase in the maximum number of traffic movements relative to the 2010 Permission. Consequently, it is concluded that there would be no adverse impact on the local highway relative to the currently approved scheme.
- 6.3 There have been no new developments since the 2010 permission which would materially affect highway capacity on the access route to this allocated industrial site. Nor have there been any changes to the policy context relating to highway matters.
- 6.4 Detailed planning controls covering access and highway matters have been imposed on previous planning permissions and the applicant is happy for equivalent controls to be imposed with respect to the current amendment proposals. This would give an appropriate level of reassurance regarding the ability to manage traffic movements from the site in accordance with relevant national guidance and local policies relating to highway matters.

Attachment: Transport Assessment for the 2010 Permission

Sunrise Renewables Limited Reference: SRB-S

Transport Assessment Biomass Plant, Woodham Road, Barry

1.0 INTRODUCTION

- 1.1 Sunrise Renewables Limited ("Sunrise") has applied to the Vale of Glamorgan Council for planning consent to install a 9MW wood fuelled biomass plant, which will generate electricity from gas produced from reclaimed wood, for export to the national grid.
- 1.2 Eight new local employees will be based at the plant at Woodham Road, Barry Docks, within an established industrial area. The plant has adequate parking on site for vehicles and cycles and will potentially receive up to 20 HGV loads of fuel per working day, during the hours specified below, depending upon the payload of the delivery vehicles.
- 1.3 The site will operate on a 24 hours basis to produce electricity but it will only receive deliveries of fuel and visits from third parties and the public during the following hours:

Monday to Friday 07:00 - 22:00 Saturday 07:00 - 20:00 Sunday / Bank / Public Holidays 07:00 - 16:00

- 1.4 Facts relating to this document:
 - i. The plant has a maximum fuel requirement of 216 tonnes per day.
 - ii. The bulk density of waste wood varies from approximately 240 to 520 kg/m³.
 - iii. Vehicle payloads range from 30 to 96 m³.
 - iv. The maximum gross vehicle weight permitted is 44 tonnes for an articulated vehicle, with a maximum payload of 28 tonnes. 28 tonnes equates to a volume of between 53 and 116 m³.
 - v. The applicant favours the use of walking floor trailers to deliver fuel, which reduce double handling and maximise delivery payloads. The likely payload of the walking floor trailers, taking into account varying densities, is between 20 and 25 tonnes.
 - vi. The payload stated in the application statement used a worst case scenario of 15 tonnes per load but that has been superceded by the figures above. At 20 to 25 tonnes per load the likely deliveries to the plant will be between 9 and 11 loads per day.
 - vii. 11 loads per day as the daily HGV deliveries, generating a total of 22 movements is used in this document as a worst case scenario.
- 1.5 Some fuel will be delivered by boat but it is likely that there will be periods when dockside deliveries do not occur, leaving the figures above unchanged. When deliveries by boat take place it is likely that the delivery will contain 3 days' fuel. The number of loads quoted also include the removal of materials off site as return loads, to maximise haulage efficiency.

- 1.6 Vehicle movements during the construction phase are likely to be lower than the maximum stated above. The planning application states that 8 other vehicles (employees and visitors) will arrive at/depart from the site each day, generating 16 movements. The construction phase is expected to be less than this level of usage as HGV movements will be restricted to delivery of materials and some removal of soil from the site.
- 1.7 The site is located off Woodham Road, with vehicular access from David Davies Road. Access on to the surrounding road network is gained via Cory Way onto Millenium Way. The proposed site location is within the area known as the Waterfront Strip. It is served by the A4050, A 4055 and A4231 local roads, providing links to the national network and Cardiff. These roads are identified as the Southern Corridor and Airport/M4 Corridor in the Vale of Glamorgan Local Transport Plan.

2.0 POLICY SUMMARY

2.1 The Vale of Glamorgan Local Transport Plan

- 2.1.1 The Local Transport Plan (2001-2006) outlines various key aims of delivering safer, less congested and less polluted roads. It also states that the development of the local economy is crucial to the continuing vitality and viability of the communities in the Vale of Glamorgan. The threats and weaknesses identified for the area include peak congestion on key routes, high (growing) car ownership and low public transport patronage. The applicant is aiming to tackle private car usage and comply with other policies in the plan by implementing a Green Travel Plan for the site (Document SRB-T). This assessment primarily considers the impact of HGV movements. The applicant has also agreed to provide funding for sustainable transport as a planning obligation.
- 2.1.2 The application proposals are consistent with the parking policies in the plan.
- 2.1.3 Policy 23 supports the transport of freight by rail and sea, where appropriate, which is relevant to the applicant's expectation that 20% of fuel will be delivered by boat. Policy 26 states that the continued use and consolidation of port facilities at Barry for freight distribution will be favoured.

2.2 UDP

- 2.2.1 The Councils UDP makes numerous references to the need for developments to be located where there is good existing or potential public transport. A specific policy on Strategic Public Transport adds that "Land will be protected and provision made for the development of facilities for bus operations including between
 - Barry, Dinas Powys and Cardiff
 - Cardiff International Airport, Barry, Wenvoe and Culverhouse Cross
 - Penarth and Cardiff, and
 - The Vale of Glamorgan and Bridgend"
- 2.2.2 The applicant supports this policy and as stated above will enter into a planning obligation to provide financial support for the local bus network. The applicant has also produce a Green Travel Plan which aims to reduce staff vehicle usage in favour of more sustainable forms of transport.

2.3 PLANNING POLICY WALES TECHNICAL ADVICE NOTE (TAN) 18: TRANSPORT

- 2.3.1 TAN 18 states that developments which attract substantial movements of freight should be located away from congested inner areas and residential neighbourhoods. The site will only attract an maximum of 2 loads or 4 movements per hour in any working day and is not therefore classed as substantial. The site has been chosen because of the proximity to the dock facility, the grid connection, potential fuel providers and the re-use of a brownfield site.
- 2.3.2 This assessment has been prepared to compliment the planning application. TAN18 suggests that the threshold for a transport assessment for industry is a gross floor area of >5,000 m², which is larger than the application building. The site in its current state is used for repair and refurbishment of containers and has no restriction on vehicle movements.

2.4 REGIONAL TRANSPORT PLAN

- 2.4.1 The regional transport plan contains the following priorities and objectives:
 - i. To improve access to services, facilities and employment, particularly by public transport, walking and cycling.
 - ii. To provide a transport system that increases the use of sustainable modes of travel.
 - iii. To develop an efficient and reliable transport system with reduced levels of congestion and improved transport links
 - iv. To reduce significantly the emission of greenhouse gases and air pollution from transport.
 - v. To ensure that land use development in south east Wales is supported by sustainable transport measures.
 - vi. To play a full role in regenerating South East Wales.
 - vii. To improve access to services and facilities, particularly by public transport, walking and cycling.
 - viii. To regenerate town centres, brown-field sites and local communities through appropriate transport provision.
- 2.4.2 The regional transport plan emphasizes and encourages the use of public transport, cycling and car sharing schemes. This emphasis is consistent with the applicant's Green Travel Plan.

3.0 TRAFFIC SURVEY

- 3.1 Traffic information for the local road network was obtained from The Vale of Glamorgan. The data arose from a traffic survey carried out on 30th September 2008 and is attached as Appendix 1.
- 3.2 The 12 hour (07:00 19:00) total value and the HCV (Heavy Commercial Vehicle) count focusing on both directions of travel for the 2 roundabouts near the site was used to compare and determine the vehicular movement impact for the proposed development.
- 3.3 Summary of results from 5 traffic counts
- 3.3.1 Millennium Way Dock Entrance (Wimbourne Road-A):

The traffic flow that contained the highest vehicular movement was in the Cardiff Rd to Millennium Way direction with a total of 4,942 vehicular movements of which 91 were HCV/HGVs. The count for Atlantic Way is still relevant despite the road being closed as it reveals the vehicle numbers traveling to the docks.

- 3.3.2 Millennium Way Dock Entrance (B):
 - The traffic flow that contained the highest vehicular movement was in the Millennium Way to Cardiff Rd direction with a total of 5,605 vehicular movements of which 100 were HCVs.
- 3.3.3 Millennium Way Dock Entrance (Wimbourne Road 2way):
 The two way leg on the Millennium Way road was counted at 12,541 vehicle movements in the 12 hour period of which 272 were HCVs.
- 3.3.4 Millennium Way Dock Entrance (Cardiff Road 2way):

 The two way leg on the Cardiff Road was counted at 12,711 vehicle movements in the 12 hour period of which 579 were HCVs.
- 3.3.5 Millennium Way Dock Entrance (Wimbourne Road):
 The two way leg on the Docks entrance was counted at 4,158 vehicle movements in the 12 hour period of which 469 were HCVs.

3.3.6 The results of most significance are presented in the table below, with the % increase calculations using 11 vehicles i.e. 22 movements [routes labeled A-C for ease of reference]:

Rou	te & Direction	12 hour total vehicles	increase in total vehicle nos from HCVs	increase in HCV nos	increase in HCVs & buses
A:	Millenium Way - Dock Entrance (Wimbourne Road) Millennium Way leg 2 way	12,541 vehicles 272 HCVs 459 HCVs & buses	0.18%	8.08%	4.79%
В:	Millenium Way - Dock Entrance (Wimbourne Road) Cardiff Road leg 2 way	12,711 vehicles 579 HCVs 757 HCVs & buses	0.17%	3.80%	2.91%
C:	Millenium Way - Dock Entrance (Wimbourne Road) Docks Entrance leg 2 way	4,158 vehicles 469 HCVs 552 HCVs & buses	0.53%	4.69%	3.99%

4.0 IMPACT OF THE DEVELOPMENT

- 4.1 The application proposals are to import fuel by road between the hours of 07:00 and 22:00, which is a 15 hour day. 11 deliveries per 15 hour day would average out at one every 82 minutes. If the deliveries were restricted to the times during which the survey was carried out deliveries would average out at one every 65 minutes.
- 4.2 The overall impact in terms of additional traffic is low and the increase in heavy vehicle traffic on the 3 routes presented in the table above range from 2.91 to an 8.08 % increase in movements. The 8.08% increase would not occur as most traffic arriving at the site would arrive from the Cardiff Road direction (route B) with the impact being an increase in HCVs of 3.8%. The increase in HCVs entering/leaving the Dock would be 4.69%. These figures are reduced further if buses are added to the heavy vehicle count.
- 4.3 The majority of HCV traffic coming from Cardiff Road towards Millennium Way (route B) enters the Dock so 22 additional movements added to the existing 469 is not considered significant.
- 4.4 A Green Travel Plan has none-the-less been developed for the site and has been submitted with the planning application.
- 4.5 The applicant has already indicated that a unilateral undertaking will be signed in relation to sustainable transport contributions and would also be willing to include a traffic routing agreement to ensure vehicles adhere to agreed routes.

Millennium Way - DockEntrance (Wimbourne Road-A)

30th September, 2008

START PERIOD 7.00

7.30

7.45

8.00

8.15

8.30

8.45

9.00

9.15

9.30

10.00

10.30

11.00

11.30

12.00

12.30

13.00

13.30

14.00

14.30

15.00

15.30

16.00

16.15

16.30

16.45

17.00

17.15

17.30

17.45

18.00

18.30

31

51

74

84

115

103

96

93

137

165

144

143

162

142

173

187

186

171

162

171

112

115

110

161

138

128

231

177

142

6

6 0

13 0

21

17

7

16

9

17 3

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21

10

11 5

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24

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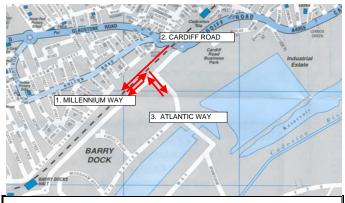
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Cardiff Rd to Millennium Way(2to1) Dock Entrance to Millennium Way(3to1) Millennium Way to Dock Entrance(1to3)

Millennium Way - DockEntrance (Wimbourne Road-A)



ITE	Millennium Way - DockEntrance (Wimbourne Road-A)	DATE:	30/09/08	
IR	Dock Entrance to Millennium Way(3to1)	DAY	Tuesday	

ITE	Millennium Way - DockEntrance (Wimbourne Road-A)	DATE:	30/09/08
IR	Millennium Way to Dock Entrance(1to3)	DAY	Tuesday

light commercial vehicles

motor cycles

heavy commercial vehicles - 2 axle

heavy commercial vehicles - 3 axle

heavy commercial vehicles - 4 plus axles

cycles - count NOT included in vehicle TOTALS

CARS

LCV

MCV HCV 2 AXLE

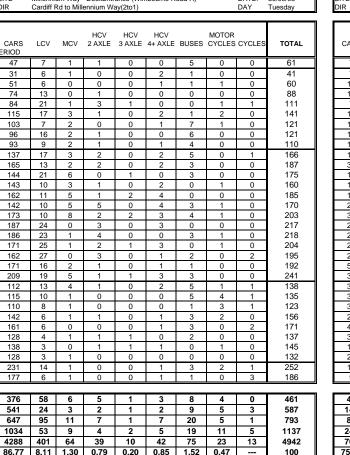
HCV 3 AXLE

HCV 4+ AXLE

MOTOR CYCLES

BUSES

CYCLES



DATE: 30/09/08

PK 800 - 0900	376	58	6	5	1	3	8	4	0	461
PK 1630-1730	541	24	3	2	1	2	9	5	3	587
2 HR AM PK	647	95	11	7	1	7	20	5	1	793
2 HR PM PK	1034	53	9	4	2	5	19	11	5	1137
12 HOUR TOTAL	4288	401	64	39	10	42	75	23	13	4942
% OF TOTAL	86.77	8.11	1.30	0.79	0.20	0.85	1.52	0.47		100

CARS	LCV	MCV	HCV 2 AXLE	HCV 3 AXLE	HCV 4+ AXLE	BUSES	MOTOR CYCLES	CYCLES	TOTAL
7	0	0	0	0	0	0	1	0	8
7	0	0	0	0	0	1	0	0	8
12	1	1	1	0	0	0	0	0	15
13	2	1	1	0	0	0	0	0	17
7	7	0	0	0	0	1	0	0	15
12	5	0	0	0	2	0	0	0	19
14	5	2	1	0	0	0	1	0	23
14	3	0	0	0	0	1	0	0	18
10	8	1	0	0	1	3	0	0	23
18	7	1	1	0	3	1	0	0	31
31	6	0	2	0	0	0	0	0	39
19	5	1	2	0	1	0	0	0	28
12	11	1	0	0	2	1	0	0	27
18	4	3	0	0	0	0	0	0	25
27	3	2	1	0	0	0	0	0	33
32	7	1	1	1	2	0	0	0	44
24	7	0	1	0	0	0	0	0	32
29	10	0	2	1	1	1	0	0	44
22	5	2	0	0	3	1	0	0	33
28	6	1	0	1	0	0	2	0	38
50	11	1	0	0	0	0	2	0	64
31	10	1	0	0	1	1	0	0	44
30	2	0	0	0	1	0	0	0	33
30	4	1	0	0	0	1	0	1	36
38	3	1	0	0	1	1	0	0	44
23	3	0	0	0	0	0	1	0	27
47	3	1	1	0	0	0	0	1	52
33	4	0	0	0	0	1	1	0	39
17	1	1	0	0	0	0	0	0	19
27	0	1	0	0	0	0	0	1	28
11	1	1	0	0	0	0	0	1	13
9	0	0	0	0	0	0	0	0	9
46	19	3	2	0	2	1	1	0	74
141	13	2	1	0	1	2	2	1	162
89	31	5	3	0	3	6	1	0	138
245	20	5	1	0	2	3	2	3	278
702	144	25	14	3	18	14	8	4	928
75.05	45.50	0.00	4.54	0.00	4.04	4.54	0.00		400

46	19	3	2	0	2	1	1	0	74
141	13	2	1	0	1	2	2	1	162
89	31	5	3	0	3	6	1	0	138
245	20	5	1	0	2	3	2	3	278
702	144	25	14	3	18	14	8	4	928
75.65	15.52	2.69	1.51	0.32	1.94	1.51	0.86		100

SITE DIR	Millennium Way - DockEntrance (Wimbourne Road-A) DATE: Millennium Way to Dock Entrance(1to3) DAY								
n-									
CARS	LCV	MCV	HCV 2 AXLE	HCV 3 AXLE	HCV 4+ AXLE	BUSES	MOTOR CYCLES	CYCLES	TOTAL
38	7	3	0	0	0	1	0	2	49
40	10	1	0	0	0	1	0	1	52
53	9	2	0	0	1	7	1	0	73
47	9	6	0	0	1	0	0	0	63
55	12	0	1	0	0	0	0	0	68
43	4	0	0	0	0	1	0	0	48
29	2	0	1	0	1	1	0	0	34
21	9	0	0	0	0	1	0	0	31
17	8	1	0	1	0	2	0	0	29
22	15	1	0	0	1	0	0	0	39
18	5	1	1	0	1	0	0	0	26
23	8	1	0	0	0	1	0	0	33
25	2	3	1	1	0	0	0	0	32
16	10	1	0	0	1	0	0	0	28
25	4	2	1	0	2	0	0	1	34
28	2	0	3	0	1	0	1	0	35
30	8	0	3	1	4	1	0	0	47
22	10	2	2	0	2	1	2	0	41
22	12	1	0	1	0	1	1	0	38
17	5	0	0	1	3	1	0	0	27
23 37	8 10	3	1	0	0	0	2	0	37 53
			2	-			0	0	15
11	1 4	0	1	0	0 1	0	0	0	19
12	2	1	0	0	1	0	0	0	16
14	2	1	0	0	0	1	0	0	18
16	1	0	0	0	0	1	0	0	18
12	2	0	0	0	1	0	0	0	15
16	3	0	0	0	0	0	0	0	19
4	3	0	1	0	0	0	0	0	8
7	2	0	0	0	0	0	0	0	9
11	1	0	0	0	0	0	0	0	12

ı	174	27	6	2	0	2	2	0	0	213
ı	54	7	2	0	0	2	2	0	0	67
ı	305	63	10	2	1	3	13	1	1	398
ı	98	18	3	4	0	3	2	0	0	128
ı	767	190	32	19	5	22	22	9	4	1066
ı	71.95	17.82	3.00	1.78	0.47	2.06	2.06	0.84		100



Millennium Way - Dock Entrance (B)

30th September, 2008

Dock Entrance to Cardiff Road(3to2) Cardiff Road to Dock Entrance(2to3) Millennium Way to Cardiff Road(1to2)



SITE	Millennium Way - Dock Entrance (B)	DATE:	30/09/08
DIR	Cardiff Road to Dock Entrance(2to3)	DAY	Tuesday



CARS	007
CARS	cars

LCV light commercial vehicles

MCV medium commercial vehicles

HCV 2 AXLE heavy commercial vehicles - 2 axle

HCV 3 AXLE heavy commercial vehicles - 4 plus axles

HCV 4+ AXLE heavy commercial vehicles - 4 plus axles

BUSES buses
MOTOR CYCLES motor cycles - cycles -

CYCLES motor cycles cycles - count NOT included in vehicle TOTALS

	Millennium Way - Dock Entrance (B)	DATE:	30/09/08
DIR	Millennium Way to Cardiff Road(1to2)	DAY	Tuesday

430	43	4	3	0	6	6	4	3	496
112	Ö	0	0	0	0	1	0	0	119
133 112	6	1	0	0	0	1	0	0	136 119
102	2	0	0	0	1	0	2	1	107
117	5	1	0	0	1	0	0	0	124
101	2	0	0	0	0	0	0	0	103
161	9	2	0	0	0	0	2	2	174
123	5	0	0	0	0	2	0	0	130
133	3	2	0	0	4	1	0	0	143
111	3	1	0	0	0	0	1	0	116
121	15	3	4	0	0	0	0	1	143
218	21	1	2	0	4	1	0	1	247
237	24	3	2	0	0	6	0	1	272
228	25	1	2	0	2	12	0	0	270
206	24	2	3	0	1	3	0	0	239
211	23	5	7	1	0	5	1	0	253
204	19	2	6	0	4	3	2	0	240
223	10	6	0	0	3	1	1	0	244
200	22	3	2	1	3	3	2	1	236
204	9	0	1	0	1	2	1	0	218
202	15	2	3	1	2	8	1	0	234
194	16	3	3	1	0	3	0	0	220
188	20	4	1	0	2	3	0	0	218
173	13	3	1	3	3	3	0	1	199
95	12	1	4	0	2	0	0	0	114
114	14	2	1	0	1	0	1	1	133
98	8	1	1	0	2	1	0	1	111
113	10	2	2	0	1	1	3	0	132
116	12	1	0	0	1	2	0	2	132
103	13	0	0	0	2	2	1	0	121
110	13	1	1	1	0	2	1	1	129
104	10	0	1	0	1	4	2	0	122
182	30	2	2	0	2	7	1	1	226
CARS	LCV	MCV	HCV 2 AXLE	HCV 3 AXLE	HCV 4+ AXLE	BUSES	MOTOR CYCLES	CYCLES	TOTA

430	43	4	3	0	6	6	4	3	496
518	19	4	0	0	4	3	2	2	550
853	92	8	10	1	10	12	8	5	994
969	44	9	4	0	6	3	5	4	1040
4937	415	55	49	8	43	76	22	14	5605
88.08	7.40	0.98	0.87	0.14	0.77	1.36	0.39		100

		SITE DIR	Millennium Dock Entra							DATE: DAY	30/09/08 Tuesday
	ı										
	START F	CARS PERIOD	LCV	MCV	HCV 2 AXLE	HCV 3 AXLE	HCV 4+ AXLE	BUSES	MOTOR CYCLES	CYCLES	TOTAL
	7.00	12	4	0	2	0	9	2	0	2	29
/	7.30	3	2	0	0	0	2	1	0	1	8
A	7.45	9	3	0	4	0	2	1	0	0	19
M	8.00	6	0	0	2	0	3	0	0	0	11
P	8.15	6	4	1	2	1	1	0	0	0	15
E	8.30	3	4	1	0	0	3	0	0	0	11
A	8.45	4	2	1	2	2	4	0	0	1	15
K	9.00	9	11	0	2	0	5	0	0	0	27
\	9.15	7	7	3	2	1	6	0	0	0	26
	9.30	15	14	3	1	0	6	0	0	0	39
	10.00	19	17	2	4	2	8	1	0	0	53
	10.30	22	19	6	1	0	7	0	0	0	55
	11.00	21	4	5	2	1	3	0	0	0	36
	11.30	30	8	5	2	3	5	1	0	0	54
	12.00	18	7	3	2	0	5	2	0	0	37
	12.30	31	6	5	1	2	7	0	0	0	52
	13.00	26	17	1	2	1	8	0	0	1	55
	13.30	15	6	0	1	1	11	2	0	0	36
	14.00	15	12	4	3	1	7	0	0	0	42
	14.30	23	9	0	2	1	8	4	0	0	47
	15.00	32	9	2	0	0	7	0	1	0	51
	15.30	30	20	1	1	3	8	1	0	1	64
/	16.00	24	4	0	0	0	1	0	0	0	29
P	16.15	45	6	0	1	0	6	0	0	0	58
M	16.30	36	8	1	0	0	2	0	0	0	47
P	16.45	23	6	0	1	0	1	0	1	0	32
E	17.00	34	2	0	1	0	4	0	0	2	41
A	17.15	32	9	2	0	0	1	1	0	1	45
K	17.30	21	4	0	0	1	0	0	1	0	27
\	17.45	27	5	0	0	1	1	0	1	0	35
	18.00	23	0	1	0	0	0	0	0	2	24
	18.30	17	1	1	0	0	0	1	0	2	20

PK 800 - 0900	19	10	3	6	3	11	0	0	0	52
PK 1630-1730	125	25	3	2	0	8	1	1	3	165
2 HR AM PK	47	33	6	14	4	26	2	0	2	132
2 HR PM PK	242	44	3	3	2	16	1	3	3	314
12 HOUR TOTAL	638	230	48	41	21	141	17	4	13	1140
% OF TOTAL	55.96	20.18	4.21	3.60	1.84	12.37	1.49	0.35		100

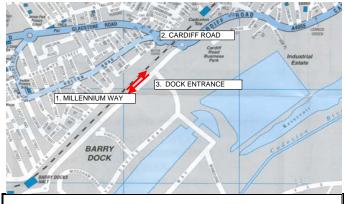
			HCV	HCV	HCV		MOTOR		
CARS	LCV	MCV			4+ AXLE	BUSES		CYCLES	TOTAL
61	23	0	1	2	4	1	0	4	92
29	9	2	2	1	2	0	0	3	45
40	18	3	2	1	2	0	1	5	67
30	16	1	1	1	1	1	0	0	51
24	14	1	1	0	1	0	0	0	41
13	8	2	0	0	3	0	0	1	26
20	10	1	2	1	7	0	0	0	41
12	3	4	1	1	8	3	0	0	32
17	9	0	0	0	1	0	0	0	27
15	12	1	2	0	7	1	0	0	38
26	5	1	3	0	4	0	0	0	39
28	7	2	1	0	5	0	0	0	43
22	7	0	0	1	11	0	0	0	41
19	11	5	2	0	6	1	0	0	44
12	7	2	3	0	8	0	0	0	32
18	5	2	1	1	9	0	0	0	36
30	19	1	2	0	7	0	0	0	59
19	11	1	3	1	8	0	0	1	43
17	5	4	2	1	4	1	0	0	34
10	5	4	2	1	6	1	0	0	29
20	7	2	2	0	7	0	0	0	38
17	4	0	1	0	7	0	0	0	29
4	0	0	1	0	3	0	0	0	8
8	0	0	0	0	3	1	0	0	12
4	3	0	0	0	1	0	0	0	8
17	2	0	1	0	1	0	0	0	21
8	1	0	0	0	1	0	0	0	10
2	1	0	1	0	2	0	0	0	6
5	0	0	1	0	1	0	0	0	7
6	0	0	1	0	2	0	0	0	9
4	0	0	0	0	1	0	0	0	5
9	1	0	1	0	0	0	0	0	11

87	48	5	4	2	12	1	0	1	159
31	7	0	2	0	5	0	0	0	45
185	87	14	9	5	25	4	1	9	330
54	7	0	5	0	14	1	0	0	81
566	223	39	40	12	133	10	1	14	1024
55.27	21.78	3.81	3.91	1.17	12.99	0.98	0.10		100

Millennium Way - DockEntrance (Wimbourne Road)

30th September, 2008

To Millennium Way From Millennium Way Millennium Way leg 2way



1			
SITE	Millennium Way - DockEntrance (Wimbourne Road)	DATE:	30/09/08
DIR	From Millennium Way	DAY	Tuesday

CYCLES

	309	13	1	0	0	1
	1026	147	19	12	1	13
	1254	63	11	3	1	9
	1894	281	34	22	3	23
	2346	135	26	13	2	16
	10694	1150	176	121	26	125
	85.27	9.17	1.40	0.96	0.21	1.00



TOTAL 344

CARS	cars
------	------

LCV light commercial vehicles

MCV medium commercial vehicles - 2 axle

HCV 2 AXLE heavy commercial vehicles - 3 axle

HCV 4+ AXLE heavy commercial vehicles - 4 plus axles

BUSES buses
MOTOR CYCLES motor cycles

cycles - count NOT included in vehicle TOTALS

Millennium Way - DockEntrance (Wimbourne Road)	DATE:	30/09/08
Millennium Way leg 2way	DAY	Tuesday

HCV

2 AXLE 3 AXLE 4+ AXLE BUSES CYCLES CYCLES

1.49 0.49

MOTOR

		SITE DIR		um Way · nnium W		ance (Win	nbourne R	oad)		DATE: DAY	30/09/08 Tuesday
	START	CARS PERIOD	LCV	MCV	HCV 2 AXLE	HCV 3 AXLE	HCV 4+ AXLE	BUSES	MOTOR CYCLES	CYCLES	TOTAL
	7.00	54	7	1	1	0	0	5	1	0	69
/	7.30	38	6	1	0	0	2	2	0	0	49
Al	7.45	63	7	1	1	0	1	1	1	0	75
M	8.00	87	15	1	2	0	0	0	0	0	105
P	8.15	91	28	1	3	1	0	1	1	1	126
Εļ	8.30	127	22	3	1	0	4	1	2	0	160
ΑĮ	8.45	117	12	4	1	0	1	7	2	0	144
K	9.00	110	19	2	1	0	0	7	0	0	139
\	9.15	103	17	3	1	0	2	7	0	0	133
	9.30	155	24	4	3	0	5	6	0	1	197
	10.00	196	19	2	4	0	2	3	0	0	226
	10.30	163	26	7	2	1	1	3	0	0	203
	11.00	155	21	4	1	0	4	1	1	0	187
	11.30	180	15	8	1	2	4	0	0	0	210
	12.00	169	13	7	6	0	4	3	1	0	203
	12.30	205	17	9	3	3	5	4	1	0	247
	13.00	211	31	0	4	0	3	0	0	0	249
	13.30	215	33	1	6	1	1	4	1	0	262
	14.00	193	30	3	2	1	6	1	1	0	237
	14.30	190	33	1	3	1	1	2	2	2	233
	15.00	221	27	3	1	0	1	1	2	0	256
	15.30	240	29	6	1	1	4	4	0	0	285
/	16.00	142	15	4	1	0	3	5	1	1	171
Pl	16.15	145	14	2	0	0	0	6	4	2	171
M	16.30	148	11	2	0	0	1	2	3	1	167
Pl	16.45	165	9	1	1	0	1	3	3	0	183
ΕĮ	17.00	208	9	1	1	0	1	3	0	3	223
A	17.15	161	8	1	1	1	0	3	1	0	176
K	17.30	155	4	1	1	1	1	0	1	0	164
\	17.45	155	3	2	0	0	0	0	0	1	160
	18.00	242	15	2	0	0	1	3	2	2	265
	18.30	186	6	1	0	0	1	11	0	3	195

422	77	9	7	1	5	9	5	0	535
682	37	5	3	1	3	11	7	4	749
736	126	16	10	1	10	26	6	1	931
1279	73	14	5	2	7	22	13	8	1415
4990	545	89	53	13	60	89	31	17	5870
85.01	9.28	1.52	0.90	0.22	1.02	1.52	0.53		100
	682 736 1279 4990	682 37 736 126 1279 73 4990 545	682 37 5 736 126 16 1279 73 14 4990 545 89	682 37 5 3 736 126 16 10 1279 73 14 5 4990 545 89 53	682 37 5 3 1 736 126 16 10 1 1279 73 14 5 2 4990 545 89 53 13	682 37 5 3 1 3 736 126 16 10 1 10 1279 73 14 5 2 7 4990 545 89 53 13 60	682 37 5 3 1 3 11 736 126 16 10 1 10 26 1279 73 14 5 2 7 22 4990 545 89 53 13 60 89	682 37 5 3 1 3 11 7 736 126 16 10 1 10 26 6 1279 73 14 5 2 7 22 13 4990 545 89 53 13 60 89 31	682 37 5 3 1 3 11 7 4 736 126 16 10 1 10 26 6 1 1279 73 14 5 2 7 22 13 8 4990 545 89 53 13 60 89 31 17

DIIX	1 TOTTI WILL								rucsuay
CARS	LCV	MCV	HCV 2 AXLE	HCV 3 AXLE	HCV 4+ AXLE	BUSES	MOTOR CYCLES	CYCLES	TOTAL
220	37	5	2	0	2	8	1	3	275
144	20	1	1	0	1	5	2	1	174
163	22	3	1	1	1	9	2	1	202
150	22	6	0	0	3	2	1	0	184
171	24	1	1	0	1	2	0	2	200
156	14	2	2	0	1	2	3	0	180
127	10	1	2	0	3	2	0	1	145
135	23	2	1	0	1	1	1	1	164
112	20	2	4	1	2	2	0	0	143
195	28	4	1	3	4	3	0	1	238
206	25	5	2	0	3	3	0	0	244
217	24	4	3	1	0	4	0	0	253
227	17	5	4	2	2	8	1	0	266
220	19	1	1	0	2	2	1	0	246
225	26	5	3	1	5	3	2	2	270
251	12	6	3	0	4	1	2	0	279
234	27	2	9	1	8	4	2	0	287
233	33	7	9	1	2	6	3	0	294
228	36	3	3	1	1	4	1	0	277
245	30	1	2	1	5	13	0	0	297
260	32	4	3	0	1	7	2	1	309
255	31	4	3	0	4	1	2	1	300
132	16	4	6	0	0	0	0	1	158
124	7	1	1	0	1	0	1	0	135
145	5	3	0	0	5	1	0	0	159
137	7	1	0	0	0	3	0	0	148
177	10	2	0	0	0	1	2	2	192
113	4	0	0	0	1	0	0	0	118
133	8	1	0	0	1	0	0	0	143
106	5	0	1	0	1	0	2	1	115
140	4	1	0	0	0	0	0	0	145
123	7	0	0	0	0	1	0	0	131

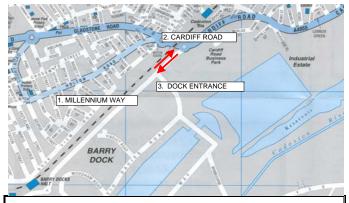
604	70	10	5	0	8	8	4	3	709
572	26	6	0	0	6	5	2	2	617
1158	155	18	12	2	13	25	9	6	1392
1067	62	12	8	0	9	5	5	4	1168
5704	605	87	68	13	65	98	31	18	6671
85.50	9.07	1.30	1.02	0.19	0.97	1.47	0.46		100

Millennium Way - DockEntrance (Wimbourne Road)

DATE: 30/09/08

30th September, 2008

To Cardiff Road From Cardiff Road Cardiff Road leg 2way



SITE	Millennium Way - DockEntrance (Wimbourne Road)	DATE:	30/09/08
DIR	From Cardiff Road	DAY	Tuesday

	BRO MORGANNWG
cars	
light commercial vehicles	
medium commercial vehicles heavy commercial vehicles - 2 axle heavy commercial vehicles - 3 axle	

VALE of GLAMORGAN

TOTAL 408

SITE	Millennium Way - DockEntrance (Wimbourne Road)	DATE:	30/09/08
DIR	Cardiff Road leg 2way	DAY	Tuesday

HCV

2.82

2 AXLE 3 AXLE 4+ AXLE BUSES CYCLES CYCLES

1.40 0.39

MOTOR

heavy commercial vehicles - 4 plus axles

cycles - count NOT included in vehicle TOTALS

0.40

motor cycles

MCV

			HCV	HCV	HCV		MOTOR		
CARS	LCV	MCV	2 AXLE	3 AXLE		BUSES	CYCLES	CYCLES	TOTAL
108	30	1	2	2	4	6	0	4	153
60	15	3	2	1	4	1	0	3	86
91	24	3	2	1	3	1	2	5	127
104	29	1	2	1	1	1	0	0	139
108	35	2	4	1	1	0	1	1	152
128	25	5	1	0	5	1	2	1	167
123	17	3	2	1	8	7	1	0	162
108	19	6	2	1	8	9	0	0	153
110	18	2	1	0	2	4	0	0	137
152	29	4	4	0	9	6	0	1	204
191	18	3	5	0	6	3	0	0	226
172	28	8	1	1	5	3	0	0	218
165	17	3	1	1	13	0	1	0	201
181	22	10	3	2	10	1	0	0	229
154	17	7	8	0	12	3	1	0	202
191	15	10	3	3	12	4	1	0	239
217	43	1	5	0	10	0	0	0	276
205	34	2	7	1	8	3	1	1	261
188	30	5	4	2	7	1	1	0	238
172	32	4	5	1	7	3	0	2	224
191	23	4	3	0	8	1	0	0	230
226	23	5	2	1	10	3	0	0	270
116	13	4	2	0	5	5	1	1	146
123	10	1	0	0	3	6	4	1	147
114	11	1	0	0	1	1	3	1	131
159	8	1	2	0	2	3	2	0	177
169	7	0	0	0	2	3	0	2	181
130	5	1	2	1	2	2	0	0	143
143	3	0	2	1	2	0	1	0	152
134	3	1	1	0	2	0	0	0	141
235	14	1	0	0	2	3	2	1	257
186	7	1	1	0	1	1	0	3	197

620	912	159	18	18	
632	1215	75	10	6	
123	1732	307	39	40	
218	2299	148	21	16	
966	10429	1269	206	169	
100	82.05	9.98	1.62	1.33	

CARS

LCV

MCV HCV 2 AXLE HCV 3 AXLE

HCV 4+ AXLE

MOTOR CYCLES

BUSES

CYCLES

CARS

LCV

		DIR	To Card	liff Road						DAY	Tuesday
	START	CARS PERIOD	LCV	MCV	HCV 2 AXLE	HCV 3 AXLE	HCV 4+ AXLE	BUSES	MOTOR CYCLES	CYCLES	TOTAL
	7.00	194	34	2	4	0	11	9	1	3	255
/	7.30	107	12	0	1	0	3	5	2	1	130
ΑĮ	7.45	119	16	1	5	1	2	3	1	1	148
M	8.00	109	13	0	2	0	5	2	1	0	132
Pl	8.15	122	16	2	2	1	2	2	0	2	147
Εl	8.30	116	14	3	2	0	4	1	3	0	143
ΑĮ	8.45	102	10	2	3	2	6	1	0	2	126
K	9.00	123	25	2	3	0	6	0	1	1	160
\	9.15	102	19	4	6	1	8	0	0	0	140
	9.30	188	27	6	2	3	9	3	0	1	238
	10.00	207	37	6	5	2	10	4	0	0	271
	10.30	216	35	9	4	1	7	3	0	0	275
	11.00	223	19	7	5	2	5	8	1	0	270
	11.30	234	17	5	3	3	6	3	1	0	272
	12.00	218	29	6	4	1	8	5	2	1	273
	12.30	254	16	11	1	2	10	1	1	0	296
	13.00	230	36	3	8	1	12	3	2	1	295
	13.30	226	29	5	8	2	11	7	1	0	289
	14.00	221	36	6	6	1	8	3	0	0	281
	14.30	251	34	1	4	1	10	16	0	0	317
	15.00	269	33	5	2	0	7	6	1	1	323
	15.30	248	41	2	3	3	12	2	0	2	311
/	16.00	145	19	3	4	0	1	0	0	1	172
Pl	16.15	156	9	1	1	0	6	0	1	0	174
M	16.30	169	11	3	0	0	6	1	0	0	190
Pl	16.45	146	11	0	1	0	1	2	1	0	162
El	17.00	195	11	2	1	0	4	0	2	4	215
A	17.15	133	11	2	0	0	1	1	0	1	148
K	17.30	138	9	1	0	1	1	0	1	0	151
\	17.45	129	7	0	0	1	2	0	3	1	142
	18.00	156	2	2	0	0	0	0	0	2	160
	18.30	129	7	1	0	0	0	2	0	2	139

Millennium Way - DockEntrance (Wimbourne Road)

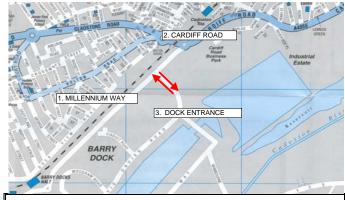
PK 800 - 0900	449	53	7	9	3	17	6	4	0	548
PK 1630-1730	643	44	7	2	0	12	4	3	5	715
2 HR AM PK	900	125	14	24	5	36	14	8	7	1126
2 HR PM PK	1211	88	12	7	2	22	4	8	7	1354
12 HOUR TOTAL	5575	645	103	90	29	184	93	26	27	6745
% OF TOTAL	82.65	9.56	1.53	1.33	0.43	2.73	1.38	0.39		100

100	U			0		5		0	1 1 1 1 1
169	7	0	0	0	2	3	0	2	181
130	5	1	2	1	2	2	0	0	143
143	3	0	2	1	2	0	1	0	152
134	3	1	1	0	2	0	0	0	141
235	14	1	0	0	2	3	2	1	257
186	7	1	1	0	1	1	0	3	197
463	106	11	9	3	15	9	4	2	620
572	31	3	4	1	7	9	5	3	632
832	182	25	16	6	32	24	6	10	1123
		9	9	2	19	20	11	5	1218
1088	60	9	9		13	20			1210
1088 4854	624	103	79	22	175	85	24	27	5966
	130 143 134 235 186 463 572	130 5 143 3 134 3 235 14 186 7	130 5 1 143 3 0 134 3 1 235 14 1 186 7 1 463 106 11 572 31 3	130 5 1 2 143 3 0 2 134 3 1 1 235 14 1 0 186 7 1 1 463 106 11 9 572 31 3 4	130 5 1 2 1 143 3 0 2 1 134 3 1 1 0 235 14 1 0 0 186 7 1 1 0 463 106 11 9 3 572 31 3 4 1	130 5 1 2 1 2 143 3 0 2 1 2 134 3 1 1 0 2 235 14 1 0 0 2 186 7 1 1 0 1 463 106 11 9 3 15 572 31 3 4 1 7	130 5 1 2 1 2 2 143 3 0 2 1 2 0 134 3 1 1 0 2 0 235 14 1 0 0 2 3 186 7 1 1 0 1 1 463 106 11 9 3 15 9 572 31 3 4 1 7 9	130 5 1 2 1 2 2 0 143 3 0 2 1 2 0 1 134 3 1 1 0 2 0 0 235 14 1 0 0 2 3 2 186 7 1 1 0 1 1 0 463 106 11 9 3 15 9 4 572 31 3 4 1 7 9 5	130 5 1 2 1 2 2 0 0 143 3 0 2 1 2 0 1 0 134 3 1 1 0 2 0 0 0 0 235 14 1 0 0 2 3 2 1 186 7 1 1 0 1 1 0 3 463 106 11 9 3 15 9 4 2 572 31 3 4 1 7 9 5 3

Millennium Way - DockEntrance (Wimbourne Road)

30th September, 2008

To The Docks From The Docks Docks Entrance leg 2way



SITE Millennium Way - DockEntrance (Wimbourne Road) DATE: 30/05 DIR From The Docks DAY Tues	DATE: 30/09/08 DAY Tuesday
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	100
	BRO MORGANNWG
cars	
light commercial vehicles	

VALE of GLAMORGAN

CARS

LCV MCV medium commercial vehicles HCV 2 AXLE HCV 3 AXLE heavy commercial vehicles - 2 axle heavy commercial vehicles - 3 axle HCV 4+ AXLE heavy commercial vehicles - 4 plus axles

BUSES

MOTOR CYCLES CYCLES motor cycles

cycles - count NOT included in vehicle TOTALS

		SITE DIR	30/09/08 Tuesday								
	START F	CARS PERIOD	LCV	MCV	HCV 2 AXLE	HCV 3 AXLE	HCV 4+ AXLE	BUSES	MOTOR CYCLES	CYCLES	TOTAL
	7.00	99	30	3	1	2	4	2	0	6	141
/	7.30	69	19	3	2	1	2	1	0	4	97
A	7.45	93	27	5	2	1	3	7	2	5	140
M	8.00	77	25	7	1	1	2	1	0	0	114
PI	8.15	79	26	1	2	0	1	0	0	0	109
Εİ	8.30	56	12	2	0	0	3	1	0	1	74
Al	8.45	49	12	1	3	1	8	1	0	0	75
K	9.00	33	12	4	1	1	8	4	0	0	63
\	9.15	34	17	1	0	1	1	2	0	0	56
	9.30	37	27	2	2	0	8	1	0	0	77
	10.00	44	10	2	4	0	5	0	0	0	65
	10.30	51	15	3	1	0	5	1	0	0	76
	11.00	47	9	3	1	2	11	0	0	0	73
	11.30	35	21	6	2	0	7	1	0	0	72
	12.00	37	11	4	4	0	10	0	0	1	66
	12.30	46	7	2	4	1	10	0	1	0	71
	13.00	60	27	1	5	1	11	1	0	0	106
	13.30	41	21	3	5	1	10	1	2	1	84
	14.00	39	17	5	2	2	4	2	1	0	72
	14.30	27	10	4	2	2	9	2	0	0	56
	15.00	43	15	3	3	0	8	1	2	0	75
	15.30	54	14	3	2	0	7	0	2	0	82
/	16.00	15	1	1	3	0	3	0	0	0	23
Pl	16.15	21	4	0	1	0	4	1	0	0	31
M	16.30	16	5	1	0	0	2	0	0	0	24
Pl	16.45	31	4	1	1	0	1	1	0	0	39
E	17.00	24	2	0	0	0	1	1	0	0	28
A	17.15	14	3	0	1	0	3	0	0	0	21
K	17.30	21	3	0	1	0	1	0	0	0	26
١	17.45	10	3	0	2	0	2	0	0	0	17
	18.00	11	2	0	0	0	1	0	0	0	14
	18.30	20	2	0	1	0	0	0	0	0	23

PK 800 - 0900	261	75	11	6	2	14	3	0	0	372
PK 1630-1730	85	14	2	2	0	7	2	0	0	112
2 HR AM PK	490	150	24	11	6	28	17	2	10	728
2 HR PM PK	152	25	3	9	0	17	3	0	0	209
12 HOUR TOTAL	1333	413	71	59	17	155	32	10	18	2090
% OF TOTAL	63.78	19.76	3.40	2.82	0.81	7.42	1.53	0.48		100

CARS	LCV	MCV	HCV 2 AXLE	HCV 3 AXLE	HCV 4+ AXLE	BUSES	MOTOR CYCLES	CYCLES	TOTAL
19	4	0	2	0	9	2	1	2	37
10	2	0	0	0	2	2	0	1	16
21	4	1	5	0	2	1	0	0	34
19	2	1	3	0	3	0	0	0	28
13	11	1	2	1	1	1	0	0	30
15	9	1	0	0	5	0	0	0	30
18	7	3	3	2	4	0	1	1	38
23	14	0	2	0	5	1	0	0	45
17	15	4	2	1	7	3	0	0	49
33	21	4	2	0	9	1	0	0	70
50	23	2	6	2	8	1	0	0	92
41	24	7	3	0	8	0	0	0	83
33	15	6	2	1	5	1	0	0	63
48	12	8	2	3	5	1	0	0	79
45	10	5	3	0	5	2	0	0	70
63	13	6	2	3	9	0	0	0	96
50	24	1	3	1	8	0	0	1	87
44	16	0	3	2	12	3	0	0	80
37	17	6	3	1	10	1	0	0	75
51	15	1	2	2	8	4	2	0	85
82	20	3	0	0	7	0	3	0	115
61	30	2	1	3	9	2	0	1	108
54	6	0	0	0	2	0	0	0	62
75	10	1	1	0	6	1	0	1	94
74	11	2	0	0	3	1	0	0	91
46	9	0	1	0	1	0	2	0	59
81	5	1	2	0	4	0	0	3	93
65	13	2	0	0	1	2	1	1	84
38	5	1	0	1	0	0	1	0	46
54	5	1	0	1	1	0	1	1	63
34	1	2	0	0	0	0	0	3	37
26	1	1	0	0	0	1	0	2	29

65	29	6	8	3	13	1	1	1	126
266	38	5	3	0	9	3	3	4	327
136	64	11	17	4	29	8	1	2	270
487	64	8	4	2	18	4	5	6	592
1340	374	73	55	24	159	31	12	17	2068
64.80	18.09	3.53	2.66	1.16	7.69	1.50	0.58		100

SITE DIR	Millennium Way - DockEntrance (Wimbourne Road) Docks Entrance leg 2way DAY												
CARS	LCV	MCV	HCV 2 AXLE	HCV 3 AXLE		BUSES	MOTOR CYCLES	CYCLES	TOTAL				
118	34	3	3	2	13	4	1	8	178				
79	21	3	2	1	4	3	0	5	113				
114	31	6	7	1	5	8	2	5	174				
96	27	8	4	1	5	1	0	0	142				
92	37	2	4	1	2	1	0	0	139				
71	21	3	0	0	8	1	0	1	104				

CARS	LCV	MCV	2 AXLE	3 AXLE	4+ AXLE	BUSES	CYCLES	CYCLES	IOIAL
118	34	3	3	2	13	4	1	8	178
79	21	3	2	1	4	3	0	5	113
114	31	6	7	1	5	8	2	5	174
96	27	8	4	1	5	1	0	0	142
92	37	2	4	1	2	1	0	0	139
71	21	3	0	0	8	1	0	1	104
67	19	4	6	3	12	1	1	1	113
56	26	4	3	1	13	5	0	0	108
51	32	5	2	2	8	5	0	0	105
70	48	6	4	0	17	2	0	0	147
94	33	4	10	2	13	1	0	0	157
92	39	10	4	0	13	1	0	0	159
80	24	9	3	3	16	1	0	0	136
83	33	14	4	3	12	2	0	0	151
82	21	9	7	0	15	2	0	1	136
109	20	8	6	4	19	0	1	0	167
110	51	2	8	2	19	1	0	1	193
85	37	3	8	3	22	4	2	1	164
76	34	11	5	3	14	3	1	0	147
78	25	5	4	4	17	6	2	0	141
125	35	6	3	0	15	1	5	0	190
115	44	5	3	3	16	2	2	1	190
69	7	1	3	0	5	0	0	0	85
96	14	1	2	0	10	2	0	1	125
90	16	3	0	0	5	1	0	0	115
77	13	1	2	0	2	1	2	0	98
105	7	1	2	0	5	1	0	3	121
79	16	2	1	0	4	2	1	1	105
59	8	1	1	1	1	0	1	0	72
64	8	1	2	1	3	0	1	1	80
45	3	2	0	0	1	0	0	3	51
46	3	1	1	0	0	1	0	2	52

498	2	1	4	27	5	14	17	104	326
439	4	3	5	16	0	5	7	52	351
998	12	3	25	57	10	28	35	214	626
801	6	5	7	35	2	13	11	89	639
4158	35	22	63	314	41	114	144	787	2673
100		0.53	1.52	7.55	0.99	2.74	3.46	18.93	64.29