

CONDITION 29 DISCHARGE

29. Prior to the first beneficial use of the development hereby approved, a Green Travel Plan (which will include details relating to proposals for minimising the use of staff car journeys to and from the site) and measure to control the plan along with agreed haul routes for the delivery of waste wood feed stock and the removal of ash from the site shall be submitted to and agreed in writing by the Local Planning Authority and the development shall be operated in accordance with the agreed details.

Biomass UK No.2 Limited has developed a Green Travel Plan, as described in this document. This application also describes measures designed to control heavy good vehicle access to the Project Site so that it confirms to the Transport Study submitted in support of the original planning application (see Appendix 10, attached) in addition to the restrictions contained in the Planning Consent itself:

Location

The site is located on existing industrial land at the Port of Barry, located on Woodham Road. The site will be occupied by Biomass UK No 2 Limited under the terms of a lease with the landowner, Associated British Ports, and access will be by the surrounding road network.

Site Access

Access will be by the main gate to the site and there will be separate access and exit points for vehicles and pedestrians, including wheelchair access. These will be clearly marked.

Segregation areas and route markings for vehicles and pedestrians around the site will be clearly marked using, road markings, physical barriers and signs as required.

Where pedestrians need to cross traffic routes these will be clearly signed and marked as defined crossing points.

Where possible one-way traffic systems will operate, reducing the need for vehicles to reverse unnecessarily whilst on site.

The site is designed such that vehicles can enter and exit the site in forward gear.

Emergency Access

The site access route and internal surfaces will provide sufficient access and suitability for emergency services, who will be provided with an updated emergency and access plan and contact numbers before the plant is operational.

Vehicle Parking

The parking and access areas will be flat and the parking area for staff and visitor's vehicles will have dedicated spaces for disabled parking. These will be close to the main site gate, negating the need for unnecessary vehicle travel across the site.

There will be secure cycle and motor cycle parking provided for staff and visitors.

These areas, as with all aspects of vehicle and pedestrian routes will be maintained to a suitable level, so as to ensure the safe use and movement of vehicles, and the protection and safety of pedestrians.

The vehicle parking area and turning facility shall be constructed of porous material, or provision shall be made for direct run off water from the area to a permeable or porous surface within the curtilage of the site, this is in the interest of minimising the amount of water entering the drainage system.

At no time shall any part of the vehicle parking, servicing, or manoeuvring areas be used for the open storage of goods in order, as to maintain the availability of these area for their intended use.

Mode Shift Targets

The site will operate a 24hour, 7 days per week shift pattern and it envisaged that there will be no more than six staff vehicles on site at each time.

It is proposed that shift changes will be at 0600hrs, 1400hrs & 2200hrs avoiding where possible the additional movement of vehicles during peak times.

It is anticipated that in addition to staff cars approximately 4 cars (8 movements) will visit the site during a normal working day.

Deliveries/Collections

Delivery/collection vehicles will enter the site from the existing roads off Woodham Road and will not affect any other business users. The site location has been chosen to ensure that it does not impose upon the adjacent users which ensures that the plan will not be obtrusive.

Fuel 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

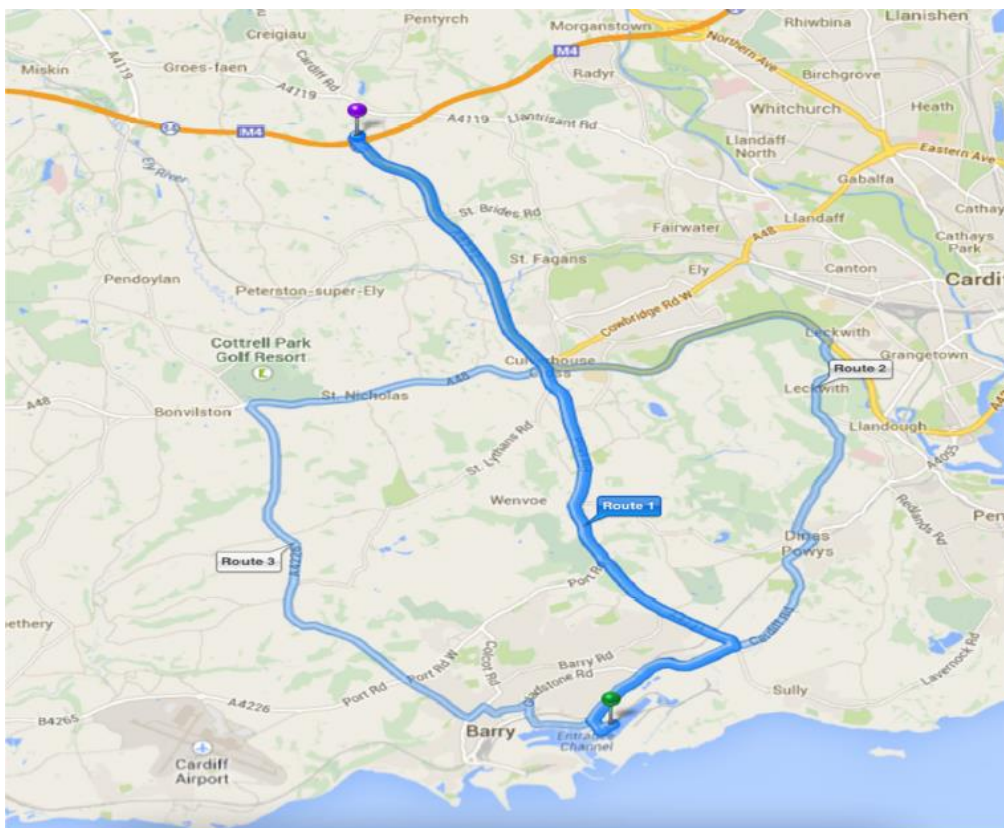
The site gates will be closed to vehicular access outside these hours with only authorised personnel on site to open the gates for emergency and regulatory access. Such physical restriction will therefore enforce such time limits on HGV drivers visiting the site.

The site will be staffed at all times when it is open to effectively supervise the reception of deliveries and the removal of waste.

Vehicle marshalling will be in place as required.

HGV Routing

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



This will be monitored by the operator via TACO information, mileage logs and periodic, random visual surveillance.

Action Plan and Targets

Our target is to have zero transport accidents on the site and work towards creating a positive effect on the environment and local traffic volume.

There will be safe speed limit defined at 5mph on the site

Where possible operational staff will be resourced locally and if it is not feasible to walk to the site our target is to encourage car sharing and or use both public transport, motorcycles or cycles to get to and from the site.

Staff will be made aware of the Public Transport Infrastructure.

Implementation and method of monitoring

All staff will be inducted to site and be made aware of the need to respect our neighbours with regard to the impact of vehicle volume and noise.

Records will be kept of visitors to the site and their mode of transport on arrival.

Frequency and reasons for visits will be monitored as well as regular deliveries with a view to delivering "more" less frequently.

These records will help us monitor our environmental impact and consider options during the lifetime of the site that may benefit all stakeholders and reduce environmental impact.

Accident and near miss records will be maintained and reviewed to assess the effectiveness of the plan in terms of safety and practicality.

Consultation with staff, visitors and other stakeholders will help us continually look to maintain and improve the plan as the site develops.

Deposits of mud or litter onto the access roads or highway is unlikely, however if it does occur it will be cleared using a road sweeper or hand-picked in the case of litter.

Transport Statement

**in support of an application for
Outline Planning
by**

Sunrise Renewables (Barry) Limited

under

the Town and Country Planning Act 1990



Stoketon House
Windmill Hill
East Sussex
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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;

Sunrise Renewables (Barry) Limited

- 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.

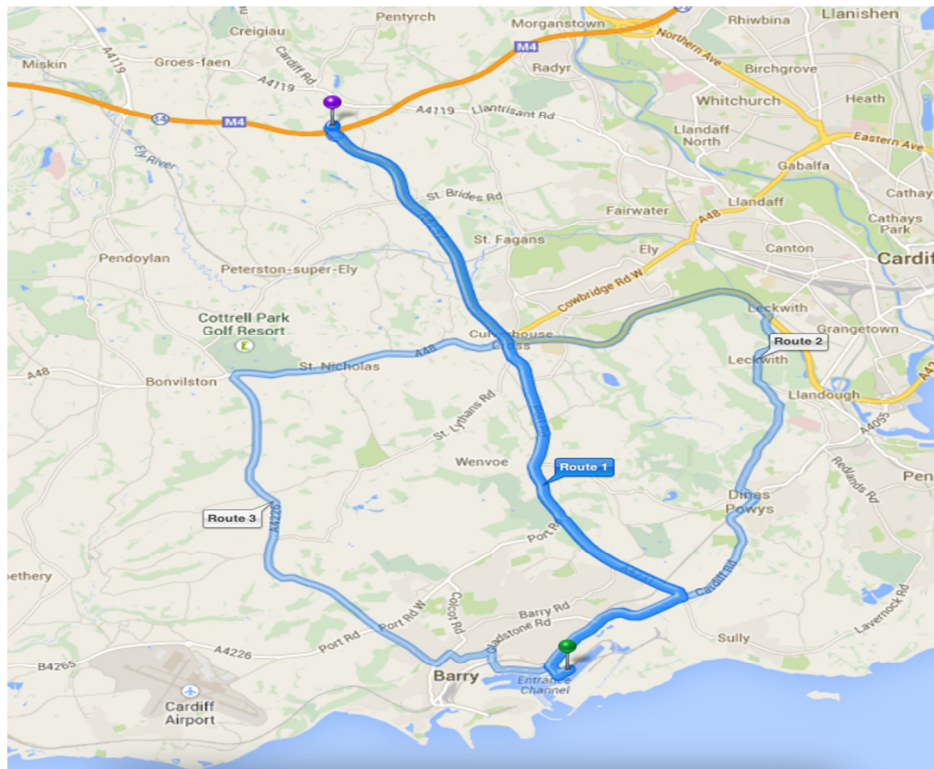
3.9 Access would be maintained to all areas of the site for fire-fighting purposes, but the main fuel store and feed hoppers would remain readily accessible, close to the entrance to the site. Detailed circulation and parking provisions within the site will also be controlled by the Health and Safety 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:

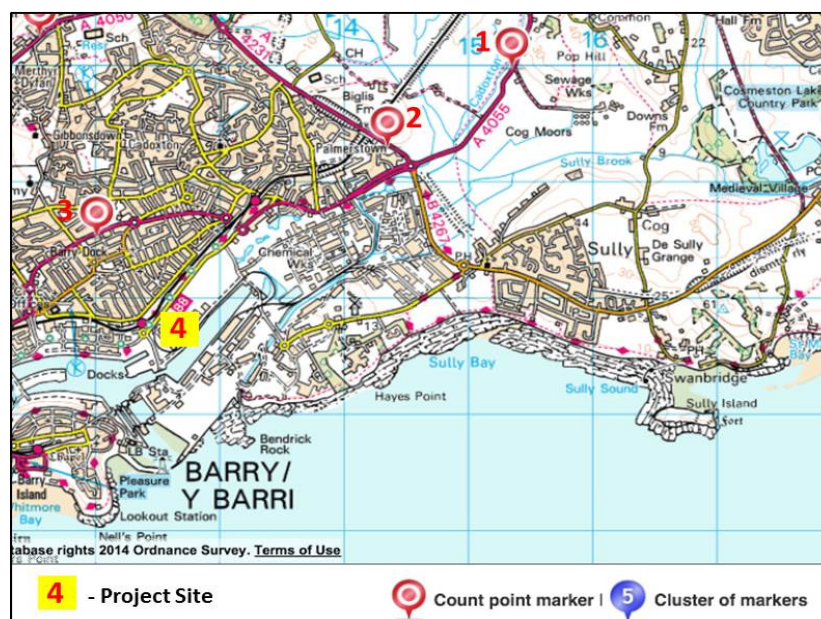
4.1 The application proposals are to import fuel by road between the hours of 07:00 and 22:00, which is a 15 hour day. 11 deliveries per 15 hour day would average out at one every 82 minutes. If the deliveries were restricted to the times during which the survey was carried out deliveries would average 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 to A4055								
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 to Cross-Common 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 re-imposed.

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

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 superseded 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]:

Route & 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%
B: 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%

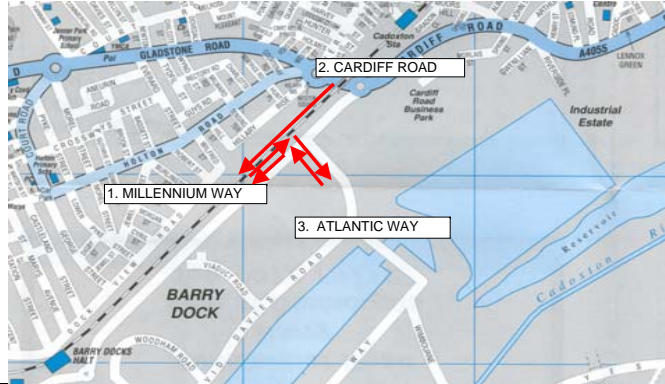
4.0 IMPACT OF THE DEVELOPMENT

- 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

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



CARS cars
 LCV light commercial vehicles
 MCV medium commercial vehicles
 HCV 2 AXLE heavy commercial vehicles - 2 axle
 HCV 3 AXLE heavy commercial vehicles - 3 axle
 HCV 4+ AXLE heavy commercial vehicles - 4 plus axles
 BUSES buses
 MOTOR CYCLES motor cycles
 CYCLES cycles - count NOT included in vehicle TOTALS

SITE	Millennium Way - DockEntrance (Wimbourne Road-A)	DATE:	30/09/08
DIR	Cardiff Rd to Millennium Way(2to1)	DAY	Tuesday

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

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

START PERIOD	CARS	LCV	MCV	HCV 2 AXLE	HCV 3 AXLE	HCV 4+ AXLE	BUSES	MOTOR CYCLES	CYCLES	TOTAL
7.00	47	7	1	1	0	0	5	0	0	61
/	31	6	1	0	0	2	1	0	0	41
AI	51	6	0	0	0	1	1	1	0	60
MI	74	13	0	1	0	0	0	0	0	88
PI	84	21	1	3	1	0	0	1	1	111
EI	115	17	3	1	0	2	1	2	0	141
AI	103	7	2	0	0	1	7	1	0	121
KI	96	16	2	1	0	0	6	0	0	121
\	93	9	2	1	0	1	4	0	0	110
9.30	137	17	3	2	0	2	5	0	1	166
10.00	165	13	2	2	0	2	3	0	0	187
10.30	144	21	6	0	1	0	3	0	0	175
11.00	143	10	3	1	0	2	0	1	0	160
11.30	162	11	5	1	2	4	0	0	0	185
12.00	142	10	5	5	0	4	3	1	0	170
12.30	173	10	8	2	2	3	4	1	0	203
13.00	187	24	0	3	0	3	0	0	0	217
13.30	186	23	1	4	0	0	3	1	0	218
14.00	171	25	1	2	1	3	0	1	0	204
14.30	162	27	0	3	0	1	2	0	2	195
15.00	171	16	2	1	0	1	1	0	0	192
15.30	209	19	5	1	1	3	3	0	0	241
/	112	13	4	1	0	2	5	1	1	138
PI	115	10	1	0	0	0	5	4	1	135
MI	110	8	1	0	0	0	1	3	1	123
PI	142	6	1	1	0	1	3	2	0	156
EI	161	6	0	0	0	1	3	0	2	171
AI	128	4	1	1	1	0	2	0	0	137
KI	138	3	0	1	1	1	0	1	0	145
\	128	3	1	0	0	0	0	0	0	132
18.00	231	14	1	0	0	1	3	2	1	252
18.30	177	6	1	0	0	1	1	0	3	186

START PERIOD	CARS	LCV	MCV	HCV 2 AXLE	HCV 3 AXLE	HCV 4+ AXLE	BUSES	MOTOR CYCLES	CYCLES	TOTAL
7.00	7	0	0	0	0	0	0	1	0	8
/	7	0	0	0	0	0	1	0	0	8
AI	12	1	1	1	0	0	0	0	0	15
MI	13	2	1	1	0	0	0	0	0	17
PI	7	7	0	0	0	0	1	0	0	15
EI	12	5	0	0	0	2	0	0	0	19
AI	14	5	2	1	0	0	0	1	0	23
KI	14	3	0	0	0	0	1	0	0	18
\	10	8	1	0	0	1	3	0	0	23
9.30	18	7	1	1	0	3	1	0	0	31
10.00	31	6	0	2	0	0	0	0	0	39
10.30	19	5	1	2	0	1	0	0	0	28
11.00	12	11	1	0	0	2	1	0	0	27
11.30	18	4	3	0	0	0	0	0	0	25
12.00	27	3	2	1	0	0	0	0	0	33
12.30	32	7	1	1	1	2	0	0	0	44
13.00	24	7	0	1	0	0	0	0	0	32
13.30	29	10	0	2	1	1	1	0	0	44
14.00	22	5	2	0	0	3	1	0	0	33
14.30	28	6	1	0	1	0	0	2	0	38
15.00	50	11	1	0	0	0	0	2	0	64
15.30	31	10	1	0	0	1	1	0	0	44
/	30	2	0	0	0	1	0	0	0	33
PI	30	4	1	0	0	0	1	0	1	36
MI	38	3	1	0	0	1	1	0	0	44
PI	23	3	0	0	0	0	0	1	0	27
EI	47	3	1	1	0	0	0	0	1	52
AI	33	4	0	0	0	0	1	1	0	39
KI	17	1	1	0	0	0	0	0	0	19
\	27	0	1	0	0	0	0	0	1	28
18.00	11	1	1	0	0	0	0	0	1	13
18.30	9	0	0	0	0	0	0	0	0	9

START PERIOD	CARS	LCV	MCV	HCV 2 AXLE	HCV 3 AXLE	HCV 4+ AXLE	BUSES	MOTOR CYCLES	CYCLES	TOTAL
7.00	38	7	3	0	0	0	1	0	2	49
/	40	10	1	0	0	0	1	0	1	52
AI	53	9	2	0	0	0	1	7	1	73
MI	47	9	6	0	0	1	0	0	0	63
PI	55	12	0	1	0	0	0	0	0	68
EI	43	4	0	0	0	0	1	0	0	48
AI	29	2	0	1	0	1	1	0	0	34
KI	21	9	0	0	0	0	1	0	0	31
\	17	8	1	0	1	0	2	0	0	29
9.30	22	15	1	0	0	1	0	0	0	39
10.00	18	5	1	1	0	1	0	0	0	26
10.30	23	8	1	0	0	0	1	0	0	33
11.00	25	2	3	1	1	0	0	0	0	32
11.30	16	10	1	0	0	1	0	0	0	28
12.00	25	4	2	1	0	2	0	0	1	34
12.30	28	2	0	3	0	1	0	1	0	35
13.00	30	8	0	3	1	4	1	0	0	47
13.30	22	10	2	2	0	2	1	2	0	41
14.00	22	12	1	0	1	0	1	1	0	38
14.30	17	5	0	0	1	3	1	0	0	27
15.00	23	8	1	1	0	1	1	2	0	37
15.30	37	10	3	1	0	0	0	2	0	53
/	11	1	1	2	0	0	0	0	0	15
PI	13	4	0	1	0	1	0	0	0	19
MI	12	2	1	0	0	1	0	0	0	16
PI	14	2	1	0	0	0	1	0	0	18
EI	16	1	0	0	0	0	1	0	0	18
AI	12	2	0	0	0	1	0	0	0	15
KI	16	3	0	0	0	0	0	0	0	19
\	4	3	0	1	0	0	0	0	0	8
18.00	7	2	0	0	0	0	0	0	0	9
18.30	11	1	0	0	0	0	0	0	0	12

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

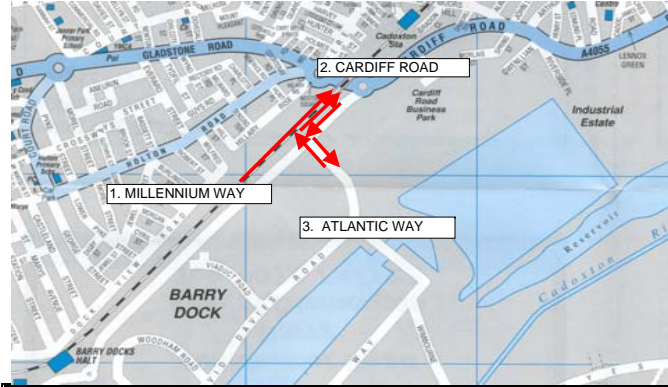
7.00	46	19	3	2	0	2	1	1	0	74
/	141	13	2	1	0	1	2	2	1	162
AI	89	31	5	3	0	3	6	1	0	138
MI	245	20	5	1	0	2	3	2	3	278
PI	702	144	25	14	3	18	14	8	4	928
EI	75.65	15.52	2.69	1.51	0.32	1.94	1.51	0.86	---	100

7.00	174	27	6	2	0	2	2	0	0	213
/	54	7	2	0	0	2	2	0	0	67
AI	305	63	10	2	1	3	13	1	1	398
MI	98	18	3	4	0	3	2	0	0	128
PI	767	190	32	19	5	22	22	9	4	1066
EI	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)



CARS cars
 LCV light commercial vehicles
 MCV medium commercial vehicles
 HCV 2 AXLE heavy commercial vehicles - 2 axle
 HCV 3 AXLE heavy commercial vehicles - 3 axle
 HCV 4+ AXLE heavy commercial vehicles - 4 plus axles
 BUSES buses
 MOTOR CYCLES motor cycles
 CYCLES cycles - count NOT included in vehicle TOTALS

SITE	Millennium Way - Dock Entrance (B)	DATE:	30/09/08
DIR	Dock Entrance to Cardiff Road(3to2)	DAY	Tuesday

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

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

START PERIOD	CARS	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

START PERIOD	CARS	LCV	MCV	HCV 2 AXLE	HCV 3 AXLE	HCV 4+ AXLE	BUSES	MOTOR CYCLES	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	

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

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

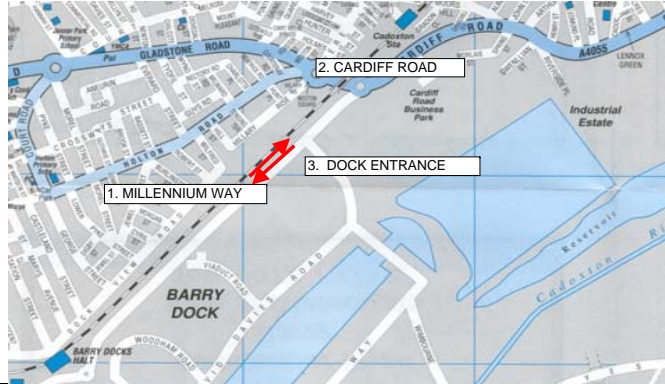
87	48	5	4	2	12	1	0	1	159
31	7	0	2	0	5	0	0	0	45
185	87	14	9	5	25	4	1	9	330
54	7	0	5	0	14	1	0	0	81
566	223	39	40	12	133	10	1	14	1024
55.27	21.78	3.81	3.91	1.17	12.99	0.98	0.10	---	100

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

Millennium Way - DockEntrance (Wimbourne Road)

30th September, 2008

To Millennium Way
From Millennium Way
Millennium Way leg 2way



CARS cars
LCV light commercial vehicles
MCV medium commercial vehicles
HCV 2 AXLE heavy commercial vehicles - 2 axle
HCV 3 AXLE heavy commercial vehicles - 3 axle
HCV 4+ AXLE heavy commercial vehicles - 4 plus axles
BUSES buses
MOTOR CYCLES motor cycles
CYCLES cycles - count NOT included in vehicle TOTALS

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

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

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

START PERIOD	CARS	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
AI	63	7	1	1	0	1	1	1	0	75
MI	87	15	1	2	0	0	0	0	0	105
PI	91	28	1	3	1	0	1	1	1	126
EI	127	22	3	1	0	4	1	2	0	160
AI	117	12	4	1	0	1	7	2	0	144
KI	110	19	2	1	0	0	7	0	0	139
\	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
PI	145	14	2	0	0	0	6	4	2	171
MI	148	11	2	0	0	1	2	3	1	167
PI	165	9	1	1	0	1	3	3	0	183
EI	208	9	1	1	0	1	3	0	3	223
AI	161	8	1	1	1	0	3	1	0	176
KI	155	4	1	1	1	1	0	1	0	164
\	155	3	2	0	0	0	0	0	1	160
17.45	242	15	2	0	0	1	3	2	2	265
18.00	242	15	2	0	0	1	3	2	2	265
18.30	186	6	1	0	0	1	1	0	3	195

START PERIOD	CARS	LCV	MCV	HCV 2 AXLE	HCV 3 AXLE	HCV 4+ AXLE	BUSES	MOTOR CYCLES	CYCLES	TOTAL
7.00	220	37	5	2	0	2	8	1	3	275
/										
7.30	144	20	1	1	0	1	5	2	1	174
AI	163	22	3	1	1	1	9	2	1	202
MI	150	22	6	0	0	3	2	1	0	184
PI	171	24	1	1	0	1	2	0	2	200
EI	156	14	2	2	0	1	2	3	0	180
AI	127	10	1	2	0	3	2	0	1	145
KI	135	23	2	1	0	1	1	1	1	164
\	112	20	2	4	1	2	2	0	0	143
9.30	195	28	4	1	3	4	3	0	1	238
10.00	206	25	5	2	0	3	3	0	0	244
10.30	217	24	4	3	1	0	4	0	0	253
11.00	227	17	5	4	2	2	8	1	0	266
11.30	220	19	1	1	0	2	2	1	0	246
12.00	225	26	5	3	1	5	3	2	2	270
12.30	251	12	6	3	0	4	1	2	0	279
13.00	234	27	2	9	1	8	4	2	0	287
13.30	233	33	7	9	1	2	6	3	0	294
14.00	228	36	3	3	1	1	4	1	0	277
14.30	245	30	1	2	1	5	13	0	0	297
15.00	260	32	4	3	0	1	7	2	1	309
15.30	255	31	4	3	0	4	1	2	1	300
/										
16.00	132	16	4	6	0	0	0	0	1	158
PI	124	7	1	1	0	1	0	1	0	135
MI	145	5	3	0	0	5	1	0	0	159
PI	137	7	1	0	0	0	3	0	0	148
EI	177	10	2	0	0	0	1	2	2	192
AI	113	4	0	0	0	1	0	0	0	118
KI	133	8	1	0	0	1	0	0	0	143
\	106	5	0	1	0	1	0	2	1	115
17.45	140	4	1	0	0	0	0	0	0	145
18.00	140	4	1	0	0	0	0	0	0	145
18.30	123	7	0	0	0	0	1	0	0	131

START PERIOD	CARS	LCV	MCV	HCV 2 AXLE	HCV 3 AXLE	HCV 4+ AXLE	BUSES	MOTOR CYCLES	CYCLES	TOTAL
7.00	274	44	6	3	0	2	13	2	3	344
/										
7.30	182	26	2	1	0	3	7	2	1	223
AI	226	29	4	2	1	2	10	3	1	277
MI	237	37	7	2	0	3	2	1	0	289
PI	262	52	2	4	1	1	3	1	3	326
EI	283	36	5	3	0	5	3	5	0	340
AI	244	22	5	3	0	4	9	2	1	289
KI	245	42	4	2	0	1	8	1	1	303
\	215	37	5	5	1	4	9	0	0	276
9.30	350	52	8	4	3	9	9	0	2	435
10.00	402	44	7	6	0	5	6	0	0	470
10.30	380	50	11	5	2	1	7	0	0	456
11.00	382	38	9	5	2	6	9	2	0	453
11.30	400	34	9	2	2	6	2	1	0	456
12.00	394	39	12	9	1	9	6	3	2	473
12.30	456	29	15	6	3	9	5	3	0	526
13.00	445	58	2	13	1	11	4	2	0	536
13.30	448	66	8	15	2	3	10	4	0	556
14.00	421	66	6	5	2	7	5	2	0	514
14.30	435	63	2	5	2	6	15	2	2	530
15.00	481	59	7	4	0	2	8	4	1	565
15.30	495	60	10	4	1	8	5	2	1	585
/										
16.00	274	31	8	7	0	3	5	1	2	329
PI	269	21	3	1	0	1	6	5	2	306
MI	293	16	5	0	0	6	3	3	1	326
PI	302	16	2	1	0	1	6	3	0	331
EI	385	19	3	1	0	1	4	2	5	415
AI	274	12	1	1	1	1	3	1	0	294
KI	288	12	2	1	1	2	0	1	0	307
\	261	8	2	1	0	1	0	2	2	275
17.45	382	19	3	0	0	1	3	2	2	410
18.00	382	19	3	0	0	1	3	2	2	410
18.30	309	13	1	0	0	1	2	0	3	326

PK 800 - 0900	422	77	9	7	1	5	9	5	0	535
PK 1630-1730	682	37	5	3	1	3	11	7	4	749
2 HR AM PK	736	126	16	10	1	10	26	6	1	931
2 HR PM PK	1279	73	14	5	2	7	22	13	8	1415
12 HOUR TOTAL	4990	545	89	53	13	60	89	31	17	5870
% OF TOTAL	85.01	9.28	1.52	0.90	0.22	1.02	1.52	0.53	---	100

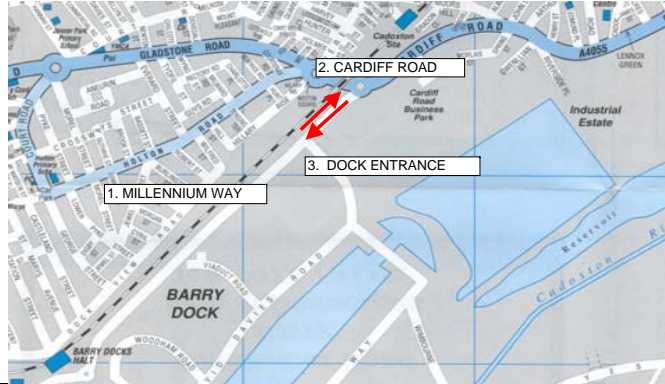
PK 800 - 0900	604	70	10	5	0	8	8	4	3	709
PK 1630-1730	572	26	6	0	0	6	5	2	2	617
2 HR AM PK	1158	155	18	12	2	13	25	9	6	1392
2 HR PM PK	1067	62	12	8	0	9	5	5	4	1168
12 HOUR TOTAL	5704	605	87	68	13	65	98	31	18	6671
% OF TOTAL	85.50	9.07	1.30	1.02	0.19	0.97	1.47	0.46	---	100

PK 800 - 0900	1026	147	19	12	1	13	17	9	4	1244
PK 1630-1730	1254	63	11	3	1	9	16	9	6	1366
2 HR AM PK	1894	281	34	22	3	23	51	15	7	2323
2 HR PM PK	2346	135	26	13	2	16	27	18	12	2583
12 HOUR TOTAL	10694	1150	176	121	26	125	187	62	35	12541
% OF TOTAL	85.27	9.17	1.40	0.96	0.21	1.00	1.49	0.49	---	100

Millennium Way - DockEntrance (Wimbourne Road)

30th September, 2008

To Cardiff Road
From Cardiff Road
Cardiff Road leg 2way



CARS cars
LCV light commercial vehicles
MCV medium commercial vehicles
HCV 2 AXLE heavy commercial vehicles - 2 axle
HCV 3 AXLE heavy commercial vehicles - 3 axle
HCV 4+ AXLE heavy commercial vehicles - 4 plus axles
BUSES buses
MOTOR CYCLES motor cycles
CYCLES cycles - count NOT included in vehicle TOTALS

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

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

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

START PERIOD	CARS	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
AI	119	16	1	5	1	2	3	1	1	148
MI	109	13	0	2	0	5	2	1	0	132
PI	122	16	2	2	1	2	2	0	2	147
EI	116	14	3	2	0	4	1	3	0	143
AI	102	10	2	3	2	6	1	0	2	126
KI	123	25	2	3	0	6	0	1	1	160
\	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
PI	156	9	1	1	0	6	0	1	0	174
MI	169	11	3	0	0	6	1	0	0	190
PI	146	11	0	1	0	1	2	1	0	162
EI	195	11	2	1	0	4	0	2	4	215
AI	133	11	2	0	0	1	1	0	0	148
KI	138	9	1	0	1	1	0	1	0	151
\	129	7	0	0	1	2	0	3	1	142
17.45	156	2	2	0	0	0	0	0	2	160
18.00	129	7	1	0	0	0	2	0	2	139

START PERIOD	CARS	LCV	MCV	HCV 2 AXLE	HCV 3 AXLE	HCV 4+ AXLE	BUSES	MOTOR CYCLES	CYCLES	TOTAL
7.00	108	30	1	2	2	4	6	0	4	153
/										
7.30	60	15	3	2	1	4	1	0	3	86
AI	91	24	3	2	1	3	1	2	5	127
MI	104	29	1	2	1	1	1	0	0	139
PI	108	35	2	4	1	1	0	1	1	152
EI	128	25	5	1	0	5	1	2	1	167
AI	123	17	3	2	1	8	7	1	0	162
KI	108	19	6	2	1	8	9	0	0	153
\	110	18	2	1	0	2	4	0	0	137
9.30	152	29	4	4	0	9	6	0	1	204
10.00	191	18	3	5	0	6	3	0	0	226
10.30	172	28	8	1	1	5	3	0	0	218
11.00	165	17	3	1	1	13	0	1	0	201
11.30	181	22	10	3	2	10	1	0	0	229
12.00	154	17	7	8	0	12	3	1	0	202
12.30	191	15	10	3	3	12	4	1	0	239
13.00	217	43	1	5	0	10	0	0	0	276
13.30	205	34	2	7	1	8	3	1	1	261
14.00	188	30	5	4	2	7	1	1	0	238
14.30	172	32	4	5	1	7	3	0	2	224
15.00	191	23	4	3	0	8	1	0	0	230
15.30	226	23	5	2	1	10	3	0	0	270
/										
16.00	116	13	4	2	0	5	5	1	1	146
PI	123	10	1	0	0	3	6	4	1	147
MI	114	11	1	0	0	1	1	3	1	131
PI	159	8	1	2	0	2	3	2	0	177
EI	169	7	0	0	0	2	3	0	2	181
AI	130	5	1	2	1	2	2	0	0	143
KI	143	3	0	2	1	2	0	1	0	152
\	134	3	1	1	0	2	0	0	0	141
17.45	235	14	1	0	0	2	3	2	1	257
18.00	186	7	1	1	0	1	1	0	3	197

START PERIOD	CARS	LCV	MCV	HCV 2 AXLE	HCV 3 AXLE	HCV 4+ AXLE	BUSES	MOTOR CYCLES	CYCLES	TOTAL
7.00	302	64	3	6	2	15	15	1	7	408
/										
7.30	167	27	3	3	1	7	6	2	4	216
AI	210	40	4	7	2	5	4	3	6	275
MI	213	42	1	4	1	6	3	1	0	271
PI	230	51	4	6	2	3	2	1	3	299
EI	244	39	8	3	0	9	2	5	1	310
AI	225	27	5	5	3	14	8	1	2	288
KI	231	44	8	5	1	14	9	1	1	313
\	212	37	6	7	1	10	4	0	0	277
9.30	340	56	10	6	3	18	9	0	2	442
10.00	398	55	9	10	2	16	7	0	0	497
10.30	388	63	17	5	2	12	6	0	0	493
11.00	388	36	10	6	3	18	8	2	0	471
11.30	415	39	15	6	5	16	4	1	0	501
12.00	372	46	13	12	1	20	8	3	1	475
12.30	445	31	21	4	5	22	5	2	0	535
13.00	447	79	4	13	1	22	3	2	1	571
13.30	431	63	7	15	3	19	10	2	1	550
14.00	409	66	11	10	3	15	4	1	0	519
14.30	423	66	5	9	2	17	19	0	2	541
15.00	460	56	9	5	0	15	7	1	1	553
15.30	474	64	7	5	4	22	5	0	2	581
/										
16.00	261	32	7	6	0	6	5	1	2	318
PI	279	19	2	1	0	9	6	5	1	321
MI	283	22	4	0	0	7	2	3	1	321
PI	305	19	1	3	0	3	5	3	0	339
EI	364	18	2	1	0	6	3	2	6	396
AI	263	16	3	2	1	3	3	0	1	291
KI	281	12	1	2	2	3	0	2	0	303
\	263	10	1	1	1	4	0	3	1	283
17.45	391	16	3	0	0	2	3	2	3	417
18.00	315	14	2	1	0	1	3	0	5	336

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

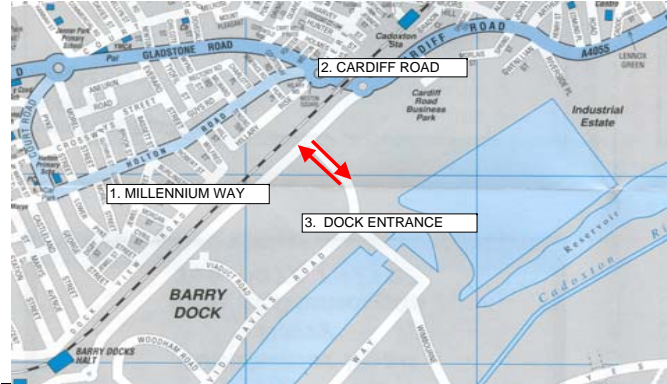
PK 800 - 0900	463	106	11	9	3	15	9	4	2	620
PK 1630-1730	572	31	3	4	1	7	9	5	3	632
2 HR AM PK	832	182	25	16	6	32	24	6	10	1123
2 HR PM PK	1088	60	9	9	2	19	20	11	5	1218
12 HOUR TOTAL	4854	624	103	79	22	175	85	24	27	5966
% OF TOTAL	81.36	10.46	1.73	1.32	0.37	2.93	1.42	0.40	---	100

PK 800 - 0900	912	159	18	18	6	32	15	8	6	1168
PK 1630-1730	1215	75	10	6	1	19	13	8	8	1347
2 HR AM PK	1732	307	39	40	11	68	38	14	17	2249
2 HR PM PK	2299	148	21	16	4	41	24	19	12	2572
12 HOUR TOTAL	10429	1269	206	169	51	359	178	50	54	12711
% OF TOTAL	82.05	9.98	1.62	1.33	0.40	2.82	1.40	0.39	---	100

Millennium Way - DockEntrance (Wimbourne Road)

30th September, 2008

To The Docks
From The Docks
Docks Entrance leg 2way



CARS cars
LCV light commercial vehicles
MCV medium commercial vehicles
HCV 2 AXLE heavy commercial vehicles - 2 axle
HCV 3 AXLE heavy commercial vehicles - 3 axle
HCV 4+ AXLE heavy commercial vehicles - 4 plus axles
BUSES buses
MOTOR CYCLES motor cycles
CYCLES cycles - count NOT included in vehicle TOTALS

SITE	Millennium Way - DockEntrance (Wimbourne Road)	DATE:	30/09/08
DIR	To The Docks	DAY	Tuesday

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

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

START PERIOD	CARS	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
/	69	19	3	2	1	2	1	0	4	97
A	93	27	5	2	1	3	7	2	5	140
M	77	25	7	1	1	2	1	0	0	114
P	79	26	1	2	0	1	0	0	0	109
E	56	12	2	0	0	3	1	0	1	74
A	49	12	1	3	1	8	1	0	0	75
K	33	12	4	1	1	8	4	0	0	63
\	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
/	15	1	1	3	0	3	0	0	0	23
P	21	4	0	1	0	4	1	0	0	31
M	16	5	1	0	0	2	0	0	0	24
P	31	4	1	1	0	1	1	0	0	39
E	24	2	0	0	0	1	1	0	0	28
A	14	3	0	1	0	3	0	0	0	21
K	21	3	0	1	0	1	0	0	0	26
\	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

START PERIOD	CARS	LCV	MCV	HCV 2 AXLE	HCV 3 AXLE	HCV 4+ AXLE	BUSES	MOTOR CYCLES	CYCLES	TOTAL
7.00	19	4	0	2	0	9	2	1	2	37
7.30	10	2	0	0	0	2	2	0	1	16
7.45	21	4	1	5	0	2	1	0	0	34
8.00	19	2	1	3	0	3	0	0	0	28
8.15	13	11	1	2	1	1	1	0	0	30
8.30	15	9	1	0	0	5	0	0	0	30
8.45	18	7	3	3	2	4	0	1	1	38
9.00	23	14	0	2	0	5	1	0	0	45
9.15	17	15	4	2	1	7	3	0	0	49
9.30	33	21	4	2	0	9	1	0	0	70
10.00	50	23	2	6	2	8	1	0	0	92
10.30	41	24	7	3	0	8	0	0	0	83
11.00	33	15	6	2	1	5	1	0	0	63
11.30	48	12	8	2	3	5	1	0	0	79
12.00	45	10	5	3	0	5	2	0	0	70
12.30	63	13	6	2	3	9	0	0	0	96
13.00	50	24	1	3	1	8	0	0	1	87
13.30	44	16	0	3	2	12	3	0	0	80
14.00	37	17	6	3	1	10	1	0	0	75
14.30	51	15	1	2	2	8	4	2	0	85
15.00	82	20	3	0	0	7	0	3	0	115
15.30	61	30	2	1	3	9	2	0	1	108
/	54	6	0	0	0	2	0	0	0	62
P	75	10	1	1	0	6	1	0	1	94
M	74	11	2	0	0	3	1	0	0	91
P	46	9	0	1	0	1	0	2	0	59
E	81	5	1	2	0	4	0	0	3	93
A	65	13	2	0	0	1	2	1	1	84
K	38	5	1	0	1	0	0	1	0	46
\	54	5	1	0	1	1	0	1	1	63
18.00	34	1	2	0	0	0	0	0	3	37
18.30	26	1	1	0	0	0	1	0	2	29

START PERIOD	CARS	LCV	MCV	HCV 2 AXLE	HCV 3 AXLE	HCV 4+ AXLE	BUSES	MOTOR CYCLES	CYCLES	TOTAL
7.00	118	34	3	3	2	13	4	1	8	178
7.30	79	21	3	2	1	4	3	0	5	113
7.45	114	31	6	7	1	5	8	2	5	174
8.00	96	27	8	4	1	5	1	0	0	142
8.15	92	37	2	4	1	2	1	0	0	139
8.30	71	21	3	0	0	8	1	0	0	104
8.45	67	19	4	6	3	12	1	1	1	113
9.00	56	26	4	3	1	13	5	0	0	108
9.15	51	32	5	2	2	8	5	0	0	105
9.30	70	48	6	4	0	17	2	0	0	147
10.00	94	33	4	10	2	13	1	0	0	157
10.30	92	39	10	4	0	13	1	0	0	159
11.00	80	24	9	3	3	16	1	0	0	136
11.30	83	33	14	4	3	12	2	0	0	151
12.00	82	21	9	7	0	15	2	0	1	136
12.30	109	20	8	6	4	19	0	1	0	167
13.00	110	51	2	8	2	19	1	0	0	193
13.30	85	37	3	8	3	22	4	2	1	164
14.00	76	34	11	5	3	14	3	1	0	147
14.30	78	25	5	4	4	17	6	2	0	141
15.00	125	35	6	3	0	15	1	5	0	190
15.30	115	44	5	3	3	16	2	2	1	190
/	69	7	1	3	0	5	0	0	0	85
P	96	14	1	2	0	10	2	0	1	125
M	90	16	3	0	0	5	1	0	0	115
P	77	13	1	2	0	2	1	2	0	98
E	105	7	1	2	0	5	1	0	3	121
A	79	16	2	1	0	4	2	1	1	105
K	59	8	1	1	1	1	0	1	0	72
\	64	8	1	2	1	3	0	1	1	80
18.00	45	3	2	0	0	1	0	0	3	51
18.30	46	3	1	1	0	0	1	0	2	52

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

7.00	65	29	6	8	3	13	1	1	1	126
7.30	266	38	5	3	0	9	3	3	4	327
7.45	136	64	11	17	4	29	8	1	2	270
8.00	487	64	8	4	2	18	4	5	6	592
8.15	1340	374	73	55	24	159	31	12	17	2068
8.30	64.80	18.09	3.53	2.66	1.16	7.69	1.50	0.58	---	100

7.00	326	104	17	14	5	27	4	1	2	498
7.30	351	52	7	5	0	16	5	3	4	439
7.45	626	214	35	28	10	57	25	3	12	998
8.00	639	89	11	13	2	35	7	5	6	801
8.15	2673	787	144	114	41	314	63	22	35	4158
8.30	64.29	18.93	3.46	2.74	0.99	7.55	1.52	0.53	---	100