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Olympic Delivery Authority Equality Impact Assessment

Weymouth and Portland Venue Completion Report



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London 2012 Values

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Facility Design Criteria report prepared by Royal Haskoning

Appendix 3

Community activity at the Weymouth & Portland National Sailing Academy

1 Project brief

1.1. Introduction

The London 2012 Olympic Games and Paralympic Games Sailing events will be hosted at the Weymouth and Portland National Sailing Academy (WPNSA), and the adjoining Portland Marina, which offers world-class facilities and some of the best small boat sailing conditions in the world. The Olympic Delivery Authority (ODA) has completed work to enhance the existing sailing facilities at WPNSA with the construction of a new permanent 250m slipway and new race-boat parking, lifting and mooring facilities. The completion of the project delivers an early legacy of world-class facilities for elite athletes and the local Dorset community to use.

Works on Portland Marina, which will be used alongside the Sailing Academy will provide berthing and land based facilities at Games time. All key facilities will be ready more than three years ahead of the start of the Games.

1.2. Project aims and objectives and deliverables

The requirement to enhance the WPNSA facilities arises directly from the selection of the Academy as the venue for the London 2012 Olympic Games and Paralympic Games Sailing events. The development is required to bring the facilities at the WPNSA up to the standard required by the International Sailing Federation (ISAF) to meet the criteria for hosting of the London 2012 Olympic Games and Paralympic Games Sailing events. The enhanced venue will also be required to host the test events in 2010 and 2011. However, the enhanced WPNSA facility will also provide lasting benefits after the Games for the Weymouth and Portland communities.

The aims and objectives of the project were to:

- provide enhanced recreational facilities;
- complement the existing sailing facilities at the WPNSA;
- retain and enhance the sailing heritage at Portland; and
- provide a focus for Sailing related cultural activities prior to, during and after the Games.

Details of the delivered elements of the overall scheme are:

- Provision of 150m of slipway at a gradient no steeper than 1-in-6, giving options for berthing (from different wind directions).
- Two crane units mounted on a pier, suitable for launching and recovery of two tonne keelboats. The Pier is to be formed as a suspended deck.
- A reclamation footprint of 20,000m² (including areas of existing man made structure, for example slipways. The reclamation will be constructed from imported granular fill.
- A new boat parking area of 10,600m² which, combined with the existing facilities, provides a total dedicated storage area of approximately 25,000m² within the WPNSA compound, all surfaced with block-paving, including surface water drainage, interceptors and consistent ground level.

1.3. Links to other applications or works

1.3.1 Marina development

A commercial marina is also under construction on land immediately to the east of the WPNSA, by marine developers, Dean & Reddyhoff. The land based development works associated with the marina have implications for the WPNSA in that some of the land currently used for events car parking and for campervan parking by the WPNSA will be redeveloped. The marina development, will prevent any use of this area by WPNSA in the long term and will restrict operational use of the area in the short term while construction activities progress.

In order to ensure the continued efficient operation of the WPNSA during construction of the marina separate planning applications were submitted for temporary replacement car parking on sites in the immediate vicinity of the WPNSA complex.

Temporary planning permission, via two applications, was sought for replacement car parking for the period until 2010 until a permanent replacement car parking area can be made available through the redevelopment of part of the Mere Tank Farm site. A separate planning application is being submitted to secure planning permission for permanent replacement car (and boat) parking and boat maintenance on land at the Tank Farm site.

Details of the phasing of the replacement facilities arising from the marina development, the size and general location of the replacement facilities can be summarised as:

- 0.2 ha within the land area proposed for the marina development previously occupied by Luhrs Marine to be used for car parking for a temporary period between 30 April 2008 to 31 October 2008.
- .7 ha within the Tank Farm area Plot Q for a temporary period between 30 April 2008 and March 2010 for car parking only.
- 0.7 ha within the remaining Tank Farm land for permanent use for car and boat parking and boat maintenance from 2010 onwards.

1.1.2 Games time

The Games themselves will involve the submission of separate applications for temporary planning permission in the period leading up to 2012. Those applications will determine how the extended and enhanced WPNSA site will be used during the period when both the Olympic and Paralympic Games are held.

2 Consultation and engagement

2.1 Planning

Consultation for the development was undertaken with Weymouth and Portland Borough Council (WPBC) (Planning, Highways and Environmental Health Officers), relevant statutory and non-statutory bodies including Royal Yacht Association (RYA), WPNSA, Natural England and the Environment Agency.

Pre-application consultation with the public and key stakeholders was carried out between 9th and 17th February 2008. In advance of the submission for planning a public consultation exercise was undertaken in order to ascertain views about the proposals for the site. The exercise was carried out as part of a wider public consultation event relating to proposals on the future for Osprey Quay as a whole, particularly relating to potential changes to the approved master plan which was intended to guide development within that area. The following consultation activities were undertaken:

- A stakeholder evening event which was attended by 35 people representing the range of companies and organisations within the Weymouth and Portland area.
- A staffed public exhibition entitled ‘Osprey Quay – What’s Next?’ was visited by more than 300 people the Portland Heights Hotel and the Weymouth Arts Centre.
- Representatives from secondary schools within Weymouth and Portland visited the exhibition prior to the general public and they were encouraged to ask questions about, and make comments on, the proposed developments within the Osprey Quay area.

At the public exhibition each attendee was encouraged to complete a consultation questionnaire and some 105 questionnaires were completed during the course of the exhibition. The exhibition materials were also on display (unmanned) at the WPNSA. A further 33 questionnaire responses were received during that period.

A brochure was produced which reflected the display boards at the exhibition and explained the proposals for Osprey Quay and within that brochure was a copy of the questionnaire. The brochure was made available at both the public exhibition and at the WPNSA.

2.1.1 Public exhibition

The public exhibition was publicised and managed by Watershed, a specialist public relations organisation, who provided a report on the consultation responses. A summary of the questionnaire responses and comments made relating to the proposed marine works enhancement at the WPNSA is detailed below, this provides an indication of the level of public support / objection and expressed concerns relating to the development.

Since the proposed enhancement works are, in the first instance, required to enable the London 2012 Olympic Games and Paralympic Games Sailing events to be held at the WPNSA, relevant responses to the various questions relating to the staging of the Games at this site:

- Around half of the respondents overall provided additional comments to the questionnaire.

Overall the concerns of those respondents from Weymouth focused mainly on the need for improved transport infrastructure. Portlanders also raised a range of issues, including matters relating to potential employment and transportation. People from out of the area were also generally very positive. Their concerns and comments tend to focus on technical sailing issues. Other issues raised by people from out of the area were divided between the following (in order of frequency):-

- possible benefits to the local area;
- impact of the Games on maritime traffic around the development; and
- waterfront pedestrian/cycle access to the development.

2.1.2 WPNSA enhancement works:

- Around 84 per cent of the consultees thought that the proposed enhancement works to the WPNSA would help to increase local interest in the sport and some 81 per cent of the respondents considered that the proposed enhancement works to the WPNSA would provide a lasting legacy after 2012.

Only a very small number of the comments related to the proposed WPNSA enhancement works specifically. The few comments made came from sailing enthusiasts and related to a perceived need to provide additional parking for mobile homes and caravans and associated services in connection with the enhanced facility and the potential effects on the slipway area available for windsurfing. Waterfront pedestrian/cycle access to the development

2.1.3 Games time

- Comments relating to the hosting of the games themselves, the majority of comments were positive and the Olympic and Paralympic Games were seen as prestigious and likely to improve the image of the area. However a number, tending to be from those living in Weymouth, raised issues related to the Games period itself and voiced concerns regarding traffic on/off the island and around the development during the competition period.
- Other concerns raised included facilities for viewing the action, accommodation for tourists, jobs/housing and impact of the event on the local population and economy.
- Impact of the Games on maritime traffic around the development

London Organising Committee of the Olympic Games and Paralympic Games (LOCOG) will review concerns and impacts going forward under their Head of Diversity and Inclusion, who works with LOCOG teams to ensure Diversity and Inclusion is a fundamental part of their work. LOCOG recognises six principal strands of diversity which it monitors throughout its work; ethnicity, disability, gender, age, sexuality and belief.

2.1.4 Osprey Quay

In terms of the future for Osprey Quay, key issues raised in order of frequency were: facilities for young people on Portland; traffic; affordable housing; environmental impact; jobs; cost; shopping; and cheap mooring fees. Many children expressed a desire for an ice rink at Osprey Quay.

2.1.5 Summary

The consultation exercise indicates that there is a strong belief locally that the proposed enhancement works to the WPNSA will stimulate local interest in the sport of sailing and will provide a lasting legacy in the lead up to the games and also after the Games have been and gone. The vast majority of respondents to the questionnaire supported the proposed enhancement works to the WPNSA.

2.2 Construction phase

During construction phase London 2012 created 2 leaflets for the Weymouth and Portland Area to update them on progress at WPNSA and also work on the Olympic Park. The ODA Construction Hotline was available for local residents to call 24- hours a day if they had any questions or complaints about the work. A total of six calls were received which in the main were queries about Games related topics.

The ODA Project Sponsor for Weymouth and Portland Project gave a presentation and answered questions at the end of the construction period at a Portland Community Partnership meeting attended by a wide local audience.

2.3 Legacy

The ODA works are now complete and the project will now be managed by LOCOG in partnership with WPNSA. It is envisaged that LOCOG will deliver further issues of the London 2012 leaflets up until the Games to update residents on progress and detail local information about accommodation, transport and ticketing. LOCOG will also undertake local community consultation on the overlay required for Games time prior to a planning application being submitted.

3 Impact assessment

This section details the aspects of the development which are likely to have an impact on the E&I target groups of; age; disabled people; gender including transgender; faith and belief; race/ethnicity; and sexual orientation/identity.

3.1 Design and accessibility

The development involved significant engineering works to reclaim land from the sea and to create the hardstanding, slipway areas and new crane pier, the scheme did not involve the erection of any new buildings at the WPNSA complex. Therefore, the importance of design within the scheme is significantly reduced, in terms of the relevant guidance on those matters set out in PPS1 and the CABE good practice guidance.

The design the development was driven by the requirement for the specification to meet the standards set by ISAF in order for the WPNSA to be an appropriate venue to host the Olympic and Paralympic Sailing events. The design specification of the boat park, slipways, crane pier, access brow, pontoons and wave protection were set out in more detail in the Facility Design Criteria report prepared by Royal Haskoning¹.

Attention has been given to the external finishes and materials for the various parts of the new structures that are visible above the mean low water mark (MLWM) to ensure that they are harmonious with the current WPNSA hardstanding areas and to ensure that where possible a consistent approach has been adopted with the proposed marina development on the adjoining site.

The surfacing of the new boat park is block paving, with parking bays delineated from circulation areas by colour coded brickwork, as per the existing surfacing within the WPNSA. The crane pier is on a concrete deck supported by vertical steel tubular piles. The slipways are made of reinforced concrete slabs with textured surface.

Access for the disabled people within the existing WPNSA complex is excellent, with the sailing facilities designed from the onset with the needs of the disabled, for spectators, visitors and competitors, given very high priority. The existing facilities have been audited under the RYA Sailability scheme during design and following construction.

¹ Appendix 2 Facility Design Criteria report prepared by Royal Haskoning

Due to the requirement for the enhanced WPNSA facilities to host the Paralympic Games and to provide a centre of excellence for all sailors in legacy, consultation with ISAF and RYA has ensured that the requirements for disabled people have been met within the scheme. The new development has therefore been specified in recognition of the report on Paralympic Games audit of the Athens Sailing facilities, including:-

- access brow gradients
- provision of wheelchair grab/ handrails
- wide pontoon systems and fingers, allowing access for wheelchair users
- low freeboard berths, suitable for a range of craft
- new Caley Marine person-lifts within the pontoon system
- crane facilities for launch and recovery of specialist sailing craft
- awareness of trip hazards (specification of slot drains and tie-down points)

The design of the WPNSA Enhancements has built on the practice established during the Academy design process and has incorporated lessons from the operational stage of the facility. In addition, the design has used the access report on the facilities for the Athens 2004 facilities (International Paralympic Committee Safety in Sailing Research Project undertaken by Joanne 'Anne' B Allen and Betsy Alison) as a reference, incorporating key recommendations. The design has also benefited from feedback from the new Sailing facilities in China (RYA delegation to Qingdao, August 2006).

The works comprise provision of a large area of boat parking, together with launch facilities (slipways and cranes) and a pontoon area for embarkation.

Key considerations to improve accessibility have been designed and built into the enhanced facility:

It has been essential to have sufficient 'tie down' points for dinghies. It is also very easy for these tie down points (or the ropes tying down the boats) to become trip hazards. Tie down points are prominently marked to overcome trip issue.

The area has been illuminated, with low level lighting associated with service points and high level lighting to provide 20 lux throughout. While this is not sufficient for a working environment, it will provide sufficient to allow comfortable transit through the area and to reinforce feelings of safety.

Access to the crane pier and onto the pontoon system has been located within a wide open footway, protected with railings and high kerbs. The gradient of the access ramp has been specified to allow wheelchair access, with the bridge handrails incorporating low level rails to assist wheelchair users

Within the existing pontoon system, WPNSA has 'disabled access' pontoons, supplied with 'Crewlift' hydraulic hoists and 'fold down' cleats. Similar units have been provided within the new western marina pontoons complete with fold-down cleats.

The pontoon area has been designed to accommodate a wide range of craft, with fendering extending below the waterline to safely accommodate low-freeboard craft, most notably those associated with disabled sailing. 50% of the finger pontoons have been upsized to 2 metres in width (from 1 metre) to provide safe and stable access, and the pontoon system incorporates lighting within service pillars.

3.2 Employment and skills

The WPNSA Enhancements benefited the local community by the employment of 17 local people during the construction period which benefited the local economy.

The appointed contractor was required to demonstrate compliance with a set of equality-related requirements, including:

- compliance with all equality legislation, including the ODA's statutory duties to promote equality;
- operate effective equality-related HR policies and procedures;
- open advertising of vacancies on the project and utilisation of the Local Labour and Business Scheme where appropriate;
- operate effective equality monitoring of recruitment, workforce and trainees;
- implement a diversity training plan.

3.3 Equality and inclusion

3.3.1 Business opportunities and impact on businesses

The development will allow the WPNSA to hold more high profile events and user numbers are predicted to increase by approximately 10% beyond the increase that would occur if the works had not gone ahead. This increase of 10 per cent should benefit the local economy in the area by bringing greater numbers of visitors to the area who are in turn likely to spend money in local businesses.

As part of the ODA commitment to improve business opportunities for Small Medium Enterprises (SMEs) The ODA encouraged the appointed contractor(s) to:

- utilise the Business Network to advertise any contracting opportunities;
- attend networking opportunities with minority-owned businesses

The ODA required the appointed contractor(s) to provide monitoring information on the ownership of companies operating in the supply chain, and to monitor their own procurement processes to demonstrate that these are open and equitable. The contractors achieved this through network events and local contacts and a number of SMEs were employed as a result.

The facilities on Portland are relatively simple in scope, requiring specialist input from a small range of specialists in support of the main Contractor. All tenderers have committed to opening the supply chain to encourage engagement, through advertisement and through network events, of the most technically appropriate suppliers irrespective of race, gender or disability.

3.4 Health, safety and security

3.4.1 Environmental

The construction works has involved no land-based construction works and no excavation activity. In addition, all the fill material was clean material sourced from local quarries or other approved locations (marine won aggregates).

As a consequence it has been assumed that the potential for health impacts associated with contaminated soils and groundwater during construction was negligible.

3.4.2 Noise

During construction, noise levels were increased due to the presence of construction vehicles and piling activity. Taking account of the fact that this noise occurred during the day time, when the majority of people are likely to be away at work, plus the existing background noise from road traffic and the daily helicopter flights, it was judged that the significance of piling-related construction noise would represent a minor adverse impact.

The timing of the works took into account of the potential for disturbance to birds in the harbour and piling did take place during the winter period, when the harbour supports migrant populations.

3.4.3 Air quality

During the construction works, low levels of dust were generated although this was only considered to have a very localised effect on air quality.

On completion of the construction it is envisaged that the operation of the site, will result in a slight increase in concentrations of vehicle exhaust pollutants from the additional traffic that will be generated. However, the levels of the relevant pollutants are predicted to be below the annual mean air quality objective. The development is therefore predicted to have a minor adverse impact on air quality.

3.4.4 Transport

The transport assessment completed for the development demonstrated that the predicted increases in vehicle numbers that are likely to arise as a result of the works are not large enough to cause any operational problems because they are within the capacity of the relevant junctions.

3.5 Legacy

3.5.1 Community access

The extended WPNSA facility will not only enable the hosting of world class Sailing events in the future (including the Olympic Games and Paralympic Games) but will facilitate a similar, or potentially wider, range of community activities to that currently taking place at the Academy.

Fundamental to the future operation of the enlarged WPNSA facility is a commitment to continue to provide access to the local community for recreational sailing, as well as high quality training and tuition².

Concerns were raised during the planning consultation that the facilities should benefit the whole community. The WPNSA currently carries out a wide range of community activities in accordance with its stated aim of providing a facility for community use³.

4 Conclusion

The EqIA process has been embraced by the project team and has helped to improve the team's capability in understanding and addressing Equality and Inclusion.

WPNSA already has a strong background in providing community activities, which will be taken forward by the Academy in future events and programmes.

³ Appendix 3: WPNSA Community Activities

Appendix 1



London 2012 Values

Vision:

To use the power of the Games to inspire change

Values:

To achieve our vision we must be

inspirational.

To do this we must be **open** and **respectful.**

Only by working as a **team**

Can we **deliver** something truly **distinctive.**

Inspirational

I take my inspiration, not just from our achievements but also from the effort required to deliver them, no matter how big or small the tasks involved. I believe in change and want to inspire this in everyone I interact with.

Open

know that my voice is heard and that my opinion is respected. We share knowledge, news good and bad and do so authentically. Every person in our team embraces challenge and disagreement as readily as praise and success.

Respectful

I treat everyone, whoever they are and whatever the situation, as I would like to be treated and view every interaction, no matter how minor, as an opportunity to deliver on the vision of the Games

Team

I work in a team where we organise ourselves so that we succeed together and learn from our mistakes in a collaborative environment where all contributions are valued and every decision is supported as a group.

Deliver

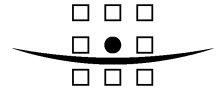
I make doing my absolute best – both in what I deliver and the attitude I adopt - the minimum standard I work to for every task, no matter how routine.

I take personal responsibility for delivering my promises (and those of my team), so that we fulfil the London 2012 vision.

Distinctive

I feel we are distinctive because we are brave and bold and genuinely seek to challenge and inspire change, and will use the opportunity handed to us to create a strong future for the Olympic and Paralympic movements.

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South West RDA

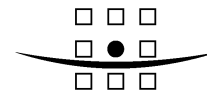
WPNSA Marine Works Enhancement

Design Criteria

Final Report

03 November 2006

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Abbreviations/units

A	Amps
API	American Petroleum Institute
ALWC	Accelerated Low Water Corrosion
BS	British Standard
CD	Chart Datum
CP	Cathodic Protection
CBR	Californian Bearing Ratio
CCTV	Closed Circuit Television
°	Degrees
°C	Degrees Celsius
FSC	Forest Stewardship Council
kg	Kilogram
kN	kilonewton
kN/m ²	Kilonewton/metre square (1kPa)
kPa	Kilopascal
kw	Kilowatt
M	Metre
mm	Millimetre
OD	Ordnance Datum
%	Percent
RDA	Regional Development Agency
RIB	Rigid Inflatable Boat
T	Tonne
V	Volt

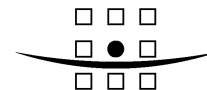
1 REFERENCES

1.1 Code & Standards

BS6349	Maritime structures
BS8110	Structural concrete
BS5400	Steel, concrete & composite bridges
BS8002	Earth retaining structures
BS8004	Foundations
BS5950	Structural steelwork

1.2 Other References

Pavement Design to be undertaken in accordance with: The Structural Design of Heavy Duty Pavements for Ports and other Industries, 2nd Edition, Knapton & Meletiou, Interpave/ British Ports Association, 1996.



2 FUNCTIONAL REQUIREMENTS

2.1 Introduction

The facility shall accommodate all items necessary for the operation of the new berths and launching of the craft. The elements required are included within this section.

2.2 Boat Park

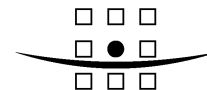
General	<p>To provide minimum of 280 slots, each measuring 5.5m by 3.5m as per the exiting area.</p> <p>Tie down points have been assumed to adopt the pattern used in the original boat park i.e. one point per 3 spaces. N.B. subsequent inspection of facilities elsewhere indicates that a frequency of one tie down point per bay would be appropriate in this location. Tie down points to be designed for ease of use and to address trip hazard when not in use.</p> <p>Surfacing to be block paving, with boat parking bays delineated from circulation areas by colour coded blockwork, as per existing surfacing.</p> <p>Paving to be laid to minimum falls of 1:50 (2%)</p>
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2.3 Slipways

General	<p>Reinforced concrete slabs, with textured surface (to be specified). Design to take account of immersion, wave climate, and underlying fill properties. Design to acknowledge use of jet wash cleaners and scrubbers.</p> <p>Priority will be given to the provision of in-situ construction of the slipways, with associated temporary works requirement.</p>
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2.4 Crane Pier

General	Concrete deck supported by vertical steel tubular piles. Pedestrian access to and from the craft is to be provided via the access brow. Deck to be designed to accommodate normal vehicular loading over restricted area, together with concurrent and sequential loading from crane systems.
Length	53m to seaward face from boat park (based on launching into >2m of water at all tides).
Stem Width	Minimum of 10m, allowing 2m safe pedestrian access way and two-way movement for vehicles.
Head	To allow vehicle and trailer operation. The minimum acceptable deck footprint must include a turning circle with a minimum of 12.5m radius clear area. N.B. Cranes and other structures are to be outside this circle.
Deck Level	+3.5mCD, 0.15m above 1:200 year still water level. The pier location is in the lee of breakwater and wave screen structures for waves from the north and east.

**2.5 Access Brow**

General	The bridge shall have a minimum width of 2.5m and shall not exceed gradients of 1:12 on more than 3% of predicted low waters per year. The bridge must meet accessibility requirements for all users of the WPNSA facility, and will be subject to an accessibility audit.
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2.6 Pontoons

General	Units to be bespoke system provided by recognised supplier, to fulfil functional requirements of the WPNSA event profile. Breakwater pontoons to be used for the main entry walkway, utilising surplus from the existing WPNSA mooring area. All pontoons to be anchored using tubular piling.
Design	Design of pontoon units and anchorage to be contracted to the supplier (who shall be required to offer PI cover as part of their provision).

2.7 Wave Screen

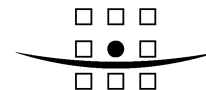
General	Structure to comprise steel piles with in-fill panels. Design to consider concrete and timber planks, with corresponding design life and life to first maintenance depending on material selection. There must be sufficient water between the wave screen and pontoon system to permit transit of RIB's and small craft (6m minimum clearance).
Design	The arrangement must incorporate measures to minimise the development of adverse wave conditions as a result of reflection. Wave transmission through the structure must be minimised to provide wave conditions limited to 0.3m for the 1:1 year case and 0.5m for the 1:50 year case.

2.8 Mechanical & Electrical Requirements**2.8.1 Lighting**

General	Lighting at levels/mast frequency equating to the existing boat park have been assumed. Service bollards (10no.) will additionally include photocell controlled light in each pillar.
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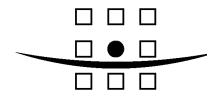
2.8.2 Water Supply

Boat Park	Hose points will be provided at each service pillar (10no. in total).
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2.8.3 Power

Boat Park	<p>Allowance is for 10no. service points each with 4no. socket outlets. It is envisaged that these will be a mixture of 16A, 32A and 63A rated 230V of the following numbers (2no. 16A, 1no. 32A and 1no. 63A, 230V)</p> <p>Hence:</p> <table data-bbox="584 593 1190 689"> <tr> <td>16A</td> <td>20no. @ 3.68kW</td> <td>=</td> <td>70.4kW</td> </tr> <tr> <td>32A</td> <td>10no. @ 7.36kW</td> <td>=</td> <td>70.4kW</td> </tr> <tr> <td>63A</td> <td>10no. @ 14.49kW</td> <td>=</td> <td>138.6kW</td> </tr> </table> <p>Equating to a total of 140kW</p> <p>If applying a diversity factor of 0.5 then the power requirement is 70kW (<i>single phase</i>)</p> <p>Hence total power requirement for pontoons and boat repair facilities is as follows:</p> <table data-bbox="584 981 1326 1014"> <tr> <td>132.5kW + 70kW</td> <td>=</td> <td>202.5kW (<i>single phase</i>)</td> </tr> </table> <p>Estimated total power requirement with a diversity factor of 0.5 for the boat repair facilities and pontoons is:</p> <p>Approximately 70 kW per phase</p> <p>Normally a marina operates on a 415/230V supply arrangement with each socket outlet what ever the socket rating operating on 230V for 16A, 32A and/or 63A and with some of the larger sockets outlet ratings even operating at 63A, 400V.</p> <p>Due to the type of installation, its location and use by members of the public each socket outlet is required to be provided with a residual current devices for protection against electrical shock and this is where the socket outlets are generally provided for powering of the boat rather than maintenance.</p> <p>Please note that it is understood that the boats are generally maintained using hand tools that operate on a 230V system. It is normal practice for hand held operated tools to operate from an 110V centre tapped earth system for safety reasons and we would recommend that an 110V system is installed for small power tools.</p> <p>We would require confirmation of the require system voltage for the pontoon socket outlets.</p>	16A	20no. @ 3.68kW	=	70.4kW	32A	10no. @ 7.36kW	=	70.4kW	63A	10no. @ 14.49kW	=	138.6kW	132.5kW + 70kW	=	202.5kW (<i>single phase</i>)
16A	20no. @ 3.68kW	=	70.4kW													
32A	10no. @ 7.36kW	=	70.4kW													
63A	10no. @ 14.49kW	=	138.6kW													
132.5kW + 70kW	=	202.5kW (<i>single phase</i>)														
Pontoons	<p>Provision or Rolec-type 750mm pillars, containing water, power and low level lighting. Supply to include 1no. 16A socket per berth, 1no. hose point per 4 berths and a photocell</p>															



	<p>controlled light in each pillar.</p> <p>Number of berths is intended to be 70no. in total. The socket outlets will be grouped together in groups of 4no. so allow 18no. hook up points each with 4no. 16A, 230V rated socket outlets. (This amounts to 72no. sockets outlets). These socket outlets are for quick maintenance repairs using small hand tools Therefore if 72 x 16A (fully power rating) = 265kW</p> <p>If apply a diversity factor of 0.5 then power requirement for pontoon is 132.5kW (single phase)</p>
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2.8.4 Drainage

General	The storm water drainage system shall be designed for a 1 in 5 year storm frequency without a flooding check (in accordance with BSEN 752 Pt2, Table 1)
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2.8.5 CCTV

Not required.

2.8.6 Public Address

Not required.

3 DESIGN CRITERIA

3.1 Design Life

3.1.1 General

In the context of this document, design life means that, at the end of that period, the asset will continue to be serviceable and stresses will not exceed permissible stresses specified in the relevant British Standards.

It may be assumed that adequate regular inspections and maintenance, but not major repairs and rebuilding, will take place throughout the design life.

3.1.2 Structures

Description	Minimum Design Life (to first major maintenance)
Pier Structure	60 years
Slipway	60 years
Wave Screen (Piles)	45 years
Wave Screen	Material specific
Access Brow	30 years
Pontoon Anchor (Piles)	30 years
Pontoon Units	12 years

3.1.3 Fixtures & Fittings

Description	Minimum Design Life (to first major maintenance)
Handrails	30 years
Pontoons	12 years
Fenders	12 years
Bollards	12 years
Ladders	12 years

3.1.4 Mechanical & Electrical Services

Description	Minimum Design Life (to first major maintenance)
Water	20 years
Power	20 years
Lighting	20 years

3.2 Water Level

Tidal Range for Portland Harbour	Tide	CD	OD
Highest Astronomical Tide	HAT	+2.5m	+1.57m
Mean High Water Springs	MHWS	+2.1m	+1.17m
Mean High Water Neaps	MHWN	+1.4m	+0.47m
Mean Sea Level	MSL	+1.1m	+0.17m
Mean Low Water Neaps	MLWN	+0.8m	-0.13m
Mean Low Water Springs	MLWS	+0.1m	-0.83m
Lowest Astronomical Tide	LAT	-0.2m	-1.13m
Notes: Relationship between CD and OD	OD = 0.93m above CD		

3.3 Sea Water

Density	Specific gravity 1.025 kg/m ³
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3.4 Wave Heights

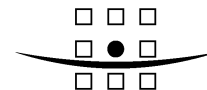
To be determined by the Designer, who shall make an assessment of the wave conditions likely to occur on the berth and shall design for a 1 in 50 year wave condition derived through the combination of wind, storm surge, inshore and offshore waves to derive a probabilistic worst case 1:50 year event. The assumed value for the 1:50 wave based on existing analysis is $H_s = 1.2\text{m}$ and $T_s = 4$ seconds.
Reference will be made to Posford Haskoning Coastal Study, May 2002 in which the individual 1:50 year wave conditions for inshore and offshore waves were calculated.
Wave height data shall be reviewed during the design stage—in combination with the marina design process.

3.5 Tidal Currents

To be determined by the Designer, who shall make an assessment of the current conditions likely to occur on the facility.
Data is provided in the following reports;
<i>'Weymouth and Portland Sailing Academy Environmental Statement'</i> Royal Haskoning, September 2002
<i>'Portland Bunkering Facility Environmental Statement'</i> Environmental Advice Centre, 2001
<i>'Portland Harbour - Closure of the South Ship Channel'</i> - Hydraulics Research, Wallingford, February 1972
<i>'Analysis of the Tidal Currents & Wind Pattern In Portland Harbour'</i> - Portland Port (research by Cardiff University) September 2000

3.6 Flood Risk Zones

The flood risk zones, used as the basis for design of the facility, are listed in Appendix A.



3.7 Ground Conditions

General	<p>Soils information is to be taken from the findings of the Quest/Fes investigation carried out during December 2001.</p> <p>Further geotechnical analysis will be required to undertake detailed design of marine structures, particularly those associated with piled structures within the pontoon area and the pier.</p> <p>Conservative estimates based on the existing data will be used to develop the cost plan and outline design.</p>
Survey prepared by Tom Bourne and Partners, 2001, supplemented by data derived by Yacht Havens Group during outline design of the adjacent marina facility.	
Notes: Survey dated 07/05/02 with subsequent as build data provided by Dean and Dyball.	

3.8 Wind

BS6349 Pt6	<p>The maximum wind speed shall be derived from HR Wallingford Report EX 1944, which details wind data from Portland collected between 1974 and 1983.</p> <p>This shall be supplemented with recent data sets, potentially including information derived from the shore station in Portland.</p>
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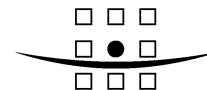
3.9 Temperature

External Design Temperature (average seasonal variation in temperature)	
Minimum	-10°C
Maximum	+32°C
Notes: Reference to be made to BS5400 Pt 2.	

3.10 Durability

3.10.1 Reinforced Concrete

General	Concrete to be suitable for this specific marine environment.
Cover	75mm
Crack Width	<p>Flexural cracking of reinforced concrete members to be restricted to 0.2mm maximum when calculated in accordance with BS8110 Pt 2</p> <p>Crack width calculations should be based on a nominal cover of 50mm.</p>
Concrete Grade	Grade C45–based on a minimum cement content of 400kg/m ³ in accordance with Table 21 of BS 6349 Pt 1.



3.10.2 Steel Piles

Piling	<p>Design life based on peak corrosion rates specified in BS6349 Pt 1 for steel tubular piles.</p> <p>The design of the piles will include measures to prevent any reduction in design life resulting from ALWC.</p> <p>Sacrificial CP will be considered but long term measures to control corrosion, and to minimise maintenance are to be reviewed, including pile coatings.</p>
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3.10.3 pontoons

Decking	<p>Shall be treated hardwood timber or concrete.</p> <p>Timber shall only be procured from sustainable sources and shall demonstrate compliance with the FSC certification scheme.</p>
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3.11 Settlement

3.11.1 Paved Areas

CBR Values	Not less than 15%
Settlement Criteria	Maximum point settlement of 50mm and maximum differential settlement of 25mm over a 5m length.

3.12 Cranes

The following schedules and listed information is to be utilised in the design of the crane.

3.12.1 Technical Description

Performance	
Rated capacity (for lifting other than for personnel)	Crane to be rated in range: 1500kg minimum, 2500kg maximum, includes lifting accessories.
Operational radius from centre of foundation plate	Maximum boom length to be within the range 5.0m min and 7.0m max.
Total hoist height of hook (measured relative to base)	9.0 m (+5.5/- 3.5m above/below baseplate).
Slewing angle	360° (approximately)
Slewing Speed	
Electric installation	The electrical installation to be in accordance with IP55.
Vertical load on the foundation at 125% load	150kN maximum
Moment at foundation at 125% load	600kNm maximum

Operation Systems	
The crane shall be provided with a cable-linked remote control facility	
The crane shall utilise powered operation of the hoist (up/down and radial) at all times. No provision for free-fall operation shall be fitted. The controls shall be “hold to run”.	
The crane shall be provided with a load limiter, preventing lifting operation in the event of overload. The limiter shall not prevent lowering of loads.	
The crane shall be provided with a two-speed hoist, for loaded and unloaded operation. A speed limiter shall be provided to restrict loaded operation.	
The facility to manually operate the crane (in abnormal circumstances) shall be included.	
Design Life	
Design life of structural components	30 years
Design life of electrical equipment	10 years
Environmental protection system	All steelwork is to be protected to address environmental conditions detailed below.
Conditions	
Saliniferous marine atmosphere with minimal industrial outfall. Equipment on/adjacent to the quay/breakwater/jetties will be wetted by seawater spray/mist.	

3.12.2 Labelling

A comprehensive set of labelling shall be provided to comply with the statutory requirements and outline the operational procedures.
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3.12.3 Operational Facilities

A multi-compartmented enclosure (manufactured from stainless steel 316L) mounted on a concrete plinth (150mm) shall be provided to house/store the:
<ul style="list-style-type: none"> • Electrical incoming supply/isolator • Electrical switch gear/controls • Hand operated control panel/wander leads • Lifting accessories • Operational instructions • Fire Extinguisher • Warning barrier to access routes • Internal lighting • 110V power outlet for use with maintenance tools • Hand held lamp/charger assembly • Similar items as required by the detail design

3.12.4 Task Lighting

External luminaries shall be provided on the crane column to provide local task lighting, assisting the operational procedures during inclement weather.
--

4 DESIGN DATA

4.1 General

The following design data has been gathered during a consultation process with the Client to ensure the design meets the facility requirements.

4.2 Design Water Depths

Structure	Minimum Water Depths
Slipways	-0.7mCD (0.5m depth required at LAT)
Crane Pier	-2.0mCD (berthing faces)
Pontoons	-2.0mCD
Notes	<p>Criteria set by ISAF in the Manual for the candidate cities</p> <p>The minimum offshore water depth shall be 2m below LAT. N.B. The Contractor shall be required to demonstrate, through survey, that this depth has been achieved.</p> <p>Predicted tidal conditions during the regattas in 2010, 2011 and 2012 taken from data set issued by Hydrographer for the Navy. This indicates that predicted low water tide levels of -0.1mCD will occur during the regatta events. No allowance has been made for high pressure atmospheric conditions influencing predicted levels.</p>

4.3 Design Keel Boat Data

Keel Boat Classes		Number to Accommodate
Olympic Classes	Star	35 (Quindao had 32)
	Yngling	35 (Quindao had 30)
Paralympic Classes	Sonar	Available in November 2006
	SKUD-18	Available in November 2006
	2.4 Metre	Available in November 2006
<p>Notes: Source: ISAF Criteria for candidate cities class association websites.</p> <p>The anticipated utilisation of the mooring facility during the Paralympic Games is not anticipated to exceed the 70 berths provided for the Olympic Trial events.</p>		

4.4 Design Olympic Classes

4.4.1 Olympic Classes

Boat Specifications		
Class	Star	Yngling
Length	6.9m	6.35m
Breadth	1.74m	1.73m
Draught	1.06m	1.05m
Weight	>671kg	645kg
Type	Keelboat	Keelboat

Crew	2	3
Designer	Frances Sweisguth	Jan Linge
Year	1911	1967

4.4.2 Paralympic Classes

Boat Specifications			
Class	Sonar	Skud-18	2.4 Metre
Length	7m	5.8m	4.1m
Breadth	2.4m	2.3m	0.8m
Weight	940kg	280kg	66kg
Ballast	-	-	200kg
Type	Keelboat	Keelboat	Keelboat
Crew	3	2	1
Designer	Bruce Kirby	Bethwaite/ Billoch/Mitchell	Scandinavian designers
Year	1980	2005	1982

4.4.3 Legacy (Future)

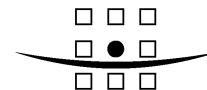
Boat Specifications	
Length	11m
Notes: Berths shall be capable of accommodating 11m yachts on fingers and pontoons.	

4.5 Pontoon Fendering

General	Pontoons to be fendered to accommodate the specific classes of vessels anticipated for the Olympics. These have low freeboards (300 – 400 mm) without crew, but this can reduce to 0mm once crewed up.
Spacing	To be provided at 1.0m centres.
Vertical Dimension	Extend to 0.1m below water level.
Pontoon provision based on new supply for standard units and fingers, and reuse as necessary of breakwater units from existing WPNSA facility.	

4.6 Flood Defence Levels

The surface elevation of the new boat park shall duplicate that of the adjacent reclamation and R3 Hard. This has a nominal level of 3.15m above CD.	
	Current 1:200 yr still sea level = 2.44mOD
	= 3.37mCD
The design case has been based on replication of consent for the WPNSA development in 2002, namely that the usage of the reclamation shall be controlled, and that early warning of extreme water levels will be received at the WPNSA through the Automatic Voice Messaging emergency flood warning system. The development is considered a water compatible development in accordance with Table D2 of PPS25 (in appendix A).	
Temporary facilities within the boat park area shall require separate and independent assessment based on PPS25.	
The reclamation is not directly exposed to wave action from any of the main harbour entrances, and is significantly masked from wave directions east of north.	



An analysis of wave overtopping will be undertaken within the modelling exercise, based on fetch limited wave propagation (assume 1:50 year wave).
Consideration to be given to the crest elevation of the eastern revetment adjacent to R3 Hard.

5 LOADS

5.1 Introduction

The loads and associated factors and allowable stresses, to be used for the design of the facility, are listed within this section.

5.2 Loadings

5.2.1 Crane Pier & Slipways

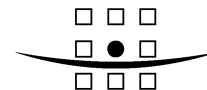
General	The paved areas must be designed to accommodate articulated road going vehicles, with normal axle and wheel loading.
Surcharge on Pier	Vertical loading 10kN/m ²
Vehicular Loading	HA Loading in accordance with BS5400 Pt 2

5.2.2 Paved Areas

Dynamic Loading	<p>Braking and cornering dynamic effects shall be allowed for in the pavement design.</p> <p>The pavement shall be designed and constructed to accommodate the following design vehicles:</p> <p>4 wheel 16t capacity boat carrier (currently used by WPNSA) Total machine weight: Unladen 14t Laden 30t Wheel Loading (static) Laden 10t</p> <p>Dynamic loading to be based on manufacturers operating criteria, or on concurrent horizontal wheel loading of 10% of static load in direction of travel and perpendicular to direction of travel.</p> <p>4 Wheel 50t capacity Boat Carrier Total Machine Weight: Unladen 23t Laden 73t</p> <p>Wheel Loading (static) Laden 18t</p> <p>Maximum Ground pressure = 860kpa</p> <p>Longitudinal and lateral loads to be 10% of vertical load i.e. 1.8t per wheel.</p>
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5.2.3 Access Brow

General	Shall accommodate design live loading of 2.5kN/m ² throughout.
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5.2.4 Pontoons

General	Shall accommodate design live loading of 2.5kN/m ² throughout.
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5.3 **Partial Load Factors**

Suspended Decks	To BS8110 Pt 2 / BS5400 Pt1
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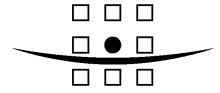
5.4 **Load Combinations**

Suspended Decks	Load Combinations to be developed by Designer, in accordance with BS6349 Pt 2, Table 2.
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5.5 **Safety Factors/Allowable Stresses**

Piles	Minimum factors of safety for ultimate static capacities (ultimate static capacity/working load): <ul style="list-style-type: none"> • Compressive load 2.0 • Tensile load 2.5 • Lateral Load 2.5
	Driving stresses must not exceed 60% of yield stress for steel piles.
	Piles and protective treatments for permanent installations including the pier and the wave screen structure shall ensure that stresses in the piles at working load do not exceed serviceability limit state stresses after unit design life, allowing for loss of section due to corrosion.

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APPENDICES

APPENDIX A

Flood Risk Zones

Table D.1: Flood Risk Zones

<p>Zone 1 Low Probability</p> <p>This zone comprises land assessed as having a less than 1 in 1000 chance of river and sea flooding in any year (<0.1%).</p> <p>All the uses of land listed in Table D.2 are appropriate in this zone. However, all development proposals should still be considered in relation to:</p> <ul style="list-style-type: none"> a) their vulnerability to flooding from other sources as well as from river and sea flooding; and b) their potential to increase flood risk elsewhere through the addition of hard surfaces and the effect of the new development on surface water run-off. <p>For development proposals on sites comprising one hectare or above, these considerations should be incorporated in a FRA. This need only be brief unless the factors at a) and b) above or other local considerations require particular attention.</p> <p>In this zone, developers and local authorities should seek opportunities to:</p> <ul style="list-style-type: none"> i. reduce the overall level of flood risk in the area through the layout and form of the development; and ii. mitigate the potential to increase flood risk elsewhere through the appropriate application of sustainable drainage techniques.
<p>Zone 2 Medium Probability</p> <p>This zone comprises land assessed as having between a 1 in 100 and 1 in 1000 chance of river flooding (1% – 0.1%) and between a 1 in 200 and 1 in 1000 chance of sea flooding (0.5% – 0.1%) in any year.</p> <p>The water-compatible, less vulnerable and more vulnerable uses of land and essential infrastructure in Table D.2 are appropriate in this zone.</p> <p>The highly vulnerable uses in Table D.2 are only appropriate in this zone if the Exception Test (see para. D10) is passed.</p> <p>All development proposals in this zone should be accompanied by a FRA, which should include:</p> <ul style="list-style-type: none"> a) their vulnerability to flooding from other sources as well as from river and sea flooding; b) their vulnerability to flooding over the lifetime of the development; c) their potential to increase flood risk elsewhere through the addition of hard surfaces, the effect of the new development on surface water run-off, and the effect of the new development on depth and speed of flooding to adjacent and surrounding property; and

Table D.1: Flood Risk Zones (*continued*)

Zone 2 Medium Probability (*continued*)

d) a demonstration that residual risks of flooding after existing and proposed flood management and mitigation measures are taken into account, including flood defences, flood resistant and resilient design, escape/evacuation, effective flood warning and emergency planning, are acceptable.

In this zone, developers and local authorities should seek opportunities to:

- i. reduce the overall level of flood risk in the area through the layout and form of the development; and
- ii. mitigate the potential to increase flood risk elsewhere through the appropriate application of sustainable drainage techniques.

Zone 3a High Probability

This zone comprises land assessed as having a 1 in 100 or greater chance of river flooding (>1%) and a 1 in 200 or greater chance of flooding from the sea (>0.5%) in any year.

The water-compatible and less vulnerable uses of land in Table D.2 are appropriate in this zone.

The highly vulnerable uses in Table D.2 should not be permitted in this zone.

The more vulnerable and essential infrastructure uses in Table D.2 should only be permitted in this zone if the Exception Test (see para. D10) is passed.

All development proposals in this zone should be accompanied by a FRA, which should include:

- a) their vulnerability to flooding from other sources as well as from river and sea flooding;
- b) their vulnerability to flooding over the lifetime of the development;
- c) their potential to increase flood risk elsewhere through the addition of hard surfaces, the effect of the new development on surface water run-off, and the effect of the new development on depth and speed of flooding to adjacent and surrounding property; and
- d) a demonstration that residual risks of flooding after existing and proposed flood management and mitigation measures are taken into account, including flood defences, flood resilient and resistant design, escape/evacuation, effective flood warning and emergency planning, are acceptable.

Table D.1: Flood Risk Zones (*continued*)

Zone 3a High Probability (*continued*)

In this zone, developers and local authorities should seek opportunities to:

- i. reduce the overall level of flood risk in the area through the layout and form of the development;
- ii. mitigate the potential to increase flood risk elsewhere through the appropriate application of sustainable drainage techniques; and
- iii. relocate existing development to land in lower flood zones.

Zone 3b The Functional Floodplain

This zone comprises land where water has to flow or be stored in times of flood.

Only the water-compatible uses and the essential infrastructure listed in Table D.2 that has to be there should be permitted in this zone. Essential infrastructure in this zone should pass the Exception Test and be designed and constructed to:

- remain operational in times of flood;
- result in no net loss of floodplain storage;
- not impede water flows; and
- not increase flood risk elsewhere.

The less vulnerable, more vulnerable and highly vulnerable uses in Table D.2 should not be permitted in this zone.

All development proposals in this zone should be accompanied by a FRA, which should include:

- a) their vulnerability to flooding from other sources as well as from river and sea flooding;
- b) their vulnerability to flooding over the lifetime of the development;
- c) their potential to increase flood risk elsewhere through the addition of hard surfaces, the effect of the new development on surface water run-off, and the effect of the new development on depth and speed of flooding to adjacent and surrounding property; and

Table D.1: Flood Risk Zones (*continued*)

Zone 3b The Functional Floodplain (*continued*)

d) a demonstration that residual risks of flooding after existing and proposed flood management and mitigation measures are taken into account, including flood defences, flood resilient and resistant design, escape/evacuation, effective flood warning and emergency planning, are acceptable.

In this zone, developers and local authorities should seek opportunities to:

- i. reduce the overall level of flood risk in the area through the layout and form of the development;
- ii. mitigate the potential to increase flood risk elsewhere through the appropriate application of sustainable drainage techniques; and
- iii. relocate existing development to land in lower flood zones.

Note: These Flood Zones refer to the probability of river and sea flooding ignoring the presence of defences.

Table D.2: Flood Risk Vulnerability Classification

Essential Infrastructure	<ul style="list-style-type: none"> – Essential transport infrastructure (including mass evacuation routes) which has to cross the area at risk, and strategic utility infrastructure.
Highly Vulnerable	<ul style="list-style-type: none"> – Police stations, Ambulance stations and Fire stations and Command Centres required to be operational during flooding. – Electricity-generating power stations and sub-stations. – Hospitals. – Emergency dispersal points. – Residential institutions such as residential care homes, childrens’ homes, social services homes and student Halls of Residence and hostels. – Gypsy and traveller sites using caravans or mobile homes. – Mobile or park homes for permanent residential use. – Dwelling houses designed, constructed or adapted for the elderly or other people with impaired mobility.
More Vulnerable	<ul style="list-style-type: none"> – Buildings used for: dwelling houses (except for those in the highly vulnerable classification); drinking establishments; nightclubs; and hotels. – Non-residential institutions such as health services, nurseries and educational establishments, but excluding hospitals. – Landfill and hazardous waste facilities.
Less Vulnerable	<ul style="list-style-type: none"> – Buildings used for: shops; financial, professional and other services; restaurants and cafes; hot food takeaways; offices; general industry; storage and distribution; non-residential institutions; and assembly and leisure. – Land and buildings used for holiday or short-let caravans and camping, subject to a specific warning and evacuation plan. – Land and buildings used for agriculture and forestry. – Waste treatment (except landfill and hazardous waste). – Minerals working and processing. – Transport infrastructure.

Table D.2: Flood Risk Vulnerability Classification (*continued*)

Water-compatible Development	<ul style="list-style-type: none"> – Flood control infrastructure. – Water treatment plants and pumping stations. – Sewage treatment plants and pumping stations. – Docks, marinas and wharves. – Navigation facilities. – Ship building, repairing and dismantling, dockside fish processing and refrigeration and compatible activities requiring a waterside location. – Water-based recreation and tourism (excluding sleeping accommodation). – Lifeguard and coastguard stations. – Amenity open space, outdoor sports and recreation and essential facilities such as changing rooms. – Essential ancillary sleeping or residential accommodation for staff required by uses in this category (subject to a specific warning and evacuation plan).
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- Note: 1) This classification is based on advice from the Environment Agency on the flood risks to people and the need of some uses to keep functioning during flooding.
- 2) Buildings that combine a mixture of uses should be placed into the higher of the relevant classes of flood risk sensitivity. Developments that allow uses to be distributed over the site may fall within several classes of flood risk sensitivity.

Appendix 3

Community activity at the Weymouth & Portland National Sailing Academy

The Sailing Academy has three main areas of activity:

- To provide a venue for Sailing events
- To contribute to the local community and economy
- To provide high quality training and tuition.

Although it is the hosting of large, prestigious events that tends to attract most publicity the Academy's role is much wider and activities involving the local community and providing tuition for young people and others are of equal importance.

The Academy has been recognised as being at the forefront of widening participation and with partner organisations, including The Chesil Trust and Sail Laser, it continues to provide opportunities for people to participate in sailing and other watersports that might not otherwise have the opportunity. The Academy works pro-actively with Sail Laser and The Chesil Trust in their work with local schools to widen participation. This activity has a number of aspects: The very popular 'Sail for a Fiver' scheme, which is open to any Year 6 pupil in a state school in Dorset, will have 500 children participating in a single week in April and a further 500 participating in a week in June. There are also a number of other local schools where pupils of all ages will be regularly participating in activity at the Academy and taking to the water in community programmes with Sail Laser.

Sail Laser have developed a weekly after school sailing club which runs on two evenings a week between April and October where children who may not have their own boat can come and participate and improve their skills. A community sports coach, jointly funded by Sail Laser and by Sport England through Active Dorset is working to increase participation by local schools in sailing.

There is an RYA 'On Board' officer, jointly funded by the Royal Yachting Association and Sport England with the brief to increase local participation in sailing. The Sailing Academy is an 'On Board' centre and works with this officer to develop this participation and sail tuition.

The Academy and Sail Laser are also working closely with RYA Sailability, the charity set up to encourage people with disabilities to participate in sailing. The Academy has some of the best facilities for disabled sailors in the World and we very much encourage those with all forms of disability to participate in our sport.

In addition to these opportunities for young people to take to the water in sailing boats, we have an arrangement with PGL, who operate an outdoor activity centre at Osmington, and who bring between 10,000 and 11,000

young people a year to the Academy to participate in activities such as Dragon boating, raft building, canoeing etc. Community Activity takes many forms and the Academy has been pleased to be able to offer facilities, for example to the Portland Boxing Club, to host events at the Centre. In addition the facilities of the Academy are often in use by the local business, academic and public sector organisations for conferences, training and corporate events.

The facilities for larger boats to be taken out of the water and over-wintered at the Academy have enabled a number of local businesses, particularly those businesses now forming the Dorset Marine Network to expand. There are now regularly over one hundred keelboats or motor cruisers stored at the Academy over the winter months. During this period the owners normally need some work undertaking, be it engine repairs, attention to the rigging or marine electronics. This important employment activity is now being retained in the area, whereas previously it was necessary for boat owners to go to Poole or the Solent for this work to be undertaken.

The community activity at the Academy is monitored by Sport England who have expressed their satisfaction at the amount of activity being undertaken. The new facilities now being planned will enable us to continue to maintain the momentum on these community activities and will enable those activities to continue alongside some of our major events.