

## Proposed New Marina development

### ENVIRONMENTAL IMPACT ASSESSMENT

### SCOPING REPORT

**GRENDON MARINA  
STATION ROAD  
EARLS BARTON  
NORTHAMPTONSHIRE  
NN6 0RB**

**Date of Report July 2013**

Prepared by  
GJP Marina Developments Ltd  
Georgian House  
63-73 Saltisford  
Warwick  
CV34 4TR  
Tel: 01926 353550  
Email: [stephen@gjpmarinas.co.uk](mailto:stephen@gjpmarinas.co.uk)

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## Appendices

- A) Existing Topographical Plan: SRL.26.10
- B) Proposed Site Plan: 6108-01E
- C) Screening Opinion Letter, ref:11/00004/SCR (08<sup>th</sup> Nov 2011) from Northamptonshire County Council
- D) Influence – Landscape and Visual Impact Assessment Scoping Report (3<sup>rd</sup> May 2013)
- E) RSK – Preliminary Ecological Appraisal/Scoping Report, ref: 854524 (10<sup>th</sup> July 2013)
- F) RSK - Habitat Regulations Assessment – Statement to Inform an Appropriate Assessment (10 July 2013)
- G) Correspondence with EA.
  - i. 12/12/2012 – EA technical comments for new marina letter
  - ii. 23/10/2012 – GJP email minutes of 15<sup>th</sup> Oct 2012 meeting with EA
  - iii. 24/01/2013 – Abingdon email confirming flood compensation EA approval
- H) Northampton Archaeology – Scope Of Works For Cultural Heritage (20<sup>th</sup> June 2013)
- I) David Tucker Associates – Transport Assessment, ref:SJT/JLS14150-01\_TS (5<sup>th</sup> October 2012)

## **1. Introduction**

- 1.1 This Environmental Impact Assessment (EIA) Scoping Report has been prepared by GJP Marina Developments Ltd (the Agent) on behalf of Mr J & D Skinner (the Applicant) in respect of a New Marina Development on land off of Station Road, nr Earls Barton, Northamptonshire NN6 0RB
- 1.2 The Applicant is proposing to construct and operate a Marina comprising a Marina basin, Ancillary Buildings, Upgraded Highways Access, New Access Roads, Parking, Landscaping and the ancillary extraction of minerals prior to the construction of the basin.
- 1.3 The application will be determined by Northamptonshire County Council (NCC – the Local Planning Authority) under the Town & Country Planning (Environmental Impact Assessment) Regulations 2011.

## **2. Screening Opinion**

- 2.1 A screening Opinion was sought from NNC by way of email and attachments on 02<sup>nd</sup> November 2011. NCC responded on 08<sup>th</sup> November 2011, confirming that the proposed development is considered to be an EIA development within the context of the EIA regulations. Therefore an Environmental Statement should be prepared and submitted with the planning application. Refer to NNC response in Appendix C

## **3. Purpose of the Scoping Report**

- 3.1 Having been identified as EIA development, the applicant may request the relevant Planning Authority, in this case NCC, to state in writing their opinion as to the information required to be provided in the Environmental Statement (the Scoping Opinion).

- 3.2 The EIA is the process that the Applicant undertakes to determine what impact the proposed development will have on the established environmental & associated economic criteria in addition to the engineering & technical considerations. The EIA must assess the potential impact of the proposed development, both during the construction phases and post completion.
- 3.3 The proposed development has been identified within Schedule 2, paragraph 02a "*Extractive Industry*", paragraph 12, "*Tourism and Leisure*" and paragraph 12b "*Marinas*". The criteria for assessing whether the development requires EIA through the screening process is:-*The area of the enclosed water surface exceeds 1000m<sup>2</sup>.*
- 3.4 Paragraph 32 of Circular 02/1999 advises on marina proposals and states that, A32:- In assessing whether significant effects are likely, particular regard should be had to any wider impacts on natural coastal processes outside the site, as well as the potential noise & traffic generation. EIA is more likely to be required for large new marinas, for example where the proposal is for more than 300 berths (seawater site) or 100 berths (freshwater site). EIA is unlikely to be required where the development is located solely within an existing dock or basin.
- 3.5 Applying the above criteria NCC have concluded that ;-
- 3.6 The development is not listed under Schedule 1 of the EIA Regulations and therefore the requirement of an EIA is not mandatory. Nevertheless, the development requires screening under the above Regulations, Schedule 2, paragraph 2(a) (*Extractive Industry*) as it involves a quarry with open cast mining and Schedule 2, paragraph 12 (*Tourism and Leisure*) (b) *Marinas*, as the proposed marina development exceeds 1,000 square meters.
- 3.7 Schedule 3 of the EIA Regulations sets out selection criteria for determining whether a Schedule 2 development is likely to have significant effects on the environment. Three broad

criteria are identified relating to the characteristics of the development (e.g. its size), the environmental sensitivity of the location and the characteristics of the potential impact (e.g. its magnitude and duration).

3.8 The broad criteria set out in Schedule 3 of the regulations include:-

3.9 **Characteristics of the Development**

- (a) *The size of the development*
- (b) *The cumulation with other development.*
- (c) *The use of natural resources.*
- (d) *The production of waste.*
- (e) *Pollution & Nuisances.*
- (f) *The risk of accidents, having regard in particular to substances or technologies used.*

3.10 **Location of the Development.**

- (a) *The Existing Land Use*
- (b) *The relative abundance, quality & regenerative capacity of natural resources in the area.*
- (c) *The absorption capacity of the natural environment.*

3.11 **Characteristics of the potential Impact**

- (a) *The extent of the Impact.*
- (b) *The trans frontier nature of the Impact.*
- (c) *The magnitude & complexity of the impact.*
- (d) *The probability of the impact*
- (e) *The duration, frequency & reversibility of the impact*

3.12 Having regard to the regulations & advice set out in Circular 02/1999 it is considered that an Environmental Impact Assessment is required for the proposed development.

3.13 The Scoping Report has been prepared as an accompaniment to the Scoping Opinion request to assist NCC in identifying the issues which should be addressed by considering what effects the proposals could have on the environment & which are likely to be significant.

3.14 The Scoping Report sets out the framework within which it is proposed that the EIA will be undertaken & the areas of assessment, including proposed methodology that will be contained within the Environmental Statement accompanying the Planning Application.

3.15 The purpose of the EIA is to establish the nature of the development and environment in which it is likely to take place so as to identify likely "*significant effects*" that may arise. The EIA will establish the existing situation (the baseline). Having done so it will then apply and assess the impact of the proposals individually & cumulatively on the baseline both during construction & once the development is complete.

3.16 This Report identifies a number of Statutory Consultees who NNC are likely to consult on the proposed scope of the EIA.

#### 4. Development Site Description.

4.1 The Application Site extends to approximately 3.24 hectares 3.17km due North-West of the village of Grendon and 1.76km South of Earls Barton, Northamptonshire. NN6 0RB. The nearest major settlement is Northampton which is 7.88Km directly West from the site.

4.2 The site is located at E485702 & N262107

4.3 Access to the site is via Station Road which is off junction 10 of the A45 Nene Valley Way. A new road entrance to the development site will be formed in accordance with highways recommendations, safety requirements and visibility splays.

4.4 The Site does not fall within a "*Sensitive Area*" as described by the EIA Regulations.

4.5 The land is generally regarded as flat but the North, East & South perimeter edges all raise slightly. Thus existing ground levels are found between around +46.000 & +48.000. An existing land drain runs across the site from East to West. A post and wire fence, hedgerow and Station Road run along the East boundary. A large industrial/commercial premises lies directly North separated by mature trees. The River Nene Navigation forms the edge of the Southern boundary. There are no isolated trees, hedges or ponds within the curtilage of the site.

4.6 Within 2Km of the proposed development the following are present :-

- Within a Nitrate Vulnerable Zone.
- Upper Nene Valley Gravel Pits 'Ramsar' Site to the East.
- Upper Nene Valley Site of Special Scientific Interest (SSSI) to the East.
- Upper Nene Valley Gravel Pits Special Protection Area (SPA) to the East.
- Area at Risk of Flooding from Rivers or The Sea.
- Historic Statutory Grade II listed building – 'Station Lodge' (English Heritage ID: 235415) to the South in Castle Ashby.

- Historic Non Statutory 'Registered Parks & Gardens' to the South in Castle Ashby.
- Within a Non Statutory 'Catchment Sensitive Farming Delivery Initiative 2011-2014', 'Catchment Partnership' area.
- Deciduous woodland Biodiversity Action Plan (BAP) priority habitat to the East & West.
- Wetland Habitat and Species - Reed bed Biodiversity Action Plan (BAP) priority habitat to the South-East.
- Agricultural & Environmental Schemes - Surrounded by the 'East Midlands Region Theme Area', 'Higher Level Stewardship Themes'.
- Agricultural & Environmental Schemes - Within 'Entry Level plus Higher Level Stewardship'.
- Agricultural & Environmental Schemes – Surrounded by areas of 'Entry Level Stewardship'.

#### 4.7 **Proposed Marina Development.**

#### 4.8 The Marina Development comprises:-

- Initial excavation and mineral extraction. As such the marina basin and perimeter edges are to be constructed of site won material to raise the ground levels of the site forming a new marina basin after the mineral extraction has taken place.
- The site sits fully within the flood plain as according to the Environment Agency map data. As such the facilities building has been designed to stand elevated outside of the 1:100yr flood level.
- A permanent Facilities Building to include Chandlery, Marina Offices, Toilets & Showers, Brokerage, Storage, Plant Room & Reception Area.
- A new Canal Entrance & Stop Plank structure will be provided to Canal & River Trust's standard specification to enable boats to safely enter and exit the marina.
- Permanent berthing for 141 narrow boats which will include all 'floating' jetties and walkways so as to maintain a constant set freeboard distance as the river water level fluctuates.
- A permanent Services Compound to include Recycling Bin area, Bunded Fuel Tank area, Coal & Gas area, and dedicated parking.
- A dedicated Fuel, Water & Foul Pump-out (for on-board chemical toilets) area, viewable from the Facilities Building

- The materials used in the construction of the Facilities Building & Services Compound will be agreed with the Local Authority (Northamptonshire County Council) before works commence.
- A permanent new access road with porous surface, accessed entrance off Station Road. The entrance will comply with Highway regulations.
- An allocated track/road will be marked around the North & East of the marina purely for the use of emergency vehicles.
- Other than the marina entrance structure, a 6m easement will be maintained along the river boundary to facilitate CRT (Canal & River Trust) maintenance and emergency vehicle access.
- Areas of ecological enhancement are to be incorporated to encourage an increase in Flora & Fauna. The site itself will be landscaped in accordance with an approved scheme.
- A Low Impact Lighting Scheme which will include buildings / jetty / walkway illumination and low level bollard lighting to all access / parking areas to provide a safe yet low glare solution.
- The Facilities Building will have renewable energy technologies to include Photovoltaic Panels (electricity) situated on the south facing roofs slopes and Water Source Heat Pumps (Heating) to extract the energy from the marina basin water body
- All Surface Water drainage will be SuDS systems incorporating Oil / Petrol interceptors as appropriate & using natural porous surfacing materials where possible
- Foul Water drainage from the Facilities Building will be processed via a "Conder" type unit or similar with the outfall draining into the existing diverted watercourse. The Pump-Out will have a separate 20,000 litre tank located underground, adjacent to the Facilities Building

## **5. The Purpose of an Environmental Statement**

- 5.1 The Environmental Statement (ES) will be prepared & submitted with the Planning Application. This Scoping Report identifies the scope for the ES and the methodology that will be employed for the assessments to be undertaken.

5.2 The ES will be prepared in accordance with Schedule 4 of the 2011 EIA Regulations and will include the following:-

- Description of the Development.
- An outline of the main alternatives considered by the Applicant.
- A description of the aspects of the environment likely to be significantly affected by the Development.
- A description of the likely significant effects of the development on the environment.
- A description of the mitigation measures to be employed to reduce or offset any significant adverse effects on the environment.
- A non-technical summary of all information provided under items 1 to 5 above.
- An indication of any difficulties encountered in compiling the required information

5.3 The Applicant has contacted a number of statutory and non-statutory bodies as part of the initial feasibility assessment i.e.:-

- The Canal & River Trust
- Local Authority Planning Dept. (Northamptonshire County Council)
- Borough Council of Wellingborough
- Northamptonshire Archaeology
- Northamptonshire Historic Environment Record
- Northamptonshire Record Office
- Historic Environment Record (HER)
- Environment Agency
- Principal Development Control Officer for Northamptonshire County Council
- Meteorological Office
- David Tucker Associates (Transport Planning)
- PCC Traffic Information Consultancy
- Influence CLA (Landscape & Visual Impact)
- Abington Consulting Engineers (Flood Risk)
- Shyres Rural Ltd Chartered Surveyors (Topographical)
- RSK Environment (Ecology)
- Magic.defra.gov.uk
- BGS: [mapapps.bgs.ac.uk/geologyofbritain/home](http://mapapps.bgs.ac.uk/geologyofbritain/home)

5.4 Further consultation will be undertaken as part of the formal EIA process.

5.5 For each of the environmental issues to be assessed in the ES, baseline studies to establish the existing current conditions, both on the site and in the wider context, will be undertaken. Information from the baseline studies will be used to assess the impact of the proposed development and will be dealt with thoroughly within each of the individual chapters.

5.6 The EIA process will assist the applicant in determining as to whether the location of the marina, buildings & associated access roads are in the optimum position.

## **6. Content & Format of the Environmental Statement**

6.1 The findings of the EIA process will be presented in the Environmental Statement (ES) which supports the Planning Application. The ES will include chapters on each of the assessment subjects and will comply with the requirements of Schedule 4 of the 2011 EIA Regulations

- Volume 1 : Non-Technical Summary – summary of the proposal and key conclusions of the EIA.
- Volume 2: Environmental Statement including detailed assessments – a full description of the proposal, consultation process, planning policy context and the EIA.
- Volume 3: Figures and Drawings – the figures and drawings used to illustrate the EIA.
- Volume 4: Technical Appendices – the technical reports and supporting information referred to in the EIA.

6.2 **The format for each of the assessment chapters will be as follows:-**

- Assessment methodology including a review of the Policy framework.
- Baseline conditions.
- Identifications, Evaluation & Assessment of Effects
- Mitigation & Enhancement.
- Residual Effects.
- Summary & Conclusion.

6.3 **Scope of the EIA Technical Assessments**

6.4 The EIA will assess the following issues and present them in the ES:

- Details of the proposal and the alternatives that have been considered.
- National, Regional & Local Planning policy.

- Landscape and Visual issues.
- Ecology.
- Flood.
- Hydrology
- Archaeology.
- Transport & Access.
- Agriculture & Land issues.
- Pollution & Nuisances.
- Production of waste.

## **7. Clarification of Detailed Assessments within the Environmental Statement**

### **7.1 Details of the proposed and Alternatives that have been considered**

7.2 A full assessment of the proposed development and its alternatives will be considered in accordance with the regulations. In particular the assessment will consider whether there are other potential sites for the river based marina development within the Nene Valley between Peterborough and Northampton. Alternative sites will be assessed in terms of their suitability and whether they meet acceptable standards for essential criteria such as access from both public highway and the river, flood risk, impact on landscape features and ecology.

### **7.3 National, Regional & Local Planning Policy**

7.4 In the context of this offline marina application at Grendon there are a number of strategic planning issues to be addressed. The application site is located within open countryside although it is not located within a special landscape area.

7.5 It is located in close proximity to a special protection area and a full evaluation of its potential impact on SPA will be undertaken in the context of compliance with planning policies.

7.6 In the context of this application to avoid adverse impacts in policy terms it would be necessary for the ES to demonstrate: -

- The objectively assessed need for rural offline marina along this section of the River Nene and how this sits with the strategic policy guidance in the National Planning Policy Framework (NPPF).

- 7.7 That the proposed development does not conflict with policies contained within the following national, regional and local plan guidance.
- National Planning Policy Framework (NPPF)
  - Northamptonshire Minerals and Waste Development Framework
  - Borough Council of Wellingborough Local Development Framework including:
  - North Northamptonshire Core Spatial Strategy
  - Statement of Community Involvements
  - Supplementary Planning Documents
  - River Nene Regional Park and Green Infrastructure.
- 7.8 With the revocation of the East Midlands Regional Plan there are currently no regional planning policies that would apply to this development.
- 7.9 The proposals do involve the provision of two residential employee staff moorings in order to provide 24 hour security and assistance to users of the marina. As such it is considered that this provision of essential management / staff accommodation is not considered to conflict with policies at either national or local level.
- 7.10 Through a sequential appraisal of alternative locations the application will demonstrate that Grendon is an appropriate location for an offline marina having regard to the specific marina needs for the River Nene and achieving compliance with the development plan policy.
- 7.11 The planning policy implications of the potential physical impact of the development, incorporating issues such as landscape, environment, ecology, pollution residential and community. These policies are noted and will be referred to appropriately and in the relevant chapters of the ES dealing with these specific issues.

7.12 **Landscape and Visual Issues**

7.13 This Landscape and Visual Scoping Report (LVSR) sets out the proposed approach and methodology for undertaking a Landscape and Visual Impact Assessment (LVIA) for the proposed marina development as part of the wider Environmental Impact Assessment. The report summarises key landscape and visual baseline conditions and potential impacts which would be assessed in the LVIA in line with the current methodology and guidance.

7.14 This section has been written by Influence-cla Ltd (Chartered Landscape Architects and Environmental Planners). The LVIA will be conducted in accordance with the detailed guidance as laid out in the Landscape and Visual Assessment Scoping Report found in Appendix D.

7.15 **Ecology**

7.16 The Ecology chapter of the ES will address issues relating to wildlife & biodiversity. The assessment will determine the value of existing ecological features within the context of the surrounding landscape and identify mitigation measures required to prevent, reduce or offset any adverse effects deemed to be significant arising from the development proposal. The assessment will be based on results from on field surveys and information obtained from consultation with statutory & non-statutory bodies involved in nature conservation in the locality.

7.17 The Ecological Assessment will be conducted in accordance with the recommendations detailed in the Preliminary Ecological Appraisal/Scoping Report, a copy of which can be found in Appendix E.

7.18 **Flood Issues**

7.19 Planning policy for flood risk is set out in the National Planning Policy Framework (NPPF) technical guidance published in March 2012. The policy document sets out key planning objectives in relation to land usage and flood risk management. The development proposals

will be designed to be compliant with the requirements of the National Planning Policy Framework.

7.20 Pre planning application consultation and negotiations have been undertaken with the environment agency to agree a scheme of development that is acceptable in terms of flood risk.

7.21 The applicants and agents have concluded negotiations and reached agreement with the EA on a scheme meeting their criteria in mitigating for any impact on flooding and flood risk. A detailed flood risk mitigating assessment will be submitted with the application setting out how the design of the scheme accords onwards with the Environment Agencies wishes and requirements. Copies of correspondence and minutes of a meeting with the EA can be found in Appendix G.

7.22 **Archaeological Issues**

7.23 The archaeological & cultural heritage chapter will be prepared and formulated by Northamptonshire Archaeology. The scoping report outlines the scope of works for archaeological and cultural heritage anticipated for assessment that will be covered during the Environmental Impact Assessment.

7.24 The full detailed scope of the archaeological works including the proposed methodology and site evaluation is included in appendix H.

7.25 **Transport and Access Issues**

7.26 The Transport Statement (TS) has been prepared on behalf of David Tucker Associates (Transport Planning Consultants) to review the transportation and highways implications of the proposed development of land adjacent to the River Nene for a 141 berth Marina, associated facilities building, new highways access and associated infrastructure and car parking.

7.27 The methodology used for the TS takes into account 'Guidance on Transport Assessment' (GTA) issued by the Department for Transport (DfT) and Department for Communities and Local Government (DCLG) in March 2007. The full details of the scope of works including base conditions, sustainability, traffic flows, generation, residual trips and mitigation can be found in Appendix I.

7.28 **Agriculture & Land Issues.**

7.29 Agricultural Land Classification.

7.30 The following notes are intended to provide information and methods in relation to Agricultural Land Classification (ALC) (Land quality).

7.31 The ALC was devised and introduced in the 1960s and revised and refined over the years to its current state. The classification is well established and understood in the planning system and provides an appropriate framework for determining the physical quality of land at the national, regional and local levels with the general aim of preserving the better quality land for agriculture. However it is recognised that factors other than land quality may influence land use.

7.32 The Agricultural Land Classification provides a framework for classifying land according to the extent to which its physical or chemical characteristics impose long term limitations on agricultural use. It does not grade the land on its current use but on its potential under a reasonable level of management. The limitations can operate in several ways: they may affect the range of crops grown, the yield and consistency of yield and the cost of obtaining it.

7.33 Guidelines for assessment of physical factors and their interactions which determine grade of land are described in MAFF 1988. They are climate, site (e.g. slope) and soil, including wetness (Appendix 1). These factors form a basis for classifying land into 4 grades and two subgrades (Appendix 2). Other land categories are also used but are not agricultural, for example ponds and buildings.

7.34 To determine the soils and site characteristics that form the basis of the grades and subgrades a site visit is normal practice using a spade and a hand auger and investigating the soil to a depth of 1.2m or rock whichever is the deepest. Auger sites are normally located on a 100m grid though this can be reduced if required. This grid sampling is standard practice for ALC and avoids bias in selecting sites. To avoid hedges and other obstacles auger sites can be moved from the 100m grid. Soil information is recorded in a notebook or on forms and the terms used are those given in the Soil Survey Field Handbook (Hodgson 1997). It must be noted that these terms may not correspond to terms used in an engineering context. Occasionally it may be necessary to dig a profile pit to about 60cm depth to assess structure, mottling and stone content.

7.35 Climate can be assessed in general terms from the Met Office Climatological database for ALC (Meteorological Office 1989). However the use of algorithms can provide data for

specific points and altitude. Site factors such as slope are measured using a clinometer and altitude using a gps or the appropriate Ordnance Survey map.

### 7.36 References

- *Hodgson, J. M. (Ed.) (1997). Soil survey field handbook. Soil Survey Technical Monograph No. 5, Silsoe.*
- *MAFF (1988). Agricultural Land Classification of England and Wales. Revised guidelines and criteria for grading the quality of agricultural land. MAFF Publications.*
- *Meteorological Office (1989). Climatological data for Agricultural Land Classification. HMSO.*

### 7.37 Appendix 1 - Definitions of Wetness Class

Wetness Class	Descriptive term	Duration of waterlogging <sup>+</sup>
I	Well drained	The soil profile is not wet within 70 cm depth for more than 30 days in most years.
II	Slight seasonal waterlogging	The soil profile is wet within 70 cm depth for 31-90 days in most years or, if there is no slowly permeable layer within 80 cm depth, it is wet within 70 cm for more than 90 days, but not wet within 40 cm depth for more than 30 days in most years.
III	Seasonally waterlogged	The soil profile is wet within 70 cm depth for 91-180 days in most years or, if there is no slowly permeable layer within 80 cm depth, it is wet within 70 cm for more than 180 days, but only wet within 40 cm depth for between 31 and 90 days in most years.
IV	Waterlogged for long periods in winter	The soil profile is wet within 70 cm depth for more than 180 days but not within 40 cm depth for more than 210 days in most years

		or, if there is no slowly permeable layer within 80 cm depth, it is wet within 40 cm depth for 90-210 days in most years.
V	Severely waterlogged	The soil profile is wet within 40 cm depth for 211-335 days in most years.
VI	Permanently waterlogged	The soil profile is wet within 40 cm depth for more than 335 days in most years.

+ The number of days specified is not necessarily a continuous period; 'in most years' is defined as more than 10 out of 20 years.

#### 7.38 Appendix 2 Definitions of Agricultural Land Classification Grades

- Grade 1 – excellent quality agricultural land
  - *Land with no or very minor limitations to agricultural use. A very wide range of agricultural and horticultural crops can be grown and commonly includes top fruit, soft fruit, salad crops and winter harvested vegetables. Yields are high and less variable than on land of lower quality.*
  
- Grade 2 – very good quality agricultural land
  - *Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.*
  
- Grade 3 – good to moderate quality agricultural land
  - *Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding*

*crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.*

- Subgrade 3a – good quality agricultural land
  - *Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.*
  
- Subgrade 3b – moderate quality agricultural land
  - *Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.*
  
- Grade 4 – poor quality agricultural land
  - *Land with severe limitations which significantly restrict the range of crops and/or level of yields. It is mainly suited to grass with occasional arable crops, the yields of which are variable. The grade includes very droughty arable land.*
  
- Grade 5 – very poor quality agricultural land
  - *Land with very severe limitations which restrict use to permanent pasture or rough grazing, except for occasional pioneer forage crops.*
  
  - *These gradings are based on certain assumptions, which include an appropriate under-drainage system and satisfactory outfalls.*

7.39 Descriptions of other land categories used on ALC maps

- Urban
  - *Built-up or 'hard' uses with relatively little potential for a return to agriculture including: housing, industry, commerce, education, transport, religious*

*buildings, cemeteries. Also, hard-surfaced sports facilities, permanent caravan sites and vacant land; all types of derelict land, including mineral workings which are only likely to be reclaimed using derelict land grants.*

- Non-agricultural
  - *'Soft' uses where most of the land could be returned relatively easily to agriculture, including: golf courses, private parkland, public open spaces, sports fields, allotments and soft surfaced areas on airports/airfields. Also active mineral workings and refuse tips where restoration conditions to 'soft' after-uses may apply.*
  
- Woodland
  - *Includes commercial and non-commercial woodland. A distinction may be made as necessary between farm and non-farm woodland.*
  
- Agricultural buildings
  - *Includes the normal range of agricultural buildings as well as other relatively permanent structures such as glasshouses. Temporary structures (e.g. polythene tunnels erected for lambing) may be ignored.*
  
- Open water
  - *Includes lakes, ponds and rivers as map scale permits.*
  
- Agricultural land which has not been surveyed.
  - *Where the land use includes more than one of the above land cover types, e.g. buildings in large grounds, and where the map scale permits, the cover types may be shown separately. Otherwise, the most extensive cover type will usually be shown.*

7.40 **Pollution & Nuisance Issues**

7.41 The ES will include a chapter on pollution and nuisance issues. The EIA will consider the potential impact of the development both during the construction phase and operational phase on both pollution and nuisance.

7.42 Due consideration will be given to mitigating any potential impacts and full details will be provided of construction details that are to be employed to ensure that the ongoing operational theme of the development does not give rise to any increased risk of pollution to the environment .

7.43 **Production of Waste**

7.44 The ES will identify all potential sources of waste that may arise as a result of the development and will provide full details as to how the amount of waste generated can be minimised and if any is generated either through construction or ongoing operation how its impact will be addressed to ensure minimal or no impact from the environment.

7.45 All excavated substances arising from the creation of marina basin and the associated areas will be redistributed within the confines of the site apart from the mineral to be extracted which will be exported for use in the construction industry.

7.46 All top soil from the site will be stripped and stored separately and if any is surplus to requirements as part of the construction will be exported for use elsewhere on the farm.

7.47 All waste construction materials arising from the construction process will be stored in fenced off binned areas located so they can be adequately monitored for correct usage by site personnel. Weekly collection of construction waste will prevent debris being blown or moved around the site causing unnecessary waste.

7.48 Careful watch will be kept throughout the ground work stage for staining or odours which may suggest contamination but should any be found the guidance will be immediately sought from appropriate specialists.

7.49 **Hydrology**

7.50 During pre planning application consultations with the environment agency the issue of potential impact of hydrology ground water levels has not arisen. The development will not cause impact on ground water once the material has been excavated from site and the basin formed the marina will be linked to the river. Therefore ground water levels will re stabilise as the marina refills with water from the river.

7.51 The boats will be refuelled by members of staff who will be fully trained in pollution prevention directly associated with the inland waterways environment. The operators will have all necessary equipment such as absorbent booms which can be quickly deployed to deal with any fuel spillages either on land or into the marina basin

7.52 The proposal will not adversely affect the quality of the water as all foul disposal from boats are either by cassette unit, which can be disposed of safely in the facilities building "Elsan" room, or pumped directly from the boat by land based "Pump-Out" unit to an underground holding tank . This tank will have an above ground alarm system to advise the operators that the tank is full and requires emptying.

7.53 During the construction phase the principal contractor will employ adequate dewatering systems, silt traps, oil & fuel interceptors to prevent pollution of water courses.

7.54 All oils & fuels for construction purposes will be stored in double bunded tanks located sufficiently far enough away from water courses for any spillages to be safely dealt with.

7.55 All materials used in the construction process will be stored in a fenced off compound The bin areas will also be located within this area in order that they can be adequately monitored for correct usage by site personnel. Weekly collection of construction waste will prevent debris being blown around the site causing pollution and nuisance.

7.56 A desktop assessment will be carried out to clarify whether there is any likely potential impact on local hydrology however all discussions to date with regard to both flood risk and ecology have not highlighted any potential significant impacts as the development itself is unlikely to have any impact on hydrology.