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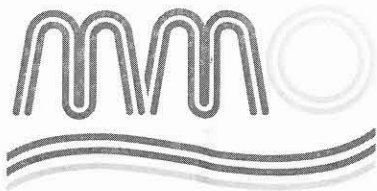
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Newcastle Upon Tyne
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**FAO: Mr K Atkinson
Sunderland City Council
City Services
PO Box 102
Civic Centre
Sunderland
SR2 7DN**

25 NOV 2010





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Marine Environment Team
PO BOX 1275
Newcastle upon Tyne
NE99 5BN

Susannah.stephen@marinemanagement.org.uk
0191 376 2561

SUNDERLAND CITY COUNCIL
CITY SERVICES
PO BOX 102
CIVIC CENTRE
SUNDERLAND
SR2 7DN
FAO: MR K ATKINSON

Our ref: DC8893

Date: 24/11/2010

Dear Mr Atkinson

COAST PROTECTION ACT 1949: CONSENT NO 34686/10/0/CON

I refer to the application dated 17 December 2009 for consent under section 34 of the Coast Protection Act 1949.

This letter records the consent of the Marine Management Organisation (MMO) under section 34 of the Coast Protection Act 1949 for the applicant to construct The New Wear Crossing: within the area known as the RIVER WEAR, hereinafter called 'the works', a line described by the following points;

Lat: 54 55.020 N	Long: 01 25.460 W	NGR: NZ369582
Lat: 54 54.910 N	Long: 01 25.360 W	NGR: NZ370580

And within the area hereinafter called 'the temporary deposit site', a line described by the following points;

Lat: 54 55.023 N	Long: 01 25.457 W	NGR: NZ369582
Lat: 54 54.915 N	Long: 01 25.365 W	NGR: NZ370580

This consent is given subject to the conditions set out below and the standard conditions set out in the Annex attached to this letter. It relates only to the works as described in the application for consent and on the specified foreshore plan

This consent does not authorise the Applicant, nor any contractor, engaged to undertake all or part of the works to construct any other works, deposit any other object, or any other materials – whether permanently or temporarily – on any part of the seashore below the level of mean high water springs. In addition, this consent does not authorise the Applicant to lay any causeway or other means of temporary access to the works, nor any temporary buoys or moorings. The Applicant should satisfy itself that it has obtained any other necessary permissions, authorisations and powers to undertake the works, including the permission of the owner of the foreshore.

Specific Conditions of Consent

1. The Applicant must ensure that a detailed method statement is submitted for approval to the Licensing Authority and Cefas at least two months prior to commencement of the works.

2. The Applicant must ensure that "a best point of passage" light be established, exhibiting 1 Long flash every 10 seconds to be visible upstream and downstream fitted under the span of the bridge. To mark the extent of the navigable channel a Fl. G.5s light to mark the starboard limit and a Fl. R.5s light to mark the port limit must be used. These lights, to be visible both upstream and downstream, can be located under the span of the bridge or on appropriate starboard and port buoys or beacons in the water so placed as to mark the extent of the navigable channel.

In respect of condition 4 of the Annex the Applicant is asked to make any application to renew this consent at least eight weeks before its expiry date.

The Applicant should inform the MMO when the works are removed. The Applicant should also inform the MMO of any change in name, address or the ownership of 'the works' so that the consent may be amended to ensure its validity.

Yours Sincerely



Susannah Stephen
Marine Environment Team
Marine Management Organisation

Annex 1: Standard Conditions of Consent

1. Unless directed in the main body of the consent, no navigational lighting or marking is required. However, the works should be marked and/or lit, as required by Trinity House, if the Marine Management Organisation at any time so directs.
2. The works shall be maintained at all times in good repair.
3. No deviation from the plans specified in the consent shall be made without the further written consent of the MMO.
4. This consent is valid from **01 DECEMBER 2011** to **01 DECEMBER 2014**. If the works are not completed within, or will continue beyond, the expiry date the Applicant must apply to the MMO for renewal of the consent.
5. The works should be removed from below the level of mean high water springs within one month of notice being given by the MMO at any time it considers this necessary or advisable for the safety of navigation, and not replaced without the further consent of the MMO.
6. A copy of this consent must be given to each contractor appointed to carry out part or all of the works in order that they are clear about the extent of the works for which consent has been given and the conditions that are attached to the consent.
7. The Applicant must notify the Hydrographic Office, Ministry of Defence, Taunton, Somerset, TA1 2DN (Email: hdcfiles@ukho.gov.uk; Tel: 01823 723 366) of both the progress and completion of the works in order that all necessary amendments to nautical charts are made, to ensure navigational safety.
8. No radio beacon or radar beacon operating in the Marine frequency bands shall be installed or used on the works without the prior written approval of the MMO.
9. If in the opinion of the MMO the assistance of a Government Department, including the broadcast of navigational warnings, is required in connection with the works or to deal with any emergency arising from the failure to mark and light the works as required by the consent or to maintain the works in good order or from the drifting or wreck of the works, the owner of the works shall be liable for any expenses incurred in securing such assistance.
10. Officers of HM Coastguard, or any other person authorised by the MMO, should be permitted to inspect the works at any reasonable time.
11. The Applicant must inform the MMO when the Works have been completed. If the consent specifies lighting and/or marking conditions the Applicant must inform the MMO and the lighting authority when they have been established.



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Sunderland City Council
City Services
PO Box 102
Civic Centre
Sunderland
SR2 7DN
FAO: Mr Atkinson

Our ref: 34686/10/0
DC8893

Date: 24/11/2010

Dear Mr Atkinson

**Food And Environment Protection Act 1985 (As Amended)
Licence to undertake construction works at sea (Ref: 34686/10/0)**

I am pleased to advise you that the Marine Management Organisation, as Licensing Authority, has now completed its consideration of your application dated 17/12/2009 for a consent under Part II of the Food and Environment Protection Act 1985 to undertake the construction of the new Wear crossing. A Licence authorising the deposit of materials associated with these works is enclosed with this letter.

Since this Licence constitutes a statutory consent, the terms and conditions set out therein must be complied with in full and are also binding upon any agent or sub-contractor who undertakes any activity to which it refers on your behalf. You are therefore advised to read the document carefully.

Return of Acknowledgement slips (forms FEP/13/14)

I would like to draw your attention in particular to the requirement for the Licence Holder formally to confirm receipt and understanding of the terms and conditions of the Licence, using the enclosed forms, within one month of their receipt.

Making representations

Under Section 8(12) of the Act, you may request, within 28 days of the issue of a consent, that the Marine Management Organisation, as Licensing Authority, gives you notice in writing of the reasons for the inclusion of any provision within the Licence. For its part, the Licensing Authority is obliged to comply with this request within 28 days of receiving it.

Should you wish to make formal representations you must do so within 28 days of receipt of the aforesaid notice. A copy of notes for the guidance of persons making representations is available on request from the Licensing Authority.

Additional consents

I would further advise you that the issue of this Licence does not absolve you from seeking any other consents or approvals which may be required before you embark upon the works to which it refers. For example, Planning Consent is often necessary for works to be undertaken above the low water mark. Approval from this Organisation, or from the local harbour authority, under the Coast Protection Act 1949 may be required as well as agreement of any land owner having proprietary rights over the seabed and foreshore - commonly the Crown Estate Commissioners. In some cases approval of the Environment Agency may also be necessary (e.g. where the works involve a discharge or have implications for flood defences).

Finally, if you have any queries or require clarification of any of the terms or conditions of the Licence, please do not hesitate to contact me.

Yours sincerely



**Susannah Stephen
Marine Environment Team
Marine Management Organisation**

FOOD AND ENVIRONMENT PROTECTION ACT 1985: PART II (AS AMENDED)
DEPOSITS IN THE SEA IN CONNECTION WITH MARINE CONSTRUCTION WORKS

Licence 34686/10/0

Marine Management Organisation (hereinafter referred to as "the Licensing Authority") hereby authorises:

**Sunderland City Council
City Services
PO Box 102
Civic Centre
Sunderland
SR2 7DN**

Company Registration No:

(Hereinafter referred to as "the Licence Holder") to deposit in the sea the substances or articles the particulars of which are set out at paragraph 1.1 of the attached Schedule. The Licence is subject to the conditions of use set out, or referred to, in the said Schedule.

This Licence shall be valid from the beginning of the day of **01 December 2011**, (hereinafter referred to as the start date of this Licence) to the end of the day of **01 December 2014**, (hereinafter referred to as the end or expiry date of this Licence).

For the purposes of this Licence and attached Schedule and unless indicated otherwise:

- (i) All times shall be taken to be Greenwich Mean Time (GMT), and
- (ii) All co-ordinates shall be taken to be latitude and longitude degrees and minutes to two decimal places (WGS84).

Signed:



Marine Management Organisation

Date of issue: 24 November 2010

The Licence Holder is urged to read carefully all the conditions and requirements of this Licence which are set out in the Schedule. You should acknowledge receipt of this Licence and confirm that you have understood its term by signing and returning Form FEP 14 within 28 days of the date of issue of this Licence.

1. Particulars of the deposit

- 1.1 The type of works for which the deposit of the substances or articles as specified in paragraph 1.4 of this Schedule are:

**Intake
Bridge Foundation
Mattress**

- 1.2 Details of the works requiring the deposit of the substances or articles as specified at paragraph 1.1 of this Schedule are:

The New Wear Bridge is an urban highway, multi-user bridge crossing the River Wear to the west of the City of Sunderland. The design is unique amongst cable-stayed bridges with two independent curving concrete/steel composite masts with stays supporting the deck from one side of each mast only.

The total length of the bridge between abutments is 335.6m, with the length between the Mean High Water Spring tide marks being approximately 155m at the centre line.

- 1.3. Such works are as detailed in the drawing(s) and sectional plan(s) detailed below which were submitted in support of your application to the Licensing Authority of 17 December 2009

- 1.4 The substances or articles authorised for deposit at sea are:

**Iron / Steel
Concrete
Stone / Rock**

- 1.5. The Licence Holder and any Agent and Contractor acting on their behalf is permitted to deposit the substances or articles specified at paragraph 1.4 of this Schedule, at the following location(s):

RIVER WEAR

54 55.020 N	01 25.460 W	NZ369582
54 54.910 N	01 25.360 W	NZ370580

TEMPORARY DEPOSIT SITE

54 55.023 N	01 25.457 W	NZ369582
54 54.915 N	01 25.365 W	NZ370580

- 1.6. The works shall be carried out in accordance with the works schedule and method statement as detailed in the following:

The New Wear Crossing Construction Report details the potential methods of construction. This would involve the construction of a temporary bridge over the southern half of the river to aid access and a series of temporary driven pile trestles over the width of the river over which the deck will be launched and supported until the masts are completed.

At this stage final methods of construction are not fully developed but the planned construction work is expected to take 3 years to complete.

In the first year, the piles for the temporary bridge will be driven and the temporary deck installed along with temporary piled trestles across the river

over which the deck will be launched. In addition a temporary pile cofferdam will be constructed around the caisson footprint. Once the caisson is of sufficient height, the temporary cofferdam will be removed and the construction of the cofferdam completed. The deck units will then be installed by launching from the southern bank.

In the second year the masts will be constructed up from the cofferdam. The masts are supported by a caisson, consisting of a cellular reinforced concrete structure, at their base, which extends through the alluvium into the mudstone, founding below level -16.5m. The top of the caisson is set at riverbed level of -3.0m. The masts are divided into five distinct sections over their height;

1. Below MLWS level (-1.88m) the section is wholly concrete, without any steel skin;
2. From MLWS level to MHWS level (+2.5m) the section has a concrete core with a stainless steel skin;
3. From MHWS level to the bottom stay location at a level of +77.35 for both the West and East Masts the section is a concrete core with a steel skin;
4. Between the stay positions and up to the final the section is a concrete core with a steel skin and steel stay anchorage arrangement;
5. Above the top stays (from levels +131.2 and +108.8m for the West and East Masts respectively) the masts have a final arrangement with a steel box section similar in shape to the sections below it.

In the third year the masts will be pre-stressed, the cables installed and tensioned and the temporary supports and bridge will be removed by cutting off the piles below bed level. The bridge parapets, surfacing etc will then be completed prior to opening to traffic.

A navigable envelope will be maintained to minimise disruption to river traffic.

2. Persons responsible for the deposit of the substances or articles

- 2.1. The Agents and Contractors permitted to engage in activities subject to the terms and conditions of this Licence are:

Name of Agent or Contractor

Function

The Licence Holder is not permitted to commence the deposit operation specified by this Licence 34686/10/0 until the Licensing Authority has in writing varied the Licence to include details of all the agent(s), contractor(s), (if any) to be employed in the operation.

3. Distribution of copies of this Licence 34686/10/0

- 3.1 The Licence Holder is required to ensure that a copy of this Licence 34686/10/0 and attached Schedule, any special conditions and any subsequent revisions or amendments thereto is given to:

3.1.1. All Agent(s) and Contractor(s) as detailed at paragraph 2.1; and

3.1.2 The transport managers responsible for the vehicles employed in the pursuance of this Licence 34686/10/0 .

- 3.2 Copies of this Licence 34686/10/0 shall also be available at the following locations:

3.2.1 at the address of the Licence Holder;

3.2.2 at any site office, located at or adjacent to the site of the works, used by the Licence Holder, agent(s) or contractor(s) responsible for the loading transportation or deposit of those substances or articles detailed at paragraph 1.4 of this Schedule; and

3.2.3 at the office of any transport manager with responsibility for vehicles from which licensed deposits are to be made.

4. Inspection of the Operation

4.1 The documents referred to in paragraph 3 shall be available at all reasonable times for inspection by an authorised Enforcement Officer at the locations stated in that paragraph.

4.2 The Licence Holder must advise the Licensing Authority and District Marine Officer five working days before the licensed operation, or an individual phase of the operation is expected to commence.

5. Returns to be made to the Licensing Authority

5.1 The Licence Holder is required to acknowledge receipt of this Licence **34686/10/0** and confirm that he or she has understood its term by signing and returning Form FEP 14 within 28 days of the date of issue of this Licence. No operations permitted under the terms of this Licence **34686/10/0** shall commence until the FEP 14 form has been signed and returned to the Licensing Authority.

5.2 All persons referred to at paragraph 2.1 of this Schedule shall provide an acknowledgement, using Form FEP 13, of their receipt of this Licence **34686/10/0** and their understanding of all the conditions specified therein to the Licensing Authority within 28 working days of the start date of this Licence **34686/10/0** or prior to engaging in any activity to which this Licence relates, whichever is the sooner.

5.3 Only those Agent(s) or Contractor(s) whose names appear at paragraph 2.1 may operate under the terms of this Licence **34686/10/0**. Any changes must be notified to and be approved by the Licensing Authority in writing prior to operating under this Licence **34686/10/0**.

6. Contacts

- 6.1 Except where otherwise indicated, the primary point of contact with the Licensing Authority and the address for returns and correspondence shall be:

**Marine Environment Team
Marine Management Organisation
PO Box 1275
Newcastle upon Tyne
NE99 5BN
Tel: 0300 123 1032**

- 6.2 For the purposes of this Licence **34686/10/0** any references to the District Marine Officer shall mean the relevant District Marine Officer in the area(s) located at:

**Marine Management Organisation
Neville House
Bell Street
North Shields
Tyne & Wear
NE30 1LJ
Tel: 0191 257 4520**

- 6.3 For the purposes of this Licence **34686/10/0** any references to the Centre for Environment, Fisheries and Aquaculture Science (Cefas) shall mean:

**Centre for the Environment, Fisheries and Aquaculture Science (Cefas)
Regulatory Assessment Team
Pakefield Road
Lowestoft
Suffolk
NR33 0HT
Tel: 01502 562244**

7. "Force majeure"

- 7.1 If, by reason of "force majeure" the substances or articles specified at sub-paragraph 1.4 of this Schedule, are deposited otherwise than in the area authorised by this Licence at paragraph 1.5, full details of the circumstances shall be notified to the Licensing Authority within 48 hours of the incident occurring.
- 7.2 "Force majeure" may be deemed to apply when, due to stress of weather or any other cause, the master of a vessel determines that it is necessary to deposit the substances or articles because the safety of human life and/or of the vessel is threatened.

8. Changes to this Licence

- 8.1 In the event of the Licence Holder becoming aware that any of the information on which the granting of this Licence **34686/10/0** was based has changed or is likely to change, he/she shall notify the Licensing Authority at the earliest opportunity of the details.
- 8.2 Similarly in the event that the Licence Holder wishes any of the particulars set down in the Schedule to be altered he/she shall inform the Licensing Authority at the earliest opportunity before taking any further action.

9. Supplementary conditions

- 9.1 The Licence Holder must ensure that a Code of Construction Practice with a detailed method statement is submitted to the Licensing Authority and Cefas for approval at least two months prior to commencement of the works.
- 9.2 The Licence Holder must ensure that appropriate steps are taken to minimise damage to the foreshore/ inter-tidal region.
- 9.3 The Licence Holder must ensure that any equipment, machinery, temporary works and/ or debris associated with the works are removed from the site upon completion of the works.
- 9.4 The Licence Holder must ensure that suitable bunding, storage facilities etc should be employed to prevent the release of fuel oils, lubricating fluids etc associated with the equipment into the marine environment.
- 9.5 The Licence Holder must ensure that the stone/ rock/ gravel material to be used is inert and contains minimal fines.
- 9.6 The Licence Holder must ensure that the potential for release of suspended sediments to the River Wear is minimised by effective use of silt curtains. The proposed location, design and duration of employment of the curtains must be agreed with the Licensing Authority prior to the commencement of any works.
- 9.7 The Licence Holder must ensure that inspection of the silt curtains should be carried out daily and any remedial action to improve their efficacy where necessary should be undertaken at the earliest opportunity.
- 9.8 The Licence Holder must ensure that methods of best environmental practice are undertaken to minimise re-suspension of sediment during the work.
- 9.9 The Licence Holder must ensure that any coatings/ treatments utilised are suitable for use in the marine environment and are used in accordance with best environmental practice.
- 9.10 The Licence Holder must ensure that precautions are taken to minimise the risk of contamination of the water or foreshore from wet concrete/ mortar products.
- 9.11 The Licence Holder must ensure that should archaeological artefacts be discovered in moderate concentration or numbers during the works the Local Authority archaeologist should be informed: Mr David Heslop. Tel: 0191 281 6117 Email: david.heslop@newcastle.gov.uk
- 9.12 The Licence Holder must ensure that *Enteromorpha* surveys are carried out prior to, during and post construction. The survey area for all monitoring should be in the inter-tidal zone, 100m either side of the bridge on both banks of the river. The surveys need to be completed at low tide. All surveys should be completed on a chosen day at the end of August with 'during construction' surveys being carried out in each August of the construction period. The surveys should comprise digital photos to assess extent and areas of growth. A copy of the interim monitoring report should be sent by the end of each September to the MMO using the address in Section 6.1 of this Licence, or via email, marine.consent@marinemanagement.org.uk and Giles Alcock at Natural England, giles.alcock@naturalengland.org.uk
- 9.13 The Licence Holder must ensure that a soft-start approach is taken for 30 minutes for all piling activity undertaken during the works.
- 9.14 The Licence Holder must ensure that piling works do not occur for 3 hours after low tide, and this condition must be met between 1st March and 31 October for each year of the Licence.
- 9.15 The Licence Holder must ensure that during the month of June in each year of the Licence, piling is restricted wherever practically possible 3 hours after high tide to allow for the migration of juvenile salmon and sea trout.
- 9.16 The Licence Holder must ensure that contingency mitigation measures are adopted to avoid cumulative adverse impacts in the event of a warm summer, to minimise potential impacts on migratory fish and eels.
- 9.17 The Licence Holder must ensure that dissolved oxygen is monitored both upstream and downstream of the bridge crossing site with a warning threshold of 5mg/l. If the

dissolved oxygen threshold is not met the operations causing the effect should be avoided until oxygen levels are restored in order to prevent fish mortalities.

- 9.18 The Licence Holder must ensure that a Mitigation Strategy document is produced that maps the inter-tidal habitat types and potential habitat losses in the area of the proposed construction, which will aid assessment of the long-term effects of the development. A copy of the document should be sent to the MMO, before construction works commence in 2012, to the address in Section 6.1 of this Licence or via email: marine.consents@marinemangement.org.uk
- 9.19 The Licence Holder must ensure that the planned 0.3 ha of saltmarsh creation is carried out according to the habitat loss plan and Mitigation Strategy.
- 9.20 The Licensing Authority reserves the right to seek a further variation charge in the event that the Licence Holder requests any significant change to the work or the working methods to which this Licence applies, or to its terms and conditions. Should the Licence Holder seek to make changes to the terms and conditions of this Licence or to the work to which it relates which in the opinion of the Licensing Authority will require it to be substantially re-assessed, the Licensing Authority may seek to revoke this Licence and request a revised application.
- 9.21 The Licence shall be deemed to become invalid and shall be liable to be revoked in the event that the Licence Holder fails to make full payment of each annual instalment of the Licence charge within a period of 28 days following the respective due date for payment.

EXPLANATORY NOTES

This page does not form part of this Licence **34686/10/0** or its associated schedule but the Licence Holder is recommended to read the following guidance notes.

1. The granting of this Licence **34686/10/0** does not absolve the Licence Holder from obtaining such other authorisations, consents and approvals which may be required under any other legislation, controls or regulations.
2. Under Section 8 of the Food and Environment Protection Act 1985, the Licensing Authority may vary or revoke this Licence **34686/10/0** if it appears to the Authority that the Licence Holder is in breach of any conditions in it or for any other reason that appears to the Authority to be relevant.
3. A person who makes a deposit, or causes a deposit to be made, at sea in contravention of the conditions specified in this Licence **34686/10/0** may be found guilty of an offence under Section 9(1) of the Food and Environment Protection Act. It is a defence under Section 9(3) of the Act for a person charged with such an offence to prove that the operation was carried out for the purpose of securing the safety of the vessel or of saving life ("force majeure") and that he/she took steps within 48 hours following the incident to send full details of the incident including those relating to the operation, the locality and the circumstances in which it took place and the substances or articles concerned, to the Licensing Authority (see paragraph 7 of the schedule).
4. If the works authorised by this Licence **34686/10/0** are unlikely to be completed by the expiry date of this Licence, the Licence Holder should apply for a replacement Licence at least 10 weeks prior to the expiry date of this Licence.



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0300 123 1032

NOTE: This confirmation should be returned to the Licensing Authority within 1 month from the date of issue of the Licence (01/12/2011) in accordance with the conditions of the Licence.

Our Reference 34686/10/0 /
8893

Dear Sirs,

**FOOD AND ENVIRONMENT PROTECTION ACT 1985, PART II:
DEPOSITS IN THE SEA: LICENCE HOLDER'S ACKNOWLEDGEMENT**

Receipt is hereby acknowledged of Licence Number

34686/10/0

I fully understand the particulars and conditions in the Licence, a copy of which has been retained at the location named below.

Yours faithfully,

Signature

Name in
BLOCK LETTERS

Status

Date

Name and full address of the licence holder:

SUNDERLAND CITY COUNCIL
CITY SERVICES
PO BOX 102
CIVIC CENTRE

SR2 7DN