

River Clyde Scotstoun

Deep Water Berth Capital & Dredging Application

Marine Scotland Additional Information

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Document Information

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This document has been produced by Arch Henderson on behalf of BAE Systems for issue to Marine Scotland

Introduction

BAE Systems have a requirement to deepen the Deep Water Berth at their Scotstoun Ship Yard and have applied to Marine Scotland for consents under the Marine (Scotland) Act 2010 namely :-

- Marine license Application for Dredging and Sea Disposal (Capital)
- Marine Licence Application for Construction Projects

Marine Scotland have requested the following clarifications and we would respond as follows

General Clarification 1

MS Comment

Usually we wait until we receive further comment from NatureScot to confirm whether or not a European Protected Species ("EPS") licence is required. However in the interest of progressing this application quickly I advise that you consider whether an EPS licence should be applied for based on the information provided in the 'OSC_2021_ArchHendersonBAE_Blasting_v2.0' document which states 'that the Peak Sound Pressure Level (Lp) of the proposed 12.5kg charge will be 282.9dB re 1uPa with a frequency of 10-100Hz.' Please review our guidance on Marine European protected species found here; [Marine European protected species: protection from injury and disturbance - gov.scot](http://www.gov.scot) (www.gov.scot)

AH Comment

We have reviewed the OSC noise report issued to MS at the beginning of February 2021 and note the recommended mitigation measures and would consider these to be sufficient that an EPS licence is not required. However we will take your advice and recommend to the client that the application is progressed.

Clarification 2 In regards capital dredging application and sea deposit application

MS Comment

I have reviewed the 'BAE Systems Scotstoun – DWB Dredge Sediment Sampling Report' and note that the sampling locations differ from the sampling plan approved by Marine Scotland Licensing Operations Team ("MS-LOT") on 27 October 2020 which has been attached to this email. Also attached is the sampling plan submitted to MS-LOT on 26 October 2020. Can you please clarify why the locations in the approved sampling plan do not match the sample locations used and why no samples were taken in the west half of the dredge area?

AH Comments

We discussed this issue with Envirocentre Limited who undertook the vibro coring and they confirmed that locations were moved due to coring success (i.e. multiple attempts in original locations did not return sufficient cores for sampling). Similarly attempts in the west half were not successful in achieving sufficient depth.

Clarification 3 In regards capital dredging application and sea deposit application

MS Comment

From the 'BAE Systems Scotstoun – DWB Dredge Sediment Sampling Report' sample locations, it appears that some of the samples were taken in the current location of the reinforced pre-cast concrete pits. Can you confirm if this is correct and if so can you explain how samples were taken from underneath the pre-cast concrete to represent the area that is to be dredged?

AH Comments

We have review the samples noted in the BPEO and confirm that VCEC 03 has been noted with the wrong coordinates.

Please find attached revised BPEO and sampling data sheets with revised coordinates, refer to drawing 205030 sk B for location of samples.

The above drawing highlights that all cores are out with the existing concrete sections of the pits.

Clarification 4 In regards capital dredging application and sea deposit application

MS Comment

It is my understanding that as part of the construction application you wish to remove the existing sections of the pits constructed in reinforced concrete. These are to be broken out and removed to land using a mixture of land and marine based plant. How do you propose to prevent any contamination from the breaking down and removal of the reinforced concrete pits? Or can you provide evidence that the breaking down and removal of the reinforced concrete will not contaminate the surrounding water environment? Since the sediment sampling has already been done it is important for MS-LOT to ensure that there will be no additional potential contamination being added to the area that hasn't been assessed in the chemistry analysis.

AH Comments

There will be stringent monitoring throughout the full excavation / dredging works attached the Main Contractors draft Method Statement ref 33021 BAE Demolition of Existing DWB Pits.

Clarification 5 With regards to the construction application

MS Comments

Where the reinforced concrete pits that are to be removed are located;- It is unclear if the entire berth pits A, B and C and the west pit, stabiliser pit and east pit, shown in the '205034-102 Existing DWB Construction' document, are filled with reinforced concrete currently or if the berths A, B and C are just dredged and the west pit, stabiliser pit and east pit contain the reinforced concrete or? I note that in document 'MS Application Section 6a – Deposits – Removals', under removals it lists 'precast units to west and east pits'. Does this mean there is only reinforced concrete precast in the west and east pits? If this is the case can you clarify what the number 34 associated to this is? Can you also confirm what the additional 600 tonnes of 'mass concrete and blinding concrete' is and where it comes from?

AH Comment

We attached drawings 205030 skA through to skG which explain the construction phases in detail.

205030 sk A : General Location of works highlighting the current construction of each area ie mass concrete , reinforced concrete or dredge pocket in natural river strata.

205030 skB basically larger scale of skA with vibro core locations shown

205030 skC Highlights extent of concrete to be removed. The 34no refers to the number of existing precast units currently insitu within the west and east pits, that in total weight circa 500 tonnes . The 600 tonnes of mass concrete is the weight of blinding and mass concrete noted in pits. The sections highlight the location of the blinding and mass concrete.

205030 skD Highlights the extent of dredging/excavation once concrete has been removed and details area on new blinding

205030 skE Highlights extend and location of new precast units

205030 skG Area of insitu concrete to be installed

205030 skH Highlights the last exercise which is to install mass concrete between precast and existing quay wall. The hit and miss is to install concrete in small sections to eliminate any potential to undermine existing quay wall so works are controlled.

Clarification 6 With regards to the construction application

MS Comments

Where the areas to be blasted are – I note slide 6 of the 'Presentation on Blasting at BAE Scotstoun' shows blasting to take place in the west and east pits. If this diagram could be provided as a standalone document (to allow us to upload it to Marine Scotland Information website), this would be ideal – it allows for clear, accessible to all, identification of exactly where the different aspects of works are to occur, I would encourage other diagrams to be annotated in a similar fashion.

AH Comments

Attached drawing 205030 skJ as requested

Clarification 7 With regards to the construction application

MS Comments

Where the new reinforced concrete precast is to be located

AH Comments

Refer to clarification point 5 specifically drawings skD through to G

Clarification 8 With regards to the construction application

MS Comment

In document '204034-104 Proposed Cross Section' it is unclear where which aspects are already in place and which aspects will be altered. Can you please annotate the diagram to clearly detail what works are to be done to each area of this diagram eg. The '200 thick blinding concrete' – is this the new concrete that has been placed and is it on top of where the existing concrete was just deeper? Is the 'mass concrete poured in 1m sections hit and miss' a new addition? It appears from the existing diagram that there is already concrete in this area? Will this be removed and refilled? Can you please explain what it means by 'hit and miss'?

AH Comment

Clarification 5 and associated drawings clarify work sequence and scope

Clarification 9 With regards to the construction application

MS Comment

Section 6a – Deposits – Scotstoun Deep Water Berth

It is noted that there will be 1 tonnes of explosives used for rock blasting. Can you confirm if this is equivalent to 12.5kg of charge as recorded in the supporting documents for the blasting and marine mammal aspects?

I note that in the MNR form it is recorded that there will be 20kg of TNT. Due to the evidence provided in the supporting documents for the blasting and marine mammal aspects being based on 12.5kg of charge, this is the quantity that will be licenced. Please let me know if this is incorrect.

AH Comment

The maximum Instantaneous charge will be 12.5kg. The 1000kg of explosives for the contract is an estimate of the total amount of explosives required

Clarification 10 With regards to the construction application

MS Comment

Section 6d – Temporary Deposits - Deep Water Berth

Can you confirm what aspect of the proposal and where the 60 tonnes of steel used as temporary shutters and screed rails will be used? In Appendix 5 (h) Section 2 I can see there is mention of the steel shutters (which are still in place) being used to accurately check the lining for the placement of the pre-cast units but I cannot see any earlier reference of when or why they were put in before this?

AH Comment

The final temporary works has still to be accurately defined but we enclose 205030 skH which highlights where we currently envisage the temporary steelwork to be located.