

Date: 10 September 2020
Our ref.: KSZHJV/OUT/2020/09/03.01/008639

Environmental Protection Department
EIAO Register Office,
27/F, Southorn Centre,
130 Hennessy Road, Wanchai
Hong Kong

By Hand

Attn: Mr. Sam Cheung – Environmental Protection Officer

Dear Sir,

Contract No. EP/SP/66/12
Integrated Waste Management Facilities, Phase 1
Marine Mammal Watching Plan (Rev. I)

Pursuant to Condition 2.13 of Further Environmental Permit No.: FEP-01/429/2012/A, we are pleased to submit herewith 3 hard copies and 1 electronic copy of Marine Mammal Watching Plan (Rev. I) for your approval.

The Marine Mammal Watching Plan (Rev. I) was certified by the Environmental Team Leader and was verified by the Independent Environmental Checker as conforming to the recommendations contained in the approved EIA report (Register No.: AEIAR-163/2012).

Thank you for your kind attention.

Yours faithfully
For and on behalf of
Keppel Seghers – Zhen Hua Joint Venture



YU Yung Hong, Kenny
Project Manager

Encl.

KY//jw

c.c. EPD – Mr. Kenneth S T Chan - Principal Environmental Protection Officer (F: 3529 2991)
AECOM – Mr. Bevis MAK – Supervising Officer (By Hand)
AECOM – Mr. Henry Chan – Chief Resident Engineer
ASCL – Mr. Jacky Leung – Environmental Team Leader (F: 2698 9383)
ERM – Ms. Mandy To – Independent Environmental Checker (F: 2723 5660)



吉寶西格斯 - 振華聯營公司
KEPPEL SEGHERS - ZHEN HUA JOINT VENTURE

Marine Mammal Watching Plan

(Clause 2.13, Further Environmental Permit FEP-01/429/2012/A)

Document No.

KSZHJV	/	312	/	MMWP	/	0001	/	I
Issuer		Project Code		Type of Document		Sequential No.		Revision Index

	Agreed by:	Certified by:	Verified by:
Name	Kenny Yu	Jacky Leung	Mandy To
Position	Project Manager	Environmental Team Leader	Independent Environmental Checker
Signature			
Date:	11. 9. 2020	9 Sep 2020	9 Sep 2020

Revision History

I	Issue for Revision on 1 st & 2 nd paragraph in Section 2.1	21 August 2020
H	Issue for Revision on 4 th paragraph in Section 2.1 as per Contractor's comment	15 January 2020
G	Issue for Response to EPD comments	7 March 2019
F	Issue for Revision on Section 1.1.5, 2.1, 2.2, 2.3, 2.4, 2.5, Appendix A, Appendix C and Appendix D	28 December 2018
E	Issue for Response to EPD Comments	14 August 2018
D	Issue for Response to AFCD Comments	26 June 2018
C	Issue for Response to IEC Comments	21 May 2018
B	Second Issue for Response to IEC Comments	16 May 2018
A	First Issue for Comments	26 March 2018
Rev.	DESCRIPTION OF MODIFICATION	DATE

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1 Introduction

1.1 Project Background

- 1.1.1 The Environmental Impact Assessment (EIA) Report and the Environmental Monitoring and Audit (EM&A) Manual (Register No.: AEIAR-163/2012) prepared for the “Engineering Investigation and Environmental Studies for Integrated Waste Management Facilities Phase 1 – Feasibility Study” (hereafter referred to “the Project”) have been approved by the Environmental Protection Department (EPD) of Hong Kong Special Administration Region (HKSAR), and an Environmental Permit (EP) (Ref.: EP-429/2012), the Application for Variation of an Environmental Permit (VEP) (Ref.: EP-429/2012A) a Further Environmental Permit (Ref.: FEP-01/429/2012/A) (FEP) have been issued for the project. Pursuant to the Condition 2.13 of the FEP, a Marine Mammal Watching Plan will be prepared to specify the requirements on regular inspection of silt curtains, visual inspection of the waters around silt curtains and recommend the action plan to cope with any unpredicted incidents such as the case that any marine mammal including, but not limited to, Finless Porpoise is found within the waters surrounded by silt curtains.
- 1.1.2 Keppel Seghers – Zhen Hua Joint Venture (“the JV”) has been awarded the Project to carry out reclamation works (including associated dredging works, seawall and breakwater construction) to construct a new land formation area of 15.9 hectares at the south-western coast of Shek Kwu Chau between the southwest of Cheung Chau and the south of Chi Ma Wan Peninsula. An incinerator and its relevant plant facilities, e.g. a mechanical sorting and recycling plant, a wastewater treatment plant, a desalination plant, electricity power plant etc., will be built on the reclaimed land. The construction programme of the Project is shown in Table 1.

Table 1 Proposed Construction Programme of the IWMF Project

Description	Tentative Date
Award of Contract	22 Nov 2017
Phase I – Construction of Perimeter Seawalls	10 Jan 2018 – 21 Jan 2020
Seawall at DCM Area	15 Mar 2018 – 21 Jan 2020
Seawall at Dredging Area	22 Aug 2018 – 09 Sept 2019
Phase II – Reclamation, Breakwater and Berth Construction	22 Sept 2019 – 27 Jun 2021
Reclamation	22 Sept 2019 – 27 Jun 2021

Description	Tentative Date
Breakwater	22 Sept 2019 – 07 Mar 2021
Foundation Works	12 Apr 2021 – 13 May 2022
Superstructure Works	12 Aug 2021 – 12 Jan 2023
Architectural Builders Works and Finishes	07 Nov 2021 – 09 Sept 2023
Building Services Installation	20 Feb 2022 – 20 Oct 2023
Process Equipment Installation	27 Jan 2022 – 04 Nov 2023
Landscape, External Road and Drains Works	07 Nov 2021 – 26 Apr 2024

- 1.1.3 The dredging and filling works together with the seawall construction of the Project shall be carried out in stages. According to the Condition 2.17 to 2.19 of the FEP, marine dredging shall be only carried out near the south-western coast of Shek Kwu Chau. The dredging works will only be carried out by closed grab dredgers and each grab shall be enclosed by a frame-type or cage-type silt curtain.
- 1.1.4 Before using deep cement mixing for seabed solidification for subsequent construction of breakwater and seawall construction along site perimeters, sand blanket laying work will be undertaken and the deployment of silt curtain, i.e. frame-type/cage-type silt curtain, will also be required for the laying works according to the Condition 2.6A of the VEP. Furthermore, as required in the Condition 2.22 of the VEP, the silt curtain will be deployed surrounding the filling work areas for seawall/breakwater construction and reclamation. After completion of construction of perimeter seawalls, one seawall gap will be provided for marine access for the reclamation work. This gap shall be sealed by silt curtain e.g. floated type silt curtain.
- 1.1.5 In order to avoid impact on marine mammal after installation, reinstallation and relocation of the frame-type, cage-type or floating-type silt curtains, a project-specific marine mammal watching plan is prepared in accordance with the Condition 2.13 of the FEP. It also outlines the arrangement for regular inspection of silt curtains and marine mammal watching during dredging, sand blanket laying and reclamation activities at designated work areas.
- 1.1.6 Acuity Sustainability Consulting Limited (ASCL) has been appointed by the JV as the Environmental Team to establish the Marine Mammal Watching Plan which will be implemented for the reclamation related marine works or any works involving deployment of silt curtains during the construction phase of the project.

1.2 Project Description

- 1.2.1 The project comprises the formation of 15.9 hectares of land near the south-western coast of Shek Kwau Chau including Phase I – Construction of Perimeter Seawalls and Phase II – Reclamation, Breakwater and Berth Construction as described briefly. The following marine works of the Project shall require deployment of silt curtains as one of the good construction site practices committed under the approved EIA report for minimizing the impact on marine mammal life during the construction phase.

Phase I – Construction of Perimeter Seawalls

- Dredging Works; and
- Sand Blanket Laying Works.

Phase II – Reclamation, Breakwater and Berth Construction

- DCM ground reinforcement;
- Seawater/Breakwater Construction;
- Marine filling activities;
- Opening of a Marine Access for the reclamation work sealed by silt curtain; and
- Opening of Floating Type Silt Curtain for Vessel Access.

2 Approaches for Marine Mammal Watching Works

Upon the completion of silt curtain installation/re-installation/relocation, the marine works would be conducted within an enclosed environment within the silt curtain. Subsequently, Visual Inspection of the Waters Surrounded by Silt Curtains (Section 2.1, MMWP) and Regular Inspection of Deployed Silt Curtain (Section 2.2, MMWP) inspection under Marine Mammal Watching Plan (MMWP) would be implemented (where applicable, Marine Mammal Exclusion Zone shall be conducted at the meantime).

2.1 Visual Inspection of the Waters Surrounded by Silt Curtains

Two shifts of marine mammal observer (MMO) team will be arranged for continuous MMO monitoring (i.e. silt curtain installation / re-installation / relocation for sand blanket laying, dredging works and filling works during seawall construction; and operating of deep cement mixing) to implement the marine mammal exclusion zone. Each shift of MMO team will be responsible for maximum 12 hours of monitoring work per day. At least two observers would be assigned as one team to work in shift to avoid/ minimize fatigue of observers during continuous monitoring.

For the construction activities requiring non-continuous MMO monitoring (i.e. opening of floating type silt curtain at marine access for reclamation works), MMO(s) will be arranged for:

1. 30 minutes before the commencement of installation / re-installation / relocation works of floating type silt curtain at marine access; and
2. MMEZ monitoring during installation / re-installation / relocation of floating types silt curtain when opening and closing at marine access area; and
3. After the enclosure of floating type silt curtain at marine access area for reclamation works to implement visual inspection as detailed in paragraphs below.

One trained MMO shall be on site to perform non-continuous MMO monitoring. Each shift of MMO will be responsible for maximum 12 hours of monitoring work per day and two shifts of MMO shall be arranged at the duty vessel to perform non-continuous MMO monitoring per day.

Training sessions shall be conducted for MMO by marine mammal specialist, Dr. Samuel Hung, Dr. Lindsay Porter, Ms. Julia Chan or someone with equivalent qualifications, with briefing materials provided as guidelines, instructing adequate knowledge of all requirements for observing marine mammal and appropriate actions to be taken according

to this plan. Competence checking by ET shall be provided at least once every 6 months to the trained MMO involved in implementation of this plan or Marine Mammal Exclusion Zone Plan.

As frontline staff of the main contractor or its sub-contractors, i.e. foremen, site agent, superintendents and engineers would involve in the implementation of this plan, briefings for these personnel will be provided by the trained MMO during induction trainings to get familiar with the plan for assisting on marine mammal observations within waters surrounded by silt curtains and taking necessary action according to the plan when there is marine mammal trapped by the silt curtain. Refresh briefings will be provided to all frontline staff once every 6 months. The briefing and training records will be provided to ETL, IEC and SO for audit and record.

Visual inspection will be conducted by a trained MMO with naked eyes and the aid of binoculars to check for any presence of marine mammal inside the works areas surrounded by silt curtains prior to commencement of works on each day. The models of the proposed marine binoculars to be used are Marine Binoculars Steiner Navigator 7X50C with Compass and Bushnell 7x50 Marine Binocular with Compass. For the night-time marine mammal monitoring, spotlight will be used to provide sufficient brightness to assist the inspection in dark condition. In case of inadequate of brightness, night vision device (NVD) will be used. The proposed models of NVD are from ATN, model PS15-CGTI Night Vision Goggles with 3x lens and Daking, model D-B1105 Night Vision Binocular with 5X lens. The specifications of Marine Binoculars Steiner Navigator 7X50C with Compass, Bushnell 7x50 Marine Binoculars with Compass, ATN PS15-CGTI Night Vision Goggles and Daking D-B1105 Night Vision Goggles with 5x lens are presented in **Appendix A**. In the event of marine mammal being sighted, the trained MMO will notify the construction superintendent immediately for response action and will then record the details of the sighting such as the time of first sighting, time of last sighting, approximate location, direction of marine mammal movement, group size, behavior, etc. as much as possible. A summary of the records of marine mammal sighting shall be included in each monthly environmental monitoring and audit report.

For the re-deployment of the localized silt curtains (frame-type, cage-type or enclosed floating-type silt curtains), MMO will conduct visual inspection to confirm that there is no presence of marine mammal within the localized silt curtains (frame-type, cage-type or enclosed floating-type silt curtains). Visual inspection will be conducted every an hour by MMO for confirming that there is no any marine mammal observed in the surrounding area

of the deployed silt curtain during re-deployment of localized silt curtains (frame-type, cage-type or enclosed floating-type silt curtains).

For the opening of access area of the floating type silt curtain in the reclamation area, MMO will conduct visual inspection to check for any presence of marine mammal near the opening of access areas surrounded by the floating type silt curtain every 30 minutes until the floating type silt curtain was enclosed. If the floating type silt curtain was enclosed during the reclamation work, MMO will conduct visual inspection to check for any presence of marine mammal inside the area surrounded by the floating type silt curtain daily. The duration will be subject to various conditions, e.g. weather or angle of observation. The works can only commence after confirming that the surrounding waters of the localized silt curtains has not contain any marine mammal. Thereafter, frontline staff, i.e. foremen, site agent, superintendents and engineers will assist our MMO in implementing the plan from the active work fronts within the waters surrounded by the silt curtains throughout the work period. The MMO will conduct visual inspection daily to observe the presence of any marine mammal around the localized silt curtains (frame-type, cage-type or enclosed floating-type silt curtains) or being trapped by the localized silt curtains. The MMOs will also check if the localized silt curtains are in correct positions. The contact list of construction superintendents refers to **Appendix B**.

The MMO shall fill up our Marine Mammal Observer Monitoring Log Record Sheet as shown in **Appendix C1**. After inspection, those records should be kept properly and submitted to the project team. In case there is any marine mammal being found, the MMO should carry out the response actions as stated in Section 2.6 and communicate with relevant parties to stop and then resume work after the discovered marine mammal leaves. After lifting up and mobilization of silt curtain, the MMO will repeat the procedures of regular and visual inspection until the end of the construction works.

Implementation schedule of the Marine Mammal Watching Plan as a mitigation measures to minimize disturbance on finless porpoise of IWMF has been listed in **Appendix D**.

Examples of the lookout points at derrick lighter (DL) and flat-top barge (FB) for dredging/sand blanket filling are shown in Figure 2.1 and Figure 2.2 respectively. Each lookout point will have an unobstructed view to waters around the DL and FB, an elevated level, clear and safe access at the edges of the DL and FB for inspection during dredging/sand blanket laying works, provision of sufficient lighting is required if working at night. The MMO will also move around the DL and FB to establish a clear and unobstructed view as much as they can without compromising the safety concern. When appropriate, the

lookout point can be replaced by a proper location if unobstructed view can be assured.

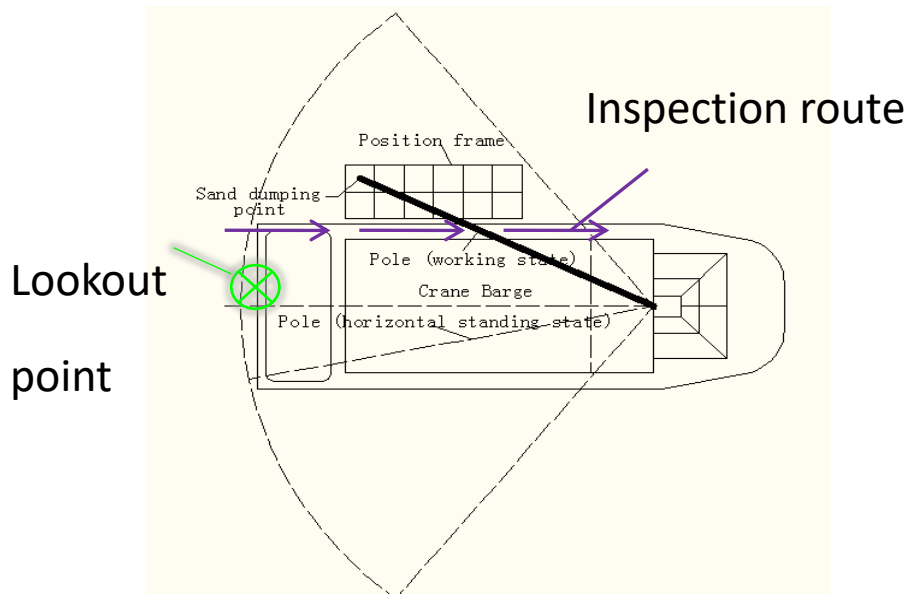


Figure 2.1 Location of the Lookout Point on the Derrick Lighter (DL)

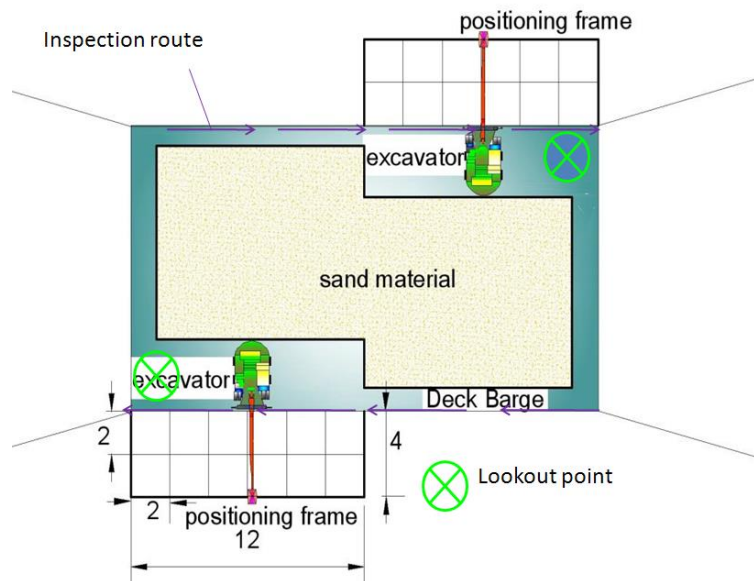


Figure 2.2 Location of the Lookout Point on the Flat-top Barge (FB)

2.2 Regular Inspection of Deployed Silt Curtain

Before commencement of dredging/sand blanket laying/DCM work at each designated area, a trained MMO shall check whether silt curtains are ready, well prepared and operated without any obvious damage. Also, the MMO shall confirm the presence of the

relevant frontline staff of the main contractor or its sub-contractors and engineers on board to ensure the effective communication, coordination and implementation of the response plan in relation to any incidents involving marine mammals within the waters surrounded by the deployed silt curtains and the work areas.

During the operation, the inspection will be conducted daily. The MMO will walk along the edge of derrick lighter (DL) and flag-top barge (FB) along the deployed silt curtain or proper location without obstacles where appropriate to inspect the deployed silt curtain with naked eyes, the MMO will check that the deployed silt curtains are maintained in the correct positions with no obvious defects / entanglement and there is no observable muddy water passing through the deployed silt curtain system. Any floating refuse trapped by the silt curtain shall be removed as part of the regular inspection. For night inspection, spotlight will be used to provide sufficient brightness to assist the inspection in dark condition. The specification of the portable spotlight refers to **Appendix A**. The MMO shall fill up our Marine Mammal Observer Monitoring Log Record Sheet as shown in **Appendix C1**.

2.3 Data Recording

Our MMO will fill in a Marine Mammal Observer Monitoring Log Record Sheet (shown in **Appendix C1**) for data keeping purpose when they are on duty. General information listed below shall be recorded:

- Date;
- Monitoring station;
- Names of observers;
- Time;
- Status of monitoring;
- Observer on effort;
- Weather;
- Beaufort Sea State;
- Visibility;
- Sun glare;
- Observation difficulty; and
- Construction activity.

In case marine mammal e.g. Finless Porpoise or Chinese White Dolphin is detected, the MMO will fill in a Marine Mammal Observer Monitoring Sighting Record Sheet (shown in

Appendix C2) in the following record:

- Sighting number;
- Group size;
- First sighting time;
- Last sighting time;
- Cessation time of construction work;
- Re-start time of construction work;
- Location of marine mammals; and
- Behavior of marine mammals.

2.4 Silt Curtain Integrity Check

After typhoon signal No.3 is lowered, retracted silt curtains will be re-deployed and visual inspection by small vessel will be carried out to confirm the integrity of the silt curtain and no marine mammals in adjacent waters prior to reinitiation of works. If any damage is observed or suspected, affected silt curtains will be repaired or replaced before works are reinitiated.

2.5 Response Plan to Cope with any Unpredicted Incidents

If any marine mammal is found in the area around the silt curtain, our MMO will immediately inform the construction superintendent by mobile phone to delay the commencement of works until the marine mammal will disappear in the sea surface and continuous clear of marine mammal for a period of 30 minutes. After the notification, the construction superintendent will cease all marine construction works within the concerned works area. After that, the silt curtain will be opened to allow the marine mammal to leave the area. During this time, the MMO shall be monitoring the movement and behavior of the enclosed marine mammal. If the marine mammal encounters difficulty in leaving the silt curtain enclosed area for duration of 20 minutes, the construction superintendent will report to SO and marine mammal specialist of the ET for consultation, notify ETL, IEC, AFCD and EPD to decide whether other methods to encourage the marine mammal to leave the silt curtain enclosed area should be adopted. The approximate location, time of appearance / disappearance, direction of movement of the marine mammal and behavior of the marine mammal will be recorded as far as possible.

After the marine mammal is clear of the area enclosed by the silt curtain, the silt curtain will be immediately examined for any openings or damages that may have overlooked. Works

within the enclosed area of the silt curtain can only be resumed after confirming the integrity of silt curtains and the area being continuously clear of any marine mammal for 30 minutes.

In case of any injured or live-stranded cetaceans are found within or nearby the silt curtain, MMO and/or site staff will immediately notify construction superintendent by mobile phone. The construction superintendent will immediately report to the marine mammal specialist of the ET and "1823" marine mammal stranding hotline, and then report to SO, ETL and IEC, AFCD and EPD.

Drill on the response plan to cope with event of marine mammal trapping within silt curtain/marine mammal appeared in close proximity will be arranged for MMO and frontline staff once every 6 months, the drill records will be provided to ETL, IEC and SO for audit and record.

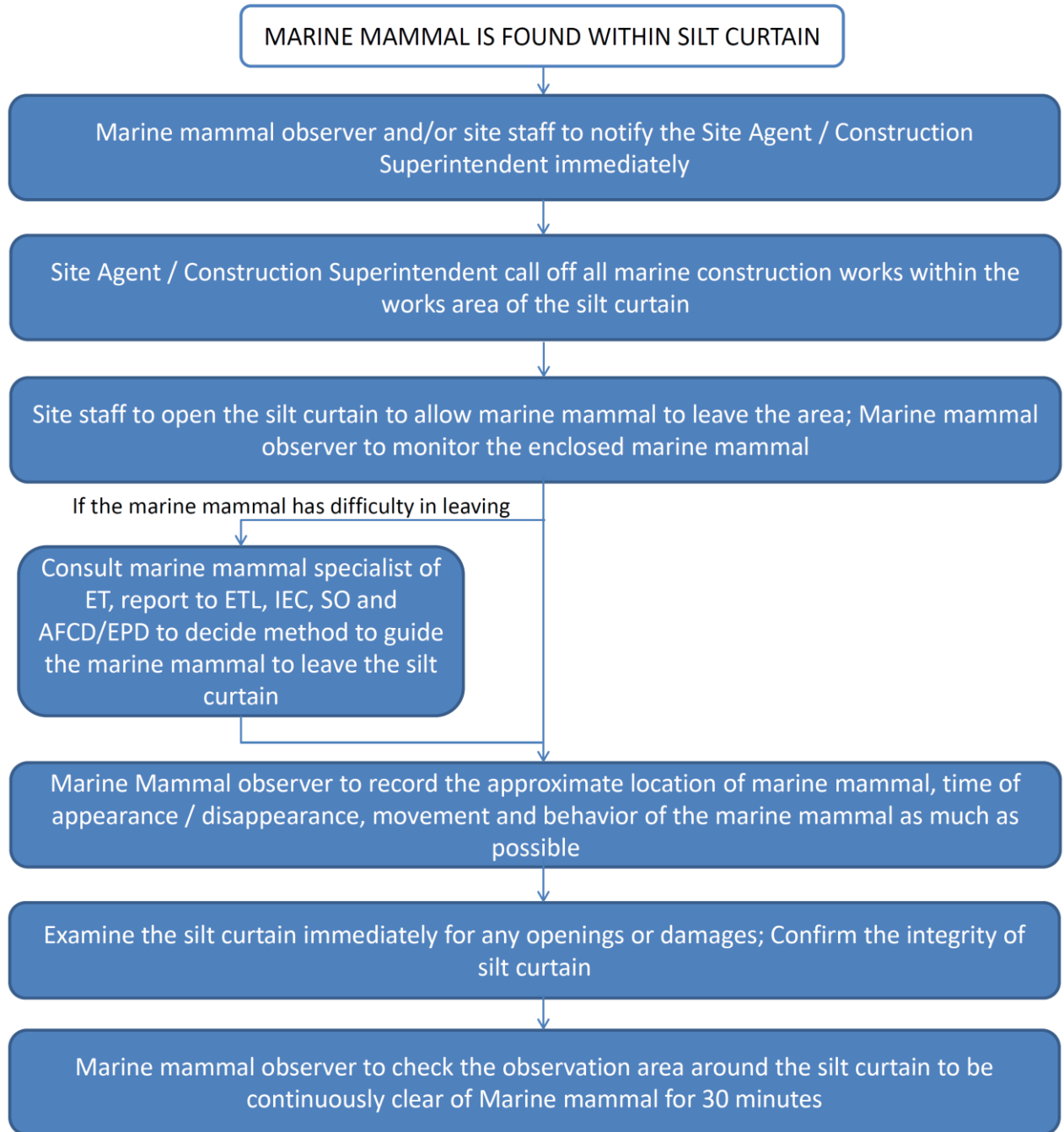


Figure 2.3 Response Procedures for Occurrence of Marine Mammal within Silt Curtain

Appendix A

Specification of Monitoring Equipment

Steiner Navigator 7X50C Compass:



NAVIGATOR PRO SERIES

NEVER COMPROMISE PERFORMANCE JUST BECAUSE IT'S FUN.

SERIOUS OPTICS FOR THOSE WHO TAKE RECREATIONAL TIME ON THE WATER SERIOUSLY, WITH THE CLEAR IMAGE, TOTAL RELIABILITY AND REMARKABLE VALUE STEINER MARINE OPTICS ARE KNOWN FOR.

MARINE SERIES

7X50 MARINE 7X50

The perfect first pair of quality, water-going binoculars, for enthusiasts who want the most performance for their money.

MAGNIFICATION 7X | WEIGHT 36.3 oz. | WIDTH 8.1 in. | HEIGHT 5.5 in. | ITEM NO. 575

• 7X MAGNIFICATION • HIGH CONTRAST LENSES • FLOATING PRISM SYSTEM
• SPORTS-AUTO-FOCUS™ • WATERPROOF AND RUBBER ARMORED

STEINER-OPTRON 2016

MARINE SERIES 35

Steiner Navigator 7X50C with Compass:



NAVIGATOR PRO 7X30

The world's first compact marine binocular, perfect for short getaways, spontaneous sailing trips or emergency gear bag.

MAGNIFICATION 7X | WEIGHT 18.4 oz. | WIDTH 6.5 in. | HEIGHT 4.2 in.
ITEM NO. 7645



NAVIGATOR PRO 7X30c

Equipped with an HD stabilized compass in a compact frame, for clear images and reliable headings in an easy-handling size.

MAGNIFICATION 7X | WEIGHT 19.8 oz. | WIDTH 6.5 in. | HEIGHT 4.2 in.
ITEM NO. 7145

THE PORRO PRISM **NAVIGATOR PRO SERIES** IS THE CHOICE FOR RECREATIONAL BOATERS, WEEKEND ANGLERS AND HOBBY SAILORS. IT OFFERS EXCEPTIONAL PERFORMANCE FOR THE PRICE WITH MANY OF THE FEATURES FOUND ON PREMIUM, WORLD-FAMOUS STEINER MARINE BINOCULARS. THEY WILL PROVIDE A LIFETIME OF USE FOR MOST WATER ENTHUSIASTS.

NAVIGATOR PRO OVERALL FEATURES

- **7X MAGNIFICATION** is perfect for on-water use, with a wide, stable image for tracking boats, buoys and bridge numbers even in rough water.
- **HIGH CONTRAST OPTICS** provide bright, sharply contoured images with natural color definition for outstanding viewing quality suitable for both beginners and professionals.
- **FLOATING PRISM SYSTEM** uses a flexible silicon lens mount to absorb severe shock, impact and abuse without damage.
- **SPORTS-AUTO-FOCUS™ SYSTEM** lets you focus each eyepiece to your vision once, then keeps images razor-sharp from 20 yards to infinity - no more chasing focus on moving targets.
- **MAKROLON® HOUSING** is durable polycarbonate with NBR Long Life rubber armoring, creating a lightweight, rugged chassis that withstands 11 Gs of impact. Impervious to harsh conditions for generations of trusted use.
- **N₂ INJECTION™ SYSTEM** seals 14-psi pressurized dry nitrogen into the optic, providing waterproof protection as deep as 16 feet.



NAVIGATOR PRO 7X50

Delivers excellent image clarity, sharp definition and contrast, and oversized light-gathering objective for bright picture in low light.

MAGNIFICATION 7X | WEIGHT 36.3 oz. | WIDTH 8.1 in. | HEIGHT 5.5 in.
ITEM NO. 7655



NAVIGATOR PRO 7X50c

Carries an HD fluid-damped, illuminated analog compass for easy-to-read navigation.

MAGNIFICATION 7X | WEIGHT 39.2 oz. | WIDTH 8.1 in. | HEIGHT 5.5 in.
ITEM NO. 7155

Bushnell Marine Binoculars 7x50 with Compass

Bushnell®

MARINE™
BINOCULARS



with
**Digital
Compass**

Model: 13-7507
LIT. #: 98-1192/08-09

Instruction Manual

ENGLISH

The BUSHNELL MARINE is the perfect binocular for sailors and outdoorsmen. Your model features a liquid-filled compass built into the viewing optics. Compass swing stops immediately due to advanced damping design. Compass bearings are called out in easy-to-read precise 1° increments. Ideal for shipboard navigation work or locating objects accurately. A range-finding scale allows the viewer to estimate the range of objects to a known size. The BUSHNELL MARINE is fully waterproof/fogproof and shock protected with suregrip rubber armoring, and has roll-down eyecups for use with sunglasses and prescription eyeglasses. Optics feature multi-coated lenses for excellent light transmission. The BUSHNELL MARINE comes complete with rugged nylon case and neck strap. Built to last, with a lifetime limited warranty.

SPECIFICATIONS

Magnification.....7 x	Relative brightness.....51
Objective lens diameter.....50 mm	Interpupillary distance...56~72 mm
Eye Relief.....18 mm	Maximum width.....3 in
Real field of view.....7 °	Minimum width.....2.5 in
Field of view @ 1000 yds...350 ft.	Length.....7 in
Exit pupil diameter.....7.1 mm	Weight.....37 oz / 1049 g

ATN PS15-CGTI Night Vision Goggles:



NIGHT VISION GOGGLES

PS15-CGTI

The PS-15 is a compact, lightweight dual night vision goggle system. It utilizes two high performance image intensifier tubes to provide extremely clear and crisp images under the darkest conditions. This dual tube design provides increased depth perception and outstanding clarity. A built-in IR lets the user easily read a map and function in a total darkness environment.

- Dual goggle/binocular
- Hands-Free use
- Comfortable flip-up headgear
- Lightweight, Compact
- Depth Perception
- Optional 3x Afocal lenses to make into a binocular
- Waterproof
- Limited Two-Year Warranty



HEAD MOUNT ASSEMBLY

HELMET MOUNT ASSEMBLY

PS15 WITH 3X LENS

ACCESSORIES



3X LENS (PAIR)
ACGOPS15LS3P

MICH HELMET
MOUNT KIT
ACGOPS15HMNM

UNIVERSAL HELMET
MOUNT KIT
ACGOPS15HMNT

IR-450
ACMLR45B4

SPECIFICATIONS

Magnification	1x
Lens System	F1.2, 27 mm
Prism Lens Coating	Yes
FOV	40°
Range of Focus	0.25 m to infinity
Dioptr Adjustment	-6 to +2
Controls	Direct
Automatic Brightness Control	Yes
Bright Light Cut-off	Yes
Automatic Shut-off System	Yes
Infrared Illuminator	Yes (Built-in with flood lens)
IR Indicator	Yes (in FOV)
Power Supply	1x1.5 V AA type battery or 1x3 V CR123A type battery
Battery Life	40 hrs
Environmental Rating	Waterproof
MIL-STD-810	Complies
Operating Temperature	-40 to +60 °C
Storage Temperature	-50 to +70 °C
Dimensions	120x114x69 mm / 4.7"x4.5"x2.7"
Weight	0.7 kg / 1.54 lbs

TUBE SPECIFICATIONS

HIGH QUALITY CGTI GEN IMAGE INTENSIFIER TUBE

DESCRIPTION	Custom
GENERATION	CGTI
PHOTOCATHODE TYPE	Multi - Alkali
RESOLUTION, lphmm*	45-54
FIGURE OF MERIT	<1250
MTTF - MEAN TIME BEFORE FAILURE, hours	10,000
EXPORT	Dual-use: subject to EAR

* Specifications are provided for informational purposes only. Actual values may vary

Export Warning: These products are subject to one or more of the export control laws and regulations of the U.S. Government. Pending the model these products are under the control jurisdiction of either the US Department of State or the US Bureau of Industry and Security US Department of Commerce. Export without proper licensing or consent is strictly prohibited.

1341 San Mateo Ave,
South San Francisco, CA 94080.

www.atncorp.com

e-mail: sales@atncorp.com, info@atncorp.com

Tel: 800-910-2862, 650-989-5100,
fax: 650-875-0129

3X Lens of ATN PS15-CGTI Night Vision Goggles:



Set of 3X Lenses

High-performance A focal 3x lenses convert your ATN PS-15 Night Vision Goggles into Night Vision Binoculars.

Magnification : 3x

Perfect match for ANT PS15 night vision binoculars, this 3x magnification lens set will work for the following night vision models:

- ATN PS15-2
- ATN PS15-CGT
- ATN PS15-HPT
- ATN PS15-3
- ATN PS15-3A
- ATN PS15-3P
- ATN PS15-4

Daking model D-B1105 Night Vision Binocular with 5X lens



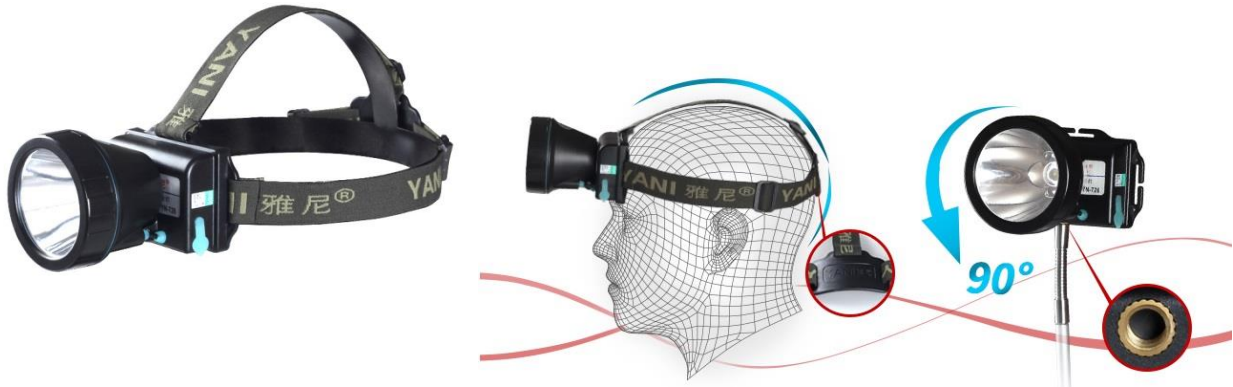
Specifications:

Product Attribute:	Type	Binocular
	Magnification	5X
	Function	Night Vision
	Lens Type	Prime Lens
	Lens	Glass
	Objective Aperture	>50mm
	Focusing Type	Internal Focusing
	Aperture	50-100mm

Product Table:	Model	D-B1105
	Image tube grade	Super Gen1
	Magnification	5X
	Resolution, lp/mm	40
	Field of view, deg	20
	Detection distance(m)	10-400m
	Lens system	F1.2, 90mm
	Proshield lens coating	Yes
	Automatic shut-off system	Yes
	Built-in IR illuminator	Yes
	IR indicator	Yes
	Low battery indicator	Yes
	Diopter adjustment, deg	+/-5

Yanni YN-726

YANI 雅尼



产品参数 / PRODUCT PARAMETERS



雅尼新款 型号: YN-726

芯片	美国科锐CREE XP-G2	光色	黄 / 白
亮度	超75W白炽灯	灯杯	铝合金光杯 (亮度增强180%)
射程	远射800米 300米清晰可见	头灯重量	0.175KG
进口电池	两节 18650锂电池5600mAh	防水等级	IP65(用水冲洗无任何伤害)
续航时间	超强光10小时 强光15小时 普光60小时	照明模式	三档调光 (超强光、强光、普光)

Appendix B

Contact List of the Construction Superintendent

Name	Company	Title	Contact No.
**	**	**	**

Note: ** - Further information shall be provided once available.

Appendix C1

Marine Mammal Observer Monitoring Log Record Sheet

Development of the Integrated Waste Management Facilities (IWMF) Phase 1

Marine Mammal Observer Monitoring – Monitoring Log Record Sheet

Date: _____ Monitoring Station: _____ Names of Marine mammal Observers on Duty: _____

Time	Action*	Observer on effort	MMEZ / MMWP	Weather (sunny/cloudy/rainy/windy/hazy)	Beaufort Sea State (0 – 5)**	Visibility*** (excellent/good/fair/poor)	Sun Glare (Y / N)	Observation Difficulty (easy/fair/hard)	Marine mammal observed? (Y / N)****	Notes on Construction Activity

Remarks:

Notes on Monitoring Log Record Sheet

*Action: SVI – Start of Visual Inspection of the Waters Surrounded by Silt Curtains
EVI – End of Visual Inspection of the Waters Surrounded by Silt Curtains
SRI – Start of Regular Inspection of Deployed Silt Curtain
ERI – End of Regular Inspection of Deployed Silt Curtain
SO – Start of Observer Effort on MMEZ Monitoring
CO – Change in Observer on MMEZ Monitoring
EO – End of Observer Effort on MMEZ Monitoring
SC – Start of Construction Activity
EC – End of Construction Activity

**Beaufort Sea State descriptions:

Beaufort	Sea conditions
0	Flat Calm; Glass
1	Ripples without crests
2	Small wavelets; crests do not break
3	Large wavelets; crests begin to break; scattered whitecaps
4	Small waves with breaking crests; fairly frequent whitecaps
5	Moderate waves; many whitecaps, small spray

***Visibility descriptions:

Visibility	Condition
Excellent	Clear, no obstruction to horizon
Good	Little to no haze and/or rain; Relatively clear horizon line
Fair	Some haze and/or rain; Horizon still visible
Poor	No visible horizon due to fog and/or rain

****In the event of marine mammal observed, mark down the Sighting Group No. in this box and fill the separate Marine Mammal Sighting Record Sheet

Examples for notes on construction activity:

DCM Injection / Silt Curtain Deployment / Sand Laying / Reclamation / Material Transfer / Dredging / Gravel Refill / Diver Checking / Maintenance / Suspending

Appendix C2

Marine Mammal Observer Monitoring Sighting Record

Sheet

Development of the Integrated Waste Management Facilities (IWMF) Phase 1

Marine Mammal Observer Monitoring – Monitoring Sighting Record Sheet

Date: _____

Marine Mammal Observers: _____

Monitoring Station: _____

Construction Activity: _____

Sighting Group No.	Group Size	First Sighting	Construction Cessation Time	Last Sighting	Construction Re-start Time	Map No.	Remarks#

*Locations of the first and last sightings of each marine mammal group shall be marked on the map.

Any observable behaviour (e.g. Foraging, Socializing, Travelling, Milling/Resting, Breaching, Spy-hopping Porpoising) and boat-association.

Appendix D

Implementation Schedule for Mitigation Measures

Table B1 Implementation Schedule for Environmental Mitigation Measures to minimise disturbance on Finless Porpoise of IWMF

EIA Ref.	Current Plan Ref.	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*			
					Des	C	O	Dec
7b.8.3.17 - 7b.8.3.24	5.2 - 5.6	<p><i>Marine mammal watching plan</i></p> <ul style="list-style-type: none"> Upon the completion of silt curtain installation/re-installation/relocation, the marine works would be conducted within an enclosed environment within the silt curtain. Subsequently, Visual Inspection of the Waters Surrounded by Silt Curtains (Section 2.1, MMWP) and Regular Inspection of Deployed Silt Curtain (Section 2.2, MMWP) inspection under Marine Mammal Watching Plan (MMWP) would be implemented (where applicable, Marine Mammal Exclusion Zone shall be conducted at the meantime). All measures recommended in the Marine Mammal Watching Plan shall be fully and properly implemented for the Project. Special attention should be paid to Phase 2 (reclamation) where the floating type still curtain would be opened occasionally for vessel access, leaving a temporary 50 m opening. Action plan devised in the Marine Mammal Watching Plan shall be properly implemented to cope with any unpredicted incidents such as the case when marine mammals are found within the waters surrounded by the silt curtains. 	IWMF site, work site	Contractor, Environmental Team		✓		

EIA Ref.	Current Plan Ref.	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*			
					Des	C	O	Dec
7b.8.3.25 - 7b.8.3.30	5.7 - 5.9	<p><i>Training of Staff</i></p> <ul style="list-style-type: none"> For the implementation of Marine Mammal Watching Plan and Marine Mammal Exclusion Zone Plan, training sessions shall be conducted for MMO by marine mammal specialist, Dr. Samuel Hung, Dr. Lindsay Porter, Ms. Julia Chan or someone with equivalent qualifications, with briefing materials provided as guidelines, instructing adequate knowledge of all requirements for observing marine mammal and appropriate actions to be taken according to this plan. Competence checking by ET shall be provided at least once every 6 months to the trained MMO involved in implementation of either this plan or Marine Mammal Exclusion Zone Plan. As frontline staff of the main contractor or its sub-contractors, i.e. foremen, site agent, superintendents and engineers would involve in the implementation of this plan, briefings for these personnel will be provided by the trained MMO during induction trainings to get familiar with the plans for assisting on marine mammal observations within waters surrounded by silt curtains and taking necessary action according to the plans when there is marine mammal trapped by the silt curtain. Refresh briefings will be provided to all frontline staff once every 6 months. The briefing and training records will be provided to ETL, IEC and SO for audit and record. 	IWMF site, work site, marine traffic route	Contractor, Environmental Team		✓	✓	

*Des – Design, C-Construction, O-Operation, and Dec - Decommissioning