

**South East Asia – Japan 2 Cable System – Hong
Kong Segment (SJC2-HK) – Chung Hom Kok**

**This Submission of Post-Project Coral Survey Report
on 10 June 2021 has been reviewed and certified by the
Environmental Team Leader (ETL)
in accordance with Condition 3.5 of the Environmental
Permit No. EP-572/2020 of the Project.**

Reviewed & Certified:



Lemon Lam
Environmental Team Leader (ETL)



Member of the Surbana Jurong Group

local people
global experience

Our Ref: 7076596/L27515/AB/TSC/JC/rw

10 June 2021

OMS Group Sdn Bhd (previously known as Optic Marine Services Sdn Bhd)
c/o No 217, Block 3 No 7 Persiaran Sukan
Laman Seri Business Park
Seksyen 13, 40100 Shah Alam
Selangor D.E., Malaysia

By Email Only
(david.lim@opticmarine.com)

Attention: Mr. David LIM

Dear Sir

**South East Asia – Japan 2 Cable System – Hong Kong Segment (SJC2-HK) – Chung Hom Kok
Verification of Post-Project Coral Survey Report**

Reference is made to the *Post-Project Coral Survey Report* dated May 2021, submitted by the Environmental Team via e-mail on 4 June 2021.

We hereby verify the said Post-Project Coral Survey Report has complied with the requirement as set out under Condition 3.5 of the Environmental Permit.

Thank you very much for your kind attention. Please do not hesitate to contact the undersigned should you have any queries.

Yours faithfully

Cindy CHUNG
Independent Environmental Checker

cc: AECOM Ms. Lemon LAM

(By Email: lemon.lam@aecom.com)

SMEC ASIA LIMITED
27/F Ford Glory Plaza, 37-39 Wing Hong Street
Cheung Sha Wan, Kowloon, Hong Kong
T +852 3995 8100
F +852 3995 8101
E hongkong@smec.com
W www.smec.com



**South East Asia – Japan 2 Cable System –Hong Kong Segment (SJC2-HK) –
Chung Hom Kok**

Post-project Coral Survey Report



ECO-ENVIRO CONSULTANTS COMPANY

May 2021

Survey Conducted by Mr. Keith Kei

A Marine Ecologist with extensive experience in marine ecology, particularly in assessment and management of corals in Hong Kong.

Summary

- The Post-project Spot Dive Survey was carried out at the shore of Sha Shek Tan.
- A total of twenty-five hard coral colonies were recorded during the spot dive survey and no bleaching, increased sediment and increased partial mortality were recorded during the survey
- Except the undescribed species, *Coscinaraea* sp., all corals recorded in the survey area are common species in Hong Kong water.

Table of Contents

SUMMARY.....1

TABLE OF CONTENTS.....2

TABLES, AND FIGURES.....3

1. INTRODUCTION.....4

2. METHODOLOGY.....4

3. RESULT.....4

4. DISCUSSION.....6

5. REFERENCES.....6

Tables and Figures

Table 1 Weather Condition for the Spot Dive Survey on 13th May 2021.....5

**Table 2 GPS Coordinates, Size and Health Condition of Recorded Coral
Colonies in Station 2 during Spot Dive Survey.....5**

**Table 3 GPS Coordinates, Size and Health Condition of Recorded Coral
Colonies in Station 3 during Spot Dive Survey.....6**

Figure 1 Spot Dive Survey Location at Station 2 and Station 3.....8

Photo Plate A.....9

Photo Plate B.....12

1. Introduction

- 1.1 The South-East Asia Japan Cable System (SJC) is a submarine telecommunications cable connecting Japan, China, Hong Kong, the Philippines, Brunei, Thailand, Singapore and Indonesia, which was completed in 2013. Construction of the second South East Asia – Japan Cable System (SJC2) is now proposed and this Project comprises the Hong Kong Segment of SJC2. The SJC2-HK Cable will provide Hong Kong with faster and more diverse international telecommunications services and will help to meet the growing demand for greater bandwidth. Installation is scheduled to be completed and the system planned to be in service by end of 2021.
- 1.2 Buried below the seabed, the SJC2-HK Cable enters the eastern waters of Hong Kong, follows the established “east-west cable corridor (south)” and lands at an existing Beach Manhole (BMH) at Sha Shek Tan Beach (SST Beach) on the Chung Hom Kok (CHK) peninsula, which is at the south side of Hong Kong Island. This is the same landing location of the existing SJC Cable and other cables, including City-to-City Cable System (“C2C”) and the East Asia Crossing + C2C cable system (“EAC-C2C”).
- 1.3 Direct impact on coral communities caused by cable laying works during the construction and operation is not likely. However, hard corals were recorded in the near shore area of SST, as a precautionary measure a Pre-installation Coral Survey and a Post-project Coral Survey shall be carried out.
- 1.4 The Pre-installation Coral Survey was conducted in April 2021 before cable installation and a total of twenty-five hard coral colonies were recorded with good health condition. The Post-project Coral Survey shall be carried out within four weeks after the end of cable installation works. The objective is to verify the corals identified during the Pre-installation Coral Survey have not been directly impacted as a result of the cable installation.

2. Methodology

- 2.1 One subtidal spot dive survey will be carried out within four weeks after the end of the cable installation works in Station 2 and Station 3 (**Figure 1**) to verify the health of coral colonies found during the pre-installation coral survey. For each coral colony found, the following data should be recorded:

- GPS location
- Species identification to genus or species level, as far as practicable
- sizes (e.g. maximum diameter) and health of identified corals (e.g. degree of sedimentation, partial mortality, sign of bleaching)
- Photographic record
- Survey date and time
- Underwater visibility
- Atmospheric, sea and tidal conditions

3. Result

3.1 The Post-project Coral Survey was carried out on 13th May 2021 and the weather conditions were summarized in **Table 1**.

Table 1 Weather Condition for the spot dive survey on 13th May 2021

Date	Condition	Average Underwater Visibility
13 th May 2021	- Southwest Wind force 3 - Sunny period - Tidal level 2.06m	Less than 0.5 m

3.2 Spot dive survey were carried out from 10:00 to 12:00 on 13th May 2021 in Station 2 and Station 3 (**Figure 1**). The average depth during the dive survey was about 4 m.

3.3 The survey area is mainly composed of sandy bottom with scattered boulders and rocks along the shore area of SST. Lot of abandoned nets was found in the survey area. The average visibility along the survey area was 0.5 m to 1 m during the dive survey.

3.4 Same as the pre-installation coral survey, twenty hard coral colonies with nine species were recorded in Station 2 during the spot dive survey (**Table 2**) including *Acorpora solitaryensis*, *Bernardpora stutchburyi*, *Coscinaraea* sp., *Dipsastraea rotumana*, *Dipsastraea speciosa*, *Plesiastrea versipora*, *Porites lutea* and *Psammocora profundacella*. Their GPS coordinates, size and health condition were recorded in **Table 2**. Photos of each coral colony were shown in Photo Plate A. Except the undescribed species *Coscinaraea* sp., all corals recorded in the survey area are common species in Hong Kong water. No soft coral was recorded during the survey.

3.5 Five hard coral colonies with five species were recorded in Station 3 during the spot dive survey (**Table 3**) including *Favites abdita*, *Favites flexuosa*, *Favites chinensis*, *Favites acuticollis* and *Duncanopsammia peltata*. Their GPS coordinates, size and health condition were recorded in **Table 3**. Photos of each coral colony were shown in Photo Plate B. All corals recorded in the survey area are common species in Hong Kong water.

Table 2 GPS Coordinates, Size and Health Condition of Recorded Coral Colonies in Station 2 during Spot Dive Survey

No.	Coral species	Size (cm)	% Bleaching	Partial Mortality	% Sediment	GPS Coordinates		Closest Distance to Cable Alignment (m)
1	<i>Dipsastraea speciosa</i>	29	0	0	0	22°12'52.49N	114°12'26.00E	37
2	<i>Coscinaraea</i> sp.	25	0	0	0	22°12'52.26N	114°12'26.05E	43
3	<i>Coscinaraea</i> sp.	17	0	0	0	22°12'52.26N	114°12'26.05E	43
4	<i>Psammocora profundacella</i>	16	0	0	0	22°12'52.26N	114°12'26.05E	43
5	<i>Psammocora profundacella</i>	19	0	0	0	22°12'52.09N	114°12'26.16E	47
6	<i>Psammocora profundacella</i>	40	0	0	0	22°12'52.09N	114°12'26.16E	47
7	<i>Psammocora profundacella</i>	15	0	0	0	22°12'52.09N	114°12'25.96E	49
8	<i>Plesiastrea versipora</i>	39	0	0	0	22°12'51.97N	114°12'25.89E	53
9	<i>Porites lutea</i>	12	0	10	0	22°12'51.91N	114°12'25.96E	54
10	<i>Psammocora profundacella</i>	17	0	0	0	22°12'51.91N	114°12'25.96E	54

No.	Coral species	Size (cm)	% Bleaching	Partial Mortality	% Sediment	GPS Coordinates		Closest Distance to Cable Alignment (m)
11	<i>Coscinaraea</i> sp.	6	0	0	0	22°12'51.88N	114°12'26.10E	53
12	<i>Psammocora profundacella</i>	26	0	0	0	22°12'52.52N	114°12'25.67E	39
13	<i>Plesiastrea versipora</i>	5	0	0	0	22°12'52.62N	114°12'25.66E	37
14	<i>Psammocora profundacella</i>	23	0	0	0	22°12'52.62N	114°12'25.66E	37
15	<i>Plesiastrea versipora</i>	15	0	0	0	22°12'52.79N	114°12'25.57E	32
16	<i>Plesiastrea versipora</i>	19	0	0	0	22°12'52.89N	114°12'25.45E	31
17	<i>Dipsastraea rotumana</i>	18	0	0	0	22°12'52.98N	114°12'25.26E	30
18	<i>Bernardpora stutchburyi</i>	10	0	0	0	22°12'52.98N	114°12'25.26E	30
19	<i>Acorpora solitaryensis</i>	8	0	0	0	22°12'53.01N	114°12'25.11E	31
20	<i>Acorpora solitaryensis</i>	6	0	0	0	22°12'53.01N	114°12'25.11E	31

Table 3 GPS Coordinates, Size and Health Condition of Recorded Coral Colonies in Station 3 during Spot Dive Survey

No.	Coral species	Size (cm)	% Bleaching	Partial Mortality	% Sediment	GPS Coordinates		Closest Distance to Cable Alignment (m)
1	<i>Duncanopsammia peltata</i>	69	0	0	0	22°12'53.33N	114°12'26.11E	11
2	<i>Favites abdita</i>	8	0	0	0	22°12'53.33N	114°12'26.11E	11
3	<i>Favites flexuosa</i>	22	0	0	0	22°12'55.07N	114°12'25.57E	33
4	<i>Favites chinensis</i>	58	0	0	1	22°12'55.07N	114°12'25.57E	33
5	<i>Favites acuticollis</i>	49	0	0	0	22°12'55.07N	114°12'25.57E	33

4. Discussion

4.1 The hard substrates of the survey site were mainly composed of sandy bottom with scattered boulders and rocks. A total of 25 hard coral colonies (Station 2: 20 colonies; Station 3: 5 colonies) were recorded during the spot dive survey. Same as the pre-installation coral survey, coral no. 9 (*Porites lutea*) in Station 2 showed 10% partial mortality. All other coral recorded during the survey are in good health condition. No rare animals were recorded. They are all common species and found in very low abundance and diversity.

4.2 All coral colonies recorded during the post-project coral survey showed the same health condition as the pre-installation coral survey. No bleaching, increased sediment and increased partial mortality were recorded during the survey after the cable laying work. As a conclusion, there is not directly impact on the recorded coral colonies during the cable installation work.

5. References

Brian Morton and John Morton. 1983. *The Sea Shore Ecology of Hong Kong*. Hong Kong University Press.

Binnie Consultants Limited. 1995. *Marine Ecology of Hong Kong: Report on Underwater Dive Surveys*. Volume I. Civil Engineering Department Geotechnical Engineering Office

Chan A.L.K., Choi, C.L.S., McCorry D., Chan K.K., Lee, M.W., and Put, A. Jr. 2005.
Field Guide to Hard Corals of Hong Kong. AFCD.

END

Figure 1 Spot Dive Survey Location at Station 2 and Station 3

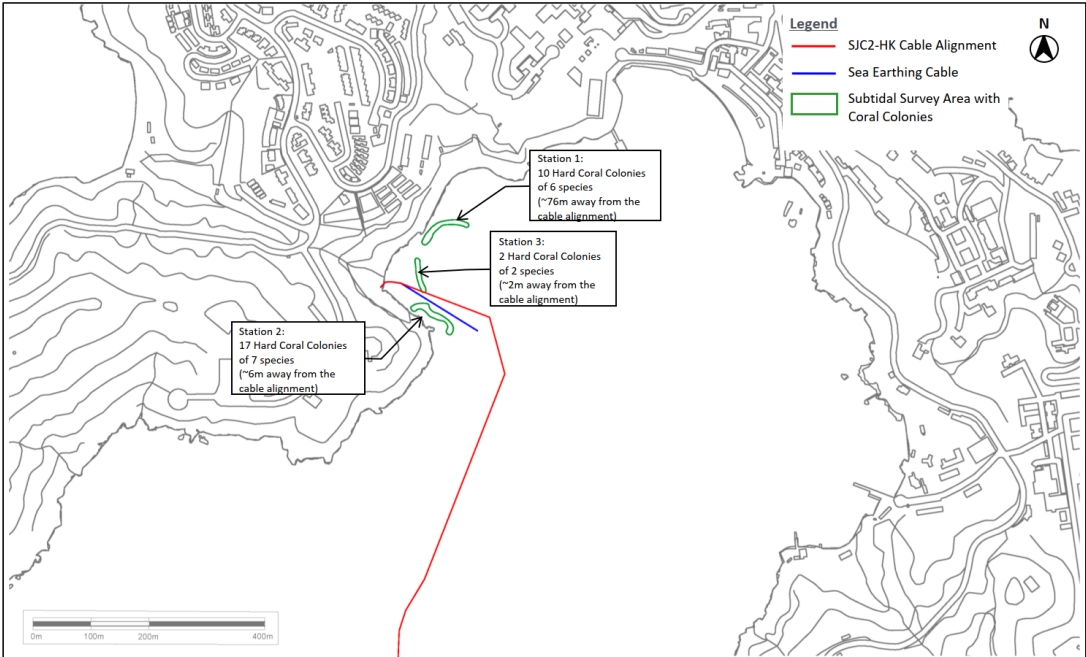















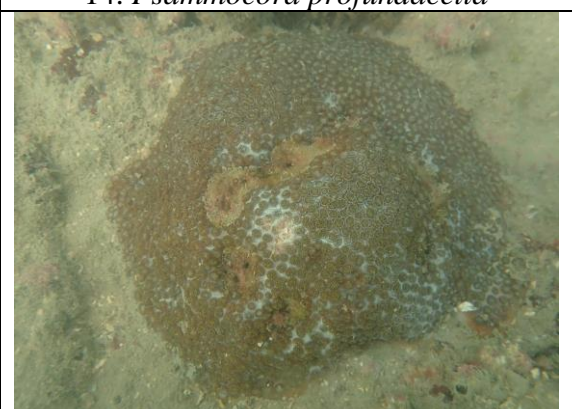


PHOTO PLATE A

	
1. <i>Dipsastraea speciosa</i>	2. <i>Coscinaraea sp.</i>
	
3. <i>Coscinaraea sp.</i>	4. <i>Psammocora profundacella</i>
	
5. <i>Psammocora profundacella</i>	6. <i>Psammocora profundacella</i>
	
7. <i>Psammocora profundacella</i>	8. <i>Plesiastrea versipora</i>

	
9. <i>Porites lutea</i>	10. <i>Psammocora profundacella</i>
	
11. <i>Coscinaraea sp.</i>	12. <i>Psammocora profundacella</i>
	
13. <i>Plesiastrea versipora</i>	14. <i>Psammocora profundacella</i>
	
15. <i>Plesiastrea versipora</i>	16. <i>Plesiastrea versipora</i>










	
<p>17. <i>Dipsastraea rotumana</i></p>	<p>18. <i>Bernardpora stutchburyi</i></p>
	
<p>19. <i>Acorpora solitaryensis</i></p>	<p>20. <i>Acorpora solitaryensis</i></p>

PHOTO PLATE B

	
<p>1. <i>Turbinaria peltata</i></p>	<p>2. <i>Favites abdita</i></p>
	
<p>3. <i>Favites flexuosa</i></p>	<p>4. <i>Favites chinensis</i></p>
	
<p>5. <i>Favites acuticollis</i></p>	