

## **ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE**

### **HEAD 705 – CIVIL ENGINEERING**

**Recreation, Culture and Amenities – Open spaces**

**444RO – Lei Yue Mun Waterfront Enhancement Project -  
construction of a public landing facility**

### **HEAD 703 – BUILDINGS**

**Recreation, Culture and Amenities – Open spaces**

**409RO – Lei Yue Mun Waterfront Enhancement Project -  
development of a waterfront promenade and related  
improvement works**

Members are invited to recommend to the Finance Committee the upgrading of **444RO** and **409RO** to Category A at estimated costs of \$164.9 million and \$103.2 million in money-of-the-day prices respectively.

### **PROBLEM**

We need to improve the facilities along the Lei Yue Mun (LYM) waterfront and enhance its connectivity with a view to further enhancing the attractiveness of LYM as a popular tourist attraction.

### **PROPOSAL**

2. The Director of Civil Engineering and Development, with the support of the Secretary for Commerce and Economic Development, proposes to upgrade **444RO** to Category A at an estimated cost of \$164.9 million in money-of-the-day (MOD) prices for the construction of a public landing facility

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in LYM under the Lei Yue Mun Waterfront Enhancement Project (LYM Project).

3. The Director of Architectural Services, with the support of the Secretary for Commerce and Economic Development, proposes to upgrade **409RO** to Category A at an estimated cost of \$103.2 million in MOD prices for the development of a waterfront promenade and related improvement works under the LYM Project.

**PROJECT SCOPE AND NATURE**

\_\_\_\_\_ 4. Details of the above two projects are at Enclosures 1 and 2 respectively.

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Commerce and Economic Development Bureau  
June 2020

**444RO – Lei Yue Mun Waterfront Enhancement Project –  
construction of a public landing facility**

**PROJECT SCOPE AND NATURE**

The scope of works under **444RO** comprises –

- (a) the construction of a public landing facility;
- (b) the construction of a breakwater; and
- (c) structural improvement works to an existing viewing platform and a lookout point.

———— A layout plan showing the works of **444RO** is at Annex 1 to Enclosure 1.

2. Subject to the funding approval by the Finance Committee, we plan to commence the construction works in the fourth quarter of 2020 for completion in mid-2023.

**JUSTIFICATION**

3. Lei Yue Mun (LYM) is one of Hong Kong's most popular tourist spots. The Lei Yue Mun Waterfront Enhancement Project (LYM Project) will improve the facilities along LYM waterfront. The proposed enhancement works include the construction of a new public landing facility, a breakwater, a promenade, a viewing platform; and beautification works to the existing viewing facilities, enabling visitors and locals to experience the traditional fishing village while enjoying the enchanting seaview of the eastern coastal of Victoria Harbour. The design of LYM Project will be embedded with the historical and cultural characteristics of LYM so as to provide visitors with a diversified travelling experience. The LYM Project will also enhance various leisure and ancillary facilities in the area including the existing LYM Rest Garden and open space, thereby providing an ideal leisure environment for the community. Overall speaking, the LYM Project will enhance the attractiveness of LYM with a view to creating a better visitor experience.

4. The LYM Project also aims at enhancing the connectivity and walkability of the waterfront area in LYM. In considering the provision of the new public landing facility, due account has been taken of the presence of the Sam Ka Tsuen ferry pier in Yau Tong and the berthings in the typhoon shelter. However, they are either too far away from the popular tourist attractions along LYM waterfront or could not accommodate large sight-seeing vessels. The proposed new public landing facility will provide visitors a convenient access to LYM waterfront for enjoyment of scenery. In the long run, LYM waterfront may serve as an extended destination of the “water taxi”<sup>1</sup> service to be introduced by the Government. Moreover, with the completion of the planned public promenade at the Cha Kwo Ling, Yau Tong Bay and Yau Tong area, visitors will be able to gain access to LYM via a continuous promenade stretching from Kwun Tong Business Area.

## FINANCIAL IMPLICATIONS

5. We estimate the capital cost of the proposed works to be \$164.9 million in money-of-the-day (MOD) prices, broken down as follows –

	<b>\$ million (in MOD prices)</b>
(a) Construction of a public landing facility	97.9
(b) Construction of a breakwater	39.8
(c) Structural improvement works to an existing viewing platform and a lookout point	2.5
(d) Site safety and environmental mitigation measures and environmental monitoring and audit (EM&A) programme	9.7
(e) Consultants’ fees for independent environmental checker services <sup>2</sup>	0.8
	<b>/\$ million .....</b>

<sup>1</sup> Currently, the proposed new public landing facility is not a calling point of “water taxi” licensed ferry. The feasibility of extending the short working trips of the “water taxi” licensed ferry service to the proposed new public landing facility in future depends on a combination of factors, including sea and berthing trial and passenger demand, etc.

<sup>2</sup> As part of the EM&A programme, we will commission consultants to provide independent environmental checker services to review and audit the environmental monitoring works and results for the proposed works.

	<b>\$ million (in MOD prices)</b>
(f) Contingencies	14.2
Total	<u>164.9</u>

————— A breakdown of the estimates for consultants' fees by man-month is at Annex 2 to Enclosure 1.

6. The contract administration and site supervision of the proposed works will be undertaken by in-house resources of Civil Engineering and Development Department (CEDD). The estimated cost for the proposed works is comparable to that of similar projects implemented by the Government.

7. Subject to funding approval, we plan to phase the expenditure as follows –

<b>Year</b>	<b>\$ million (in MOD prices)</b>
2020-2021	5.2
2021-2022	49.2
2022-2023	53.5
2023-2024	38.9
2024-2025	18.1
	<u>164.9</u>

8. We have derived the MOD estimates based on the Government's latest forecast of trend rate of change in the prices for public sector building and construction output for the period from 2020 to 2025. Subject to funding approval, we will deliver the construction works under a re-measurement contract of New Engineering Contract (NEC) form<sup>3</sup> because the quantities of works may vary depending on actual ground conditions. The contract will provide for price adjustments.

9. We estimate the annual recurrent expenditure arising from the proposed works to be \$0.9 million.

## **PUBLIC CONSULTATION**

10. Since 2005, the Government has carried out extensive consultation on the LYM Project to collect views of relevant stakeholders, including the Kwun Tong District Council (KTDC), green groups, the Hong Kong Off-shore Fishermen's Association and the Sub-committee on Harbour Plan Review of the former Harbourfront Enhancement Committee. KTDC members expressed unanimous support for the LYM Project and urged the Government to implement the LYM Project as early as possible. The other consulted parties mentioned above also raised no in-principle objection to the LYM Project. The Culture, Recreation and Sports Committee under KTDC and the local community were consulted again on the latest progress of the LYM Project on 16 July 2019 and 23 August 2019 respectively. They showed unanimous support to the LYM Project and urged for its early implementation.

11. Upon the establishment of the Harbourfront Commission (HC) in July 2010, the Administration was invited to discuss the LYM Project at the Task Force on Harbourfront Developments in Kowloon, Tsuen Wan and Kwai Tsing (HC Task Force) under HC on 4 October 2010 and 12 January 2011. HC expressed views on the LYM Project and the associated sewerage problem<sup>4</sup>. Subsequently, with the completion of the Environmental Impact Assessment (EIA) study for the LYM Project conducted by CEDD and the implementation of the construction works of Sewerage to LYM Village by the Drainage Services Department, we updated HC Task Force on the LYM Project on 24 September 2019 and Members of the HC Task Force expressed support to the LYM Project.

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<sup>3</sup> NEC is a suite of contracts developed by the Institution of Civil Engineers, United Kingdom. It is a contract form that emphasises cooperation, mutual trust and collaborative risk management between the contracting parties.

<sup>4</sup> LYM Village has no public sewerage system. Only the restaurants and a few village houses thereat are equipped with their individual and simple on-site facilities such as septic tanks and soakaway systems. Many squatter houses discharge their sewage directly into the stormwater system.

12. We gazetted the proposed works under the Foreshore and Seabed (Reclamations) Ordinance (Cap. 127) on 23 October 2009 and received 95 objections. After taking administrative steps to resolve the objections, 75 objections remained unresolved. The main grounds of objections concerned were related to public hygiene and safety, wastage of public resources, preservation of unique natural resources, and the capacity of LYM area in receiving a huge increase in number of tourists. To address these concerns, the Government has implemented various measures including the commencement of the construction works of sewerage to LYM Village in November 2018 with a view to improving the water quality and the hygiene conditions in LYM; the completion of the EIA study in 2018 which has addressed the overall environmental impact of the LYM Project and proposed mitigation measures; as well as avoiding works to be carried out at the oyster shell beach, LYM lighthouse and rocky outcrop which are natural features located at the nearby coastal protection area. The concerns of the objections have thus been duly addressed. In February 2020, the Chief Executive in Council authorised the proposed works and the notice of authorisation was gazetted on 28 February 2020.

13. We consulted the Legislative Council Panel on Economic Development on 25 May 2020. Members supported the LYM Project and had no objection to the submission of the funding proposal to the Public Works Subcommittee.

## **ENVIRONMENTAL IMPLICATIONS**

14. The LYM Project is a designated project under Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO) (Cap. 499) and an environmental permit (EP) is required for the construction and operation of the LYM project. In October 2018, the Director of Environmental Protection approved the EIA report for the LYM Project with conditions under EIAO and an EP for construction and operation of the LYM Project was issued on 10 December 2018. The EIA report concluded that the environmental impact of the LYM Project could be controlled to within the acceptable levels under EIAO and the Technical Memorandum on EIA Process. We will implement the measures recommended in the approved EIA report, and comply with the relevant conditions stipulated in the EP. The key measures to be implemented include use of closed grab dredger, control of dredging rate, deployment of silt curtains, erection of noise barriers and portable noise enclosure, translocation of affected coral colonies, and implementation of EM&A programme including those for water quality and noise during construction phase. We have included the cost of

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implementing the environmental mitigation measures as well as the EM&A programme in the overall project estimates in **444RO**.

15. At the planning and design stages, we have considered the design and construction sequence of the proposed works with a view to minimising the generation of construction waste where possible. In addition, we will require the contractor to reuse inert construction waste (e.g. excavated materials) on site or in other suitable construction sites as far as possible in order to minimise disposal of inert construction waste at public fill reception facilities<sup>5</sup>. We will also encourage the contractor to maximise the use of recycled or recyclable inert construction waste, as well as the use of non-timber formwork to further reduce the generation of construction waste.

16. At the construction stage, we will require the contractor to submit for approval a plan setting out the waste management measures, which will include appropriate mitigation means to avoid, reduce, reuse and recycle inert construction waste. We will ensure that the day-to-day operations on site comply with the approved plan. We will require the contractor to separate inert portion from non-inert construction waste on site for disposal at appropriate facilities. We will also control the disposal of inert and non-inert construction waste at public fill reception facilities and landfills respectively through a trip-ticket system.

17. We estimate that the proposed works will generate in total about 5 698 tonnes of construction waste. Of these, we will deliver 5 528 tonnes (97%) of the inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 170 tonnes (3%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at public fill reception facilities and landfill sites is estimated to be about \$426,500 for the proposed works (based on a unit charge rate of \$71 per tonne for disposal at public fill reception facilities and \$200 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

18. In addition, we estimate that the proposed works will generate about 13 000 m<sup>3</sup> of marine sediment, which will be disposed of at sites agreed by the Marine Fill Committee (MFC) and the Environmental Protection Department.

/ **HERITAGE** .....

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<sup>5</sup> Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap 354N). Disposal of inert construction waste at public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.



## HERITAGE IMPLICATIONS

19. This project will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites or buildings, sites of archaeological interest and Government historic sites identified by the Antiquities and Monuments Office.

## LAND ACQUISITION

20. This project does not require any land acquisition.

## TRAFFIC IMPLICATIONS

21. We have conducted traffic impact assessment for the project, covering the traffic impact during the construction and operation period. According to the findings of the assessment, the project would not cause significant impact to the traffic network in the concerned area.

22. Upon commissioning, the new public landing facility will provide an additional berthing point for vessels up to 30 metres (m) long with a draft of 3m at LYM.

## BACKGROUND INFORMATION

23. In 2003, the Tourism Commission (TC) implemented a number of minor improvement works in LYM. In response to the request of the LYM community, TC introduced the LYM Project in 2005 with a view to enhancing the facilities along the LYM waterfront.

24. We upgraded **409RO** and **444RO** to Category B in December 2005 and October 2011 respectively.

25. CEDD engaged consultants to undertake preliminary environmental review and an EIA, marine and land traffic impact assessment, and contractors to undertake ground investigation works, at a total estimated cost of about \$9.0 million, which was charged to Capital Works Reserve Fund block allocation **Subhead 5101CX** "Civil engineering works, studies and investigation for items in Category D of the Public Works Programme". Detailed design was undertaken by in-house resources of CEDD.

26. The proposed works will involve felling of one tree. The tree to be felled is not an important tree<sup>6</sup>. We will incorporate planting proposals as part of the LYM Project, including a total of seven trees.

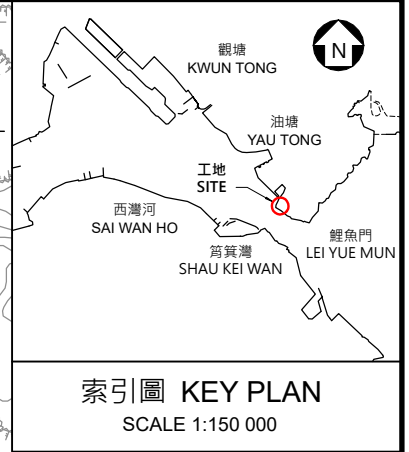
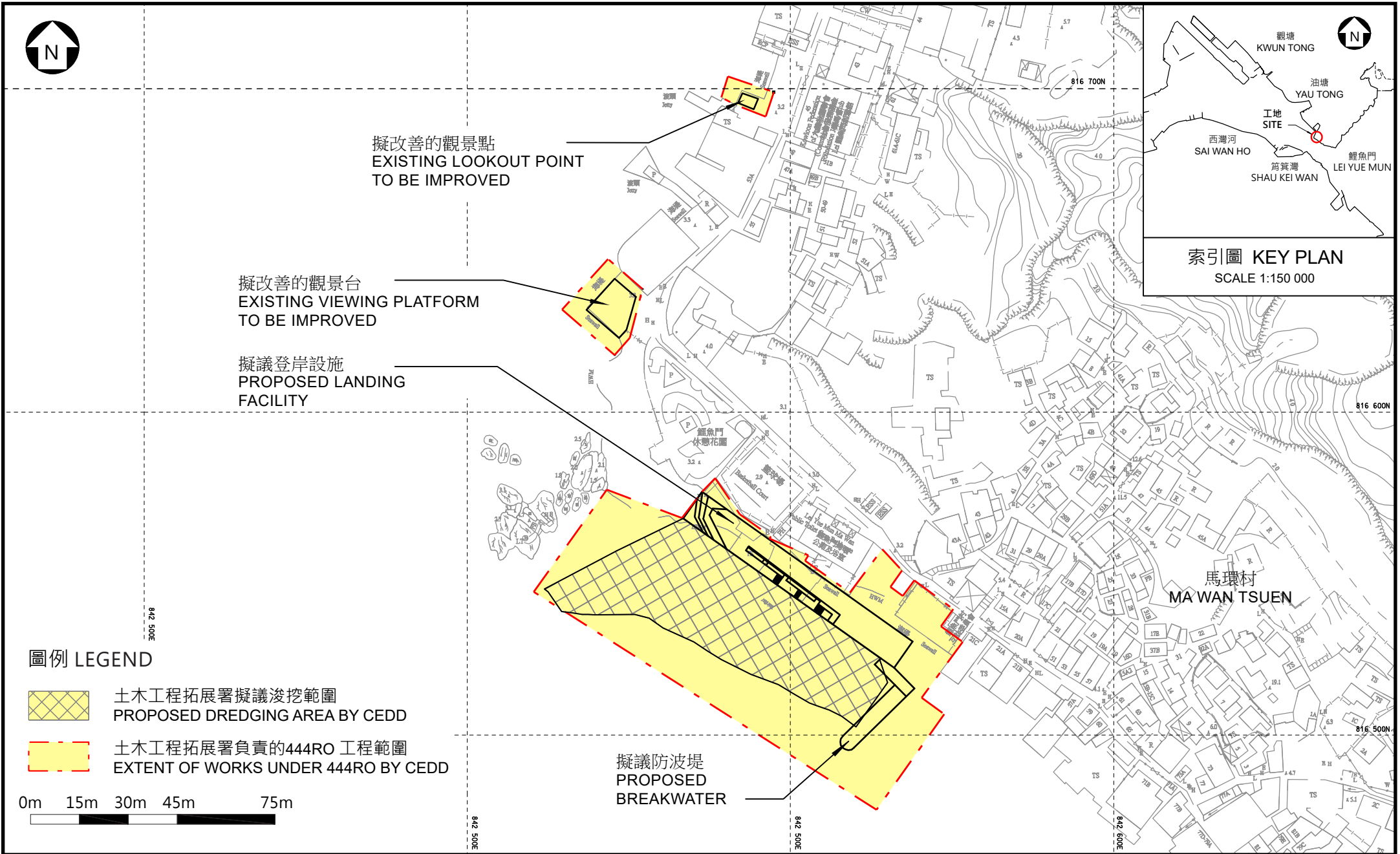
27. We estimate that the proposed works will create about 70 jobs (60 for labourers and another 10 for professional or technical staff) providing a total employment of 1 300 man-months.

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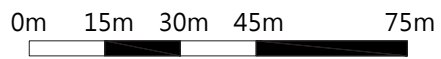
<sup>6</sup> “Important trees” refer to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

- (a) trees of 100 years old or above;
- (b) trees of cultural, historical or memorable significance e.g. Fung Shui trees, trees as landmark of monastery or heritage monument, and trees in memory of an important person or event;
- (c) trees of precious or rare species;
- (d) trees of outstanding form (taking account of the overall tree sizes, shape and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitat; or
- (e) trees with a trunk diameter equal to or exceeding 1.0 metre (m) (measured at 1.3 m above ground level), or with a height/canopy spread equal to or exceeding 25m.



圖例 LEGEND

-  土木工程拓展署擬議浚挖範圍  
PROPOSED DREDGING AREA BY CEDD
-  土木工程拓展署負責的444RO 工程範圍  
EXTENT OF WORKS UNDER 444RO BY CEDD



公眾登岸設施及相關海事工程平面圖  
LAYOUT PLAN OF PUBLIC LANDING FACILITY AND  
RELATED MARINE WORKS UNDER 444RO

444RO  
鯉魚門海旁改善計劃 – 公眾登岸設施建造工程  
LEI YUE MUN WATERFRONT ENHANCEMENT PROJECT -  
CONSTRUCTION OF A PUBLIC LANDING FACILITY



**444RO – Lei Yue Mun Waterfront Enhancement Project –  
construction of a public landing facility**

**Breakdown of the estimates for consultants' fees  
(in September 2019 prices)**

		<b>Estimated man- months</b>	<b>Average MPS* salary point</b>	<b>Multiplier (Note 1)</b>	<b>Estimated fee (\$ million)</b>
Consultants' fee for independent environmental checker services (Note 2)	Professional	2	38	2.0	0.3
	Technical	7	14	2.0	0.4
				<b>Total</b>	<b>0.7#</b>

\* MPS = Master Pay Scale

**Notes**

1. A multiplier of 2.0 is applied to the average MPS salary point to estimate the full staff cost for the staff employed in the consultants' offices (including the consultants' overheads and profit) (as at now, MPS salary point 38 = \$85,870 per month and MPS salary point 14 = \$30,235 per month).
2. The actual man-months and actual costs will only be known after selection of the consultants and completion of construction works.

**Remarks**

The figures in this Annex are shown in constant prices to correlate with the MPS salary point of the same year. The figures marked with # are shown in money-of-the-day prices in paragraph 5 of Enclosure 1.

**409RO – Lei Yue Mun Waterfront Enhancement Project –  
development of a waterfront promenade and related improvement works**

**PROJECT SCOPE AND NATURE**

The proposed site occupied an area of about 5 100 square metre (m<sup>2</sup>) located at Lei Yue Mun (LYM) waterfront. The scope of works under **409RO** comprises -

- (a) construction of a waterfront promenade and a new viewing platform;
- (b) beautification works to the existing viewing platform, five lookout points and other improvement works along LYM waterfront; and
- (c) improvement works to an existing LYM Rest Garden and open space.

2. A site and location plan, site plans and artist's impressions for the project are at Annexes 1 to 6 to Enclosure 2.

3. Subject to the funding approval by the Finance Committee, we plan to commence construction of the proposed project in the fourth quarter of 2020 for completion in phases from the second quarter of 2022 to the fourth quarter of 2024.

**JUSTIFICATION**

4. LYM is one of the Hong Kong's most popular tourist spots. The Lei Yue Mun Waterfront Enhancement Project (LYM Project) will improve the facilities along LYM waterfront. The proposed enhancement works will enable visitors and locals to experience the traditional fishing village while enjoying the enchanting seaview of the eastern coastal of Victoria Harbour. The design of the LYM Project will be embedded with the historical and cultural characteristics of LYM so as to provide visitors with a diversified travelling experience. The LYM Project will also enhance various leisure and ancillary facilities in the area including the existing LYM Rest Garden and open space, thereby providing an ideal leisure environment for the community. Overall speaking, the LYM Project will enhance the attractiveness of LYM with a view to creating a better visitor experience.

5. The LYM Project also aims at enhancing the connectivity and walkability of the waterfront area in LYM. In the long run, with the completion of the planned public promenade at the Cha Kwo Ling, Yau Tong Bay and Yau Tong area, visitors will be able to gain access to LYM via a continuous promenade stretching from Kwun Tong Business Area.

## FINANCIAL IMPLICATIONS

6. We estimate the capital cost of the proposed works to be \$103.2 million, in money-of-the-day (MOD) prices, broken down as follows –

	<b>\$ million</b> <b>(in MOD prices)</b>
(a) Site works	9.3
(b) Building services	6.1
(c) Drainage	1.1
(d) External works	58.6
(e) Additional energy conservation, green and recycled features	0.1
(f) Consultants' fees for	6.9
(i) contract administration	6.3
(ii) management of resident site staff (RSS)	0.6
(g) Remuneration of RSS	11.7
(h) Contingencies	9.4
Total	103.2

7. We propose to engage consultants to undertake contract administration and site supervision for the project. A detailed breakdown of the estimated consultants' fees and RSS costs by man-months is at Annex 7 to Enclosure 2. We consider the estimated project cost comparable to that of similar projects implemented by the Government.

8. Subject to funding approval, we plan to phase the expenditure as follows –

Year	\$ million (in MOD prices)
2020 – 2021	1.0
2021 – 2022	17.6
2022 – 2023	19.6
2023 – 2024	20.6
2024 – 2025	21.6
2025 – 2026	19.9
2026 – 2027	2.9
	<hr/> 103.2 <hr/>

9. We have derived the MOD estimates on the basis of the Government's latest set of assumptions on the trend rate of change in the prices of public sector building and construction output for the period from 2020 to 2027. We will deliver the construction works through lump sum contracts as the scope of the works can be clearly defined in advance. The contracts will provide for price adjustments. Subject to the progress of the marine works of the LYM Project under **444RO**, the procurement of part of the works with interface with **444RO** through term contract will also be considered.

10. We estimate the annual recurrent expenditure arising from the proposed works to be \$2.7 million.

**PUBLIC CONSULTATION**

11. Since 2005, the Government has carried out extensive consultation on the LYM Project to collect the views of relevant stakeholders, including the Kwun Tong District Council (KTDC), green groups, the Hong Kong Off-shore Fishermen's Association and the Sub-committee on Harbour Plan Review of the former Harbourfront Enhancement Committee. KTDC members expressed unanimous support for the LYM Project and urged the Government to implement the LYM Project as early as possible. The other consulted parties mentioned above also raised no in-principle objection to the LYM Project. The Culture, Recreation and Sports Committee under KTDC and the local community were consulted again on the latest progress of the LYM Project on 16 July 2019 and 23 August 2019 respectively. They showed unanimous support to the LYM Project and urged for its early implementation.

12. Upon the establishment of the Harbourfront Commission (HC) in July 2010, the Administration was invited to discuss the LYM Project at the Task Force on Harbourfront Developments in Kowloon, Tsuen Wan and Kwai Tsing (HC Task Force) under HC on 4 October 2010 and 12 January 2011. HC expressed views on the LYM Project and the associated sewerage problem. Subsequently, with the completion of the Environmental Impact Assessment (EIA) study for the LYM Project conducted by the Civil Engineering and Development Department (CEDD) and the implementation of the construction works of Sewerage to LYM Village by the Drainage Services Department, we updated HC Task Force on the LYM Project on 24 September 2019 and Members of HC Task Force expressed support to the LYM Project.

13. CEDD gazetted the works of **444RO** under the LYM Project under the Foreshore and Seabed (Reclamations) Ordinance (Cap. 127) on 23 October 2009 and received 95 objections. After taking administrative steps to resolve the objections, 75 objections remained unresolved. The main grounds of objections concerned were related to public hygiene and safety, wastage of public resources, preservation of unique natural resources, and the capacity of LYM area in receiving a huge increase in number of tourists. To address these concerns, the Government has implemented various measures including the commencement of the construction works of Sewerage to LYM Village in November 2018 with a view to improving the water quality and the hygiene conditions in LYM; the completion of the EIA study in 2018 which has addressed the overall environmental impact of the LYM Project and proposed mitigation measures as well as avoiding works to be carried out at the oyster shell beach, LYM lighthouse and rocky outcrop which are natural features located at the nearby coastal protection area. The concerns of the objections have thus been duly addressed.

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14. We consulted the Legislative Council Panel on Economic Development on 25 May 2020. Members supported the LYM Project and had no objection to the submission of the funding proposal to the Public Works Subcommittee.

## **ENVIRONMENTAL IMPLICATIONS**

15. The LYM Project is a designated project under Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO) (Cap. 499) and an environmental permit (EP) is required for the construction and operation of the LYM Project. In October 2018, the Director of Environmental Protection approved the EIA report for the LYM Project with conditions under EIAO and an EP for construction and operation of the LYM Project was issued on 10 December 2018. The EIA report concluded that the environmental impact of the LYM Project could be controlled to within the acceptable levels under EIAO and the Technical Memorandum on EIA Process. We will implement the measures recommended in the approved EIA report, and comply with the relevant conditions stipulated in the EP. The key measures to be implemented include erection of noise barriers and portable noise enclosures and implementation of environmental monitoring and audit (EM&A) programme including noise monitoring during construction phase. We have included the cost of implementing the environmental mitigation measures as well as the EM&A programme in the overall project estimates in **409RO**.

16. At the planning and design stages, we have considered the design and construction sequence of the proposed works with a view to reducing the generation of construction waste wherever possible (e.g. adopting pre-cast units and off-site pre-fabrication works as far as possible to minimise the wet trades and in-situ works on site in order to reduce the generation of construction waste). In addition, we will require the contractor to reuse inert construction waste (e.g. excavated soil) on site or in other suitable construction sites as far as possible in order to minimise disposal of inert construction waste at public fill reception facilities<sup>1</sup>. We will also encourage the contractor to maximise the use of recycled

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<sup>1</sup> Public fill reception facilities are specified in Schedule 4 of Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste at public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

or recyclable inert construction waste, as well as the use of non-timber formwork to further reduce the generation of construction waste.

17. At the construction stage, we will require the contractor to submit for approval a plan setting out waste management measures, which will include appropriate mitigation means to avoid, reduce, reuse and recycle inert construction waste. We will ensure that the day-to-day operations on site comply with the approved plan. We will require the contractor to separate inert portion from non-inert construction waste on site for disposal at appropriate facilities. We will control the disposal of inert and non-inert construction waste at public fill reception facilities and landfills respectively through a trip-ticket system.

18. We estimate that the proposed works will generate in total about 1 260 tonnes of construction waste. Of these, we will reuse about 160 tonnes (12.7%) of inert construction waste on site and deliver about 930 tonnes (73.8%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 170 tonnes (13.5%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at public fill reception facilities and landfill sites is estimated to be about \$0.1 million for the proposed works (based on a unit charge rate of \$71 per tonne for disposal at public fill reception facilities and \$200 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

## **HERITAGE IMPLICATIONS**

19. This project will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites or buildings, sites of archaeological interest and Government historic sites identified by the Antiquities and Monuments Office.

## **LAND ACQUISITION**

20. This project does not require any land acquisition.

## **ENERGY CONSERVATION, GREEN AND RECYCLED FEATURES**

21. This project will adopt various forms of energy efficient features and renewable energy technologies, in particular solar powered light fittings.

22. The total estimated additional cost for adoption of the above energy conservation features is around \$0.1 million, which has been included in the cost estimate of this project. The energy efficient features will achieve 3.5% energy savings in the annual energy consumption with a payback period of about eight years.

## BACKGROUND INFORMATION

23. We upgraded **409RO** to Category B in December 2005. The Architectural Services Department engaged consultants to undertake various services including site investigation, topographic and tree survey, underground utility mapping, architectural lead consultancy and quantity surveying consultancy services at a cost of about \$7.4 million. These services and works provided by the consultants were funded under block allocation **Subhead 3100GX** “Project feasibility studies, minor investigations and consultants’ fee for items in Category D of the Public Works Programme”.

24. Of the 17 trees within the boundary of the proposed works, 14 trees will be preserved while three trees will be removed, including one tree to be felled and two trees to be transplanted within the works site. All trees to be removed are not important trees<sup>2</sup>. We will incorporate planting proposals as part of the proposed works, including estimated quantities of seven trees, 2 800 number of shrubs and 1 300 number of groundcovers.

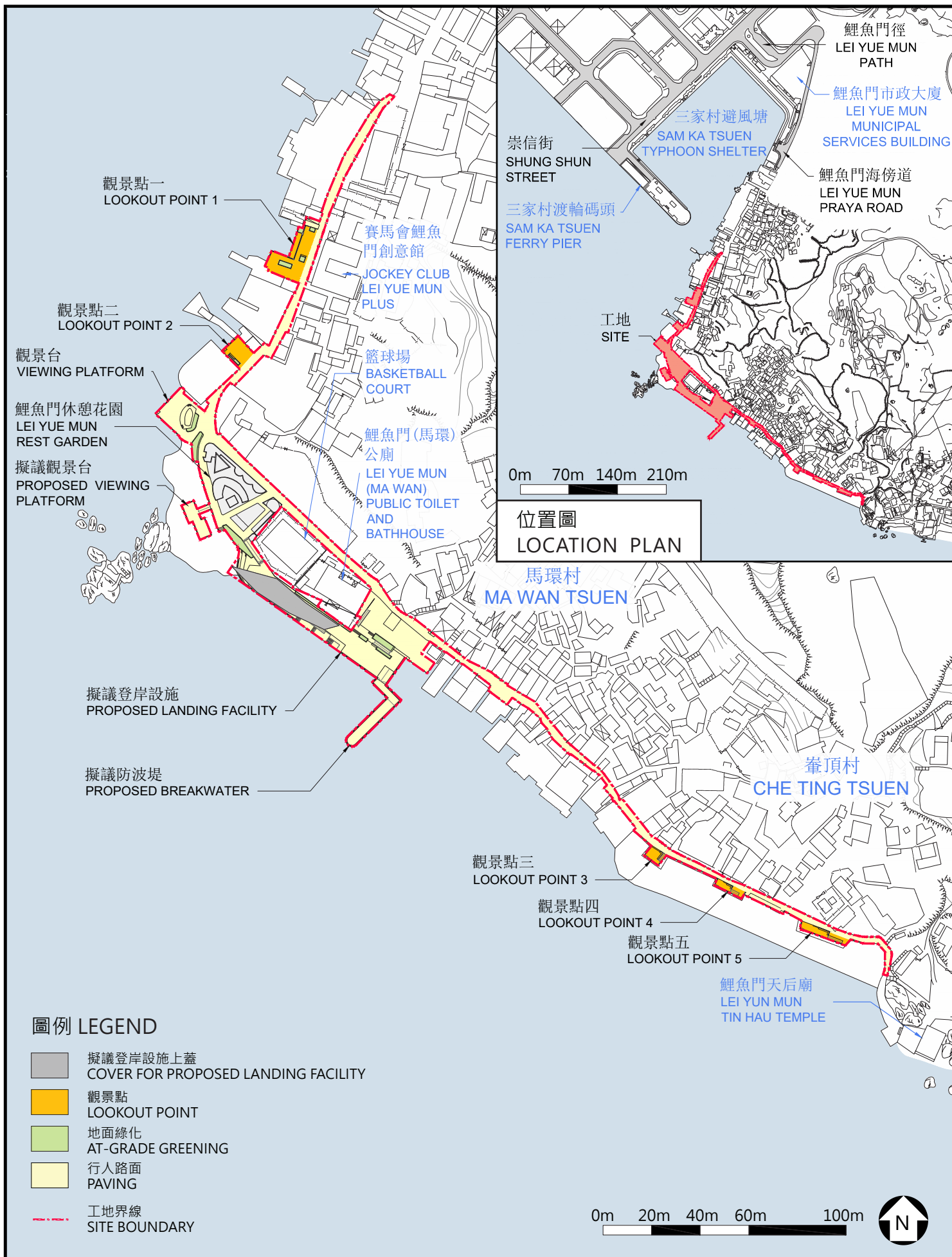
25. We estimate that the proposed works will create about 20 jobs (15 for labourers and five for professional or technical staff) providing a total employment of 660 man-months.

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<sup>2</sup> “Important trees” refer to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

- (a) trees of 100 years old or above;
- (b) trees of cultural, historical or memorable significance e.g. Fung Shui trees, trees as landmark of monastery or heritage monument, and trees in memory of an important persons or events;
- (c) trees of precious or rare species;
- (d) trees of outstanding forms (taking account of overall tree sizes, shapes and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitats; or
- (e) trees with a trunk diameter equal to or exceeding 1.0 metre (m) (measured at 1.3 m above ground level), or with a height/canopy spread equal to or exceeding 25 m.

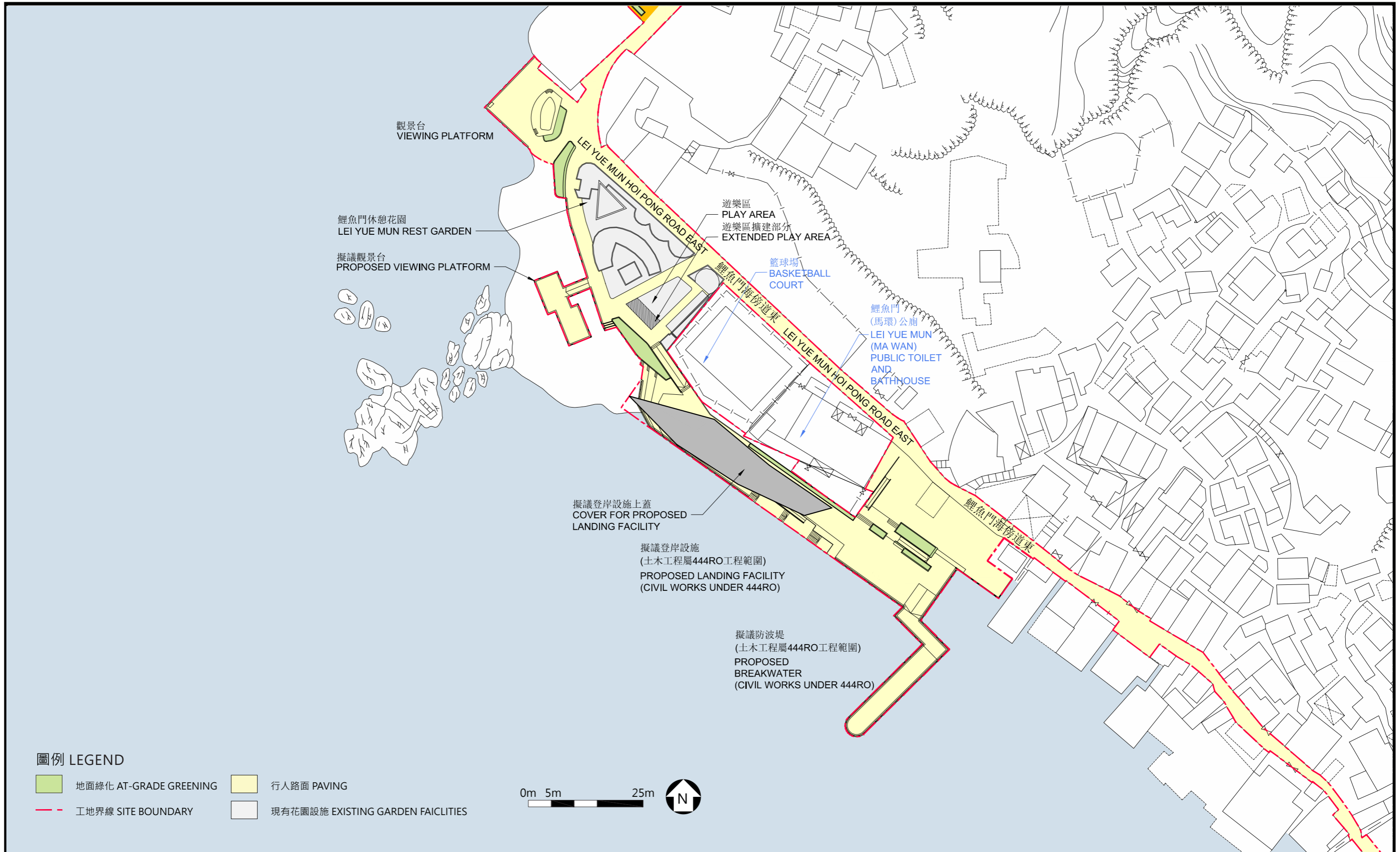


工地平面圖一  
SITE PLAN 1

409RO  
鯉魚門海旁改善計劃 – 發展海濱長廊及相關改善工程  
LEI YUE MUN WATERFRONT PROJECT - DEVELOPMENT OF A WATERFRONT PROMENADE AND RELATED IMPROVEMENT WORKS



ARCHITECTURAL SERVICES DEPARTMENT 建築署

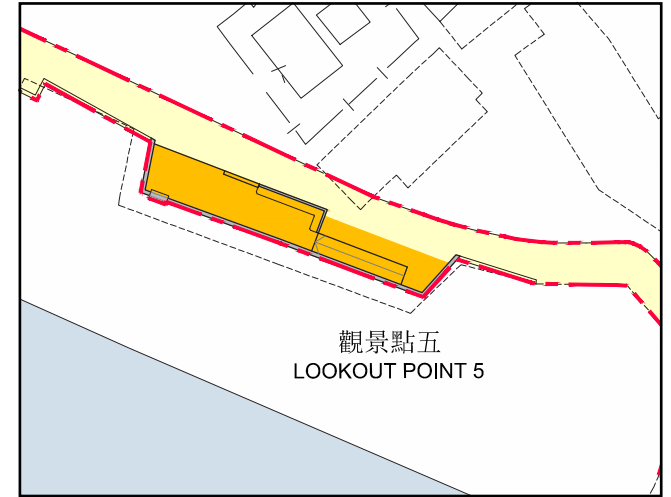
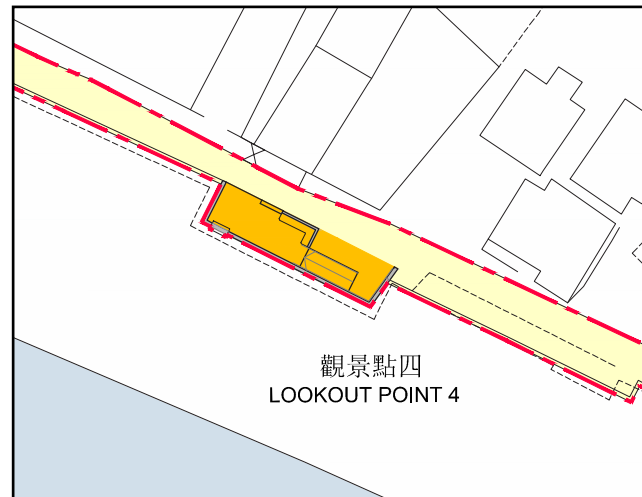
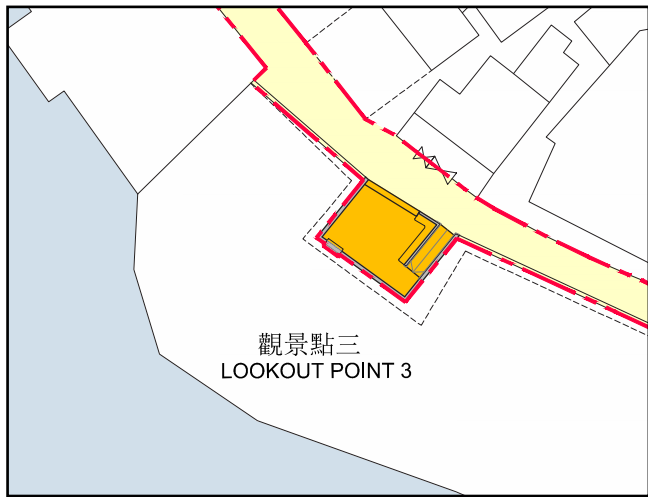
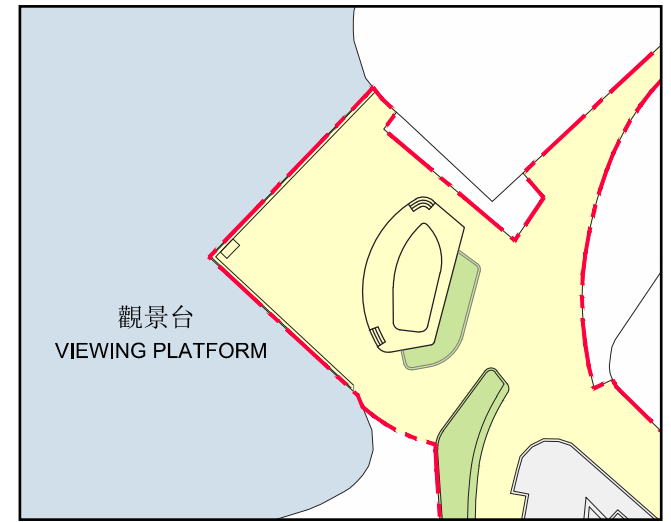
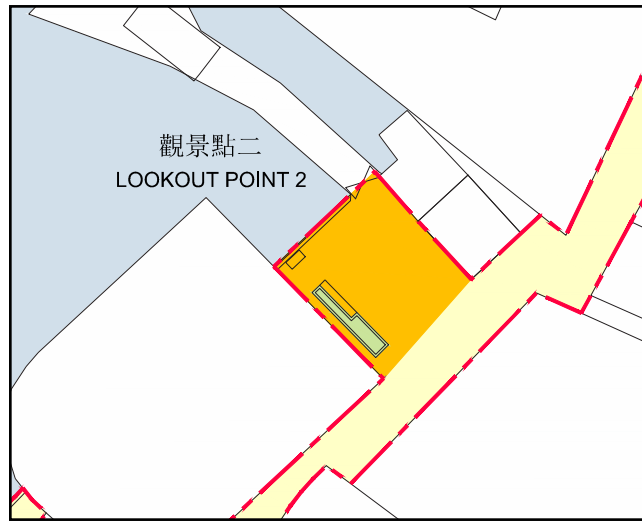
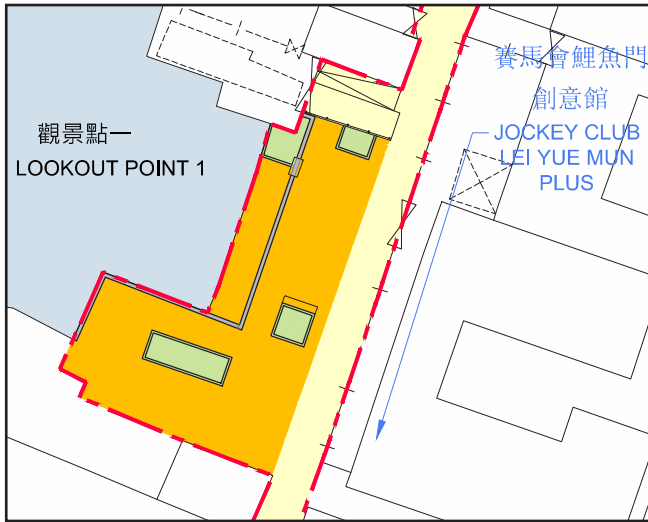


圖例 LEGEND

- 地面綠化 AT-GRADE GREENING
- 行人路面 PAVING
- 工地界線 SITE BOUNDARY
- 現有花園設施 EXISTING GARDEN FACILITIES

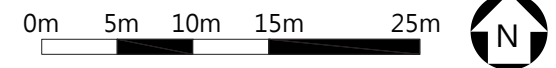
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圖例 LEGEND

- 地面綠化 AT-GRADE GREENING
- 觀景點 LOOKOUT POINT
- 工地界線 SITE BOUNDARY
- 行人路面 PAVING



工地平面圖三  
SITE PLAN 3

409RO  
鯉魚門海旁改善計劃 – 發展海濱長廊及相關改善工程  
LEI YUE MUN WATERFRONT PROJECT - DEVELOPMENT OF A  
WATERFRONT PROMENADE AND RELATED IMPROVEMENT WORKS



從南面望向擬議登岸設施的構思透視圖

PERSPECTIVE VIEW OF THE PROPOSED LANDING FACILITY  
FROM SOUTH DIRECTION (ARTIST'S IMPRESSION)

構思圖一  
ARTIST'S IMPRESSION 1

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從西南面望向擬議觀景台的構思透視圖  
PERSPECTIVE VIEW OF PROPOSED VIEWING PLATFORM  
FROM SOUTHWEST DIRECTION (ARTIST'S IMPRESSION)

構思圖二  
ARTIST'S IMPRESSION 2

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觀景點一的構思透視圖  
PERSPECTIVE VIEW OF LOOKOUT POINT 1



觀景點二的構思透視圖  
PERSPECTIVE VIEW OF LOOKOUT POINT 2



觀景台的構思透視圖  
PERSPECTIVE VIEW OF VIEWING PLATFORM



觀景點三的構思透視圖  
PERSPECTIVE VIEW OF LOOKOUT POINT 3



觀景點四的構思透視圖  
PERSPECTIVE VIEW OF LOOKOUT POINT 4



觀景點五的構思透視圖  
PERSPECTIVE VIEW OF LOOKOUT POINT 5

構思圖三  
ARTIST'S IMPRESSION 3

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**409RO – Lei Yue Mun Waterfront Enhancement Project –  
development of a waterfront promenade and related improvement works**

**Breakdown of the estimates for consultants' fees and resident site staff costs  
(in September 2019 prices)**

		Estimated man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(a) Consultants' fees for contract administration (Note 2)	Professional	–	–	–	3.5
	Technical	–	–	–	1.7
				Sub-total	<u>5.2 #</u>
(b) Resident site staff (RSS) costs (Note 3)	Professional	-	-	-	-
	Technical	211	14	1.6	10.2
				Sub-total	<u>10.2</u>
Comprising -					
(i) Consultants' fees for management of RSS			0.5#		
(ii) Remuneration of RSS			9.7#		
				<b>Total</b>	<b><u>15.4</u></b>

\* MPS = Master Pay Scale

**Notes**

1. A multiplier of 1.6 applied to the average MPS salary point to estimate the cost of RSS supplied by the consultants (as at now, MPS salary point 14 = \$30,235 per month).
2. The consultants' staff cost for contract administration is calculated in accordance with the existing consultancy agreement for provision of contract administration and site supervision of **409RO**. The assignment will only be executed subject to Finance Committee's funding approval to upgrade **409RO** to Category A.
3. The actual man-months and actual costs will only be known after completion of the construction works.

**Remarks**

The cost figures in this Annex are shown in constant prices to correlate with the MPS salary point of the same year. The figures marked with # are shown in money-of-the-day prices in paragraph 6 of Enclosure 2.