For discussion on 25 April 2022

ITEM FOR LEGISLATIVE COUNCIL PANEL ON ENVIRONMENTAL AFFAIRS

Part upgrade of 878TH – Upgrading of Nim Wan Road (North) and Deep Bay Road

PURPOSE

This paper seeks Members' views on the proposal to upgrade part of Public Works Programme (PWP) Item No. **878TH** "Upgrading of Nim Wan Road (North) and Deep Bay Road" to Category A to carry out investigation study, detailed design, archaeological surveys and site investigation works for the proposed works at an estimated cost of \$177.3 million in money-of-the-day (MOD) prices.

SCOPE

2. This paper proposes to upgrade part of PWP Item No. **878TH** (i.e. "Upgrading of Nim Wan Road (North) and Deep Bay Road – Investigation and Detailed Design") to Category A, the scope includes –

- (a) detailed design for upgrading of Deep Bay Road (DBR)
 - (i) review the findings of previous studies; carry out detailed design for the proposed upgrading works of DBR; and
 - (ii) carry out archaeological surveys, site investigations and the associated works supervision; and update the impact assessments on the environmental, traffic, heritage, land and other related aspects.
- (b) investigation and detailed design for upgrading of Nim Wan Road (North) (NWR(N)) –

- (i) review the findings of previous studies; carry out investigation and detailed design for the proposed upgrading works of NWR(N); and
- (ii) carry out archaeological surveys, site investigations and the associated works supervision; and assess the impact on the environmental, traffic, heritage, land and other related aspects.

3. Subject to the findings of the above studies, the upgrading of NWR (N) and DBR will comprise –

- (a) widening of the existing about 4.2 km long NWR(N) and about 3.6 km long DBR from a single lane carriageway with two-way traffic to a 2-lane carriageway of 7.3 m width, with approximately a total of 6.7 km in the form of at-grade road and 1.1 km in the form of bridge structures; and
- (b) the associated civil, structural, geotechnical, drainage, landscape and environmental mitigation works.

A preliminary layout plan of the proposed works project is shown at **Enclosure 1**.

4. We plan to commence in parallel the proposed detailed design for upgrading of DBR, and the proposed investigation and detailed design for upgrading of NWR(N) after funding approval from the Finance Committee (FC). We expect to complete the detailed design for upgrading of DBR in around 26 months. As for NWR(N), we expect to complete the investigation study (including the completion of the relevant statutory procedures under the Environmental Impact Assessment Ordinance (EIAO) and the Roads (Works, Use and Compensation) Ordinance) in around 28 months, and to complete the detailed design in around 26 months thereafter.

5. We will retain the remaining part of PWP Item No. **878TH**, i.e. Upgrading of Nim Wan Road (North) and Deep Bay Road – Construction, in Category B. As the detailed design for upgrading of DBR will be completed earlier, we expect to apply for funding from the FC first and to commence the upgrading works for this road section as soon as possible. If the studies and construction works are progressing smoothly, the upgrading of NWR(N) and DBR is anticipated to be completed in phases by around 2029.

PROPOSAL AND JUSTIFICATIONS

6. In 1980s, Nim Wan Road and Deep Bay Road were originally a road linking Tuen Mun to Lau Fau Shan along the coastline of Deep Bay. Since 1993, with the construction of the West New Territories (WENT) Landfill and the operation of heavy-duty vehicles, the NWR has been divided into two sections, namely Nim Wan Road (Tuen Mun Section) (NWR(TM)) to the west of the WENT Landfill, and NWR(N) to the east of the WENT Landfill. Both NWR sections are connected by an internal road within the WENT Landfill for use by authorized vehicles only.

7. Given the opportunity that the WENT Landfill is expected to be exhausted in 2026, we plan to reconnect NWR(TM) and NWR(N) to enhance the coastal road network and the connectivity between Tuen Mun West and Yuen Long West, and improve the accessibility for emergency, while upgrade the NWR(N) and DBR to current design standards, including reducing sharp curves, improving driving sightline and traffic safety.

8. The feasibility study to review the upgrading of NWR(N) and DBR from the existing single lane carriageway with two-way traffic to a 2-lane carriageway was completed in late 2020, and the feasibility of upgrading works was affirmed. According to the findings of the feasibility study, the Government plans to implement the upgrading of NWR(N) and DBR.

9. The upgrading of DBR is not a designated project and is not required to follow statutory environmental impact assessment (EIA) process. We commenced the relevant investigation study of DBR in September 2020. The investigation study will soon be completed and it is proposed to proceed with the detailed design for DBR, and to carry out site investigation works to gather geotechnical and geological information for related design works.

10. We propose to carry out the investigation and detailed design for upgrading of NWR(N) in parallel and also to conduct the relevant impact assessments, including EIA to identify the environmental impacts of the project and recommend the required mitigation measures. We will also carry out site investigation works to gather geotechnical and geological information for related design works.

FINANCIAL IMPLICATIONS

11. We estimate the cost of the investigation study and detailed design to be \$177.3 million in MOD prices, which includes the expenditure on the associated archaeological surveys and site investigation works. In view of the complexity and multi-disciplinary nature of the investigation study and detailed design, we plan to engage consultants to undertake the assignments and supervise the associated site investigation works.

ENVIRONMENTAL IMPLICATIONS

12. Although the upgrading of DBR is not a designated project, we have completed a Preliminary Environmental Review (PER) in the feasibility study to assess the environmental impacts of the proposed works and the required mitigation measures. The detailed design for upgrading of DBR, and the associated archaeological surveys and site investigation works will only generate minimal amount of construction waste. We will require the consultants to review/update the findings of the PER and comprehensively consider how to reduce the generation of construction waste and to reuse or recycle the construction waste as much as possible in the detailed design stage. We will review/update the findings of the PER in the detailed design stage, with the Environmental Review Report to be submitted to the relevant Authority for approval.

13. The upgrading of NWR(N) is a designated $project^{\perp}$ under Schedule 2 of the EIAO and we have to apply for an environmental permit for the construction and operation of the NWR(N) upgrading works. We will conduct an EIA study to assess the environmental impacts arising from the proposed works in accordance with the requirements of the EIAO. The investigation study, detailed design and the associated archaeological surveys and site investigation works will only generate minimal amount of construction waste. We will require the consultant to comprehensively consider how to reduce the generation of construction waste and to reuse or recycle the construction waste as much as possible in the detailed design stage.

¹ The project is classified as a Designated Project under the EIAO (Cap 499) because it comprises road bridges more than 100m in length between abutments; drainage diversion works which discharge into Deep Bay within 300 m from the nearest Site of Special Scientific Interest, site of cultural heritage, and coastal protection area.

HERITAGE IMPLICATIONS

14. This study and the associated archaeological surveys and site investigation works will not affect all declared monuments, proposed monuments, graded historic sites and buildings, and government historic sites identified by the Antiquities and Monuments Office. As the scope of future works involves Sites of Archaeological Interest, namely Hang Hau Tsuen, Sha Kong Miu (North), Sha Kong Miu (South), Ngau Hom Shek, Fu Tei Au, Ngau Hom Sha, Sheung Pak Nai, Long Jok Tsuen and Ha Pak Nai, we will conduct archaeological surveys, archaeological impact assessment and relevant cultural heritage impact assessment in this study, and recommend appropriate mitigation measures if necessary.

LAND ACQUISITION

15. This study and the associated archaeological surveys and site investigation works will not require any land acquisition. This study will examine the need and extents of land acquisition and clearance required for the upgrading of NWR(N) and DBR during the construction stage.

TREE IMPLICATIONS

16. This study and the associated archaeological surveys and site investigation works will not directly involve any tree removal or planting proposals. This study will examine the impacts of works on trees during the construction stage, the need for tree preservation and tree planting proposals.

PUBLIC CONSULTATION

17. We consulted Tuen Mun District Council (DC) and Yuen Long DC on the upgrading of NWR(N) and DBR on 5 March 2019 and 16 April 2019 respectively. Members of the two DCs requested for prompt implementation of the upgrading works.

18. We also consulted the Ha Tsuen Rural Committee and local residents in mid-2021. They all expressed their strong support for prompt implementation of the upgrading of NWR(N) and DBR.

19. We gazetted the proposed upgrading of DBR under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) on 10 December 2021, and are dealing with the public objections received according to the statutory procedures. We will continue to maintain close liaison with the concerned parties on the progress of upgrading of Deep Bay Road during the detailed design stage.

WAY FORWARD

20. After consulting the Panel on Environmental Affairs, we plan to seek support from the Public Works Subcommittee and apply to the FC for funding within 2022 to upgrade part of PWP Item No. **878TH** to Category A and retain the remaining part of PWP Item No. **878TH** in Category B. Members are invited to comment on the proposed funding application.

Environment Bureau Highways Department April 2022



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工務計劃項目第878TH - 稔灣路(北)與深灣路改善工程 - 平面圖 PUBLIC WORKS PROGRAMME ITEM NO.878TH - UPGRADING OF NIM WAN ROAD (NORTH) AND DEEP BAY ROAD - LAYOUT PLAN



