

**For discussion
on 3 July 2006**

**Legislative Council
Panel on Environmental Affairs**

**338DS - Improvement and Upgrading of the
Sewerage Systems in Sha Tin / Ma On Shan New Town**

PURPOSE

This paper seeks Members' support for the Administration's proposal to upgrade the project **338DS** to Category A at an estimated cost of about \$76 million in money-of-the-day (MOD) prices, prior to submission to the Public Works Subcommittee for consideration with a view to seeking the Finance Committee's funding approval.

PROPOSAL AND JUSTIFICATION

2. In November 2004, we included **338DS** in Category B of the Public Works Programme for improvement and upgrading of sewerage facilities in the Sha Tin/Ma On Shan area so as to meet the increasing demands. Following the commissioning of Ma On Shan Rail at the end of 2004, the development demands along the railway line, particularly around its nine railway stations will progressively increase. After a critical review, we identified that the existing sewerage facilities are inadequate to cope with sewage mainly generated from the planned developments around two of the railway stations namely Che Kung Temple Station and Wu Kai Sha Station. The proposed sewerage works set out in paragraph 3 will serve the planned developments around the above two railway stations with a total projected population intake of about 32 000, and will convey the sewage to the Sha Tin sewage treatment works via the existing sewerage. The population intake would start in mid 2008 for the planned property development at Wu Kai Sha Station and will be followed by others in phases. The proposed sewerage works would be completed in phases to tie in with the developments.

3. The scope of the sewerage works under **338DS** comprises –
- a) construction of a new sewage pumping station and the associated rising mains of about 450 metres (m) along Sai Sha Road;

- b) construction of about 600 m of sewers along Sha On Street and Sai Sha Road;
- c) construction of about 300 m of sewers along Che Kung Miu Road;
- d) upgrading of part of the pumping equipment at the Ma On Shan Main Pumping Station; and
- e) the associated ancillary works.

Site plans showing the proposed works are at **Enclosure 1**.

4. We plan to commence construction in early 2007 for completion in late 2010.

FINANCIAL IMPLICATIONS

5. We estimate the capital cost¹ of the proposed works to be about \$76 million in MOD prices and the annual recurrent cost¹ to be about \$0.9 million. Based on the current level of expenditure on operation and maintenance of sewerage facilities, the proposed works of themselves will lead to an increase in the recurrent cost of providing sewage services by about 0.05%, which will be taken into account in determining sewage charges.

6. We estimate that the proposed works will create about 52 jobs¹ (45 for labourers and another 7 for professional/technical staff) providing a total employment of about 2 100 man-months.

TRAFFIC IMPLICATIONS

7. We have completed a traffic impact assessment and worked out mitigation measures to minimize possible disruption to the traffic during construction of the sewers. To minimize disturbance and inconvenience to the public during the construction stage, we will carry out the pipe laying works in sections and institute appropriate temporary measures to divert traffic and pedestrians so as to maintain all existing vehicular and pedestrian accesses. To expedite works progress without inducing unacceptable interruption to the traffic, we will also employ the trenchless method to construct a section of rising main across Sai Sha Road.

¹ These are the latest estimates. We would finalize the project costs and estimated new job opportunities, and include the cost breakdown prior to submitting the proposals to the PWSC for consideration.

ENVIRONMENTAL IMPLICATIONS

8. Among the proposed works, only the proposed new pumping station in Area 108 is a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). We will apply for an environmental permit under the Ordinance in mid 2006 for its construction and operation. We have completed a Project Profile which concluded that there would not be any long term adverse environmental impacts arising from the proposed works. We will nevertheless install a forced ventilation system fitted with a de-odourizer in the proposed pumping station to combat the potential odour problem. For short term impacts caused by the works during construction, we will control noise, dust and site runoff to levels within established standards and guidelines through implementation of mitigation measures, such as the use of quieter construction equipment to reduce noise, water-spraying to reduce dust, and strict control on diversion of site run-off. We will also carry out regular site inspections to ensure that these recommended mitigation measures and good site practices are properly implemented.

9. We have given due consideration to the need to minimize construction and demolition (C&D) materials in the planning and design stages of the proposed works. We will require the Contractor to submit a waste management plan (WMP) for approval. The WMP will include appropriate mitigation measures to avoid, reduce, reuse and recycle C&D materials. We will require the Contractor to separate public fill from C&D waste for disposal at appropriate facilities. We will ensure that the day-to-day operation on site complies with the approved WMP. We will control the disposal of public fill and C&D waste to designated public filling reception facilities² and landfills respectively through a trip-ticket system. We will record the disposal, reuse and recycling of C&D materials for monitoring purposes.

10. We estimate that the proposed works will generate about 10 600 tonnes of C&D materials. Of these, we will reuse about 5 000 tonnes (47%) on site and 5 000 tonnes (47%) as fill in public filling reception facilities, and dispose of 600 tonnes (6%) at landfills. The total cost for accommodating C&D materials at public fill reception facilities and landfill sites is estimated to be about \$0.2 million for this project (based on a unit cost of \$27/tonne for disposal at public fill reception facilities and \$125/tonne³ at landfills).

² Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation. Disposal of public fill in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

³ This estimate has taken into account the cost for developing, operating and restoring the landfills after they are filled, and the aftercare required. It does not include the land opportunity cost for existing

PUBLIC CONSULTATION

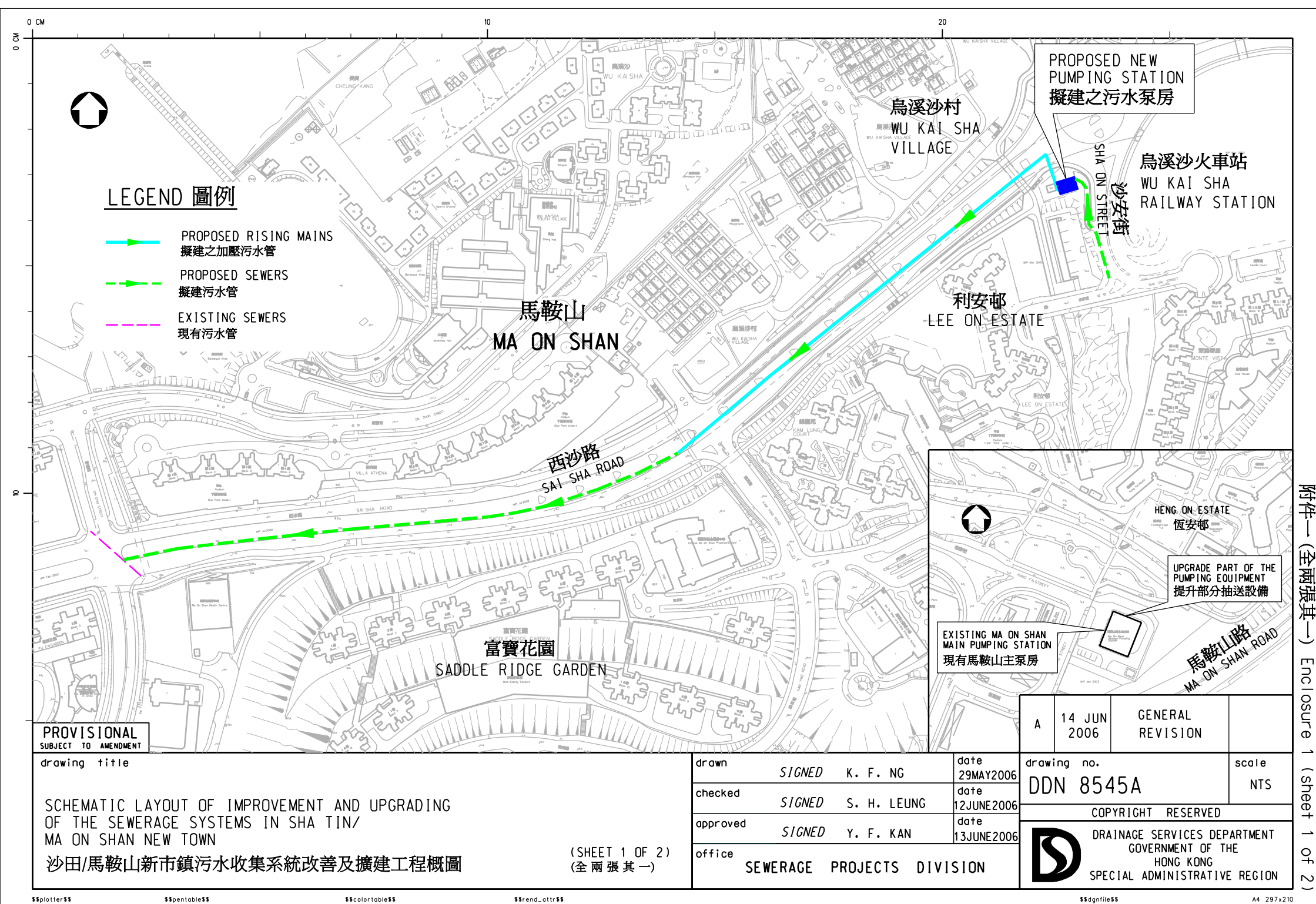
11. We presented the proposal for the implementation of this project to the Development & Housing Committee of Sha Tin District Council on 21 February 2006. The Committee supported the implementation of the project.

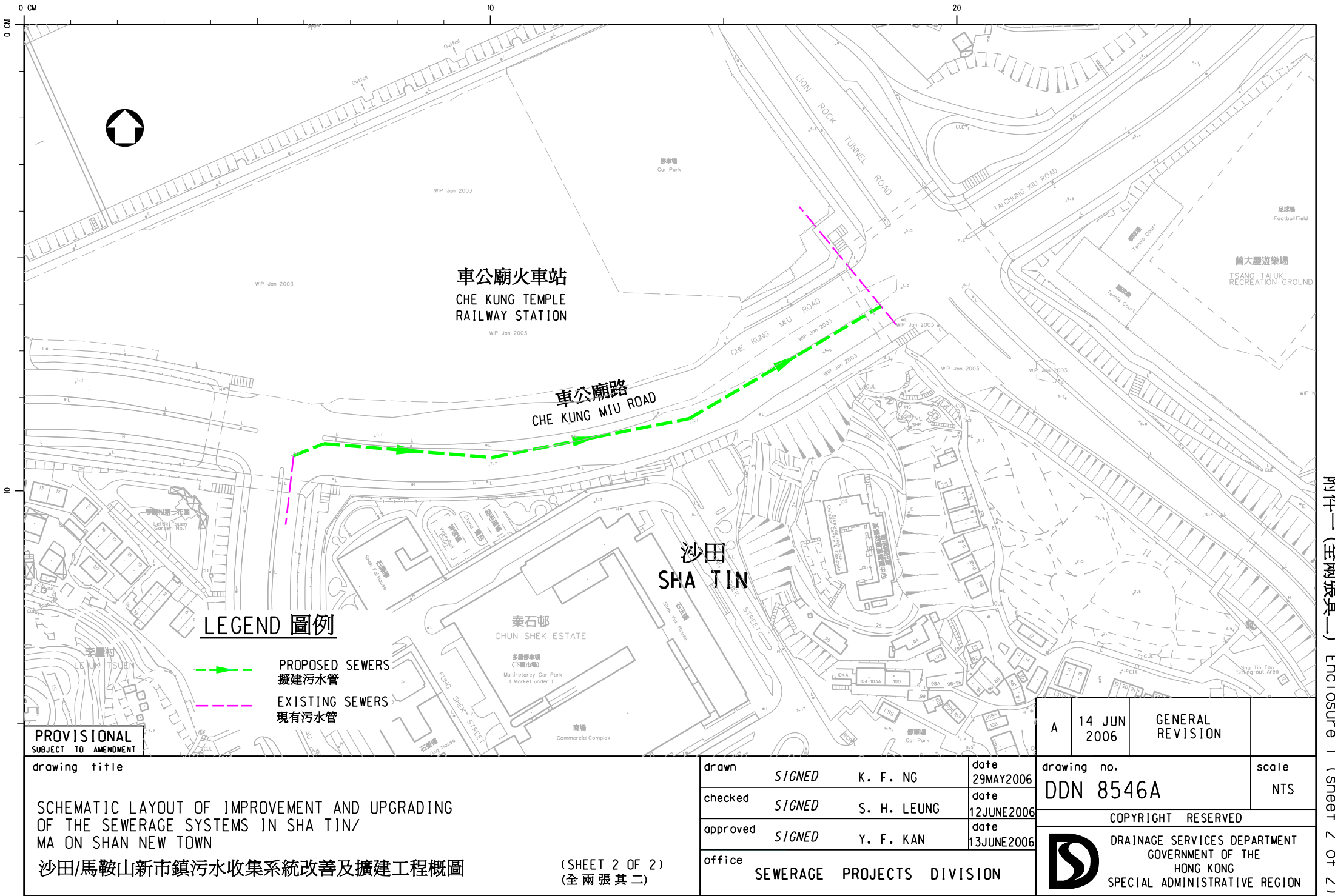
ADVICE SOUGHT

12. Members are invited to support our proposal to seek PWSC support in October 2006 for upgrading of **338DS** to Category A, with a view to seeking the funding approval of Finance Committee in November 2006.

Environmental Protection Department
June 2006

landfill sites (which is estimated at \$90/m³), nor the cost of providing new landfills (which are likely to be more expensive) when existing ones are filled.





LEGEND 圖例

- PROPOSED SEWERS
擬建污水管
- EXISTING SEWERS
現有污水管

PROVISIONAL
SUBJECT TO AMENDMENT


drawing title

SCHEMATIC LAYOUT OF IMPROVEMENT AND UPGRADING
OF THE SEWERAGE SYSTEMS IN SHA TIN/
MA ON SHAN NEW TOWN

沙田/馬鞍山新市鎮污水收集系統改善及擴建工程概圖

(SHEET 2 OF 2)
(全兩張其二)

drawn	SIGNED	K. F. NG	date	29MAY2006
checked	SIGNED	S. H. LEUNG	date	12JUNE2006
approved	SIGNED	Y. F. KAN	date	13JUNE2006
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