

**For information
on 26 April 2005**

**LEGISLATIVE COUNCIL
PANEL ON PLANNING, LANDS AND WORKS**

**PWP Item No. 177CL -
Sha Tin New Town - remaining engineering works**

PURPOSE

This paper briefs Members on the proposed engineering infrastructural works at Shui Chuen O and Kau To in Sha Tin.

PROJECT SCOPE AND NATURE

2. The scope of 177CL comprises –
- (a) construction of about 2 kilometres (km) each of two two-lane roads at Shui Chuen O and Kau To;
 - (b) construction of elevated highway structures and retaining structures, slope stabilisation works, drainage works, sewerage works and landscaping works associated with the road works mentioned in item (a) above;
 - (c) re-construction and widening of about 550 metres (m) of To Shek Street and 350 m of Shui Chuen Au Street;
 - (d) re-construction of about 300 m of Lai Ping Road;
 - (e) improvement works of three road junctions at Sha Tin Wai Road and two road junctions at Ma Liu Shui Section of Tai Po Road;
 - (f) construction of about 320 m of noise barriers on To Shek Street;

- (g) construction of trunk sewers from 375 millimetres (mm) to 600 mm in diameter of about 2.3 km near Pok Hong Estate, under Sha Tin Wai Road, under Lai Ping Road and under Ma Liu Shui Section of Tai Po Road; and
- (h) implementation of environmental mitigation measures and an Environmental Monitoring and Audit (EM&A) programme for the works mentioned in items (a) to (g) above.

Site plans of the proposed works are at Enclosures 1 and 2. We plan to start the proposed works in January 2006 for completion in November 2008. We will carry out the foundation works of the noise barriers in item (f) above at the same time as the road works, and will erect the noise barrier panels to tie in with the development in Area 52.

JUSTIFICATION

3. In September 1998, we completed the “Feasibility Study for Housing Sites in Sha Tin District” (the Study) which established the feasibility of the planned housing developments and the associated government/institutional/community (G/IC) facilities at Areas 34 and 52 in Shui Chuen O, and the planned housing developments at Area 56A in Kau To. The Study has recommended site formation works and provision of infrastructure to cater for the planned developments. In October 2001 we commenced the site formation works in order to provide land for the planned housing developments. We have planned to commence the infrastructure works after completion of all necessary statutory procedures including the gazetting of the proposed road works under the Roads (Works, Use and Compensation) Ordinance, and the proposed sewerage works under the Water Pollution Control (Sewerage) Regulation. We completed the site formation works in December 2003 under 685CL, and propose to provide the infrastructure under this project.

4. The proposed infrastructure at Areas 34 and 52 in Shui Chuen O is essential for private housing development as well as the associated G/IC facilities including an indoor game hall, a fresh water pumping station, a fresh water reservoir and tentatively two schools. In accordance with the latest population forecast by Planning Department, we plan to accommodate a maximum population of about 10 600 in the area by 2016. In order to support the development, we need to complete the infrastructure by 2008.

5. The proposed infrastructure at Area 56A in Kau To is essential for low-density private development. In accordance with the latest population forecast by Planning Department, we plan to accommodate a maximum population of about 6 300 in the area by 2016. In order to support the development, we need to complete the infrastructure by 2008.

PUBLIC CONSULTATION

6. We consulted the Development and Housing Committee of the Sha Tin District Council on the proposed works on 27 June 2000. The Committee supported the project but expressed concern on the capacity of a section of the Shui Chuen Au Street near Pok Hong Estate. We explained to the District Council that, according to the result of the Traffic Impact Assessment (TIA), To Shek Street would be the main access for traffic in Area 52 and Shui Chuen Au Street would only serve as a secondary access. Nevertheless, to address the Committee's concern, we will construct a lay-by with footpath at Shui Chuen Au Street near Pok Hong Estate which will improve traffic condition.

7. We gazetted the proposed road works under the Roads (Works, Use and Compensation) Ordinance on 7 June 2002 and received no objection. The then Permanent Secretary for the Environment, Transport and Works (Environment) authorised the proposed road works under the ordinance on 27 September 2002 and the notice of authorisation was gazetted on 4 October 2002.

8. We gazetted the proposed sewerage works under the Water Pollution Control (Sewerage) Regulation on 7 June 2002 and received no objection. The then Director of Environmental Protection (DEP) authorised the proposed sewerage works under the regulation on 23 August 2002 and the notice of authorisation was gazetted on 6 September 2002.

9. We updated the Development and Housing Committee of the Sha Tin District Council about the latest development of the project on 22 February 2005. Although a few members remained concerned about the capacity of the section of Shui Chuen Au Street mentioned in paragraph 6 above, the Committee as a whole supported the project.

ENVIRONMENTAL IMPLICATIONS

10. The project is not a designated project under the Environmental Impact Assessment (EIA) Ordinance. Nevertheless, we completed an Environmental Assessment (EA) Study in September 1998. DEP has vetted the study report and agreed that the works would not have adverse long term environmental impact.

11. The key environmental mitigation measures set out in the EA for the proposed works include the use of silenced plant and noise screening, dust suppression by water spraying on unpaved roads, the use of detention basins for collecting site run-offs, and restoration of woodland and shrubbery by replanting, where necessary. We will incorporate all the mitigation measures recommended in the EA in the works contract.

12. We further completed an environmental study for To Shek Street and Shui Chuen Au Street in February 2003. The study has concluded that the project would not have any adverse environmental impact at Shui Chuen Au Street but recommended that some noise mitigation measures should be provided at To Shek Street. These mitigation measures will help contain the noise level to an acceptable standard. DEP has vetted the report and agreed to its findings. In accordance with the recommendation of the study, we will provide noise barriers of about 320 m in length (comprising 4 m to 5.5 m high plain barrier and 5.5 m high vertical barrier with a 2 m bend in 45 degrees) along To Shek Street to protect the existing and planned noise sensitive receivers. The noise barriers will be of a transparent type. We estimate that a total of about 65 existing dwellings and about 77 planned dwellings will benefit from the provision of the noise barriers.

13. At the planning and design stages, we have considered ways of minimising construction and demolition (C&D) material. These include minimising slope excavation by means of soil nailing or concrete buttress as appropriate, maximising the use of the surplus excavation material in construction of road embankments and backfilling of retaining walls, and optimising the design level and layout of the access roads to balance the necessary cut and fill material.

14. We estimate that the project will generate about 149 000 cubic metres (m³) of C&D material. Of these, we will reuse about 130 000 m³ (87%) on site, 13 000 m³ (9%) as fill in the public filling areas and dispose of 6 000 m³ (4%) at the landfills.

15. The proposed project will involve removal of 891 trees including 686 to be felled and 205 to be transplanted within the project site. All trees to be removed are not important trees¹. We will incorporate planting proposals as part of the project, including estimated quantities of 13 371 trees, 241 938 shrubs and 890 square metres of grassed area.

LAND ACQUISITION

16. The proposed works do not require any land acquisition. Clearance of government land for the project will require termination of a short term tenancy for a garage maintenance depot at Area 56A.

WAY FORWARD

17. We plan to seek endorsement of the Public Works Subcommittee for upgrading the proposed works mentioned in paragraph 2 above to Category A (at an estimated cost of \$491.6 million in money-of-the-day prices) on 11 May 2005.

ATTACHMENT

Enclosure 1 – Drawing No. ST2012

Enclosure 2 – Drawing No. ST2013

**Housing, Planning and Lands Bureau
Civil Engineering and Development Department
April 2005**

¹ Important trees include trees on the Register of Old and Valuable Trees, and any other trees which meet one or more of the following criteria –

- (a) over 100 years old;
- (b) of cultural, historical or memorable significance;
- (c) of precious or rare species;
- (d) of outstanding form; or
- (e) with trunk diameter exceeding one metre (measured at one metre above ground level).

圖例 LEGEND :

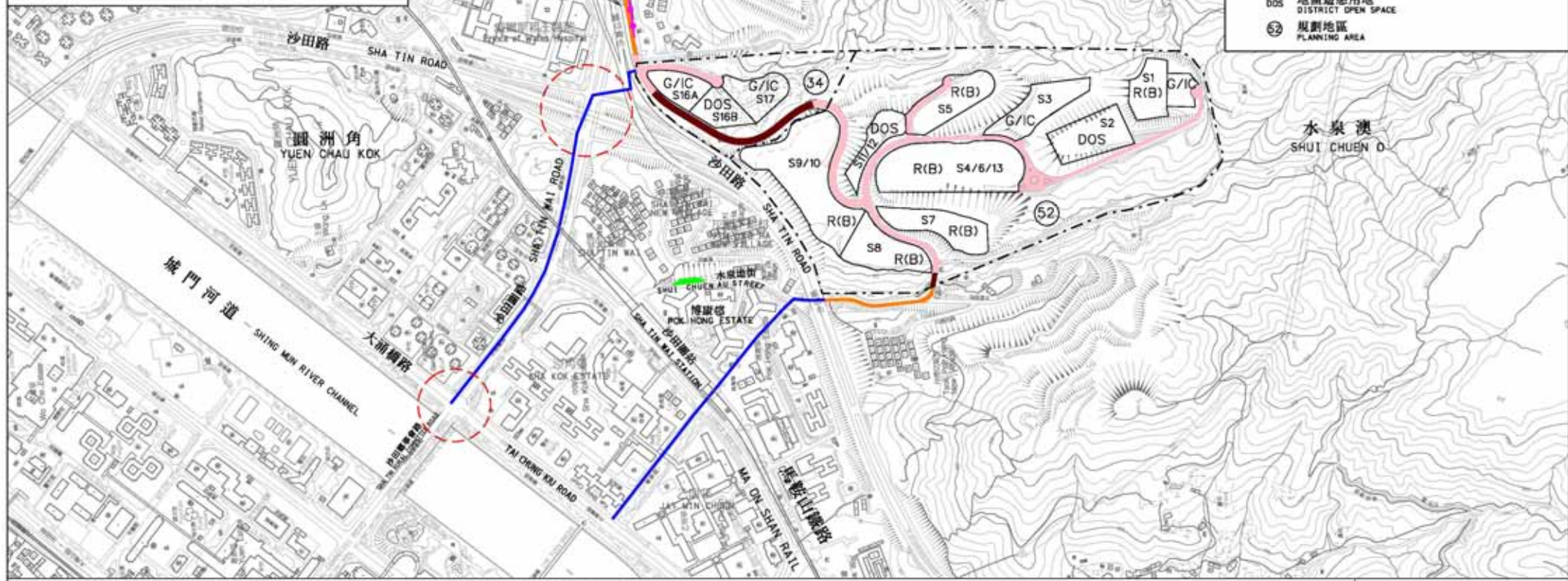
- 規劃地區範圍
LIMIT OF PLANNING AREA
- S1 地盤編號
SITE NUMBER
- 擬建地面行車路、排水渠及污水渠
PROPOSED AT-GRADE CARRIAGEWAY, DRAINAGE AND SEWER
- 擬建路口改善工程
PROPOSED ROAD JUNCTION IMPROVEMENT WORKS
- 擬建架空道路
PROPOSED ELEVATED CARRIAGEWAY
- 擬擴闊道路工程
PROPOSED ROAD WIDENING
- 擬建主幹污水渠
PROPOSED TRUNK SEWER
- 擬建隔音屏障
PROPOSED NOISE BARRIER
- 擬建避車處
PROPOSED LAY-BY
- G/I/C 政府、機構、社區用途
GOVERNMENT/INSTITUTION COMMUNITY USE
- R(B) 住宅(乙類)
RESIDENTIAL (GROUP B)
- DOS 地區遊憩用地
DISTRICT OPEN SPACE
- 52 規劃地區
PLANNING AREA



切面 SECTION A - A
比例 SCALE 1 : 300



索引圖 KEY PLAN 比例 Scale 1 : 75 000



二〇〇五年至二〇〇六年度工務小組委員會文件 P.W.S.C. SUBMISSION 2005-2006

圖則名稱 drawing title
沙田新市鎮 - 餘下工程
工地圖(1) - 水泉澳第34區及第52區基本建設
SHA TIN NEW TOWN - REMAINING ENGINEERING WORKS
SITE PLAN (1) - INFRASTRUCTURE AT AREAS 34 AND 52 IN SHUI CHUEN O

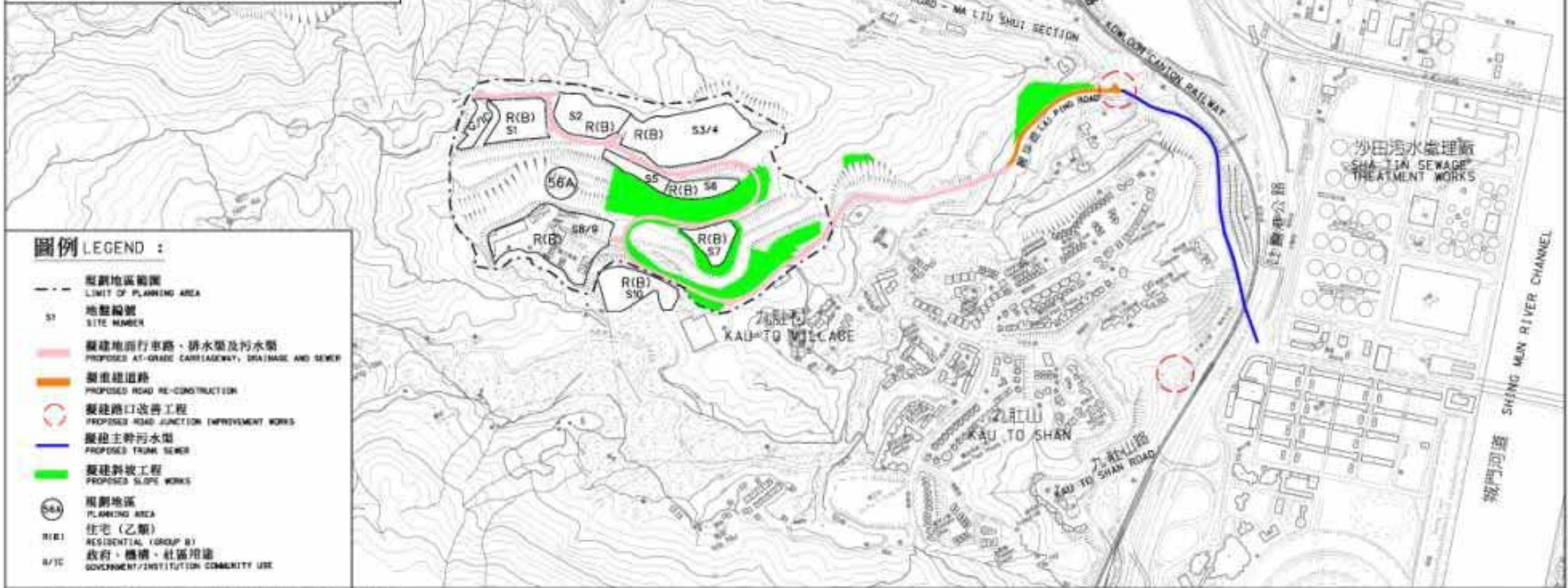
繪圖 drawn W K CHUI	簽署 initial SIGNED	日期 date 15.04.2005
核對 checked H S WONG	簽署 initial SIGNED	日期 date 15.04.2005
核准 approved W T YEUNG	簽署 initial SIGNED	日期 date 15.04.2005

比例 scale
1 : 7 500
圖則編號 drawing no.
ST2012

項目編號 item no. 177CL
辦事處 office
新界東拓展處
NT EAST DEVELOPMENT OFFICE
土木工程拓展署
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
CEDD



索引圖 KEY PLAN 比例 Scale 1 : 75 000



圖例 LEGEND :

- 擬劃地區範圍
LIMIT OF PLANNING AREA
- 地盤編號
SITE NUMBER
- 擬建地面行車路、排水渠及污水渠
PROPOSED AT-GRADE CARRIAGEWAY, DRAINAGE AND SEWER
- 擬重建道路
PROPOSED ROAD RE-CONSTRUCTION
- 擬建路口改善工程
PROPOSED ROAD JUNCTION IMPROVEMENT WORKS
- 擬建主幹污水渠
PROPOSED TRUNK SEWER
- 擬建斜坡工程
PROPOSED SLOPE WORKS
- 擬劃地區
PLANNING AREA
- 住宅 (乙類)
RESIDENTIAL (GROUP B)
- 政府、機構、社區用途
GOVERNMENT/INSTITUTION COMMUNITY USE

二〇〇五年至二〇〇六年度工務小組委員會文件 P.W.S.C. SUBMISSION 2005-2006

項目編號 Item No. 177CL

圖則名稱 drawing title

沙田新市鎮 - 餘下工程
工地圖(2) - 九肚第56A區基本建設
SHA TIN NEW TOWN - REMAINING ENGINEERING WORKS
SITE PLAN (2) - INFRASTRUCTURE AT AREA 56A IN KAU TO

繪圖 drawn W K CHU	簽署 initial SIGNED	日期 date 15.04.2005
核對 checked H S WONG	簽署 initial SIGNED	日期 date 15.04.2005
核准 approved W T YEUNG	簽署 initial SIGNED	日期 date 15.04.2005

比例 scale 1 : 7 500
圖則編號 drawing no. ST2013

辦事處 office 新界東拓展處 NT EAST DEVELOPMENT OFFICE
土木工程拓展署 CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT