

ITEM FOR ESTABLISHMENT SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 60 – HIGHWAYS DEPARTMENT Subhead 000 Operational expenses

Members are invited to recommend to the Finance Committee the creation of the following supernumerary posts in the Highways Department with immediate effect upon approval of the Finance Committee for three years –

2 Chief Engineer
(D1) (\$150,950 - \$165,200)

PROBLEM

We need to enhance dedicated staffing support at the directorate level in the Highways Department (HyD) to cope with the rapidly increasing workload relating to the maintenance of cross-boundary highway infrastructures, other major highway infrastructures as well as ageing public highway structures; and to take part in various tasks relating to land supply and land use planning strategies.

PROPOSAL

2. We propose to create the two supernumerary Chief Engineer (CE) (D1) posts in HyD with immediate effect upon approval of Finance Committee (FC) for three years, one each in the New Territories (NT) Regional Office and Urban Regional Office.

/JUSTIFICATION

JUSTIFICATION

Increasing Workload of the NT Regional Office and Urban Regional Office of HyD

3. HyD is responsible for the maintenance of public highway infrastructures and road networks. At present, there are two Regional Offices (i.e. the NT Regional Office and Urban Regional Office) in HyD. The work of each Regional Office broadly falls into two categories, namely, highway maintenance and district road administration. For highway maintenance, duties mainly include maintenance of public roads, bridges, tunnels, road furniture, exclusive road drainage and roadside slopes; coordination and control of road excavation works; and handling maintenance works arising from emergencies that affect the operation of roads, such as typhoons, rainstorms, landslips, blockages by miscellaneous articles and road subsidence. Regarding district road administration, the two Regional Offices offer advice on town plans, land allocations and leases, public and private sector development proposals from the perspective of planning and administration of highway infrastructures; and provide technical advice on government and private development projects on road matters. Moreover, the two Regional Offices also carry out minor road improvement works in the respective regions when needed, which involve modification of existing roads or installation of new facilities (such as adding pedestrian crossings and widening existing roads), in response to community needs and the latest traffic conditions. These district traffic improvement works not only enhance the safety of road users, but are also closely related to people's livelihood.

4. Currently, the two Regional Offices are respectively headed by one Government Engineer (D2), each with the support of two CEs (D1)¹ and teams comprising professional and technical staff. The two Regional Offices are responsible for the maintenance of about 6 000 kilometres (km) long road lanes, 4 770 highway structures², 12 500 roadside slopes as well as other pedestrian and cycling facilities, and handle about 15 000 works orders³ on average each year. Moreover, the two Regional Offices on average process

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¹ Both Regional Offices are split into two divisions on a geographical basis. The NT Regional Office has established the New Territories East (NTE) District and Maintenance Division and the New Territories West (NTW) District and Maintenance Division. Urban Regional Office has established the Hong Kong (HK) District and Maintenance Division and Kowloon (Kln) District and Maintenance Division. Each division is headed by a CE (i.e. Chief Highway Engineer (CHE)/NTE, CHE/NTW, CHE/HK and CHE/Kln), who is responsible for highway maintenance and district road administration work in the respective districts.

² They include about 1 450 footbridges and subways, 1 000 flyovers, 20 tunnels, 900 gantry signs, 600 noise barriers/enclosures, 300 walkway covers, 100 tram stop shelters and 400 other types of highway structures.

³ A works order is a written notice given to the term contractor, which states the works or services to be completed or materials to be supplied by the term contractor.

around 19 000 submissions and development plans related to town planning, land leases as well as development proposals put forward by public and private sectors each year.

5. Since the establishment of HyD in 1986, road networks in Hong Kong have been expanding rapidly. The total lane length of public carriageway, including expressway has increased from about 3 400 km in 1986 to about 6 000 km in end 2020 (i.e. an increase of around 76%), while the total number of highway structures in the territory has increased from about 1 020 in 1986 to about 4 770 in end 2020 (i.e. an increase of around 368%). The workload of the two Regional Offices, which are responsible for the maintenance of the relevant facilities, has therefore increased drastically. However, at CE level, only one additional post has been created in the Regional Offices over the years. Currently, the road maintenance works are mainly implemented under several term contracts. These term contracts are managed by the CEs in the two Regional Offices who are also responsible for the final technical vetting as well as expenditure control and approval. To cope with the maintenance works associated with the newly constructed carriageways, highway structures, roadside slopes and other new road facilities, the scope of HyD's road maintenance term contracts and relevant expenditure have also increased substantially. Therefore, both the scope and workload of the CEs in the two Regional Offices have increased significantly as compared with the time when HyD was established, and exceeded their capacity.

6. Following the successive completion and commissioning of a number of large-scale local and cross-boundary transport infrastructures in recent years, including the Hong Kong Section of the Hong Kong-Zhuhai-Macao Bridge, public infrastructures associated with the Hong Kong Section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link, road improvement works for West Kowloon Reclamation Development and the Central – Wanchai Bypass and Island Eastern Corridor Link, there has been a significant increase in the workload of the Regional Offices in relation to highway maintenance and district road administration. In addition, after the completion of upcoming highway infrastructures, the Regional Offices will also be responsible for their maintenance and district road administration works. In parallel, the NT Regional Office and Urban Regional Office have been gradually taking over approximately 230 and 140 lift facilities retrofitted under the Universal Accessibility Programme in their respective regions, as well as the maintenance works of newly completed “walkable-city” projects including hillside escalator links and elevator systems and walkway covers, etc.

7. Apart from the expansion in road networks as mentioned above, the public highway structures constructed in early years are also ageing gradually. At present, around 32% (i.e. over 1 500 in number) of the public highway structures

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maintained by the Regional Offices were constructed more than 30 years ago. There is an urgent need for the Regional Offices to study and formulate inspection and rehabilitation strategies to ensure structural safety and enhance the durability of these aged public highway structures.

8. Besides, to tie in with the Government's policy to increase land supply in recent years, the Regional Offices are required to coordinate and provide professional advice on and support the road development and improvement related to land supply and land use planning strategies in the respective regions, and to monitor and implement relevant road works.

Need for Creating Two Supernumerary CE (D1) Posts

9. In view of the aforesaid additional work, the four incumbent CEs are overloaded and there is a pressing need to create a dedicated post in each of the two Regional Offices to effectively handle the additional workload related to highway maintenance and district road administration. We therefore propose to establish a new division in both the NT Regional Office and Urban Regional Office, which will be named as the NT (Maintenance) Division and Urban (Maintenance) Division respectively. Each of the two new divisions will be headed by a proposed CE (D1) post (to be designated as Chief Highway Engineer/New Territories (Maintenance) (CHE/NT (Maintenance)) and Chief Highway Engineer/Urban (Maintenance) (CHE/Urban (Maintenance)) respectively).

Steering and Formulation of Maintenance Strategy

10. The two proposed CEs will provide dedicated steer on the maintenance of highway infrastructure facilities and other associated work in the respective regions. Upon the handover of the cross-boundary highway infrastructure facilities, such as the Hong Kong Section of the Hong Kong-Zhuhai-Macao Bridge and the related link roads, the Heung Yuen Wai Control Point and associated roads, and the Tuen Mun-Chek Lap Kok Link, to the NT Regional Office for maintenance, the proposed CHE/NT (Maintenance) will be responsible for supervising and formulating related maintenance strategies for these new cross-boundary highway infrastructure projects. The post-holder will also lead HyD's staff to liaise with the counterparts from the Mainland and the Macao Special Administrative Region Government as well as other relevant authorities and establish regular and effective communication channels to coordinate the daily maintenance strategies on cross-boundary highway facilities. Besides, the proposed CHE/NT (Maintenance) will also be responsible for the maintenance of highway facilities at three other existing boundary control points, namely Shenzhen Bay Port, Lok Ma Chau Control Point and Lok Ma Chau Spur Line Control Point, as well as setting up and leading an emergency control centre for the cross-boundary

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highway infrastructure facilities under his/her purview and formulating contingency plans in case of emergencies as well as arranging recovery and clearance works. As regards the proposed CHE/Urban (Maintenance), the post-holder will be responsible for the maintenance of over 1 600 existing highway structures in the urban region, including those associated with the Hong Kong Section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link, road improvement works for West Kowloon Reclamation Development and the Central–Wanchai Bypass and Island Eastern Corridor Link. The maintenance and district road administration works in connection with other urban large-scale infrastructures to be completed, such as Central Kowloon Route and its associated roads, will also be taken up by the proposed CHE/Urban (Maintenance).

Inspection and Rehabilitation of Public Highway Structures

11. Around 900 public highway structures maintained by the NT Regional Office and around 600 maintained by Urban Regional Office were completed over 30 years ago, accounting for about 30% and 40% of public highway structures in the respective regions. We plan to carry out comprehensive inspection on the main structures and associated components of about 700 highway structures in the coming three years. The two proposed CEs will be responsible for reviewing the overall condition of the ageing public highway structures in their respective regions and formulating the associated inspection and rehabilitation strategies. Specific tasks include coordinating and monitoring the inspection of public highway structures; prioritising the rehabilitation works based on the inspection results; and determining the scope, scale and construction scheme of the rehabilitation works, such as replacement of bridge bearings, application of protective coating, replacement of expansion joints and rehabilitation of aged concrete structures. Given the substantial number of ageing highway structures involved, careful planning and coordination will be required in resource allocation, technical assessment and formulation of implementation strategy, etc. It is thus necessary for the work to be undertaken by CEs who are experienced in the management of district maintenance works.

12. The two proposed CEs will also be responsible for the preliminary planning and construction supervision of the rehabilitation works of highway structures in the respective regions. Taking the Canal Road Flyover and the Island Eastern Corridor (IEC) as examples, they are the major component of the north-south traffic artery and the east-west traffic artery on the Hong Kong Island respectively, and have been completed for almost 50 and 40 years respectively with relatively significant ageing conditions. As both have very heavy traffic during daytime, rehabilitation works can only be implemented at night and must be completed before the peak hours of the next morning so that the relevant road sections can be re-opened to traffic. Some of the structures of the IEC, including

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pile caps and bridge piers, are located underwater, of which the relevant rehabilitation works involve complicated technical arrangements. The planning of rehabilitation works must be led by CEs with experience and leadership who will oversee resource allocation, select the most resource-efficient rehabilitation scheme and prioritise the implementation sequence. In order to formulate a suitable maintenance scheme, the proposed CEs will need to review the ageing conditions of relevant components at an early stage based on their experience and professional knowledge, compare various maintenance technologies and evaluate their respective feasibility, including the necessary equipment to be deployed for repairing underwater pile caps and bridge piers as well as the safety of maintenance personnel. In addition, the maintenance of major structures involves complicated issues relating to traffic flow assessments, traffic diversions and noise impact, which require the proposed CEs to coordinate liaison work with relevant departments, including convening inter-departmental traffic management liaison groups and formulating feasible schemes to reduce the impact on traffic and the environment. The proposed CEs will also need to communicate with various stakeholders, attend to and consolidate their opinions in finalising the rehabilitation scheme. During the construction stage, the proposed CEs will need to monitor the progress of works, administer the works contracts, exercise financial control, and optimise the schemes having regard to the actual progress of the works. As various challenges are anticipated in the course of implementation, the supervision and coordination of relevant works should be undertaken by CEs to ensure that the rehabilitation works can be carried out smoothly and at the soonest.

13. Besides, the two proposed CEs will also share the district traffic improvement works mentioned in paragraph 3 above. Implementation of these works faces substantial challenges and restrictions, and the works involve numerous stakeholders including residents and shops nearby, public transport service providers, utility undertakings and other government departments, etc. To take forward these works effectively, the preliminary planning should be led by experienced CEs, who are capable of consolidating the views of various stakeholders, formulating a work scheme that is acceptable to all parties, and coordinating resource deployment and work priorities with relevant government departments (such as participating in inter-departmental meetings, formulating temporary traffic diversion schemes, assessing their feasibility, prioritising the works sequence and deployment of resources) to ensure that the works can proceed smoothly and be completed in time.

Connecting Road Works Associated with New Housing and/or Commercial Sites

14. With regard to the land supply related work in their respective regions, the two proposed CEs will be responsible for coordinating and providing professional advice in connection with road development and improvement. Some new housing sites require the construction of new roads for connecting to the public

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road network nearby. The proposed CEs need to conduct feasibility studies for a number of road improvement proposals in connection with various parcels of land that might be developed for housing and/or commercial use in the future, in order to ensure that the proposals can meet relevant standards and be connected to the existing road network. The studies also evaluate the impact of connecting road construction on surrounding traffic, environment, trees, etc. As the work relating to land supply and housing developments spans across the purview of different policy bureaux and departments, they have to participate in inter-departmental steering and working meetings on behalf of HyD from time to time to assist and facilitate relevant policy bureaux and departments in implementing relevant policies.

15. The proposed job description of CHE/NT (Maintenance) post and the proposed organisation chart of the NT Regional Office of HyD are at

Encls. 1(a) & (b) Enclosures 1(a) and (b) respectively. The proposed job description of CHE/Urban (Maintenance) post and the proposed organisation chart of Urban Regional Office of HyD are at Enclosures 2(a) and (b) respectively.

16. In view of the pressing need to cope with the inspection and rehabilitation works for ageing public highway structures, we propose creating the above two supernumerary posts in the NT Regional Office and Urban Regional Office for a period of three years to meet the urgent need.

17. The duties of the Regional Offices are, however, continuous in nature and the related workload will increase over time. We will review the necessity of retaining the aforementioned posts prior to their expiry.

Non-directorate Support

18. HyD will internally redeploy 133⁴ and 104⁵ non-directorate posts to support the proposed CHE/NT (Maintenance) and CHE/Urban (Maintenance) posts respectively.

/ALTERNATIVES

⁴ They include 33 professional grade posts (nine Senior Engineer/Senior Electrical and Mechanical Engineer posts and 24 Engineer/Electrical and Mechanical Engineer/Assistant Engineer posts), 90 technical grade posts and 10 general grade posts.

⁵ They include 20 professional grade posts (four Senior Engineer posts and 16 Engineer/Assistant Engineer posts), 80 technical grade posts and four general grade posts.

ALTERNATIVES CONSIDERED

19. We have critically examined the possible redeployment of other existing directorate officers within HyD to take up the work of the proposed posts. As other existing directorate officers are already fully engaged with their respective work schedules, it is operationally not practicable for them to take up additional tasks without adversely affecting the discharge of their current duties. The key portfolio of the existing CE posts and our assessment on the possibility for them to take up additional responsibilities are detailed at Enclosure 3.

Encl. 3

20. In light of the upcoming workload in different divisions of HyD, we consider that the proposed creation of the two supernumerary CE posts is the only viable arrangement to ensure adequate dedicated staffing support in HyD to cope with the substantial workload relating to the maintenance of cross-boundary highway infrastructures, other major highway infrastructures as well as ageing public highway structures; and to take part in various tasks relating to land supply and land use planning strategies.

FINANCIAL IMPLICATIONS

21. The proposed creation of two supernumerary CE posts will bring about an additional notional annual salary cost at mid-point of \$3,847,200. The additional annual average staff cost, including salaries and staff on-costs of the above proposal, is about \$5,245,000.

22. We have included sufficient provision in the Estimates to meet the cost of the proposal.

PUBLIC CONSULTATION

23. We consulted the Legislative Council (LegCo) Panel on Transport on 20 November 2020 on the proposal of creating six permanent directorate posts⁶ to take forward “walkable-city” projects as well as handling highway maintenance and district road administration work. In view of the present Government’s fiscal constraints, Members requested the Administration to review the staffing proposal and consider first creating supernumerary posts to cope with the immediate needs, and submit supplementary information on the benefits of creating the proposed

/directorate

⁶ It includes the creation of one permanent Principal Government Engineer (D3) post and three permanent CE (D1) posts in the proposed Walkability Project Management Office and two permanent CE (D1) posts in the NT Regional Office and Urban Regional Office.

directorates posts. We provided the requested information to the LegCo Panel on Transport on 17 March 2021. Having considered Members' views, we have revised the original staffing proposal of creating six permanent posts to five supernumerary posts. After further review, we propose to first create two supernumerary CE posts to cope with the urgent tasks of the Regional Offices. We shall deploy existing resources to continue taking forward "walkable-city" projects as far as practicable and will review the relevant manpower arrangement in due course. The latest revision to the proposal has been submitted to the Panel on Transport on 10 June 2021.

ESTABLISHMENT CHANGES

24. The establishment changes in HyD for the past two years are as follows –

Establishment (Note)	Number of posts			
	Existing (as at 1 June 2021)	As at 1 April 2021	As at 1 April 2020	As at 1 April 2019
A	32 + (2) [#]	32 + (1)	32 + (2)	32 + (4)
B	713	712	679	643
C	1 755	1 781	1 722	1 685
Total	2 500 + (2)	2 525 + (1)	2 433 + (2)	2 360 + (4)

Note –

A – ranks in the directorate pay scale or equivalent

B – non-directorate ranks, the maximum pay point of which is above Master Pay Scale (MPS) Point 33 or equivalent

C – non-directorate ranks, the maximum pay point of which is at or below MPS Point 33 or equivalent

() – number of supernumerary directorate posts approved by the Establishment Subcommittee/FC

– as at 1 June 2021, there was no vacant directorate post in HyD

CIVIL SERVICE BUREAU COMMENTS

25. The Civil Service Bureau supports the proposal to create two supernumerary CE posts in HyD. The grading and ranking of the proposed posts are considered appropriate having regard to the level and scope of responsibilities and professional duties.

/ADVICE

**ADVICE OF THE STANDING COMMITTEE ON DIRECTORATE
SALARIES AND CONDITIONS OF SERVICE**

26. As the posts proposed to be created are on a supernumerary basis, their creation, if approved, will be reported to the Standing Committee on Directorate Salaries and Conditions of Service in accordance with the established procedure.

Transport and Housing Bureau
June 2021

**Proposed Job Description of
Chief Highway Engineer/New Territories (Maintenance)**

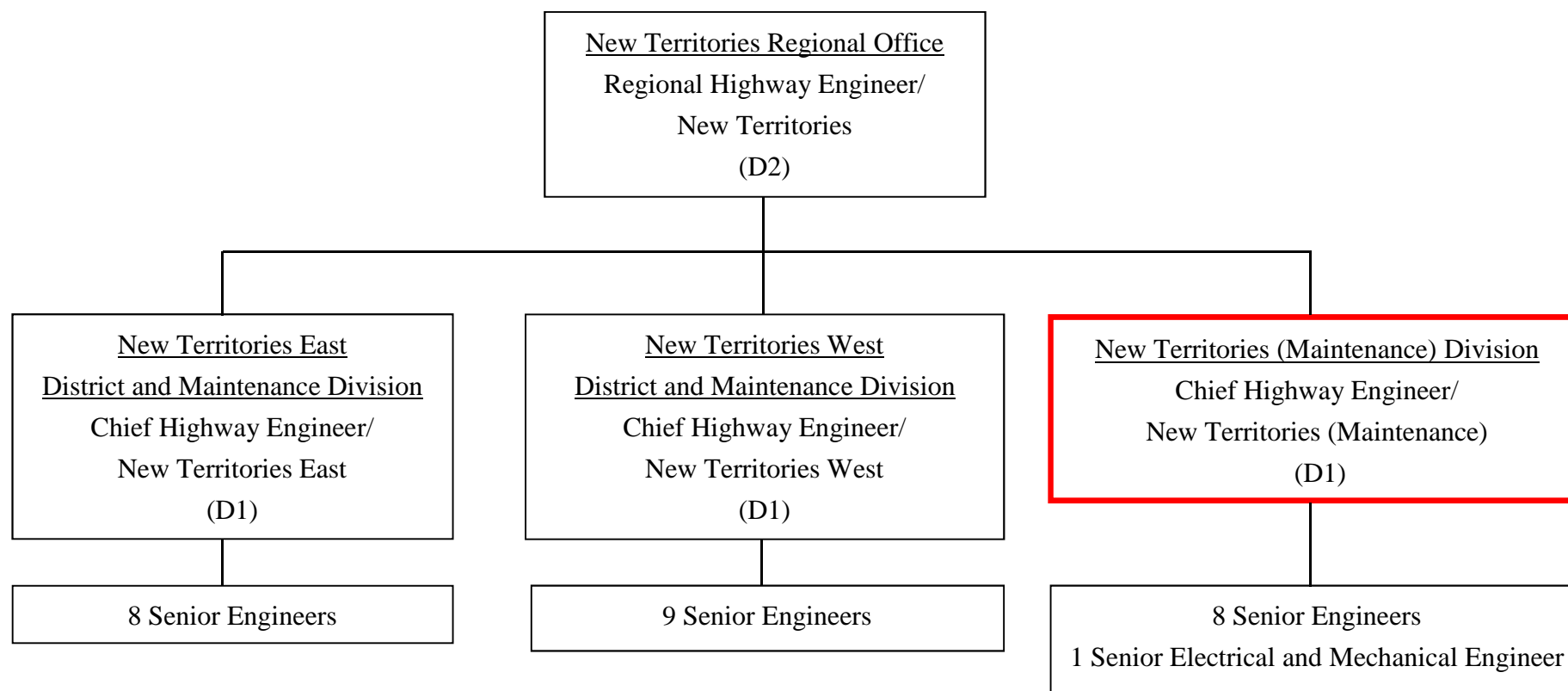
Rank : Chief Engineer (D1)

Responsible to : Regional Highway Engineer/New Territories

Major Duties and Responsibilities –

1. To lead, manage and supervise the New Territories (Maintenance) Division under the New Territories Regional Office of the Highways Department, set up and lead an emergency control centre for cross-boundary highway infrastructure facilities and formulate contingency plans for deploying resources and arranging for the recovery and clearance works in case of emergencies;
2. To steer the liaison and exchanges relating to cross-boundary highway infrastructure facilities with the Mainland and the Macao Special Administrative Region Government or relevant authorities concerned;
3. To oversee the implementation of statutory and administrative procedures, including funding application, financial management and tendering of contracts;
4. To manage contractors and consultants engaged, including monitoring the progress and quality of the maintenance works, performance in handling emergency tasks and implementation of safety measures;
5. To formulate and implement the maintenance schemes for ageing public road structures in the New Territories region;
6. To coordinate road improvement works in the New Territories region;
7. To oversee tasks relating to land supply and land use planning strategies in the New Territories region; and
8. To oversee and steer Senior Engineers and Engineers/Assistant Engineers in executing relevant work.

**Proposed Organisation Chart of
the New Territories Regional Office of the Highways Department**



Proposed directorate post to be created

**Proposed Job Description of
Chief Highway Engineer/Urban (Maintenance)**

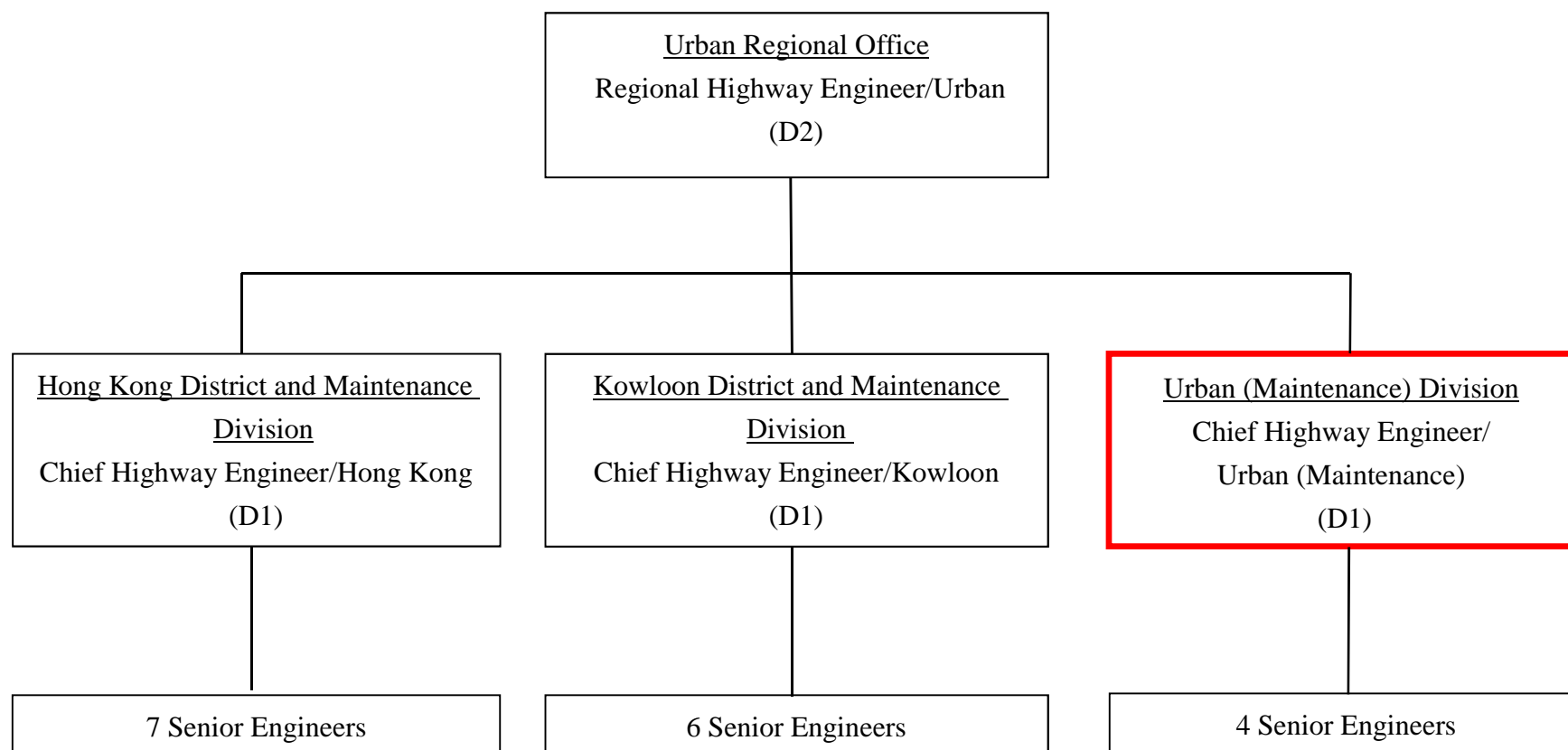
Rank : Chief Engineer (D1)

Responsible to : Regional Highway Engineer/Urban

Major Duties and Responsibilities –

1. To lead, manage and supervise the Urban (Maintenance) Division under the Urban Regional Office of the Highways Department and oversee the maintenance of the public highway infrastructure facilities related to the Hong Kong Section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link, the West Kowloon Reclamation Development and the Central – Wan Chai Bypass and Island Eastern Corridor Link;
2. To oversee the implementation of statutory and administrative procedures, including funding application, financial management and tendering of contracts;
3. To manage contractors and consultants engaged, including monitoring the progress and quality of the maintenance works, performance in handling emergency tasks and implementation of safety measures;
4. To formulate and implement the maintenance schemes for ageing public road structures in the urban region;
5. To coordinate road improvement works in the urban region;
6. To oversee tasks relating to land supply and land use planning strategies in the urban region; and
7. To oversee and steer Senior Engineers and Engineers/Assistant Engineers in executing relevant work.

**Proposed Organisation Chart of
Urban Regional Office of the Highways Department**



Proposed directorate post to be created

**Key portfolios of existing Chief Engineer (CE) posts in the
Highways Department (HyD)
and assessment of the possibility for them
to take up additional responsibilities**

All existing CEs in the HyD are fully engaged in their respective duties. Director of Highways has assessed their current and anticipated workloads, and concluded that they have no spare capacity to take up additional duties. It is operationally not practicable for them to take up additional tasks without adversely affecting the discharge of their current duties. The distribution and major duties of each CE are as follows –

Headquarters (HQs) and Regional Offices

2. Deputy Director of Highways (DDHy) (Principal Government Engineer (PGE)) (D3) currently oversees the HQs and two Regional Offices (i.e. Urban and the New Territories). At the HQs, DDHy is assisted by two Government Engineers (GEs) (D2) (i.e. Assistant Director/Technical¹ (AD/T) and Assistant Director/Development² (AD/D)) and four CEs in managing eight divisions and 11 units. As regards the Regional Offices, each office is led by one GE and supported by two CEs.

3. The four CEs at the HQs are fully occupied with the following work –

- (a) **Chief Highway Engineer/Works (CHE/Works)** is responsible for overseeing the implementation of small to medium-sized highway capital works projects in the territory, including the construction of footbridges and carrying out improvement works for cycle track networks in new towns, etc., which require CHE/Works' attention in determining the project scope, steering public consultation process, approving documents for the relevant statutory procedures, administering the tendering process and

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¹ AD/T is responsible for formulating technical and administrative policies, standards, techniques and guidelines on highway engineering, public lighting, landscaping, surveying, quality management, environmental, building information modelling matters, etc. and managing the public relations and training matters, as well as personnel matters (including staff deployment, grade management and appointments) for the department.

² AD/D is responsible for managing capital works projects, maintaining highway facilities within Tsing Ma Control Area and Tsing Sha Control Area, and overseeing highway project planning, site safety and provision of advice in the environmental, contractual and geotechnical aspects.

approving tender documents as well as managing and administering contracts. Furthermore, CHE/Works is also responsible for overseeing the implementation of several large-scale projects, including the Flyover from Kwai Tsing Interchange upramp to Kwai Chung Road, upgrading of remaining sections of Kam Tin Road and Lam Kam Road, improvement works for Fan Kam Road, as well as the road network in West Kowloon Reclamation Development, etc. At present, CHE/Works is managing about 50 projects under planning, design or construction.

- (b) **Chief Highway Engineer/Bridges and Structures (CHE/B&S)** is responsible for design and standard setting for bridges and highway structures, providing comments and technical advice on public and private developments/projects involving highway structures, supervising structural design for in-house highway projects, and providing structurally-related technical support for on-going construction works. Furthermore, CHE/B&S supervises the maintenance of highway facilities³ within Tsing Ma Control Area and Tsing Sha Control Area.
- (c) **Chief Engineer/Lighting** provides professional services and advice on all matters relating to the policies, design, planning and construction of public lighting provision as well as the maintenance and administration of 240 000 units of road lighting in the territory. Besides, he is studying and reviewing the standard and latest technologies for road lighting, including the implementation of the Light Emission Diode Public Lighting Replacement Programme to reduce energy consumption and greenhouse gas emission. He is now taking forward the replacement of road lights in the vicinity of some MTR stations with street-lighting decorations to enhance the streetscape, and working in collaboration with the District Offices to plan for the installation works of road lights in village areas.
- (d) **Chief Highway Engineer/Research and Development** is responsible for conducting researches and formulating specifications and standards for upgrading highway design, construction, maintenance and material, and timely updating the relevant parameters and application of technology to enhance

/safety

³ Highway facilities within the two Control Areas comprise four long span cable-supported bridges, four dual three-lane tunnels, one dual two-lane tunnel, viaducts, roads and roadside slopes, all located along strategic routes linking to the airport. Due to the special structural designs of the four long span cable-supported bridges within the two Control Areas, close monitoring of their wear and tear is required. Apart from the regular repair of the bridge deck surfacing, the major structural elements also require frequent inspection and maintenance.

safety of road works. He also oversees the work of Research and Development Division in formulating and reviewing the departmental information technology strategies, overseeing the coordination of road excavation works management, supervising the work of the central audit team on inspection of road excavation works, supervising the management of all asphalt suppliers for public works, and promoting the incorporation of innovative technology in highway engineering specifications and standards.

4. As regards the two Regional Offices (each led by one GE and supported by two CEs), they are responsible for the district administration of highway infrastructure and maintenance works in their respective geographic area. They provide comments on public and private developments which have impact on public roads; handle the gazettal process for new road projects and deal with objections from members of the public; and plan, design and supervise the maintenance and improvement works for about 6 000 kilometres of road lanes, 4 770 highway structures and 12 500 roadside slopes. Moreover, they oversee the processing of road excavation permits, coordinate with relevant departments and organisations with respect to road excavation matters, and monitor the excavation work of utility undertakings. Besides, they also need to regularly review the overall condition of lift systems, hillside escalator links and elevator systems and related facilities in the respective regions, and make early preparations and carry out appropriate improvement works. They also represent their respective Regional Office to formulate Service Level Agreements, maintenance strategies and plans with the Electrical and Mechanical Services Department for the electrical and mechanical installations of the above-mentioned facilities, and supervise the progress of the maintenance works. In the light of these heavy and on-going duties, and to ensure the safety of the highway networks, the directorate officers concerned cannot take up additional duties.

Major Works Project Management Office (MWPMO)

5. There are nine directorate officers in MWPMO, including one PGE (designated as Project Manager/Major Works) (D3), two GEs and six CEs.

6. The six CEs in MWPMO are fully occupied with the following work –

- (a) **Chief Engineer 1/Major Works (CE1/MW)** is mainly responsible for taking forward three of the construction contracts under the Central Kowloon Route (CKR) project, widening of the

/Western

Western Section of Lin Ma Hang (LMH) Road, and widening of Eastern Section of LMH Road which is now at its detailed design stage. The three CKR construction contracts overseen by CE1/MW are (1) Kai Tak West contract; (2) Kai Tak East contract; and (3) Buildings, Electrical and Mechanical Works contract. As for the widening of the Western and Eastern Sections of LMH Road, the works implementation is rather complicated due to the close vicinity of the works site to adjacent private developments and part of the widening works falls within the category of Designated Projects under the Environmental Impact Assessment Ordinance (Cap. 499). The works contracts mentioned above have mostly adopted the New Engineering Contract⁴ (NEC) form with different options, CE1/MW is therefore heavily engaged in contract management and does not have any spare capacity to take on additional duties.

- (b) **Chief Engineer 2/Major Works (CE2/MW)** is mainly responsible for taking forward the other three construction contracts under the CKR project, i.e. (1) Yau Ma Tei (YMT) East contract; (2) YMT West contract; and (3) Central Tunnel contract. The works involve re-provisioning of several community facilities along the tunnel alignment, including YMT Specialist Clinic Extension, YMT Jade Hawker Bazaar and YMT Public Library, and demolition of the YMT Multi-storey Car Park. For YMT West contract, the works require implementation of substantial traffic diversion arrangement on major roads such as Lin Cheung Road. CE2/MW is also responsible for maintaining close liaison with other government departments and handling substantial public consultation work to ensure smooth implementation of the construction works. CE2/MW is heavily involved in contract management and is also responsible for taking forward the construction of noise enclosures at Gascoigne Road Flyover project. As such, he will not have any spare capacity to take on additional duties.
- (c) **Chief Engineer 3/Major Works (CE3/MW)** is mainly responsible for overseeing the widening of the Fanling Highway and needs to closely monitor the progress of works, including the ongoing installation of traffic control and surveillance system and

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⁴ Unlike conventional contract, the NEC form emphasises mutual trust and cooperation between the contracting parties, and collaboration in risk management. It enhances the efficiency of contract management. The contract form is applicable to different types of engineering contracts, including construction contracts, maintenance contracts and consultancy contracts. It also provides various payment options that suit different needs, such as priced contracts and target contracts, etc.

account finalisation of the main works contract. CE3/MW is also responsible for various noise barrier retrofitting projects for existing roads. Besides, CE3/MW is responsible for managing and taking forward the Lion Rock Tunnel improvement works, which require detailed examination of various viable tunnel rehabilitation and improvement schemes, assessment of the impacts on traffic, environment, country park, water supply, drainage and public utilities, as well as conducting public consultation and coordinating with other departments on various matters. The workload is extremely heavy and CE3/MW will not have any spare capacity to take on additional duties.

- (d) **Chief Engineer 4/Major Works (CE4/MW)** is mainly responsible for taking forward the Central – Wan Chai Bypass and Island Eastern Corridor Link project (CWB) and following up the remaining tasks related to other construction works contracts, contract variation and account finalisation following the commissioning of the CWB. Besides, CE4/MW has to ensure the operation of the projects complies with the conditions set out in the Environmental Permit, and coordinate with relevant departments and tunnel operator in respect of tunnel management, operation and maintenance until the completion of the outstanding works. CE4/MW is also responsible for taking forward the widening of Castle Peak Road – Castle Peak Bay. As the works site is in close proximity to schools and residential estates, road closures associated with the construction works have to be carried out in stages so as to maintain traffic as far as practicable. Retaining walls and noise barriers will also be constructed in stages for residential estates along the road. In order to take forward these projects smoothly, dedicated effort of CE4/MW is required, so it is not practicable for him to take up further duties.
- (e) **Chief Engineer 5/Major Works (CE5/MW)** is mainly responsible for the planning and implementation of a number of medium to large-scale infrastructure projects, including the Hiram's Highway Improvement Stage 1 and Stage 2 projects. CE5/MW needs to closely monitor the works progress to ensure timely completion. As for the Stage 2 project, CE5/MW is handling the objections in accordance with the statutory procedures, so as to duly handle and address public concerns. Moreover, CE5/MW is heavily involved in the planning, design and implementation of the widening of Tsuen Wan Road and the improvement works at Tsuen Tsing Interchange. As the road sections associated with these projects are in close proximity to numerous residential developments, the projects will be rather

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complicated and require CE5/MW to involve heavily in handling issues of public concern. In addition, CE5/MW is also responsible for managing “Feasibility Study on Route 11 (between Yuen Long and North Lantau)”, conducting public consultation and coordinating with other departments for this project. The workload will be very heavy given the scale, complexity as well as tight schedule of the project. Therefore, CE5/MW will not have any spare capacity to take on additional duties.

- (f) **Chief Engineer 6/Major Works⁵ (CE6/MW)** is mainly responsible for taking forward the Route 11 (between Yuen Long and North Lantau) project, including seeking funding from the Legislative Council for the next stage of investigation, formulating the investigation details and tendering. During the investigation stage, CE6/MW needs to review the findings of the feasibility study, conduct various impact assessments and further optimise the design. In addition, CE6/MW is also responsible for the engineering studies and other associated work for the Tsing Yi – Lantau Link and widening of Yuen Long Highway (between Lam Tei and Tong Yan San Tsuen). As the project is of mega scale and extremely complicated with a tight schedule, the workload will be very heavy. Therefore, CE6/MW will not have any spare capacity to take on additional duties.

Railway Development Office (RDO)

7. RDO is led by Principal Government Engineer/Railway Development (PGE/RD) (D3). PGE/RD is responsible for overseeing the planning, design and implementation of railway projects, including the related reprovisioning and enabling works, public infrastructure works and station improvement works, and overseeing the work of the MTR Corporation Limited (MTRCL) in these aspects. PGE/RD is supported by two GEs and underpinned by six CEs in performing relevant duties.

8. The six CEs in RDO are fully occupied with the following work –

- (a) **Chief Engineer/Railway Development 1-1 (CE/RD1-1)** is responsible for overseeing the planning and design of the Northern Link (NOL) (and Kwu Tung Station) and will be heavily engaged in

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⁵ As mentioned in paragraph 9 of Enclosure 8 to the Transport Panel paper (LC Paper No. CB(4)139/20-21(06)), the concerned CE post is a permanent post previously redeployed to Major Works Project Management Office (Special Duties). It has been returned to MWPMO since 1 January 2021.

the management of detailed planning and design of the NOL, such as handling complex interface and technical issues, acquisition of land and gazettal procedures, etc. These tasks require liaison, coordination and decision making at directorate and managerial level. Furthermore, CE/RD1-1 is responsible for the project management of Hung Hom Station and Admiralty Station under the Shatin to Central Link (SCL) project, which includes monitoring of the works programme and progress, handling of vesting drawings and inventories, conducting patronage estimation, and providing technical support for the financial assessment of the concession agreement for the SCL project. CE/RD1-1 is also responsible for monitoring the capital works cost of the South Island Line (East) and Kwun Tong Line Extension projects.

- (b) **Chief Engineer/Railway Development 1-2 (CE/RD1-2)** is responsible for the planning and implementation of the North South Corridor of the SCL project (except the project management of Hung Hom Station and Admiralty Station), which extends the existing East Rail Line across the Victoria Harbour to Admiralty via the Wan Chai North Area. The Cross Harbour Section of SCL is extremely challenging as the SCL tunnel needs to be constructed within a congested workspace under a very tight construction schedule. Resolution of complex interface and technical issues require efforts of a directorate officer. CE/RD1-2 is also responsible for the management of the consultancy for monitoring and verification of the construction of the SCL project.
- (c) **Chief Engineer/Railway Development 1-3 ⁶ (CE/RD1-3)** is responsible for overseeing Tuen Mun South Extension project, covering the management of detailed planning and design of the project, reprovisioning works, land acquisition and gazettal procedures, etc. CE/RD1-3 is also responsible for overseeing the consultants in conducting the “Strategic Study on Railways beyond 2030” and the “Feasibility Study on Separating Light Rail System and Roads/Footpaths at Selected Road Junctions”. He also administers a computerised railway transport model, maintains a comprehensive database of transport statistics, and collates key planning and land use information to generate forecasts on rail patronage for different railway network configurations. CE/RD1-3 is also required to oversee a number of station improvement works proposed by the MTRCL relating to railway operation. Furthermore, CE/RD1-3 is

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⁶ It is a supernumerary post created on 1 April 2009 approved by the Finance Committee of the Legislative Council. It will be retained until 31 March 2022.

also responsible for the East West Corridor of the SCL project, including non-railway works, post-commissioning works of the Tuen Ma Line (Kai Tak to Hung Hom Station), as well as contract variations and account finalisation work, etc.

- (d) **Chief Engineer/Railway Development 2-1 (CE/RD2-1)** is responsible for administering the Entrustment Agreement of the Hong Kong Section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link (XRL) project signed between the Government and the MTRCL. CE/RD2-1 is required to oversee the remaining works being conducted by the MTRCL, and to review the finalisation of project accounts of the XRL project by the MTRCL. Besides, CE/RD2-1 is responsible for overseeing the planning of East Kowloon Line, North Island Line and Siu Ho Wan Station; and managing a consultancy study on reviewing the monitoring of and control strategies for new railway projects. The duties of CE/RD2-1 involve complex project management and technical issues, which require liaison, coordination and decision making at directorate level.
- (e) **Chief Engineer/Railway Development 2-2 (CE/RD2-2)** is responsible for overseeing the planning and design of the Hung Shui Kiu Station and South Island Line (West), which will involve complex interface and technical issues in connection with developments in the vicinity. CE/RD2-2 will also be actively engaged in managing the detailed planning and design of Tung Chung Line Extension project and the Airport Railway Extended Overrun Tunnel. The management of the above projects requires the participation and supervision of a professional directorate officer. CE/RD2-2 is also responsible for examining all development proposals put forward by public and private organisations which are in the vicinity of the existing and planned railway lines so as to ensure that the railway lines will not be adversely affected. CE/RD2-2 also takes part in various planning and development studies, such as the developments on Lantau Island, in Fanling North, Kwu Tung North, New Territories North, Hung Shui Kiu, Tseung Kwan O and Wah Fu Estate, and provides comments from the perspective of railway development.
- (f) **Chief Engineer/Railway Development 2-3 ⁷ (CE/RD2-3)** is responsible for providing technical support for the planning and implementation of the proposed priority rail links connecting Hong Kong Island, the Kau Yi Chau Artificial Islands, Northeast Lantau and the coastal areas of Tuen Mun (Priority Rail Links) and

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⁷ It is a supernumerary post approved by the Finance Committee of the Legislative Council on 30 April 2021, which will be retained until 31 March 2025.

possible rail links for the longer term under the “Studies related to Artificial Islands in the Central Waters” (the Central Waters Study). The main duties of CE/RD2-3 include providing technical support to the area-wide transport study and the engineering feasibility study of the proposed Priority Rail Links (including examining the consultant’s assessment of the performance of the railway network, proposed engineering schemes, economic and financial performance estimates and the proposal of implementation strategy for railway projects) under the Central Waters Study. CE/RD2-3 is also responsible for examining the assessment of the railway network performance in Hong Kong under the Central Waters Study to ensure that the planning parameters and the assessment results are compatible with that of the “Strategic Study on Railways beyond 2030”. CE/RD2-3 will also coordinate the planning and implementation of the proposed railway projects under the Central Waters Study and other railway projects to ensure compatibility.
