

## Schedule of Resident Site Staff Standards and Duties

1. Chief Resident Engineer
2. Senior Resident Engineer
3. Resident Engineer (Civil)
4. Resident Engineer (E&M)
5. Assistant Resident Engineer (Civil)  
Assistant Resident Engineer (E&M)
6. Resident Senior Inspector of Works (Civil)  
Resident Senior Inspector of Works (E&M)
7. Resident Inspector of Works (Civil)  
Resident Inspector of Works (E&M)
8. Resident Assistant Inspector of Works (Civil)  
Resident Assistant Inspector of Works (E&M)
9. Resident Works Supervisor I (Civil)  
Resident Works Supervisor I (E&M)
10. Resident Works Supervisor II (Civil)  
Resident Works Supervisor II (E&M)
11. Resident Senior Survey Officer (Quantities)
12. Resident Survey Officer (Quantities)
13. Resident Survey Officer (Engineering)
14. Resident Technical Officer
15. Labour Relations Officer
16. Resident Clerical Officer
17. Resident Assistant Clerical Officer
18. Resident Clerical Assistant

**Resident Site Staff**  
**Chief Resident Engineer (CRE)**

**1. Qualifications**

- (1) Corporate Membership of the Hong Kong Institution of Engineer (an appropriate engineering discipline) elected after 5 December 1975 or equivalent and;
- (2) Grade E or above in English (Syllabus B) and Chinese Language in the Hong Kong Certificate of Education, or equivalent.

**2. Experience**

Fifteen years experience following attainment of Corporate Membership of which eight years shall be as Senior Resident Engineer or above in water supply engineering works.

**3. Duties**

- (1) Exercise an overall administration and control of the construction work supervision and discharge the duties of the Engineer's Representative as required by the General Conditions of Contract.
- (2) Review contractors' programme of works to ensure the satisfactory progress of the project as a whole.
- (3) Provide forecasts of anticipated expenditure on individual contracts within the Project.
- (4) Ensure that instruction laid down and standards set within the contract documents are adhered to in relation to the construction of the civil engineering works and installation of the equipment.
- (5) Liaise with Government departments, utility companies etc., where their activities affect the project.
- (6) Programme site staff recruitment as the need arise.
- (7) Keep the Engineer fully advised on all matters related to the work on site.
- (8) Exercise the powers and discharge the duties contained in the provisions of the Contract delegated by the Engineer.
- (9) Assist the Engineer to exercise the powers and discharge the duties of those provisions of the Contract that have not been delegated.

- (10) Supervise the preparation and maintenance of the records required by the Project Administration Handbook and the Project Administration Manual together with any other records required by the Engineer including the taking of photographs.
- (11) Examine and vet all proposals and correspondence revised from the Contractor and prepare draft replies and certificates including draft certificates for payment.
- (12) Attend meetings with the Contractor on matter relating to the Works including progress, safety and public image and prepare minutes of these meetings.
- (13) Liaise and attend meetings with parties other than the Contractor on matters relating to the Works and prepare minutes of these meetings.
- (14) Keep the Engineer informed of all developments including progress on Site by monthly reports and any special or incident reports.
- (15) Encourage Contractors and other persons on Site to use safe methods of working.
- (16) Bring to the attention of the Contractor and the Engineer any breach of regulations or good safe working practice observed that could give rise to the injury of any person on the Site or any member of the public.
- (17) Bring to the attention of the Contractor and the Engineer any working practice that could be detrimental to the Works.
- (18) Uphold the public image of Government in general and Water Supplies Department in particular and bring to the attention of the Contractor and the Engineer any action that is detrimental to a good public image including but not necessarily limited to the provision of clean footpaths and barriers in public areas, lighting, signing and guarding, and mitigation of the environmental impact of the construction activities on the public.
- (19) Supervise the other Resident Site Staff as directed by the Engineer including provision of such guidance they may need to carry out their duties, advise the Engineer of any requirements for overtime working and prepare reports on their performance.
- (20) Prepare as constructed drawings.
- (21) Supervise the deployment and use of any vehicle provided by the Contractor under the terms of the Contract.

- (22) Wear and encourage Resident Site Staff to wear helmets protective shoes and reflective jackets.
- (23) Review the techniques involved and analyse the results of any test or trial carried out on or off Site.
- (24) Carry out such further duties as may be assigned by the Engineer.

**Resident Site Staff**  
**Senior Resident Engineer**

**1. Qualifications**

- (1) Corporate Membership of the Hong Kong Institution of Engineer (an appropriate engineering discipline) elected after 5 December 1975 or equivalent and;
- (2) Grade E or above in English (Syllabus B) and Chinese Language in the Hong Kong Certificate of Education, or equivalent.

**2. Experience**

Eight years experience following attainment of Corporate Membership of which four years shall be as Resident Engineer or above in water supply engineering works.

**3. Duties**

- (1) Assist CRE to discharge the duties of the Engineer's Representative as required by the General Conditions of Contract.
- (2) Exercise the powers and discharge the duties contained in the provisions of the Contract delegated by the Engineer and CRE.
- (3) Assist the Engineer and CRE to exercise the powers and discharge the duties of those provisions of the Contract that have not been delegated.
- (4) Supervise the preparation and maintenance of the records required by the Project Administration Handbook and the Project Administration Manual together with any other records required by the Engineer and CRE including the taking of photographs.
- (5) Make recommendations to the Engineer and CRE on contractual matters including contractors' claims.
- (6) Examine and vet all proposals and correspondence revised from the Contractor and prepare draft replies and certificates including draft certificates for payment.
- (7) Attend meetings with the Contractor on matter relating to the Works including progress, safety and public image and prepare minutes of these meetings.

- (8) Liaise and attend meetings with parties other than the Contractor on matters relating to the Works and prepare minutes of these meetings.
- (9) Keep the Engineer and CRE informed of all developments including progress on Site by monthly reports and any special or incident reports.
- (10) Encourage Contractors and other persons on Site to use safe methods of working.
- (11) Bring to the attention of the Contractor and the Engineer and CRE any breach of regulations or good safe working practice observed that could give rise to the injury of any person on the Site or any member of the public.
- (12) Bring to the attention of the Contractor and the Engineer and CRE any working practice that could be detrimental to the Works.
- (13) Uphold the public image of Government in general and Water Supplies Department in particular and bring to the attention of the Contractor and the Engineer and CRE any action that is detrimental to a good public image including but not necessarily limited to the provision of clean footpaths and barriers in public areas, lighting, signing and guarding, and mitigation of the environmental impact of the construction activities on the public.
- (14) Supervise the other Resident Site Staff as directed by the Engineer and CRE including provision of such guidance they may need to carry out their duties, advise the Engineer and CRE of any requirements for overtime working and prepare reports on their performance.
- (15) Prepare as constructed drawings.
- (16) Supervise the deployment and use of any vehicle provided by the Contractor under the terms of the Contract.
- (17) Wear and encourage Resident Site Staff to wear helmets protective shoes and reflective jackets.
- (18) Review the techniques involved and analyse the results of any test or trial carried out on or off Site.
- (19) Carry out such further duties as may be assigned by the Engineer and CRE.

**Resident Site Staff**  
**Resident Engineer (Civil) [RE(C)]**

**1. Qualification**

- (1) Corporate Membership of the Hong Kong Institution of Engineers (Civil Engineering Discipline) elected after 5 December 1975 or equivalent and;
- (2) Grade E or above in English (Syllabus B) and Chinese Language in the Hong Kong Certificate of Education, or equivalent.

**2. Experience Required**

Three years experience following attainment of Corporate Membership of which two years shall be as Resident Engineer or above with relevant experience.

**3. Duties**

- (1) Assist SRE to discharge the duties of the Engineer's Representative as required by the General Conditions of Contract.
- (2) Exercise the powers and discharge the duties contained in the provisions of the Contract delegated by the Engineer.
- (3) Assist the Engineer and SRE to exercise the powers and discharge the duties of those provisions of the Contract that have not been delegated.
- (4) Supervise the preparation and maintenance of the records required by the Project Administration Handbook and the Project Administration Manual together with any other records required by the Engineer including the taking of photographs.
- (5) Examine and vet all proposals and correspondence received from the Contractor and prepare draft replies and certificates including draft certificates for payment.
- (6) Make recommendations to the Engineer and SRE on contractual matters including contractors' claims.
- (7) Attend meetings with the Contractor on matter relating to the Works including progress, safety and public image and prepare minutes of these meetings.
- (8) Liaise and attend meetings with parties other than the Contractor on matters relating to the Works and prepare minutes of these meetings.
- (9) Keep the Engineer and SRE apprised of all developments including

progress on Site by monthly reports and any special or incident reports.

- (10) Encourage Contractors and other persons on Site to use safe methods of working.
- (11) Bring to the attention of the Contractor, the Engineer and SRE any breach of regulations or good safe working practice observed that could give rise to the injury of any person on the Site or any member of the public.
- (12) Bring to the attention of the Contractor, the Engineer and SRE any working practice that could be detrimental to the Works.
- (13) Uphold the public image of Government in general and Water Supplies Department in particular and bring to the attention of the Contractor, the Engineer and SRE any action that is detrimental to a good public image including but not necessarily limited to the provision of clean footpaths and barriers in public areas, lighting, signing and guarding, and mitigation of the environmental impact of the construction activities on the public.
- (14) Supervise the other Resident Site Staff as directed by the Engineer and SRE including provision of such guidance they may need to carry out their duties, advise the Engineer of any requirements for overtime working and prepare reports on their performance.
- (15) Prepare as-constructed drawings.
- (16) Supervise the deployment and use of any vehicle provided by the Contractor under the terms of the Contract.
- (17) Wear and encourage Resident Site Staff to wear helmets protective shoes and reflective jackets.
- (18) Review the techniques involved and analyse the results of any test or trial carried out on or off Site.
- (19) Carry out such further duties as may be assigned by the Engineer and SRE.
- (20) Check the calculation of quantities of work from measurements taken on Site.
- (21) Take measurements and calculate quantities of work measured from Drawings.



**Resident Site Staff**  
**Resident Engineer (E&M) [RE(E&M)]**

**1. Qualifications**

- (1) Corporate Membership of the Hong Kong Institution of Engineers (an appropriate engineering discipline) elected after 5 December 1975 or equivalent and;
- (2) Grade E or above in English (Syllabus B) and Chinese Language in the Hong Kong Certificate of Education, or equivalent.

**2. Experience Required**

Three years experience following attainment of Corporate Membership of which 2 years shall be as Resident Engineer with relevant experience.

**3. Duties**

- (1) Ensure that E&M works are installed to required standards.
- (2) Ensure that all necessary site records are kept.
- (3) Prepare back-up records for claim evaluation.
- (4) Review, comment and approve contractor's design, E&M equipment and shop drawings in accordance with contract and statutory requirements.
- (5) Evaluate testing procedures and any test results submitted by the contractor.
- (6) Brief the SRE on any variations or extensions of time considered warranted or desirable.
- (7) Liaise with design office and civil RE's on interface work.
- (8) Call and attend meeting with the contractor's representative to resolve technical issues and to discuss quality of work, progress and safety.
- (9) Coordinate and supervise the testing and commissioning of E&M works prior to handover.
- (10) Review and approve as-built drawings the O&M Manuals.
- (11) Monitor rectification of defects.
- (12) Ensure site safety.
- (13) Any other duties as may be assigned from time to time by the CRE/SRE.

**Resident Site Staff**  
**Assistant Resident Engineer (Civil) [ARE(C)]**  
**Assistant Resident Engineer (E&M) [ARE(E&M)]**

**1. Qualification**

- (1) Degree in an appropriate engineering discipline from a Hong Kong university or equivalent and;
- (2) Grade E or above in English (Syllabus B) and Chinese Language in the Hong Kong Certificate of Education, or equivalent.

**2. Experience Required**

Three years relevant post-qualification experience.

**3. Duties**

- (1) General day to day contract administration.
- (2) General correspondence with the contractor.
- (3) Answer technical queries and supply further information.
- (4) Prepare draft site instruction and variation orders.
- (5) Prepare reports on progress of works and safety.
- (6) Check contractor's submissions.
- (7) Liaise with government departments and utility companies.
- (8) Supervise construction works.
- (9) Prepare meeting minutes.
- (10) Any other duties as may be assigned from time to time by his superior.

**Resident Site Staff**  
**Resident Senior Inspector of Works (C) [RSIOW(C)]**  
**Resident Senior Inspector of Works (E&M) [RSIOW(E&M)]**

**1. Qualifications**

- (1) Diploma or Higher Certificate in an appropriate engineering discipline from Hong Kong Polytechnic or a technical institute or equivalent and;
- (2) Grade E or above in English (Syllabus B) and Chinese Language in the Hong Kong Certificate of Education, or equivalent.

**2. Experience**

Twelve years of relevant post-qualification experience in an appropriate engineering discipline of which four years shall be in a position equivalent to Inspector of Works or above in Government or quasi Government project.

**3. Duties**

- (1) Control and direct Resident Inspectors of Works, Resident Assistant Inspectors of Works, Resident Works Supervisors and to supervise contractor's activities.
- (2) Check that the contractor follows the agreed works programme.
- (3) Ensure the work are carried out according to specifications and drawings by identifying faulty materials, workmanship etc.
- (4) Report to professional staff on site problems, progress, quality of workmanship, etc.
- (5) Guide Resident Works Supervisors in the preparation of site measurements and check site measurements.
- (6) Ensure proper contract management and that site measurements, diary and other records are kept up to date.
- (7) Submit monthly progress report or any other return as required by his superior.
- (8) Check and verify bills submitted by contractor.
- (9) Check observation of safety precautions for works to be carried out.
- (10) Ensure consistent supervision and measurement standard across all sites.

- (11) Maintain overtime records of all site staff.
- (12) Liaise with Government Departments, utility companies, public on site etc.
- (13) General outdoor staff management.
- (14) Provide on job training to his subordinates.
- (15) Offer comments on method statement and material submissions.
- (16) Any other duties as may be assigned from time to time by his superior.

**Resident Site Staff**  
**Resident Inspector of Works (C) [RIOW(C)]**  
**Resident Inspector of Works (E&M) [RIOW(E&M)]**

**1. Qualifications**

- (1) Diploma or Higher Certificate in an appropriate engineering discipline from a Hong Kong Polytechnic or technical institute or equivalent and;
- (2) Grade E or above in English (Syllabus B) and Chinese Language in the Hong Kong Certificate of Education, or equivalent.

**2. Experience Required**

Eight years of relevant post-qualification experience in an appropriate engineering discipline of which four years shall be in a position equivalent to Assistant Inspector of Works in a Government or quasi Government project.

**3. Duties**

- (1) Control and direct Resident Works Supervisors and to supervise contractor's activities.
- (2) Check contractor's progress against agreed programme.
- (3) Ensure that the Work is carried out in accordance with specifications and drawings by identifying faulty materials, workmanship etc.
- (4) Report to professional staff and RSIOW on site problems, progress, quality of workmanship, etc.
- (5) Guide Resident Works Supervisors in the preparation of site measurements and check site measurements.
- (6) Ensure proper contract management and that site measurements, site diary and other records are kept up to date.
- (7) Submit monthly progress report or any other return as required by his superior.
- (8) Check and verify bills submitted by contractors.
- (9) Check observation of safety precautions for works to be carried out.
- (10) Ensure consistent supervision and measurement standard across all sites.

- (11) Maintain overtime records of all site staff.
- (12) Liaise with Government Departments, utility companies, public on site etc.
- (13) General outdoor staff management.
- (14) Provide on job training to his subordinates.
- (15) Offer comments on method statement and material submissions.
- (16) General supervision of construction work and check whether it complies with contract documents and approved method statement.
- (17) Maintain contemporary site records.
- (18) Arrange and monitor site and laboratory tests.
- (19) Assign works to RAIOW, RWSI and RWSII daily and provide guidance and instruction.
- (20) Inspect all works on site as regards safety to workman.
- (21) Check lighting and signing for traffic diversion.
- (22) Prepare and maintain all site records up to date.
- (23) Any other duties as may be assigned from time to time by his superior.

**Resident Site Staff**  
**Resident Assistant Inspector of Works (Civil) [RAIOW(C)]**  
**Resident Assistant Inspector of Works (E&M) [RAIOW(E&M)]**

**1. Qualifications**

- (1) Diploma or Higher Certificate an appropriate engineering discipline from a Hong Kong Polytechnic or technical institute or equivalent and;
- (2) Grade E or above in English (Syllabus B) and Chinese Language in the Hong Kong Certificate of Education, or equivalent.

**2. Experience**

Four years of relevant post-qualification experience in an appropriate engineering discipline of which one year shall be in a position equivalent to WSI in a Government and quasi Government project.

**3. Duties**

- (1) Assist SRE/RE/RSIOW/RIOW in the supervision on site of construction works.
- (2) Ensure that the work is carried out in accordance with contract documents and approved method statement.
- (3) Report to the RSIOW, RIOW and the professional staff on site problems, progress, quality workmanship, etc.
- (4) Maintain proper and contemporary site measurement, diary and other records.
- (5) Check and verify bills submitted by contractors.
- (6) Guide Resident Works Supervisors in the preparation of site measurements and check such measurements.
- (7) Assist the RSIOW/RIOW in overseeing the junior staff.
- (8) Carry out field investigations on the works and to assist professional staff in problem investigation and planning.
- (9) Arrange and monitor site and laboratory test.
- (10) Liaise with Government Departments, utility companies, public on site

etc.

- (11) Submit monthly progress report or any other return as required by his superior.
- (12) Check observation of safety precautions for works to be carried out.
- (13) Any other duties as may be assigned from time to time by the superior.



**Resident Site Staff**  
**Resident Works Supervisor I (Civil) [RWSI(C)]**  
**Resident Works Supervisor I (E&M) [RWSI(E&M)]**

**1. Qualifications**

- (1) Ordinary Certificate in an appropriate engineering discipline from a Hong Kong Polytechnic or Technical Institute or the equivalent and;
- (2) A proficiency in English and Chinese languages equivalent to Form 5 standard (Syllabus B for English Language) in Hong Kong or minimum Form 3 Education with five years' appropriate experience and service.

**2. Experience Required**

Three years of relevant post-qualification experience as Works Supervisor in a Government or quasi Government project.

**3. Duties**

- (1) Assist inspectorate staff in supervising site works.
- (2) Ensure that the site works are constructed in accordance with contract specification, drawings and site instructions.
- (3) Check material quality and workmanship.
- (4) Prepare estimates and assist checking of interim certificates submitted by the contractor.
- (5) Take quantities from drawings and site measurements.
- (6) Perform routine site tests.
- (7) Keep site records, site diary, weather chart, progress report, material delivery records etc.
- (8) Assist in preparation of reports.
- (9) Report to his supervisor on site difficulties, day-to-day progress of work, quality of workmanship, adequacy of contractor's plant and labour force required for the proper execution of the works etc.
- (10) Check that all contractor's site staff observe safety precautions for works to be carried out.

- (11) Liaise with Government Departments, utility companies, public on site etc.
- (12) Any other duties as may be assigned from time to time by his superior.

**Resident Site Staff**  
**Resident Works Supervisor II (Civil) [RWSII(C)]**  
**Resident Works Supervisor II (E&M) [RWSII(E&M)]**

**1. Qualifications**

- (1) Ordinary Certificate in an appropriate engineering discipline from a Hong Kong Polytechnic or Technical Institute or the equivalent and;
- (2) A proficiency in English and Chinese languages equivalent to Form 5 standard (Syllabus B for English Language) in Hong Kong or minimum Form 3 Education with five years' appropriate experience and service.

**2. Experience Required**

One year of appropriate experience as Works Supervisor in a Government or quasi Government project.

**3. Duties**

- (1) Assist inspectorate staff in supervising site works.
- (2) Ensure that the work is constructed in accordance with contract specification, drawings, site instructions and agreed method statements.
- (3) Check material quality and workmanship.
- (4) Keep daily records of site operations and details and prepare test request forms.
- (5) Take quantities from drawings and site measurements.
- (6) Perform routine site tests.
- (7) Report to his supervisor on site difficulties, day-to-day progress of work, quality of workmanship, adequacy of Contractor's plant and labour force required for the proper execution of the works etc.
- (8) Check that all contractor's site staff observe safety precautions for works to be carried out.
- (9) Liaise with Government Departments, utility companies, public on site etc.
- (10) Any other duties as may be assigned from time to time by his superior.

**Resident Site Staff**  
**Resident Senior Survey Officer (Quantity) (RSSO(Q))**

**1. Qualifications**

- (1) Diploma or Higher Certificate in Quantity Surveying or an allied subject from Hong Kong Polytechnic or a technical institute or equivalent and;
- (2) Grade E or above in English (Syllabus B) and Chinese Language in the Hong Kong Certificate of Education, or equivalent.

**2. Experience**

Four years post-qualification experience in Quantity Surveying of which two years shall be in a position equivalent to Survey Officer (Quantity) or above.

**3. Duties**

- (1) Direct, supervise and control a team of Survey Officers (Quantity) and other staff assigned to him.
- (2) Process and check interim and final payment certificates.
- (3) Calculate fluctuations for contract payments.
- (4) Assist professional officers in assessing claims and proposed rates for variations.
- (5) Investigate and bring to professional officers' attention problems associated with the work and suggest solutions.
- (6) Direct and supervise the work of the Survey Officer (Quantity).
- (7) Carry out independent checks on the work of his subordinate.
- (8) Calculate and check wage, material and cost of sand and cement content in ready mixed concrete, taking into consideration the price fluctuation and the like.

- (9) Bill and check variation bills and cross-check bill of quantities rates.
- (10) Check quantity transfer in bill of quantities and final accounts.
- (11) Prepare and check abstracts of re-measured engineering works.
- (12) Assist in technical checking and in preparation of interim and final accounts including site measurement.
- (13) Prepare simple estimates.
- (14) Check and undertake or supervise site measurement or re-measurement contracts.
- (15) Assist in preparation of bill of quantities for works projects by taking off quantities from drawings, abstracting and billing.
- (16) Prepare bar schedules from reinforced concrete drawings.
- (17) Supervise and organise the re-checking of sample accounts previously checked in other sections.
- (18) Prepare statistical analysis of the quality of accounts presented by contractors and the quality of the checking of accounts by the checking unit.
- (19) Advise on areas of dispute and discrepancies in the presentation of accounts and on more efficient methods of measuring on site and checking of accounts.
- (20) Answer general enquiries and queries relating to work of his unit.
- (21) Any other duties as may be assigned from time to time by his superior.

**Resident Site Staff**  
**Resident Survey Officer (Quantity) [RSO(Q)]**

**1. Qualifications**

- (1) Diploma or Higher Certificate in Quantity Surveying or an allied subject from a Hong Kong Polytechnic or Technical Institute or equivalent and;
- (2) Grade E or above in English (Syllabus B) and Chinese Language in the Hong Kong Certificate of Education, or equivalent.

**2. Experience**

One year post-qualification experience in Quantity Surveying.

**3. Duties**

- (1) Process and check interim and final payment certificates.
- (2) Calculate fluctuations for contract payments.
- (3) Assist professional officers in assessing claims and proposed rates for variations.
- (4) Investigate and bring to professional officers' attention problems associated with the work and suggest solutions.
- (5) Calculate and check wage, material and cost of sand and cement content in ready mixed concrete, taking into consideration the price fluctuation and the like.
- (6) Check variation bills and cross-check bill of quantities rates.
- (7) Check quantity transfer in bill of quantities and final accounts.
- (8) Prepare and check abstracts of re-measured engineering works.
- (9) Assist in technical checking and in preparation of interim and final accounts including site measurement.
- (10) Prepare simple estimates.
- (11) Check and undertake or supervise site measurement or remeasurement contracts.
- (12) Assist in preparation of bill of quantities for works projects by taking off

quantities from drawings, abstracting and billing.

- (13) Prepare bar schedules from reinforced concrete drawings.
- (14) Advise on areas of dispute and discrepancies in the presentation of accounts and on more efficient methods of measuring on site and checking of accounts.
- (15) Answer general enquiries and queries relating to work of his unit.
- (16) Take off quantities and prepare bar schedules from contract drawings, and prepare abstract and bill of quantities.
- (17) Prepare and check site measurement of remeasurement contracts including squaring and other related arithmetic operation.
- (18) Prepare and maintain records of certified work up to date.
- (19) Assess effective value of works and materials on site.
- (20) Value dayworks.
- (21) Assist in the preparation of financial reports.
- (22) Any other duties as may be assigned from time to time by his superior.

**Resident Site Staff**  
**Resident Survey Officer (Engineering) [RSO(E)]**

**1. Qualifications**

- (1) Diploma or Higher Certificate in an appropriate discipline from a Hong Kong Polytechnic or Technical Institute or equivalent and;
- (2) Grade E or above in English ( Syllabus B) and Chinese Language in the Hong Kong Certificate of Education, or equivalent.

**2. Experience**

One year relevant post-qualification experience in land surveying.

**3. Duties**

- (1) Co-ordinate the survey support to SRE and RE on computerisation of survey work. Advise SRE/RE on all computerisation requirements including hardware, software, staff requirements including training, implementation of the facilities of the survey section.
- (2) Report and advise on administrative matters relating to survey standards, procedures, personnel and equipment.
- (3) Organise and carry out land and marine field surveys.
- (4) Provide monthly and final measurement quantities to the QS section for the purpose of certifying interim and final payments to the Contractor.
- (5) Attend technical meetings with the Contractor.
- (6) Ensure as far as possible that all Works included in various Contracts are constructed to correct line, level and dimensions.
- (7) Provide surveys and information as requested by the Engineer/supervising officers.
- (8) Liaise with contractors, site staff, engineers and others to receive work and convey results and organise use of shared resources.
- (9) Check the Contractor's submissions, compute quantities, monitor movement and settlement.
- (10) Supervise, direct and control a survey party of Chainmen, Workmen II and driver who work for him/her.



- (11) Perform complicated and high accuracy demanding tasks including highway geometry design computation, its setting out on ground and subsequent monitoring.
- (12) Carry out field survey works for control positions, initial survey data for planning and design, quality control, setting out and comply with all survey requests of the engineering staff in relation to the design and construction of the project.
- (13) Check contractor's setting-out work and verify positions of as-built works by the contractor.
- (14) Carry out all office calculation, reduction and plotting of the field work including use of computers and specialised software.
- (15) Assist RSSO(Q)/RSO(Q) for measuring purpose including computation of earthwork quantities.
- (16) Ensure that survey instruments under his control are maintained in good adjustment and proper working order at all times.
- (17) Any other duties as may be assigned from time to time by his superior.

**Resident Site Staff  
Resident Technical Officer (RTO)**

**1. Qualifications**

- (1) Diploma or Higher Certificate in an appropriate discipline from a Hong Kong Polytechnic or Technical Institute or equivalent and;
- (2) Grade E or above in English (Syllabus B) and Chinese Language in the Hong Kong Certificate of Education, or equivalent.

**2. Experience**

One year relevant post-qualification experience.

**3. Duties**

- (1) Enable professional engineering staff to obtain the necessary technical support.
- (2) To be responsible for processing and editing of all survey data input and production of joint survey record plans.
- (3) Prepare documentation and the estimation of bulk quantities for all contracts.
- (4) Carry out technical guidance on computerised data gathering and recording to site survey officers.
- (5) Undertake the more complex designs, calculations and drawings.
- (6) Acquire drawing equipment and stores and coordinate their issue and use with proper record-keeping.
- (7) To be responsible for the safe keeping of drafting equipment, stationery and drawing materials etc.
- (8) To be responsible for keeping and updating of divisional records and information system regularly.
- (9) Assist professional staff in the technical matters.
- (10) Give advice on the usage of the computer software currently in use.
- (11) Develop and maintain software for simple management and technical applications.

- (12) Undertake preliminary system analysis and design.
- (13) Maintain an inventory record of the computer items and library.
- (14) Process the procurement of standard computer equipment.
- (15) Carry out minor design work and prepare drawings and sketches.
- (16) Carry out plotting related to engineering surveys.
- (17) Carry out site visits and prepare field sketches.
- (18) Prepare programme charts, works progress schedules and plans.
- (19) Check and coordinate for amendment of drawings.
- (20) Produce record drawings.
- (21) Maintain records of drawings and charts.

**Resident Site Staff  
Labour Relations Officer  
(Equivalent to Resident Assistant Clerical Officer (RACO) rank)**

**1. Qualifications**

- (1) Five subjects at Grade E or above in the Hong Kong Certificate of Education (HKCEE) (including Chinese Language, English (Syllabus B) and Mathematics) or equivalent and;
- (2) Preferably have completed a post secondary certificate programme on human resources or personnel management.

**2. Experience**

Full-time working experience on personnel management or human resources related duties and good job records. Good command of both oral and written English and Chinese and good computer knowledge preferably with past experience on the operation of a computerized smart-card system.

**3. Duties**

- (1) To act as a one-point contact for the Site Personnel on Site on any enquires to employment matters.
- (2) To conduct briefing sessions to inform and to educate the Site Personnel the benefits of the wage payment control measures being implemented under the Contract, in particular the workers' obligations to report wage arrears.
- (3) To conduct regular site visits to promote the monitoring system and to establish contacts with Site Personnel to obtain feedback.
- (4) To monitor payment of wages and MPF contributions and to assess whether they are made timely by the Contractors and all subcontractors.
- (5) To oversee the setting up and maintenance of a record system on employment contracts, workers attendance, re-deployment, and wage payments.
- (6) To undertake regular physical checks to verify the accuracy and reliability of the records and to identify irregularities, if any, for early intervention.

- (7) To establish a simple and user friendly complaint system, including the operation of a telephone hotline to receive enquires from Site Personnel on employment matters and to receive reports on wage defaults.
- (8) To alert the Engineer/Engineer's Representative of anomalies and to refer the same to the Contractor for investigation and appropriate follow up actions.
- (9) To refer to the Labour Department complaints on wage arrears as soon as they are received and to provide necessary assistance to Labour Department to facilitate investigation and/or dispute resolution where appropriate.

**Resident Site Staff  
Resident Clerical Officer (RCO)**

**1. Qualifications**

5 passes in HKCEE including English Language (Syllabus B), Chinese Language and Mathematics or equivalent.

**2. Experience**

Eight years relevant experience with preferably three years experience in handling public enquires and relation matters.

**3. Duties**

- (1) Assist the professional staff in dealing with queries and complaints from the public who are affected by the proposed works and streamlining the issues which interface with WSD's daily operation.
- (2) Handle complaints and enquiries from the general public.
- (3) Provide support to the professional staff in periodic updating of the work progress to the concerned parties, such as, the District Councils.
- (4) Any other duties as may be assigned from time to time by the SRE/RE.

**Resident Site Staff  
Resident Assistant Clerical Officer (RACO)**

**1. Qualifications**

5 passes in HKCEE including English Language (Syllabus B), Chinese Language and Mathematics or equivalent.

**2. Experience**

Two years relevant experience.

**3. Duties**

- (1) Assist the professional staff in the establishment and maintenance of a system for filing of site documents including contract documents, correspondence, reports, forms, drawings, charts and records.
- (2) Handle day-to-day matters relating to receipt and despatch of correspondence, cleaning and maintenance of the site office, coordination of site transport etc.
- (3) Provide clerical support to the site staff including compilation of statistics and preparation of routine returns.
- (4) Coordinate with the Consultants on personnel, office administration and accounting matters of the site staff.
- (5) Any other duties as may be assigned from time to time by the SRE/RE.

**Resident Site Staff  
Resident Clerical Assistant (RCA)**

**1. Qualifications**

Completion of Form IV or equivalent.

**2. Experience**

Two years relevant experience.

**3. Duties**

- (1) Carry out general secretarial and clerical duties.
- (2) Type correspondence and associated documents by using a computer as a tool in the discharge of these duties.
- (3) File correspondence and associated document.
- (4) Answer phones & take messages.
- (5) Maintain register of appointments.
- (6) Receive visitors and maintain record of visitors to site.
- (7) Any other duties as may be assigned from time to time by the his/her superior.



## **Minimum Site Supervision Requirements for Geotechnical Works**

The RSS provision for supervision of geotechnical works shall comprise of Cat. I and Cat. III supervisors with the following minimum qualification/experience and main duties:

### **Cat. I supervisor**

#### **1. Qualifications**

RPE(G) or equivalent (from the Engineer's Consultants and is familiar with the Engineer's design).

#### **2. Experience**

Minimum 5 years of post qualification working experience including site supervision of slope/retaining wall works, rock slope stabilization works and natural terrain hazard mitigation works.

#### **3. Duties**

- (1) Carry out periodic inspections on all geotechnical works.
- (2) Inspect all critical items of works and ensure timely follow-up actions are taken to ensure adequate quality of the works and no adverse impact on life and property.
- (3) Check that the design assumptions are valid and that the works are being carried out as specified in the accepted design.

### **Cat. III supervisor**

#### **1. Qualifications and Experience**

A higher certificate or higher diploma holder with minimum 5 years of relevant working experience, or a degree holder with minimum 2 years of relevant working experience.

The Cat. III's working experience should include design and site supervision of slope and retaining wall construction/upgrading works, rock slope stabilisation works and natural terrain hazard mitigation works..

## **2. Duties**

- (1) Resident full-time on site (i.e. during the site working hours) during the carrying out of the works to check that the works are being carried out as specified.
- (2) Check compliance with drawings, specifications, working procedures and method statements.
- (3) Collect and ensure quality of monitoring data and check against the risk limits specified in the contract drawings and specifications.