## <u>Composition, Qualification and Experience, and Duties of the Independent</u> <u>Audit Team</u>

Civil Engineering and Development Department ("CEDD") shall engage an Independent Audit Team ("IAT") to monitor and audit the operation of the CEDD approved off-site steel reinforcing bar prefabrication yards ("the Yards").

The IAT shall be a certification body accredited under the Hong Kong Certification Body Accreditation Scheme of the Hong Kong Accreditation Service, providing services in certification of quality management system to ISO 9001 and third-party product certification of construction materials/products.

The IAT shall comprise a Registered Structural Engineer ("RSE") under the Buildings Ordinance, Quality Audit Team Leader(s) ("QTL(s)") and Quality Audit Supervisor(s) ("QS(s)"). The minimum qualifications and experience of the QTL(s) and QS(s) must at least be equivalent to the Technically Competent Persons of grade T4 of Authorised Person's stream and grade T3 of RSE's stream respectively for building works, as stipulated in the Technical Memorandum for Supervision Plans and Code of Practice for Site Supervision issued by the Buildings Department.

All members of the IAT must not have any association with the Yards including the Plant Manager and senior management, such as President, Chairman, Directors, Managing Director, General Manager, etc. of the Yards. There shall be no real or perceived conflict of interest for the IAT to conduct its sampling, inspecting, checking, monitoring and auditing duties.

## The major duties of IAT include:

- (i) inspect, monitor and audit the Yards' due performance and quality control of incoming rebar materials and prefabricated rebar products;
- (ii) check the stockist's and manufacturer's certificates/documents of the incoming rebar materials for Government projects to ascertain that the materials are in compliance with the requirements of the purchaser's specification and relevant standards;
- (iii) check quality control records of the incoming rebar materials;

- (iv) select samples of the incoming rebar materials for compliance testing;
- (v) arrange collection of test samples by testing laboratories or arrange delivery of test samples under supervision by personnel assigned by CEDD to the testing laboratories;
- (vi) arrange compliance testing and if necessary, retesting of the incoming rebar materials for Government projects;
- (vii) check and assess the results of compliance testing of the incoming rebar materials for Government projects against the purchaser's specification and relevant standards and follow up with the testing laboratories to sort out any irregularity;
- (viii) monitor, audit and validate the Yards' Quality Management System ("QMS");
- (ix) prepare and submit the monthly inspection and materials testing reports and the quarterly audit reports to CEDD for Government projects, on their findings and observations about the Yards' performance, results of any performance monitoring, production inspections, and audits on quality assurance and traceability;
- (x) check to ensure that the Yards' bar bending schedules have been agreed with the purchasers before fabrication for Government projects;
- (xi) check the method and procedure adopted by the Yards to ensure that the dimensions of prefabricated rebar products produced by the Yards for Government projects are in compliance with the requirements of the purchaser's specification and relevant standards;
- (xii) check the traceability system being implemented throughout the Yards from the arrival of the materials to the delivery to the purchaser's site that the prefabricated rebar products shall be identifiable with production information traceable up to the rebar's manufacturer;
- (xiii) check the fabrication processes of the Yards and review/comment the Yards' quarterly operations reports;
- (xiv) examine the statistical data on the quality of the prefabricated products including the acceptance and failure rates compiled by the Yards;
- (xv) check the arrangement for segregation of conforming materials/products and non-conforming materials/products for disposal;

- (xvi) monitor the effectiveness and efficiency of the Yards' operation;
- (xvii) check all quality control records, and test reports and certificates associated with the production of the prefabricated products;
- (xviii) audit the calibration records of production equipment and control measuring devices of the production process;
- (xix) review the Yards' QMS and provide advice on areas for continuous improvement on the Yards' QMS and quality assurance requirements;
- (xx) liaise with the Yards' management and report to CEDD on unanticipated events which prevent the delivery of good quality products;
- (xxi) handle enquiries and investigate complaints associated with the quality of the prefabricated products of the Yards and report to CEDD;
- (xxii) advise CEDD on quality assurance and logistics issues as well as areas for improvement on the rebar prefabrication operation; and
- (xxiii) liaise and attend regular meetings with CEDD.