Ref: BD _____

Address: _____

Appendix _____ to approval dated _____

Elastomeric/Mechanical Bearing Works

In giving this approval of plans, I hereby impose the following conditions under item 6 in section 17(1) of the Buildings Ordinance (BO):

(a) Qualified site supervision of bearing works, by experienced and competent persons as defined in (b) and (c), should be provided to ensure that the works are carried out in accordance with the plans approved and that the required standards are complied with.

(b) The Registered Structural Engineer (RSE) should assign a quality control supervisor to supervise the works, determine the necessary frequency of inspection by the quality control supervisor which should not be less than once a week, and devise inspection check lists. The minimum qualifications and experience of the quality control supervisor is to be the same as the Technically Competent Person of grade T3 under the RSE's stream, as stipulated in the Code of Practice (CoP) for Site Supervision 2009.

(c) The Registered General Building Contractor (RGBC) should assign a quality control co-ordinator to provide full time on site supervision of the works and devise inspection check lists. The minimum qualifications and experience of the quality control co-ordinator is to be the same as the Technically Competent Person of grade T1 under the RGBC's/Registered Specialist Contractor's stream, as stipulated in the CoP for Site Supervision 2009.

(d) The names and qualifications of the supervisory personnel representing the RSE and the RGBC respectively should be recorded in an inspection log book. The date, time, items inspected and inspection results should be clearly recorded in the log book. The log book should be kept on site for inspection by representatives of the Buildings Department.

#2. Under item 7 in section 17(1) of the BO, you are required to submit amendment plans providing the following information and substantiated with the manufacturer's catalog for approval:

(a) Name of bearing manufacturer and its factory plant;

(b) Brand and model number of the bearing;

(c) Constituent materials and corresponding material standard of the bearing;

(d) Values of stiffness in compression and in shear of elastomeric bearing;

(e) Details of fixings to superstructures and substructures;

(f) Details of protective coatings;

(g) Method of installation;

(h) Acceptance criteria for the tests required to be carried out for the proposed bearing; and

*(i) Technical manual/data sheet, records of past test reports and reference reports.

#3. Consent to the commencement and carrying out of the bearing works now approved will not be given until the information specified in paragraph 2 has been submitted and found satisfactory. Section 16(3)(ba) of the BO refers.

4. Under regulation 10 of the Building (Administration) Regulations (B(A)R), a copy of quality assurance scheme of the manufacturer is required to be submitted prior to the application for consent to the commencement of the bearing works. The quality assurance scheme should include the following details:

*(a) Quality control documentation relating to the production of the bearings.

*(b) Sample mill certificates of the constituent materials used to produce the bearings.

*(c) Documents to prove that manufacturing of the bearings are by a factory or factories with ISO 9001 quality assurance certification.

(d) A bearing test proposal including detailed method statement and acceptance criteria of the tests as specified in paragraph 6 below.

(e) A method statement of installing the bearings including description of any special equipment involved, its frequency of calibration, any special training to be provided to the site installers and the inspection required.

5. Under regulation 10 of the B(A)R, a report is required to be submitted within 60 days of the delivery of the bearing to the site which should include:

(a) A certificate for each type of bearing used which shows the manufacturer's name, the date and place of manufacture, the material standards and results of the tests[@] of the bearings as proposed in paragraph 4(d) above.

(b) A statement signed by the RSE to confirm that the acceptance criteria appropriate to the tests have been complied with.

6. Bearing tests should conform to section 20 of the General Specification for Civil Engineering Works – Bridge Works as follows:

(a) Sliding bearing and bearing which contains sliding parts shall be subject to friction test to determine the coefficient of friction, flatness, bonding properties and resistance to mechanical damage.

(b) Bearing other than elastomeric bearing shall be subject to vertical load test and horizontal load test.

(c) Elastomeric bearing shall be tested to determine the stiffness in compression and in shear.

@ The test carried out by an accredited laboratory should be within its scope of accreditation. To ensure this, test results should be reported on a HOKLAS Endorsed Certificate or equivalent Certificate/Report issued from other laboratory accreditation bodies which have reached mutual recognition agreements/arrangements with the HOKLAS.

Laboratory/Organisation/Testing Agency for carrying out the test(s) should be independent of the Registered General Building Contractor (RGBC)/Registered Specialist Contractor (RSC).

To be deleted if inapplicable, i.e. the information has already been provided in the plan submission.

* Not required if the bearing is supplied by a manufacturer whose name and address is included in the list of approved suppliers of materials and specialist contractors for public works kept by the Development Bureau under the category of Supply and Installation of Bearings for Highway Structures.