



**THE  
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**THE BUILDINGS ORDINANCE, 1994**

**THE CITY OF KUCHING NORTH  
(EARTHWORKS) BY-LAWS, 2002**

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## THE BUILDINGS ORDINANCE, 1994

THE CITY OF KUCHING NORTH  
(EARTHWORKS) BY-LAWS, 2002

(Made under section 8A(17))

## PART I

## PRELIMINARY

In exercise of the powers conferred by section 8A(17) of the Buildings Ordinance, 1994 [*Cap. 8*], the Commission of the City of Kuching North has made the following By-laws:

**Citation and commencement**

1. These By-laws may be cited as the **City of Kuching North (Earthworks) By-laws, 2002**, and shall come into force on the 1st day of September, 2002.

**Interpretation**

2. In these By-laws—

“building” shall have the same meaning assigned to it in the Ordinance;

“building line” shall have the same meaning assigned to it in the Ordinance;

“Commission” means the Commission of the City of Kuching North established under section 4 of the City of Kuching North Ordinance, 1988 [*Cap. 49*];

“earthworks” shall have the same meaning assigned to it in the Ordinance;

“engineer” shall have the same meaning assigned to it in the Ordinance;

“foundation earthworks” includes the construction of foundation, basement, substructure, piling, underpinning and trenching;

“minor earthworks” means any earthworks as specified in the Third Schedule;

“Ordinance” means the Buildings Ordinance, 1994 [*Cap. 8*];

“qualified person” shall have the same meaning assigned to it in the Ordinance;

“vehicle” shall have the meaning assigned to it under the Road Transport Act 1987 [*Act 333*].

## PART II

## SUBMISSION AND APPROVAL OF PLANS

**Approval of Commission required for earthworks**

3.—(1) No person shall commence or carry out any earthworks without having first submitted to the Commission plans and specifications in respect of the earthworks and obtained the approval of the Commission thereto, as required under section 8A(1) of the Ordinance.

(2) In exercise of its powers under this by-law, the Commission shall—

(a) where the earthworks involve the removal of rock materials from any land, consult the Superintendent of Lands and Surveys; and

(b) have due regard to the provisions of the Natural Resources and Environment Ordinance [*Cap. 84 (1958 Ed.)*] including any order or rule made, or any direction or guideline issued, thereunder for the protection and enhancement of the environment.

(3) In granting its approval under paragraph (1), the Commission may impose such terms and conditions as it deems fit.

**Plans of earthworks to be submitted and certified**

4.—(1) Plans relating to earthworks required to be submitted under these By-laws shall be submitted together with an application form in Form A in the First Schedule and shall be accompanied with the fees as set out in the Second Schedule and shall contain the particulars required under these By-laws.

(2) Such plans shall be submitted and signed by an engineer and shall—

(a) contain a certification by him that the specifications and particulars stated therein are correct; and

(b) be countersigned by the owner of the land concerned or his agent authorised in writing and shall bear the full address of the owner or agent, as the case may be.

(3) The plans and specifications approved by the Commission may be resubmitted for amendment, variation or alteration but in such a case the requirements under paragraph (2) shall apply *mutatis mutandis*.

(4) Where the earthworks are to be commenced or carried out for the purpose of the construction of any building or any other construction or work whatsoever, the plans and specifications relating to the earthworks shall be submitted to the Commission at the same time as the plans and specifications

in respect of the building or other construction or work required to be submitted under the Ordinance.

(5) Unless the earthworks are commenced within twelve months after approval of all the plans and specifications relating thereto required under by-law 7, every approval of such plans and specifications shall lapse on expiry of the said period, provided that the Commission may extend the period as he thinks fit subject to payment of the fees specified in the Second Schedule.

#### **Duties and responsibilities of engineer**

5.—(1) The engineer submitting the plans under by-law 3 shall be responsible for the proper execution of the earthworks and shall continue to be so responsible until the completion of the earthworks unless—

(a) with the agreement of the Commission, another engineer is appointed to take over; or

(b) the Commission agrees to accept his withdrawal.

(2) Where the Commission agrees to accept an engineer's withdrawal under paragraph (1)(b), the earthworks shall not commence or continue until another engineer is appointed to take over.

(3) The engineer submitting the plans shall diligently carry out such supervision and make such inspections as may be necessary, to ensure that the earthworks are carried out in accordance with the plans and specifications, directions, amendments or conditions approved or imposed by the Commission and generally with the provisions of these By-laws.

(4) The engineer submitting the plan shall before the commencement of the earthworks notify the Commission in Form B in the First Schedule of the intention to commence the earthworks.

(5) The engineer submitting the plans shall, within one week of the completion of the earthworks, notify the Commission in writing of the completion thereof.

(6) Paragraph (1) shall not be construed as to relieve the responsibility of any person from section 9 of the Ordinance.

(7) For the purpose of this by-law, the term "engineer submitting the plans" shall include any engineer appointed to take over.

#### **Duties and responsibilities of owner**

6. The duties and responsibilities of the owner of the land shall be—

(a) to require the developer for whom any construction works are to be carried out to appoint a qualified person in respect of those works; the qualified person shall be responsible to advise the developer in the appointment of an appropriate, competent and experienced contractor to carry out the building works;

(b) to require the joint certification by the qualified person, contractor and site supervisor that every stage of the construction work has been carried out according to all the relevant requirements; the stages which are involved in this certification are—

(i) site formation works including the preparation of temporary drainage, crusher run road surfacing and the erection and maintenance of storm water retention ponds and silt traps according to the plans and specifications;

(ii) proper execution, surface treatment and drainage works including turfing and slope stabilisation for the surrounding sites which have been exposed due to the construction work; and

(iii) piling and excavation works have been properly executed according to the plans and specifications.

#### **Plans to be in duplicate**

7.—(1) All plans shall be submitted in duplicate or in as many copies as may be required by the Commission.

(2) One set of the plans shall be retained by the Commission and one set shall be returned to the person submitting the plans after approval.

(3) If the plans are disapproved, one set of such plans shall be returned to the person submitting the plans together with the grounds of disapproval.

#### **Reports, plans and particulars to be submitted**

8.—(1) Unless exempted by the Commission, the following reports, plans, specifications and particulars shall be submitted:

(a) a preliminary site evaluation report together with details of erosion and sediment control measures;

(b) a site plan drawn to a scale of not less than 1:1,000 showing in clear colour the site of the earthworks, road access, mainstreams, natural water courses, drains and adjoining lands or part thereof, indicating the scale used and the North point;

(c) plans at 1.5 metre contours showing both existing grounds on which the earthworks are to be carried out and adjoining lands to a scale

of not less than 1:500; the survey plan shall be certified by a Licenced Surveyor;

(d) plans to a scale of not less than 1:500 showing—

- (i) platform levels for the building or buildings;
- (ii) finished road levels;
- (iii) drain invert levels and crossings;
- (iv) points of discharge of drainage;
- (v) closure or deviation of any mainstreams and natural water courses or improvements thereto;
- (vi) any excavation, cutting or filling exceeding 2.0 metres in depth or height;
- (vii) protection to the earthworks against erosion, including provision for temporary drainage, stormwater retention ponds and silt traps during the continuance of the earthworks;
- (viii) proposal for the construction and maintenance of the designed drainage system, including permanent silt traps; and
- (ix) provision of crusher-run road surfacing or sealing off the access road leading to the project site;

(e) longitudinal and cross-sectional plans of not less than 1:100 for the vertical scale and of not less than 1:500 for the horizontal scale showing the mass haul of the earthworks to be carried out on the site;

(f) the method of excavation, levelling, filling, protective piling or any other geotechnical processes to be carried out;

(g) schedule of the earthworks and the other order in which the earthworks are to be phased;

(h) (i) the amount of earth to be excavated and the place where such excavated earth is to be deposited and accompanied with approval by the relevant authority to move such earth;

(ii) the amount of earth to be filled and the location from which the earth for filling is to be obtained and accompanied with approval by the relevant authority to move such earth;

(i) proposal for gathering and removal of vegetation from the project site and composing of the vegetative matters;

(j) the precautions taken to protect the adjoining lands, buildings, roads and other properties;

(k) detailed plans to be scale of not less than 1:50 and specifications of any close sheet piling or other retaining structure or stabilization of slope required;

(l) identification and preservation of selected trees not to be cut;

(m) proposal for planting of trees, shrubs and grass during and upon completion of the project; and

(n) proposal for the control of dust which may arise as a result of the earthworks.

(2) Where relevant, the calculations and all ground levels and contours referred to in this rule shall be drawn with reference to the Land and Survey Department datum level.

#### **Plans may be submitted separately**

9. The plans and specifications required under by-law 7 may, with the permission of the Commission, be submitted separately but in such a case the certification required under by-law 4 shall also accompany each subsequent set of plans and specifications:

Provided that no earthworks shall commence until all the plans and specifications required under these By-laws have been approved.

#### **Piling works**

10.—(1) If piling works are proposed, plans submitted under by-law 7 shall also include—

(a) plans to a scale of not less than 1:50 and specification of the material piles and the method of piling that is to be carried out; and

(b) a certification by the engineer to the effect that the noise level due to the piling works will not cause any undue annoyance or be a nuisance to the residents in the surrounding area.

(2) Piling works shall be carried out during daylight working hours or such hours that may be approved by the Commission, subject to such terms and conditions as may be imposed.

#### **Monitor noise level and weekly reports**

11. Wherever directed by the Commission, the engineer shall monitor the noise level caused by the piling works and weekly reports of such monitoring shall be certified and submitted to the Commission.



**Relevant codes of practice to be complied with**

12.—(1) Wherever applicable the plans, specifications and calculations submitted under these By-laws shall comply with the following codes of practice as amended from time to time:

- (a) Site Investigation—British Standards Code of Practice 2001;
- (b) Earthworks—British Standards Code of Practice 2004;
- (c) Foundation—British Standards Code of Practice 2004;
- (d) Civil Engineering Code of Practice No. 2 on Earth Retaining Structures, issued by Institution of Structural Engineers, United Kingdom; and
- (e) Foundation and substructures for non-industrial buildings of not more than 4 storeys—British Standards Code of Practice 101.

(2) Where there is issued a corresponding Malaysian Standards Code of Practice after the coming into force of these By-laws the same shall supersede the British Standards Code of Practice on the same subject matter and shall be complied with:

Provided that this shall not affect plans and specifications already approved under the British Standards Code of Practice on earthworks carried out thereunder.

**PART III****SPECIAL PROVISIONS RELATING TO FOUNDATION WORKS****Requirement of close steel sheet piling**

13.—(1) (a) The sides of all foundation earthworks exceeding 3.5 metres in depth shall be protected by close steel sheet piling.

(b) In other cases not exceeding 3.5 metres in depth, other alternative methods of protection to the banks approved by the Commission shall be erected.

(2) The requirements under paragraph (1)(a) may be relaxed, varied or exempted by the Commission on being satisfied from specifications, designs and calculations submitted to the Commission that an alternative method of protection is at least as effective or better and will give adequate protection to adjoining properties or that they are unnecessary, as the case may be.

**Soil to be investigated and water table to be determined**

14.—(1) Soil investigation shall be carried out and the depth of water table in any foundation earthworks shall be determined; and the engineer

submitting the plans under by-law 4 shall submit the soil investigation reports and shall certify that any lowering of water table will not affect any surrounding structures, roadways or any other properties.

(2) (a) The owner of the land must submit a geotechnical report and a design report prepared by a qualified person for all earthworks in respect of the following:

(i) for any site on which is to be constructed a building of a height of five storeys or more;

(ii) on a site with a natural gradient of 25 degrees or more;

(iii) on a site where a retaining wall of a height of 4 metres or more is to be constructed;

(iv) on a site which has been excavated exceeding the depth of 3 metres;

(v) on a mined-out land;

(vi) on a land with underlying limestone bedrock; and

(vii) on a site where the distance of the nearest coastline or riverbank to the edge of the proposed platform or structure is less than 50 metres.

(b) All geotechnical reports and geological reports must be certified by a qualified person in Form D in the First Schedule.

(c) All geotechnical reports, geological reports and soil investigation must comply with the minimum requirements in the Fourth Schedule.

#### PART IV

#### PROVISIONS RELATING TO GENERAL EARTHWORKS

##### **Protective hoarding**

15. A protective hoarding to the requirements of the Commission shall be erected along the perimeter of the project site of the earthworks whenever required.

##### **Trees not to be cut until site is to be worked**

16. Where there are trees on the earthwork site, the same shall not be cut or cleared until the earthworks site is ready to be worked.

**Earthworks exceeding 3.5 metres**

17.—(1) All earthworks exceeding 3.5 metres in height or depth shall, unless exempted by the Commission, be protected by a retaining structure or stabilization of slopes.

(2) In earthworks where permanent retaining structure or stabilization of slopes are exempted by the Commission, there shall be provided with temporary retaining structures or stabilization of slopes during the continuance of such earthworks.

**Phasing of earthworks**

18. Earthworks to be carried out shall be phased in the order submitted under by-law 8(1)(g) and no earthworks shall commence or continue to the next phase unless any conditions imposed by the Commission under by-law 19 have been complied with and the engineer submitting the plans certifies in writing that the earthworks are not likely to cause nuisance or damage to the surrounding properties.

**Conditions may be imposed at any time before work can continue to the next phase**

19. The Commission may at any time before any earthworks may be continued to the next phase require—

(a) the drainage and deviation of mainstream and natural water courses, including provisions of adequate bunds and culverts;

(b) that silt traps and other sediment control facilities are adequately provided and properly maintained;

(c) that retaining structures, where necessary, are provided;

(d) that slopes are adequately protected against erosion;

(e) that all practical measures are taken to control any dust which may arise as a result of the earthworks;

(f) that foundation of the road is laid and the surface of such road is sealed so as to prevent silt being washed into existing watercourses;

(g) that fill areas are firmly consolidated and compacted;

(h) that cut and fill batters shall be turfed or hydroseeded as soon as possible; and

(i) that larger or steeper cut or fill batters shall be terraced and provided with appropriate drainage installations to discharge surface runoff.

## PART V

## MISCELLANEOUS

**Further plans, specifications, etc., if required**

20. The Commission may, where it considers it necessary, require further plans, specifications and particulars to be submitted or give further directions or make further amendments to the plans or impose further conditions as it deems fit and such directions, amendments or conditions shall be complied with.

**Transportation**

21. All materials to be transported to or from the earthworks site shall be deposited in such place and in accordance with such directions and conditions as may be imposed by the Commission.

**Vehicles for transporting materials**

22. Every person who uses any vehicles for the purpose of transporting materials to or from any earthworks site shall—

(a) ensure that the body of the vehicle is sound and free from gaps or holes through which the materials may fall out;

(b) ensure that the materials are not loaded in the vehicle above the height of the sides of the vehicle;

(c) cover the materials with tarpaulin, plastic, canvas or any other suitable material;

(d) ensure that the wheels and tyres of all vehicles are washed thoroughly clean at the exit point in such manner as may be specified by the Commission before allowing the vehicles to go onto any public road; and

(e) use the routes, as specified by the Commission and comply with all other conditions as may be determined by the Commission.

**Prohibition of open burning**

23. No person shall carry out open burning of any refuse or combustible materials on or in the vicinity of the project site of the earthworks.

**Fees**

24. The fees payable under these By-laws are as set out in the Second Schedule.

**Offences**

25. Any person who—

(a) submits plans, specifications, calculations or particulars which are false in any material particular or gives false certification required under the First and Third Schedules;

(b) without reasonable excuse fails to comply with any directions, orders or conditions given or imposed under these By-laws; or

(c) contravenes any of the provisions of these By-laws,

commits an offence and shall, on conviction, be liable to a fine not exceeding five thousand ringgit and shall also be liable to a further fine, not exceeding two hundred ringgit for every day during which the offence is continued.

**Exemptions**

26. These By-laws shall not apply to—

(a) earthworks carried out under any written law relating to mines;

(b) earthworks carried out for agricultural purposes; and

(c) minor earthworks as specified in the Third Schedule.

*FIRST SCHEDULE*

**FORM A**

**SUBMISSION OF PLANS FOR EARTHWORKS  
(By-law 4)**

Section A

To: The Director,  
City of Kuching North

I/We make an application for the following proposed works:

.....  
.....  
.....  
.....

on behalf of (Name of Owner/Developer) .....

Drawing No. ....

Calculations and specifications are submitted in duplicate.

I take full responsibility for the design, specifications and performance of the works.

Signature of Submitting Engineer: .....

Name: .....

Address: .....

Board of Engineers Registration No.: .....

Discipline: .....

Date: .....

*FIRST SCHEDULE*

**FORM A**

**SUBMISSION OF PLANS FOR EARTHWORKS  
(By-law 4)**

Section A

To: The Director,  
City of Kuching North

I/We make an application for the following proposed works:

.....  
.....  
.....  
.....

on behalf of (Name of Owner/Developer) .....

Drawing No. ....

Calculations and specifications are submitted in duplicate.

I take full responsibility for the design, specifications and performance of the works.

Signature of Submitting Engineer: .....

Name: .....

Address: .....

.....

Board of Engineers Registration No.: .....

Discipline: .....

Date: .....

Section B

To: The Director,  
City of Kuching North

I/We, the Owner/Developer of this project, confirm that the above engineer

Name: .....

Board of Engineers Registration No.: .....

Address: .....

has been authorized to submit plans on my/our behalf.

I/We undertake as follows:

1. The name and address of the engineer responsible for the supervision of the works will be submitted to you before the commencement of works.
2. I/We shall comply fully with the requirement of the Buildings Ordinance, 1994, and the City of Kuching North (Earthworks) By-laws, 2002.
3. Authorized officers of the Commission shall at all reasonable times have access to those works, material stores and sites where those works are being carried out.
4. I/We shall jointly and severally be responsible with the engineer for any damages to parties, etc., arising out of the construction of those works.

Signature: .....

Name: .....

Address: .....

Date: .....



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FORM B  
NOTICE OF COMMENCEMENT OF EARTHWORKS  
(By-law 5(4))

Date: .....

To: The Director,  
City of Kuching North

I give notice that after the expiration of seven (7) days from the date of receipt of this notice, I intend to commence/resume earthworks operation, viz.:

On Lot/s .....

Section .....

at .....

for .....

in accordance with the Approved Plan No. ....

.....  
Signature of Submitting Engineer

Name: .....

Address: .....

Board of Engineers Registration No.: .....

Discipline: .....

FORM C  
CERTIFICATION OF MINOR EARTHWORKS  
(Item 4 of Third Schedule)

To: The Director,  
City of Kuching North

I certify that the excavation works to be carried out  
on Lot/s .....  
Section .....  
at .....  
for .....  
.....  
.....

is of a minor character in accordance with the Third Schedule of the City of Kuching North (Earthworks) By-laws, 2002.

2. I understand that the exemption from the requirements of the City of Kuching North (Earthworks) By-laws, 2002, will not absolve me from the liability to any person for any damage caused by those earthworks.

3. I further agree to indemnify and keep you indemnified against any claim, damage, loss, action or proceeding that may be brought against you arising out of and incidental to those earthworks.

Date: .....

.....  
*Signature of Submitting Engineer*

Name: .....

Address: .....

Board of Engineers Registration No.: .....

Discipline: .....

FORM D

CERTIFICATION OF GEOTECHNICAL REPORT

(By-law 14(2)(b))

To: The Director,  
City of Kuching North

I certify that all explanations, information and testings as contained in this Report are done solely for Lot/s .....  
..... Section .....  
Block ..... at .....  
for .....

I further certify that all explanations, information and testings in the report are carried out based on the specifications and sound engineering/land surveying practice and certify that the soil conditions are consistent with the design criteria used and I/We accept full responsibility accordingly.

.....  
*Signature of Submitting Engineer*

Name: .....  
Address: .....  
.....  
Board of Engineers Registration No.: .....  
Discipline: .....

.....  
*Signature of Land Surveyor*

Name: .....  
Address: .....  
.....  
Board of Engineers Registration No.: .....  
Discipline: .....

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**SECOND SCHEDULE**
**FEEES**

(By-law 24)

(a)	Where foundation earthworks do not exceed 6 metres below the highest ground level and involving up to 500 cubic metres of earth.	RM65.00
	For every additional 100 cubic metres of earth or part thereof involved.	RM12.50
(b)	Where the foundation earthworks exceeds 6 metres below the highest ground level.	1/2 times the fee prescribed in (a) above.
(c)	Where the foundation earthworks exceeds 12 metres below the highest ground level.	2 times the fee prescribed in (a) above.
(d)	General earthworks	RM250.00 per hectare or part thereof.
(e)	Visit to the site for inspection made by an authorized officer of the Commission.	RM30.00 per visit
(f)	Inspection of an approved plan at the office of the Commission.	RM6.00
(g)	For copying a set of plans with the approval of the person submitting.	RM10.00 per sheet, subject to a minimum of RM50.00.
(h)	For certified true copy of a set of plans.	RM10.00 per sheet, subject to a minimum of RM50.00.
(i)	Extension of validity period of earthworks	50% of the original fee.

**THIRD SCHEDULE****MINOR EARTHWORKS**

(Provided that all works, inclusive of landscaping works on a slope that are falling under by-law 14(2)(a) is not categorized as minor works)

1. Excavation for landscaping without structures to a depth not exceeding three metres.
2. Excavation for the planting or uprooting of trees or poles to a depth not exceeding three metres.

3. Excavation for the construction of manholes and laying of pipes/cables to a depth not exceeding three metres.
4. Excavation for pit foundation not exceeding three metres by three metres for residential buildings which are at least three metres away from the boundary and not exceeding a depth of three metres.
5. Such other acts or works which the Commission may classify as minor earthworks.
6. For item 4, the exemption will only apply if the Engineer submit a certification in Form C in the First Schedule.

*FOURTH SCHEDULE*  
GEOTECHNICAL REPORT  
(By-law 14)

All geotechnical reports submitted in respect of any earthworks shall, unless inapplicable, contain the following:

- (1) Biodata of the qualified person.
- (2) Certification by qualified person under Form D in the First Schedule.

Note: the biodata and Form D to be made available for all types of field involved in the preparation of the report.

- (3) Table of contents to list out all topics contained in the report with page numbering.
- (4) Introduction executive summary of the proposed works, site conditions and conditions of adjoining sites. Aerial photographs, locality plans and relevant plans to be included.
- (5) Information and contents to cover the following:
  - (a) All descriptions and information that will affect the design of piling system such as:
    - (i) topographic plan;
    - (ii) sections' drawings that show clearly the surface and slope of the site before and after the development/earthworks;
    - (iii) All testings that can explain the strength of soil structure, cavity under the site, land composition, *etc.*
  - (b) All descriptions and information that will affect the building structures such as:
    - (i) plan showing the exact location of any trees that are having trunk grith diameter of 250 mm or more;
    - (ii) earthworks plan inclusive of the trees that are going to be cut;
    - (iii) location of existing infrastructures such as underground cables, drains, *etc.*;

- (iv) type of soil excavated or going to be used for filling;
- (v) early signs (before actual works are carried out) showing the movement of earth, erosion, *etc.*
- (c) All descriptions and information about underground water, existing water table, streams, river, rate of water absorption, rainfall record, *etc.*
- (6) Test Methodology: Descriptions about how the various tests are carried out inclusive of:
  - (a) desk study involving all information received or taken from relevant departments plans, reference books, *etc.*;
  - (b) surface investigations which explain the actual situation and condition of the site and surrounding area;
  - (c) subsurface investigations which include the explanation on the various kind of tests carried out for the determination of soil structure, geotechnical problem and water table/underground water.
- (7) Analysis and outcome - to determine whether the site is safe or not for the proposed development.
- (8) Summary and Recommendations:

Based on the analysis and the outcome of various tests and study, the qualified person(s) must summarise and put forward his/her views and recommendations on the following--

  - (a) the suitability of the proposed building with the slope/soil;
  - (b) the effect of the development towards the existing environment/infrastructures;
  - (c) the suitability of piling system with the slope as proposed;
  - (d) slope protection system to be adopted;
  - (e) surface water/drainage system proposed inclusive of protection of existing drains from development and method to ensure the existing drains are functional at all times.

Dated this 4th day of July, 2002.

MADEHI HAJI KOLEK,  
*Commissioner,*  
*City of Kuching North*

(16)JKM.P/SUL/MMKN/046



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