Muscat Municipality
Local Order No. 23/92
Building Regulation For Muscat

Issued on 9th Shawal 1412 H
12th April 1992

Building Regulation For Muscat
The Sultanate Of Oman

INDEX

LOCAL ORDER NO (23/92)
BUILDING REGULATIONS FOR MUSCAT

MUSCAT MUNICIPAL COUNCIL

After perusal of Royal Decree No. 18/84 on the transfer of supervision over Muscat Municipality to the Diwan of Royal Court and Royal Decree NO: 8/92 on the issuance of the Law on the organization of Muscat Municipality and amendments thereof.

And Local Order No (1) on Building Regulations issued on 21-1-1974. And Ministerial Decision No. 40/81 on Building Regulations issued on 24/10/1991.

And according to Royal Orders from His Majesty, The Sultan that building specifications and architectural design should be a combination of Omani, Arab, Islamic and contemporary style & character.

The Municipal Council hereby, issues the following Local Order:

CHAPTER – I
General Provisions

Article 1

DEFINATIONS

Unless stated otherwise the words and phrases used hereafter will have the following meanings:

Minister: The Minister of the Diwan of Royal Court.

Council: The Council of Muscat Municipality.

Municipality: Muscat Municipality.

Council Chairman: The Chairman of Municipality Council.

President: President of Muscat Municipality.

Committee: Public Affairs Committee at the Council.

Owner: The person (persons) or company or an authority who has a little deed or a property identification certificate issued in his/her/their name.

Building: A structure incorporating a group of elements meant to serve a common or different purposes and functions. It includes the walls and all civil works and may consist of one floor only or a number of floors.

Permanent Building : Any Building or structure made of bricks, block works reinforced concrete or stones etc or a metal framework or any other solid permanent material.

Temporary Building : Any building or structure made of materials other than those stated in the definition of the permanent building. Also any building or structure erected by a special permission for a limited period of time, are included in this definition.

Road (Street) : A street shown on the structure plan of the city for the use of cars and pedestrians. It may be of width large enough for division into two way Lanes with a pavement or median in between.

Sikka : A passage or a branch road of narrower width for the use of pedestrians and a limited number of cars.

Lane : A narrow passage or a branching from a sikka but narrower. It is for the use of pedestrians.

Pavement : Is part of the street, road or sikka, which lies between the car lane and private or public properties. It is for the use of pedestrians and for overhead and underground utility service lines

Implementing Party : A person or a group of persons engaged in a construction work. This includes contractors, technicians, craftsmen and labourers.

Leveling Floor : A floor built at split eve! De^ow the ground floor where there is a natural slope within the plot boundary. One side of this floor should be totally clear above the ground level where the natural slope is lower.

Basement : An underground floor below the ground floor but connected to it from inside.

Mezzanine : A secondary floor, which is part of a Commercial, or (Industrial) shop. It is directly connected to the shop and can only be reached though its ground floor.

Roof Floor : The floor above the last permitted floor

Ancillary Building : A construction appended to main building but not connected to it is intended to serve the main building.

Boundary Wall : A fence or wall of permanent material built to approved design at an appropriate height on the boundary of the plot along the property limits.

Projecting Balcony (Balcony-Verandah) : An extended area projecting beyond the building facade/elevation line. It may be open or have a horizontal roof.

Projecting Room : A room partly suspended and extending beyond the building facade/elevation line.

Architectural Projection : Any element for decoration protruding beyond the building facade/ elevation line. This includes sheds for protection against weather conditions on windows, flower beds, cornices on the edge of the building facade/elevation and any architectural projection (vertical or horizontal) on the building facade/elevation.

Flat : Part of the building, which constitutes an independent residential apartment.

House (Villa) : An independent residential unit consisting of one floor or more connected by an indoor staircase.

Open-to-sky : A space or an open-to-sky area within the building, which may be surrounded by walls on all sides (closed open-to-sky) or on three or two sides (open, open-to-sky). Its function is to provide ventilation and natural light to the rooms and adjoining parts of the building.

Pergola : Any roofed shed with geometrical shaped openings. The area of openings, shall be, at least 50% of its surface area.

Height of Building : Is the clear height of the building measured from the main road level in front of the building to the last level of the building. If there is no main road but some streets around the building, the street with the highest level is taken for measuring the height of the building.

Percentage of covered area : Is the percentage of the roofed horizontal area of the building as compared to the total area of land on which the building is erected.

Percentage of the floor area (Building Density) : Is the percentage of the total floors or Floor-Space-Index (FSI) area of the building as compared to the area of the plot on which the building is erected. It is also termed as Floor-Area-Ratio (FAR).

Land Use : Is the purpose for which the land is allotted, zoned or categorized according to the regulations and plans issued by the concerned Authority?

Set Back : An uncovered space or courtyard between the building and the plot boundary. It may be on some or all sides of the plot.

Building Line : The line on which the building is erected. It may be on the boundary of the plot or at a certain setback distance from it as determined by the concerned Authority.

Plot Boundary : The line separating a certain plot of land from the neighbouring properties of others or road(s) etc.

Compound Wall : A wall separating two independent plots. It may be built by the two neighbours jointly.

Parapet Wall : A protective external fence built on the roof of the building for safety purposes, and to architectural requirements.

Bathroom : A room for bathing, provided with a hand washing basin, bath tub (banio) or a shower basin, toilet and bidet. In some oriental buildings the bathroom (Masbah) may be for bathing only and is built separately from the toilet.

Toilet : A room for human refuse.

Sewage Disposal Pipe (Sewer) : A vertical pipe for disposing wastes from toilets and urinals into the nearest inspection chamber.

Waste Water Pipe : A vertical pipe for disposing waste water from sanitary units (toilets and urinals are not included) into the nearest trap or gully trap in the building.

Ventilation Pipe : A vertical pipe joined at the bottom end to a horizontal pipe connected to sanitary connections in order to provide ventilation and prevent the back flow of waste water from sewerage networks and for the fall of internal pressure below the normal air pressure.

Ground Connections : Underground horizontal pipes which take refuse (waste) from the vertical pipes in the building to the last

inspection chamber before it is disposed for treatment within the plot or into the main sewers.

Inspection Chamber (Manholes) : A special chamber with a cover provided in the ground connections located at the end of the sewage disposal pipe on straight lines for examining the connections and cleaning the pipes.

Gully Trap : A check point or trap with a filter of galvanized iron, or any other approved material, and a tight cover. It receives water disposed from the sink units and ground siphons in sewage pipes before it reaches the inspection chamber.

Septic Tank : A basin or tank of certain specifications built below the ground level with entry and exit points for the treatment of liquid waste, to separate and decompose solids through fermentation and coagulation by bacteria.

Soakage Pit : A pit below the ground level to receive effluent from the septic tank for soaking away into ground.

Collection (Holding) Tank : A tank or pit built below the ground level in order to collect human refuse. It may be emptied by vacuum/suction when it is filled up.

Storeroom : A place for storing household & other effects

Major Building Permit : A permit for construction issued by the Municipality (Building Permit Department) or other authorised Department of Municipality after a scrutiny of documents and approval of detailed drawings of the building.

Minor Building Permit : A permit issued by the Municipality (Building Permit Department) after a scrutiny of the documents of the building and the land on which it is constructed. It is issued in case of secondary additions to the building in unplanned areas (old areas) and other works that may or may not require detailed drawings.

Maintenance Permit : A permit issued by the Municipality for the maintenance of the buildings or any existing structures after

examining the official documents of the building and the land on which it is constructed. The maintenance should not introduce any alterations in the type of the building or the materials used for construction.

Article 2 : Approval shall be obtained from the Municipality before a building is constructed, additions to it are made, demolished totally or in part or have external or internal alterations, changed in style, leveled or have a door or window opened. Colours of paintings approved by the Municipality shall be adhered to when the building is painted or re-painted.

Article 3 : Before starting any construction work, organic and botanical materials, if any, shall be removed from the construction site and replaced if necessary by materials approved by the building authorities. The site shall also be treated with insecticides for protection against termites and other insects.

Article 4 : The major building permit shall not be issued unless official documents and plans of the proposed building are attached to the application (see article 5). The minor building permit and the maintenance permit may be issued without drawings if other conditions are fulfilled.

Article 5 : Applications, for the Major building permits shall be submitted to the Municipality "Building Permits Department" in accordance with the procedures in force. The relevant forms shall be filled by the Owner and/or his Consultant. The following documents and plans shall be attached to the application.

A. Copy of the Property Identification Certificate or Ownership Certificate. (The Municipality has the right to ask for the original, if necessary).

B. Site plan (Krooki), or an approved true copy of it issued by the concerned Authority.

C. Any forms, models or conditions that may be made in the interest of work by the Municipality or any concerned Authority.

D. A lay out plan scale 1:100-1:500 depending on the area of the plot, showing the proposed building site and other existing buildings, if any, and dimensions of set backs as determined by the concerned Authority also the thickness of the boundary wall, location and width of the gate or main door, location of services within the site and roads or neighbouring plots. Calculations of the percentage of covered area of building and the percentage of floor area shall also be shown on the layout plan, with North line shown thereupon.

E. The following Architectural plans scale 1:100 minimum:

- Horizontal plan for each floor showing the thickness of external and internal walls and openings. Also the dimension and use of all elements, units and space within the floor and the design information needed for implementation. A horizontal plan, for half of the floor, may be submitted if the building is symmetrical i.e. the symmetry axis passes through the main entrance.

- Vertical plans (facades/elevation). The vertical plan shall show the openings, internal and external projections and other elements of the facade/elevation. Also the details and information needed for implementation plans of two facades/elevations, minimum, shall be submitted.

- An architectural, section (cross or longitudinal) from the highest level in the building to slightly below the ground level showing elements of the building, levels of roofs, openings, floors and the main building material. Applicants shall submit more than one section if so required by the Municipality.

N.B. Detailed Architectural drawings for doors, windows, stairs etc, may not be submitted unless required by the Municipality.

F. The following structural plans (scale 1:100 minimum)

- A horizontal plan for the foundations, columns and ground beams showing all the necessary dimensions, calculation tables and other details needed for checking and implementation.

- A Horizontal plan for Beams and roof slabs for each floor showing the calculation tables and other necessary details for checking and implementation.

- Detailed sectional plans for beams, columns, foundations, staircases, floor slabs and other necessary structural details.

- Design calculations of reinforced cement concrete elements. Indicate the safe bearing capacity of the soil on which the foundations are designed.

- Specifications of materials used for construction, and finishes etc.

G. Horizontal plans scale 1:100 minimum for electrical connections, lighting, telephones and fire-fighting requirements in each floor, if necessary.

H. Detailed plan scale, 1:50 minimum for the septic tank, soakage, pit, collection (holding) tank, inspection chamber and other necessary details etc. Also a horizontal plan scale 1:100 showing the slope of the roof and ground for drainage.

I. A plan scale 1:50 minimum for cross section and details of boundary walls.

J. Other information or details required by the Municipality may also be attached to the application for permit.

Article 6 : A. Existing buildings intended to remain uncharged shall be excluded from the plans and details under Article 5. This does not apply to the provisions where the phrase existing building is mentioned. The dimensions of the existing building shall be shown on the site plan as it is included in the calculations of the percentage of covered area,

B. Plans should be correct, clear and to the proper technical standard.

C. The size and measurement of drawings shall be according to the standard technical practices. Plans included in the drawings shall be properly distributed and clearly typed. Proper technical procedures shall be followed in processing the drawings and preparing project schedules and scope of work.

Article 7 : Standard code of practices adopted in the Sultanate shall apply to structural design calculations of buildings of various heights provided that the safe bearing capacity of soil is used in calculating the foundations.

Article 8 : Materials used in the construction of any new building or additions or alterations of an existing building shall be of high quality and in conformity with local and international standards adopted in the Sultanate of Oman.

Article 9 : If the building height exceeds three floors, the documents and drawings submitted should be supported by a report on soil test signed by a registered consultant, a specialised firm or a recognised soil-testing laboratory, if so required by the Municipality. The Municipality may require the submission of a report of a soil test for buildings of less than three floors, depending on the nature of the site or building in which case the Municipality, may only accept a report, from the designing Consultant stating the nature of the building site and condition of soil at the site. The designing consultant shall be held responsible for the type of soil and its safe bearing capacity.

Article 10 : Drawings and plans shall be submitted in three complete sets signed by a recognised Consultant registered at the concerned Authority. All the necessary information regarding the Consultant shall be filled in the form prepared by the Municipality. The documents attached to the form shall include the name of the designing Consultancy Office and a statement confirming that the structural design of the building is satisfactory, and in accordance with standard code of practice, and[1] design procedures.

Chapter – II
Architectural and Technical Conditions of Buildings

Article 11 : Percentage of Covered Area

The Percentage of covered area differs from one area to another depending on the condition of each area and the type of buildings. Hence, it is not allowed to exceed the percentage set by the Authority for each area according to its detailed plans.

Article 12 : The percentage of covered area does not include the following:

1. Architectural Projections.

2. Water tanks and mechanical equipments (if it is necessary to keep these separate from the main building).

3. Guard room and annexed facilities (if built separately from the main building).

4. (The annex of the workers residence and the external services of the main building provided the annex should be of one floor, and 20% of the main building area not more than 50 square meters).

5. Pergola whether it is used for sitting out of door or for parking.

6. Open-to-sky.

7. Projecting shades, canopies at entrances of buildings.

Article 13 : The calculations of the percentage of floor area does not include the following:

A. Mezzanine.

B. Service floor.

C. Stair and lift room on the roof of the building or any other room permitted on the roof.

D. Buildings mentioned in article (12) above under 3, 4, 5, 6, 7

Article 14 : Standard Internal Architectural Design of Residential Units. Building Materials, Areas and Dimensions of Rooms:

1. Privacy within the residential unit

A. The architectural design of the building shall conform with the social norms of the Arab Muslim families in terms of the location of various parts of the residential unit e.g. the main entrance should be located in such a way that does not expose the house or interfere with the privacy and freedom of internal movement of members of the family i.e. from the living room to the bedroom or to various service facilities in the house.

B. Privacy within the residential unit shall be maintained whether the building is for private residence or for investment i.e. a multi-floor apartment.

C. Boundary walls of any building, walls separating two residential units or separating the living room from the guest room shall not be less than 20 cm. thick, so as to prevent or reduce the emission of sound. The Consultant shall be required to submit proper technical treatment in this regard.

2. Building Materials

A. Materials used for buildings shall conform to locally approved specifications and measurements. The main building materials should be non-inflammable.

B. Heat insulation materials shall be used for roofs and external walls according to the following formula:

- Roofs:

U (Maximum) = 0.1 B.t.u/sq.ft/hr. °F
i.e. 0.57 Watts/sq.m.°C

External Walls.

U (Maximum) = 0.13 B.t.u/sq.ft/hr. °F
i.e. 0.741 Watts/sa.m °C

C. Sketches showing heat insulation layers (for external face walls and roofs) should he submitted. These should be appropriately placed in relation to other layers and in accordance with the standard technical practice. Other specifications or information that help in implementation may also be submitted.

D. Acceptable building insulation materials are.

- Non-inflammable poly-styrene (extruded or expanded)

- Sprayed or solid Poritine/rigid polyurethane foam.

Other materials of the identical qualities may be used as heat insulators. However heat insulation materials used in buildings should be of similar composition, long lasting insulation capacity, fixed dimensions, hardly liable for expansion or contraction, and corrosion and stiff resistant. It would also be resistant to environment conditions in the Sultanate, chemical changes and reactions and fire resistant.

- The condition for using heat insulation materials for (external walls) may not apply to the following:-

- Oriental style buildings of one floor only where the internal courtyard, verandah etc. provide treatment for weather conditions.

- Part of the boundary wall within the balcony,

- Industrial buildings (workshops, factories, warehouses). Buildings for non-human use may also be excluded.

3. Areas and Dimensions of Rooms:

The minimum areas and dimensions of rooms in buildings are determined according to the following table:

Description	Minimum Area (Sq. m)	Least Dimension
Bedrooms	12.00	3.00
Office	8.10	2.70
Shop or showroom	8.10	2.70
Kitchen	5.00	2.00
Bathroom	4.00	1.80
Toilet	1.50	0.90

N.B. 1. Areas of rooms in Public buildings such as schools, hospitals, hotels etc are determined in accordance with the international code of practice adopted in the Sultanate

Measurements in the above table do not apply to guard's room, servant quarters or the small kitchens annexed to an office or workshop etc. However the difference in area should be within reasonable limits.

Article 15 : Windows and Doors

A. Rooms and other building facilities should be provided with an opening or openings (windows) for ventilation and natural lighting. These should open on a street, road or internal courtyard and should be in accordance with the conditions mentioned in this Order. The minimum area of an opening should be as follows:

1. 7% of the ground area of a residential room or office,
2. 5% of the ground area of a bathroom and toilet.
3. 6% of the ground area of kitchen or stair well in the same floor

B. Glass (laminated or solar control or reflective) shall be used in all windows (bedrooms, living rooms and offices) of multifloor buildings with more than four floors (or flats or offices of more than 11 units and public buildings).

C. In order to maintain privacy in residential buildings where window openings of bedrooms are opposite the windows, of a neighbouring building, with a maximum distance of 10 m. in between, a screen, should be provided on to the windows opening of both buildings to conceal or diminish the chance to see from outside. The same applies to windows of bedrooms or kitchens over-looking an internal courtyard (open-to-sky).

The use of duplex or reflective glass does not apply to windows with screens and windows within roofed balconies or those provided with enough architectural projection to give shade.

Acceptable types of screens

1. Perforated wood screen or wood-grills to cover the upper half of the window opening with ventilation blinders used for the other half (subject to acceptable design). This should be framed and fixed to the aluminium window and glass at a reasonable distance.

2. Wood blinders that open and close vertically or at an angle.

3. Aluminium blinders with an insulation layer - This should be fixed to the window from outside (outside the aluminium frame). Blinders should open and close vertically and at an angle.

4. Other types of screens that serve the same purpose may be used subject to approval of the concerned department provided that these are non-metallic.

D. The entrance door of a residential unit should be 1.00m. wide, minimum, width of bedroom door and similar doors 0.90 m., kitchen door 0.80 m, minimum bathroom door 0.75 m. Doors should not be less than 2.10 m high, measured from the ground floor level to the soffit of lintels/beams or slabs.

Article 16 : Heights of Buildings

The net vertical height of the floor is determined according to the type and usage of the building. The height is measured from the level of the neighbouring street up to the roof tiles. In other cases approval of the concerned Authority should be obtained.

Article 17 : Internal Heights

In residential areas the minimum headroom shall be as follows:

A. Ground floor or one-storey buildings. 3.00 m up to 4.00 m maximum.

B. Upper floors 2.80 m up to 3.60 m maximum.

Article 18 : In Commercial and Commercial Residential Buildings the minimum nett headroom shall be as follows:

A. Ground floor 4.00 m up to 4.75 m maximum in case there is no mezzanine. The measurements apply whether the ground floor is part of a multi-storey residential-commercial building or a one-storey commercial building.

B. In case of mezzanine, the minimum height of ground floor should be 6 m. whether the ground floor is part of a multi-storey commercial residential building or a one storey commercial building. 70cm. may be added to the height if there is a concrete beam projecting down the roof and central cooling is used unless area planning and building regulations specify a particular height that should be observed.

C. The minimum height of mezzanine is 2.60 m to 3.00 m maximum.

D. Upper floors 2.80 to 3.60 maximum.

.B. 1. The headroom is measured from the finished floor level to the clear soffit of floor above.
2. In service floors the headroom is measured in accordance with the provisions under Article (34).

Article 19 : Industrial Areas

A. The height for workshops, store rooms and factories with sheds should be 8 m, maximum. (Heavy industries of special specifications may be excluded).

B. For Workshops and stores built in reinforced concrete, with no mezzanine, the height may be 4.5 m. minimum or 6 m. to 7 m. maximum (Heavy industries of special specifications are excluded provided that the building consists of ground floor only).

Article 20 : If the architectural design requires a visible reinforced concrete beam inside the roof of an office, shop or showroom, the projecting part of the beam should be 0.40 m. maximum when the minimum head-room measurement is applied. The reinforced concrete beam should not be visible within bedrooms in residential units.

Article 21 : International code of practice shall apply to public buildings (e.g. International and regional exhibitions, conference halls, theatres, cinemas and similar buildings if no particular conditions are specified). Sheds may exceed the limit of maximum height, subject to functional and structural requirements.

Article 22 : Staircase room, water tank and airconditioning equipment etc. on the roof of the buildings may exceed the maximum height of the building and shall be screened according to the Municipality's design or any other approved design. The parapet wall shall not be more than one metre and a half above the maximum height of the building. Domes decorations, ventilation towers, chimneys and minarates may exceed the maximum height of the building.

Article 23 : The Roof Floor

Usage and conditions of the Roof Floor.

1. The roof floor is used to accommodate service facilities in the building such as the staircase room, water tank air conditioning equipment, lift engine room, central TV antenna etc.

2. A room or hall may be approved on the roof of villas only provided that it occupies about 10% of the roof area. Its area should not be more than 30 sq.m. whatever the roof area is.

3. a. Regarding the 2 floor commercial and investmental buildings, the roof annex should be constructed in an area not more than 35 S.M.

b. Regarding the private buildings, the roof annex should be constructed in an area of 20% of the roof area not more than 50 S.M.

4. (For the commercial or commercial residential building which consist of many floors (3 floors or more), the permission could be granted for one or more private residence within 50% of the building roof area provided the constructed area should not exceeds 400 S.M what ever the roof area is).

5. A pergola of permanent or temporary material occupying about 10% of the roof area may be permitted provided that its area, is limited up to 40 sq.m., maximum whatever the area of the roof, the pergola should be 2.30 m. height, measured from the ground of the floor to lower soffit of concrete or wooden beams.

6 Bui dings with more than three residential units should have one central TV antenna to serve the whole building. This should be shown on plans of the building when submitted for approval.

7. Rooms on the roof are not permitted in buildings in industrial areas. Only a stair room is allowed.

Article 24 : Open-to-sky

1. In residential, commercial and multistory residential commercial buildings (where the open-to-sky is required in the architectural design to meet the condition for natural light and ventilation for rooms, offices, bathrooms, toilets, kitchens and staircases) the area and dimensions for the open-to-sky shall be according to the table below:

(The conditions mentioned under No. 1, 2 and 3 of the table below do not apply to bath rooms in public buildings such as Hospitals and Hotels etc.)

The areas and dimensions do not include balconies overlooking the open-to-sky. Open-to-sky should not have any sort of construction that reduces the amount of light or ventilation or the areas and dimensions shown on the table below:

No.	**No of floors**	**Internal space overlooking the Open-to-sky**	**Minimum area of opening (sq. m.)**	**Least dimension of sides (M.L)**
A	1-3 floors	Bedrooms or office	7.50	2.50
B	More than Three floors	Bedrooms or office	(1/5 x height)2 the outcome Of this formula should be 9 sq.m.	3.00

		(minimum)		
C	1-3 floors	Kitchen, bathrooms, Toilets, stairs	7.50	2.50
D	4-6 floors	Kitchen, bathrooms, Toilets, stairs	9	3.00
4	More than 6	Kitchen, bathrooms, Toilets, stairs	12	3.00

2. In residential buildings one room only, in each unit (flat), shall overlook the open-to-sky.

3. In multi-storied residential, commercial and residential-commercial buildings where only bathrooms or toilets overlook the open-to-sky, the area of the open-to-sky provided for natural light and ventilation shall be 1.50 sq.m. The length of each side shall not be less than 1 m. Bathrooms and toilets of multi-storied buildings (3-floors or more) may be excluded from the open-to-sky condition provided that proper artificial means are provided for ventilation and treatment of bad odour. Doors shall also have reasonable opening of perforated wood or aluminium. The sketches and specifications of these shall be submitted by the consultant (in his capacity as the owner's representative).

4. The floor of the open-to-sky shall be paved with tiles 01 concrete and provided with appropriate means for drainage.

5. The open-to-sky may have an opening for maintenance, cleaning and rescue purposes.

Article 25 : Set-backs

Setbacks from the boundaries of adjacent plots in residential and commercial areas are determined according to the following (This does not include areas where special conditions are set for SBI-D3CKS).

A. If there are openings or windows on the side of the building overlooking the adjacent plot, a distance of 1.50 m. minimum

shall be left as set-back in single storied buildings or the ground floor of multistoried building.

B. A set-back of 3 m. minimum shall be left for the same purpose (as mentioned in 'A' above) in case of successive upper floors of the same design (up to seven floors, ground floor is not included) provided that the area of openings is less than 15% of the area of the building facade/elevation overlooking the neighbouring plot. In case of successive floors above the 7th floor (ground floor not included) set-back shall be 5 m.

C. No openings or windows are permitted in buildings, which consist of more than one floor unless these are overlooking a road, of width 6 m. minimum. Otherwise the setback between the facade/elevation of the building and the edge of the road shall be half the difference between the width of the existing road and.6 m. This does not apply where the openings are only for bathrooms toilets and stairs. Also for buildings in small plots in unplanned areas where plot area is within 200 sq.m.

D. Set-backs shall always be measured from the external boundary of the building to the boundary of the adjacent plot.

Article 26 : A distance of 1.5 m., minimum shall left for set-back if there are exhaust fans or air conditioners facing the adjacent plot. This condition applies to all residential and residential-commercial

Article 27 : In areas for industry and warehouses where plot area is more than 1500 sq.m. (whether there are openings in the building or not) set backs shall be as follows:
- 8m. between the main building and the boundary of the plot on the main roadside. Guard’s room, usually built near the main entrance of the plot is not included.
- 3m. between the main building and the boundary of the plot on the minor roadside, if any.
- 5m. minimum, between the main building and the boundaries on the side of the adjacent neighbour.

Article 28 : In plots allotted for light industry (workshops) with areas ranging from 800-1500 sq.m. set backs shall be as follows:

- 5m. between the main building and the boundaries of the plot on the main roadside.

- 1.50 m. minimum, between the main building and boundaries of the plot on the side of the adjacent neighbour or neighbouring street or road whether there are openings in the building or not.

- 3m. between the main building and plot boundary on the side of the adjacent neighbour. This applies to two-storied buildings where there are openings for windows in the upper floor.

Article 29 : In plots allotted for light industry with areas less than 800 sq.m., set-backs shall be as follows:

- 1.5 m set-back, in the ground floor between the main building and boundary of the plot of adjacent neighbour (if the building has openings overlooking the neighbouring plot),

- 3m. between the main building and boundary of the neighbouring plot in case, there are window openings for offices in the upper floor.

N-B. Planning conditions for set-backs, as determined by the concerned Authority, shall be adhered to (This only applies where the set-backs required are more than what is mentioned under these Regulations).

Article 30 : Use of Buildings

- In Industrial areas of various types, warehouses and workers' camps it is not permitted to build residential units for family accommodation.

Owners of industrial plots over-looking a main street shall use the front part of the plot for commercial purpose, provided that prior approval is obtained from the concerned Authority. The conditions for set back at the front do not apply in such cases.

Article 31 : A. Workers accommodation is permitted within reasonable limits, in various types of industrial areas according to the type of industry or workshop built on the same plot. Bachelor’s accommodation for staff or technicians may be permitted in plots with large areas, originally allocated as workers' camp.

B. Showrooms (to exhibit industrial products and spare parts only) shall be permitted in areas allotted for light industry provided that the area of showrooms is not more than 30% of the approved percentage of building.

C. (It is allowed to construct offices only in the first floor in the industrial areas and stores areas provided the public utilities for the same should be in one place).

D. Complexes or buildings for workers or bachelors accommodation are not permitted in residential or residential commercial areas. Any architectural design revealing such use shall not be accepted. Also buildings that consist of family as well as bachelors accommodation shall not be permitted.

E. Buildings for industrial activities (heavy or light industries) shall not be permitted in residential, commercial or residential-commercial areas.

F. Residential and residential-commercial buildings of four floors, minimum, or buildings that have more than 10 residential units shall be provided with a bathroom in the ground floor, connected to the entrance, for use of the guard.

Article 32 : A. Planned Areas

1. Balconies and rooms projecting beyond the boundary of the plot shall not be permitted.

2. Balconies and projecting rooms are considered an integral part of the main building, therefore the article on set backs, if any, shall be equally applied.

B. Un-planned and Partly Planned Areas

1. The projection of room or balcony shall be 10% of the width of the road. It should not be more than 1.20m. wide whatever the width of road.

2. The nett width of the balcony shall be 75cm. minimum.

3. The clear distance between the soffit of the slab of balcony or projecting room and the level of neighbouring foot-path shall be 4 m. minimum.

4. No balcony or room may project over a road less than 7.5 m wide.

N.B. 1. Balconies in residential buildings overlooking the street and used for washing lines shall be screened. Perforated wood may be used for screening provided that the openings are not more than 1.50 cm x 1.50cm., also perforated concrete depth 10 cm. maximum and openings not more than 7 cm x 7 cm. may be used. The relevant sketches shall be submitted to the concerned Department.

2. In multistoried residential buildings, with more than three units (flats) a balcony shall be provided in each unit for washing line. This should be appropriately located according to the architectural design of the unit and screened using one of the screening elements mentioned in No. 1 above.

3. Washing lines on balconies may only be used if the screening elements mentioned above are provided.

4. It shall not be permitted to use metal grills to screen openings in buildings (balconies or windows).

Article 33 : Architectural Projection and Building Facades/Elevations

1. Architectural projection, 5% of the width of the street, is permitted on the neighbouring street side provided that the projection does not exceed 50 cm. whatever me wiam of the street.

2. The architectural design of facades/elevations of residential and residential-commercial buildings shall be according to the local, Arabs or Islamic style as in the models prepared by the concerned Department or the conceptual design submitted by the Consultant and approved by the concerned Department.

3. Totally inclined roofs are not permitted as well as the use of potter tiles of all colours. However in facades such as entrances of buildings and sheds over windows deviations from these conditions may be accepted.

4. In Industrial areas of various types, wood or metal sheds be covered. Concrete materials, metals or wood may be used as cover depending on the areas where the plot is located.

5. Projecting or visible air-conditioners on facades/elevations of buildings shall be covered with a screen as per Article 32 item I. Air-conditioners, in all floors, shall have plastic pipes coming down the building to the ground to drain excess water. These pipes shall be inside the wall or fixed to it from outside in such a way that does not distort the facade/elevation of the building.

Article 34 : Service Floor

Conditions and usage of the service floor:

1. A service floor may be permitted in high-rise buildings (above
It is used for collection and convergence of sewage connections, water pipes, mechanical equipments and or for parking.

3. The height of service floor from the ground level to the soffit of the roof slab shall be 2.30 m. maximum.

4. The service floor shall be an open area without any partitions.

Article 35 : Leveling Floor

1. The conditions regarding the heights .of buildings do not a\ to the leveling floor.

2. One leveling floor only, is permitted, however another leveling floor may be allowed in areas where the slope of the ground is steep.

3. No walls shall be built around the leveling floor if it is on the front side of the plot.

Article 36 : All the conditions regarding ventilation natural lighting and set backs shall apply to the leveling floor.

Article 37 : Retaining walls shall be built of reinforced concrete and according to the international approved standard codes of practice

Article 38 : Basement

The basement in any building shall not be more than one floor.

Article 39 : The basement shall be used for the following purposes

1. Residential Building:-
Parking, services, emergencies and recreation. It should not be used for residence.

2. Residential Commercial and Commercial Bldgs.
For storing non-inflammable materials, services, emergencies and parkings.

3. Industrial areas:-
Basement may only be permitted in buildings with showrooms on the front side of the industrial plot.

4. Buildings for Public services
A basement may be permitted if necessary, provided that approval of the security department is obtained if it is to be used for parking.

5. In the commercial centres, in which the movement is from inside, it is allowed to utilize the gable for commercial shop or showrooms.

Article 40 : 1. The basement should not project, more than 1.40 m. above the level of the internal courtyard or the level of road pavement.

2. The basement shall have natural ventilation, directly or indirectly.

Article 41 : 1. The nett vertical height of basement is 2.75 m. to 3.50 m maximum, measured from the ground of the basement to the soffit of the roof slab.

2. One toilet or two may be permitted in the basement if proper connections to main sewers are provided.

Article 42 : Provisions for setbacks of the main building apply to the basement floor as well.

Article 43 : Protections against leaking through the walls and the ground of the basement should be considered. Drainage shall be provided and necessary precautions taken to protect neighbouring buildings during the construction of basement.

Article 44 : All the conditions and provisions for protection against fire and other safety conditions apply to the basement floor.

Article 45 : The area of basement shall not exceed the area of the ground floor.

Article 46 : Pergola

The pergola, whether of reinforced concrete or timber, may be built on the roof of the building or the courtyard of the plot. The conditions for setbacks apply if it is built of concrete material.

Article 47 : The pergola should be open on all sides except the side adjoining part of the building or a wall.

Article 48 : The area of openings in the pergola shall not be less than 50% of its total area.

Article 49 : A. The construction of commercial mezzanines in show rooms and commercial buildings shall be approved subject to the following conditions:

The area of mezzanine shall not be more than 50% of the area of show room or shop. The Municipality may not be committed to that percentage, provided that requirements for public safety and protection against fire are provided.

2. The space for the mezzanine shall be connected to the showroom or shop and provided with a fence or rails, of minimum height 0.9 m. It shall have a staircase of reinforced concrete, wood or steel for access from the showroom or shop.

3. The mezzanine shall only be used for the direct service of the show-room or shop.

4. The height of commercial mezzanine is determined according to the conditions specified for internal heights of buildings in these Regulations.

5. The projection of Mezzanine beyond the horizontal floor plan of the showroom or shop is not permitted. Special cases may be excluded if approved by the concerned Authority.

6. The mezzanine shall have ventilation and natural lighting.

B. The construction of commercial mezzanines in industrial areas (workshops or factories) and warehouses shall be approved subject to the following conditions:

1. (For the workshops, factories and stores constructed of gables, it is allowed to construct partition (Siddah) with in an area of 50 % of the net area utilized for the work shop or factory or store).

2. The same conditions in paragraph 2 item 'A' above apply but in factories and warehouses it is permitted to screen the space of mezzanine connected to the lower space with glass, perforated wood or aluminium,

3. (For the workshops constructed of fixed materials, it is allowed to construct partition (Siddah) within an area of 50% of the net area of the workshop),

4. The mezzanine shall only be used for offices or storage,

5. The conditions under No. 4,5,6 of item "A" above apply

C. In the commercial centres in which the movement is from inside, it is allowed to utilize the commercial partition (Siddah) for commercial shops or showrooms.

Article 50 : Staircases

Any building consisting of more than one floor shall have a number? of staircases (other than fire exits) as follows:

1. One staircase, at least, for each building where the area of one floor is not less than 500 sq. m and the total floors area is not more than 1,500 sq. m.

2. An additional staircase shall be provided for every 500 sq. m in addition to the area of one floor or for every 1500 sq. m additional to the total area of the building as mentioned under No. 1 of this Article.

Article 51 : The main staircase shall be built of reinforced concrete or any non-inflammable material. Staircases of private buildings (villas) and those for mezzanine in small shops are not included.

Article 52 : The nett minimum clear width of stairs of a main staircase shall be as follows:

Residential and Residential Commercial buildings
1.10 m if the staircase serves three residential units in one floor of a total of 12 units maximum in all floors.

1.20 m. if the number of residential units in a floor is above 12

Commercial buildings
1.20 m. in that consist o[f] Buildings up to 5 floors and 1.40 m. in buildings above that limit

Public Buildings (Hospitals - Schools -Hotels etc.)

1.40 m.

The above conditions do not apply to staircases used for special or industrial purposes, minarets, towers and small oriental style buildings, also excluded are staircases of private buildings and villas the clear width of which shall be 1m, minimum.

Article 53: he maximum travel distance served by the staircase shall be 27 m.

Article 54 : The number of stairs in each part of the staircase leading in one direction shall not exceed 14. Open external stairs of one-storey

Article 55 : The tread of one step may not be less than 28 cm in width and not more than 30 cm. The rise of the step should not be less than 15 cm and not more than 18 cm.

Note: Tread excludes nosing if any.

Article 56 : The stairs shall be calculated according to the following formula. Twice the rise of one step -I- tread = 60-65 cm.

Article 57 : The nett distance between one landing and the one above shall not be less than 2.20 cm.

Article 58 : Passages and Corridors

The minimum width of corridors and passages in a building shall be as follows:

Residential Buildings

A. Corridors inside the residential unit 1.20 m.

B. Public Corridors of 15 m. length maximum leading to various residential units (between two rows of units) shall be 1.50 m wide. If the length is more than 15 m. the maximum width shall be 2.20 m.

C. Public corridors (in front of one row of units) leading to five residential units shall be 1.40m. wide. For more than five units the width of the corridor should be increased by 5% per unit provided that it does not exceed 2 m.

Commercial Buildings

A. The width of the main corridor in front of a row of showrooms or shops shall be 1.80 m. (unless special conditions are set for the commercial area).

B. The width of the main corridor between two rows showrooms or shops shall be 2.50 m.

Hospitals & Schools

A. The width of the main corridor shall be 2.50 m. Hotels & similar buildings

- The width of the main corridor shall be 2.20 m.

- Standard international specifications and measurement shall app to corridors in other public buildings such as sports grounds, cinemas ..etc.

Article 59 : Electric lifts

Any building of four storeys or more (the ground floor included) shall have one lift at least. The number of lifts in a building shall be in proportion to its size, number of its residents and usage.

Article 60 : The number and capacity of each lift supported by any other information shall be indicated in the drawings submitted for any building of more than three floors. This shall be according to the conditions and specifications for electric lifts shown in the appendix issued by the Municipality.

Article 61 : Electric lifts should work efficiently throughout the year, the owner (or his agent) should submit a certificate from a specialised registered company certifying that the lift is in good condition or is properly maintained and usable. This certificate should be submitted to the Municipality at least once a year.

Article 62 : Oriental Style Residential Buildings:
Oriental style residential buildings are permitted according to the following:

The building may be constructed on the boundary of the plot directly, provided that the rooms and services overlook a courtyard or space. The least dimension of the courtyard or space should be 4 m.

Article 63 : The internal space shall not be roofed or covered.

Article 64 : Setbacks shall be according to the Regulations set for the region.

Article 65 : Water tanks:

Water tank shall be of non-rusting, non-corrosive material that preserve the natural and chemical qualities of water, its colour, taste and odour and is unaffected by weather conditions such as heat and humidity. Omanian Standard O.S 89/1985 may also be referred.

Article 66 : The design of tanks shall not include sharp angles that lead to the accumulation of dirt or germs and obstruct regular cleaning.

Article 67 : Tanks shall have tightly closed openings for filling, distribution and discharge. Openings shall be designed in such a way that prevents pollution and entry of insects. The openings shall be as follows:

A. For big tanks the opening for filling shall be wide enough to allow the person in charge of regular cleaning to get inside the tank.

B. Openings for distribution shall be at one side of the tank at a height of 6 cm, minimum, in order to prevent in-flow of deposits from the tank to distribution pipes.

C. Openings for scour-drainage shall be at the bottom of the tank. It shall be wide enough to drain all water and deposits.

D, The tank shall be covered with wooden slats designed according to the architectural design specified by Directorate General of Technical Affairs of the Municipality.

Article 68 : The tank inward or outward connections for distribution of water to the building should be of non-rusting, non-corrosive material.

Article 69 : Wherever the tank is located in a building it shall be put on appropriate supports of 1 foot above floor level so that the bottom of the tank may be cleansed. The tank should be kept away from sources of external pollution and should not be placed on the ground directly.

Article 70 : Water tanks shall be cleaned regularly (once in every six months minimum) and sterlized with approved detergents. Materials and equipment used for cleaning should be non-poisonous and should not include organic materials harmful to health. The Municipality has the right to take regulatory actions according to the controls set in this regard.

Article 71 : Municipal authorities reserve the right to enter residential complexes at appropriate times to inspect water tanks, ensure adherence to the conditions and that tanks are regularly cleaned and the water is suitable for human consumption.

Article 72 : The regulations and laws in force in other Ministries and Government departments shall be observed in the implementation of the provisions of these Articles.

Article 73 : Toilets, Drainage and Sanitary Items

A Single family residence consisting of one or two bedrooms shall have at least one complete bathroom that shall not open on any of the bedrooms directly. If there is more than one complete bathroom in a single family unit or flat, the additional bathrooms may open on bedrooms directly. It is not permitted to have bathrooms directly opening to a kitchen or a place for storinc food.

B Toilets and bathrooms may be located next to dining rooms or living rooms provided that the access is not directly through these rooms.

Article 74 : The number of toilets in commercial buildings, offices and workshops is determined according to the following table:

No	Sex	No. of users	Sanitary units required	Remarks
1.	Men	1-100	1 Toilet 1 hand washing basin for every 10 people	if there is no urinal
2.	Men	above 100	1 more toilet & hand washing basin for 20 people	if there is no urinal
3.	Men	1-100	1 Toilet to every 25 people (hand washing basin and 1 urinal for every 10 people	if there are urinals
4.	Men	above 100	1 more toilet for every 40 people, 1 urinal 1 hand washing basin for every 20 people above 100	if there are urinals
5.	Ladies	1-100	1 Toilet 1 hand washing basin for every 10 people	No urinal
6.	Ladies	above 100	1 more toilet & 1 hand washing basin for every 10 people above 100	No urinal

Article 75 :
The minimum number of sanitary units required in public buildings is as follows:

1. Hotels

Halls: 1 toilet, 2 urinals, 2 hand-washing basins for every 80-100 men,

3 toilets, 2 hand-washing basins, for every 100 ladies.

Rooms: 1 toilet, 1 hand-washing basins, 1 bathroom basin for every 10 beds.

2. Theatres & Cinemas

1 toilet 1 urinal for every 200 men

2 hand washing basins for every 300 men

1 toilet for every 150 ladies

1 hand washing basin for every 200 ladies

3. Hospitals

1 toilet for every 18 beds (men)

1 urinal for every 30 beds (men)

1 hand washing basin for every 25 beds (men)

1 hand washing basin for every 12 beds (ladies)

1 hand washing basin for every 15 beds (ladies)

Visitors and staff toilets are not included in the above. A reasonable number of toilets should therefore be provided.

4. Sports grounds and similar buildings
5. Mosques

1 toilet, 4 water taps for ablution for every 100 men.

N.B.

A. A separate area for ablution shall be provided and connected to the women place of prayer (i.e. 1 toilet and four water taps for ablution for every 100 ladies)

B. It is not permitted to build toilets and ablution facilities on the front side of .the mosque or on the directional-bearing of Mecca. Ablution places and toilets shall be carefully deter mined taking into consideration the direction of winds and the possibility of entering the ablution place or toilet from outside and then to the mosque through an inside door.

C. Ablution places (toilets in particular) shall have a high degree-of privacy i.e. no one can see from outside through a door or window.

6. Filling Stations

2 toilets shall be built as part of the main building of a petrol filling station (toilets for workmen in the station are not included) one for men and the other for ladies. The men's toilets shall be provided with a hand washing basin and 2 urinals, the ladies with a hand washing basin only.
Article 76 : 1 : The minimum number of sanitary units required for schools below secondary level is as follows:

1 toilet, 1 hand washing basin for every 20 students or half a class.

2. For secondary schools and schools above the secondary level the minimum number of sanitary units should be as follows:

1 toilet for every 30 students	Male
1 hand washing basin for every 25 students	Male
1 urinal for every 25 student	Male
1 toilet for every 20 student	Female
1 hand washing basin for every 15 students	Female

3. In boarding schools (male and females) architectural standard code of practice shall be applicable.

N.B.

A. A water tap shall be provided near toilet or bathroom basin for cleaning purposes unless there is a bidet (ladies' shower)

B. All sanitary items shall be fixed in position according to the specifications and criteria adopted in the Sultanate. Technical Standards shall be observed for proper installation and connection.

Sewage Disposal

Without violation of the conditions and specifications for sewage disposal network and the provisions stipulated vide Ministerial Decision No. 5/86 issued by the Ministry of Environment the following articles shall be applicable.

Article 77 : Requirement for sewage disposal:
Vertical waste - water pipes

1. In toilets, the internal diameter of sewage disposal pipe shall be 10 cm. minimum.

2. The internal diameter of the waste water pipe (for bathroom basin, hand washing basin, ground sewerage .. etc.) shall not be less than 7.5 cm. Waste in the pipe is disposed into a gully trap before reaching the inspection chamber.

3. Waste water from the dishwashing sink in the kitchen is directly disposed into the vertical waste water pipe then into the gully trap and then inspection chamber.

4. A vent pipe, diameter 7.5 cm minimum, shall be used for ventilation in toilets. The pipe shall be of a reasonable height.

5. The diameter of waste pipes (ground connection) shall be 15 cm minimum. The laying of such pipes under buildings should be avoided as far as possible. But if the laying of part of the waste pipe under the building is unavoidable it should be made of cast iron or any other material of approved technical specifications. The pipe shall be 6 mm thick (minimum) and covered with concrete 13 cm thick (minimum).

6. If bathrooms, toilets or kitchens overlook a main road or minor road, the vertical pipes, if any, should be covered. Doors for inspection and maintenance of pipes should also be provided and appropriately located.

7. Waste water pipes whether vertical, horizontal or underground should be of strong non-inflammable non-corrosive material and according to the specifications adopted in the Sultanate.

Article 78 : Waste water pipes (ground connections) should not be less than 60 cm. below the ground level and its slope shall be as follows:

Horizontal gradient	Vertical gradient
diameter 15 cm.	1/6G 1/8
diameter 20 cm.	1/90 1/12
Pipes diameter 22.5 cm.	1 /100 1/14

In case it is necessary to use pumps the department concerned may permit lesser gradients as follows:

Pipes diameter 15 cm	1/100 Maximum

Pipes diameter 20 cm	1/175 Maximum
Pipes diameter 22.5 cm	1/200 Maximum

Article 79 : The locations and conditions of inspection chamber:

1. Inspection chambers shall be built at each point the pipe route (sewer) changes its direction, level or slope.

2. At the junctions of two or more waste pipes.

3. At the open ends of the waste pipe under the building.

4. At the junction of a vertical pipe with the ground connections.

5. At the end of the horizontal waste pipe before it is connected to the main sewerage or septic tank.

6. The inspection chamber shall be built on a reinforced concrete layer 20 cm. thick, minimum. Its wall shall be built of block work with a thickness proportionate to the depth but not less than 20 cm. (Walls may be built of concrete).

The inside of the inspection chamber shall be plastered in order to be smooth and to insulate water and humidity.

7. Sloping grounds (benching) shall be built inside the entrance openings around the pipes. The slope towards the pipe shall 1:2.

8. The distance between an inspection chamber and the next one shall not be more than 25 m.

9. The dimensions of inspection chambers vary from one chamber to another. However, these shall not be less than 60 cm. x 60 cm. The opening of the entrance shall be 45 x 45 cm. minimum. The inspection chamber shall be tightly covered with a cast iron cover or reinforced concrete in accordance with the standard specification in the Sultanate.

Article 80 : in areas with no public sewers, a septic tank shall be provided according to the type of soil at the site of the building, technical specifications, regulations and approved schedules. Excess liquid waste from the tank shall be disposed to the soakage pit, waste pit or well.

A. Septic Tank

The following conditions shall be observed when the septic tank is built.

1. It shall be of adequate capacity, to contain human waste of the building and according to Standard criteria and rules adopted in the Sultanate.

2. It shall be built in an open space accessible for maintenance, discharge etc. It may also be built near to a place where public sewers are expected to be provided in future.

3. The septic tank shall not be less than 2 m. from any building in the plot or neighbouring building. It shall be provided with insulators on the base and sides and well plastered from inside with cement and sand. The 2 m. distance between the tank and building is subject to review in unplanned areas where plot area is not more than 100 sq. m. provided that it has no adverse effect on public safety or interference with the rights of others.

4. The tank shall be built on a concrete or reinforced concrete layer and the side walls of cement blocks, concrete or reinforced concrete. The roof shall be of reinforced concrete, thickness 15 cm. minimum. It shall have enough openings for inspection (60 cm x 60 cm) and a tight cover.

5. A septic tank shall have inspection chambers at the entrance and exit. The inspection chamber at the entrance is for initial precipitation.

6. The length of the tank shall not be less than three times the width or four times the width, maximum.

7. The depth of the septic tank shall be 1.20 m. minimum, if it is intended to serve 10 people and 1.50 m. minimum if it is for more than 10 people.

8. Ventilation shall be adequately provided by using the proper means as in force.

9. Approved ready-made septic tanks may be used.

10. other technical methods in building septic tanks shall be observed.

B. Soakage pit

1. Waste is disposed from the septic tank on to the soakage pit in case of porous soil, where ground water is at an appropriate depth from the surface to allow for disposal. An under-ground soaking system may be used after obtaining approval from the concerned departments.

2. Walls of the pit shall be built of cement blocks or limestone with no mortar but openings to allow disposal. Thickness of stonewalls is 50 cm, minimum. Block walls shall be 35 cm thick minimum with no foundations.

3. The soakage pit shah be covered with a tight reinforced concrete cover, 15 cm thick, minimum with a tightly

4. The depth or height of the pit shall not be more than- 2 m.

5. The length is determined according to the permeability of the soil and the rate of soaking.

6. Half the pit may be filled with soaking material,

7. The soakage pit shall not be placed at less than 3 m. distance from any building.

The construction of soakage pit and way of disposal from the septic tank to soakage pit shall be according to approved technical conditions.

C. Collection tank (Holding Tank)

if the ground conditions make it impossible to have a soakage pit for disposal of refuse from the septic tank, a collection (holding) tank may be built according to the following conditions to contain and collect (hold) the waste.

1. The tank shall have a capacity of a two days waste, minimum i.e. 200 litres for every person. The total capacity of the tank shall not be less than 2000 litres.

2. It shall be built on reinforced concrete base.

3. The walls shall be built of blocks, 30 cm thick at least.

4. The collection (holding) tank may be built of reinforced concrete in order to stand the load of traffic.

5. For easy insertion of the suction pipe to pump out the waste collected in the pit, the reinforced concrete base of the pit shall have a slope of 1:4 towards the draining point, size 60 cm x 60 cm and 30 cm depth, below the base of the tank under the tightly covered opening on its roof (60cm x 60cm).

6. Ventilation shall be provided according to approved standard practice.

7. The depth of the tank shall be 1.5m. minimum or 2m. maximum.

8. If more than one collection (holding) tank is built the minimum distance between each two shall be three times the dimension or diameter of the largest tank.

9. The tank shall be covered with a reinforced concrete roof, nave an opening of 60cm x 60cm minimum, and a tight cover. Precautions shall be taken to prevent the entry of insects through the openings.

10. The collection (holding) tank shall be located in an open place accessible for maintenance, discharge etc. and suitable for connection to public sewers in future.

11. Approved readymade collection (holding) tanks may be used.

N.B. 1. If an alternative method is used for sewage disposal, approval shall be obtained from the concerned departments,

2. Under all circumstances technical aspects and approved sanitary regulations shall be observed.

Article 81 : Waste water pipes, septic tanks and soakage pits shall be within the legal boundaries of the plot, exceptional cases in unplanned areas, plots of small areas or rocky lands are excluded subject to prior approval of the Municipality and adherence to the conditions under Article (80).

Article 82 : Septic tanks and soakage pits already built outside the boundaries of the plot shall remain in place. A permission to maintain and clean them shall be obtained. If a house is demolished and rebuilt, its owner shall lose the above concession and shall construct a septic tank or soakage pit according to the permit and drawings approved by the Municipality.

Article 83 : Safety means and Precautions against Fire

Any building of more than three floors (ground floor included) or of a height more than 13.5m. measured from the road level or have a floor area more than 350 sq.m., corridors, emergency exits or additional stairs leading directly outside, shall be provided.

These means of escape shall be according to the specifications and conditions for protection of buildings against fire issued by the Directorate of Civil Defence and Fire of the Royal Oman Police.

Buildings of one to four floors and floor area of 450 sq.m., maximum, may be exempted from the additional staircase condition provided that other precautionary measures against fire are provided.

Article 84 : Staircases, emergency exits, corridors and walls shall be capable of resisting fire for half an hour at least or made of non-inflammable material.

Article 85 : The staircase provided for escape shall have a clear width of not less than 90cm. The rise of one step shall not be more than 20 cm. and the number of steps Seeding in one direction shall not exceed 12.

Article 86 : 1. The distance from ^e escape staircase to the entrance of the unit shall not be more than 10m.

2. The distance from the door at any bedroom to the entrance of the unit shall not be more than 7.50m.

3. Doors of bedrooms, kitchen and the main entrance of the unit shall be fire resistant for half an hour at least.

4. Partitions between indoor halls and corridors shall be provided with materials capable of resisting fire for half an hour at least. The same applies to walls along the staircases.

5. In order to limit the spread of fire to other parts of the building, facilitate extinction and the safe evacuation, the building shall be divided horizontally and vertically into fire zones according to the specifications and conditions for the protection of buildings against fire issued by the Civil Defence Administration of the Royal Oman Police.

Article 87 : Buildings where large number of people are usually present or areas where inflammable or dangerous materials are manufactured, used or stored, the number, direction and distance from one point and the nearest emergency exit should be according to the specifications and conditions for protection of buildings against fire issued by the Directorate of buildings against fire issued by the Directorate of Civil Defence and Fire of the Royal Oman Police. The same applies to unfamiliar buildings or building in which people cannot easily move.

Article 88 : Stairs shall be secured with rails. The nett vertical height of these rails shall not be less than 80 cm.

Article 89 : Roofs of buildings, balconies and open-to-sky shall be provided with rails or walls of height not less than 90 cm.

Article 90 : 1. Hose reels for fire extinction or rising pipes shall be used to extinguish fire in buildings of more than four floors or where the number of flats in one floor exceeds four.

2. Small shops shall be provided with manually operated fire extinguishers. Equipment for fire extinction in commercial showrooms of large areas (area of one show room more than 60 sq.m.) shall be determined by concerned department, each case considered separately.

3. Fire extinguishing equipment shall be appropriately placed and according to approved technical standards.

Article 91 : Buildings of heights and areas mentioned under these Articles shall have fire warning and fire fighting devices according to the specifications and guidelines approved by the concerned fire department.

Article 92 : Approval of the concerned fire department (Directorate of Civil Defence and Fire of the Royal Oman Police) on plans for the following buildings shall be obtained before these are finally approved by the Municipality.

A. Buildings of and more than four floors or if the area of ground floor is more than 350 Sq. m. or the area of the one shop in the ground floor used for commercial purposes, is more than 60 Sq. m.

B. Any Multi-storey Commercial building.

C. Hotels, hospitals and similar buildings, also private shopping centres, multi-storey car parks in basements if the area is more than 450 sq. m, heavy and other industrial buildings in which more than 10 people are employed and involve the use of dangerous materials. Also buildings used for storing or selling inflammable materials, cinemas, theatres and other similar

D. The Municipality may ask for approval to be obtained from the Directorate of Civil Defence and Fire of the Royal Oman Police for plans of any building, if necessary.

Article 93 : A space or balcony, over-looking an open space which as courtyard or road shall be provided outside the kitchen for keeping gas cylinders to ensure the safety of residents in single family housing and multifloor residential blocks. The cylinder outside the kitchen, shall be properly connected to the kitchen and shall have natural ventilation and protection against heat in a way that does not distort the outlook of the building. The cylinders shall also be provided with safety devices such as fast-closing valves etc.

N.B. If in the architectural design the Kitchen and its balcony overlook an internal courtyard (open-to sky) surrounded by walls on all sides, gas cylinders shall not be kept in the balcony. A well-secured place may be provided instead on the ground floor for the connection of cylinders to the upper floors. This condition does not apply to two storey buildings.

Article 94 : Chimneys in factories should be at a distance of 10 m. minimum, from the boundaries of the neighbouring plot or road (or as determined by concerned departments). The height of house chimneys and gas exhaustion

facilities shall be according to the provisions and regulations set by concerned Departments, in certain cases it shall be necessary to provide gas purification equipment in order to comply with the conditions set by the concerned departments.

Article 95 : Public Utility Connections within Buildings:

All Public Utility connections within buildings and establishments shall be according to the conditions and specifications set by the concerned department.

Article 96 : Car Parks:

Car Parks shall be provided in each building according to the use of the building. These shall be within the legal boundaries of the plot. Parking areas shall be shown on site plans according to the following:

A. Residential Areas:
One Car Park at least for every residential unit (flat) or a single family residence (Villa).

B. Commercial and Commercial-Residential Area:
One car park, at least, for every flat, office or shop. If the area of the office or shop exceeds 100sq.m. an additional car park shall be provided for every additional 50 sq.m.

C. Industrial and Warehouses Area:
One car park at least for every five employees. Open or covered areas provided for workshops or warehouses are not included.

D. Cinemas, Theatres and Entertainment Centres:
One car park at least for every 15 seats.

E. Clubs and Similar Facilities:
One car park at least for every 12 Sq.m. of the covered area.

F. Hotels:
Five Star Hotels : A car park for every 3 beds
Four Star Hotels : A car park for every 5 beds
Three Star Hotels : A car park for every 10 beds

N.B. 1. Standard code of practice for car parks applies to public buildings such as Hospitals, Sports Grounds etc.

2. Plots area 200 Sq.m. in unplanned areas, inaccessible plots and plots that have special planning conditions are excluded from the conditions set for car parks.

Article 97 : A. The dimension of car parks (for private cars) whether on road sides or the areas mentioned under Article 96 above shall be as follows:
Length: 5 m. Width : 2.40 m.

B. The minimum width of paths within car parks is as follows:

- 3m if the parking is parallel to the path.

- 3.5m if the parking makes an angle of 45° with the path.

- 6m. if the parking is at a right angle with the path.

If the width of parking area for each car is increased by 25%, the above width of paths may be reduced by 18%, maximum.

C. The dimensions of parking for heavy-duty vehicles such as trucks shall be determined according to the specifications of the international code of practice.

D. parking areas in covered and multi-floor garages are planned according to the specifications of international code of practice.

Article 98 : When the minimum limit for paths within car parks is applied, traffic shall be in one direction to facilitate entrance and exit.

N.B. If parking cannot be provided within the legal boundaries of the plot, for any reasons, it may be permitted to use the ground floor for parking provided that the height of the floor from the ground to the slab of the roof is 225 cm. But, that height shall not be included in the permitted heights of buildings. Thus the location of columns and smooth entrance and exit of cars should be considered carefully. The same applies for residential buildings where the number of units or flats is more than seven.

Article 99 : Refuse Collection Centres
Multistorey buildings consisting of four floors minimum (Ground Floor + 3 Floors) shall be provided with a refuse collection chamber in the Ground Floor as part of the Main Building. The collection chamber shall be according to the following conditions:

1. In four-storey buildings the area of the chamber shall be 4 sq.m. minimum. This area shall be increased by 20% for each extra floor provided that the maximum area is 8.30 sq.m.

2. The Municipality reserves the right to order the increase of the area of chamber if the number of residential units in each floor is more than seven. A refuse collection chamber may also be required in multifloor buildings where the

number of floors is less than four but the number of units in each floor is more than 10.

3. Huge buildings of more than 40 units (whatever the number of floors) shall be provided with refuse pressing machines inside the chamber. The area of the chamber shall therefore be determined according to the size of the machine.

4. The chamber shall be built of non-inflammable materials.

5. The surface of its fioor and walls shall be strong, smooth and corrosion resistant.

6. It shall be provided with means for liquid disposal on its floor. These are connected to the main sewers to dispose water when the chamber is washed or cleaned,

7. It shall be reached through s. rear entrance or a minor road. It should not be reached through the main entrance of the building.

8. It shall be properly ventilated.

Any further conditions the Municipality considers necessary shall be applicable.

CHAPTER-III
INSPECTION AND SUPERVISION OF BUILDINGS

Article 100 : A. Concerned Municipality officials are authorised to enter the building site at any time to check whether the construction of the building is according to the permit and approved drawings and that there is no violations according to these regulations and others.

B. The concerned technical department shall take action against violation, if any. If the violation is noticed during construction, the owner or contractor or consultant should comply with the stop-work order before settling the violation in question.

C. The permit and approved drawings shall be kept at the site for checking. These should be submitted to the Municipality's officials in charge of the implementation of the provisions of this Order.

Article 101 : No building may be erected or used except for the purpose mentioned in the building permit and in accordance with the land use and the structural planning of the area.

Article 102 : The building permit is valid for two years commencing from the date of issuance. It shall be invalid thereafter unless it is renewed (by

after paying the fees, unless there are reasons for non-renewal in which case the concerned party shall be informed in writing.

Article 103 : No alteration is permitted in the approved permit, drawings or any other official document unless prior approval is obtained from the concerned department. No alternations shall be endorsed unless signed and stamped by the department that issued the permit or the document.

Article 104 : is not allowed to do any construction work during the period between sunset and sunrise unless a prior permission is obtained from the Municipality as per the conditions.

Article 105 : Any person who demolishes, builds or lays the foundations of any building shall take all necessary measures to secure the safety of neighbours, their property, protection of workers, passers-by, roads and whatever is under or above the ground including equipment and public service facilities and shall adhere to the law on the Conservation of National Heritage (Royal Decree No. 6/80).

Article 106 : Any holder of a building permit shall not commence any form of building unless (the owner or his agent) has received plot pegs from the surveyor in the presence of the building inspector. The prescribed forms shall be signed by the three parties concerned.

The owner or his agent shall maintain the pegs in position until the building is completed and shall continue to maintain these during all phases of implementation.

Article 107 : A. No contractor or other implementing party may commence work before signing an under-taking form at the Area's Municipality, to confirm adherence to approved plans, fixed boundaries and the guidelines mentioned on the permit book. The Contractor or the implementing party shall pay a deposit to cover this undertaking as decided by the Municipality.

The deposit shall be refunded to the implementing party when the building is completed or part of it may be retained until the site is completely cleaned to the satisfaction of the authorities concerned at the Municipality.

Article 108 : The owner, contractor or consultancy office supervising the building shall strictly adhere to the approved drawings, legal boundaries and shall sign the prescribed undertaking form.

Article 109 : The Consultant responsible for design, the soil test consultant supervising the building and the building contractor, each in his respective field, are fully responsible for the safety of the building for minimum period of 10 years

starting from the date of completing building works. This responsibility shall be in accordance with the Laws in force in the Sultanate,

Article 110 : (The building owner or his representative should charge an approved and registered consultancy office to be responsible for the technical supervision of execution provided adherence to the specifications and the approved plans, and to sign on the form of undertaking. A copy of the agreement or the consultancy charge letter should be deposited in the Municipality of the region. Ground floor residential buildings where its cost of construction is not more than RO. 8000/- are excluded.

Article 111 : A. A temporary fence shall be erected along the boundary of the plot prior to start any building in accordance with the conditions and specifications set by the Municipality and shown on
the building permit book.

B. The owner or contractor shall build a temporary latrine with in the plot boundary for the workers to use during construction period in accordance with the conditions set by the Municipality.

C. Building of temporary offices or workshops shall not be assumed at the site unless prior approval is obtained from the Municipality and after payment of fees and insurance.

Article 112 : A signboard measuring 0.90m x 1,80m. minimum shall be fixed by the owner or contractor on the building site, at least 3m, above the ground level showing the following in block letters:

- Plot number, Block number and area, if any.

- Number of Building Permit.

- Name and address of Contractor or Contracting Co

Article 113 : The owner or contractor shall keep all building material remains of the building within the fence and shall remove these from the site as soon as possible.

Article 114 : The owner or his agent shall ask the concerned Municipality to inspect the building (if no consultant is appointed to supervise implementation) on completion o' excavations for foundations and column bases in order to ensure conformity to approved drawings and write this information in the permit book.

Article 115 : Workshops, factories, crushers, stores for building materials and all works and crafts that pollute the environment and cause disturbances may not be built in residential and residential-commercial areas.
The use of such buildings shall be limited to the purpose stated in the building permit and on the site shown thereon.

Article 116 : Workers' camps may only be built on the sites planned and allocated for such purposes in accordance with the conditions laid down by the Municipality. Temporary camps erected at building sites for the sole use of workers are excluded, provided that prior approval for building such camps is obtained from the Municipality. The camps shall be built and removed according to the Municipality's specifications and conditions.

Article 117 : There may be no mountain cutting road digging or removal of building remnants or debris from the site of building or from one site to another unless prior approval is obtained from the Municipality and in accordance with the conditions the Municipality sets in this regard. The Municipality may retain a cash deposit, which will not be refunded unless all these conditions are met with and a certificate is issued from the concerned department to this effect.

Article 118 : In Buildings for public use, commercial purposes, residential blocks and offices, which have lifts, there should be a person appointed to deal with any emergency that may arise. Adequate warning devices should be made available to him. A telephone may be provided inside the lift and connected to the guards room if so required by the Municipality which may set a further condition for providing a generator to operate the lift depending on the size, height, the number of occupants and use of the building.

Article 119 : The contractors and companies specialised in the maintenance of lifts shall submit their applications for registration to the Municipality enclosing all documents certifying the experience and proficiency of the technical staff employed. The Municipality shall consider the application and complete the registration procedures, thereafter.

Article 120 : The lift shall be licensed annually by the Municipality after the concerned committee checks the relevant certificates. If the licence of the lift is not renewed the Municipality may order the lift to be closed and prohibit its usage and penalise the owner of the building in accordance with paragraph (3) of Article 134 of this Order.

Article 121 : No building may be connected nor any recommendation be made to connect a building to public services e.g. electricity, water, telephone and sewerage, unless the following conditions are met with:

A. If the building is constructed according to the permit and drawings approved by the Municipality a recommendation to connect part of the building to public service may be made, if necessary, and approved by the building authorities.

B. A No Objection Certificate from the Directorate of Civil Defence and Fire of the Royal Oman Police shall be submitted if the administration has approved same drawings of the buildings.

C. Pavements and passages for pedestrians in front of commercial and commercial residential buildings shall be paved according to the specifications set by the Municipality.

D. A central T.V. antenna shall be installed on the roof of the building as shown on the approved drawings in the following locations:

- At the main entrance of Villas.

- At the entrance of Commercial and Commercial Residential, Buildings. The number of mail boxes shall be corresponding to the number of flats and offices in the building.

F. The building or house shall have a number. Otherwise a certificate from the concerned departments shall be submitted showing that the numbering of the Area has not yet been finalised.

G. A wooden box shall be provided with a lock to cover the main switch and electric metres.

H. Debris and remnants of the building should be removed from the site, which should be perfectly leveled and graded.

I. A confirmation that electric lifts, if any, are installed according to the approved drawings and specifications and indicate the same in the power supply application form.

J. A temporary water meter may be allowed during the implementation period, at the contractor's expense, to ensure the supply of water for building purposes.

Article 122 : The Building completion certificate shall only be issued when the building is properly completed according to the approved drawings and building permit and considered safe and suitable for occupancy of residence or work.

Article 123 : No building shall be painted from outside in colours other than the ones approved in the permit. Any person who wants to change the colour or repaint the building from outside shall abide by the colours approved by the Municipality.

Article 124 : No sign, guidance, advertisement board, illuminated or otherwise may be installed or fixed on any building, street or wall, temporarily or permanently, prior to obtaining the necessary approval from the Municipality. Before submission of application for approval of the sign-board, application form shall be duly filled by the applicant concerned. The installation of such boards on building facades (elevations) should not distort the general outlook of the building.

Article 125 : For public safety excavations carried out under the Municipality approval shall be covered or screened to protect passers-by. A warning signal light lantern may be placed from sunset to sunrise as well as other requirements sought necessary by the Municipality or any other concerned department.

Article 126 : No excavations or buildings shall be made on public road, public square or open space owned by the government or by others temporarily or permanently unless prior approval is obtained from the Municipality (in case of land owned by others, the owners approval should be obtained) in accordance with the conditions set by the Municipality.

Article 127 : The issuance or renewal of permit shall not affect the rights of those concerned regarding the land shown on the permit. The Municipality shall not be held responsible for any unknown documents (unknown at the time of issuing the permit) or legal rights that have amended or cancelled these rights.

Article 128 : Rain water gutters, drainage or air conditioners shall not be fixed or directed towards others' properties, unless such a right is legally acquired and provided that precautions are taken to eliminate the damage that may be caused to the neighbour or owner of the land.

Article 129 : The owners of ruins or old deserted buildings (unaffected by planning) should make a boundary wall, of permanent material or a fence of plywood, according to the specifications set by the Municipality. Should these ruins threaten public health and safety, the Municipality has the right to notify the owner to remove these completely and clear the site properly. Failing to meet this requirement during the notice period, the Municipality shall have the right to demolish them and force the person concerned to bear the cost and impose any other legal penalty. The demolition shall be made in accordance with an administrative decision issued by the President of the Municipality or the person authorised by him. An appeal against the decision may be made. If the owners of ruins are unknown or not available, the Municipality shall make an announcement in the local press for three days. At the expiry of the period mentioned in the announcement the Municipality may take appropriate legal action.

Article 130 : Owners of open lands which are relatively lower than its surrounding shall fill it up with earth and level it. Should they fail to act accordingly, the

Municipality may notify them in writing. On the expiry of the notice period, the Municipality reserves the right to fill it up and claim in the cost from the owner.

Article 131 : Buildings totally or partially dilapidated imposing danger on residents, neighbours and passers-by should be removed by the owner or his agent. Should they fail to respond to the notice issued by the Municipality in this regard, the Municipality shall have the right to evacuate and demolish the building as per administrative procedures, claim the cost from the owner or his agent and impose any other legal penalties.

Article 132 : The Municipality has the right to force upon the owner or his agent to repair and maintain his building whenever necessary according to the specifications considered appropriate by the Municipality. The owner has to act accordingly.

Article 133 : The Municipality has the right to issue an order to stop construction work, if so required by the concerned department.

CHAPTER-IV
PENALTIES

Article 134 : Persons violating any article of this Local Order shall be liable to penalties mentioned hereinafter.

1. For constructing a new building or making extensive additions to an existing building without permit one or more of the following penalties shall be imposed:

A. A fine of P.O. 100/ minimum and not more than R.O. 500/.

B. A fine of R.0.25 per day for 30 days, maximum.

C. Six month imprisonment, maximum, depending on the intensity of the violation.

D. Removal of the violation by the Municipality's authorities and claim of all cost from the defaulter.

2. For building on government land or the land of others without ownership or permit, one or more of the following penalties shall be imposed:

A. A fine or R.O. 200/, minimum, and not more than R.O. 1000/.

B. Immediate removal of the violation.

C. A fine or R.O. 50/ per day.

D. Six months imprisonment, maximum, depending on the intensity of the violation.

E. Removal of the violation by the Municipality's authorities and claim of all cost from the defaulter.

3. For other violations one or more of the following penalties shall be imposed:

A. A fine of R.O. 25, maximum, and not more than R.O. 50/.

B. A fine of R.O. 57 per day, minimum, for 10 days, maximum.

C. Six months imprisonment, maximum, depending on the
intensity of the violation.

4. in case of the recurrence of building violations despite orders from the Municipality's authorities to the defaulter the violation shall be considered repeated and the defaulter shall be penalized as follows:

Second violation : Twice the penalty imposed for the first violation.

Third violation : Twice the penalty imposed for the second violation.

Fourth violation : Twice the penalty imposed for the third violation.

Article 135 : Without breach of the provisions regarding the penal responsibility for violating article 109 of this Local Order and the responsibility for the safety of the building for ten years, minimum, starting from the
for the second violation.

date of completing building works as mentioned in the same article, the following penalties shall be imposed for violations committed by contractors, implementing parties and Consultancy offices (mentioned under Article 107, 108, 110).

A. A fine of R.O. SO/ minimum, and not more than R.O. 100/ for the first violation.

B. A fine of R.O. 100/ minimum, and not more than R.O. 200/for the second violation.

C. A fine of R.O. 300/ minimum, and not more than R.O. 1000/ for further violations.

The Municipality may ask for the work to be stopped. It the violation is repeated the licence may be withdrawn once and for all.

Article 136 : The Local Order No. (I) issued on 21.1.1974 shall be considered null and void. Also any stipulation, that contradicts with the provisions of Local Order No. 23/92 on the building regulations in Muscat.

ENGINEER ABDULLA BIN ABBAS BIN AHMED
CHAIRMAN OF THE MUNICIPAL COUNCIL

I hereby endorse and approve this Order according to Article 5 of the Muscat Municipality law issued vide Royal Decree No. 8/12. This Order shall be published in the official gazette and put into effect commencing from date of issue.

SAIF BIN HAMAD BIN SAUD
MINISTER OF THE DIWAN OF ROYAL COURT

ISSUED ON: 09 Shawwa! 1412
12 April 1992