In exercise of powers conferred by Section 295 and Section 423 of the Karnataka Municipal Corporation Act 1976 (Karnataka Act 14 of 1977) the Gulbarga Mahanagar Palike hereby makes the following draft building bye-laws and the same is hereby published as required by Clause (a) of Section 426 of the said Act for public inspection



GULBARGA MAHANAGAR PALIKE DRAFT BUILDING BYELAWS 2011

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CHAPTER 1

1.0 SHORT TITLE, EXTENT AND COMMENCEMENT

- 1.1 These Bye Laws shall be called The Gulbarga Mahanagarpalike Building Bye Laws 2011
- 1.2 These Bye Laws shall be applicable within the jurisdiction of Gulbarga Mahanagarpalike as notified by the Government under Chapter II of the Karnataka Municipal Corporation Act 1976.
- 1.3 These Bye laws shall come into force from

CHAPTER 2

2.0 DEFINITIONS

- 2.1 Act, means the Karnataka Municipal Corporations Act, 1976 (and amendments, if any).
- 2.2 Act KTCP means the Karnataka Town and Country Planning Act, 1961 (and amendments, if any).
- **2.3 Addition and/or Alteration** means a structural change including an addition to the area or change in height or the removal of part of building, or any change to the structure, such as the construction or removal or cutting of any wall or part of a wall, partition, column, beam, joist, floor including a mezzanine floor or other support, or a change to or closing of any required means of ingress or egress.
- **2.4 Agriculture** includes horticulture, farming, growing of crops, fruits, vegetables, flowers, grass, fodder, trees of any kind or cultivation of soil, breeding and keeping of live stock including cattle, horses, donkeys, mules, pigs, fish, poultry and bees, the use of land which is ancillary to the farming of land or any purpose aforesaid but shall not include the use of any land attached to a building for the Purpose of garden to be used along with such building; and agriculture shall be construed accordingly.
- 2.5 'Amalgamation' means clubbing of two or more authorized plots.
- **2.6 Apartment/Flat** refers to any residential building constructed in a detached or semi-detached manner, being designed as ground floor plus more upper floors and constructed as separate dwelling unit with common staircase.
- **2.7 'Applicant'** means any person who gives notice to the Authority for any approval with an intention to take up any development work.
- **2.8 Amenity** includes roads, street, open spaces, parks, recreational grounds, playgrounds, gardens, water supply, electric supply, street lighting, sewerage, drainage, public works and other utilities, services and conveniences.
- **2.9 'Auditorium:** Premises having an enclosed space to seat audience and stage for various performances such as concerts, plays, music etc.
- **2.10 Authority or Local Authority** means: The Commissioner of the Gulbarga Mahanagar palike, or any other officer to whom the powers are delegated by the Commissioner.
- **2.11 Automatic Fire Detection System and Alarm System** refers to a fire alarm system comprising of components for automatically detecting a fire, initiating an alarm of fire and initiating other actions that may be appropriate. The system may also include manual fire alarm call points.

- **2.12 Automatic Sprinkler System** means a system of water pipes fitted with sprinkler heads at suitable intervals and heights and designed to actuate automatically, control and extinguish a fire by the discharge of water.
- **2.13 Balcony** means a horizontal projection open on the exterior side, with a handrail or balustrade to serve as passage or sit out place.
- **2.14 Basement/Cellar** means any storey, which is partly/wholly below the ground level. The basement height should not project more than 1.2 mt. above the average ground level.
- **2.15 'Bifurcation'** means bifurcation of a plot into two.
- **2.16 Biochemical Oxygen Demand** (abbreviated as B.O.D.) means the quantity of oxygen utilized in the biochemical oxidation of organic matter in five days at 20_° C expressed in milligrams per liter, as determined by procedures outlined in standard methods.
- 2.16 Building means as defined in Section 2(1)(IA) of the Karnataka Municipal Corporation Act 1976.
- **2.17 Building Byelaws / Codes** refer to the ordinances and regulations controlling the design, construction, materials, alteration and occupancy of any structure for human safety and welfare. Building Byelaws/Codes include both technical and functional standards.
- **2.18** "Building Envelope" means the horizontal spatial limits in a plot up to which the construction of a building may be permitted.
- **2.19 "Building Line"** means the line up to which the plinth of a building adjoining a street or an extension of a street or on a future street may lawfully extend within the plot on a street or an extension of a street and includes the line prescribed, if any, or in any scheme.
- **2.20 "Building setback"** is the minimum distance between any building or structure from the boundary line of the plot.
- **2.21** "Bus Depot" means a premises used by public transport agency or any other agency for parking, maintenance and repair of buses. These may include the workshop.
- **2.22** "Bus Terminal" means a premises used by public transport agency to park the buses for short duration to serve the public. It may include the related facilities for passengers.
- **2.23 Canopy** means a projection over any entrance.
- **2.24 Capacity** means a combination of all the strengths and resources available within a community, society or organization that can reduce the level of risk, or the effects of a disaster. Capacity may include physical, institutional, social or economic means as well as skilled personal or collective attributes such as leadership and management. Capacity may also be described as capability.
- **2.25 Carpet Area** means the covered area of the usable rooms at any floor level (excluding the area of the walls).
- **2.26 Chajja** means a sloping or horizontal structural overhang usually provided over openings on external walls to provide protection from sun and rain.
- **2.27 Chimney** means an upright shaft containing one or more flues provided for the conveyance to the outer air of any product of combustion resulting from the operation of heat producing appliance or equipment employing solid, liquid or gaseous fuel.
- **2.28 Civic Amenity** means a market, a post office, a bank, a bus stand or a bus depot, a fair price shop, a milk booth, a school, a dispensary, a maternity home, a child care centre, a library, a gymnasium, a

recreation centre run by the Government or local authority, a centre for educational, religious, social or cultural activities or philanthropic service run by a co-operative society or society registered under the Karnataka Societies Registration Act, 1960 (Karnataka Act 17 of 1960) or by a trust created wholly for charitable, educational or religious purposes, a police station, an area office or a service station of the local authority or the Gulbarga Electricity Supply Company Limited and such other amenity as the Government may, by notification, specify.

- **2.29 Combustible Material** refers to that material which either burns itself or adds heat to a fire, when tested for non-combustibility in accordance with the IS:3808-1966 Method of Test for Combustibility of Building Material of the National Building Code.
- **2.30 'Commercial building'** means a building or part of a building, which is used as shops, and/or market for display and sale of merchandise either wholesale or retail, building used for transaction of business or the keeping of accounts & records for similar purpose; professional service facilities, corporate offices, software services, offices of commercial undertakings and companies, petrol bunk, restaurants, lodges, nursing homes, cinema theatres, multiplex, kalyana mantapa, community hall, banks, clubs. Storage and service facilities incidental to the sale of merchandise and located in the same building shall be included under this group, except where exempted.
- **2.31 Common Wall** means a wall built on land belonging to two adjoining owners, the wall being the joint property of both owners. If two adjoining owners build a dividing wall on their property, they are not common walls and no part of the footings of either wall shall project on to the land of the adjoining owner's property except by legal agreement between the owners. Any common or dividing wall shall be considered for the purpose of these byelaws, as being equivalent to an external wall as far as the thickness and height are concerned.
- **2.32 'Community Hall'** means congregational place to be developed by Government or Local bodies, Trust Society, etc., and having a hall without separate kitchen and dining. No upper floor shall be permitted.
- **2.33 Common Plot** means a common open space exclusive of margins and approaches, at a height equal to or higher than ground level of the building unit. The owner shall have to give an undertaking that the common plot shall be for the common use of all the resident or occupants of the building unit, free of cost. On sanction of the license, the common plot shall deem to have vested in the society/association of the residents/occupants. In case such society or Association is to be formed, the possession/custody of common plot shall remain with Competent Authority until such association/society is formed. The common plot shall not be sold to any other person and it shall not be put to any other use except for the common use of the resident/occupants.
- **2.34 Compliance** refers to the verification of the properties of construction materials based on test data and verification of the strength and structural adequacy for various components of buildings and structures.
- **2.35 Control Manhole** means the manhole so designated for the express purpose of collecting waste effluent samples and facilitating observation and measurement of waste as necessary from a property. It shall be the manhole at the junction of the building sewer with the public sewer, or it shall be the nearest manhole on the public sewer downstream of the junction of the building sewer with the public sewer, as may be decided by the Authority.

- **2.36 Convention Center** means a premises having enclosed space for official meetings and discussions, Cultural activities without cooking facilities.
- **2.37 Corner Plot/ Corner site** means a plot at the junctions of, and fronting on, two or more intersecting streets/roads.
- **2.38 Corporation** means the Gulbarga mahanagar palike.
- **2.39 Counter Measures** means all measures taken to counter and reduce disaster risk. They most commonly refer to engineering (structural) measures but can also include non-structural measures and tools designed and employed to avoid or limit the adverse impact of natural disasters and related environmental and technological disasters.
- **2.40 Courtyard** means a space permanently open to the sky, enclosed fully or partially enclosed by building and may be at ground level or any other level within or adjacent to a building.
- **2.41 Covered Area** means area covered by building / buildings immediately above the plinth level, but does not include the space covered by;
- **i.** Garden, rocky area, well and well structures, plant, nursery, water pool, swimming pool (if uncovered) platform around a tree, tank, fountain, bench with open top and unenclosed sides by walls and the like;
- ii. Drainage, culvert, conduit, catch-pit, gully-pit, chamber gutter and the like;
- **iii.** Compound or boundary wall, gate, un-storied porch and portico, Chajja, slide, swing, uncovered staircase, watchman booth, pump house. The area covered by watchman booth / pump house shall not exceed three square meters;
- iv. Sump tank and electric transformer.
- 2.42 Cross Wall means an internal wall within the building up to the roof level or lintel level.
- **2.43 'Cultural buildings'** means a building built by a Trust, Society, Government or Local body for cultural activities.
- **2.44 Damage Classification** refers to the evaluation and recording of damage to structures, facilities, or objects according to three categories: Severe Damage which precludes further use of the structure, facility, or object for its intended purpose; Moderate Damage or the moderate degree of damage to principal members, which precludes effective use of the structure, facility, or object for its intended purpose, unless major repairs are done; Light Damage which refers to slight damage to roofing
- and siding, interior partitions blown down, and cracked walls; the damage is not severe enough to preclude use of the structure/facility for the purpose for which it was intended.
- **2.45 Density** means concentration of population expressed in terms of number of persons per hectare in a particular area.
- 2.46 Depth of Plot means the horizontal distance between the front and rear plot (site) boundaries.
- **2.47 Design Earthquake** refers to the earthquake parameters selected for designing an earthquake resistant structure according to byelaws/code requirements.
- **2.48 Detached Building** means a building; the walls and roof of which are independent of any other building in the same plot with open spaces on all sides, except the portion covered by the garage(if provided)
- **2.49 Developer or Builder** means the person who is legally empowered to construct or to execute work on a building unit, building or structure, or where no person is empowered, the owner of the building unit, building or structure.

- **2.50 Development**, with its grammatical variations, means the carrying out of building, engineering, mining or other operations in, or over or under land or water, on the making of any material change in any building or land, or in the use of any building, land. Development also includes redevelopment and layout and sub-division of any land.
- **2.51 Development Plan** means the proposal to construct one or more buildings on a plot measuring more than 5000 Sq. mt.
- **2.52 Disaster Legislation** refers to the body of laws and regulations that govern and designate responsibility for disaster management concerning the various phases of disaster.
- **2.53 Disaster Management** means the body of policy and administrative decisions and operational activities that pertain to the various stages of a disaster at all levels.
- 2.54 Disaster, Natural A natural disaster is the occurrence of an abnormal or infrequent hazard (example: earthquake, flood, cyclone, landslide etc) that impacts on vulnerable communities or geographical areas, causing substantial damage, disruption and possible casualties and leaving the affected communities unable to function normally. (A natural disaster results in the disruption of the functioning of a society, causing widespread human, material and environmental losses, which exceeds the ability of the affected society to cope using only its own resources). From an economic perspective a disaster implies some combination of losses in terms of human, physical and financial capital, and a reduction in economic activity, such as income and investment, consumption, production and employment in the 'real' economy. There may also be severe impacts in terms of financial flows, such as revenue and expenditure of public and private bodies. A disaster is a function of the risk process. It results from the combination of hazards, conditions of vulnerability and insufficient capacity or measures to reduce the potential negative consequences of risk.
- **2.55 Disaster Risk Management** means the systematic management of administrative decisions, organization, operational skills and abilities to implement policies, strategies and coping capacities of the society and communities to lessen the impacts of natural disasters and related Environmental and technological disasters. This comprises all forms of activities, including structural and non-structural measures to avoid (prevention) or to limit (mitigation and preparedness) adverse effects of disasters.
- **2.56 Disaster Risk Reduction (Disaster Reduction)** refers to the conceptual framework of elements considered with the possibilities to minimize vulnerabilities and disaster risks throughout a society, to avoid (prevention) or to limit (mitigation and preparedness) the adverse impacts of hazards, within the broad context of sustainable development.
- **2.57 Drain** means a conduit, channel or pipe, natural valleys intended for carrying of storm water, sewage, wastewater or other water borne wastes in a building drainage system.
- **2.58 Drainage** means the removal of any liquid by a system constructed for the purpose.
- **2.59 Dwelling Unit/Tenement** means an independent housing unit with separate facility for living, cooking and sanitary requirements.
- **2.60 Early Warning** refers to the provision of timely and effective information, through identified institutions, that allow individuals exposed to a hazard, to take action to avoid or reduce their risk and prepare for effective response. Early warning systems include of three primary elements
- (i) Forecasting of impending events,
- (ii) Processing and dissemination of warnings to political authorities and population, and

- (iii) Undertaking appropriate and timely actions.
- **2.61 Earthquake** refers to a sudden break within the upper layers of the earth, sometimes breaking the surface, resulting in the vibration of the ground, which, where strong enough will cause the collapse of buildings and destruction of life and property.
- **2.62 Emergency Lighting System** refers to a complete but discrete emergency lighting installation from the standby power source to the emergency lighting lamp(s).
- **2.63 Emergency Management** refers to the organization and management of resources and responsibilities for dealing with all aspects of emergencies, particularly in preparedness, response and rehabilitation. Emergency management involves plans, government, voluntary and private agencies in a comprehensive and coordinated way to respond to the whole spectrum of emergency needs.
- **2.64 Environmental Impact Assessment (EIA)** refers to the study undertaken in order to assess the effect on a specified environment of the introduction of any new factor, which may upset the ecological balance.
- **2.65 Environmental Degradation** means unfavorable modification of the ecological state and environment through natural processes and/or human activities. Potential effects are varied and may contribute to an increase in vulnerability and the frequency and intensity of natural hazards. Some examples: land degradation, deforestation, forest fires, loss of biodiversity, land, water and air pollution, climate change, sea level rise, ozone depletion.
- **2.66 Escalator** means a power driven, inclined, continuous stairway used for raising or lowering passengers.
- **2.67 Escape Lighting** refers to that part of the emergency lighting, which is provided to ensure that the escape route is illuminated at all times.
- **2.68 Exit** means a passage, channel or means of egress from any building, storey or floor area to a street or other open space of safety.
- **2.69 External Wall** means an outer wall of the building not being a partition wall even though adjoining a wall of another building, and also a wall abutting on an interior open space of any building.
- **2.70 Filling Station** is a place of retail business engaged in supplying and dispensing of petrol, diesel, motor-oil etc., essential for the normal operation of automobiles.
- **2.71 Filling cum Service station** is a place of retail business engaged in supplying goods and services essential for the normal operation of automobiles. These include dispensing petrol, diesel, motor-oil, the sales and services of tyres, batteries and other automobiles accessories and replacement item and washing and lubrication. They do not include the body of tender work, painting or other major motors repairs and over hauling.
- **2.72 Fire Exit** refers to a way put leading to an escape route having panic bar hardware provided on the door.
- **2.73 Fire Lift** refers to the lift installed to enable fire services personnel to reach different floors with minimum delay.
- **2.74** Fire Load refers to the calorific energy of the contents contained in a space, including the facings of the walls, partitions, floors and ceilings.
- **2.75** Fire Load Density refers to the fire load divided by the floor area.

- **2.76 Fire Separators** means the distance in meters measured from the external wall of any other building on the site, or from other site, or from the opposite side of a street or other public space for the purpose of preventing the spread of fire.
- **2.77 First Floor** means the floor immediately above the ground floor or stilt, on which second and other floors follow subsequently.
- **2.78 Flatted Factory** means a group of non-hazardous small industrial units having not more than 50 workers. These units may be located in multi-storied buildings.
- **2.79 Floor** means the lower surface in a storey on which one normally walks in a building. The general term 'floor', unless specifically mentioned otherwise, shall not refer to a basement, a cellar or a mezzanine floor.
- **2.80 Floor Area Ratio (FAR)** means the ratio of the combined Nett floor area of the floors including areas of all walls, except areas specifically exempted under these byelaws, to the total area of the plot.

- 2.81 Floor Area means built up area including area of walls.
- 2.82 Footing means the projection courses at the base of a wall to spread the weight over a large area.
- **2.83 Foundation** means that part of the structure which is below the lowest floor and which provides support for the superstructure and which transmits the load of the superstructure to the bearing strata.
- **2.84 Frontage** means the measurement of the side of any site/land abutting the road.
- **2.85 Gallery** means an intermediate floor or platform projection from a wall of an auditorium or a hall providing extra floor area, additional seating accommodation, etc. It shall also include the structures provided for seating in stadia.
- **2.86 Garage or Private Garage** means a building or a portion thereof designed and used for parking of private owned motor driven or other vehicles. Public Garage means a building or portion thereof, other than a private garage, designed or used for repairing, servicing, hiring, selling or storing or parking motor driven or other vehicles.
- **2.87 Garbage** means solid wastes from the domestic and commercial preparation, cooking and dispensing of food and from the handling storage, and sale of produce.
- **2.88 Garbage, Properly Shredded** means the waste from the preparation, cooking and dispensing of food that have been shredded to such a degree that all particles will be of 1cm carried freely under the flow conditions normally prevailing in sewers with no particle greater then 1cm in any dimension.
- **2.89 Geological Hazard** refers to the natural earth processes or phenomena, which may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation. Geological hazard includes internal earth processes of tectonic origin, such as earthquakes, geological fault activity, tsunamis, volcanic activity and emissions as well as external processes such as mass movements: landslides, rockslides, rock falls or avalanches, surfaces collapses, and debris and mud flows. Geological hazards can be single, sequential or combined in their origin and effects.
- **2.90 Geographic Information Systems (GIS)** refer to the analysis that combines relational databases with spatial interpretation and outputs often in form of maps. A more elaborate definition is that of computer programs for capturing, storing, checking, integrating, analyzing and displaying data about the earth that is spatially referenced. Geographical information systems are increasingly being

utilized for hazard and vulnerability mapping and analysis, as well as for the application of disaster risk management measures.

- 2.91 Government, means the "Government of Karnataka".
- **2.92 Ground Floor** means the floor immediately above the level of the adjoining ground level on all sides or above the basement floor.
- **2.93 Ground Level** means the level of the crown of the existing nearest constructed road or existing ground level, whichever is higher.
- **2.94 Group Housing** means more than two buildings on a plot with one or more floors and with one or more dwelling within each floor, they are connected by an access of not less than 3.5mm in width; if they are not approachable directly from the road.
- **2.95 Habitable Room** means a room occupied or designed for occupancy by one or more persons for study, living, sleeping, eating, and kitchen if it is used as a living room, but not including bathrooms, water-closet compartments, laundries, serving and store pantries, corridors, cellars, attics, and spaces that are not used frequently or during extended periods.
- **2.96 Hazard** refers to a potentially damaging physical event, phenomenon and/or human activity, which may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation. Hazards can include latent conditions that may represent future threats and can have different origins: natural (geological, hydrometereological and biological) and/or induced by human processes (environmental degradation and technological hazards). Hazards can be single, sequential or combined in their origin and effects. Each hazard is characterized by its location, intensity, frequency and probability.
- **2.97 Hazard Analysis** means the Identification, study and monitoring of any hazard to determine its potential, origin, characteristics and behavior.
- 2.98 Hazardous Building' means a building or part thereof used for:

Storage handling, manufacture of processing of radioactive substances or of highly combustible or explosive materials or of products which are liable to burn with extreme rapidity and / or producing poisonous fumes or explosive emanations;

Storage, handling, manufacture or processing of which involves highly corrosive, toxic or noxious alkalis, acids, or other liquids, gases or chemicals producing flame, fumes and explosive mixtures, etc.

- or which result in division of matter into fine particles capable of spontaneous ignition.
- **2.99 Head Room** where a finished ceiling is not provided; the lower side of the joists or beams or the tiebeams shall determine the clear head room.
- **2.100 Heavy Industry** means an industry employing more than 500 workers. These industries are permissible only in accordance with the land use as per the Revised Comprehensive Development Plan or Master Plan approved by the Government.
- **2.101 Height of Building** means the vertical distance measured in the case of flat roofs from the ground level/plot level, whichever is more, to the top of the roof, and in the case of pitched roofs, up to the point where the external surface of the outer wall intersects a finished surface of the sloping roof; and in the case of gable facing the road, the mid-point between the eave-level and the ridge. Architectural features serving no other function except that of decoration shall be excluded for the purpose of measuring heights. Water tank, chimneys, pent house, lift room, stair case room and parapet are also excluded for

the purpose of measuring the height of a building. The aggregate area of such structures shall not exceed 1/10th of the roof area of the building upon which they are erected.

- **2.102 Heritage building** means a building possessing architectural aesthetic, historic or cultural values, which is declared as Heritage building by the Gulbarga Urban Development Authority within whose jurisdiction such building is situated.
- **2.103 Heritage Precinct** means an area comprising heritage building or buildings and precincts there of or related places which is declared as such by the Gulbarga Urban Development Authority within whose jurisdiction such building is situated.
- **2.104 High-rise Building** means a building with ground floor plus four or more floors above the ground floor or a building exceeding 15 m in height. The building shall be permitted on a plot of minimum size 15.25 mt. X 21.35 mt. and above and on road width of 12 m and above.
- **2.105 Hospital** is a premises providing medical facilities of general or specified nature for the treatment of in-patients and out-patients.
- **2.106 Induced Seismicity** refers to earthquake activity resulting from man-made activities such as mining, large explosions, or forcing large quantities of liquid deep into the ground.
- **2.107 Industrial Building** means a building wholly or partially used as a factory, for the manufacturing of products of all kinds including fabrication and assembly, power plant, refinery, gas plant, distillery, beverages, dairy factory & workshops etc.
- **2.108 Industrial waters** means the liquid wastes from industrial manufacturing process, trade, business or form of any development, recovery or processing operation, as distinct from sanitary sewage.
- **2.109 Junk yard** means premises for covered, semi-covered or open storage, including sale and purchase of waste goods, commodities and materials.
- **2.110 Kalyan Mantapas** means premises where marriages, social and religious functions are conducted with cooking facilities.
- **2.111 Land Use** includes the purpose for which the site or part of the site or the building or part of the building is in use or permitted to be used by the Authority. Land use includes zoning of land use as stipulated in the Master Plan and the Zoning Regulations.
- **2.112 License** means a permission or authorization in writing by the authority to carry out work regulated by the byelaws.
- **2.113 Lifelines** means the public facilities and systems that provide basic life support services such as water, energy, sanitation, communications and transportation.
- **2.114 Lift** means an appliance designed to transport persons or materials between two or more levels in a vertical or substantially vertical direction by means of a guided car or platform. The word 'elevator' is also synonymously used for 'lift'.
- **2.115 Loft** means a residual space above normal floor level, which may be constructed or adopted for storage purposes.
- **2.116 Master Plan** means Master Plan/ Master Plan (Revised) prepared for the Local Planning Area of the Gulbarga approved by the Government under the Karnataka Town and Country Planning Act, 1961.
- **2.117 Mezzanine Floor** means an intermediate floor between the ground floor and the first floor. The area of such mezzanine floor shall not exceed 1/3 of covered area of ground floor and its minimum height will be 2.20 mt. Mezzanine floors are permitted for non residential uses only.

- **2.118 'Multilevel Car Parking (MLCP)'** means multilevel R.C.C. structure used for car parking connected to all floors by means of ramps/ mechanical elevators. MLCP can be an independent structure or part of a building with other land uses.
- **2.119 Mitigation** refers to the measures taken in advance of a disaster aimed at decreasing or eliminating its impact on a society and on environment including preparedness and prevention.
- **2.120 Multiplex complex** means, a building housing an entertainment and cultural centre including cinema theatres, restaurants, food courts, shops etc.
- 2.121 Natural Outlet means a channel in which a flow of ground water occurs continuously.
- **2.122 Non-Combustible Materials** means a material that neither burns nor gives off inflammable vapors in sufficient quantity to ignite a pilot flame.
- **2.123 Nursing home** means, a premises having medical facility for in patients and out patients, providing upto 30 beds.
- **2.124 Occupancy or Use Group** means the principal occupancy for which a building or part of the building is used or intended to be used. For the purpose of classification of a building according to occupancy, occupancy shall be deemed to include subsidiary occupancies which are contingent upon it.

Note: The building use classification and land use classification shall be based on the provisions of Zoning Regulations approved under the KTCP Act, 1961.

- **2.125 Occupancy mixed** means the occupancy where more than one type of occupancy are present in different portions of the building.
- **2.126 Open space** means an area, forming an integral part of the plot, left open to the sky. The open space shall be the minimum distance measured between the front, rear and side of the building and the respective plot boundaries.
- **2.127 Owner** means a person or body having a legal interest in land and/or building thereon. This includes free holders, leaseholders or those holding a sub-lease that both bestows a legal right to occupation and gives rise to liabilities in respect of safety or building condition. In case of lease or sub-lease holders, as far as ownership with respect to the structure is concerned, the structure of a flat or structure on a plot belongs to the allottee/lessee till the allotment/lease subsists.
- **2.128 Parapet** means a low wall or railing built along the edge of a roof or floor.
- **2.129 Parking Space** means an area enclosed or unenclosed, covered or open, sufficient in size to park vehicles, together with a drive-way connecting the parking space with a street or alley or any public area and permitting ingress/way in and egress/way out for vehicles.
- **2.130 Partition** means an interior non-load bearing barrier, one storey or part-storey in height.
- **2.131 Penthouse** means a covered space not exceeding 20 square meters on the roof of a building that shall have at least one side completely open without any partition.
- **2.132 Person** includes any individual or body of individuals corporate or incorporate (including individual firm, company, association, society, corporation or group).
- **2.133 Plinth** means the portion of a structure between the surface of the surrounding ground and surface of the floor, immediately above the ground.
- **2.134 Plinth Area** means the built up covered area of the building/buildings immediately above plinth level.
- **2.135 Plinth Level** means the level of the floor of a building immediately above the surrounding ground.

- 2.136 Plot or Site means a parcel (piece) of land enclosed by definite boundaries.
- **2.137 Porch or Portico** means a roof cover supported on pillars or cantilevered projection for the purpose of pedestrian or vehicular approach to a building.
- **2.138 Preparedness** refers to the activities and measures taken in advance to ensure effective response to the impact of hazards, including the issuance of timely and effective early warnings and the temporary removal of people and property from a threatened location and facility.
- **2.139 Prevention** refers to the activities undertaken to provide outright avoidance of the adverse impact of hazards and means to minimize related environmental, technological and biological disasters. Depending on social and technical feasibility and cost/benefit considerations, investing in preventive measures is justified in areas frequently affected by disasters. In the context of public awareness and education related to disaster risk reduction, changing attitudes and behavior contribute to promoting a "culture of prevention".
- **2.140 Public and semi-public building** means a building used or intended to be used either ordinarily or occasionally by the public such as offices of Central or State Governments or local authorities, a church, temple, chapel, mosque or any place of public worship. dharmashala, college, school, library, theatre for cultural activities, public concert room, public hall, hospital run by public institutions, public exhibition hall, lecture room or any other place of public assembly.
- **2.141 Pump Room** means, a room provided below ground level adjacent to sump tank to house various types of pumps with self priming mechanism. However, the entrance shaft of the pump room of a maximum of 2 m X 2m may be permitted above the ground level.
- **2.142 Quality Assurance** refers to all planned and systematic actions necessary to ensure that the final product i.e. structure or structural elements will perform satisfactorily in service life.
- **2.143 Quality Audit** refers to a requirement for an independent (third party) assessment of the quality and seismic and cyclone resistant features of the buildings. The quality audit report shall consist of conformance or nonconformance of structures with the technical specifications for earthquake and cyclone resistance and to suggest remedies/rectification, if any.
- **2.144 Quality Control** refers to construction quality and control of variation in the material properties and structural adequacy. In case of concrete, it is the control of accuracy of all operations that affect the consistency and strength of concrete, batching, mixing, transporting, placing, curing and testing.
- **2.145 Rain Water Harvesting** in a building site means storage or recharging into ground of rainwater falling on the terrace or on any paved or unpaved surface within the building site. Rain Water harvesting is a method of utilizing rain water for domestic and agricultural use.
- **2.146 Recovery** refers to the decisions and actions taken after a disaster with a view to restoring the living conditions of the stricken community, while encouraging and facilitating necessary adjustments to reduce disaster risk. Recovery (rehabilitation and reconstruction) is an opportunity to develop and apply disaster risk reduction measures.
- **2.147 Recreational Club**, is a premises used for assembly of a group of persons for social and recreational purposes with all related facilities.
- 2.148 Registered Town Planner (RTP), Registered Architect (RA), Registered Engineer (RE), Registered Structural Engineer (RSE), Registered Structural Design Agency (RSDA), Registered Geotechnical Engineer (RGE), Registered Construction Engineer (RCE), Registered Construction

Management Agency (RCMA), Registered Quality Auditor (RQA), Registered Quality Audit Agency (RQAA), Registered Electrical Engineer(REE) means respectively the person(s)/firm registered with the competent authority for the purpose of this act as a town planner, architect, engineer, structural engineer, structural design agency, geo-technical engineer, construction engineer, construction management agency, quality auditor, quality audit agency, electrical engineer under these byelaws or any other act prevailing for the area.

2.149 Town Planner on Record (TPR), Architect on Record (AR), Engineer on Record (ER), Structural Engineer on Record (SER), Structural Design Agency on Record (SDAR), Geotechnical Engineer on Record (GER), Construction Engineer on Record (CER), Construction Management Agency on record (CMAR), Quality Auditor on record (QAR), Quality Audit

Agency on record (QAAR), Electrical Engineer on Record means respectively the person(s)/firm employed by the owner, developer for a particular development/construction who is competent and having a valid registration to perform duties and responsibilities under these byelaws or any other act Prevailing for the area.

- **2.150 Relief / Response** means the provision of assistance or intervention during or immediately after a disaster to meet the life preservation and basic subsistence needs of those people affected. It can be of an immediate, short-term, or protracted duration.
- **2.151 Repair shop**, is a premises similar to retail shop for carrying out repair of house-hold goods, electronic gadgets, automobiles, cycles etc.
- **2.152 Residential Building** means a building used or constructed or adopted to be used usually for human habitation and includes garages and other ant-homes necessary for the normal use of the building as a residence.
- **2.153 Retail shop**, is a premises for sale of commodities directly to the consumer with necessary storage.
- **2.154 Retrofitting (or upgrading)** refers to the enhancement of strength of structures in order to be more resistant to the forces of natural hazards. It also includes upgrading the strength of unsafe building by using suitable engineering techniques.
- **2.155 Risk** refers to the probability of harmful consequences, or expected losses (deaths, injuries, property, livelihoods, economic activity disrupted or environment damaged) resulting from interactions between natural or human induced hazards and vulnerable conditions. Conventionally risk is expressed by the notation Risk = Hazards x Vulnerability.
- **2.156 Risk Assessment/Analysis** refers to a process undertaken to determine the nature and extent of risk by analyzing potential hazards and evaluating existing conditions of vulnerability that could pose a potential threat or harm to people, property, livelihoods and the environment on which they depend. The process of conducting a risk assessment is based in a review of both the technical features of hazards such as their location, intensity, frequency and probability; and also the analysis of the physical, social, economic and environmental dimensions of vulnerability, while taking particular account of the coping capabilities pertinent to the risk scenarios.
- **2.157 Risk Management** means the process of identifying, analyzing and quantifying the probability of losses in order to undertake preventive or corrective actions. This involves planning actions to reduce

vulnerability in areas where risk can be controlled, and establishing protective mechanisms against the potential economic losses from uncontrollable factors of natural hazards.

- **2.158 Road (Street)** means any means of access namely, highway, street, lane, pathway, alley, stairway, passageway, carriageway, footway or bridge, whether a thoroughfare or not, over which the public have a rite of passage or have passed and had access uninterruptedly for a specified period, whether existing or proposed in any scheme, and includes all bunds, channels, ditches, storm water drains, culverts, sidewalks, traffic islands, roadside trees and hedges, retaining walls, fences, barriers and railings within the street lines.
- **2.159 Road (Street) Level or Grade** means the officially established elevation of grade of the central line of the road upon which a plot fronts and if there is no officially established grade, the existing grade of the street at its mid-point.
- 2.160 Road (Street) Line means the line defining the side limits of a road (street).
- **2.161 Road Width** means the distance between the boundaries of a road including footways and drains measured at right angles to the center of the plot. In case of roads having service roads in addition to the main roads, the width of road shall be the aggregate width of service roads and main roads for determining Floor Area Ratio (FAR) and number of floors.
- **2.162 Roof Exits** refers to a means of escape on to the roof of a building, where the roof has access to it from the ground. The exit shall have adequate cut-off within the building from the staircase below.
- **2.163 Room Height** means the vertical distance measured from the finished floor surface to the finished ceiling surface. Where finished ceiling is not provided, the underside of the joists or beams or the tie beams shall determine the upper point of measurement. The minimum height of the room shall be 2.75 mt.
- **2.164 Secondary Hazards** mean those hazards that occur as a result of another hazard or disaster, i.e., fires or landslides following earthquakes, epidemics following famines, food shortages following drought or floods.
- **2.165 Seismicity** refers to the distribution of earthquakes in space and time.
- **2.166 Semi Detached Building** means a building on two plots attached to each other by a common or adjacent wall with open spaces on three sides.
- **2.167 Service Apartment** means fully furnished room or suit or rooms with kitchen, which are intended to be rented out on daily/weekly/monthly basis.
- **2.168 Service Industry** means a industry were service are offered with or without power. If power is used, aggregate installed capacity shall not exceed 5HP or the site area shall not exceed 240 sq meters.
- **2.169 Service Road/Lane** means a road/lane provided adjacent to a plot(s) for access or service purposes as the case may be.
- **2.170 Setback** means the open space prescribed under these byelaws between the plot boundary and the plinth of the building.
- **2.171 Set-back Line** means a line prescribed under these byelaws beyond which nothing can be constructed towards the plot boundaries except those not included under the definition of covered area.
- **2.172 Sewage** means a combination of the waters carried from residences, business buildings, institutions and industrial establishments.

- **2.173 Sewage Treatment Plant** means any arrangement or devices and structures used for treating sewage.
- 2.174 Sewer means a pipe, or conduct or other construction provided for carrying sewage.
- **a.** Building Sewer means the sewer under the control of the property owner and extending from the building to the first inspection chamber/intercepting trap or manhole
- **b.** Public sewer means a sewer in which all owners of abutting properties may discharge, and which is controlled by the public body
- **c.** Sanitary Sewer means a sewer, which carries sewage, and to which storm, surface and ground water are not admitted
- **d.** Storm Sewer means sewer, which carries storm and surface water and drainage but excludes sewage and industrial wastes, other than unpolluted cooling water
- e. Combined Sewer means a sewer receiving both sewage and surface run off.
- **2.175 Sewer System** means the sewage disposal system. Sewerage works mean all facilities for collecting, pumping, treating and dispensing of sewage.
- **2.176 Sewerage works** mean all facilities for collecting, pumping, treating and dispensing of sewage.
- **2.177 Sludge** means any discharge of water sewage industrial waste which in concentration of any given constituent or in quantity of flow exceeds for any duration longer than 15 minutes, five times the average 24 hour concentration of flow during normal operation.
- **2.178 Staircase Room** means a room accommodating the stair and for purpose of providing protection from weather and not used for human habitation.
- **2.179 Stilt** floor means, open parking area provided at ground level. The height of the stilt floor shall be a minimum 2.4 mt and in no case shall exceed 3.0 mt. The height shall be considered for calculating the total height of the building but the area shall be exempted from FAR/FSI calculation when the stilt is not enclosed. In case of mechanical or multi level parking used in stilts, the maximum height can be relaxed up to 3.6 mt.
- **2.180 Storey** means the portion of a building included between the surface of any floor and the surface of the floor next above it, or if there be no floor above it, then the space between any floor and the ceiling next above it.
- **2.181 Structural Measures** refers to the engineering measures and construction of hazard-resistant and/or protective structures and infrastructure.
- **2.182 Suspended Solids** means solids that either float on the surface or are in suspension in water, sewage or other liquids, which are removable by a laboratory filtering device, quantitative determination of which shall be done in accordance with standard methods.
- **2.183 Sustainable Development** means the development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts: the concept of "needs", in particular the essential needs of the poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and the future needs. Sustainable development is based on socio-cultural development, political stability and decorum, economic growth and ecosystem protection, which all relate to disaster risk reduction.

- **2.184 Abut** means to abut on a road (street) boundary such that any portion of the building is on the road (Street) boundary.
- 2.185 T.D.R. means Transferable development rights as defined in section 14 (b) of KTCP act.
- **2.186 To Erect** means to erect a new building on any site whether previously built upon or not; and To re-erect any building of which portions above the plinth level have been pulled down, burnt or destroyed.
- **2.187 Travel Distance** is the distance to be traveled from any point in a building to a protected escape route, external escape route or final exit.
- **2.188 Ventilation** refers to the supply of outside air into or the removal of inside air from an enclosed space.
- **2.189 Verandah** means a covered area with at least one side open to the outside with the exception of 1 m high parapet on the upper floors to be provided on the open side.
- **2.190 Volume to Plot Area Ratio (VPR)** is the ratio of volume of building measured in cubic meters to the area of the plot measured in square meters and expressed in meters.
- **2.191 Vulnerability** refers to a set of conditions and processes resulting from physical, social, economic, and environmental factors, which increase the susceptibility of a community to the impact of hazards. Positive factors, those increase the ability of people and the society they live in, to cope effectively with hazards and can reduce their susceptibility, are often designated as capacities.
- **2.192 Water Closet** refers to a water flushed plumbing fixture designed to receive human excrement directly from the user of the fixture. The term is used sometimes to designate the room or compartment in which the fixture is placed.
- **2.193 Water Course** means a channel in which a flow of water occurs either continuously or intermittently.
- 2.194 Width of Plot means the horizontal distance between the left and right plot (site) boundaries.
- **2.195 Window** refers to an opening to the outside other than a door, which provides all or part of the required natural light or ventilation or both to an interior space.
- **2.196 Zoning** in general means the subdivision of a geographical entity (country, region, etc.) into homogenous sectors with respect to certain criteria (for example, intensity of the hazard, degree of risk, same overall protection against a given hazard, etc.)
- **2.197 Zoning Regulations** means the regulations/byelaws governing the zoning of land use under the Development Plan/Master Plan of Gulbarga City, prepared under the Karnataka Town and Country Planning Act, 1961 prescribing the uses permissible in different land use zones, building lines, standards for roads, standards for civic amenities etc.

Note: The words and expressions not defined in these byelaws shall have the same meaning as in the Karnataka Municipal Corporation Act 1976 and the Karnataka Town and Country Planning Act 1961

CHAPTER 3

3.0. ZONING REGULATIONS (Land Use Classification & Uses Permitted)

In order to promote public health, safety and the general moral and social welfare of the community it is necessary to apply reasonable limitations on the use of land and buildings. This is to ensure that the most appropriate, economical and healthy development of the town takes place in accordance with the land use plan and its continued maintenance over the years. For this purpose, the city is divided into a number of use zones, such as residential, commercial, industrial, public and semi-public etc. each zone has its own regulations, as the same set of regulations cannot be applied to the entire city.

Zoning regulations protects residential areas from the harmful invasions of commercial and industrial uses and at the same time promotes the orderly development of industrial and commercial areas. By providing suitable regulations on the spacing of buildings, it provides adequate light, air, protection from fire, etc. it prevents overcrowding in buildings and land and thus ensures continued provisions of adequate facilities and services.

Zoning is not retrospective. It does not prohibit the uses of land buildings that are lawfully established prior to the coming into effect of the zoning regulations. If these uses are contrary to the newly proposed uses, they are termed nonconforming uses and are gradually eliminated over years without inflicting unreasonable hardship upon the property owner.

The Zoning regulation and their administration are a major tool in carrying out the land use part of the master plan, of which it is an integral part.

The Zoning regulation for Gulbarga Local Planning Area is issued under clause (iii) of Sub-Section (2) of Section 12 of the Karnataka Town and Country Planning Act.

3.1 Establishment of Zones and Zoning Maps

The entire area within the local planning area is divided into different Zones such as residential, commercial, industrial etc., shown in the enclosed maps, which together with all explanatory notes thereon is hereby adopted and declared to be a part of these regulations. The Zoning maps as approved by the Government shall be identified by the seal of the Government. Any changes in the map that may be permitted by the Authority or the Government as the case may be from time to time shall be similarly. The maps as approved by the Government shall be kept in the Office of the Gulbarga Urban Development Authority and those shall be the Authority and those shall be the Authorities wiz, Gulbarga mahanagar palike. The charges as approved by the Government shall also be intimated to all these local authorities having jurisdiction over the area. The maps shall be made available to the public by the Authority and the local Authority in the Office for inspection during the prescribed hours on all working days.

3.2 Zonal Boundaries

Where there is uncertainty as regards the boundaries of the zones in the approved maps, it shall be referred to the Government and decision of the Government in this shall be final.

The **Annexure No. 1** appended to these regulations sets out the various uses of land a) that are permissible and b) that are permissible under special circumstances as decided by the Authority in different zones. Any land use other than what is permissible shall not be permitted by the Authority.

The regulations governing minimum size of plot, maximum plot coverage, minimum setbacks, on four sides of the building minimum road widths, maximum number of floors and maximum height of structures that could be permitted, in various zones are set out in **Annexure 2** appended to those regulations.

ANEXURE - 1

Classification of land uses and the uses of developments that are permitted

Classification of land into various zones

- a) Residential
- b) Commercial
- c) Industrial
- d) Open spaces, parks and playgrounds (including public recreation area)
- e) Public & semi public.
- f) Transport and communication
- g) Public utilities.
- h) Agricultural
- i) Monument Area.

Uses of land that are permitted and that may be permitted under special circumstances by the Gulbarga Urban Development Authority which is the planning Authority for the local planning area of Gulbarga shall be as detailed hereunder.

a) Residential Zone

Uses that are permitted under normal circumstances.(Subject to space standards as per table No: 1)

All kinds of residential developments. Milk Booths, HOPCOM centers, Vegetable & fruit shops, bakery, medical shop, flour mill, tailoring shop, hair cutting salon, beauty parlor, laundry, dry cleaning and ATM etc. GESCOM counters, Bus shelters, State & central government establishments, telecommunications & micro wave towers and stations subject to structural stability certificate from a registered Structural engineer, Open spaces and Play grounds, Public utilities as defined in Karnataka planning authority rules 1965. Neighborhood or Convenience shops, Doctors consulting rooms, Office of advocates, Other professionals not exceeding 20.00 sq m.

Uses that may be permitted by the Authority under special circumstances (Subject to space standards as per table No: 1)

Hostels for working women and men, Paying guest facilities, Old age homes, Orphanages, Places of worship, Cemeteries, burial grounds, public libraries, public toilets, vehicle parking including MLCP, educational institutions up to primary schools subject to space standards as prescribed by the competent authority, nursing homes and veterinary clinics.

Note:

- 1. NOC from Dy Commissioner of the Gulbarga district, shall be obtained before permitting buildings for Places of Worship vide GO No: Kan.E/65/MuAaBi/2001 Dt.24.12.2001;
- 2. NOC from Dy Commissioner of the Gulbarga district, shall be obtained before permitting buildings for Educational institutions vide GO No: Na Aa Yee 237 Bema pra 2009 dated 19.09.2009

b) Commercial

Uses that are permitted under normal circumstances: (Subject to space standards as per table No: 1)

All uses specified in the residential zone of these regulations, All commercial and business uses including all shops, stores, markets (except meat & fish), shopping centers, shopping malls and uses connected with the display and sale of merchandise either wholesale or retail and storage incidental to the sale of the same, Fuel filling stations, Corporate offices, professional service facilities, software offices, offices of commercial undertakings and companies, Hotels, restaurants, lodges, service apartments, cinema theaters, multiplex, community halls, convention centers, Kalyan Mantapas, Banks, clubs, hospitals, Educational, places of amusement or assembly and all the uses specified under the definition CIVIC AMENITY.

Uses that may be Permitted by the authority under Special Circumstances (Subject to space standards as per table No: 1)

Automobile workshops & Garages, Truck terminals, Weigh bridges, Meat & Fish markets, Cold storage, storage of inflammable materials, & industries as listed out in SCHEDULE - 1

c) Industrial Zone

Uses that are permitted

All industries and related activities subject to clearance from The Karnataka state Pollution control board, Storage for the industries, Public utilities and related buildings, logistics, stock yards, sports and recreational uses, bus & truck terminals, & all those uses permitted and uses permitted under special circumstances in the commercial zone.

Note:

To encourage work-home relationship, upto 30 % of the gross area may be permitted for residential use for providing quarters to the employees of that particular industry, subject to clearance from the KSPCB.

d) Parks, Playgrounds and Recreational Areas

Uses that are permitted under normal circumstances

Parks, play grounds, stadiums, cemeteries & crematoria, burial grounds, public toilets, Parking, water storage, Sewerage treatment plant etc.

Uses that may be permitted by the authority under Special Circumstances

Open air theaters, Water sports & amusement theme parks, recreational clubs(non commercial nature)", public libraries, aquarium, planetarium, museum, bal bhavan, art gallery, horticultural nursery, swimming pool etc. Uses ancillary to the above such as canteens, milk booths, Hopcoms center etc. may be permitted not exceeding 55 of total area, limited to ground plus one floor.

e) Public and semi-public use

Uses that are permitted under normal circumstances: (Subject to space standards as per table No: 1)

Educational, health & religious institutions, Library, cultural & recreational institutions of non commercial nature and any other place of assembly, Post office, Bank, Police station, Fire station, State & Central Govt. offices, Fair price shops, milk booths, child care centers, gymnasium, and all those uses permitted under Parks, Play grounds & Open spaces.

Uses that may be permitted by the authority under special Circumstances

Retail Shops, Filling stations, Clubs, Cafeteria, dwellings required for essential staff for proper maintenance & functioning of public and semi public uses may be permitted up to an extent of 10% of

the sital area in their own premises as ancillary to the respective institutions.

f) Transportation & Communication

Uses Permitted

Railway lines, Railway yards, Railway stations, Railway workshops and sidings, Roads, Road transport depot, Bus stations/terminus & Bus shelters, Parking areas, Logistics, Truck terminals, Dock yards, Jetties, Piers, Airports and Air stations, Post offices, ATM'S, Telegraph offices, Telephone exchanges, Television telecasting and Radio broadcasting stations, Microwave stations and offices in their own premises and residential quarters for watch and ward. Any other confirming commercial activities that are ancillary to the main use, provided, the total area for such ancillary uses shall not exceed 45% of the allowable floor area of the project when taken up by the Central & State government & public undertakings; and shall not exceed 20% of the allowable floor area in other cases.

g) Public Utilities

Uses permissible under normal Circumstances

Water supply & sanitary installations including treatment plants & disposal works, storage reservoirs, drying beds, dumping yards, power plants, transformers, high & low tension transmission lines, substations, gas installations & gas works, Fire stations, microwave towers, public toilets & such other public utilities.

Uses that may be permitted by the authority under special Circumstances

Canteens, Offices, ATM's, Indoor recreational use, dwellings required for essential staff for maintainance and functioning of public utility uses in their own premises as an ancillary to the respective institutions not exceeding 10% of total area.

h) Agricultural Zone

Uses permissible under normal Circumstances

Agriculture, Horticulture, Water sports and amusement parks, Dairy and poultry farming, Cold storage, Farm houses and their accessory building and uses not exceeding 200 sq. mt. of plinth area within the plot area limitation of 1.0 hectares. Brick kilns, Cement blocks and poles and pipes production, Quarrying and removal of clay and stone up to 3.0 mt. depth, Stone crushing units, Filling stations, Weigh bridges, Vehicle parking & Terminals abutting National & State highways, Uses specifically shown as stated in the land use plan like Urban village, Ashraya houses for the economically weaker section, rehabilitation schemes of government, Parks, open spaces & play grounds, burial grounds etc.

Uses permissible under special Circumstances

Religious, Health, Highway facilities, Helipads, Stadiums, Water sports, Golf centers, Institutions relating to agriculture, Research centers, Storage and sale of farm products, Service and repairs of farm machinery and agricultural supplies, Ore stock yards, Crushing units, Old age and orphanages homes, Agro based industries. Health & educational institutions with a coverage of 20% within a plot area limitation of 2 ha.

Note

Highway facilities in combination shall be permitted as specified in Government circular No:NaAaE16: BemRuPra: 2004, Bangalore, Dated 20-12-2004. (See Annexure);

A buffer of 45 mt. (On both the banks) shall be assumed all along the flow of the River and Tanks, which shall be treated as no development zone;

i) Monument Area.

No developments in monument area shall be permitted except the conservation and preservation activities and such activities shall be permitted subject to the approval of the Archaeological Survey of India / Department of Archaeology and Museums.

While permitting developments around historical monuments care shall be taken to preserve and protect their aesthetic environs. Hence the areas surrounding the monuments is declared as zones of special control and the following special regulations are imposed.

Prohibited area: - 100 m radius area around the monument is declared as prohibited area zone as per the provisions of archaeology act.

Uses Permitted:

Parks, Open **s**paces and play grounds, Natural landscaping, Planting of saplings, Repairs, Modifications, Alterations, Re-construction of existing buildings, Adding toilet and bathing facilities to the existing building subject to the regulations mentioned below.

Note: Any permission to be given in the prohibited area is subject to NOC from the archaeology department concerned;

Any subsequent amendments to the archaeology act concerned regarding prohibited area such amendments shall mutatis mutandis apply to these regulations;

Regulations:

These regulations shall apply for the developments in the Areas of special control.

- ➤ Re-roofing and Re-plastering modification and alterations (all without involving change in construction area). Addition of facilities like bathroom, toilet to the existing buildings may be permitted.
- > Building up to and inclusive of first floor or up to a height of 8.0 mt. from the ground level, which ever is less is permissible.
- ➤ In case of the said land is required by ASI / Department of Archaeology and museums for better management of the monument, concerned archaeology department shall initiate and frame a proposal to acquire and rehabilitate the inhabitants in consultation with Gulbarga Mahanagar palike
- In case the concerned archaeology department prepares any generic guidelines (subject to the approval of Authority) for the existing buildings in prohibited area / regulated area, modification or reconstruction only, without involving change in constructed area may be permitted subject to these regulations.
- ➤ No development is permitted in Eco-Sensitive Areas like River Islands & Tank Bed Areas.

SCHEDULE - I

Illustrative list of Industries that are permissible under special circumstances by the Authority in the Commercial zone:

chocolate oil expellers and refining, malt extract, protein isolates, high protein foods, weaning food extruded/other ready to at food products and all other processed foods (excluding non-packed for items served in Hotels & Restaurants of all categories). Bio-technology and Bio-informatics industry. Commodity grading and packing industries. Cold Storage Units. Dainy products (including milk processing and milk based products. Decorticators Fish processing. Floriculture. Food grain milling/processing, using modern technology and equipment to be specified separately the directorate of Industries & Commerce. Fruit based ready to serve beverages. Fruit & Vegetable processing, including grading/packing. Processing of plantation crops including tea, coffee, forest produce such as herbal, medicinal aranmatic plants, coconut based products and arecaunut/areacunut based products. Processing of poultry, eggs, meat and meat products. Refrigerated transport vehicles / containers (excluding second hand refurbished vehicles/containers) Rice mills, Dal mills, Sugar cane crushers (Jaggery mills). Sugar Industry (excluding Molasses/Alcohol). Tissue Culture Laboratories, Green Houses, Green House Nurseries & Seed Production Units, base on modern scientific methods to meet industry standards. Units manufacturing food-grade packing materials for Food Processing Industry.	SI.No.	Description
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items served in Hotels & Restaurants of all categories). Bio-technology and Bio-informatics industry. Commodity grading and packing industries. Cold Storage Units. Dairy products (including milk processing and milk based products. Decorticators Fish processing. Floriculture. Food grain milling/processing, using modern technology and equipment to be specified separately the directorate of Industries & Commerce. Fruit based ready to serve beverages. Fruit & Vegetable processing, including grading/packing. Fruit & Vegetable processing, including grading/packing. Processing of plantation crops including tea, coffee, forest produce such as herbal, medicinal araromatic plants, coconut based products and arecaunut/areacunut based products. Refrigerated transport vehicles / containers (excluding second hand refurbished vehicles/containers Rice mills, Dal mills, Sugar cane crushers (Jaggery mills). Sugar Industry (excluding Molasses/Alcohol). Tissue Culture Laboratories, Green Houses, Green House Nurseries & Seed Production Units, base on modern scientific methods to meet industry standards. Units manufacturing food-grade packing materials for Food Processing Industry. Units engaged in packaging, canning and bottling of processed foods.		chocolate oil expellers and refining, malt extract, protein isolates, high protein foods, weaning foods,
D2 Bio-technology and Bio-informatics industry. Commodity grading and packing industries. Cold Storage Units. D3 Dairy products (including milk processing and milk based products. D6 Decorticators O7 Fish processing. O8 Floriculture. O9 Food grain milling/processing, using modern technology and equipment to be specified separately in the directorate of Industries & Commerce. 10 Fruit based ready to serve beverages. 11 Fruit & Vegetable processing, including grading/packing. 12 Processing of plantation crops including tea, coffee, forest produce such as herbal, medicinal and aromatic plants, coconut based products and arecaunut/areacunut based products. 13 Processing of poultry, eggs, meat and meat products. 14 Refrigerated transport vehicles / containers (excluding second hand refurbished vehicles/containers) 15 Rice mills, Dal mills, Sugar cane crushers (Jaggery mills). Sugar Industry (excluding Molasses/Alcohol). Tissue Culture Laboratories, Green House, Green House Nurseries & Seed Production Units, base on modern scientific methods to meet industry standards. Units manufacturing food-grade packing materials for Food Processing Industry. Units engaged in packaging, canning and bottling of processed foods.		extruded/other ready to at food products and all other processed foods (excluding non-packed food
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19 Units engaged in packaging, canning and bottling of processed foods.		on modern scientific methods to meet industry standards.
	18	
	19	Units engaged in packaging, canning and bottling of processed foods.
Units manufacturing additives, preservations, colours and fragrant for the Processed Food Industry.	20	Units manufacturing additives, preservations, colours and fragrant for the Processed Food Industry.

Note:

No-Objection certificate from KSPCB should be obtained wherever necessary.

Industry permitted is subject to performance characteristics viz , (a) air, water & noise, (b) Vibration & sound pollution, (c) Dust, (d) Odor, (e) Effluent & (f) General nuisance.

ANNEXURE - II

A) Space standards for various Buildings / Uses, permissible in all zones:

TABLE - 1

SI	Puildings / Lloop	Min. road	Min. size of plotsq.m
no	Buildings / Uses	widthm	
1	Conference halls, Community halls &	12.0	500
'	Social clubs	12.0	300
2	Cold storages	15.0	2000
3	Game centre's & Convention centre's	15.0	2000
4	Hotels and lodges	12.0	500
5	Kalyana Mantapas	12.0	2000
6	LPG storage & Fuel Filling stations	15.0	500
7	Nursing homes / polyclinics	12.0	500
8	Service Apartments	12.0	500
9	Nursery	12.0	
10	Lower Primary schools	12.0	
11	Higher Primary schools	12.0	As prescribed by the competent
12	High schools with play ground,	12.0	authority
13	Integrated Residential Schools	15.0	
14	Colleges	15.0	
15	Star hotels (up to 3 star)	15.0	As prescribed by the competent
16	Star hotels (above 3 star)	18.0	authority

B) The minimum set back required on all the sides of a building, maximum plot coverage, maximum FAR, maximum number of floors, maximum height of building that are permissible for different dimensions of sites and different widths of roads are set out in Tables given below.

TABLE – 2
Exterior Minimum setbacks for residential & Commercial buildings up to/less than 15 mt. high

SI.	Width/Depth	Width of site		Depth o	of site
No	of site (m)	Right Set	Left Set Back	Front Set	Rear Set
INO	or site (iii)	Back	Len Set Back	Back	Back
1	Up to 6.0	1.00m		1.00m	0
		One side Either Right or Left			
2	Over 6.0 up to 9.0	1.00m	1.00m	1.00m	1.00m
3	Above 9.0	8% or 1.00 m	8% or 1.00 m	12% or 1.00 m	8% or 1.00
		whichever is	whichever is	whichever is	m whichever
		higher	higher	higher	is higher

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Notes:

The dimensions in British system if any, adopted for the dimensions of plots may be interpreted as follows in metric system and setbacks may be applied accordingly;

 20' - 6.0 m
 v. 60' _ 18.0 m

 30' _ 9.0 m
 vi. 70' _ 21.0 m

 40' _ 12.0 m
 vii. 80' _ 24.0 m

 50' _ 15.0 m
 ix. 90' _ 30.0 m

* For Residential sites up to 120 sq. m;

Open staircase shall be permitted in the side setbacks, but there shall be a minimum open space of 1.00 m from the side boundary and 1.0 m from the front and rear boundary of the site.

Toilets minimum of 1 m x 1.5 m and not exceeding 1.5 percent of the plot area permissible in rear set back only;

When minimum set back of 1.5 m is left on the right or left side, a scooter garage may be permitted at the backside limiting the depth of the garage to 3.0 m;

Constructions permitted in setback area:

The following constructions shall be permitted within the setback area:

Cantilever Portico: A cantilever portico of 3.0 m width (maximum) and 4.5 m length (maximum) may be permitted in the ground floor within the side set back. No access is permitted to the top of the portico for using it as a sit out. Height of the portico shall be open to sky. The portico when allowed shall have a clear open space of one meter from the boundary of the property;

Balcony: The projection of the balcony shall be measured perpendicular to the building up to the outermost edge of the balcony. Cantilever projection of the balcony shall be permitted not exceeding 1/3 of the setback subject to a maximum of 1.1 m in the first floor and 1.75 m in and above the second floor. No balcony is allowed at the ground floor level. The length of the balcony shall be limited to 1/3 of the length of each side of the building;

Cross wall: A cross wall connecting the building and the boundary wall may be permitted limiting the height of such wall to 1.5 m;

Basement floor: Refer Chapter 5 clause 5.5

Watch man's cubicle not more than 3.0 sq m;

Sump tanks below the ground level;

Generator with outdoor acoustic enclosure:

Solid waste dumping yard open to sky;

Children's play area open to sky;

Swimming pools open to sky or within the plinth of the building;

Transformer / Power substation;

Bore wells with proper safety;

Steps to ground floor entry only.

TABLE – 3

Exterior Minimum setbacks for Transport & Communication / Public Utilities / Public & semipublic buildings up to/less than 15 mt. high.

SI. Width/Depth		Width	of site	Depth of site	
No.	of site (m)	Right Set	Left Set Back	Front Set	Rear Set
		Back	Len Set back	Back	Back
1	Up to 9.0	1.00 m	0.0	1.25m	1.00
2	Above 9.0	12% or 1.00 m	12% or 1.00 m	15% or 1.00 m	12% or
		whichever is	whichever is	whichever is	1.00 m
		higher	higher	higher	whichever
				V	is higher

TABLE – 4

Exterior Minimum setbacks for Residential/commercial/Transport & Communication / Public

Utilities / Public & semi-public buildings above 15.00 m height.

SI. No.	Height of building in meters	Exterior Setbacks to be left on all sides (Front, rear and sides in meters)
1	Above 15.0 up to 18.0	6.0
2	Above 18.0 up to 21.0	7.0
3	Above 21.0 up to 24.0	8.0
4	Above 24.0 up to 27.0	9.0
5	Above 27.0 up to 30.0	10.0
6	Above 30.0 up to 35.0	11.0
7	Above 35.0 up to 40.0	12.0
8	Above 40.0 up to 45.0	13.0
9	Above 45.0 up to 50.0	14.0
10	Above 50.0	16.0

TABLE – 5

Maximum Plot Coverage for Different Sital Areas for Different buildings up to 5000 sq. mt. plot area.

Plot area in Sq. meters	Maximum Plot Coverage for residential	Maximum plot coverage for commercial	Maximum plot coverage for Public-semi public / Transportation & communication/ Public utilities
Up to 110	75%	70%	65%
Over 110 Up to 240	70%	65%	60%
Over 240 Up to 500	65%	60%	55%
Over 500 Up to 750	60%	55%	55%
Over 750 Up to 1,000	55%	55%	55%
Over 1,000 up to 5000	55%	50%	50%

TABLE – 6

Maximum FAR (Floor area ratio)/ FSI (Floor space index) for Different road widths, for different buildings up to 5000 sq. mt. plot area.

	F.A.R (floor area ratio) / F.S.I. (floor space index)				
Road width in meters	residential	commercial	Public-semi public / Transportation & communication/ Public utilities		
Below 6.0	1.50	1.75	1.25		
6.0 and up to below 9.0	1.75	2.00	1.50		
9.0 and up to below 12.0	2.00	2.25	1.75		
12.0 and up to below 18.0	2.25	2.50	2.00		
18.0 and above	2.50	2.75	2.25		

TABLE – 7
Regulations for Flatted Factories

Minimum plot area	:	1,000 sq.m.
Maximum plot coverage	:	40 %
FAR.	:	1.50 up to 9 m. road width and 1.75 above 9.0 m. road width.
4. Minimum setbacks	:	a. Front 8.00 m.b. Rear 4.50 m.c. Sides 4.50 m.

TABLE – 8

Coverage, Floor Area Ratio and Open space for Industrial buildings up to 5000 sq. mt. plot area.

Plot area in sq m	Max. plot coverage	Floor area Ratio	Minimum Front setback in mt.	Other sides in m	Minimum road width in m
Up to 110	75%	1.25	1.00	1.00	6.0
Over 110 Up to 240	80%	1.50	1.00	1.00	9.0
Over 240 Up to 500	75%	1.75	4.50	4.50	9.0
Over 500 Up to 750	60%	2.00	4.50	4.50	9.0
Over 750 Up to 1,000	50%	2.25	6.00	6.00	12.0
Over 1,000 up to 5000	50%	2.50	6.00	6.00	12.0

Note:

Constructions Excluded from FAR/FSI calculations:

The following constructions are excluded from FAR/FSI calculations;

- Staircase areas in all floors and its headroom's.
- Lifts areas in all floors and its machine room.
- Escalators.
- Architectural features.
- > Chimneys.
- Overhead tanks with its headroom.
- Garbage shafts & ducts.
- > Watchman's cubicle.
- > Pent house.
- > Effluent treatment plant.
- Parking area with its driveways.
- Open Balcony & open terrace.
- ➤ Meter room, Air-conditioning plant, Electric sub-station, Pump room, Generator room & Machine room, when it is provided in the Basement floor

C) Regulations for Residential Development Plans and Non Residential Development Plans Regulations for Residential Development Plan (Sital Area > 5000 sq m)

- ➤ Minimum of 10% of the land shall be reserved for Park & Open space. The Park & Open space shall be relinquished to the authority free of cost and the same may be allowed to be maintained by the local residents association (registered).
- A minimum of 5% of total plot area shall be provided for Civic Amenities and the owner or developer shall develop such Civic amenities which finally shall be handed over to the local residents association (registered) for maintenance. The mode of such handing over shall be decided by the authority.

- > FAR is calculated for the total area after deducting the area reserved for Civic Amenities.
- Parking area requirement shall be as applicable vide Table-8.
- Roads as shown in the Master plan shall be incorporated within the plan and shall be handed over to the authority free of cost.
- > FAR & Ground coverage for Residential development plan is given in the table below.

TABLE – 9
Coverage, Floor Area Ratio and Open space for residential development plan
(Sital area > 5000 Sq. mt.)

Road width inmt	Coverage	FAR
Below 12.0	60%	1.50
12.0 and up to below 18.0	55%	1.75
18.0 and up to below 24.0	50%	2.00
24.0 and above	45%	2.25

Regulations for Non Residential development plan(Sital Area > 5000 sqm)

- ➤ Minimum of 10% of the total area shall be reserved for Parks and Open spaces, which shall be maintained by the owner to the satisfaction of the Authority.
- ➤ Parking area requirements shall be as applicable vide Table-8. An additional 5% of the plot area shall be reserved for surface parking for visitors.
- > FAR is calculated based on total sital area.
- Roads as shown in the Master Plan shall be incorporated within the Development Plan and shall be handed over to the Authority free of cost.
- > FAR & Ground coverage for Non- Residential development plan is given in the table below

TABLE – 10
Coverage, Floor Area Ratio and Open space for Non-residential development plan
(Sital area > 5000 Sq. mt.)

Road width inmt	Coverage	FAR
Below 12.0	60%	1.75
12.0 and up to below 18.0	55%	2.00
18.0 and up to below 24.0	50%	2.25
24.0 and above	45%	2.50

D) Regulations for Parking.

Parking Space standards:

- ➤ Each off-street parking space provided for vehicles shall not be less than (2.50 x 5.5 m) 13.75 sq m area.
- ➤ The minimum width of the driveway shall be 2.5 m wide.
- ➤ For building of different uses, off-street parking spaces for vehicles shall be provided as stipulated below in Table no-11.

TABLE – 11
Off- Street Parking spaces

SI.	Occupancy	Minimum one parking for every
No.	, ,	
1	Multifamily residential	i) 2 tenements each having floor area less than 75 Sq. mt.
_	Ladging actablishments, tourist	ii)Tenement exceeding 75 Sq. mt. floor area.
2	Lodging establishments, tourist homes.	100 Sq. mt. of floor area.
3	Educational	175 Sq. mt. of floor area.,
		In addition pick up and drop area of 100 Sq. mt. should be earmarked with separate entry and exit. The minimum width of such entry and exit shall be 5.5 mt.
4	Hospital	125 Sq. mt. floor area or fraction thereof.
		10% of the total requirement shall be reserved for visitors.
5	Nursing homes	75 Sq. mt. floor area or fraction thereof.
6	Assembly/Auditorium/ Kalyana Mantapas / community hall/ convention center	50 Sq. mt. floor area or fraction thereof.
7	Public & Semi Public buildings	100 Sq. mt. floor area or fraction thereof.
8	Office building/ I.T & B.T.	75 Sq. mt. floor area or fraction thereof.
9	Commercial/ banks	75 Sq. mt. floor area or fraction thereof.
10	Industrial	i) 100 Sq. mt. floor area
<u> </u>	Storage	ii) One lorry parking (3.5 X 7.5m) for every 1000 sqm. Mt. i) 100 Sq. mt.
11	Storage	ii) Additional one loading/unloading bay (3.5 X 7.5m) for
		every 1000 sq. mt.
12	Restaurant serving Food and beverage	100 Sq. Mt. of floor area
13	Hostels	i) 5 rooms in case of professional colleges/ working men and women hostels
		li) 10 rooms in case of other colleges.
14	Recreational clubs	75.0 Sq. mt. of floor area or fraction thereof.

Note:

- ➤ Up to 100 Sq. Mt. in case of commercial use, parking spaces need not be insisted.
- Additional parking for the part area shall be provided when the part area exceeds 50% of the prescribed limits and standards. In addition 10% of the total car parking shall be reserved for Two wheelers.
- > For the purpose of calculating parking, hi-tech industries shall be treated as office buildings.
- ➤ Off-street parking space shall be provided with adequate vehicular access to a street/road, and the area of drive aisles and such other provision required for adequate maneuvering of vehicles shall be exclusive of the parking spaces stipulated in these regulations.
- ➤ Parking may be permitted in setback areas, provided a minimum of 3.0 mt. shall be left free from the edge of the building in case of G+3 floors and a minimum of 6.0 mt. in case of buildings which are G+4 and more.

- ➤ When MLCP (Multi level car parking) is proposes on a plot, as an independent activity, there shall not be any limitation for FAR/FSI or Height of the building, subject to condition that they satisfy Fire and airport authority restrictions, wherever applicable.
- > Stilt Parking if ENCLOSED from sides, will be considered for reckoning of FAR/FSI
- > The height of the stilt parking shall not exceed 2.4 mt. from floor to bottom of slab/beam/ceiling (whichever is less) and its height will be considered for calculating the building height.

E) Height restrictions near aerodromes.

TABLE - 12

SI. No.	Limits of distance from a measured horizontally to installations	nerodromes reference point b building structure of	Difference between the elevation of the top of the building structure or installations and elevation of the		
	International Civil airports or their alternate	Other civil airports and aerodromes	aerodromes. (aerodrome reference point)		
01	Between 8534 m and 22224 m	Between 7925 m and 22324 m	Less than 152 m		
02	Between 7315 m and 8534 m	Between 6706 m and 7925 m	Less than 122 m		
03	Between 6095 m and 7315 m	Between 5486 m and 6706 m	Less than 91 m		
04	Between 4877 m and 6096 m	Between 4267 m and 5486 m	Less than 61 m		
05	Between 4267 m and 4877 m	Between 3658 m and 4267 m	Less than 49 m*		
06	Between 3658 m and 4267 m	Between 3048 m and 3658 m	Less than 37 m*		
07	Between 3048 m and 3658 m	Between 2438 m and 3048 m	Less than 24 m*		
08	Between 2438 m and 3048 m	Between 1829 m and 2438 m	Less than 12 m*		
09	Below 2438 m	Below 1829 m	Nil. Except with due concurrence of the civil aviation authorities.		

Note:

- ➤ Irrespective of their distance from the Aerodromes (that is beyond 22224 m of the Aerodrome /Aerodrome reference point) no radio masts or such, similar type of line installations exceeding 152 m in height should be erected without prior permission of the concerned Civil aviation authority.
- > No buildings, structures or installations exceeding the height indicated in the table shall be permitted without prior consultation with the local Aerodrome authority;
- ➤ The location of the slaughter houses and other areas of activities, like garbage dump which would attract high flying birds, like eagles, hawks, etc. shall not be permitted within a radius of 10 km from the Aerodrome reference point;

F) Row Housing.

Row housing shall have minimum three dwelling units and maximum of 12 dwelling units on one site. Other stipulations are prescribed in the table below in Table no. 13.

TABLE-13

Minimum combined area of plot	210 Sq. Mtrs		
2. Minimum area of each plot	108 Sq. Mtrs		
3. Building Coverage	As applicable to individual plot		
4. Floor area ratio	As applicable to individual plot		
5. Number of floors	As applicable to individual plot		
6. Minimum road width	As applicable to individual plot		
7. Setbacks Front	2.00 M		
Rear	1.50 M		
Side	2.00M Only for end units		

G) Regulations for integrated township.

- ➤ The minimum extent of property for the development of Integrated Township shall be 20 Ha. Multiple land parcels each not less than 20 Ha. contiguous, interconnected with roads can be part of a single Integrated Township.
- > The minimum width of approach road to an Integrated Township shall be 24 M.
- > Permissible land uses: Residential, IT/BT related activities / Industrial, Commercial
- > Permissible Usage:

Minimum area for Civic Amenities – 5%

Minimum area for Park & Open spaces - 10%

Minimum area for Roads – 20%

Note: If 20% is not used for Roads, the difference in area shall be added to Park & Open spaces.

- Maximum area for Non Residential uses
 - i. IT, BT related activities / Industrial 50%
 - ii. Commercial (to support township) 3%
- Balance area for Residential use.
- > FAR is calculated for the total sital area excluding area reserved for Civic Amenities.
- Coverage and FAR in the Integrated Townships shall be as specified in Table below.
- > Prior no objection certificate from Karnataka state pollution control board is necessary for approval
- The minimum width of roads abutting properties of commercial land use shall be 18 M.
- F.A.R. and ground coverage for Integrated Township shall be as below in Table no. 14

TABLE-14

Road Width (M)	Coverage	F.A.R. Allowable	
24m up to 30 m	50%	3.75	
Above 30 m	45%	4.00	

H) Regulations for Redevelopment schemes.

In case of Slum Redevelopment Scheme, taken up by the Karnataka Housing Board and Karnataka Slum Clearance Board, the following regulations given in the table no 15 below shall be applicable.

TABLE-15

	TABLE-13								
SI.	Regulations for Slum Redevelopment Scheme								
No.									
1	Land Use Allocation For rehabilitation scheme, procedure as per Section 14 A of Karnataka Town & Country Planning Act may be dispensed with in agricultural zone of approved Master Plan after consultation with the Director of Town and Country Planning and for re-development within the conurbation area shall be as per the Zoning								
	Regulation and Master Plan proposals.								
2	FAR and Ground Coverage, if taken up at the same location								
	Extent in Ha	Coverage	FAR	Min. Road width		Min. all round Set back			
	Up to 0.4	60%	3.0		or buildings < 15m nt and 9m for > 15 m height	6 m			
	above 0.4 up to 0.8	60%	3.0		or buildings< 15m ht 12m for > 15 m ht	7.5 m			
	Above 0.8	60%	3.0		12.0 m	9.0 m			
3	FAR & Ground	d Coverage f	or a relocat	ion sche	eme.				
	Road width in	m.	Coverage	FAR	Set back	S			
	Less than 12		60%	2.00	As per Table 2 or 4 of these				
	Above 12 and up to 18		55%	2.25					
	Above 18 and	up to 24	55%	2.50	Regulations				
	Above 24 and	up to 30	50%	3.00					
	Above 30		50%	3.25					
4	Minimum Open space and Civic Amenity area Open space and Civic Amenity area shall be 15% of total sital area. Out of 15%, not less than 10% shall be reserved for park area and the rest reserved for Civic Amenity area. Such areas need not be handed over free of cost to the authority								
5	Commercial 2% of the total area may be reserved for Commercial use subject to fulfillment of parking area.								
6	Set-backs Set-backs								
	As shown in item number 2 or 4								
7	Distance betw	veen the bloc	ks						
	Up to 15 m height 6.0 m minimum & Above 15m height 9.0m minimum shall be provided.								

I) Building line.

Building lines are prescribed for some important roads in Gulbarga. In addition to building line prescribed for the below listed roads, front setbacks are also prescribed separately for various types of buildings considering the depth of plot. The maximum of the above has to be provided as front setback to a building while applying regulations for sanction of a building/ layout plan.

TABLE-16

		Road S	Stretch		Distance of
SI No.	Name of the road	From To		Proposed width (in meters)	building line from the center line of the road in mtr.
i	ii	iii	iv	V	vi
		a) Conurbation boundary	Ram mandir Circle	30.00	18.00
		b) Ram mandir Circle	Venkatgiri Hotel	45.00 As it is existing on site	25.50
		c) Venkatgiri Hotel	To Over bridge	30.00	18.00
1	Bangalore Humnabad	d) Over bridge	Godutai Nagar Swagat Kaman	45.00 As it is existing on site	25.50
		e) Godutai Nagar Swagat Kaman	Jewargi Cross	30.00	18.00
		f) Jewargi Cross	Sardar valabhai Patel circle	24.00	15.00
		g) Sardar vallbhai Patel circle	Jagat circle	30.00	18.00
		h) Jagat circle	Humnabad base (Maragamma temple)	24.00	15.00
2	Sedam Road (Rampure marg)	Bangalore Humnabad main Road	Conurbation limits	30.00	18.00
3	S.B Temple Road	Sardar valabhai Patel circle	Aland Circle	24.00	15.00
		a) Jewargi Cross	M.S.K Mill	30.00	18.00
4	M.S.K Mill Road	b) M.S.K Mill	Ring Road	30.00	18.00
		c) Ring Road	Govt.Warehouse (Heerapur)	18.00	11.50

		d) Govt.Warehouse (Heerapur)	Conurbation limits (Babalad Road)	24.00	15.00
5	Old Jewargi Road	Ram Mandir	Mohan Lodge	30.00	18.00
6	Aland Road	Aland Circle	Conurbation limits	30.00	18.00
7	Sulthanpur Road	a) Gunj Junction	Filter bed	24.00	15.00
		b) Filter bed	Conurbation limits	24.00	15.00
		c) Filter bed	Sulthanpur	24.00	15.00
		d) Filter bed	Ring Road	24.00	15.00
8	Darga Road	Jagat Circle	Humnabad Road	18.00	11.50
9	Basaveshwar Nagar Road	Sangtraswadi Cross	Ring Road	18.00	11.50
10	Azadapur (M.G.Road)	Darga Road	Azadapur	18.00	11.50
11	Bazar Road	Prakash Theater (via Ganesh Mandir)	National Chowk	12.00	7.50
12	Bazar Road	Tirandaz Talkies (Via chappal bazaar)	Saraf Bazar Circle	15.00	9.00
13	Shahabazar Road	Aland Road Circle(via lal Hunman Temple)	Ring Road	15.00	9.00
14	Junge Brothers Road	Lalgiri Circle (via Junge brothers building)	Ring Road	18.00	11.50
15	Shahabad Road	R.T.O Circle(via Rajapur village)	Conurbation limits	30.00	18.00
16	Kusnoor Road	Ambedkar Hostel	Kusnoor Village	18.00	11.50
17	S.B. College Road	S.B Temple Road (Anand hotel circle)	Jewargi Cross	15.00	9.00
18	Tank Bund Road	Jagat Circle	Goa Hotel	18.00	11.50
19	PDA Eng. College	S.V.P Circle	PDA Eng. College	15.00	9.00
	Road	PDA Eng. College	Railway Station	15.00	9.00
20	Station Road	Railway Station	S.V.P Circle	18.00	11.50
21	Hagaraga Road	National Chowk (via KBN Darga)	Conurbation limits	15.00	9.00
22	KBN College Road	Hagaraga Road	Ring Road	15.00	9.00
23	Udanoor Road	Jewargi Road	Conurbation limits	18.00	11.50
24	Kesartagi Road	PDA Eng. College(via Kesartagi)	Conurbation limits	30.00	18.00

		Prakash Theater	Aland Circle	18.00	11.50
25	Jeelanabad Road	M.S.K Mill	Ring Road	18.00	11.50
26	Rajapur Road	Govt. Polytechnic	Shahabad Road	18.00	11.50
27	Saw mill road	Prakash Theater	Aland circle	18.00	11.50

(Zoning regulation shall be as adopted and enforced by Gulbarga Urban Development Authority from time to time and in addition to these Byelaws, the Building License application shall be dealt with in accordance with zoning regulations in force)

J) Continuation of special regulations.

> Super Market Area

The old jail and jail garden of Gulbarga is converted into commercial area, where commercial plots of different dimensions were auctioned among public, in stages, by the Govt. of Karnataka.

To maintain uniform height and elevation of building in the area, the super market committee requested chief architect of Govt. of Karnataka to prepare a building design for the above commercial plots.

The design furnished by chief architect of Govt. of Karnataka provides 100% coverage on site and Ground+3 upper floors. In order to regulate developments in the above area the super market area is declared as area under special control and the following regulations are proposed up to a **plot area not exceeding 111.52 sq mt**. (originally approved plan).

Coverage	FAR	Height of Building
100%	4.00	14.0 mt

> M.S.K. Mill Commercial Scheme

Gulbarga Urban development authority has developed the commercial layout adjacent to the central bus stand called MSK Mill commercial scheme. The Govt. has approved the following Special regulations vide Govt. Order No.NaAaEe:279MaiAapra:2006 Dtd 8.11.2006.

- 100% coverage is allowed up to 140.00 Sq m of plot area (originally approved plan).
- Ground +2 floors are allowed up to 140.00 Sq m of plot area.
- O Parking is not required up to 140.00 Sq m. of plot area, because of the centralized parking is kept in the scheme.

ANNEXRE-III

SUB-DIVISION REGULATIONS, AMALGAMATION AND BIFIRCATIONS:

In sanctioning the sub-division of a plot under section 17 of the Karnataka Town and Country Planning Act, 1961, read with Sec 32 of the Karnataka Urban Development Authorities act, 1987, the Competent Local Authority shall among other things see that the following planning standards are followed.

The authority reserves the right to modify the layout submitted by the applicant / owner and may impose any condition either from the planning point of view or in the interest of public.

1. Approval of Sub-division of plot or layout plan

A. Residential purpose:

Sanctioning of layout plan for residential purpose shall be subject to the following conditions in all the local planning areas of the state where master plans are approved by the state government.

- > The land in question is converted for residential purpose.
- > The land shall have access from the public road and the land use of the land shall be in accordance with the zonal regulations of the master plan.
- ➤ A minimum of fifteen percent (15%) of the total extent of land shall be reserved for parks and open spaces.
- > A minimum of ten percent (10%) of the total extent of land shall be reserved for civic amenities.
- > After providing for roads as per minimum standards prescribed and also the roads proposed in master plan, the remaining area shall be provided for residential sites.
- > The area reserved for parks and Open spaces, Civic Amenities and Roads shall be handed over to the Competent Local Authority free of cost for maintenance through a registered relinquishment deed. In case of planning authorities (other than Urban development authorities) it shall be handed over to the local authority through a relinquishment deed free of cost.
- ➤ The Competent local authority shall collect the fee under section 18 of the KTCP act and development charges and any other fees and charges prescribed by the government from time to time.

B. Non-Residential purpose:

Sanctioning of layout plan for Non-residential purpose shall be subject to the following conditions in all the local planning areas of the state where master plans are approved by the state government.

- > The land in question is converted for Non residential purpose.
- > The land shall have access from the public road and the land use of the land shall be in accordance with the zonal regulations of the master plan.
- > A minimum of fifteen percent (15%) of the total extent of land shall be reserved for parks and open spaces.
- > A minimum of five percent (5%) of the total extent of land shall be reserved for civic amenities.
- > A minimum of five percent (5%) of the total extent shall be reserved for vehicle parking and this shall be in addition to the parking requirements as laid down in table no. 11
- After providing for roads as per minimum standards prescribed and also the roads proposed in master plan, the remaining area shall be provided for residential sites.
- > The area reserved for parks and Open spaces, Civic Amenities and Roads shall be handed over to the Competent local Authority free of cost for maintenance through a registered relinquishment deed. In case

- of planning authorities (other than Urban development authorities) it shall be handed over to the local authority through a relinquishment deed free of cost.
- > The Competent local authority shall collect the fee under section 18 of the KTCP act and development charges and any other fees and charges prescribed by the government from time to time.

2. Approval of Single plot.

A. Residential purpose:

Any extent of land can be approved as single plot subject to the following conditions.

- > The land in question should have been converted for residential purpose.
- > The land shall have access from the public road and the use of land shall be in accordance with these Regulations of the Master Plan.
- > The competent local Authority shall collect the fee under section 18 of the KTCP act and development charges and any other fees and charges prescribed by the Government from time to time.
- If the owner of Single plot desires to sub-divide the plot at subsequent dates, he shall obtain approval by the Authority treating it as sub-division of land and the norms applies accordingly as prescribed in these Regulations.

B. Non-residential purpose.

- > The land in question should have been converted for Non-residential purpose.
- > The land shall have access from the public road and the use of land shall be in accordance with these Regulations of the Master Plan.
- A minimum of ten percent (10%) of the total extent of land shall be reserved for parks and open spaces and five percent (5%) of the total extent shall be reserved for vehicle parking and this shall be in addition to the parking requirements as laid down in table no. 11
- > The area earmarked for parks and open spaces and vehicle parking shall be maintained by the land owner and this land shall not be used for any other purpose by the land owner.
- > The competent local Authority shall collect the fee under section 18 of the KTCP act and development charges and any other fees and charges prescribed by the Government from time to time.
- ➤ If the owner of Single plot desires to sub-divide the plot at subsequent dates, he shall obtain approval by the Authority treating it as sub-division of land and the norms applies accordingly as prescribed in these Regulations.

3. Amalgamation.

- In the case of amalgamation, the proposed sites shall have the same land use.
- > Ownership of the amalgamated plot could be in a single or multiple names/family members/company. But amalgamation shall not be considered if the plots are under lease agreement.
- Development controls for the amalgamated plot shall be with reference to new dimensions.

4. Bifurcation.

- ➤ In the case of all bifurcations, whether corner sites or intermediate sites, front setback for the resulting site abutting the road shall be the same as that of the original site and not of the sub-divided site.
- A plot/site, which is a part of the Sub-division plan/layout/scheme, duly approved by the authority may be further bifurcated with prior permission of the Authority and the Sub-Divided plot shall not be less than the prescribed size.
- > A bifurcated plot shall not be less than 54 Sq. m.. Bifurcated plot shall have a min of 3.3 m access.
- The Bifurcated plot shall have a minimum of 6.0 m frontage.

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CHAPTER 4

4.0 ADMINISTRATION

4.1 Building License

- (1) Every person who intends to:
- a. erect a building or a part of a building
- b. re-erect, repair or make any material alteration of any building
- c. demolish a building or part of a building
- d. convert or alienate any land or piece of land
- e. develop or redevelop any land or piece of land
- f. change the land use under special circumstances within the jurisdiction area of Gulbarga mahanagar palike is required to obtain a license in writing from the Authority. If any clearance is required from the Development Authority, the Authority will refer such applications to the Development Authority.
- (2) Such license will also be necessary in the case of a Department of Central or State Government or other governmental agencies to carry out any development and operational construction.
- (3) Nothing in these byelaws shall require the removal, alteration or abandonment of a building existing prior to the enforcement of these byelaws unless it was in contravention of any provision of law then applicable and also unless in the opinion of the Authority such building constitutes hazard to the safety of the property/neighboring property or the occupants of the building itself or occupants of neighboring buildings.
- **(4)** Where Land is to be developed, or re-developed into subdivisions, plots or land use zone, the byelaws apply to all the modifications to the land layout.

4.2 Application for building license

Any person desiring license, under Byelaw 4.1.1, shall give an application in writing to the Authority in the Form 1 (or Form 6 or Form 27) prescribed in this Byelaws. Depending on the necessity, the following particulars and documents as detailed in Byelaws 4.2.1 to 4.2.4 and 4.3 to 4.19 shall also be submitted:

- (1) Undertaking for Hazard Safety Requirement as prescribed in Form 2.
- (2) Certificate of Undertaking as prescribed in Form 3 by the "Architect on Record"/ "Engineer on Record";
- (3) Certificate of Undertaking as prescribed in Form 4 by the "Structural Engineer on Record; and Structural Design Basis Report as cited in Form 12 (12a (i.e., Part I) and 12b or 12c or 12d as applicable) duly certified by Structural Engineer on Record.
- (4) Certificate of Undertaking as prescribed in Form 5 by the "Construction Engineer on Record" who shall be undertaking the construction supervision.

Note: The term Construction Engineer also includes Site Supervisor

4.3 Title deed/possession certificate:

A copy of the title deed or possession certificate of the property, issued by a competent authority.

4.4 Property book/khata certificate and latest assessment book extract:

A copy of the property khata and along with the R.T.C. of the property, latest assessment book extract issued by the competent authority.

4.5 Survey sketch:

Attested copy of the Survey Sketch shall be enclosed.

4.6 Land conversion/alienation certificate and sketch:

Attested copies of land conversion/alienation certificate and sketch shall be enclosed.

4.7 Up to date tax paid receipt (certified copies):

The receipt for having paid up to date property tax to the corporation shall be enclosed.

4.8 Previously sanctioned plan:

Attested copy of the previously sanctioned plan if the application is for addition/ alteration/modification to the existing building. If the applicant for any reason cannot produce the previously sanctioned plan of the existing building, then in such cases the plan of the existing building along with site plan, etc., will have to be submitted.

4.9 Drawings:

The following drawings in ammonia prints, one drawing on tracing paper/polyester-tracing print shall be enclosed in addition to ammonia prints, in case of manual submission and the complete set of drawings, duly marked in the "Author" version of the AUTO PLAN software by CD or online submission.

4.10 Key plan:

A key plan (need not be to scale), showing the boundary locations of the site with respect to neighborhood landmarks.

4.11 Site plan:

Site Plan drawn to a scale of 1:500 for site of area up to one hectare and 1:1000 for sites of area more than one hectare. The site plan shall indicate the following:

- **a).** Title of drawing consisting of the property number of the site, name of the block, street or road in which the site is situated, number of the site if situated in an approved layout, and reference number of such approval with the use of the building.
- b). The boundaries of the site and of any contiguous land belonging to the owner thereof.
- c). The north direction relative to the plan of the building.
- d). The name and the description of the adjacent roads, street, or lanes, if any, with the width thereof.
- e). The road boundaries considering proposed road widening as per Master Plan, if applicable.
- f). The position of the adjacent plots whether vacant or built up.
- g). The area to be occupied by the proposed building and the setbacks proposed for proper air and ventilation.
- **h).** The nature of the ground on which the proposed building is to be erected, whether natural like, rocky, gravelly, clayey, sandy etc., or made up ground.
- i). In the case of made up ground, the time when it was so made up and the materials used in making it up shall be indicated. In case of sloping ground where the gradient exceeds 5% (1:20) block levels have to be furnished in the site plan.
- j). Any physical features such as wells, drains, transmission lines, etc.
- k). Natural features like existing trees, valleys etc.
- I). Block levels in cases where basement/cellar floor are proposed below ground level
- **m).** Such other particulars, as may be specified by the Authority.

4.12 Building plan:

Building Plan drawn to a scale of not more than 1:100 showing the following particulars:

- **a).** Floor plans of all floors indicating the north line and various parts of the building, sizes of rooms, position of stair-cases and lifts, machine rooms, ramps etc., in detail along with street elevation.
- **b).** Use or occupancy of all parts of the building.
- c). Exact location of essential services viz., water closets, baths, sinks etc.
- **d).** Sectional drawing showing size of footing, thickness of walls, spacing of columns, thickness of roof slab, height of rooms, height of parapet, drainage and slope of the terrace roof, details of staircase showing tread, rise and landing width, railing, etc.
- e). Details of ventilation of all rooms.
- **f).** Open spaces or yards inside or surrounding the buildings.
- g). Sewerage arrangements.
- h). The schedule of all doors, windows, and ventilators showing sizes and numbers.
- i). Dimensions of projected portions beyond the walls like Chajja, balcony, canopy, etc.
- **j).** In case of basement floor, position of the ramp with respect to the entrance, ground level and building with a slope not exceeding 1 to 8, the drainage arrangement in the basement floor, etc.
- **k).** Such other particulars like site area & plinth area of all buildings, area of each floor and total floor area, building coverage, total height of building etc shall be indicated.
- I). The drawing must be fully dimensioned so as to have easy, quick and accurate measurements.

4.13 Plan of parking area:

In the case of commercial buildings, multi-storey buildings, hospitals, auditoria, Kalyana Mantapas, cinema theatres and multiplex theatres, stadia and exhibition centre's and other similar buildings, separate detailed drawings of parking areas showing the arrangement for vehicular parking as per standards laid down in **Zoning Regulations (Chapter 3, Table 11)** indicating the entry, exit of vehicles, drive way, etc. shall be submitted.

4.14 Detailed floor-wise area calculation with sketches (color index)

4.15 License fee/scrutiny receipt:

Receipt for having paid to the Authority license fee/scrutiny fee as prescribed in **Byelaws 4.23** (certified copies.)

4.16 Indemnity bond on stamp paper

as prescribed by the Authority (in case of high-rise buildings).

4.17 Schedule II of the National Building Organization duly filled in duplicate as per Form 22.

4.18 Foundation certificate:

A Foundation Certificate, issued by a Registered Geotechnical Engineer as in Form 23, which certifies;

- **4.18.1** The fitness of the foundation to bear the additional building load in respect of old buildings (above which new floors are proposed to be added).
- **4.18.2** The expected depth of excavation/filling and the requirement of prior approval from the Authority.
- **4.18.3** The suitability of the site for building construction in the case of low-lying/water logging area, hilly regions and terrains with steep slope.
- **4.18.4** The overall fitness of the site for construction, in respect of high-rise buildings.
- **4.18.5 Other Certificates**, as applicable, from the following authorities

Table 4.1 Other Certificates (Byelaw 4.18.5)

	Agency	In respect of
4.18.5 (1)	Karnataka Fire & Emergency Services	N.O.C. in case of high rise building
4.18.5 (2)	Airports Authority of India	N.O.C. in case of high rise building in the vicinity of the Airport
4.18.5 (3) Karnataka Slum Clearance and Improvement Board		N.O.C. with regard to noninterference with improvement schemes, in respect of areas notified under section 3 of the Karnataka slum Clearance and Improvement Board Act.
4.18.5 (4)	Directorate of Factories and Boilers	N.O.C. in case of industrial buildings
4.18.5 (5)	Controller of Explosives	N.O.C. in case buildings proposed for storage or sale of combustible articles.
4.18.5 (6)	Railways	N.O.C. in case of buildings abutting railway margin.
4.18.5 (7)	National Highway	N.O.C. in case of buildings to be located within 75m from the National Highways.
4.18.5 (8)	Karnataka State Pollution Control Board	N.O.C. in case of industries/factories N.O.C. in case of mega projects
4.18.5 (9)	Ministry of Environment & Forests & Department of Ecology and Environment	N.O.C. in case of mega projects
4.18.5 (10)	Gulbarga Urban Development Authority	 (a). Bifurcation and amalgamation of plot as per Section 14 & 16 of the KTCP Act 1961 (b). Approval in case of buildings and power license under Special Circumstances (c). Approval of lay out plan in case of Group Housing Schemes where site area of Housing exceeds 4000 sq.mtrs. (d) In case of civic amenity site, leased out by GUDA, commencement certificate under Section 14 & 15 of KPTC Act 1961 for construction of buildings.
4.18.5 (11)	District Magistrate/Deputy Commissioner	NOC in case of permanent and/or semi- permanent cinema theatres including drive-in theatres, multiplex, amusement parks and petrol pump.

4.19 Sewage disposal arrangements:

If the underground drainage is not feasible/not available, and if the proposed building is for more than 3 tenements, detailed drawings and information regarding sewage and waste water disposal arrangements (such as septic tank/soak pit/soak well) shall be enclosed to the application for building license.

Note: Separate clearance from Engineering and Water Supply Department of Gulbarga mahanagar palike should be submitted.

Note: Form 27 shall be used for application for permission to demolish a building or part of it and only scrutiny fee has to be paid. No other supporting documents, except documents specified in Byelaw Nos. 4.3 (Title/deed, possession certificate), 4.4 (Property book/khata certificate and latest assessment book extract) and 4.7 (Up to date tax paid receipt-certified copies) above, are needed to be enclosed with the application.

4.20 Size of drawing sheets (Manual submission):

The following sizes shall be adopted for the drawing to be submitted.

Table 4.2 Sizes of Drawing Sheets (Byelaw 4.2)

SI.No.	Standards	Trimmed size (mm)	Untrimmed size (mm)
1	A 0	841 X 1189	880 X 1230
2	A 1	594 X 841	625 X 880
3	A 2	420 X 594	450 X 625
4	A 3	297 X 420	330 X 450
5	A 4	210 X 297	240 X 330
6	A 5	148 X 210	165 X 240

Any of the above convenient standards sizes may be adopted considering the details to be shown.

4.21 Coloring of plans(Manual submission)

All the plans should be colored as specified in **Table 4.3** and folded to A4 size.

Table: 4.3. Coloring of Plans (Byelaw 4.21)

0.		4000	Site Plan		1	Building Pla	n
SI. No.	ltem	White Plan	Blue Plan	Ammonia Plan	White Plan	Blue Plan	Ammonia Plan
1	Plot lines	Thick black	Thick black	Thick black	Thick black	Thick black	Thick black
2	Existing Street/road	Green	Green	Green			
3	Future street/ road if any	Green dotted	Green dotted	Green dotted	<i></i>		
4	Permissible building line	Thick dotted	Thick dotted	Thick dotted			
5	Open Space	No color	No color				
6	Existing work	Black outline	White	Blue	Black	White	Blue
7	Work proposed to be demolished	Yellow hatched	Yellow hatched	Yellow hatched	Yellow hatched	Yellow hatched	Yellow hatched
8	Proposed work (see note 1)	Red filled in	Red filled in	Red	Red	Red	Red
9	Drainage & sewerage work	Red dotted	Red dotted	Red dotted	Red dotted	Red dotted	Red dotted
10	Water supply work	Black dotted thin	Black dotted thin	Black dotted thin	Black dotted thin	Black dotted thin	Black dotted thin

Note: Item No. 8 does not apply, in case of an entirely new construction on the site. For land development, sub-division, layout, suitable coloring notations shall be used which shall be indexed.

4.22 Registration of professionals:

The authority shall register professionals referred to under these byelaws. The details are given in Byelaw 8.0.

4.23 Building license fee:

4.23.1 Every person applying for license to construct or reconstruct or alter any building under sections 299, 304, 312 and 313, of the KMC Act, develop or alienate any piece of land shall pay to the Authority,

the license fee and other applicable fees as in **Byelaw no.4.23.2**, provided that no fee shall be payable by the Central and the State Government or government agencies for the construction of buildings by them on their lands. Scrutiny fees shall be paid along with application and all other fees only after receipt of demand notice.

Note: The fixation of license fee shall be governed by the following:

- a) For re-erection of existing buildings, the fees chargeable shall be the same as for the erection of new buildings.
- b) For additions and alterations in the existing buildings the fees shall be chargeable on the added portions only at the same rate applicable to the new building.
- c) The license fee and site inspection fee shall be as notified by the Authority from time to time, with at least one month advance notification in case of fee revisions.

4.23.2 Other fees (as fixed by the Authority) to be paid are:

- 1) The slum improvement cess, the betterment fees and the development fees, as prescribed by the authority from time to time.
- 2) The Drainage Development Fees (towards improving drainage)
- 3) Greenery fees (for maintaining the greenery of the City)
- 4) Scrutiny fees (for scrutiny of application)
- 5) Application fee (to be paid while collecting the application forms from the office of the Authority)
- 6) Karnataka State Building Construction Workers Welfare Board

4.24 Ground rent/ Storage charges/fees

4.24.1 The ground rent/ Storage charges for stocking of building materials on public land shall be done as prescribed by the Authority, without causing any obstruction to the movement of vehicles and pedestrians, subject to the permission of the Authority.

Note:

- (i) The ground rent/ Storage fees shall be based on the total area required for stocking of building materials. The ground rent/ Storage fees is valid for a period of two years only. If the building is not completed and the Occupancy Certificate is not obtained within the period of two years, further rent should be paid at half the rate per annum or part thereof till the building is completed.
- (ii) The ground rent applies only for the storing of building materials and no other purpose.
- (iii) If public land is utilized for storing of excavated material and debris, separate charges shall have to be paid at four times the rate fixed as ground rent. No materials/debris should be stacked on road land/shoulders, inside drains etc. causing public nuisance and damage to public property

4.24.2 Ground Rent/ Storage charges for High-rise Buildings:

High rise buildings are not exempted from payment of ground rent/ Storage charges irrespective of the setbacks and coverage.

4.24.3 Exemptions for Ground Rent/ Storage charge:

Ground rent/ Storage charges may be exempted in the following cases, namely

- (1) Individual residential bungalows with front setback of 6 meters and more, with coverage of not more than 55 percent.
- (2) Schools, colleges and other educational/research institutions with a front set back of 8 meters and more, with coverage of not more than 33.33 per cent.

- (3) Religious and cultural buildings with a front set back of 8 meters and more, with coverage of not more than 45 percent.
- **(4)** Heavy industries and government buildings with large extents of land, capable of storing the building materials within the periphery of the property

Note: Exemption shall be granted only on production of undertaking from the applicant on a stamped paper that the government land, footpath and road will not be used for stocking building materials as well as depositing debris. In the event of violation of this undertaking by the applicant, the license shall be suspended.

Table 4.4 (Bye-law 4.23 & 4.24) Schedule of Fees/Charges

SI. No.	Type of Fees/charges	Residential	Commercial
1	Construction Fees	1.5 % of the value of the Building	3% of the value of building
2	Compound wall	1.5% of the value of the	Compound wall.
3	Scrutiny Fees Up to 9.0 m X 12.0 m (30' X 40') Up to 12.0 m X 18.0 m(40' X 60') Above 12.0 m X 18.0 m (40' X 60')	Rs. 300.00 Rs. 400.00 Rs. 500.00	Rs. 750.00 Rs. 1000.00 Rs. 1500.00
4	Betterment Fees.	Rs. 1.50/ Sq. mt. of the total plot area.	Rs. 4.00/ Sq. mt. of the total plot area.
5	Slum cess Up to 9.0 m X 12.0 m (30' X 40') Above 9.0 m X 12.0 m(30' X 40')	Rs. 0.20/ Sq. mt. of the total plot area. Rs. 0.50/ Sq. mt. of the total plot area.	Rs. 0.50/ Sq. mt. of the total plot area.
6	Ground rent/ Storage Charges	Rs. 0.25 / Sft of Plinth area	Rs. 0.50 / Sft of Plinth area
7	Renewal Fees	306 of KMC act, but times & only yearly rer	fees, subject to section limited to Maximum 3 newal will be granted, if yed within the period of red period.

4.25 Temporary structures/sheds

4.25.1 Construction of Temporary Shed – Temporary shed, to be used as construction shed, may be permitted in that plot (excluding public land) along with the sanction to a building and may be put up not earlier than a month before the commencement of the work and shall be removed immediately after the completion of the work. Occupancy certificate for the building shall be issued only after the removal of the temporary shed.

4.25.2 Temporary Structures – Temporary structures used for running establishments of commercial in nature, Religious and Cultural Programs etc., shall be permitted according to the purpose for which these are used by the special permission of the authority for a limited period and subject to such conditions as may be imposed in the permission. Such structures shall be constructed

satisfying the criteria of fire and safety services, and shall have adequate provision for mass exit during emergency situations. Such temporary structures shall be completely removed on the expiry of period specified in it.

4.25.3 Temporary structures such as exhibition malls, circus and other pandals, where public are likely to assemble, shall have sufficient emergency exit facilities. Fire safety measures have to be verified, by the Fire & Safety Services and the Authority, before issuing the license.

4.26 Demand notice

The Authority shall send the demand notice to the applicant, for payment of license fee, ground rent and other applicable fees for the issue of building license, after the scrutiny of the application. The demand notice will be valid for a period of forty five days only from the date of dispatch of the notice or forty days from the receipt of notice by the applicant. After the expiry of the above period, fees shall be paid as per the revalidated demand notice. The revalidation shall be subject to the byelaws and fees in force at the time of such revalidation.

4.27 Revision of license fee, other fees and ground rent

The license fee, other fees and ground rent are subject to revision from to time to time by the Authority, with a minimum of thirty days notice.

4.28 Grant of license

- **4.28.1** Subject to sections 303 and 304 of the KMC Act, the Authority after having examined the application for license, may either grant the license as per the proposal or with such modification or condition as it may deem necessary or refuse license and thereupon shall communicate its decision to the applicant within 30 days as per KMC Act in the Performa given in **Form 7 or Form 8**, as given in the Appendix A.
- **4.28.2** For every application received, application number shall be given to the applicant along with acknowledgement and the application shall be processed on "first come first serve" basis.
- **4.28.3** While granting license, the Authority shall impose a condition that:
- (i) the plants and trees within the site should not be disturbed as much as possible;
- (ii) at least two trees shall be grown in the sites where the site area exceeds 200sqm, and for every additional 200sqm, additional two trees shall be planted in the interest of improving the environment of the area. The positions of the trees to be planted shall be shown in plan. If the tree dies a new tree shall be planted as replacement.
- **4.28.4** The owner, developer/builder, or any other person, responsible for construction of a building, shall erect and maintain during construction such barricading as considered necessary to prevent dust, debris and other materials endangering the safety of people / structures, etc. in and around the site.

4.28.5 Revised plans

- (1) Where plans have been scrutinized and the Authority has pointed out modifications or objections, the applicant shall modify the plans to comply with the modifications or objections raised and resubmit the plans. The plans submitted for approval shall not contain superimposed corrections.
- (2) A plan once sanctioned may be revised or modified by the Applicant and may be scrutinized and sanctioned by the Authority on payment of additional scrutiny charges and additional fee if any due to the increase in the floor area. This sanction will be as per the rules prevailing at the time of revision. If the

modified plan is sanctioned after the commencement of work, the applicant shall pay penalty at the rates prescribed by the Authority.

4.28.6 Special power of Authority

The Authority may direct the owner:

- a. to change the location of the proposed building,
- **b.** to provide open space or ventilation,
- **c.** to use specified materials for construction, if such measures are considered necessary keeping in view the existing or proposed power lines, water and sewage lines passing through the site, or due to any proposed widening of the road or formation of new roads passing through the site; which shall not be inconsistent with the Act and the master plan.

4.28.7 Suspension of license

The License granted shall be deemed to be suspended in cases of resignation by any professional such as Architect on Record, Engineer on Record, Structural Engineer on Record, Construction Engineer on Record, Geotechnical engineer on record till the new appointments are made. During this period construction shall not be carried out at the site. Any work at site during this time shall be treated as unauthorized construction without any due permission.

Note: In case of resignation by any professional, he has to give 30-day's prior notice in writing to the owner with a copy to the Authority, citing the reasons clearly, so that alternate arrangements can be made by the owner.

4.28.8 Withdrawal of application by the owner

The owner may withdraw the application and plans at any time prior to the sanction and such withdrawal shall terminate all proceedings with respect to such application; but the fees paid shall in no case be refunded.

4.28.9 Cancellation of license

The license if secured by any person by any misrepresentation or by producing false documents, such license will be treated as cancelled/revoked and any work done there under shall be deemed to have been done without license.

4.28.10 Structural deviations during course of constructions

Notwithstanding anything stated in the above byelaws, it shall be incumbent on every person whose plans have been approved to submit the revised (amended) plans for any structural deviations he proposes to make during the course of construction of his building work. The procedure laid down for plans or other documents so far shall apply to all such revised (amended) plans also.

4.28.11 Liability

- **a.** The granting of license, approval of the plan and specifications, or inspections made by the Authority shall not in any way relieve the owner of a building from full responsibility for carrying out the work in accordance with the byelaws and the requirements of the sanctioned building plan along with such conditions as have been imposed while sanctioning the license.
- **b.** Notwithstanding any license granted under the Act and these byelaws, any person undertaking any development work shall continue to be completely liable for any injury or damage or loss whatsoever that may be caused to anyone in or around the area during such construction and no liability whatsoever in this regard shall be cast on the Authority.

- **c.** Approval of drawings and acceptance of any statement, documents, structural report, structural drawings, progress certificate, or building completion certificates shall not discharge the Engineer on Record, Architect on Record, Construction Engineer on Record, Structural Engineer on Record, Builder, Developer and Owner from their responsibilities imposed under the Act, the local acts and the byelaws.
- **d.** The landowner or power of attorney holder or builder/developer shall be jointly and severally shall be held responsible for any unauthorized construction, and if addition or alteration is done without prior permission from the competent Authority.
- **e.** Professional Misconduct: In the event of suspected professional misconduct by the Builder/Developer and other concerned persons (such as AR, CR, CER, CMAR, ER, GER, QAR, QAAR, SDAR, SER, TPR etc.), the Authority shall initiate appropriate investigation and issue a show cause notice to the concerned. If there is sufficient proof of professional misconduct and if the explanations provided to the show cause notice are not satisfactory, the Authority may initiate disciplinary action, if necessary, which may range from imposing heavy penalty of fees to suspension or cancellation of registration of one or more of concerned persons within the jurisdiction.

Further, depending on the severity of case and, wherein the professional misconduct has clearly:

- (i) affected the safety and stability of the neighboring land & structures;
- (ii) violated the building byelaws;
- (iii) resulted in loss of life

the Authority shall initiate criminal proceedings/legal action against the concerned as per the law of the Land for violation of statutory obligations.

4.29 Procedure after grant of license

4.29.1 Commencement of work -

- (1) The construction or reconstruction of a building shall be commenced within a period of two years from the date of issue of license. Before the expiry of two years, the owner shall give intimation to the Authority of the intention to start work in the form (Form 10) prescribed in Appendix A.
- (2) After the expiry of two years from the date of license, construction or reconstruction of a building shall not be commenced without obtaining a fresh license from the Authority.

4.29.2 Inspection -

- (1). Generally all construction and work for which a license is required shall be subject to inspection by the Authority and certain types of construction involving hazards or requiring constant inspection, shall have continuous inspections by the Authority.
- (2). Within 15 days from the date of the receipt of intimation under **Byelaw 4.29.1**, the Authority shall inspect the site to verify the line out marked for the building according to the sanctioned plan. The owner shall commence the work after the grant of commencement certificate in the form **(Form 11)** prescribed in Appendix A.
- **(3).** If the commencement certificate is not issued within a period of 15 days from the date of intimation by the owner, the construction may proceed according to the sanctioned plan, provided there are no deviations from the approved plan.
- **(4). Inspection at various stages** The Competent Authority at any time during erection of a building or the execution of any work or development, make an inspection thereof without giving prior notice of his intention do so.

- **(5). Inspection by Fire & Emergency Services Department** For all apartments, multi-storied, high-rise, special building, assembly building, business building, educational building, hazardous building, industrial building, institutional building, public building, office building and storage building, the work may also be subject to inspection by the Local Fire & Emergency Services Department.
- **(6). Quality Control** All the construction for high-rise buildings, higher than seven storey's shall be carried out under quality inspection program prepared and implemented under the Quality Auditor on record (QAR) or Quality Auditor Agency on Record (QAAR). Quality inspection program to be carried out on the site shall be worked out by QAR/QAAR in consultation with the Owner, builder, CER. QAR or QAAR shall give a certificate of quality control as per Performa given in **Form 25**.

4.29.3 Document at Sites:

Where tests of any materials are required to be conformed with the requirement of these byelaws, or conditions of license, records of the test data shall at all times be kept for inspection during the construction of the building and for such period thereafter as may be required by the Authority.

4.29.4 Display of Sanctioned Plan and License at the Construction Site:

- (1) The owner/developer/builder shall, during the construction, display the following documents in a conspicuous place of the premises:
- (i) A copy of the building license.
- (ii) A copy of the approved plans of the property for which the license was issued and the specifications of the building to be constructed.
- (iii) Names of owner, developer, all professionals on record, contractor with their phone numbers.
- (2) The building license and the copies of sanctioned plans with specifications shall be made available during inspections.

4.30 Procedure during construction

- 4.30.1 Recognized stages for progress certificate and checking:
- (1) Following shall be the recognized stages in the erection of every building or the execution of every work:-
- (i) Plinth, in case of basement before the casting of basement slab.
- (ii) First storey.
- (iii) Middle storey in case of High-rise building.
- (iv) Last storey.
- (2) At each of the above stages, the owner / developer under these byelaws shall submit to the designated officer of the Authority a progress certificate in the given formats (Form 13, Form 14, Form 15 and Form 16).
- (3) The progress certificate shall not be necessary in the following cases:
- (i) Alteration in building not involving the structural part of the building.
- (ii) Extension of existing residential building on the ground floor up to maximum 15 sqm. in area.
- **4.30.2** On receipt of the progress certificate from the owner/developer, it shall be the duty of the Authority, if found necessary, to check any deviation from the approved plan and convey decision within 15 days to the owner/developer accordingly for compliance.

4.31 Occupancy certificate

- **4.31.1** Every person shall before the date of expiry of license (which is five years from the date of issue of license) shall complete the construction or reconstruction of a building for which the license was obtained. Within one month after the completion of the erection of a building shall send intimation to the Authority in writing of such completion, accompanied by certificates (Forms 17-20, given in Appendix A) and shall apply for permission to occupy the building. The Authority shall decide after due physical inspection of the building (including whether the owner had obtained commencement certificate and compliance regarding production of all required documents including clearance from the Fire & Emergency Services Department in the case of high rise building at the time of submitting application). The Authority shall intimate the applicant within thirty days of receipt of the intimation whether the application for occupancy certificate is accepted or rejected. In case, the application is accepted, the occupancy certificate shall be issued in the format (Form 21) given in Appendix A, provided the building is in according with the sanctioned plan.
- **4.31.2** Physical inspection means the Authority shall find out whether the building has been constructed in all respects as per the sanctioned plan and requirement of Byelaws, and includes inspections by the Fire & Emergency Services Department wherever necessary. **For all high-rise buildings**, the work completed shall also be subject to inspection by the officers of the Fire & Emergency Services Department and the occupancy certificate shall be issued only after a clearance certificate is obtained.
- **4.31.3** If the construction or reconstruction of a building is not completed within five years from the date of issue of license for such a construction, the owner shall intimate the Authority; the stage of work at expiry of five years. The work shall not be continued after the expiry of five years without obtaining prior permission from the Authority. Such continuation shall be permitted if the construction or reconstruction is carried out according to the license plan and if the Authority is satisfied that at least 75 percent of the permitted floor area of the building is completed before the expiry of five years. If not, the work shall be continued according to a fresh license to be obtained from the Authority.

4.31.4 Occupancy or Letting out of the New Building:

No person shall occupy or allow any other person to occupy any new building or part a new building for any purpose whatsoever until occupancy certificate to such building or part thereof has been granted by an officer, authorized to give such certificate if in his opinion in every respect the building is complete according to the sanctioned plans and fit for use for which it is erected. The Authority may in exceptional cases and excluding high-rise buildings, and multi stored commercial buildings, (after recording reasons) allow partial occupancy for different floors of a building.

4.32 Deviations during construction

- **4.32.1** Wherever any construction is in violation/deviation of the sanctioned plan, the Authority may, if he considers that the violations / deviations are within 5% of (a) the setback to be provided around the building, (b) plot coverage (c) floor area ratio and (d) height of the building and also that the demolition under Chapter XV of the KMC Act is not feasible without affecting structural stability, he may regularize such violation/deviations after recording detailed reasons for the same.
- **4.32.2** Violation/deviation as at **Byelaw 4.32.1** above may be regularized only after sanctioning the modified plan, recording thereon the violations/deviations and after the levy of fee prescribed by the

Authority from time to time. However if the violations/deviations are more than 5% of the items specified above, the building shall be demolished.

4.32.3 Regularization of violation / deviations under this provision are not applicable to the buildings which are constructed without obtaining any sanctioned plan whatsoever and also the violations / deviations which are made in spite of the same being specifically deleted or rejected in the sanctioned plan.

4.33 Unauthorized buildings and developments, and Constructions in Mandal layouts.

- 4.33.1 In case of unauthorized buildings & developments, the Authority shall;
- (a) take suitable action which shall include demolition of unauthorized works when such works are not in accordance with the provisions of the Byelaws.
- **(b)** take suitable action against the owner, developer, registered architect/engineer others who are involved, including the disqualification of the registered professionals.
- **4.33.2** The setbacks, parking spaces, open spaces and other open land, minimum or excess, shown as provided in the sanctioned plan and the area of land used for the FAR calculation of a building shall remain so in the respective usage till the existence of such building. If any other Construction/development is done in such open spaces without permission from the Authority, such constructions will be considered unauthorized and Byelaw 4.33.1 shall be applicable.
- **4.33.3 Mandal Layouts**, are those layouts which were accorded sanction by the respective Mandal Panchayats for the legally converted Non Agricultural (residential) land, before those areas coming under the jurisdiction of the GMP. The area falling under the erstwhile mandals were transferred to the Local authority in 1996. Now almost all the so called Mandal Panchayat's sanctioned layouts are a part of the GMP and the GMP has been providing all amenities to those layouts. To avoid hardships to the innocent public of the City, the GMP had passed a resolution in this regard on 17-4-2002, based on the resolution of the Urban Development authority, Gulbarga dt. 23-1-2002.

Based on this, many residents had paid the requisite taxes to the GMP and got the Khata done. Many people have already constructed houses on the said plots taking the construction permissions for the GMP. Hence this proposal to continue the same with certain conditions as laid down in the notes.

- The cutoff date of NA of the land to be considered shall be 31-3-1999.
- The Various charges to be collected under various scenarios will be as under:

SI. No.	Various scenarios	Park Fees.	Betterment Fees	Development charges to be collected.
1	The land converted in to NA and is ,			
	Town planning / GDA approvedGram Panchayats/ Corporation/local	NILL	NILL	NILL
	authority, has issued the building permissions and the area is developed fully (after 1986)	NILL	NILL	NILL
2	The Land converted to NA and the Town planning / GDA has approved the layouts; The gram Panchayat's/ corporation/ local authority has issued the building permission, but no development works taken up. (Prior to 1986)	10% of the Sub-Registrar value	Rs. 4.00 / Sq. mt.	Rs. 130.00/ sq. mt. of land/plot

3	The land converted to NA, and no approval from Town planning/ GDA, but manual / gram/ Mandal panchayats have approved the layouts and issued the building permissions & the corporation/local authority has collected the betterment charges, garden cess and other taxes.	10% of the Sub-Registrar value	Rs. 4.00 / Sq. mt.	Rs. 130.00/ sq. mt. of land/plot
4	The land Converted into NA, Majority of houses surrounding the areas are regularized by corporation / local authority by collecting Betterment and other taxes, but some pockets of plots are still to be regularized.	10% of the Sub-Registrar value	Rs. 4.00 / Sq. mt.	Rs. 130.00/ sq. mt. of land/plot

NOTE:

- I. The provisions of clause no 4.33.3 will be only for a period of 12 months from the date of approval of these Bye-laws by the Government and after 12 months, the Local authority will take legal possession of such vacant site/sites and convert them as gardens and CA sites.
- II. The Amount collected under Park fees shall be strictly used for parks to be developed by purchasing land or by acquisition as per **note l**.
- III. The various charges as mentioned are prevailing, and subject further revisions by the authority from time to time.

4.34 Unsafe building

4.34.1 Examination of Unsafe Building

The Authority shall examine, or arrange for the examination by an expert committee, of every building suspected to be unsafe or damaged, and shall make a written record of such examination.

4.34.2 Notice to Owner, Occupier of Unsafe Building for Repair and Improvement

Whenever the Authority finds any building or portion thereof to be unsafe, he/she shall give written notice, to the owner and occupier of such building, stating the defects thereof. This notice shall require the owner or the occupier within a stated time either to complete specified repairs or improvements or to demolish and remove the building or portion thereof and shall ensure the structural safety and service in accordance with the structural safety clauses of the Byelaws. The Authority shall also report to the competent authority concerned with the safety of public such as police department, and fire and emergency services department.

4.34.3 Notice to Owner, Occupier of Unsafe Building to vacate

The Authority may direct in writing that the building which in his opinion is dangerous, or has no provision for exit if there is a fire, shall be vacated or improved or altered to make it safe and free from danger immediately or within the period specified for the purpose; provided that the Authority concerned shall keep a record of the reasons for such action with him. If any person does not comply with the orders of vacating a building, the Authority may direct the Police to remove the person from the building.

4.34.4 Disregard of Notice by Owner, Occupier of Unsafe Building

In case the owner or occupier fails, neglects or refuses to comply with the notice to repair or to demolish the said building or portion thereof, the Authority shall cause the danger to be removed whether by demolition or repair of the building, or portion thereof or otherwise and realize the cost from the owner/occupier.

4.35 Prohibition/control of construction in specified areas

4.35.1 Graveyards, Burial Grounds etc.

The land occupied by the graveyards, burial grounds, cremation and allied actions shall not be allowed to be built upon and shall be kept permanently open.

4.35.2 Improvement Scheme

No license shall be issued for development of area designated for improvement scheme until such scheme is prepared and finalized by the Competent/Appropriate Authority.

4.35.3 Co-Owners Consent

In cases where the building construction is as per Byelaws but the co-owners are not giving consent either at the time of Building license or at the time of Occupation Certificate, the Authority may issue the license after giving opportunity of hearing to the co-owners and considering the merits and demerits of individual case.

4.36 Prohibition of construction on public property

- **4.36.1** Erection on drains No building or part of a building shall be erected over drains, sewer lines, water mains or underground electric mains or on any such other public property.
- 4.36.2 Projection of doors windows, etc.:
- (a) No one shall build any wall or erect any fence or other obstruction or projection or make any encroachment in or over any public street, foot path, drain or margin land.
- **(b)** No door, gate, bar, windows or projections shall be hung, or placed so as to open outwards or project upon any street or public utility or into any public property.

4.37 Prohibition of construction near prisons

No building or part of a building shall be erected within 100m from the boundaries of prisons.

4.38 Prohibition of construction near dumping yards

No building or part of a building shall be erected within 500m from the boundaries of dumping yards / garbage disposal areas of any kind, identified by the Authority.

4.39 Inspection, repair, strengthening & retrofitting of aged buildings

- **4.39.1** In case of residential low-rise buildings older than fifty years, it shall be the duty of the owner, to get his building inspected by a Registered Structural Engineer (RSE) within two years from the date of coming into force of these Byelaws. The Structural Inspection Report (Form 24) shall be produced by the Owner to the Authority. If any action, for ensuring the structural safety and stability of the building is to be taken, as recommended by SER, it may be completed within five years. Thereafter, the building shall be inspected once in 10 years.
- **4.39.2** For other buildings, the owner shall get his building inspected after the age of the building has crossed forty years. The procedure shall be followed as per byelaw.
- **4.39.3** The owner of all such buildings will produce the structural stability certificates by a RSE, once in every five years or at the expiry of a safe period as stated in the structural inspection report.
- **4.39.4** The Authority shall maintain proper record of such inspections and recommendations.

4.40 Building works that do not require a license

No license is required for undertaking the following alterations, repairs and minor works in all buildings except those buildings which are classified as Heritage Buildings by the competent Authority such as the Heritage Conservation Committee.

- i. Plastering and patch repair
- ii. Construction of non-load bearing false ceilings, in a manner that complies with the building byelaws
- iii. Flooring and re-flooring

- **iv.** Opening and closing windows, ventilators and doors not opening directly onto adjoining plots in a manner that complies with the building byelaws.
- v. Repair of weather-shades/sunshades not more than 75cm in width within the plot and not projecting onto a public street.
- vi. Repair of parapets, in a manner that complies with the building byelaws.
- vii. Repair of boundary walls, in a manner that complies with the building byelaws.
- viii. White-washing, painting and coating of building surfaces.
- ix. Construction of internal partitions, in a manner that complies with the building byelaws.

4.41 Simplified procedure for small building

- **4.41.1** The Authority shall grant exemption for submission of working drawing, structural drawing and soil investigation report in case the Authority is satisfied that in the area where the proposed construction is to be taken, similar types of structure and soil investigation reports are already available on record and such request is from an individual owner/developer, having plot of not more than **500sqm** in size and for a maximum **ground plus two (2)** storied building.
- **4.41.2** If the local site conditions do not require any soil testing or if a soil testing indicates that no special structural design is required, a small building having up to ground + 2 floors, having load bearing structure, may be constructed including relevant seismic safety measures as per IS code. If the proposed small house is to be constructed with load bearing type masonry construction technique, where no structural design is involved, no certificate from a Structural Engineer on Record will be required. However, a Structural Design Basis Report **(Form 12)** has to be submitted, duly filled in.

CHAPTER 5

5.0 GENERAL BUILDING REQUIREMENTS

5.1 Requirements of Building Sites

- **5.1.1** No piece of land shall be used as a site for the construction of buildings under the following circumstances:
- (a) If the site is not drained properly or is incapable of being well drained;
- (b) If the Authority considers that the site is unsanitary or it is dangerous to construct a building on it;
- **(c)** If the building is proposed on any area filled up with filthy and offensive matter without a certificate from the Health Officer and Corporation Engineer to the effect that it is fit to be built upon from health and sanitary point of view;
- (d) If the proposed development is likely to involve damage to or have negative impact on urban aesthetic environment or ecology.
- **(e)** If the site is found to be liable to liquefaction by the Competent Authority under the earthquake intensity of the area, except where appropriate protection measures are taken to prevent the liquefaction:
- **(f)** If the site is found to be in low lying area and liable to flooding, except where protection measures are adopted to prevent the possibility of damage due to flood water;
- (g) If the site is within a distance of nine meters from the water spread area of a tank at full tank level;
- **(h)** If the owner of the building has not shown to the satisfaction of the Authority that all the measures required to safeguard the construction from constantly getting damp are being taken;
- (i) If the site is over a municipal drain, sewer line, water mains or under electric supply lines;
- (j) If the building is for an office or building including school, theatre or assembly on a site which has not been previously approved by the Authority;
- (k) If the construction of the building thereon is for public worship which in the opinion of the Authority may offend the religious feelings of any class of persons in the vicinity thereof; or which may cause obstruction to the traffic:
- (I) If the use of the said site is for the purpose of establishing a factory, warehouse, or work place which in the opinion of the Authority, will be source of annoyance to the health and comfort of the inhabitants of the neighborhood:
- (m) If it violates any provisions of master plan and zoning regulations;
- (n) If the plot is a revenue site for which permission under the Karnataka Land Revenue Act, 1964 is not obtained under section 95 thereof.

Note: Every application for a factory, workshop or work place, if it is proposed to use power, shall also satisfy the conditions of section 354 of the KMC Act and specific permission there under shall be obtained.

- **5.1.2** If an active fault trace is identified by Geological Survey of India, a structure for human occupancy should not be placed over the fault trace and must be set back by a minimum of 15m on either side of fault trace.
- **5.1.3** No plan shall be sanctioned for a residential detached building on a plot measuring less than 50qm or having width less than 6m. In specific cases of sites for housing schemes for Economically Weaker Sections, Low Income groups, slum clearance and improvement schemes as well as reconstruction in

case of densely populated area, and plot sub-divided due to partitions, the Authority may relax the above conditions.

- **5.1.4** The proposal for the subdivision of plots shall be made in accordance with the section 17 of the Karnataka Town and Country Planning Act, 1961.
- **5.1.5** Where cutting of hill slope in an area causes ecological damage and slope instability in adjacent areas, such cuttings shall not be undertaken unless appropriate measures are taken to avoid or prevent such damages.
- **5.1.6** Excavation in any site (including wells), for more than 3.00m depth, and filling in any site for more than 3.00m height (1.00m height in sites of low-lying or water logging areas and open fields) requires written permission from the Authority before taking up such work. The Authority decision will be based on the geotechnical report issued by a Registered Geotechnical Engineer.

5.2 Means of Access

- **5.2.1** The means of exclusive access other than through public roads and streets, shall not be of more than 30m in length from a public road or street. The minimum width of such access shall be 3.5m. FAR and height of buildings coming up on such plots connected by means of exclusive access shall be regulated according to the width of public street or road. If the means of access exceeds 30m in length, FAR shall be regulated with reference to the width of such access road. Construction of buildings on plots with common access roads/lanes, the public road /street shall be regulated according to the width of such common access roads/lanes.
- 5.2.2 No building shall be erected so as to obstruct the means of access of any other building.
- **5.2.3** No person shall erect a building so as to encroach upon the means of access.
- **5.2.4** The means of access shall be clearly shown in the plans submitted indicating the width, distance from the public road, width of the public road from which the access is taken etc.
- **5.2.5** Every such means of access shall be drained and lighted to the satisfaction of the Authority and manhole covers or other drainage, water or any other fittings, laid in such means of access shall flush with the finished surface level so as not to obstruct the safe movement.
- **5.2.6** The existing width of the means of access shall not be reduced in any case.
- **5.2.7** Construction of residential buildings up to [150sqm of built up area] (2 tenement) may be permitted only under special circumstances, even if the width of the means of access is less than 3.5m.

5.3 Open Spaces (within a plot), Coverage and FAR

5.3.1 General

- (1) Every room intended for human habitation shall abut on an interior or exterior open space or open verandah open to such interior or exterior open space.
- (2) The open spaces inside and around a building have essentially to cater for lighting and ventilation requirements of the rooms abutting such open spaces, and in the case of buildings abutting on roads in the front, rear or sides, the open spaces provided shall be sufficient for the future widening of such roads.
- (3) Open spaces separate for each building or wing: The open spaces shall be separate or distinct for each building and where a building has two or more wings, each wing shall have separate or distinct open spaces for the purpose of lighting and ventilation of the wings. However, separation between

accessory and main buildings more than 7m in height shall not be less than 1.5m; for buildings up to 7m in height no such separation shall be required.

(4) The open space shall be the minimum distance measured between the front, rear and side of the building and the respective plot boundaries. The front, rear and side of the building shall be the points of the building nearest to the boundary.

5.3.2 General rules while enforcing the setbacks for all types of buildings

- a) The front and rear setbacks shall be with reference to depth/extent of the site.
- b) Left and right setbacks shall be with reference to width/extent of the site.
- c) No side setbacks shall be insisted upon in the case of reconstruction of existing building where traditional row housing type of development exists and in areas specifically provided under the Zoning Regulations.
- **d)** The provision of setbacks should be read with tables prescribed for floor area ratio, coverage etc., for different type of buildings.
- **e)** When the building lines are fixed, the front set back shall not be less than the building line fixed or the minimum front set back prescribed whichever is higher.
- f) In the case of corner sites both the sides facing the road shall be treated as front side and byelaws applied accordingly to maintain the building line on these two roads, so as not to impair clear visibility to road traffic.
- **g)** In the case of sites facing roads both in front and rear, both the sides facing roads shall be treated as front, and other two sides not facing roads shall be treated as right sides and the setbacks be applied accordingly.
- h) In case where the building line is not parallel to the property line, the front and rear setbacks shall not be less than the specified setbacks at any point.
- i) In case of building sanctioned prior to coming into force of these rules which are abutting other properties on one, two or more sides, upper floors may be permitted, to utilize the available FAR, by obtaining no objection certificates from the adjoining property owners or even without no objection certificates if the adjoining owner himself has put up such abutting floors, provided that not less than ¼ of the area is left as vacant space, open to sky, if the existing building is retained.
- j) In case of irregular plots set backs are to be calculated according to the depth or width at the points where the depth or width is the least. In such cases, average setbacks should not be fixed, as they may effect minimum set back at any point.
- **k)** The left and right set-backs may be interchanged by the authority in exceptional cases due to existing site conditions such as open well, presence of trees and also considering the topography of the land.
- I) In case of two or more buildings proposed on a single site, the setbacks shall be applied by considering them as a common building. In such cases, the distance between the two buildings shall be minimum of half the height of the taller building.
- m) Public open space or conservancy lanes adjoining the plot should not be considered as setbacks.

5.3.3 Plots facing the road proposed for widening

(a) Where upper floors are permitted over the existing building, which were sanctioned prior to the coming into force of these byelaws and facing the roads proposed for widening in the master plan, the upper floors shall be limited to the proposed line of road widening or building line, if any prescribed.

- **(b)** In case of a plot facing the road proposed for widening, the required land as indicated in the development plan for road widening shall be handed over to the Authority, before sanction is accorded to his plan. The Authority shall compensate by Transfer of Development Rights.
- (c) Ramp or parking is not allowed in the land required for road widening;
- (d) The FAR shall be allowed as applicable to the total area of the site without deducting the area to be taken over for road widening, provided at least 60% of the site area is available for use as a building site after the proposed road widening; and set back shall be determined for the remaining portion of the plot.
- **(e)** Existing road width along the site shall be considered for calculating the FAR and the proposed road width shall not be the factor for this purpose.

5.3.4 Additions, alterations and modifications

- (a) Any additions, alterations & modifications to existing buildings shall be permitted in accordance with these byelaws.
- **(b)** In case of the buildings which were existing prior to coming into force of these byelaws, upper floors may be permitted according to the existing setbacks only, but limiting the FAR and the number of floors according to the present byelaws, subject to production of the foundation certificate.

5.3.5 Interior open spaces

The whole or one side of one or more rooms intended for human habitation but not abutting on any of the front, rear or side open spaces shall abut onto an interior open space of minimum width of 3m.

5.4 Building at Intersection of Streets

At the intersection of streets, the corners of the boundary of the plot shall be rounded off or cut – off after leaving a minimum distance of 1.5m from the point of intersection. The Authority may further require the corner of the building to be rounded off or cut –off parallel to the rounded off or cut-off boundary up to the height of the ground floor. In such cases the FAR is to be allowed for the total area of the plot. Entry or exit for the buildings shall be provided away from the point of intersection.

5.5 Basement Floor

- **5.5.1** Basement floor shall be permitted, if the area of the Plot is 200 Sq. Mt. & above.
- **5.5.2** If the plinth of the ground floor of the building is constructed leaving more set back than the minimum prescribed, the basement floor may extend beyond this plinth of the building, but no part of the set-backs shall be used for the basement other than for parking.
- **5.5.3** Every basement storey shall be at least 2.4m in height from the floor to the bottom of the roof slab / beam / ceiling (whichever is less) and not more than 2.75 mt.
- 5.5.4 The basement storey should not project more than 1.20m above the average ground level.
- **5.5.5** If the minimum setback left is more than 2.0 mt., then the basement may be extended on all sided below the ground level except the site abutting the road, provided the minimum setback between the basement and the property boundary is 2.0 mt.
- **5.5.6** In case of mechanical multilevel parking proposed at basement, the maximum height shall be 3.6 mt.
- **5.5.7** When a basement floor is proposed for car parking, convenient entry and exit shall be provided to the basement.
- **5.5.8** Access to the basement floor, used for other than parking purposes, shall be from inside the building.

- **5.5.9** Adequate protection against fire shall be provided to the basement storey. The roof separating the basement and the floor above shall be constructed of materials like RCC or such other material which can provide resistance against fire for at least two hours. Where a basement floor is permitted in apartment houses (residential flat) and hotels, the owner shall display the basement plan at the entrance. Thimbles (metal rings to receive wires/ropes) shall be provided in the roof of the basement and their positions clearly indicated on the plan. One fire extinguisher for every 100sqm of basement area or part thereof, shall be provided.
- **5.5.10** The walls and the floors of the basement shall be watertight and shall be so designed and constructed such that the water does not enter the basement.
- **5.5.11** Necessary arrangements shall be made to prevent moisture on walls.
- **5.5.12** No place in a basement floor shall be more than 11.25m away from the exit in case of residential/educational/institutional/hazardous buildings, 15m for commercial buildings and 22.5m for industrial buildings.
- **5.5.13** One additional basement for all buildings exceeding five floors may be permitted for parking and machines used for services and utilities of the buildings. The maximum number of basements in such buildings shall be two.
- **5.5.14** Two additional basements in case of three Star and above hotels may be permitted for parking and machines used for service and utilities of buildings. The maximum number of basements in such buildings shall be three.
- **5.5.15 Provision of ramp in setback:** A ramp provided from surface level of the site to the basement floor shall have a minimum width of 3.50 meters and slope of not more than 1 in 8. The gradient of a ramp shall start after leaving a minimum distance of 1m from the front boundary of the plot. In the case of high rise buildings, the ramp may be provided in the set back area without affecting the free movement of fire tenders.

5.5.16 Activities allowed in Basement floors:

- **a.** As a rule, basement shall be used for vehicular parking only.
- **b.** In case of three star hotel and above if extra area is available in the basement after meeting the requirements of parking facilities and other necessary items as provided in the byelaws, the same can be used for health club, shopping arcade, dining area without kitchen facilities, offices, conference hall, gym rooms, massage rooms, subject to reckoning such areas for FAR.
- **c.** In case of other commercial buildings, the spare area in the basement after catering to the requirements of parking facilities and other necessary items as provided in the byelaws, can be used for other purposes incidental to the commercial complex, such as restaurants, shopping arcade, health club, offices, subject to reckoning such areas for FAR.
- **d.** In case of public, semi-public buildings, the extra area available in the basement after fulfilling the required parking facilities as per byelaws can be used for;
- i. Canteen, conference hall, indoor games, stores in educational institutions, government offices of Local bodies and other statutory organizations;
- **ii.** X-ray rooms, radiology rooms, consulting rooms, physiotherapy, medical stores and canteens in government and private hospitals including nursing homes.

- **e.** In case of multi-storey residential apartments, the extra area available in the basement after meeting the requirements of parking facilities, can be used for other purposes incidental to the residential requirement, (such as shopping, health club, gym rooms, indoor games), to a maximum of 5% of the total built up area, subject to reckoning such areas for the purposes of FAR.
- **f.** In case of other residential buildings, the extra area available after catering to the requirements of parking can be used for play home, gym rooms, indoor games and professional consulting rooms (to a maximum of 20 Sgm) subject to reckoning such areas for the purpose of FAR.
- **g.** The uses to be permitted in basement are subject to providing of adequate drainage, ventilation, lighting and safety requirements.

5.6 Garages

- **5.6.1** For garages no side or rear setbacks are to be insisted. One upper floor, not exceeding 3.0m, in height shall be permitted provided no openings are provided towards neighboring buildings and at least one opening for light and ventilation is provided towards the owner's property.
- **5.6.2** Garages shall be permitted in an appropriate place in the plot. In cases of buildings constructed or sanctioned prior to the enforcement of these byelaws, where due to site constraints, provisions would not have been followed, the same may be permitted anywhere in the site without harming the interests of adjoining property.
- **5.6.3** In case of corner plots, the garage shall be located at the rear corner diagonally opposite to the road intersection.
- **5.6.4** The maximum width of the garage shall not exceed 4m.
- **5.6.5** The garages shall not be constructed or reconstructed within 4.5m from road edge. This may be relaxed in cases where the garage forms part of the main building with minimum setback for the plot. A garage not exceeding 3.00 meters width may be permitted as part of the main building with minimum setbacks applicable to such a building, provided such a garage is not located at the intersection of roads in the case of corner sites. The length of the garage shall not exceed one third of the length of the corresponding side of the site or 6.00 meters, whichever is less.

5.7 Foundations

- 5.7.1 The foundations of a building shall rest on good bearing strata, preferably on natural grounds.
- **5.7.2** The spread of the foundation of every building shall be so designed and constructed so as to sustain the dead load of the building and the superimposed load, and to transmit the loads to and distribute them over the soil in such a manner that pressure brought to bear on the soil by these loads shall not exceed the safe bearing capacity of the soil.

5.8 Plinth

- **5.8.1** The height of the plinth at the ground floor level should not be less than 0.45m. The basement height should not project more than 1m above the average ground level. In case of sloping street reference shall be made with respect of the street level at the centre of the frontage of the plot. Where the level of the plot is different from the street level, the plinth height shall be determined by the Authority with respect to the surrounding average ground level so that adequate drainage from the site is assured.
- **5.8.2** In case of plots situated in low lying areas/flood prone areas, the plinth level shall be above the maximum flood level notified by the MCC. The plinth level shall be such that sufficient gradient is created for sewerage, and to avoid any risk of surface drains flooding the building.

5.8.3 In case of access steps to the plinth, the construction shall be within the plot boundaries. In special cases, where the general level of the site is higher than the street level, the Authority shall have the power to impose conditions on the building schemes prescribing the location of the building and of any steps or ramps leading from the streets to the proposed building within the plot only. Such access ways shall be kept completely free of obstructions and open to the sky.

5.9 Wells

- **5.9.1** License from the competent authority is required for digging bore wells, which will be based on the number and spacing of existing bore wells and open wells in the area, depth of water table and other requirements as per the prescribed guidelines from time to time.
- **5.9.2** The following byelaws (5.9.2 to 5.9.7) shall apply in the case of open wells.
- 5.9.3 The well shall have a minimum diameter of not less than 1m.
- **5.9.4** The ground adjoining the well shall, for a distance of not less than 1.20m in every direction, be covered, with a watertight pavement constructed so as to slope away from the well.
- **5.9.5** A drain shall be constructed around such pavement for draining the water and it shall be connected to the house drainage.
- **5.9.6** A parapet wall not less than seventy five centimeters high will be constructed above the level of the pavement.
- **5.9.7** The sides of the well shall be rendered impervious for a depth of not less than 1.8m from the level of the adjoining ground.

5.10 Other Requirements of Buildings

5.10.1 Habitable rooms

- (1) No habitable room shall have a floor area of less than 8.0sqm for plot sizes up to 120sqm with a minimum width of 2.4m.
- (2) The minimum height of all rooms used for human habitation shall be 2.75m measured from the surface of the floor to the lowest point of the ceiling (bottom of slab). In case of air conditioned rooms, the height of not less than 2.4m measured from the surface of the floor to the lowest point of the air conditioning duct or false ceiling shall be provided. Where beams are provided the minimum head room shall be 2.4m.

5.10.2 Kitchen

- (1) The area of the kitchen where a separate dining area is provided shall not be less than 5sqm with a minimum width of 1.8m. Where there is a separate store, the size of the kitchen may be reduced to 4.5sqm. A kitchen which is also intended for dining shall have a floor area of not less than 7.5sqm with a minimum width of 2.1m.
- (2) The height of the kitchen shall not be less than 2.75m. Where beams are provided the minimum head room shall be 2.4 m.
- (3) Every room to be used as a kitchen shall have the following conveniences, namely:
- (a) Unless separately provided with a pantry, provision should be made for washing of kitchen utensils with proper drainage.
- **(b)** An impermeable floor.
- (c) Proper chimney or exhaust fan to be provided for the escape of gases.

5.10.3 Store room

- (1) The height of a store room shall not be less than 2.2m.
- (2) The size of store room, where provided in a residential building, shall not be less than 3sqm.

5.10.4 Power room

In the case of multi-storey buildings, the panel boards and other instruments related to power supply shall be housed in a separate room reserved for the purpose. In no case, the space under the staircase shall be utilized for installing the panel boards as they may be possible sources of fire hazards and prevent the safe evacuation of the occupants.

5.10.5 Bath room and water closet

- (1) The size of a bath room shall not be less than 1.8sqm with a minimum width of 1.2m. If it is a combined bath and water closet, its floor area shall not be less than 2.0sqm, with a minimum width of 1.2m. The minimum floor area for water closets shall be 1.1sqm with a minimum width of 0.9m.
- (2) The height of a bath room or water closet measured from the surface of the floor to the lowest point of ceiling shall not be less than 2.2m.
- (3) Every room used as bath room and water closet,
- a) Shall be so situated that at least one of its walls shall have external wall opening.
- b) Shall have the platform or seat, made of water-tight non-absorbent materials.
- c) Shall be enclosed by walls or partitions and the surface of every such wall or partition shall be furnished with a smooth impervious material to a height of not less than 1m above the floor of such a room.

d)

- **i.** Shall be provided with an impervious floor covering, sloping towards the drain with a suitable grade and not towards verandah or any other room.
- **ii.** Shall not be used for any purpose except as a lavatory and no such room shall open directly into a kitchen or cooking space by a door, window or other openings. Every room containing water closets shall have a door completely closing the entrance to it.
- e) Shall have flush out facility.

(4) Sanitary requirements:

All the buildings when erected or re-erected from foundation or when additions to the floors are made shall be provided with minimum sanitary accommodation.

- (a) Office buildings, commercial buildings, cinemas, theatres, auditorium, meetings halls:
- (i) Every building shall be provided with at least one water closet in each floor, separately for males and females.
- (ii) The total number of such water closets for each sex shall be based upon the maximum number likely to occupy such building at any one time.
- (iii) One urinal shall be provided for every 25 males or part thereof and one water closet for every 25 females or part thereof up to 100 persons. For any number exceeding 100, one urinal for every 50 persons shall be provided.
- (iv) There shall be provided one water closet for every 50 persons of each sex or part thereof up to 500 persons and for excess over 500, one water closet for every 100 persons of each sex or part thereof shall be provided. However, if the total number of employees in such a building or the number of persons

likely to use such building does not exceed 20 one water-closet each for both sexes shall be sufficient and no urinal may be provided.

- (v) An office building shall be deemed to be occupied by persons or employees at the rate of one per every 5sqm of the floor area and sanitary facilities shall be provided according to the number of employees or occupants so worked out.
- (vi) Such water closet and urinals shall be in an accessible location and shall be provided with signs plainly indicating their purposes and the sex for which they are meant.

(b) Industrial Buildings and Warehouses:

All types of industrial buildings shall be provided with minimum sanitary facilities as under:

- (i) Every building shall be provided with at least one water closet in each floor, separately for males and females.
- (ii) Water closets shall be provided for each sex and number of such closets for each sex shall in every case be based upon the maximum number or persons of that sex employed in occupying such building.
- (iii) Water-closets shall be provided on the following scale:

Where females are employed there shall be at least one water closet for every 25 females.

Where males are employed, there shall be at least one water-closet for every 25 males.

Provided that where the number of males employed exceed 100, it shall be sufficient if there is one water closet for every 25 males up to the first 100, and one water closet for every 50 thereafter. In calculating the number of water closets required under these byelaws, any number of workers less than 25 or 50, as the case may be, shall be reckoned as 25 or 50 and the number of workers to be considered shall be the maximum number employed at any one time during the day.

- (iv) In every such factory there shall be provided one urinal for every 100 persons of each sex or any less number thereof.
- (v) In every such factory there shall be provided one washing place of 3.6sqm in area with sufficient number of taps as per standards laid down by rules in respect of factories.
- (vi) In every building of the warehouse class, there shall be provided one water closet for every 50 males or any less number thereof and one water closet for every 50 females or any less number thereof and one water closet for every 50 females or any less number thereof. There after water closet shall be provided at the rate of one closet for every 70 persons.
- (vii) In every building of the warehouse class, there shall be provided one urinal for every 100 persons or any less number thereof.
- (viii) For the purpose of determining the number of water closets and urinals each 30 sqm of the gross floor space of such building shall be deemed to be occupied by one person.
- (ix) Such water-closets and urinals shall be accessible in location and shall be provided with signs plainly indicating their purpose and the sex for which they are meant.

(c) Educational Buildings:

Any building used for educational purpose shall be provided with minimum sanitary facilities as follows:

(i) Subject to minimum provisions of two water-closets and five urinals, there shall be one water-closet and four urinals for every 200 students or part thereof.

- (ii) Competent Authority may enforce the distribution of the above sanitary facilities to be provided at each floor of the building.
- (iii) The building shall be deemed to be occupied by students at the rate of one student per every 1.00sqm of the floor area of all the class-rooms and sanitary facilities shall be provided according to the number of students so worked out.

(d) Residential Building or Residential Tenements:

Each residential building or residential tenement shall be provided with at least one water-closet.

(5) Septic tank/ Soak pit

- (a) In the case where there are no drainage facilities available to the land to be developed, the owner/developer shall provide septic tank; soak pit/soak well for disposal of sewage and waste water.
- **(b)** Septic tank/soak pit/soak well may be allowed in setback. The requirements of septic tank are given in Byelaw 7.3.

5.10.6 Mezzanine floor

- (1) Not more than one mezzanine floor shall be permissible in a building.
- (2) A Mezzanine floor shall be accessible only from its lower floor.
- (3) Minimum size of mezzanine floor if it is used as a living room shall be 9.5 sqm. The aggregate area of a mezzanine floor shall not exceed 1/3 (or 33.33%) of covered area of its lower floor.
- (4) The minimum height of mezzanine floor shall be 2.2m.
- (5) A Mezzanine floor may be permitted over a room or a compartment.
- (6) It shall conform to the standards of the habitable room as regards lighting and ventilation.
- (7) It shall be constructed without interfering with the ventilation of the space over and under it; A mezzanine floor shall not be sub-divided into smaller compartments unless adequate ventilation is provided.
- (8) A mezzanine floor or any part of it shall not be used as a kitchen.
- (9) In no case, a mezzanine floor shall be closed so as to make it liable to be converted into unventilated compartments.
- (10) Mezzanine floor area shall be considered while calculating FAR.

5.10.7 Loft

- (1) A loft provided in a kitchen shall not exceed 25% of the area of the kitchen and when provided over a bath room, water closet and corridor, the loft can occupy up to 100% of the area.
- (2) The head room or the loft shall be not more than 1.5m.

5.10.8 Staircase

(1) The Minimum width of staircases shall be as follows:

Table 5.1:
Minimum width of Staircase (Byelaw 5.10.8)

SI. No	Type of Building	Minimum width of Staircase
a.	Residential buildings (Single dwellings)	1.00 m
b.	Residential hostel & multi storey	1.50 m
	buildings	
C.	Assembly building like auditorium,	2.00 m
	theatres and cinemas	
d.	Educational building	1.50 m
e.	Institutional buildings like hospitals etc	1.50 m
f.	All other buildings	2.00 m

(2) The minimum width of tread without nosing shall be 25cm for residential buildings. The minimum width of tread for other buildings shall be 30cm. Maximum riser shall be 19cm. for residential buildings and 15cm. for other buildings and they shall be limited to 15 per flight. The minimum clear head room in a stair case shall be 2.2m. The surface material of stairs, treads and landings shall be such as not to involve undue danger of slipping.

5.10.9 Lift

Provision of lifts shall be made for all buildings with a height of 15m and above and/ or having more than ground plus three floors in accordance with the National Building Code with regard to planning and designing of lift. Lifts shall be terminated at the topmost floor.

5.10.10 Lightning Conductor

- **1.** Lightning conductors (i.e., sufficient and properly earthed apparatus for protection of the building and its occupants against damage by lightening) shall be provided for structures with inherent explosive risks (such as explosives factories, stores and dumps and fuel tanks).
- 2. Lighting conductors shall be also provided:
- a. where large numbers of people congregate
- b. where essential public services are concentrated
- c. where the area is one in which lightning strokes are prevalent
- d. where there are tall or isolated structures
- e. where the structures are on hill tops
- f. where there are structures of historic or cultural importance
- **3.** Since there are many cases where it is not easy to make a decision whether to provide lighting conductor or not, the factors affecting the risk of being struck and the consequential effects of a stroke shall be examined to assist in decision making.
- **4.** As a rule, lightning conductors may be provided in high rise buildings, if the building is highest or one of the highest of the locality.

5. The lighting conductors shall be periodically checked and kept in good condition.

5.10.11 Boundary wall

- (1) Except with the special permission of the Authority,
- (a) The maximum height of the front and side boundary wall shall be 1.5m above the ground level.
- **(b)** The rear boundary walls shall not have a height of more than 2m above the centre line of the service road, or where there is no service road 2m above the ground level.
- (c) In case of corner plots, the height of the boundary wall shall be restricted to 0.75m. for a length of rounded off or cut off.
- (2) The stipulations of **Byelaw 5.10.11 (1) (a)** of the above, are not applicable to the boundary walls of jails, sanitaria and heavy industries and women's hostels;

5.10.12 Corridor

The minimum width of corridor for different building or type is as given in the Table 5.2.

Table 5-2
Minimum width of corridors (Byelaw 5.10.12)

SI. No	Building use or type	Minimum width of the corridor in meters
1	Residential building	1.0
2	Residential building (multi-storey/flats/apartments)	2.0
3	Assembly buildings such as auditorium, Kalyana Mantapas, Religious building, Temple, Mosque or Church and other buildings of Public assembly or Conference.	2.0
4	Institutional buildings such as:	
	a. Government office	2.0
	b. Government Hospitals	2.4
	c. Educational Buildings such as Schools, Colleges, Research Institutions	2.0
	d. Commercial buildings such as private office, Nursing homes, Lodges, etc.	2.0
	e. All other buildings	2.0

5.10.13 Water supply

Before awarding the occupancy certificate, the Authorities shall verify that there are arrangements for supply of water either through legitimate supply lines from the MCC, or through wells/bore wells in the locality. Bore wells shall be provided in high rise buildings to provide alternative source of water supply.

5.10.14 Mosquito-proof water tanks

Water storage tanks shall be maintained in perfectly mosquito-proof condition, by providing a properly fitting hinged cover and every tank more than 1.50m in height shall be provided with a permanently fixed iron/aluminum ladder to enable inspection by anti-malaria staff.

5.10.15 Sunshades

The sunshades shall be flat or gently sloped without any fascia to avoid water stagnation which may lead to breeding of mosquitoes.

5.10.16 Refuse area/disposal of solid waste

Wherever a property is developed or redeveloped, a space for community-bin for disposal of solid waste shall be provided in the road-side front marginal open space. The owners/occupants shall be required to provide the community-bin with air-tight cover on top at the standards prescribed by the Authority.

5.10.17 Provision of letter box In all cases of buildings having more than two floors including ground floor, a letter box of appropriate dimension, for each separate unit shall be provided at ground floor level itself in such a way that post man can easily deliver the posts to it.

5.10.18 Disposal of polluted and unpolluted water

- (1) Separate drains shall be provided for the disposal of polluted and unpolluted water separately from the buildings. Polluted water shall be the water coming out from bathrooms, water closet, kitchen and from other parts of the building which is already used for domestic or other purposes. Unpolluted water shall include rain water and the unpolluted subsoil water, if any. Wherever possible, used water from bathrooms, kitchen etc shall be recycled or diverted to gardening and other secondary uses whereas sewage from lavatories/water closet shall be connected to sewage drain or septic tanks.
- (2) Roof of every building shall be constructed so as to permit effectual drainage of rain water by means of sufficient rain water pipes of adequate size wherever required, which shall be so arranged, jointed and fixed as to ensure that the rain water is carried away from the building without causing dampness in any part of the wall or foundation of the building or those of an adjacent building or causing annoyance or inconvenience to the neighbor or passer by.
- (3) Rain water pipe shall be affixed to the out-side of the external walls of the building or in recesses or chases cut or formed in such external walls or in such other manner as may be approved by the Authority, so as to discharge the rain water at a level not more than 0.6m above the ground level.
- (4) Rain water pipe shall be connected to the roadside drain or may be carried out in any other approved manner without causing damage to the property of the Authority. The rain water pipes shall be fixed so as to discharge the rain water at a level not more than 0.6m above the road level.

5.10.19 Lighting and ventilation requirements

- (1) Natural ventilation: Rooms shall have, for admission of light and air, one or more openings, such as windows and ventilators, opening directly to the external air or into an open verandah. Doors are not counted towards the area of openings in walls for lighting and ventilation purposes.
- (2) Artificial ventilation: Where the light and ventilation are not met through daylight and natural ventilation, the same shall be ensured through artificial lighting and mechanical ventilation, as per Part VIII Building Service section I, Lighting and ventilation of National Building Code of India.

(3) Area of openings:

(a) Minimum aggregate area of openings excluding doors shall not be less than 1/6th of the floor area in the case of residential buildings. In the case of other public buildings like business houses, educational buildings, offices, institutional and hospital buildings, the minimum aggregate area of openings shall be not less than 1/5th of the floor area. The area of openings shall be increased by 25% in the case of kitchen. No portion of a room shall be assumed to be lighted if it is more than 7.5m from the opening.

- **(b)** In case of bath rooms and water closets, minimum area of window or ventilator shall be 0.3sqm with side not less than 0.3m.
- **(4) Ventilation shaft** For lighting and ventilating the space in water closets and bath rooms, when no opening is provided towards any open spaces, they shall open on to the ventilating shaft, the size of which shall not be less than as indicated below

Table-No.5.3
Ventilation shaft (Byelaw 5.10.19)

No. of storey's	Size of ventilation shaft in	Minimum width in m.	
	sqm.		
Up to 2.00	1.20	0.90	
Up to 4.00	1.80	1.20	
Up to 6.00	4.00	1.50	
Up to 8.00	5.40	1.80	
Up to 10.00	8.00	2.40	
11 and above	9.00	3.00	

5.11 Exit Requirements (As per NBC 2005. Latest provisions of NBC shall be followed)

5.11.1 General

- (1) Every building meant for human occupancy shall be provided with exits sufficient to permit safe escape of occupants, in case of fire or other emergency.
- (2) In every building for multifamily dwellings and all places of assembly, exits shall comply with the minimum requirements of the latest NBC provisions.
- (3) All exits shall be free of obstructions.
- (4) No building shall be altered so as to reduce the number, and size of exits to less than that required.
- (5) Exits shall be clearly visible. Routes to reach the exits shall be clearly marked and signs.
- (6) Wherever necessary, adequate and continuous illumination shall be provided for exits.
- (7) Firefighting equipment shall be suitably located and clearly marked.
- (8) Alarm devices shall be installed to ensure prompt evacuation of the persons concerned.
- (9) All exits shall provide continuous means of egress to the exterior of buildings or to the exterior open space leading to a street.
- (10) Exits shall be so arranged that they may be reached without passing through another occupied unit.
- **5.11.2 Arrangement of exits** Exits shall be so located that the travel distance on the floor shall not exceed the limits given in **Table 5.4**

5.11.3 Capacity of exits

- a) The unit of exit width used to measure capacity of any exist shall be 50cm. A clear width of 25 cm. shall be counted as an additional half unit. Clear width less than 25 cm shall not be counted for exit width;
- b) The occupants per unit exit width shall be as given in Table 5.5.

5.11.4 Occupant load

The occupant load of buildings shall be worked out as given n Table 5.6

5.11.5 Number of exits

- i) The location, width and number of exits shall be in accordance with the travel distance, capacity of exits and the population of building based on occupant load;
- **ii)** There shall not be less than 2 exits serving every floor for buildings of 15m height and above and at least one of them shall be an internal stairway.

Table No. 5-4
Travel distance for occupants (Byelaw 5.11.2)

SI. No.	Group of occupancy	Maximum travel distance in mtrs.
1.	Residential	22.50
2.	Educational	22.50
3.	Institutional	22.50
4.	Assembly	30.00
5.	Business	30.00
6.	Commercial / mercantile	45.00
7.	Industrial	30.00
8.	Storage	30.00
9.	Hazardous	22.50

Table No. 5-5

Occupants per unit exit width - maximum number of occupants (Byelaw 5.11.3)

SI.	Group of occupancy	Stairways	Ramps	Doors
No.				
1.	Residential	25.0	50.0	75.0
2.	Educational	25.0	50.0	75.0
3.	Institutional	25.0	50.0	75.0
4.	Assembly	40.0	50.0	60.0
5.	Business	50.0	60.0	75.0
6.	Commercial / mercantile	50.0	60.0	75.0
7.	Industrial	50.0	60.0	75.0
8.	Storage	50.0	60.0	75.0
9.	Hazardous	25.0	30.0	40.0

Table No.5-6
Occupant Load (Byelaw 5.11.4)

SI. No.	Group of occupancy	Occupant load-gross floor area in sq. mt. per person.
1.	Residential	12.50
2.	Educational	4.00
3.	Institutional	15.00*
4.	Assembly	
	a)With fixed or loose seats and dance floors.	0.60**
	b)Without seating facilities including dining room.	1.50**
5.	Business & industrial	10.00
6.	Storage	30.00
7.	Hazardous	10.00

Note 1: The travel distance to any exit from the dead end of a corridor shall not exceed half the distance specified above except in educational, assembly and institutional occupancies in which case it shall not exceed 6m.

Note 2: Whenever more than one exit is required for any room, space or floor of a building, exits shall be placed as remote from each other as possible and shall be arranged so as to provide direct access to the exits from different directions.

Note 3: For fully sprinklered building, the travel distance may be increased by 50% of the values specified.

Note 4: Ramps shall be protected with automatic sprinkler system and shall be counted as one of the means of escape.

Note:

Horizontal allowance: When horizontal exit is provided in buildings mercantile, storage, industrial, business and assembly occupancies, the capacity per storey per unit width of exit stairways in the table above, may be increased by 50% and in the buildings of industrial occupancy, it may be increased by 100%.

*The gross area shall mean plinth area or covered area. Occupant load in dormitory portions or homes for the aged, orphanages, asylums, etc., where sleeping accommodation is provided, shall be calculated at not less than 7.5sqm gross floor area per person.

** The gross floor area shall include, in addition, the main assembly room or space, any occupied connecting room or space in the same storey or in the storey above or below where entrance in common to such rooms and spaces and they are available for use by the occupants or the assembly place. No deduction shall be made in the gross floor area for corridors, closets or other sub-divisions. The areas shall include all space serving the particular assembly occupancy.

Note; The occupant load of a mezzanine floor discharging to a floor below shall be added to that floor occupancy and the capacity of the exits shall be designed for the total occupancy load thus established.

5.11.6 Doorways

- (1) Every exit doorway shall open into an enclosed stairway, a horizontal exit, or a corridor or passageway providing continuous and protected means of egress;
- (2) No exit doorway shall be less than 75cm in width in the case of residential buildings and 100 cm in the case of other buildings. Doorways shall be not less than 200 cm. in height.
- (3) Exit doorways shall open outwards i.e., away from the room. But shall not obstruct the travel along any exit. No door, when open, shall reduce the required width of stairway or landing to less than 90cm. Overhead or sliding doors shall not be installed;
- (4) Exit doors shall not open immediately upon a flight of stairs; a landing equal to at least the width of the door shall be provided in the stairway at each doorway; level of landing shall be same as that of the floor which it serves.

5.11.7 Revolving Doors

- (1) Revolving doors shall not be used as required exits except in residential, business and commercial occupancies, but shall not constitute more than ½ the total required door width;
- (2) When revolving doors are considered as required exit way, the following assumptions shall be make;
- (a) Each revolving door shall be counted as one half of the exit unit width.
- **(b)** Revolving doors shall not be located at the foot of a stairway. Any stairway served by a revolving door shall discharge through a lobby or fover.

5.11.8 Staircase

- (1) Interior stairs shall be constructed of non-combustive materials;
- (2) Interior staircases of all buildings with the exception of residential buildings up to G+3 floors shall be constructed as self-contained units with at least one side adjacent to an external wall. The staircase shall be completely enclosed in the case of buildings of 15m height and above.
- (3) A staircase shall not be arranged around a lift shaft unless the latter is entirely enclosed by a material of fire resistance rating;
- (4) Hollow combustible construction shall not be permitted;
- (5) The minimum width of an internal staircase shall be as per byelaw 5.10.8;
- (6) The minimum width of treads without nosing shall be as per byelaw 5.10.8;
- (7) The maximum riser shall be as per byelaw 5.10.8.
- (8) Handrails shall be provided with a minimum height of 100cm for all buildings and shall be firmly supported;
- (9) No windings should be provided in a public building except in the case of emergency exits.

5.11.9 Fire escapes or external stairs

- (1) Fire escapes shall not be taken into account in calculating the evacuation time of a building;
- (2) All fire escapes above the ground level shall be directly connected to the ground and shall not lead to the basement floor.
- (3) All entrances to a fire escape shall be separate and remote from the internal staircase:
- (4) The route to fire escape shall be free of obstruction at all times except a door way leading to the fire escape which shall have the required fire resistance;
- (5) Fire escapes shall be constructed of non-combustible materials;

- (6) Stairs of fire escapes shall have straight flights not less than 75cm. wide, 20cm. tread and with risers not more than 19cm. The number of risers shall be limited to 16 per flight;
- (7) Handrails shall be of a height of a not less than 100cm.

5.11.10 Spiral stairs (Fire escape)

The use of spiral staircases shall be limited to low occupant loads and to buildings of not more than 9m height, unless they are connected to platforms such as balconies and terraces to provide for a pause during escape. A spiral fire escape shall be not less than 150cm in diameter and shall be designed to give adequate headroom.

5.11.11 Ramps

Ramps with a slope of not more than 1:10 may be substituted and shall comply with all the applicable requirements of required stairways regarding enclosures, capacity and dimensions. Larger slopes shall be provided for special use but in no case greater than 1 in 10. For all slopes exceeding, 1:10 and wherever the use is such as to involve danger of slipping, the ramp shall be surfaced with approved non-slipping materials;

5.11.12 Exit corridors and passageways

Exit corridors and passage ways shall be of width of not less than twice the aggregate required width of exit doorways leading form them in the direction of travel to the exits. Where stairways discharge through corridors and passage ways, the height of corridors and passage ways shall be not less than 2.4 m.

- 5.12 Fire Protection in High Rise Buildings (As per NBC 2005 amended from time to time)
- In case of high rise buildings, the latest NBC Provisions, such as listed below, shall be made for safety of buildings from fire:
- (1) In addition to the requirement under Byelaws 6.14.10, at least one lift designed as fire-lift as defined in the NBC, shall be installed.
- (2) At least one stair-case shall be provided as a fire staircase as defined in the National Building Code. Provided that this shall not be applicable if any two sides of a staircase are kept totally open to external open air space.
- (3) Water Supply: Underground tank as specified in recommendation of expert committee on fire safety, as fire tank, shall be provided.
- (4) The internal fire hydrants shall be installed as provided in the National Building Code or as prescribed in the Indian Standard Code of practice for installation of internal fire hydrants in high rise buildings. The detailed plan showing the arrangement of pipe lines, booster pumps and water-tanks at various levels shall be submitted for approval of the concerned authority along with the plans and sections of the buildings.
- (5) An external fire hydrant shall be provided within the confines of the site of the building and shall be connected with Municipal Water mains not less than 10cm in diameter. In addition, fire hydrant shall be connected with Booster Pump from the static supply maintained on site.
- **(6)** Separate electric circuits for lift installation, lighting of passages, corridors and stairs and for internal fire hydrant system shall be provided.
- (7) All the requirements under the above byelaws shall be clearly indicated on plans duly signed by the owner and the person who has prepared the plans. The Competent Authority may direct the owner to

submit such further drawings as may be necessary, to clarify the implementation of the provisions of the above byelaws.

- (8) Every building having a height of more than 15m shall be provided with generators, which can be utilized in case of failure of the electricity.
- (9) The standard as prescribed in the National Building Code must be adopted fully in providing staircase and alarm system.
- (10) There should be provision of dry-powder, fire extinguisher to the extent of two on each floor with a capacity of 5kg in all the high rise buildings.
- (11) Suitable detection as well as protection arrangements shall be provided according to the fire risks according to the high-rise residential buildings and other occupancies.
- (12) Basement car parking shall be protected with automatic sprinklers.
- (13) The guidelines for fire drill and evacuation procedure for high rise buildings, as given in NBC, shall be strictly implemented.

5.13 Development of low cost housing

- **5.13.1 Scope:** These regulations shall be applicable to development of schemes for socially and economically backward class of people for economically weaker section of the society and for low cost housing only undertaken by public agencies, co-operative societies Government or Semi Government bodies, Registered Developers.
- **5.13.2 Planning:** The type of development shall be for housing for socially and economically backward class of people, and for low cost housing, block development as group housing.
- (1) The maximum permissible density in Dwelling shall be 225 dwelling per hectare.
- (2) The minimum and the maximum plot size shall be between 18 sqm and 40 sqm. respectively with built up area not exceeding 70% of the plot area leaving front as well as rear margin of 1.5m.
- (3) The minimum frontage of plot shall be 3.0m in width.
- (4) At every 20 such continuous plots, 2.0m wide space open to sky shall be provided.
- (5) The maximum numbers of stories in a building construction on the plot shall be ground plus one upper storey only.
- (6) Common plot at the rate of 10% percent of the area of the plot / land developed shall be provided for open space / community open space which shall be exclusive of approach roads, path ways, or margins

.5.13.3 Building requirements

- (1) The minimum height of the plinth shall be 0.3m from the top surface of approach road or path way.
- (2) The maximum floor space index permissible shall be 1.8
- (3)(a) The size of living room, bed room shall not be less than 8sqm with minimum width of 2.4
- **(b)** In case of single room tenement a separate kitchen is not necessary: and in case of double room tenements, the kitchen shall not be less than 4sqm in area with the minimum width of 1.5m

(c)

- (i) Size of independent bath room and water closet shall be 0.9sgm with minimum width of 0.9m each.
- (ii) Size of combined bath room and water closet shall be 1.8sqm with minimum width of 1m.
- (4)(i) The minimum height of room shall be as under:

Living room: 2.4m Kitchen room: 2.4m

Bath /water closet: 2.1m

Corridor: 2.1m

- (ii) In case of the slopping roof, the average height of the roof shall be 2.1m and the minimum height of the eaves shall be 2.4m.
- (iii) The minimum slopes of the slopping roof, shall be 300 for G.I sheets, asbestos sheets or tiled roof while for RCC slopping roof, the minimum slop shall be 120.
- (5) The opening through windows, ventilators and other opening for light and ventilation shall be as under:
- (5)(i) One tenth of the room floor area
 - (ii) For water closet and bath not less than 0.2sqm.
- **(6)** The width of stair case shall be 0.75m minimum. The maximum height of the riser shall be 20cm. The minimum width of the tread shall be 22.5cm. The minimum clear head roof of the stair case shall be 2.10m. There shall be one staircase for every 12 (twelve) dwelling units or part thereof.

5.13.4 Roads and pathways

- i. The area under the roads and pathways in such housing project shall normally not exceed 20 percent of the total area of the project.
- **ii.** Access to the dwelling units where motorized vehicles are not normally expected shall be by means of paved foot paths with right of way of 6m and pathways of 2m only. The right of way shall be adequate to allow for plying of emergency vehicles and also for side drains and plantation.
- **iii.** Where motor able access ways are not provided and pedestrian path ways are provided the minimum width of such path way shall be 4m. which shall not exceed 50m in length.

5.13.5 Minimum required accommodation

- (1) The minimum accommodation provided in every dwelling unit shall be one living room and a water closet. Where there is a drainage system, the agency developing the area shall install and maintain the internal drainage system. Where there is no drainage system, the individual soak-pit shall be provided as per provision of National Building Code.
- (2) The loft if provided in the room shall not cover more than 30 % of the floor area of the room.

5.13.6 Structural requirements

- (1) Load bearing walls of the building shall be of brick, stone or pre cast block in any mortar. In the case of R.C.C framed structure or wooden framed structure, filler walls may be of suitable local materials.
- (2) Roof of the building shall be of galvanized iron sheets, asbestos sheet, tiled roof or RCC roof.
- (3) Doors and windows of building shall be of any material.
- (4) Rest of the work of building shall be as per locally available resources and as per choice.
- **(5)** For structural safety and services, Byelaw 6.1 and 6.2 shall apply. Relevant provisions of IS codes shall be enforced.

CHAPTER 6

6.0 STRUCTURAL DESIGN AND OTHER REQUIREMENTS

6.1 Structural design

- **6.1.1** The loads and forces on buildings shall be in accordance with "Part 6 Structural Design: Section 1 Loads. Forces & Effects" of the NBC 2005.
- **6.1.2** The structural design of foundations and elements of substructures of wood, masonry, reinforced or pre-stressed concrete shall be in accordance with "Part 6I Structural Design: Section 2 Soils & Foundations; Section 3- Timber and Bamboo; Section 4- Masonry; Section 5- Concrete; Section 6 Steel and, section 7- Prefabrication, Systems Building and Mixed/Composite Construction", of the NBC 2005.
- **6.1.3** Corrosion protection to RCC Structures: It has been observed that many RCC structures in coastal region are subjected to extensive corrosion of steel, resulting in distress in RCC structures, leaky roofs and early deterioration of strength. To provide comprehensive corrosion protection to RCC structures and to increase their durability, it is strongly recommended that all reinforcement steel be provided with anticorrosive coating such as "Fusion Bonded Epoxy Coating".

6.2 Fire and life line safety

- **6.2.1** Buildings shall be planned, designed and constructed to ensure adequate safety of the property and inhabitants against fire or other emergency. This shall be carried out, in accordance with "Part 4 Fire and Life safety" of the National Building Code of India. The fire fighting requirements, arrangements and installations required in building shall also conform to the provisions of "Part 4 Fire and Life safety" of the NBC, as amended from time to time.
- **6.2.2** For buildings with ground floor + four floors and above (or height of 15m and above), clearance of the Director of Fire Services shall be obtained regarding the fire and life safety provision in building.

6.3 Building services

The planning, design and installation of various building services shall be in accordance with "Part 8 Building Services: Section 1- Lighting & Ventilation; Section 2 – Electrical & Allied Installations; Section 3 – Air Conditioning, Heating and Mechanical Ventilation; Section 4 – Acoustics, Sound Insulation & Noise Control; section 5 – Installation of Lifts & Escalators" of the NBC 2005.

6.4 Plumbing services

The planning, design and installation of various plumbing services shall be in accordance with "Part 9 Plumbing Services: Section 1 - Water Supply, drainage & sanitation (including Solid Waste management); Section 2 – Gas Supply" of the NBC 2005.

6.5 Telecom services

- **6.5.1** Every Residential/Commercial premises shall provide an access path for leading copper/optical fiber cable to the building from outside the compound to the building.
- **6.5.2** A single 32mm GI pipe buried at a minimum depth of 600mm from the compound wall shall be connected to the access point inside the building. A hand hole of 0.60x0.60x0.60m at the outside of the compound wall where the pipe has been terminated shall be provided.

- **6.5.3** In case of multistoried residential/business premises, minimum 2 pipes, one of 32mm and 2nd one of 60mm diameter should be laid at a minimum depth of 600mm with hand hole at the boundary of the compound towards the street/road.
- **6.5.4** The buildings shall be completely pre wired within using concealed conduits for their communication requirements.
- **6.5.5** In case of the multi storied building a separate room preferably 4.50x3.65m may be provided in the basement for installation of telecom equipment. The room should have proper ventilation and lighting. The internal wiring from all the apartments should be brought to this room and terminated on a termination box.
- **6.5.6** A vertical chute may be provided for drawing telecom cables from the basement with openings at every floor at a convenient place preferably near lift/staircase so that the telecom cable can be drawn for each floor/each flat.

6.6 Construction practices and safety

- **6.6.1** The various construction activities like; demolition, excavation, blasting, actual construction from foundation level up to completion shall be in accordance with "Part 7 Construction Practices and Safety" of the NBC 2005.
- **6.6.2** The safety measures to be adopted during the various construction operations, including storage of materials on the construction site and Corporation/public land shall be in accordance with "Part 7 Construction Practices and Safety" of the NBC 2005.

6.7 Building materials

The requirement of building materials to be used in construction shall conform to "Part 5 Building Materials" of the NBC 2005.

6.8 Alternative materials, methods of design and construction

- **6.8.1** The provisions of **Byelaws 6.1, 6.3, 6.5, 6.6** and other provisions of the byelaws are not intended to prevent use of any material or method of construction not specifically prescribed in these regulations provided such a work has been approved by the Authority.
- **6.8.2** The Authority may approve any such alternative, provided it is found that the proposed alternative is satisfactory and conforms to the provisions of the relevant parts regarding materials, design and construction, method of work offered for the purpose intended, at least equivalent to that prescribed in the regulations in quality, strength, compatibility, effectiveness, fire, water and sound resistance, durability and safety.
- **6.8.3** Tests Whenever there is insufficient evidence of compliance with the provisions of these regulations or evidence that any material or method of design or construction does not conform to the requirement of the regulations or in order to substantiate claim for alternative materials, design or methods of construction the authority may require tests sufficiently in advance as proof of compliance.

These tests shall be made by an approved agency at the expense of the owner.

6.8.4 Test methods shall be as per the relevant I.S. Codes. Copies of the results of all such tests shall be retained by the Authority for a period of not less than 2 years after the acceptance of the alternative materials.

Note 1: All references of clauses of the NBC in these regulations are referred to the publication of the National Building Code of India 2005. If these numbers are changed in subsequent additions, corresponding number shall be substituted.

Note 2: Facilities at the construction premises – Temporary lavatories shall be provided for the use of workers within the construction premises where the floor area is more than 250sqm.

6.9 Distance of building from electrical lines and related requirements

6.9.1 No building shall be erected below an electrical line, as well as within the horizontal distance from the electrical line indicated in the Table 6.1. The vertical distance below the level of the electrical line and the topmost surface of the building corresponding to the minimum horizontal distance, shall be as indicated in Table 6.1. The minimum vertical clearance is not applicable if the horizontal distance exceeds the minimum prescribed.

Table 6.1 Distance of building from electrical lines (Byelaw 6.9)

SI. No.	Electrical lines	Vertical clearance in mt.	Horizontal clearance in mt.
1	Low and medium voltage lines up to 11 KV	2.5	1.2
2	High voltage lines up to and including 11 KV	3.7	1.2
3	High voltage line above 11 and up to and including 33 KV	3.7	2.0
4	Above 33 KV	concerned ele	on Certificate from ectricity department is be obtained

- **6.9.2** Where the requisitioned load is 25kW or more, or built up area in the premises of the applicant exceeds 500sqm, the applicant shall provide the required space in his premises also provide at his own cost electric line, distribution transformer and associated equipments. The transformer so provided by the applicant shall be dedicated to the premises of such applicant. The details of space to be provided by the applicant are as follows:
- a) An electrical room with RCC roof having clear floor area of 5mx4m with a vertical clearance of 2.75m, with locking facility, exhaust fans and adequate size of cable duct, shall be provided at the ground floor within the applicant's premises, near the main entrance for installing floor mounted distribution transformer and associated switchgear or
- **b)** A clear space of 3mx5m open to the sky shall be provided within the applicant's premises preferably at the main entrance for installing the structure mounted distribution transformer and switchgear.

Note:

- (1) If space is not provided by the applicant, he is not entitled to get power supply.
- (2) For car parking area, external staircase area and balcony area, 50% of the area shall be taken for calculating the built up area.
- (3) Water tank area and Chajja projection area shall not be considered for calculating built up area.

- (4) In case the sanctioned plan indicates two or more buildings in the same premises, they shall be clubbed together to calculate the built up area.
- **(5)** Byelaw 6.9.2 are not applicable to educational institutions, Govt. hospitals, Govt. guest houses, hospitals of charitable institutions, Students' hostels, multi-storied buildings of slum dwellers and LT industries. However they shall be liable to pay the cost towards electric line/plant at the applicable rates.
- **(6)** In case of following installations, Byelaw 6.9.2 are not applicable, if the requisitioned load is less than 25kW irrespective of built up area, Buildings of Govt. offices (Govt. owned), godowns, kalamandiras, samudaya bhavanas, theatres of film societies, art galleries, auditoriums and charitable/religious institutions registered under section 12-A of Income Tax Act, temples, mosques, churches, gurudwaras and other places of worship, youth centers and vocational centers. However, if the required load is 25kW and above, Byelaw 6.9.2 shall be applicable.
- **6.9.3** Where any extension of electric line and/or erection of electric plant is required within the premises of the applicant, the applicant shall execute such works at his own cost through appropriate class of licensed electrical contract.
- **6.9.4** Byelaw 6.9.2 is applicable to existing consumers seeking additional loads, where addition of such loads makes the total load to be 25kW or above. The byelaws are also applicable to existing consumers when their total built up area exceeds 500sqm. In such cases, the consumer shall provide necessary space for the transformer as noted under regulations 6.9.2 above and install the transformer at his own cost.
- **6.9.5** Provision for low tension supply for layouts: In case of layouts approved by the competent authority, the developer shall execute at his own cost the electric line/plant such as extension works including extension of 11kV line, transformer, LT lines etc., but excluding improvement/augmentation works in the station and/or works of strengthening of the distribution main subject to specified conditions.

6.10 Solar water heater requirements

The following buildings which require service hot water shall be provided with a centralized solar water heating system for at least 20% of the designed hot water requirement.

- **6.10.1** Restaurants serving food and drinks, Lodging establishments & tourist homes, Hostels & guest houses, industrial canteens, Kalyana Mantapas, Community halls & convention halls (with dining facilities & Kitchen), Recreational clubs, hospitals & nursing homes, Hotels, training centers, Rest rooms, service apartments, inspection bungalows, catering units, office buildings, and any other building of public use where hot water requirement is high.
- **6.10.2** Any group of residential houses / apartments, housing schemes undertaken by Co-Operative housing societies and the Govt. Boards and authorities.
- **6.10.3** In case of independent residential buildings (for new and renovated / extended) with a built up area of more than 100 Sq. mt. Or where energy consumption is likely to be 300 units per month, central Solar heating system will be mandatory with a minimum sized Solar water heater unit with a capacity of 100 Liters.
- 6.10.4 Solar Photovoltaic lighting systems shall be installed in multi unit residential buildings (more than 5 units) for lighting the setback areas, driveways, internal corridors, passages, bathrooms, entry & exit sign boards, security lighting, emergency lamps and all common areas.

Table 6.2 Solar lighting and water heater requirements (Byelaw 6.10)

SI.	Type of use	100 liters per day shall be
No.	Type of use	provided for every unit
1	Restaurants service food and drinks with seating / serving area of more than 100 sq m and above.	40 sq m of seating or serving area
2	Lodging establishments and tourist homes	3 rooms
3	Hostel and guest houses	6 beds / persons capacity
4	Industrial canteens	50 workers
5	Nursing homes and hospitals	4 beds
6	Kalyana Mantapas, community hall and convention hall (with dining hall and kitchen)	30 sq m of floor area
7	Recreational clubs	100 sq m of floor area
8	Residential buildings:	
	(a) Single dwelling unit measuring 200 sq m of floor area or site area of more than 400 sq m whichever is more.	
	(b) 500 LPCD for multi dwelling unit / apartments for every 5 units and multiples thereof.	
9	Solar photovoltaic lighting systems shall be installed in multi unit residential buildings (with more than five units) for lighting the set back areas, drive ways, and internal corridors.	

6.11 Safety requirements against natural hazards

6.11.1 Protection of areas from earthquakes

(1) General guidelines

- (a) In those areas where there are no dangers of soil liquefaction or settlements or landslides, all building structures and infrastructures should be designed using the relevant Indian Standards as provided in the byelaws and the NBC 2005.
- **(b)** Soils subjected to liquefaction potential under earthquake shaking can be improved by compaction to desired relative densities, so as to prevent the possibility of liquefaction.
- (c) Buildings and structures could be founded on deep bearing piles going to non-liquefiable soils.
- (d) Steep slopes can be made more stable by terracing, soil nailing and construction of retaining walls, and by ensuring good drainage of water so that the saturation of hill-slope is avoided.
- **(e)** Any other appropriate engineering intervention to save the building structures or infrastructure from the fury of earthquake.

Note: The protective action under (b) to (e) will usually involve large amount of costs and should only be considered in the case of large and costly structures. For ordinary buildings the cost of improvement of the site will usually be uneconomical, hence bad sites should be excluded from Land Use Zoning.

(2) Safety measures against earthquake in building construction

(a) Building with ground plus four floors and above or buildings with a height of 15m and above shall be designed and constructed in accordance to the norms prescribed in the National Building Code and in

the "Criteria for earthquake resistant design of structures" bearing No. IS 1893-2002 published by the Bureau of Indian Standards, to make the buildings resistant to earthquakes. The supervision certificate and the completion certificate of every such building shall contain a certificate recorded by the Registered Engineer/Architect (as explained in Byelaw 4.30 & 4.31s) that the norms of the National Building Code and I.S. 1893-2002 have been followed in the design and construction of buildings for making the buildings resistant to earthquake.

- **(b)** All important buildings such as schools, hospitals, government offices, life line installations, community centers, industrial and commercial buildings, auditoriums and cinema halls, Kalyana Mantapas, the buildings which are likely to be used as evacuation center's in cases of disasters, must also be designed as earthquake resistant.
- **(c)** For masonry constructions, the ready reckoner "Earthquake Safe Construction of masonry Buildings: Simplified Guideline for all new buildings in the Seismic Zones V, IV & III of India" may be used.

6.11.2 Protection from cyclonic wind damage

- (1) Buildings and infrastructures in the cyclone prone areas should be designed according to the Indian Standards and Guidelines as provided in the regulations and the national Building Code of India.
- **(2)** Light utility structures used for electrical transmission and distribution, and towers for communications, chimney stacks of industrial structures require special design considerations against the cyclonic wind pressures, suctions and uplifts.
- (3) In case the buildings, structures and infrastructures are found on marine clay deposits it will be advisable to adopt either under reamed or long piles which should penetrate the marine clay layer and rest on dense sand stratum, or individual column footing with a reinforced concrete beam located at the level of the ground, or a continuous reinforced concrete strip footing.
- **(4)** Whenever the top soil could become slushy due to flooding, the top layer of 300mm deep of soil should not be considered for providing lateral stability.
- (5) In storm surge prone areas, it will be preferable to construct the community structures, like schools, cyclone shelters, etc. by raising the level of the ground protected by provision of retaining walls at sufficient distance away from the building, taken to such depth that no erosion takes place due to receding storm surge. Alternatively, the community structures can be constructed on stilts with no masonry or bracing up to the probable maximum surge level.

6.11.3 Protection of areas from floods

This may require one or more of the following actions

- (a) Construction of embankments against the water spills from the source of flooding like rivers, large drain etc.
- **(b)** Construction of high enough embankments/bund around the planning area.
- **(c)** Raising the planning area above the high flood level.
- (d) Construction/improvement of drainage paths to effectively drain the water from the planning area.
- **(e)** Construction of buildings and structures on deep foundations going below the depth of scour or on stilts with deep enough foundations under water.
- (f) Flood proofing works such as the following:
- (i) Providing quick drainage facility consisting of:

- Revitalization of secondary and primary drainage channels after establishing the drainage blockage points;
- · Provision of additional waterways;
- Clearing of clogged cross drainage works
- (ii) Providing human and animal shelters for population living within embankments in the form of raised platform or use of available high ground.
- (g) Anti-erosion actions in affected areas
- (h) Any other suitable measure

Note:

- (1) Similar protection methods could be used against flooding caused in cyclone prone areas by high intensity rains or by storm surge.
- (2) The concept of land zoning should be kept in mind for areas where protection works are taken up to decide inter-se priority for location of structures considering possibility of failure of protection works during extreme disaster events.

6.12 Review of structural design (Third party verification)

- **6.12.1** The Authority shall create a Structural Design review panel (SDRP) consisting of senior SER's and SDAR's whose task will be to review and certify the design prepared by SER or SDAR whenever referred by the Authority or by the Applicant. The expenses (such as fees), if any, shall be borne by the Applicant.
- **6.12.2** The Reviewing Agency shall submit addendum to the certificate or a new certificate in case of subsequent changes in structural design. Table 6.3 gives the proof checking requirements for structural design.

Table 6.3

Proof checking requirements for structural design (Byelaw 6.12)

SI.	Type of structure	Submission from SER or	To be proof checked
No.		SDAR	
1	Load bearing buildings up to 3 storey	SDBR*	Not to be checked
2	Buildings up to seven storey	SDBR	To be checked
	(RCC/ steel framed structures)	Preliminary design	To be checked
3	Buildings greater than seven storey	SDBR	To be checked
	(RCC/ steel framed structures)	Preliminary design	To be checked
		Detailed structural design &	To be checked
		structural drawings.	
4	Public Buildings.**		
	(a) Load Bearing up to 3 storey.	SDBR	Not to be checked
	(b) RCC / Steel Structures.	SDBR	To be checked
		Preliminary design	To be checked

		Detailed structural design & structural drawings.	To be checked
5	Special Structures.***	SDBR	To be checked
		Preliminary design	To be checked
		Detailed structural design & structural drawings.	To be checked

^{*} SDBR: Structural Design basis report

6.13 Rain water harvesting

- **6.13.1** To encourage and popularize the Rain Water Harvesting, concession in the water charges shall be provided as fixed by the Authority, for those buildings fitted with rain water harvesting facilities.
- **6.13.2** Rain water harvesting shall be mandatory for all new buildings and the rainwater from the terrace/roof top shall be directed by proper means to a properly designed rainwater harvesting structure for domestic use or for recharging ground water table.
- **6.13.3** Rainwater harvesting in a building site includes storage or recharging into ground of rainwater falling on the terrace/roof top or on any paved or unpaved surface within the building site. The following systems are recommended for harvesting the rainwater drawn from terrace/roof top and the paved surface:
- (A) Open well of a minimum of 1.00 m diameter and 6.00m in depth into which rainwater may be channeled and allowed after filtration for removing silt and floating material. The well shall be provided with ventilating covers. The water from the open well may be used for no potable domestic purposes such as washing, flushing and for watering the garden, etc.
- **(B)** Rainwater harvesting for recharge of ground water may be done through a bore well around which a pit of one meter width may be excavated up to a depth of at least 3.00 m and refilled with stone aggregate and sand. The filtered rainwater may be channeled to the refilled pit for recharging the bore well.
- **(C)** An impervious storage tank of required capacity may be constructed in the setback or other than space and the rainwater may be channeled to the storage tank. The storage tank may be raised to a convenient height above the surface and shall always be provided with ventilating the surface and shall always be provided with ventilating covers and shall have draw off taps suitably place so that the rain water may be drawn off for domestic, washing, gardening and such other purposes. The storage tanks shall be provided with an overflow.
- **(D)** The surplus rainwater after storage may be recharged into ground through percolation pits or trenches or combination of pits and trenches. Depending on the geomorphologic and topographical condition, the pits may be of the size of 1.20 m width x 1.20 m length x 2.00 m to 2.50 m depth. The trenches can be or 0.60 m width x 2.00 m to 6.00 m length x 1.50 m to 2.00 depth. Terrace water shall

^{**} Public building: Assembly of large number of people including schools, hospitals, courts

^{***} Special structures – large span structures such as stadium, assembly halls or tall structures such as water tanks, TV tower, chimney, light house etc.

be channeled to pits or trenches. Such pits or trenches shall be backfilled with filter media comprising the following materials:

- a) 40 mm stone aggregate as bottom layer up to 50% of the depth;
- b) 20 mm stone aggregate as lower middle layer up to 20% of the depth;
- c) Course sand as upper middle layer up to 20% of the depth;
- d) A thin layer of fine sand as top layer;
- **e)** Top 10% of the pits / trenches will be empty and a splash is to be provided in this portion in such a way that roof top water falls on the splash pad;
- f) Brick masonry wall is to be constructed on the exposed surface of pits / trenches and the cement mortar plastered;
- **g)** The depth of wall below ground shall be such that the wall prevents lose soil entering into pits / trenches. The projection of the wall above ground shall at least be 15 cm;
- h) Perforated concrete slabs shall be provided on the pits / trenches.
- **(E)** If the open space surrounding the building is not paved, the top layer up to a sufficient depth shall be removed and refilled with course sand to allow percolation of rain water into ground.
- **6.13.4** The terrace shall be connected to the open well / bore well / storage tank/recharge pit /trench by means of H.D.P.E. / P.V.C. pipes through filter media. A valve system shall be provided to enable the first washings from roof or terrace catchments, as they would contain undesirable dirt. The mouths of all pipes and opening shall be covered with mosquito (insect) proof wire net. For the efficient discharge of rainwater, there shall be at least two rain water pipes of 100 mm diameter for a roof area of 100 sqm.
- **6.13.5** Rainwater harvesting structures shall be sited as not to endanger the stability of building or earthwork. The structures shall be designed such that no dampness is caused in any part of the walls or foundation of the building or those of an adjacent building.
- **6.13.6** Every building with plinth area of exceeding 100sqm and built on a site measuring not less than 200sqm shall have one or more rain water harvesting structures having a minimum total capacity as detailed above.
- **6.13.7** The Authority may approve the rain water harvesting structures of specifications different from above, subject to the minimum capacity of rain water harvesting being ensured in each case.
- **6.13.8** The owner of every building mentioned above shall ensure that the rain water harvesting structure is maintained in good repair for storage of water for non potable purposes or recharge of groundwater at all times.

6.14 Facilities for physically challenged persons

- **6.14.1** Public and semi public buildings, having covered area of 300sqm. and above shall be designed and constructed to provide facilities to the physically challenged persons as prescribed in the byelaws below.
- **6.14.2** These regulations shall apply to the physically challenged persons having the following disabilities:-
- **a) Non-ambulatory disabilities:** Impairments that regardless of cause or manifestation, for all practical purposes, confine individuals to wheelchairs;

- **b) Semi-ambulatory disabilities:** Impairments that cause individuals to walk difficulty or insecurity. Individuals using braces or crutches, amputees, arthritics, spastics, and those with pulmonary land cardiac ills may be sent ambulatory.
- c) Hearing disabilities: Deafness or hearing handicaps that make an individual insecure in public areas because he is unable to communicate or hear warning signals.
- **d) Sight disabilities:** Total blindness or impairments affecting sight to the extent that the individual functioning in public areas is insecure or exposed to danger.
- **6.14.3 Access path / walk way:** The width of access path / walk way from plot entry and surface parking to the building entry shall not be less than 1.80 m. It shall not have a gradient exceeding 5%.
- **6.14.4 Surface parking:** At least two car spaces shall be provided at surface level near entrance with maximum travel distance of 30.00 m from the building entrance.
- **6.14.5 Space for wheel chair users:** Adequate space shall be kept for the free movement of wheel chairs. The standard size of wheel chairs shall be taken as 1050 mm x 750 mm the doors shall have a minimum width of 900 mm to facilitate the free movement of wheel chairs.
- **6.14.6 Approach to plinth level:** At least one entrance shall have approach through a ramp. The ramp shall have a minimum width of 1.80 m with maximum gradient of 1:10.
- **6.14.7 Entrance landing:** Entrance landing shall be provided adjacent to ramp with the minimum dimension of 1.80 m x 2.00 m.
- **6.14.8 Corridors:** The minimum width of corridors shall be 1.80 m.
- **6.14.9 Staircase:** The minimum width of staircases shall be 1.50 m. The maximum number of risers on a flight shall be limited to 12. Size of treads shall not be less than 300mmand the height of risers shall not be more than 150mm.

6.14.10 Lifts:

- (A) Wherever lifts are required to be installed as per regulations, provision of at least one lift shall be made for the wheel chair users with the following cage dimensions recommended for passenger lifts of 13 persons capacity by Bureau of Indian Standards.
- (a) Clear internal depth 1.10m.
- (b) Clear internal width 2.00m.
- (c) Entrance door width 0.90m.
- **(B)** The lift lobby shall have a minimum inside measurement of 1.80 m x 1.80 m.
- **6.14.11 Toilets:** One special water closet in as set of toilets shall be provided for the use of physically challenged persons with wash basin keeping in view the following provisions.-
- (a) The minimum size of toilet shall be 1.50 m x 1.75 m.
- **(b)** The maximum height of the water closet set shall be 0.50 m above the floor.
- **6.14.12 Hand rails:** Hand rails shall be provided for ramps, staircases, lifts and toilets. The height of handrails shall be normally 800 mm above the floor level. If the building is meant for the predominant use of children, the height of hand rails may be suitably altered.
- **6.14.13 Guiding / Warning floor material:** The floor material to guide or to warn the visually impaired persons with a change of color or material with conspicuously different texture and easily distinguishable

from the rest of the surrounding floor materials is called guiding or warning floor material. The material with different texture shall give audible signals with sensory warning when person moves on this surface with walking stick. The guiding / warning floor material is meant to give the directional effect or warn a person at critical places. This floor material shall be provided in the following areas;

- a) The access path to the building and to the parking area;
- b) The landing lobby towards the information board, reception, lifts, staircase and toilets;
- c) At the beginning / end of walkway where there is vehicular traffic;
- **d)** At the location abruptly changing in level and at the beginning / end of ramp;
- e) At the entrance / exit of the building.
- **6.14.14 Proper signage:** Appropriate identification of specific facilities within a building for the physically challenged persons should be done with proper signage. Visually impaired persons make use of other senses such as hearing and touch to compensate for the lack of vision; whereas visual signals shall benefit those with hearing disabilities. Signs should be designed and located such that they are easily legible by using suitable letter size (not less than 20 mm size). For visually impaired persons, information board in Braille should be installed on the wall at a suitable height and it should be possible to approach them closely. To ensure safe walking there should not be any protruding sign, which creates obstruction in walking. The symbols / illustrations should be in contrasting color and properly illuminated so that with limited vision one may be able to differentiate amongst primary colors.

CHAPTER 7

7.0 ENVIRONMENTAL SAFETY/CONSERVATION REQUIREMENTS

7.1 Control of air and water pollution

- **7.1.1** No industrial effluent shall be disposed or exposed so as to cause nuisance and endanger to public health. Without prejudice to the generality of the above provisions, the Authority may stipulate certain conditions or measures to control the air borne emissions and liquid effluents from industrial units.
- **7.1.2** Industries in the special industrial zone, which emit liquid and gaseous effluents, shall not be allowed to emit such effluent unless they are purified and rendered harmless from the public health point of view by provision of purification plants, as may be prescribed by the Competent Authority and/or Pollution Control Board.
- **7.1.3** Controls as prescribed from time to time by the KSPCB / Competent Authority shall be applicable to all development and redevelopment.
- **7.1.4** In case a factory/industry is required to dispose off trade waste and effluent, the local officer of KSPCB may be consulted regarding the means provided for such disposal before permission is granted by the Authority. In case it is proposed to discharge the waste/ effluent in public sewerage system, prior approval of the concerned Authority should be attached with the application for permission.

7.2 Control of drains, sewers, drainage and sewage works

- **7.2.1** It shall be unlawful for any person to place or deposit on public or private property within the jurisdiction of Authority any human or animal excrement, garbage or other objectionable waste.
- **7.2.2** It shall be unlawful for any person to discharge to any natural outlet or any where, within the area under the jurisdiction of Competent Authority any sewage or other polluted waters except where suitable treatment has been provided in accordance with subsequent provisions of these byelaws.
- **7.2.3** For permission to discharge into the sewage system from establishments producing industrial wastes, the owner or his authorized agent shall make application on a special form furnished by the Competent Authority as the case may be. The permit application shall be supplemented by any plans, specifications, sample test reports or other information considered pertinent in the opinion of the Authority. An inspection fee, fixed by the competent Authority for an industrial building sewer permit, shall be paid at the time application is filed. All industrial and trade establishments existing and discharging industrial wastes into the sewer system at the time of enactment of these byelaws shall also require permission to discharge into the sewer under these byelaws.
- **7.2.4** No person shall discharge or cause to be discharged any storm water, surface water, ground water, roof run-off, or subsurface drainage to any sanitary sewer. Uncontaminated cooling water or unpolluted industrial process water may be permitted to be discharged to any sanitary sewer by the Authority, on permission from KSPCB, if storm sewer is not available.
- **7.2.5** Storm water and all other unpolluted drainage shall be discharged to such sewer as are specifically designated as storm sewers or to a natural outlet approved by the Authority. Industrial cooling water or unpolluted process waters may be discharged with the prior approval of the Authority, on permission from KSPCB, to a storm sewer or natural outlet.

- **7.2.6** Grease, oil and sand interceptors of approved type and capacity shall be provided when in the opinion of the Authority, they are necessary for the proper handling of liquid wastes containing grease in excessive amounts or any inflammable wastes, sand or other harmful ingredients, such interceptors shall be so located as to be readily accessible for cleaning and inspection.
- **7.2.7** No storage rooms where acids, cyanide, cyanogen compound or other dangerous substances are stored, shall be connected directly to the public sewers or to any natural outlet. Curing holding pit, or other approved arrangement may be required to be provided so that accidental discharge can be caught and disposed off in a safe manner.
- **7.2.8** All permits/licenses granted under Clause 7.2.3 shall be valid for a period of 3 years and it shall be incumbent on the owner or his authorized agent to make an application for renewal with payment of a renewal fee three months before the 'expiry' of the permit period furnishing sample test reports and any other information considered pertinent.
- **7.2.9** No person shall discharge or cause to be discharged any of the kinds of sewage, industrial or factory waste, into any sewer or body of water within or entering the area, if that sewage is not confirming to the KSPCB norms (as per IS:2490 (Part I) –1981) for discharge into public sewers.
- **7.2.10** No person shall discharge or caused to be discharged substances, materials, waters or wastes, if it appears likely in the opinion of the Authority that such wastes are not amenable to satisfactory treatment or can harm either sewers, sewage treatment process or equipment have an adverse effect on the reviving stream or can otherwise endanger life, limb, public property, or constitute a nuisance. In forming his opinion as to the acceptability of such wastes the Authority will give consideration to such factors as the quantities of wastes in relation to flows and velocities in the sewers, materials of construction of the sewers, nature of the sewage treatment process, degree of treatability of wastes and other pertinent factors.
- **7.2.11** If any waters of wastes which are discharged, or are proposed to be discharged to the public sewers, contain the substances or process characteristics enumerated in these byelaws and which in the judgment of the Authority may have a deleterious effect upon the sewage works, processes, equipment or reviving waters, or which otherwise create a hazard to life or constitute a public nuisance, the Authority may:
- a) reject the wastes.
- **b)** require pre-treatment in a private waste treatment system to an acceptable condition for discharge to the public sewers.
- c) require provision of flow equalizing facilities for control over the quantities and rates of discharge to avoid unusual volumes or flow or concentration of waste constituting slugs as defined.
- **7.2.12** The owner shall operate and maintain continuously and effectively at his expense the private waste treatment of flow equalization system in a sanitary and safe manner at all times.
- **7.2.13** When required by the Authority, the owner of any property serviced by a building sewer carrying industrial wastes shall install a suitable control manhole together with such necessary appurtenances in the building sewer to facilitate observation sampling and measurement of the wastes. Such manhole when required shall be accessible at all times. In a default of the owner to install and maintain a control manhole and any required appurtenance within 1 month of a written notice from the Authority to do so, the latter shall be entitled to estimate the quality and quantity in any manner or method practicable for

computing the amount of the surcharge and the presence of the objectionable constituents laid down in **Byelaws 7.2.9 and 7.2.10** above.

- **7.2.14** In the event that no special manhole has been required, the control manhole shall be connected to the nearest downstream manhole in the public sewer to the point at which the building sewer is connected.
- **7.2.15** Sampling shall be carried out to reflect the effect of constituents upon the sewage works and to determine the existence of hazards to life, limb and property. The particular analysis involved will at the discretion of Authority be done either on basis of a 24 hours composite of all discharge of a property or as a grade sample or samples. Normally B.O.D. and suspended solids analysis are determined from 24 hours composites whereas pH is determined by grade samplings.
- **7.2.16** All tests and analysis of the characteristics of water and wastes to which reference is made in these byelaws shall be determined in accordance with Standard Methods as defined in Byelaw 2.0 and shall be determined at the said control manhole in the presence of representatives of all parties concerned, and tested at a Municipal or any other laboratory approved by the Authority.
- **7.2.17** The Authority may at any time before or after issue of permit or grant of connection, run additional tests of the sewage or wastes being discharged by any trade or industry over such period as it may deem necessary, cost of such test shall be borne by the Competent Authority.
- **7.2.18** The Authority or other duly authorized employees of the Competent Authority shall be permitted to enter all properties for the purposes of inspection, observations of these byelaws and having a direct bearing on the nature and source of discharge.
- **7.2.19** Any person found to be violating any provision of these byelaws shall be served by the Competent Authority with written notice stating the violation and providing a reasonable time limit not less than one month for the satisfactory correction thereof. The offender shall within the period of time stated in such notice, permanently cease all violations.
- **7.2.20** Any person who shall continue any violation beyond the time limit, provided for in byelaw 7.2.19 above, shall be liable for prosecution and be punished with a fine which may extend for each violation. In case of a continuing breach, a penalty on per-day basis shall be levied after the date of first conviction.
- **7.2.21** Any person violating any of the provisions of these byelaws shall become liable to the Competent Authority for any expenses, loss or damage occasioned to the Competent Authority by the reason of such violation and shall be liable to suspension, revocation or cancellation, if any permissions were granted under the byelaws.
- **7.2.22** The above-mentioned byelaws shall be subject to modification from time to time as required by KSPCB and Competent Authority.

7.3 Requirements of septic tanks

- **7.3.1** Location and sub-soil dispersion A sub-soil dispersion system shall not be closer than 15m to any source of drinking water, such as a well, to mitigate the possibility of bacterial pollution of water supply. It shall also be as far removed from the nearest habitable building as economically feasible but not closer than 2m to avoid damage to the structure. It is recommended that the bottom of the septic tank be at least 1.5m above the ground water table.
- **7.3.2** Dimensions and other requirements, listed below as a reference, shall confirm to IS: 2470 (Part I & II). Septic tank shall have a minimum inner width of 75c, a minimum depth of 1.5m below the water level

and a per capita minimum liquid capacity of 85 liters. The length of the tanks shall be least twice the width.

- **a)** Septic tanks may be constructed of brick work, stone masonry, concrete or other suitable material as allowed in the standard design procedures.
- **b)** Under no circumstances should effluent from a septic tank or allowed into an open channel drain or body of water without adequate treatment.
- **c)** The minimum normal diameter of the pipe shall be 100 mm. Further at junction of pipes in manholes, the direction of flow from a branch connection should not make an angle exceeding 45 with the direction of flow in the main pipe.
- **d)** The gradients of land-drains, under-drainage as well as the bottom of dispersion trenches and soak wells should be between 1:300 and 1:1400.
- e) Every septic tank shall be provided with a ventilating pipe of at least 50 mm diameter. The top of the pipe shall be provided with a suitable cage of mosquito proof wire mesh. The ventilating pipe shall extend to a height, which would cause no smell or nuisance to any building in the area. Generally, the ventilating pipe should extend to a height of about 2 m above the septic tank building when it is located closer than 15 m.
- f) When the disposal of a septic tank effluent is to a seepage pit, the seepage pit may be of sectional dimension of 90 cm. and not less than 100cm in depth below the inner level of the inlet pipe. The pit may be lined with stone, brick and concrete blocks with dry open joint which should be backed with at least 7.5cm of clean coarse aggregate. The lining above the inlet level should be narrowed to reduce the size of the R.C.C. cover slabs. Where no lining is used, especially near trees the entire pit should be filled with loose stones. A masonry ring should to be constructed at the top of the pit to prevent damage by flooding of the pit by surface run off. The inlet pipe should be taken down to a depth of 90 cm from the top as an anti mosquito measure.
- g) When the disposal of septic tank effluent is to a dispersion trench, the dispersion trench shall be 50 to 100 cm wide excavated to a slight gradient and shall be provided with a layer of shed gravel or crushed stones 15 to 25cm deep. Open joined pipes placed inside the trench shall be made of unglazed earthenware clay or concrete and shall have a minimum internal diameter or 70 to 100 mm. Each dispersion trench should not be longer than 30m and trenches should not be placed closer than 1.8m to each other.
- **7.3.3** The above-mentioned byelaws shall be subject to modification from time to time as required by KSPCB and Competent Authority.

7.4 Requirements of motor fuels filling station and filling-cum service – station

7.4.1 Space Requirements

- (1) The minimum size for the location of Filling Station and filling cum Service Station shall be as follows: filling station 30.00m x 36.50m (In intensely developed areas the minimum frontage may be relaxed by the Authority after complete investigation). Filling cum service station shall be 2000 sqm having frontage not less then 30.00m.
- (2) The plot should be on level ground.
- (3) Every filling station should provide for one parking space for each four employees with a minimum of two car parking space.

- (4) In the case of filling cum service stations in addition to parking space requirements given above provision should also be made for one car parking space for each service station.
- (5) Common plot shall not be required.

7.4.2 Traffic requirements

- (1) A filling station or filling cum service station is a major generator of traffic and as such present a degree of traffic hazard on the road on which it is sited. This potential traffic hazard determines the number of station that can be permitted in any section of the road or the highway or in a section of a city, the objective being to keep the traffic hazard to the minimum.
- (2) A filling station or filling cum service station shall not be located opposite a break or opening in the central verge on a dual carriage as this will encourage the traffic to cross the road while entering a filling station or filling cum service station preferably may not be sited too close to an intersection to a traffic island on the main road. To assure satisfactory distances, the minimum desirable distance between an access to a station and the tangent point of the traffic island or intersection should be 80.00 m.
- (3) In the case of main road provided along with a service road or a marginal access road, the access to the station shall be provided from the service to the marginal access road and not from the main road.
- (4) On road having heavy traffic, it is desirable to provide one station on either side of the road so that vehicles are not required to cross the road. On roads the traffic cannot support two filling station open on either side, one may be located on either sides provided the site is not close to a junction and confirm to the requirements of the (3) above.
- (5) Stations on road curves or bends are a safety hazard and shall be avoided. Also, they shall not be located adjacent to the residential houses.
- (6) The minimum distance of the property line of the filling station from the central line of the road shall not be less than 15m or half the proposed right of way of the road, whichever is more. In the case of National Highways, and major road in the urban areas they should be set back so as to be outside the ultimate right of way of the highway along which it is to be located. However, variations can be approved in special cases if allowed by the competent Authority after complete investigation.
- (7) The heaping up of the oil cans and other goods within the premises which tend to create a sort of ugly character to the area should be discouraged. Preferential locations in highly congested highways in urban areas create traffic problems, which need proper and careful examination. Similarly the concentration of filling station and service station etc. along traffic or arteries creates problems in maintaining street capacity thereby depriving the community facility for mass and quick transport along the highway in urban

7.4.3 Entrance and exit considerations

- (1) In all location of filling stations: The basic principle governing location as well as exit and entrance consideration is to minimize as much as possible interference with normal flow of traffic on the road.
- (2) For easy flow of the station a minimum frontage of 30m shall be provided with wide and easy entrance and exit curb, vehicles entering and leaving the station should be fully visible to the traffic on the main road and there should not be any obstruction to view between the filling station pumps and the road.
- (3) The following minimum requirements for the ingress should be observed.

- (a) Maximum width of the drive ways at the side walk: 9.00m
- (b) Minimum angle of intersection of drive ways with the street pavement: 60 degree
- **(c)** Minimum distance from any drive way to any exterior property line: 6.00m.
- (d) Minimum distance from any driveway to any interior plot line: 3.00m
- (e) Minimum distance between curb sites: 9.00m
- **7.4.4** The above mentioned byelaws shall be subject to modification from time to time as required by the concerned IS specifications and the Competent Authority.

7.5 Control of signs (hoardings), paging towers, telephone towers & outdoor display structures

7.5.1 Permission

No structure to display or hold any sign (hoardings) or outdoor display for advertising or paging towers, telephone towers, wireless (Cell Phone) micro wave receiving towers and other purposes will be done except with the previous permission of the Authority.

7.5.2 Design and size

Every hoarding or outdoor display for advertising or paging towers, telephone towers, wireless (Cell Phone) micro wave receiving towers shall be designed so as to withstand the wind, dead, seismic and other loads and other structural requirements in accordance with the National Building Code of India. In the case of shopping units in commercial areas and/or residential-cum commercial buildings, the display boards shall be at the same height above the shopping arcade and shall ordinarily be 45.5cm to 61cm in height. The placement and size of the boards shall form a part of the building permission and no change therein shall be permitted nor shall any additional boards be allowed to be displayed. Size of the hording along the various roads shall be permitted as prescribed by appropriate authority. The appropriate authority shall prescribe size of the hording according to local conditions and requirements with prior intimations to state governments.

7.5.3 Prohibited signs

The following signs are prohibited along major roads, having width beyond 18.00m.

- **a)** Any sign that by reason of its shapes; position or color may be confused with an authorized traffic sign or signal.
- **b)** Any sign containing the word "Stop" ,"Look" ,"Danger" or other similar word that might mislead or confuse the travelers.
- c) Any sign that is attached to or printed on a rock or other natural objects and
- **d)** Any sign that is located within a public right-of-way unless it is an official street name, traffic sign or signal or other official sign.

7.5.4 General restrictions

- **a)** No ground sign shall be erected to a height according to local condition and requirements. Lighting, reflections may extend beyond the top of face of the sign.
- **b)** Every ground sign shall firmly support and anchored to the ground. Supports and anchors shall be of treated timber in accordance with good practice or metal treated for corrosion resistance or masonry or concrete.
- c) No ground sign shall be erected so as to obstruct from access to or egress from any building and;
- d) No ground sign shall be set nearer to the street line than the established building line.

- **e)** Distance from the junction of road:- No sign or hoarding along roads shall be permitted. In such away that it is not obstructing the vision required for safe traffic movements. Any hoarding which in the opinion of the Authority is likely to be confused with unauthorized traffic sign or signal shall not be permitted.
- f) Any hoarding containing the words "Stop", "Look", "Danger" or other similar words that might mislead or confuse the travelers shall not be permitted.
- **g)** No hoarding shall be permitted after keeping distance, according to local condition and requirements from any public park. No hoarding shall be permitted in the open margin space of the building. All permission for hording shall be given only after getting certificate from Registered Structural Engineer for the stability, safety of hording to be erected.

7.5.5 Hoarding on roof-Following provisions shall apply for roof signs.

- a) Location: No roof sign shall be placed on or over the roof of any building, unless the entire roof construction is of non-combustible material. The top of signboard should confirm the building height byelaws.
- **b)** Projection: No roof sign shall project beyond the existing building line of the building on which it is erected or shall extend beyond the roof in any direction.
- **c)** Support & Anchorage: Every roof sign shall be thoroughly secured and anchored to the building on or over which it is erected. All loads shall be safety distributed to the structural members of the building.
- **7.5.6 Wall signs** Following provisions shall apply for wall signs.
- **a)** Dimensions: The total area of the sign shall not exceed 25 percent of the total area of the facade on which the sign is erected. The facade of the building shall be subdivided into blocks of uniform height and the area of the sign erected on particular block shall not exceed 10 percent of the area of that block.
- **b)** Projection: No wall sign shall extend above the top of the wall or beyond the ends of the wall to which it is attached. At any place where pedestrians may pass along a wall, any wall sign attached there to shall not project more than 7.5cm. there from within a height of 2.5m. measured from the level of such place.
- c) Support & Attachment: Every wall sign shall be securely attached to walls, wooden blocks or anchorage with wood used in connection with screws, staples or nails shall not be considered proper anchorage, except in the case of wall signs attached to walls of wood.
- **d)** Reflectors: Lighting reflectors may project 2.4m beyond the face of the wall provided such reflectors are at least 4m above the footpath level, but in no case shall such reflectors project beyond a vertical plane one meter inside the kerb line.

7.5.7 Projecting signs

- **a)** No projecting sign or any part of its supports or frame work shall project more than 2m beyond the main face of the building to which such sign is attached. At every place where pedestrians may pass underneath a projecting sign, an over-head clearance of at least 2.5m shall be maintained.
- **b)** Comprehensive Sign Design: Particularly in the case of an existing structure where because of the code amendment new signage is likely to cover less of the building facade than previously, it is hoped that Comprehensive Sign Designs will encourage the rehabilitation of the building front itself as well as the careful design of the sign that goes on it.

7.5.8 Signs in urban renewal project areas

These signs must confirm with the zoning byelaws and with the special restrictions for the area, which may include additional byelaws or requirements.

- **a)** Banners, Sign-Boards etc: Banners, signboards and several other kinds of signs other than on-premise signs shall be only temporarily permitted.
- b) No signs within 30m distance of a park entrances or institutional entrances shall be permitted.
- **7.5.9 Historical buildings** The Competent Authority is empowered to deny the permission on the ground of ambiance of heritage buildings and precincts.

7.5.10 Telecommunication infrastructure (paging, cellular mobiles, BSNL etc.)

- **a)** Location: The Telecommunication Infrastructure shall be either placed on the building roof tops or on the ground or open space within the premises subject to other byelaws.
- **b) Type of structure:** Steel fabricated tower or antennae's on M.S. pole. Pre-fabricated shelters of fiberglass or P.V.C. on the building roof top/terrace for equipment. Masonry Structure/ Shelter on the ground for equipment. Generator set with sound proof cover to reduce the noise level.

c) Requirement:

- i) Every applicant has to obtain/ procure the necessary permission from the "Standing Advisory Committee on Radio Frequency Allocation" (SACFA) issued by Ministry of Telecommunications.
- **ii)** Every applicant will have to produce the structural stability certificate from the Registered Structural Engineer which shall be the liability of both parties.
- iii) Applicant has to produce/ submit plan's of structure to be erected.
- **d) Projection:** No Pager and/or Telephone Tower shall project beyond the existing building line of the building on which it is erected in any direction.
- **e) Structural Safety:** Pager and/or Telephone Tower shall be structurally safe to withstand against earthquake, cyclone and flood. The competent authority shall be empowered to prohibit from holding any Pager and/or Telephone Tower or shall demolish any existing Pager and/or Telephone Tower after serving a 30 days prior notice, if the same is found to be constructed against prevailing codal provisions.

7.5.11 Deposit and fees:

- **a)** The fees for erection and maintenance of the hoarding shall be charged as decided by Competent Authority from time to time.
- b) The fees for hoarding shall be paid by the applicant in advance, for the calendar year or part thereof.

7.6 Control of Mining and Quarrying

- **7.6.1** No mining, quarrying and brick kiln operations where no blasting is involved shall be permitted within a distance of 50m from the boundary of any public road, railway line, canal, transmission line or any other building. No mining, quarrying and brick kiln operations, which involves blasting, shall be permitted within a distance of 200m from any public road, railway line, canal, transmission line or any other building.
- **7.6.2** No building operations shall be permitted on the plot on which mining, quarrying and kiln operations have been permitted, without the prior approval of the competent authority.
- **7.6.3** The maximum depth of mining & quarrying, and all other related requirements shall be as per the regulations stipulated by the Department of Mining and Geology.

- **7.6.4** The mining, quarrying and brick kiln shall be permitted for a stipulated period not exceeding three years from the date of permission at a time and shall be so prescribed in the permission.
- **7.6.5** The following shall govern the mining, quarrying and brick kiln operations and shall form conditions of the permission:
- a) The mining, quarrying and brick kiln operations shall not cause any nuisance to people in the vicinity.
- **b)** The mining, quarrying and brick kiln operations below the average ground level shall be permitted only for the extraction.



CHAPTER 8

8.0 REGISTRATION, QUALIFICATIONS AND DUTIES OF PROFESSIONALS

8.1 Registration of professionals

- **8.1.1** The Authority shall register Town Planners (RTP), Architects (RA), Engineers (RE), Structural Engineers (RSE), Structural Design Agencies (RSDA), Geotechnical Engineers (RGE), Construction Engineers (RCE), Construction Management Agency (RCMA), Quality Auditors (RQA) and Quality Audit Agencies (RQAA), Developers (RD), Electrical Engineers (REE) wherever applicable. The qualified technical personnel shall be registered and licensed by the Authority. Application for registration and license shall be submitted by above-mentioned professionals to the Development Authority as per format cited at Form 26.
- **8.1.2** Registration with license shall be valid for a period of three consecutive calendar years and shall be renewable on the completion of every three consecutive calendar years.
- **8.1.3** The registration may be suspended for a specified period or cancelled permanently for unprofessional conduct.
- **8.1.4** Civil contractors, masons, plumbers/plumbing contractors, electrical technicians/electrical contractors and other skilled/semiskilled personnel involved in construction activities shall have proper training through vocational courses or training at recognized Industrial Training Institutes. The Construction Engineer on Record shall confirm the skills of above personnel, through verification of relevant certificates, before employing them at the construction site. However there is no need for registration of these personnel.

8.2 Fee for registration

- **8.2.1** The fee for registration/licensing/renewal of registration of any qualified technical personnel (such as Engineer, Architect, Town Planner) as well as developer/builder shall be as decided by the Authority.
- **8.2.2** If the owner himself is the developer/builder then there is no need for registration as developer/builder.
- **8.2.3** Applications for license renewal may be submitted to the Authority from 45 days before the expiry of the license and the Authority shall communicate its decision within two weeks of receiving the application. The approval of fresh applications shall also be intimated to the applicants within 15 days of receiving the application.
- **8.2.4** If the applications for license renewal are submitted after the date of expiration of license, such applications shall be treated as fresh ones.

8.3 Qualifications of professionals

8.3.1 Registered Structural Engineer (RSE)

On the basis of their academic qualifications and experience, Structural Engineers shall be "Registered" in two "Grades". The eligibility criteria for registration in each "Grade" and the "Scope of Work" which can be entrusted to the Structural Engineer of each "Grade" are given below.

Grade-

Scope of work: To prepare structural design and structural drawings of all types of buildings including high-rise buildings.

Eligibility:

- (i) B. E. Civil or equivalent with minimum 10 years experience (after attaining the degree) in structural design work at a responsible position as a structural engineer OR
- (ii) M. E. Structures/ Earthquake Engineering or Ph.D. in Structures with minimum 5 years of experience (after attaining the degree) in structural design work at a responsible position as a structural engineer OR
- (iii) In the case of faculty members of academic Institutions M. E. Structures/Earthquake engineering or Ph.D. in Structures with minimum 5 years of experience (after attaining the degree).
- (iv) The experience as stated above shall be under a Structural Engineer on Record, except for the faculty members of academic Institutions. (This requirement shall be waived for the first ten years of the promulgation of these Byelaws)

Grade-II

Scope of work: To prepare structural design and structural drawings of all types of buildings except high-rise buildings. (Plinth area up to 5000 m2)

Eligibility:

- (i) Diploma in Civil or equivalent with minimum of 8 years experience (after attaining the diploma) in structural design work at a responsible position as a structural engineer. OR
- (ii) B. E. Civil or equivalent with minimum 5 years experience (after attaining the degree) in structural design work at a responsible position as a structural engineer. OR
- (iii) M. E. Structures/ Earthquake Engineering or Ph.D. in Structural Engineering with minimum 2 years of experience (after attaining the degree) in structural design work at a responsible position as a structural engineer. OR
- (iv) In the case of faculty members of academic Institutions M. E. Structures/ Earthquake Engineering or Ph.D. in Structures with minimum 2 years of experience (after attaining the degree).
- (v) The experience as stated above shall be under a Structural Engineer on Record, except for the faculty members of academic Institutions. (This requirement shall be waived for the first five years of the promulgation of these Byelaws)

8.3.2 Registered Engineer (RE)

Registered Engineers are those Graduate Civil Engineers or Diploma Holders in Civil Engineering who are registered by local bodies to submit drawings and other documents for obtaining license.

8.3.3 Registered Construction Engineer (RCE)

The requirements for registration shall be:

- (i) B.E. Civil or equivalent with five years experience in construction or
- (ii) Diploma in Civil Engineering with seven years experience in construction.
- (iii) B.Arch. or its equivalent with a degree or diploma in Construction Management and five years of experience in construction.
- (iv) The experience as stated above shall be under one or more Construction Engineer on Record of under one or more reputed construction companies. Such company or companies established within or outside the area of jurisdiction of the competent authority shall be of minimum ten years of standing.

8.3.4 Registered Construction Management Agency (RCMA)

The requirement for registration shall be

(i) Owner of a proprietary firm shall be an RCE

- (ii) Fifty per cent partners of a partnership firm shall be RCE
- (iii) A designated officer of a limited company shall be RCE

8.3.5 Registered Quality Auditor (RQA)

The requirements for registration shall be:

- (i) B.E. Civil or equivalent with five years experience in testing of building materials including concrete and/or experience in quality control work with a reputed construction agency.
- (ii) M.E. (Civil) or equivalent with two years experience as above.
- (iii) B.Arch. or equivalent with a degree or diploma in Construction Management and five years of experience in quality control aspects of construction.
- (iv) The experience as stated above shall be under one or more registered quality inspector/s of in quality work under one or more reputed construction agencies of minimum ten years of standing from within or outside the area of jurisdiction of the Competent Authority.

8.3.6 Registered Quality Audit Agency (RQAA)

The requirements for registration shall be:

- (i) Owner of a proprietary firm shall be QAR
- (ii) Fifty percent partners of a partnership firm shall be QAR
- (iii) A designated officer of a limited company shall be a QAR

8.3.7 Registered Electrical Engineer (REE):

The requirements for registration shall be:

- (i) B. E. (Electrical) or equivalent with minimum 10 years experience (after attaining the degree) in electrical works with proof of appointment for the purpose OR
- (ii) M.E. (Electrical Engineering) or equivalent with minimum 5 years of experience (after attaining the degree) as above OR
- (iii) PhD (Electrical Engineering) or equivalent with minimum 1 year of experience as above OR
- (iv) In the case of faculty members of academic Institutions M. E. Electrical Engineering with minimum 2 years of experience (after attaining the degree).

8.3.8 Registered Geotechnical Engineer (RGE)

The requirements for registration shall be:

- (i) B. E. (Civil) or equivalent with minimum 10 years experience (after attaining the degree) in geotechnical investigations with proof of appointment for the purpose OR
- (ii) M.E. (Geotechnical Engineering) or equivalent with minimum 5 years of experience (after attaining the degree) as above OR
- (iii) PhD (Geotechnical Engineering) or equivalent with minimum 1 year of experience as above OR
- (iv) In the case of faculty members of academic Institutions M. E. Geotechnical Engineering with minimum 2 years of experience (after attaining the degree).

Shall have a laboratory for soil tests and equipments for field tests, or shall be capable of hiring services of a competent soil testing laboratory.

8.3.9 Registered Geo-Technical Agency (RGA):

The requirements for registration shall be:

(i) Owner of a proprietary firm shall be M.E. (or equivalent) in Geotechnical engineering with minimum 10 years of experience and should be a RGE.

- (ii) At least fifty percent partners of a partnership firm should be RGE, shall have educational qualifications as in (i) but a minimum 5 years experience.
- (iii) A designated officer of a limited company shall have qualifications as in (i)
- (iv) The experience as stated above shall be under one or more Geotechnical Agency on Record. Such agencies established within or outside the area of jurisdiction of the competent authority shall be of minimum ten years of standing.
- (v) The agency shall have a laboratory for soil tests and equipments for field tests.

8.3.10 Registered Architect (RA)

Qualification and Experience:

Requirement for registration: The person/firm/company acting as Architect shall be registered with Council of Architecture and shall be bind with the terms & conditions as prescribed under the professional rules by the Council of Architecture to render professional services.

8.3.11 Town Planner on Record (TPR)

Requirement for registration: The person/ firm/company acting as Town Planner shall be registered with the Institute of Town Planners and shall be bind with the terms & conditions as prescribed under the professional rules by the Institute of Town Planners to render professional services.

8.3.12 Developer/Builder on Record (DR)

Requirement for registration: Although there is no specific requirement on the educational qualification, if the developer is different from the owner, it is preferable that the developer has completed the basic compulsory education. If the owner himself is the Developer, there is no need for registration. However if the Developer is interested to develop other's property, then he has to register with the Authority.

8.4 Responsibilities of owners to appoint professionals

8.4.1 Appointment of Professionals: The Owner / Developer shall appoint the following profess	sionals,
out of the registered professionals described Byelaw 8.3 above, for the project as required:	
□ Town Planner on Record (TPR)	

□ Architect on Record (AR)
□ Engineer on Record (ER)
□ Structural Engineer on Record (SER)
□ Structural Design Agency on Record (SDAR)
□ Geo-technical Engineer on Record (GER)
□ Construction Engineer on Record (CER)
□ Construction Management Agency on Record (CMAR)
□ Quality Auditor on Record (QAR) Quality Audit Agency on Record (QAAR)
□ Electrical Engineer on Record (REE)
□ Developer on Record (DR)

- **8.4.2 The Owner / Developer** shall submit a list of the appointed professionals on Record with the application for License to the competent authorities. (Consent/undertaking from these professionals shall be needed in the required format at the time of seeking License)
- **8.4.3 In case the Owner / Developer** change any of the professional on Record intimation to that effect shall be sent to the competent authorities, along with a no-objection certificate from the professional who is being changed.

8.5 Duties and responsibilities of professionals

- **8.5.1** Each Professional shall clearly indicate on every plan, document & submission, prepared by him the details of his / her designation with registration number and date, full name and his/her address below the signature for identification.
- **8.5.2** The Structural Engineer, The Geotechnical Engineer and the Architect shall be jointly held responsible for adhering to the provisions of the relevant and prevailing 'Indian Standard Specifications'. The Construction Engineer/Site Supervisor, the Quality Auditor, the Developer/ Builder and the Contractor shall be held responsible for the actual execution as per the design.
- **8.5.3** The professionals shall not be held responsible for the severe damage or collapse that may occur under the natural forces going beyond the design forces provided in the above 'Indian Standard Specifications'. However, if the structural damage/failure is due to poor site conditions, poor workmanship or poor quality of foundation/construction or mistakes/drawbacks in the design etc., the contractor and the concerned professionals shall be held responsible, and the byelaws related to professional misconduct shall be applicable.

8.5.4 Structural Engineer on Record (SER):

Duties and Responsibilities:

- (A) At the time of seeking permission from Competent Authority for starting construction, the Owner shall submit an undertaking from SER or SDAR
- (i) That the SER / SDAR is agreeable to accept the assignment to prepare designs, drawings and specifications.
- (ii) The designs shall be carried out according to relevant national codes and specifications and good engineering practice.
- (iii) A structural design report giving salient features of the structure, loads and soil characteristics and capacity, etc. shall be submitted in the prescribed format.
- (B) In the case of high-rise buildings and Special Structures, SER/SDAR shall
- (i) Prepare Preliminary Design of the structure in addition to the Report indicated in A (iii) above.
- (ii) Get required soil (geo-technical) investigation done from an approved laboratory/geotechnical engineer and submit the report concerning the same in prescribed format to the Competent Authority.
- (iii) Get the Preliminary Design checked through third party verification by a member of Structural Design Review Panel and submit a certificate concerning the same to the Competent Authority. Provided that in case of high-rise buildings having seven or more structural floors and special structures detailed design verification of major structural components will be required.
- **(C)** All Reports and other submissions to the Competent Authority by and on behalf of the SDAR shall only be signed by Registered Structural Engineer (SER) as a proprietor, partner or as a designated officer of the company.
- (D) To prepare a report of the structural design.
- **a)** To prepare detailed structural design and to prescribe the method and technique of its execution strictly on the basis of National Building Code or relevant Indian Standard Specifications.
- **b)** To prepare detailed structural drawings and specifications for execution indicating thereon, design live loads, safe soil bearing capacity, specifications of material, assumptions made in design, special precautions to be taken by contractor to suit the design assumptions etc whatever applicable.

- c) To supply two copies of structural drawings to the supervisor.
- **d)** To advice the Owner/Architect/Engineer for arranging for tests and their reports for soil, building material etc. for his evaluation and design consideration.
- e) To prepare the revised calculations & drawings in case of any revision with reference to the earlier submission of drawings & design in a particular case.
- **f)** To inform in writing the Competent Authority within 7 days, if for any reason, he/she is relieved of his appointment/responsibilities as the registered Structural designer for the development.

8.5.5 Construction Engineer on Record (CER)/ Site Supervisor on Record

All construction work shall be carried out under the supervision of a Construction Engineer/Site Supervisor on Record.

Duties and Responsibilities:

- **a)** To adhere strictly to the structural drawings, specifications and written instructions of the Structural Engineer on Record and Architect on Record / Engineer on Record
- **b)** To follow the provisions of N.B.C. or I.S. specifications as regards materials, components, quality control and the process of construction.
- c) To verify, through verification of relevant certificates, the skills of masons, plumbers/plumbing contractors, electrical technicians/electrical contractors and other personnel involved in construction activities.
- d) To provide for safety of workers and others during excavation, construction and erection.
- e) To provide safe and adequate temporary structure required for construction and erection.
- f) To bring to the notice of the structural designer and Architect/Engineer any situation of circumstances which in his opinion are liable to endanger the safety of the structure.
- **g)** To deposit with the Competent Authority one set of working drawings of the works executed along with the progress certificates before proceeding with the next stage of the work.
- h) He/she shall be in overall charge of the site and responsible for overall supervision of the work.
- i) He/she shall ensure that all the work under his charge is carried out in conformity with the approved drawings and as per the details and specifications supplied by the registered Architect/Engineer.
- j) He/she shall take adequate measures to ensure that no damage is caused to the work under construction and adjoining properties.
- **k)** He/she shall also ensure that no undue inconvenience is caused in the course of his/her work to the people in the neighborhood.
- I) He shall also ensure that no nuisance is caused to traffic & neighboring people by way of noise, dust, smell, vibration etc. in the course of his/her work.

8.5.6 Construction Management Agency on Record (CMAR):

Construction work for a high-rise building or Special Structures shall be carried out by a Construction Management Agency on Record.

Duties and Responsibilities:

- (A) At the time of seeking permission from Competent Authority for starting construction of a high-rise building or special structures, the Owner shall submit an undertaking from CMAR that
- (i) The CMAR is agreeable to accept the assignment to execute the project as per designs, drawings and Specifications.

- (ii) The CMAR shall install a Quality Assurance program by retaining an independent Quality Audit Agency on Record (QAAR) and submit a certificate concerning the same to the Owner/Developer as well as to the Competent Authority. The appointed QAAR shall be acceptable to the Owner/Developer. (The text put in italics does not specifically apply/relate for registration.
- **(B)** Upon completion of the construction work of the high-rise building and Special Structures the CMAR shall intimate to the Owner/Developer that the work has been carried out according to the design drawings and specifications and written instructions of SDAR and as per guidance of the QAAR.
- **(C)** The CMAR shall submit a report and certificate in the prescribed format from the QAAR that the quality assurance program has been satisfactorily carried out on the construction work. This report and certificate shall be submitted to the Owner/Developer for final submission to the Competent Authority.
- **(D)** All Reports and other submissions to the Competent Authority by and on behalf of the CMAR shall only be signed by Construction Engineer ON Record (CER) as a proprietor, partner or by as a designated officer of the company.

8.5.7 Quality Auditor On Record (QAR)

The construction work of a high-rise building executed by CMAR shall be under an independent quality inspection program prepared and implemented under the supervision of an independent QAR.

8.5.8 Quality Audit Agency On Record (QAAR)

For all high-rise construction and special structures, it will be necessary to have an Independent Quality Inspection Program, which will be determined and executed by and independent Quality Audit Agency on Record (QAAR).

- (A) At the time of seeking permission from competent authority for starting construction of a high rise building of special structures CMAR shall submit an undertaking form QAAR that:
- (i) The QAAR is agreeable to accept the assignment to implement the quality inspection program and that the appointed QAAR is acceptable to the Owner/Developer.
- (ii) The QAAR will get all the testing of building materials, concrete etc. done by an independent approved testing laboratory.
- **(B)** During construction of a high rise building and special structures the QAAR shall carry out necessary testing of materials as well as nondestructive testing of structural components with the help of approved testing laboratory and submit to the CMAR and the owner/developer the reports as per quality inspection program.
- **(C)** Upon completion of the construction of high-rise building or the special structure the QAAR shall submit the report and certificate in the prescribed format based on the quality inspection program. This report and certificate will be submitted to the CMAR and the owner/developer for final submission to the competent authority.
- **(D)** All reports and other submissions to the CMAR by QAAR shall only be signed by Quality Auditor on Record (QAR) as proprietor, partner or as a designated officer of the company.

8.5.9 Electrical Engineer on Record (EER)

For electrical works of high rise buildings and for buildings for medium to heavy industries, the services of an Electrical Engineer on Record shall be used. Such an Electrical Engineer must be a member of the Electrical Consultants Association of India.

Duties and Responsibilities:

- (a) To compute the electrical needs of the building
- **(b)** To plan for the various electrical components in the building such as distribution transformers, electrical panels, generator sets, cables/wires and earthing system, lighting conductors and so on.

8.5.10 Geotechnical Agency on Record (GAR)/Geotechnical Engineer on Record:

For foundation work/inspection, when required, the services of a Geotechnical Agency on Record or Geotechnical Engineer on Record shall be used.

Duties and Responsibilities:

- (a) To carry out soil investigation at proposed locations as per specifications of Structural Engineer on Record (SER) of Structural Design Agency on Record (SDAR).
- **(b)** To recommend various type foundation for proposed structure and loading with supporting calculations.
- (c) To enable SER or SDAR to take site decision in case strata different than soil investigation report is
- (d) To list out precautionary measures so that there is no damage to adjacent property.

8.6 Duties and responsibilities of developer/builder

- (1) To obtain and submit to the Competent Authority, along with application for license, each progress report and application for occupation certificate.
- (2) To appoint an Architect on Record/ Engineer on Record and Structural Engineer on Record.
- (3) To obtain at relevant stages certificates from them, for submission to the Competent Authority, that in designing the real estate development and providing detailed drawings and specifications for it they have complied with requirements as laid out in the byelaws.
- (4) To appoint a registered CER as construction engineer/site supervisor.
- (5) To verify, through verification of relevant certificates, the skills of masons, plumbers/plumbing contractors, electrical technicians/electrical contractors and other personnel involved in construction activities.
- **(6)** To obtain and adhere to the quality assurance procedure prepared by the registered construction engineer/site supervisor.
- (7) To adequately enable the construction engineer/site supervisor to carry out his responsibilities.
- (8) To certify along with the construction engineer/site supervisor that construction of the real estate development has been carried out as per the design, detailed drawings and specifications provided by the Architect on Record/ Engineer on Record and Structural Engineer on Record.
- **(9)** To obtain development permission from the Competent Authority prior to commencement of construction of the real estate development.
- (10) To regularly submit progress reports and certificates as required by the Competent Authority.
- (11) To inform in writing the Competent Authority within 7 days, if for any reason he ceases to be the developer or is relieved of his responsibilities as the developer of the real estate development.
- (12) To inform in writing the Competent Authority within 7 days, if for any reason any of the registered professionals appointed by him have been relieved of their responsibilities or have resigned.
- (13) The appointment of the registered Architect/ Engineer on Record shall mean that he (the Developer) has authorized the Architect on Record / Engineer on Record to do all things necessary and to take all adequate measures for preparing the design, drawings and specifications for the project and to appoint

on his behalf appropriate persons to act as registered, clerk of works site supervisor, required for the proper execution of the project and to retain on behalf of the owner any other specialist or expert required on the work of the project.

- (14) He shall not cause or allow any deviations from the approved drawings in the course of the execution of the project against the instruction of Architect on Record /Engineer on Record /Construction Engineer or Site Supervisor on Record / Structural Engineer on Record and shall bear all responsibility for any irregularity committed in the use and function of the building or its parts for which the approval has been obtained.
- (15) When no registered construction contractor or construction engineer/site supervisor is required to be appointed and not appointed he shall be responsible for their duties and responsibilities under the byelaws.
- (16) He shall not commence the use of building or shall not give the possession to occupy the building to any one before obtaining the occupancy certificate from the Competent Authority.
- (17) He shall provide adequate safety measures for structural stability and protection against fire hazards likely from installation of services like electrical installation, plumbing, drainage, sanitation, water supply etc. wherever required under the byelaws.
- (18) He shall exhibit the names of registered persons only, on site and no additional names will be exhibited/displayed.
- (19) He shall explain the construction design and its intended use as per approved plan only, to the prospective purchaser of the premises under construction.
- (20) He shall make available copies of titles for the land, approved plans and all certificates issued to the Competent Authority under these Byelaws.

8.7 Duties and responsibilities of owner

"Owner", in relation to any property, includes any person who is for the time being, receiving or entitled to receive, whether on his own account or on account of or on behalf of, or for the benefit of, any other person or as an agent, trustee, guardian, manager or receiver for any other person or for any religious or charitable institution, the rents or profits of the property; and also includes a mortgaging possession thereof.

The responsibilities of an owner:

- (1) To appoint a registered architect/engineer and structural engineer;
- (2) To obtain at relevant stages, for submission to the Competent Authority, certificates from them that in designing the development and providing detailed drawings and specifications for it they have complied with requirements as laid out in the byelaws.
- (3) To appoint a registered construction engineer/site supervisor.
- **(4)** To obtain and adhere to the quality assurance procedure prepared by the registered construction engineer/site supervisor.
- (5) To adequately enable the construction engineer/site supervisor to carry out his responsibilities.
- **(6)** To certify along with the site supervisor that construction of the development has been undertaken as per designs, detailed drawings and specifications provided by the Architect/Engineer and the Structural Engineer.
- (7) To obtain development permission from the Competent Authority prior to the development.

- (8) To regularly submit progress reports and certificates as required by the Competent Authority.
- (9) To obtain occupancy certificate from the Competent Authority prior use being made of the development.
- (10) To inform in writing the Competent Authority within 7 days, if for any reason he ceases to be relieved of his responsibilities as the owner of the development.
- (11) To inform in writing the Competent Authority within 7 days if for any reason any of the registered professionals appointed by him have been relieved of their responsibilities.

8.8 Appointment of professionals under special circumstances

8.8.1 In Case Of termination of professionals:

In case of termination of employment, of any, of the, professional persons employed under byelaws. It shall be the duty of the person employed to intimate immediately in writing to the Competent Authority specifically indicating the stage up to which he has supervised the construction. In the absence of any such intimation and until such intimation has been received, person so last engaged shall be deemed to continue to supervise the work in question.

8.8.2 In Case of death of professionals:

Where any of the professional persons employed under these byelaws and required for the execution of the projects dies or ceases to be employee before such building work is completed, the further execution of such building or the further execution of such work shall forthwith be suspended until another person as required under these byelaws is engaged and his name has been duly communicated to the Competent Authority.

APPENDIX A - FORMS

Form 1 Application for License to erect/re-erect/alter a Building or part of a Building (Byelaws 4.1, 4.2)

Ref No	Date:
To The Commissioner, Gulbarga mahanagar palike Gulbarga.	
Sir,	
I/We hereby give notice that I/we intend to erect/re-ere property No	o, ward No
No will supervise the construction.	
The necessary documents, as listed in byelaw 4.2, are enc	losed herewith.
I further give the following information:	
a) The occupancy of building is intended to	use.
b) The source of water for the construction is	
c) The duration of stocking of building materials is	
I request that the plans submitted be approved and permis-	sion be accorded to execute
the work.	
Signature of the owner	
Name of the owner	
(in block letters)	
Address of owner	
Tel: Checklist for the documents to be enclosed with Form	1 (Byolaw 4.2)
(Note: All documents are NOT needed for small buildin	
1) Undertaking for hazard safety requirement, as per the form prescribed 2) Certificate as per the form prescribed in Form 3	
3) Certificates prescribed as per the form in Form 4 and Form 12 {12a (i.e.	., Part I)
and 12b or 12c or 12d as applicable} 4) Certificate prescribed as per the form in Form No.5	
5) Title deed/possession certificate6) Property Book/Khata Certificate and Latest Assessment Book Extract	
7) Survey Sketch	
8) Land Conversion/Alienation Certificate and Sketch9) Up-to Date Tax Paid Receipt (certified copies)	
10) Previously Sanctioned Plan, if any	
11) Drawings (Key Plan, Site Plan, Building Plan, Plan of Parking Area) 12) Detailed Floor-wise area calculation with sketches (color index)	
13) License fee/Scrutiny fee Receipt14) Indemnity Bond on stamp paper (in case of high-rise buildings).	
15) Schedule II of the National Building Organization duly filled in duplicat	e as per Form 22
16) Foundation Certificate17) Sewage Disposal Arrangements (drawings)	
18) Other Certificates, as applicable	
19) Any other information	

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Form 2 Certificate of Undertaking for Hazard Safety Requirement {Byelaw 4.2(1)}

Ref No	Date:
To The Commissioner, Gulbarga mahanagar palike Gulbarga.	
Ref: Proposed work of	
(Title of project)	
Plot/building bearing property no plot no,, city survey no locality/street	, ward no.
1. Certified that the building plans submitted for approval will satisfy the safety requnder the "Gulbarga Mahanagar Palike Building Bye laws 2011" and the information factually correct to the best of our knowledge and understanding.	
2. It is also certified that the structural design including safety from hazards based be duly incorporated in the design of the building and these provisions shall be construction.	
3. Footpath and road will not be used for stocking building materials as well as devent of violation of this undertaking, we understand that the license will be suspe	
Owner:	
Name in Block Letters	-
Signature with date	_
Address	_
	_
Pin code	
Tel	
Developer on Record	
Name in Block Letters	
Signature with date	
Registration No	
Validity date	
Address	_
Pin code	_
Tel	

Structural Engineer on Record	
Name in Block Letters	
Signature with date	
Registration No	
Validity date	
Address	
Pin code	
Tel	
Architect on Record/ Engineer on I	Record
Name in Block Letters	
Signature with date	
Registration No	
Validity date	
Address	
Pin code	
Tel	

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Form 3 Certificate of Undertaking of Architect on Record/Engineer on Record {Byelaw 4.2(2)}

{Byelaw 4.2(2)}	
Ref No	Date:
To The Commissioner Gulbarga mahanagar palike Gulbarga.	
Ref: Proposed work of	
(Name of Owner) Address:	
	
Pin code: Tel. No.:	
I am a member of Council of Architects/Institution of Engineers (Architect/Engineer and I am possessing current registration to act as register I hereby certify that I am appointed as the Architect on Record / Engineer plans, sections and details as required under the provisions of the Act / Bu mentioned project and that I have prepared and signed the same and that shall be carried out under my direction, and supervision of a Construction the approved drawings. I am fully conversant with the provisions of the Byel about my duties and responsibilities under the same and I undertake to fulfill except under the circumstances of natural calamities. I also undertake to adequate measure to be taken by the owners for installation of plumbing, dr supply. The appointment of a Construction Engineer on Record, building control electrical contractor shall be made at the appropriate stage by the owner commences. I also undertake to report to the Authority within 3 days of any deviation for violation of the Building Byelaws/Zoning regulations, observed during the province.	red Architect/Engineer. er on Record to prepare the ilding Byelaws for the above the execution of the project Engineer on Record, as per aws, which are in force, and them in all respects, provide my guidance for the ainage, sanitation and water intractor, plumbing contractor before the relevant work from the sanctioned plan, or
Signature:	
Date:	
Reg. No.:	
Validity date:	
Name:	
Address:	

Pin code: _____

Tel. No.: _____

Form 4 Certificate of Undertaking of Structural Engineer on Record {Byelaw 4.2(3)}

Ref No	(=)011111 11=(0))	Date:
To The Commissioner, Gulbarga mahanagar palike Gulbarga	•	
(Title of the project) Plot/building bearing proper	rty no plot no,, city surve	ey
(Name of Owner) Address:		
Pin code:		
the Structural Engineer or design and detailed structu and responsibilities under the I have prepared and signed I undertake to carry out a proposed building as per to Design Basis Report. I undertake to supply the	al Engineer (RSE) Grade This is to certiful Record to prepare the Structural design by the Iral drawings for above mentioned project. I also the Byelaws and assure that I shall fulfill them it I a Structural Design Basis Report (SDBR). In detailed structural design and prepare detained at Indian Standard Specifications, and owner and the construction engineer the detailed retailed to intimate the Authority in writing.	pasis report, detailed structural im fully conversant of my duties in all respects. Tailed structural drawings of the d as indicated in the Structural
Signature:		_
Date:		_
Reg. No.:		-
Validity date:		_
Name:		
Address:		
Pin code:		

Tel. No.: _____

Form 5 Certificate of Undertaking of Construction Engineer on Record {Byelaw 4.2((4)}

{Byelaw 4.2((4)}	
Ref No	Date:
To The Commissioner, Gulbarga mahanagar palike Gulbarga	
Ref: Proposed work of	
Pin code: Tel. No.:	_
I possess a current Registration to act as Registered Construction Engineer. I hereby certify that I am appointed as a Construction Engineer on Record on project and that all the works under my charge shall be executed in accordance specifications prepared for this project. I am fully conversant with the provisions of the Byelaws, which are in force and Responsibilities under the same, and I undertake to fulfill them in all respect.	with the drawings and
Signature:	
Date:	
Reg. No.:	
Validity date:	
Name:	
Address:	
Pin code:	

Tel. No.: _____

Form 6

Ref No

Application for License to
i) to develop or redevelop any piece of land
ii) convert or alienate any piece of land
iii) change the land use under special circumstances (Byelaw 4.1& 4.2) Date:

To The Commissioner, Gulbarga mahanagar palike Gulbarga
Sir,
I/We intend to develop/re-develop the land/convert or alienate the land/change the land use under special circumstances as described in the enclosure. I/We forward herewith the following in quadruplicate duly signed by me/us
I/We request that the license may be granted.
Signature of the Applicant:
Name of the Applicant (In Block Letters):
Address of the Applicant:
Pin code:
Tel. No:
Date:

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Form 7 Sanction of License (Byelaw 4.28)

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Form 8 Refusal of License (Byelaw 4.28)

(2)0.2
From The Commissioner Gulbarga mahanagar palike Gulbarga
То
Sir/ Madam,
With reference to your application nodatedfor grant of license for the erection/ making alteration / renewal of the
building bearing property No
I have to inform you that sanction has been refused by the Authority on the following grounds:
Office Communication No
Dated
Signature of Authority
Name, designation and Address of the Authority
Office Stamp:

Form 9

Grant of license to

- (i) develop or redevelop any piece of land
 (ii) convert or alienate any piece of land
 (iii) change the land use under special circumstances
 (Byelaw 4.28)

License to	is	hereby	granted	1	refused	under	Byelaw	4.28
(Name of the	person)							
for								
(Description of	of work)							
On the follow	ing cond	itions:						
(In case of gr	ant)							
(In case of re	fusal)							
a) Documents Following doc i) ii) b) Site Cleara (i) Site is not - Road line - Reservation - Zone	cuments ance: - cleared v	/ plans / N.O.	C/ undertakin	gs are no	ot submitted.			
- Other (spec	use is r	not permissib	le according	to the	width of r	oad as per	the Building	Byelaw
Office Comm	unication	No						
Dated								
Signature of A	Authority		./					
Name, desigr	nation an	d Address of	the Authority					
Office Stamp	:							

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Form 10 Notice of Commencement of Work (Byelaw 4.29.1)

Ref No	,	Date:
To The Commissioner, Gulbarga Mahanagar Palike, Gulbarga.		
I hereby certify that the erection/ Noplot No noward N	, Nolo	bearing property city survey ocality / street
a) Architect/Engineer (name)	,	bearing registration
No b) Structural Engineer (name) No		bearing registration
c) Construction Engineer (name)		bearing registration
No in accordance with plans sanctioned asdated		LP
is to commence on		
Signature of the Owner:		
Name of the Owner (In Block Letters):		
Address of the Owner:		
Pin code:		_
Tel. No:		
Date:	**	

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Form 11 Commencement Certificate (Byelaw 4.29.1)

To
Sir,
Subject: Issue of permission for the commencement of work of the building sanctioned in license noLP
The property no
 The work should be carried out strictly as per the sanctioned plan and Building Byelaws without any deviations, alterations or violations. When the work has reached the completion of the foundation or footing or columns fixed, the Corporation shall be intimated regarding the progress of work so as to facilitate the Authority to inspect and verify as to whether the construction is being carried out as per the sanctioned plan and Byelaws. Other conditions.
Office Communication No.
Office Communication No
Dated
Signature of Authority
Name, designation and Address of the Authority
Office Stamp:

Form 12a **Structural Design Basis Report (Part 1)** {Byelaw 4.2(3)}

- This report to accompany the application for Building/Development License.
 In case information on items 3, 10, 17, 18, 19 cannot be given at this time, it should be submitted at least one week before commencement of construction.

	before commencement of construction.					
SI.	General Data Description Information Notes					
No.	Description	IIIIOIIIIalioii	Notes			
1	Address of the Building					
'	l =					
	Property No.Plot No.					
	City survey No.					
	Ward No.					
	Locality/ Street					
	District					
2	Name of the owner					
2 3	Name of the builder on record					
4						
5	Name of Architect/Engineer on Record Name of structural engineer on record					
6	Use of building					
7	No. of storey's above the ground level (
,	including the storey's to be added later, if any)					
8	No. of basements below ground level					
9	Type of structure					
3	Load bearing walls.					
	R.C.C. Frame					
	R.C.C. and Shear walls.					
	Steel Frame					
10	Soil Data					
10	Type of soil.		IS: 1893 CL. 6.3.5.2			
	Design safe bearing capacity.		IS: 1904			
11	Dead Loads(unit weights adopted)					
• • •	Earth					
	Water					
	Brick masonry					
	Plain cement concrete		IS: 875 PART 1			
	Reinforced cement concrete					
	Floor finish					
	Other fill materials					
	Piazza floor fill and landscape					
12	Imposed (Live) loads.					
	Piazza floor accessible for fire tender.					
	Piazza floor not accessible for fire tender		IS: 875 PART 2			
	Floor loads*					
	Roof loads**					
13	Cyclone / wind					
-	Speed		IS: 875 PART 3			
	Design pressure intensity					
14	Seismic Zone		IS: 1893 (2002)			
15	Importance factor		IS: 1893(2002) table 6			
16	Seismic zone factor (Z)		IS: 1893(2002) table 2			
17	Response reduction factor		IS: 1893(2002) table 2			
18	Fundamental natural period – approximate		IS: 1893 CL. 7.6			
19	Design horizontal spectrum value (Ah)		IS: 1893 CL. 6.4.2			
20	Expansion / separation joints***		-			
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	l			

- Enclose small scale plans of each floor on A1 sheets
- Incase terrace garden is provided, indicate additional fill load and live load
- Indicate on a small scale plan on A4 size sheet

Form 12b **Structural Design Basis Report (part 2)** {Byelaw 4.2(3)}

Part	2 Load Bearing Masonry Buildings								
SI.	Description		Informatio	n		Not	es		
No.									
1	Building category				IS: 4326 CI. 7				
					Read with IS 1893				
					Zone	Ш	III	IV	V
					D. H.F.				
					Building				
					Ordinary	В	С	D	Е
						С	D	E	E
					Important	C	יין	=	_
2	Basement provided								
3	No. of floors including ground floor								
4	Type of Masonry wall								
5	Type of mix and mortar				IS: 4326 C	L. 8.	1.2		
6 ¹	Re. Size and position of openings								
	(See Note No. 1 at the end of this table)								
	Minimum distance (b5) Datia (b4 a b b a b b b) (444)								
	• Ratio (b1 + b2 + b3) / 11								
	or (b6 + b7) / 12 • Minimum pier between consequent			IS: 4326 Table 4, fig. 7					
	opening (b4)				10. 4320 1	abic .	- , 119.	'	
	Vertical distance (h3)								
	Ratio of wall height to thickness.								
	Ratio of wall length between cross walls								
	to thickness.								
7 ²	Horizontal seismic band	P ³	TP⁴	NA ⁵	See note 2	.3.4	& 5 a	t the	end
•					of this table				
	At plinth level								
	At window cill level				IS: 4326 C	L. 8.4	4.6		
	At Lintel level				IS: 4326 C	L.8.3			
	At ceiling level				IS: 4326 C	L.8.4	.2		
	At Eave level (Sloping roof)				IS: 4326 C	L 8.3			
	At top of gable walls (Sloping roof)				IS: 4326 C	L 8.3			
	At Top of ridge walls (Sloping roof)				IS: 4326 C	L 8.4	.4		
8	Vertical reinforcing bar								
	At corners and T junctions of walls				IS: 4326 C				
	At jambs of door & window openings				IS: 4326 C	L. 8.4	1.9		
9	Integration of Prefab roofing / flooring								
	elements through reinforced concrete			1	IS: 4326 C	L. 9.	1.4		
	screed.								
10	Horizontal bracings in pitched truss								
	In horizontal plane at the level of the ties.			<u> </u>					
	 In the slopes of pitched roof. 		1						

¹ Information in Item No. 6 should be given on separate A4 sized sheets for all walls with large number of openings

² Tick one of the Boxes

³ "P" indicates "Information Provided"

⁴ "TP" indicates "Information to be Provided"

⁵ "NA" indicates "Not Applicable"

Form 12c Structural Design Basis Report (part 3) {Byelaw 4.2(3)}

S. No. Description Information Notes 1 Type of Building. • Regular frames. • Regular frames with shear walls. • Irregular frames with shear walls. • Soft Storey. 2 Number of Basements 3 Number of floors including ground floor 4 Horizontal floor system. • Beams & Slabs. • Waffles. • Ribbed Floor. • Flat Slab with drops. • Flat Plate with drops. 5 Soil Data • Type of Soil. • Recommended type of foundation • Independent footing • Raft • Piles • Recommended bearing capacity of soil. • Recommended bearing capacity of soil. • Recommended lype, length, diameter and local capacity of piles. • Depth of water table. • Chemical analysis of ground water. • Chemical analysis of soil. 6 Foundations. • Depth below ground level. • Type • Independent • Interconnected. • Raft. • Piles 7 System of Interconnecting foundations • Plinth beams • Foundation beams 8 Grades of concrete used in different parts of buildings. 9 Method of analysis used 10 Computer software used 11 Torsion Included 12 Base Shear a) Based on approximate Fundamental period. b) Based on approximate Fundamental period. b) Based on Dynamic analysis. c) Ratio of a/b 15: 1893 CL 7.7.0 15: 1893 CL 7.70 15	Part 3 Reir	{Byelaw nforced Concrete Framed Buildings	T.2(0)j	
Type of Building. Regular frames. Regular frames. Regular frames with shear walls. Irregular frames with shear walls. Irregular frames with shear walls. Irregular frames with shear walls. Soft Storey. Number of basements Number of loors including ground floor Horizontal floor system. Beams & Slabs. Waffles. Ribbed Floor. Flat Plate with drops. Flat Plate with drops. Flat Plate with drops. Soil Data Type of Soil. Recommended type of foundation Independent footing Recommended bearing capacity of soil. Recommended bearing capacity of soil. Recommended by e. length, diameter and local capacity of piles. Depth of water table. Chemical analysis of ground water. Chemical analysis of ground water. Chemical analysis of soil. Foundations. Depth below ground level. Raft. Piles. System of interconnecting foundations Interconnected. Raft. Piles. System of interconnecting foundations Pilnth beams Foundation beams Grades of concrete used in different parts of buildings. Method of analysis used Computer software used Computer software used Computer software used Depth of season approximate Fundamental period. Base Shear Base Shear Bis: 1893 CL 7.7 Provide sketcho Is: 1893 CL 7.7 Provide sketcho Is: 1893 CL 7.7 Provide sketcho Is: 1893 CL 7.70		_	Information	Notes
Regular frames Regular frames Regular frames Irregular frames Irregular frames Irregular frames with shear walls. Soft Storey. Number of basements Number of floors including ground floor Horizontal floor system. Beams & Slabs. Waffles. Ribbed Floor. Flat Slab with drops. Flat Plate with drops. Flat Plate with drops. Flat Plate with drops. Flat Plate with drops. Recommended type of foundation Independent footing Raft Piles Recommended type, length, diameter and local capacity of piles. Depth of water table. Chemical analysis of ground water. Chemical analysis of ground water. Chemical analysis of soil. Foundations. Depth below ground level. Type Independent Interconnected. Raft. Piles. System of interconnecting foundations Piloth beams Foundation beams Foundat		•	mioringuori	110100
Regular frames with shear walls. Irregular frames. Irregular frames with shear walls. Soft Storey. Number of basements Number of floors including ground floor Horizontal floor system. Beams & Slabs. Waffles. Ribbed Floor. Flat Plate with drops. Flat Plate with drops. Flat Plate with drops. Flat Plate with drops. Soil Data Type of Soil. Recommended type of foundation Independent footing Raft Piles Recommended bearing capacity of soil. Recommended bype, length, diameter and local capacity of piles. Depth of water table. Chemical analysis of ground water. Chemical analysis of soil. Foundations. Depth below ground level. Type Independent Interconnected. Raft. Piles. System of interconnecting foundations Plinth beams Foundation beams Foundati		-		
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14 The Column of Soft ground storey IS: 1893 CL 7.10	. •			
	14			IS: 1893 CL 7.10
specially designed.		specially designed.		

15	Clear Minimum cover provided in,	
	FootingsColumns.Beams.Slabs.	
	• Walls.	
16	Ductile Detailing of R.C. Frame	
	Type of reinforcement used	IS: 456 CL 5.6
	Minimum dimension of beam	IS 13920 CL. 6.1
	Minimum dimension of columns	IS 13932 CL 7.1.2
	Minimum percentage of reinforcement of beams at any cross-section	IS: 456 CL 26.5.1.1(b)
	Maximum percentage of reinforcement of beams at any cross-section	IS: 13920 CL 6.2.1
	 Spacing of transverse reinforcement in 2-d length of beams near the ends. 	IS: 456 CL 26.5.1.1 (b)
	 Ratio of capacity of beams in Shear to capacity of beams in flexure. 	IS: 13920 CL. 6.2.2
	Maximum percentage of reinforcement in column	IS:13920 CL.6.3.5
	 Confining stirrups near ends of columns and in beam-column joints Diameter Spacing 	IS: 456 CL.26.5.3.1
	Ratio of shear capacity of columns to maximum seismic shear in the storey.	IS: 13920 CL. 4

General Notes

- 1. A certificate to the effect that this report will be completed and submitted at least one month before commencement of Construction shall be submitted with the application for Building Development Permission.
- 2. In addition to the completed report following additional information shall be submitted, at the latest, one month before commencement of Construction.

Foundations

Incase raft foundation has been adopted indicate K value used for analysis of the raft. Incase pile foundations have been used give full particulars of the piles, type, dia, length, capacity. In case of high water table indicate system of countering water pressure, and indicate the existing water table, and that assumed to design foundations. Idealization for Earthquake analysis In case of a composite system of shear walls and rigid frames, give distribution of base shear in the two systems on the basis of analysis, and that used for design of each system. Indicate the idealization of frames and shear walls adopted in the analysis with the help of sketches. Submit framing plans of each floor In case of basements, indicate the system used to contain earth pressures.

Form 12d Structural Design Basis Report (Part 4) {Byelaw 4.2 (3)}

Part 4 Buildings in Structural Steel					
S. No.	Description	Information	Notes		
1	Adopted method of design.	Simple Semi-rigid Rigid	 IS: 800; Cl. 3.4.4 IS: 800; Cl. 3.4.5 IS: 800; Cl. 3.4.6 		
2	Design based on.	Elastic AnalysisPlastic Analysis	IS: 800; Section-9 SP: 6(6)		
3	Floor Construction.	CompositeNon CompositeBoarded			
4	Roof Construction.	CompositeNon CompositeMetalAny other			
5	Horizontal force resisting system adopted.	o Frameso Braced frameso Frames & shear walls	Note: Seismic force as per IS: 1893 would depend on the system.		
6	Slenderness ratios maintained.	 Members defined in table 3.1 	IS:800; CL. 3.7		
7	Member deflection limited to	 beams, rafters, crane girders, purlins top of columns. 	IS: 800; CL. 3.13		
8	Structural Members	Encased in concreteNot encased	IS: 800; Section 10		
9	Proposed Material	General weld-ableHigh strengthCold formedTubular	o IS: 2062 o IS: 8500 o IS: 801,811 o IS: 806		
10	Minimum metal thickness specified for corrosion protection	Hot rolled sectionsCold rolled sectionsTubes	IS: 800, CL.3.8, Cl. 3.8.1 to Cl. 3.8.4, IS: 800 CL. 3.8.5		
11	Structural Connections	 Rivets C.T. Bolts S.H.F.G. Bolts Black Bolts Welding- Field shop (Specify welding type proposed) Composite. 	IS: 800, Section-8 IS: 1929,2155,1149 IS: 6639, 1367 IS: 3757, 4000 IS: 1363, 1367 IS: 816, 814, 1395, 7280, 3613, 6419, 6560, 813, 9595		
12	Minimum Fire rating proposed	 Rating hours Method proposed: In tumescent painting Spraying Quilting Fire retardant boarding 	IS: 1641, 1642, 1643		

Form 13 Progress Certificate: Plinth Stage (Byelaw 4.30.1)

(Byelaw 4.30.1)
(Plinth Stage/In case of basement casting of basement slab)

Ref. no.	Date:
Owner's Name:	Location:
Plot/building bearing property No	plot no,,
city survey No	,Ward No
locality/street	
To The Commissioner Gulbarga mahanagar palike	
Gulbarga	
3	
Sir,	
We hereby inform you that the work of ex	ecution of the building as per approved plan, working drawing
and structural drawings has reached the P	linth Level and is executed under our supervision.
We declare that the amended plan is not n	ecessary at this stage.
Yours faithfully,	
Owner:	
Signature of the Owner:	
Name of the Owner (In Block Letters):	
Address of the Owner:	
Pin code:	
Tel. No: Date:	
Developer on Record:	
Name in Block Letters	
Signature with date	
Registration No	
Validity date	
Address	
Pin code Tel Date:	

Construction Engineer on Record:

Name in Block Letters	
Signature with date	
Registration No	
Validity date	
Address	
Pin code	
Tel	

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Form 14 Progress Certificate: First Storey (Byelaw 4.30.1)

Ref. no.	Date:
Owner's Name: Plot/building bearing property No,Ward I locality/street	Location: plot no,, No
To The Commissioner Gulbarga mahanagar palike Gulbarga	
Sir,	
We hereby inform you that the work of execution	of the building as per approved plan, working drawing
and structural drawings has reached the First Stor	
We declare that the amended plan is not necessa	ry at this stage.
Yours faithfully,	
Owner:	
Signature of the Owner:	
Name of the Owner (In Block Letters):	
Address of the Owner:	
Pin code:	
Tel. No:	
Date:	
Developer on Record:	
Name in Block Letters	
Signature with date	
Registration No	·
Validity date	
Address	
Pin code	
Tel	

Construction	Engineer	on	Record:
CONSUMERION		VII	IXECUIU.

Name in Block Letters	
Signature with date	
Registration No	
Validity date	
Address	
Pin code	
Tel	

Form 15 Progress Certificate: Middle Storey (in case of high-rise buildings) (Byelaw 4.30.1)

Ref. no.	Date:
Owner's Name: Plot/building bearing property No	
To The Commissioner Gulbarga mahanagar palike Gulbarga	
Sir,	
We hereby inform you that the work of execution of the buildi working drawing and structural drawings has reached theStorey Level and is executed under our supervision. We declare that the amended plan is not necessary at this st	
Yours faithfully,	
Owner:	
Signature of the Owner:	
Name of the Owner (In Block Letters):	
Address of the Owner:	
Pin code:	
Tel. No:	
Date:	
Developer on Record:	
Name in Block Letters	
Signature with date	
Registration No	
Validity date	
Address	
Pin code	
Tel	

Construction Engineer on Record:

Name in Block Letters	
Signature with date	
Registration No	
Validity date	
Address	
Pin code	
Tel	

Form 16 Progress Certificate; Last Storey (Byelaw 4.30.1)

Ref. no.	Date:
Owner's Name: Plot/building bearing property No,Ward No. locality/street,	
To The Commissioner Gulbarga mahanagar palike Gulbarga	
Sir,	
We hereby inform you that the work of execution of the working drawing and structural drawings has reached Storey Level (last storey level) and is executed under We declare that the amended plan is not necessary at	theour supervision.
Yours faithfully,	
Owner:	
Signature of the Owner:	
Name of the Owner (In Block Letters):	
Address of the Owner:	
Pin code:	
Tel. No:	
Date:	
Developer on Record:	
Name in Block Letters	
Signature with date	
Registration No	
Validity date	
Address	
Pin code	
Tel	
l el	

Construction Engineer on Record:

Name in Block Letters	
Signature with date	
Registration No	
Validity date	
Address	
Pin code	
Tel	

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Form 17 Completion Report (Byelaw 4.31.1)

Ref. no.	Date:
Owner's Name: Plot/building bearing property No city survey No, locality/street	
To The Commissioner Gulbarga mahanagar palike Gulbarga	
Sir,	
of Architect/Construction Engineer who has	ing as per approved plan is completed under the Supervision given the completion certificate which is enclosed herewith. I as per the approved plan/permission granted and to our on is to be used for the purpose as
per approved plan and it shall not be chang	
	ne building erected has been submitted and approved.
4. We have transferred the area of	parking space provided as per approved plan to an
individual/association before for occupancy	certificate.
5. Any subsequent change from the comple	tion drawings will be our responsibility.
6. We request that the occupancy certificate	e for the premises be issued.
Yours faithfully,	
Owner:	
Signature of the Owner:	
Name of the Owner (In Block Letters):	
Address of the Owner:	
Pin code:	
Tel. No:	
Date:	
Developer on Record:	
Name in Block Letters	
Signature with date	
Registration No.	

Validity date		 	
Address		 	
Pin code	-		
Tel			

Encl:



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Form 18 Building Completion Report by the Architect/Engineer on Record (Byelaw 4.31.1)

Ref. no.	Date:	
	Location:, ward No.	
To The Commissioner Gulbarga mahanagar palike Gulbarga		
Sir,		
1. The building/s has/have been con	structed according to the sanctioned plan.	
•	constructed as per approved plan and design as per ions prepared by Architect on Record/Engineer on record.	detailed
3. Construction has been done unde	r our supervision / guidance and adheres to	
the drawings submitted.		
Yours faithfully,		
Architect / Engineer on Record:		
Name in Block Letters		
Signature with date		
Registration No		
Validity date		
Address		
Pin code		
Tel		

of

Gulbarga Mahanagar Palike Draft Building Byelaws 2011

Form 19 Building Completion Report by the Construction Engineer on Record (Byelaw 4.31.1)

Ref. no.	Date:	
	Location: aring property Noplot no,,Ward No	
To The Commissio Gulbarga maha Gulbarga		
Sir,		
1. The building/s	s has/have been constructed according to the sanctioned plan.	
2. The building/s	s has / have been constructed as per the	
✓ Detailed Record	structural drawings and structural specifications prepared by the Structural Engineer of	'n
✓ The det	ailed Architectural drawings and Architectural specifications prepared by the Architect of	'n
✓ Detailed	drawings and specifications of all services	
3. All materials	used in the construction have been tested as provided in specifications and a record	of
test reports has	been kept.	
Yours faithfully,		
Construction E	ingineer on Record:	
Name in Block I	.etters	
Signature with o	ate	
Registration No		
Validity date		
Address		
Pin code		
Tol		

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Form 20 Building Completion Report by the Structural Engineer on Record (Byelaw 4.31.1)

Ref. no. Date:	:
Owner's Name: Plot/building bearing property No	
To The Commissioner Gulbarga mahanagar palike Gulbarga	
Sir,	
This is to certify that detailed structural drawings of the buildings/s has / have been probasis of a detailed analysis and a detailed design carried out according to relevant prolatest Indian Standard Codes, National Building Code and as indicated in the structural	evisions of the
report.	
Yours faithfully,	
Structural Engineer on Record:	
Name in Block Letters	
Signature with date	
Registration No.	
Validity date	
Address	
Pin code	

Form 21 Occupancy Certificate (OC) (Byelaw 4.31.1)

A plan was sanctioned for construction ofbuilding consisting	រូ of
Vide LP No	/
dt:	
On receipt of the intimation of the completion of the building from the Owner/Developer, the building v	was
inspected by the and it was found that the applicant	has
built the building according to the sanctioned plan/effected certain changes from the sanctioned p	lan.
These changes were regularized by the Commissioner in his note dated	as
recommended by the by levying a penalty of Rsafter	
ensuring that the deviations are within the permissible limit of 5% from the sanctioned plan.	
The applicant has paid a sum of Rs(Rup	ees
	the
compounding fine. Hence, the deviations affected by the applicant are regularized.	
Therefore, permission is granted to occupy the building forpurpose	at
vide LP consisting	of
with the following details.	

Floor Description	Area	No. of Units / Use of the floor	Remarks

And subject to the following conditions:

1. He/she shall not add or alter materially, the structure or a part of the structure there off without specific permission of GMP. In the event of the applicant violating, the GMP has the right to demolish the deviated/altered/added portion without any prior notice.

- 2. He/she shall construct the toilet, facilities for the visitors, drivers and servants at Ground floor Level within the plinth area of the building within 3 months from the date of issue of O.C.
- 3. The basement floor must be used for car parking purpose only as per sanctioned plan.
- 4. Other conditions.

On default of the above	ve conditions, the O.C. issued will be withdrawn.
Office Communication	1 No
Dated	
Signature of Authority	·
Name, designation ar	nd Address of the Authority
Office Stamp:	

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Form 22 SCHEDULE I/II OF THE NATIONAL BUILDING ORGANISATION (Byelaw 4.2)

Government of India, Ministry of Housing and Urban Poverty Alleviation National Building Organization

Schedule I/II return for the year ending 31st March

the tot	ule I is to be filled by field units of Cenal cost of the projects undertaken, new e filled by all builders in Class I, Class I	or continuing,	costing Rs 25, 00, 000	
1. Ider	ntification:			
i.	Sector-Public/Private:			
ii.	Name of the Project			
2. Loc	ation:			
	Place	District		Town
	State	Rural/Urban		
3. Date	e:			
i.	Date of Commencement			
ii.	Total Approved Cost of the Project			
4. Exe	cuting Agency:		(Code):	
5. Nan	ne of Construction:		(Code):	
6. Type of Building: (Code):				
7. Tota	al Plinth Area of all the floors in the Proj	ects in Sq. Mt:		
8. Tota	al Floor Area of all the floors in the Proje	ects in Sq.Mt:		

10. No. of dwelling units in the project by:(i) EWS(ii) LIG

(iii) MIG (iv)HIG

11. Whether project is completed: (Code):

9. If Code 1 in Item 6, then total No. of dwelling units in the Project:

12. If Code 1 & 2 in Item 11, the date of completion of Work:

13. Total Investment made in the project:

Items	Latest Approved Cost		Value of work done		Value of work done since	
			during the current year		beginning of work	
	Material	Labor	Material	Labor	Material	Labor
Building Portion						
Sanitary & Water						
supply						
Electrical fittings						

14. Remarks:

<u>1</u>1

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Codes for:

- Item 4: CPWD-1, MES-2, Railways-3, P & T-4, Central PSU-5, State PSU-6, State PWD/Development Authority/Deptt.-7, Builder/Contractor-8, Private Individual-9
- Item 5: New-1, Additions-2, Alterations-3, Repairs-4
- Item 6: Family Residential-1, Non-family Residential-2, Industrial-3, Commercial-4, Institutional-5, Others-9
- Item 11: Started and completed current year-1, Started in earlier year and completed in current year-2, Ongoing from previous year-3, Started in current year and continuing-4



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Government of India Ministry of Housing and Urban Poverty Alleviation INSTRUCTIONS FOR FILLED-IN SCHEDULE

Return for the year ending 31st March

Schedule-I (Public Sector): This statistical return/schedule is to be filled by all the Central/State/UT's construction agencies such as CPWD/MES/Railways/P & T/PWD's/Development Authorities/Housing Boards/Municipalities etc. and State and Central PSU's, if the total cost of all the projects currently undergoing/new by each field unit separately is Rs. 25 lakhs or more. If the total cost of all the projects undertaken/continuing does not exceed Rs. 25.00 lakhs, a nil report has to be filled for all projects. If the total cost exceeds Rs. 25.00 lakhs, a separate return for all the projects, irrespective of the cost of the individual project, has to be filled.

Schedule-II (Private Sector): This return/schedule is to be filled by all builders/individuals in Class I & II towns and the selected Class III to Class VI towns.

The returns have to be filled with respect of "New Construction" only.

- 1. Identification: Self-explanatory
- **2. Location:** It is to be ascertained here that the building projects are within the town, municipalities, and cantonment areas.

Place, District, State, Rural & Urban are self-explanatory. Town, District & State name should be written.

3. Date of Commencement: When the first physical operations are undertaken on the building site after planning & designing stages i.e., site preparation, delivery of materials & equipment to the site, the start of excavation or the lying of foundation stone.

Approved Costs: The approved cost of the project, which is approved by the competent authority. The amount should be entered here in Rs. 0.00 (Whole Number).

- 4. Executing agency (Codes): Self-explanatory
- 5. Nature of Construction (Codes): Self-explanatory
- 6. Type of Building (Codes): Self-explanatory
- **7. Total plinth area of all the floors in the project in Sq.mt**: Total plinth area means the sum total of plinth of all floors in case of multi-storey buildings or more than one floor is to be calculated here.
- **8.** Total floor area of all the floors in the Projects in Sq.mt (Carpet Area): It means inside roofed area. It includes the area of the rooms, kitchen, bathroom etc. but excludes uncovered area both inside and outside of the structure, eg., Terrace, stair, landing etc. In case of alteration & addition to the existing building, the plinth area & floor area should relate to each other i.e., total floor area may be less than plinth area or equal to plinth area but not more than plinth area.
- 9. If Code 1 in Item 6, then total No. of dwelling units in the project: Self-explanatory
- 10. No. of dwelling units in the Project: The classification of units by category is as follows:

EWS (< 500 sq.ft.)

LIG (500-800 sq.ft.)

MIG (800-1200 sq.ft.)

HIG (> 1200 sq.ft.)

- 11. Whether project is completed: Self-explanatory
- 12. If code 1 & 2 in item 11, date of completion of work: Self-explanatory

13. Total investment made in the project: The information pertaining to total investment to the project is to be collected on different heads

Latest approved cost: This is the cost at which the project is approved by the competent authority. If there is a change in the cost, the latest approved cost is to be given.

Value of work done during the current year: It includes the cost of material incorporated in the structure, cost of labor and appropriate overhead cost incurred during the current year.

Value of work done since beginning of work: It is the total expenditure incurred since the beginning of the project.

14. Remarks: Self-explanatory



Form 23 Foundation Certificate by the Registered Geotechnical Engineer on Record (Byelaw 4.18)

Ref. no.	Date:
Owner's Name: L Plot/building bearing property Noplot no city survey No,Ward No locality/street	
To The Commissioner Gulbarga mahanagar palike Gulbarga	
Ref: Proposed work of	
(Title of the project)	
Name of Owner:	
Address:	
Pin code:	
Tel. No.:	
I am a Registered Geotechnical Engineer (RGE). This is to ce carried out required studies with respect to the proposed construction of the foundation is/is not fit to bear the additional building load new floors are proposed to be added. The excavation depth will/ will not be more than 3m and prequired. The filling height will/ will not be more than 3m and prior approof. The land is low-lying, water logged area. The filling height approval from the authority is/is not required. The site is/is not fit for building construction. (In the case of loand terrains with steep slope). The site can be used for building construction after suitably deslopes. The site is/is not fit for construction of high-rise buildings and will not affect the neighboring sites in any way. Any other observations/remarks. Name in Block Letters	uction. I hereby certify that: d in respect of old buildings above which prior approval from the authority is/is not eval from the authority is/is not required. will/ will not be more than 1m and prior ew-lying, water logging area, hilly regions esigning the foundation and stabilizing the amount of excavation/filling involved will.
Signature with date	
Registration No Validity date	
Address	
Pin code	
Tel	

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Form 24 Structural Inspection Report (Byelaw 4.40.1) STRUCTURAL INSPECTION REPORT

(This form has to be completed by registered Structural Engineer after his site Inspection and verification regarding compliance of all recommendation by the owner, which in the opinion of the registered structural engineer are necessary for safety of the structure)

I. Description by title and location of the property including C.S No. etc.

II. Name of the present owner :

III. Description of the structure :

(Briefly describe the property in general and the structure in particular)

(a) Function	(b) Framed Construction							
	Residence (with or without shops)	Apartments (with or without shops)	Office Building	Shopping Centre	School, College	Hostel	Auditoria	Factory
	1	2	3	4	5	6	7	8
A. Load bearing masonry wall construction								
B. Framed structure								
C. Construction and structural materials	Critical load bearing element	Brick	RCC	Stone	Timber	Steel		
	Roof Floor	RCC	Timber	RBC	Steel	Jack arch		

IV. Year of construction

Year of subsequent additions or rectification's (Please describe briefly the nature of additions or rectifications)

V. Date of last inspection report filed last filed by whom (This does not apply to the first report)

VI. Soil on which building is founded

Any change subsequent to construction
 Nearby open excavation

Nearby collection of water

Proximity of drain

Underground water-tankRain water (RW) pipe out-lets

Settlements

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VII.	The Super-structure (R.C.C. Frame structure)
	 Crack in beam or column nature and extent of crack probable Causes
VIII.	The Super-Structure (Steel Structure) Paintings Corrosion Joint, nuts, bolts, rivets, welds, gusset plates Bending or buckling of members Base plate connections with columns or pedestals Loading Loading
IX.	The Super-Structure (Load bearing masonry structure) Cracks in masonry walls) (Please describe some of the major cracks, their nature, extent and location, with a sketch, if necessary)
X.	Recommendations, if any :
determ The re	to certify that the above is a correct representation of facts as given to me by the owner and as ined by me after Site Inspection to the best of my ability and judgment. commendations made by me to ensure adequate safety of the structure are compiled with by the to my entire satisfaction.
Regist	ered Structural Engineer:
Name i	n Block Letters
Signati	re with date

Registration No.____

Validity date_____

Address____

Tel_____

Pin code_____

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Form 25 Model Performa for Technical Audit Report (Byelaw 4.29.2)

1. Design

3.8.2 Corner Stones

3.9 Overall workmanship

1. Design			
1.1 Design/Drawings available?	Y/N		
Design category	Y/N		
	ollected to refer to Design		
	nsultant/H.O.		
Drawings prepared/checked by competent Authority?	Y/N		
Design Drawings/details			
Structural detailed included	Y/N		
Earthquake/cyclone resistant features included?	Y/N		
Design verified/vetted by Dept./Govt. approved agency/competent authority?	Y/N		
Design changes approved by dept./govt. approved agency/competent authority?	Y/N		
2 Foundation			
2 i duitation			
2.1 Foundation used	Existing/New		
0.0 If ovieting foundation used			
2.2 If existing foundation used	50 /50 70/ 70		
2.2.1 Depth of foundation below ground	<50cm/50-70/>70cm		
2.2.2 Type of masonry	Stone/Bricks/PCC Blocks		
2.2.3 Thickness of masonry (above ground)	23cm/35/>35		
2.2.4 Mortar used	Cement/Sand/Lime/Mud		
2.2.5 Mix of cement mortar	1:4/1:6/Leaner		
2.2.6 Height up to Plinth	cm		
2.2.7 If stone masonry	Vaa/Na :6 Vaa		
2.2.7.1 Through Stones	Yes/No, if Yes		
2.2.7.2 Corner Stores	Adequate/Inadequate		
2.2.7.2 Corner Stones	Yes/No, if Yes		
2.3 If new foundation used	Adequate/Inadequate		
2.3.1 Depth of foundation below ground	<50/50-70/>70cm		
2.3.2 Type of masonry blocks	stone/bricks/PCC		
2.3.3 Thickness of Masonry above plinth	23 cm/35/>35cm		
2.3.4 Mortar used	Cement /sand/lime/mud		
2.3.5 Mix of cement mortar (1:4)	Yes/No		
2.3.6 Height up to Plinth	<60/>60cm		
2.3.7 If stone masonry	(00/2000III		
2.3.7.1 Through Stones	Yes/No, if Yes		
2.6.7.1 1111000911 0101100	Adequate/Inadequate		
2.3.7.2 Corner Stones	Yes/No, if Yes		
	Adequate/Inadequate		
2.4 Vertical reinforcement in foundation	Yes/No		
3 Walling			
3.1 Type of masonry	Stone/Brick/PCC/Blocks		
3.2 Mortar used	Cement/Sand/Lime/Mud		
3.3 Mix of cement mortar	1:4/1:6/Leaner		
3.4 Thickness of wall	>23cm/23cm/<23cm		
3.5 Mixing of mortar	OK/Not OK		
3.6 Joint Property filled	OK/NOT OK		
3.7 Wetting of bricks	Good/ Medium/ Poor		
3.8 If stone masonry	555aoaiaiiii i 00i		
3.8.1 Through Stones	Yes/No		
2.9.2 Corner Stance	Vos/No		

Yes/No

Good / Medium / Poor

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4 Roofing

4.1 Type of roof

4.2 If sloped

4.3 Purlins

4.4 Truss type

4.5 Anchorage with wall

Flat/Sloping

Morbid tiles/ A.C.sheet/ G.I.

sheet

Angle-Iron / Timber /NA

Adequate/Inadequate/ NA

5 Materials

5.1 Cement

5.1.1 Source

5.1.2 Type of cement

5.1.3 If OPC

5.2 Sand

5.2.1 Type of sand

5.2.2 Presence of deleterious materials

5.3 Coarse Aggregates

5.3.1 Type coarse Aggregates

5.3.2 Presence of deleterious material

5.4 P.C.C. Blocks (Applicable for onsite production)

5.4.1 Type of P.C.C. Blocks

5.4.2 Ratio of concrete in blocks

5.4.3 Interlocking feature

5.4.4 Course aggregates used

5.5 Bricks Blocks, Stone etc.

5.5.1 Strength (field assessment)

5.5.2 Dimensional accuracy

5.6 Concrete

5.6.1. Mix of concrete

5.6.2 Batching

5.6.3 Compaction

5.6.4 Workability

5.6.5 Availability of water

5.6.6 Curing

5.7 Reinforcing Steel

5.7.1 Type of Steel

5.7.2 Source

5.7.3 Whether IS marked

5.7.4 Conditions of bars

5.7.5 Fixing of reinforcement as per drawing

5.7.6 Suitable cover

5.7.7 Spacing of bars

5.7.8 Overlaps as per specifications

5.8 Form Work

5.8.1 Type of Form Work

5.8.2 Use of mould oil

5.8.3 Leakage of cement slurry

5.9 Source

5.9.1 Cement

5.9.2 Sand

5.9.3 Coarse Aggregate

5.9.4 Bricks

5.9.5 PCC Blocks

Authorized Dealer/Market

OPC/PPC/PSC Grade (33/ 43/ 53)

River sand / Stone dust Mild / Moderate/ High

Gravel/ Crushed Stone Mild/ Moderate / High

Solid blocks/Hollow blocks

Yes/No

Natural/ Crushed stone

Low/Medium/High Yes/No

(1:1 ½:3) / (1:2:4)/Design Mix Weigh batching/Volume batching

Vibrators/Thappies and rods

Low / Medium / High Sufficient / Insufficient Satisfactory/Unsatisfactory.

Plain mild steel/HYSD bars Authorized Dealer/Market

Yes/No

Clean/Corroded

Yes/No Yes/No

Regular/Irregular

Yes/No

Timber / Ply board /Steel

Yes/No

Observed/Not observed

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6 Seismic Resistance Features			
6.1 Masonry Structures			
6.1.1 Provision of bands at	Provided	Adequate	
6.1.1.1 Plinth level	Yes/No	Yes/No	
6.1.1.2 Sill level	Yes/No	Yes/No	
6.1.1.3 Lintel level	Yes/No	Yes/No	
6.1.1.4 Roof level (if applicable)	Yes/No	Yes/No	
6.1.2 If sloped roof, whether seismic bands are provide at			
6.1.2.1 Gable wall top	Yes/No	Yes/No	
6.1.2.2 Eaves level	Yes/No	Yes/No	
6.1.3 Provision of vertical steel in masonry at			
6.1.3.1 Each corner	Yes/No	Yes/No	
6.1.3.2 Each T-junction	Yes/No	Yes/No	
6.1.3.3 Each door joint	Yes/No Yes/No		
6.1.3.4 Around each window	Yes/No	Yes/No	
6.1.4 Openings			
6.1.4.1 Total width of openings: <50%/50*-60%/>60%			
(*-42% for double storey)	OK/Not OK		
6.1.4.2 Clearance from corner	OK/Not OK		
6.1.4.3 Pier width between two openings			
6.2 Framed structures			
6.2.1 Ductile detailing			
6.2.1.1 Spacing of stirrup	OK/ Not OK		
6.2.1.2 Sizes of members	OK/Not OK		
6.2.1.3 End anchorage OK/Not OK			
6.2.1.4 Lapping (length, location, etc.) OK/Not OK			
6.2.1.5 Angle of stirrup hook	90/135 degrees	;	
6.3 Any testing carried out by owner/ Engineering Supervisor on	Testing done	Testing results	
6.3.1 Water	Yes/No	OK/Not OK	
6.3.2 Cement	Yes/No	OK/Not OK	
6.3.3 Bricks/PCC blocks/Stones	Yes/No	OK/Not OK	

Yes/No

Yes/No

Yes/No

Yes/No

OK/Not OK

OK/Not OK

OK/Not OK

OK/Not OK

6.3.4 Aggregate

6.3.6 Concrete

6.3.7 Reinforcement

6.3.5 Mortar

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Form 26 Registration of Professionals (Byelaw 8.1)

(Licensing For Architect/Engineer / Structural Engineer/Structural Design Agency/Geotechnical Engineer/Construction Engineer/ Construction Management Agency/Quality Auditor/Quality Audit Agency/ Town Planner/ Electrical Engineer/Developer etc)

APPLICATION FORM

Name:
Address (Local):
Permanent Address:
Telephone No.:
Qualifications:
(Copy of relevant certificates to be attached)
Experience:
Membership of Professional Societies:
Are you serving anywhere?
(Give detailed address of employer and his No Objection Certificate)
Registration (License) /Registration (License) renewal fee/remitted in person/by M. O. etc.
Last year's Registration/License No.
Further particulars, if any
I hereby undertake to abide by all Rules, Byelaws, Standing Orders, Requisitions and instructions given by the Authority and shall carry out duties and responsibilities as prescribed in Gulbarga City Building Byelaws. I also understand that if, I fail to perform my duties as above, the Authority will be entitled to withdraw my Registration/License and forfeit my Registration/licensing fee, if any.
Kindly grant me a new/renewed Registration/License for the yearto
Registration/License Book may be sent to me when ready. I send herewith two passport size copies of my photographs signed by me.
Ref No
Date:
Signature of applicant:

Gulbarga Mahanagar Palike Draft Building Byelaws 2011

Form 27 Application for Permission to demolish a Building Or part of a Building (Byelaw 4)

Ref. no.	Date:
To The Commissioner Gulbarga mahanagar palike Gulbarga	
Sir	
I/We hereby give notice that I/we intend to demolish a bearing property No plot No ward No ward No in accordance with the Building Byelaws of Gulbar and specifications in duplicate duly signed by me/uproposed work. (In case of buildings abutting neighbors property, their written consent for definition of the second sec	no,
I/we will take utmost care with respect to the hazard sa	·
any consequences arising out of this work.	
(Name in block letters)	
Signature of the owner	
Name of the owner	
(In block letters)	
Address of owner	
Tel:	
Note: Only scrutiny fee has to be paid. No other supporting doc. 4.2 are needed to be enclosed with the application.	uments, except item No.(5), (6) and (9) of Byelaw

APPENDIX B

INDIAN STANDARDS

List of Indian Standards for Structural Design

C-1: For General Structural Safety

- 1. IS 456: 2000 Code of Practice for Plain and Reinforced Concrete
- 2. IS 800:1984 Code of Practice for General Construction in Steel
- **3.** IS 801: 1975 Code of Practice for Use of Cold Formal Light Gauge Steel Structural Members in General Building Construction.
- **4.** IS 875 (Part 2):1987 Design loads (other than earthquake) for buildings and structures Part2 Imposed Loads.
- 5. IS 875 (Part 3):1987 Design loads (other than earthquake) for buildings and structures Part 3 Wind Loads
- **6.** IS 875 (Part 4):1987 Design loads (other than earthquake) for buildings and structures Part 4 Snow Loads.
- 7. IS 875 (Part 5):1987 Design loads (other than earthquake) for buildings and structures Part 5 special loads and load combination.
- 8. IS 883:1966 Code of Practice for Design of Structural Timber in Building.
- **9.** IS 1904:1987 Code of Practice for Structural Safety of Buildings: Foundation.
- 10. IS1905:1987 Code of Practice for Structural Safety of Buildings: Masonry Walls.
- 11. IS 2911 (Part 1): Section 1: 1979 Code of Practice for Design and Construction of Pile Foundation
- Part 1: Section 2 Based Cast-in-situ Piles
- Part 1: Section 3 Driven Precast Concrete Piles
- Part 1: Section 4 Based precast Concrete Piles
- Part 2: Timber Piles
- Part 3: Under Reamed Piles
- Part 4: Load Test on Piles

C-2: For Cyclone/Wind Storm Protection

- **12.** IS 875 (3)-1987 Code of Practice for Design Loads (other than Earthquake) for Buildings and Structures, Part 3, Wind Loads.
- **13.** Guidelines (Based on IS 875 (3)-1987) for improving the Cyclonic Resistance of Low rise houses and other building

C-3: For Earthquake Protection

- 14. IS: 1893-2002 Criteria for Earthquake Resistant Design of Structures (Fifth Revision)
- **15.** IS:13920-1993 Ductile Detailing of Reinforced Concrete Structures subjected to Seismic Forces Code of Practice
- **16.** IS:4326-1993 Earthquake Resistant Design and Construction of Buildings Code of Practice (Second Revision)
- 17. IS:13828-1993 Improving Earthquake Resistance of Low Strength Masonry Buildings Guidelines
- 18. IS:13827-1993 Improving Earthquake Resistance of Earthen Buildings –Guidelines
- 19. IS:13935-1993 Repair and Seismic Strengthening of Buildings -Guidelines

C-4: For Protection of Landslide Hazard

- 20. IS 14458 (Part 1): 1998 Guidelines for retaining wall for hill area: Part 1 Selection of type of wall.
- 21. IS 14458 (Part 2): 1997 Guidelines for retaining wall for hill area: Part 2 Design of retaining/breast walls
- 22. IS 14458 (Part 3): 1998 Guidelines for retaining wall for hill area: Part 3 Construction of dry stone walls
- **23.** IS 14496 (Part 2): 1998 Guidelines for preparation of landslide Hazard zonation maps in mountainous terrains: Part 2 Macrozonation

Note: Whenever an Indian Standard including those referred in the National Building Code of India is referred, the latest revision of the same shall be followed.