

MANIPUR



GAZETTE

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No. 253

Imphal, Thursday, December 5, 2024

(Agrahayana 14, 1946)

GOVERNMENT OF MANIPUR MUNICIPAL ADMINISTRATION HOUSING & URBAN DEVELOPMENT DEPARTMENT

NOTIFICATION

Imphal, the 4th December, 2024

No.BBL-101/1/2024-MAHUD-MAHUD-Part(1): Whereas, Town Planning Department, Manipur is in the process of amending the existing Imphal Municipal Corporation Building Bye-laws, 2013 to incorporate the changes recommended by the Ministry of Housing & Urban Affairs, Government of India and whereas the existing building bye-laws of (1) Bishnupur, (2) Jiribam, (3) Kakching, (4) Mayang Imphal, (5) Moirang, (6) Ningthoukhong, (7) Nambol and (8) Thoubal which was introduced based on Model Building Bye-laws of 1998 has not been updated since many years.

And, Whereas, there are no building bye-laws in-force in the remaining ULBs viz., (1) Andro, (2) Heirok, (3) Kakching Khunou, (4) Kumbi, (5) Kwakta, (6) Lamlai, (7) Lamshang, (8) Lilong (IW), (9) Lilong (Thoubal), (10) Oinam, (11) Samurou, (12) Sekmai, (13) Shikhong Sekmai, (14) Sugnu, (15) Thongkhong Laxmi, (16) Wangjing Lamding, (17) Wangoi & (18) Yairipok and Master Plan/ Notified Areas of Manipur (Urbanizable areas within a Master Plan boundary indicated in the Master Plan of a Town but beyond the municipal limits).

And, Whereas, Building Bye-Laws are legal tools used to regulate coverage, height, building bulk, and construction aspects of buildings so as to achieve orderly development of an area. This bye-law is mandatory in nature and serve to protect buildings against fire, earthquake, noise, structural failures and other hazards.

And, Whereas, Notice inviting objections and suggestions on the proposed bye-law was notified vide Notification No. BBL-101/1/2024-MAHUD-MAHUD(Part-1) dated 29.10.2024 and published in 4 (four) local dailies and Town Planning Department website.

And, Whereas, all the objections/suggestions received was placed before the Committee for examination/disposal of the objection/suggestions on the proposed bye-law. The recommendations of the Committee have been incorporated in the bye-law.

Now, therefore, the Governor of Manipur in supersession of all previous orders/notifications issued in this regard is pleased to accord approval for publication of the aforesaid "**The Model Manipur Unified Building Bye-Laws, 2024**" under Section 213 of the Manipur Municipalities Act, 1994 (Act No.43 of 1994) and Section 26(1) of the Manipur Town & Country Planning Act, 1975 (Manipur Act 11 of 1975) for adoption by the Urban Local Bodies and Planning & Development Authority, Manipur and the same is hereby published for general information as ANNEXURE. The ANNEXURE will be available at the Town Planning Department Website <https://tpmanipur.mn.gov.in>.

By Orders and in the name of Governor,

M. JOY SINGH,
Commissioner (MAHUD),
Government of Manipur.

THE MODEL MANIPUR UNIFIED BUILDING BYE-LAWS, 2024

(Under Section 213 of the Manipur Municipalities Act, 1994 (Act No.43 of 1994) and Section 26(1) of the Manipur Town & Country Planning Act, 1975)

CHAPTER-I PRELIMINARY

1. Short title and commencement:

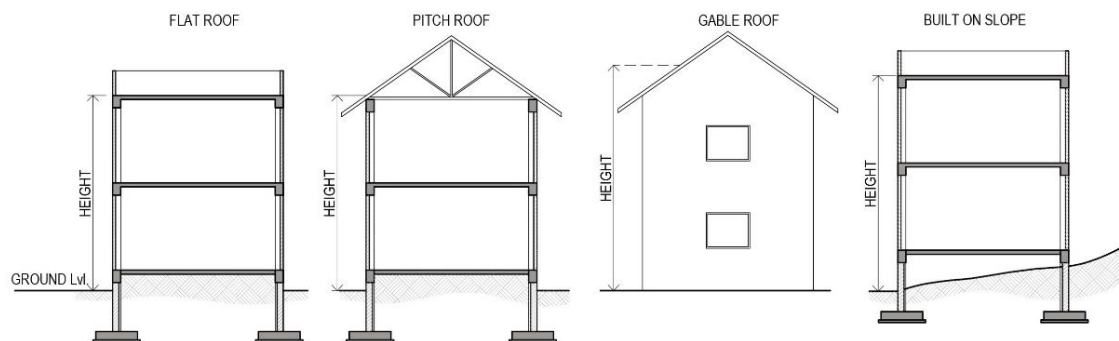
- (1) These Bye-laws may be called the Model Manipur Unified Building Bye-laws, 2024.
- (2) They shall extend to the Master Plan areas or notified Planning areas and area under the jurisdiction of all the Urban Local Bodies of Manipur.
- (3) These Bye-laws shall come into force from the date of their publication in the Official Gazette.

2. In these Bye-Laws unless there is anything repugnant in the subject or context:

- (1) **“Access”** means a clear approach to a plot or a building.
- (2) **“Act”** means Manipur Municipalities Act, 1994 in respect of areas under the jurisdiction of all the Urban Local Bodies and the Manipur Town & Country Planning Act, 1975 in respect of Master Plan areas but beyond the municipal limits.
- (3) **“Affordable Housing”** means the housing schemes for providing affordable housing at low cost to Economically Weaker Sections (EWS) and Low Income Group (LIG) of public and shall include housing whose carpet areas are less than or equal to 66 Sq.Mt.
- (4) **“Air Conditioning”**- The process of treating air so as to control simultaneously its temperature, humidity, purity, distribution and air movement and pressure to meet the requirements of the conditioned space.
- (5) **“Antenna”** means any structure or device used to receive or transmit electromagnetic waves, including both directional antennas, such as panels, micro wave dishes and Omni-directional antennas such as whips but not the satellite earth stations. This definition does not include any structure erected solely for residential or non-commercial individual use such as television antennas, satellite dishes etc.
- (6) **“Application”** means an application made in such form as may be prescribed by the Authority from time to time.
- (7) **“Area”** - In relation to a building means the superficies of a horizontal section thereof made at the plinth level inclusive of the external walls and of such portions of the party walls as belong to the building.
- (8) **“Authorised Officer”** means the officer of the Corporation/Council authorised by the Corporation/Council for the purpose of these bye-laws.
- (9) **“Approved”** means approved by the Corporation/Council.
- (10) **“Balcony”** means a horizontal projection, cantilevered or otherwise including a parapet, handrail, balustrade to serve as passage or sit out place.
- (11) **“Basement”** means the lower storey of a building which is minimum 2/3rd of the floor height below the finished ground level.

- (12) **“Black waste-water”** means the waste water discharged from the water closet, urinals, Septic tanks and municipal solid waste.
- (13) **“Building”** means a structure constructed with any materials whatsoever for any purposes whether used for human habitation or not and includes:
- (a) Foundation, Plinth, walls, floors, roofs, chimneys, plumbing and building services, fixed platforms etc.
 - (b) Verandahs, Balconies, cornices, projections etc.
 - (c) Parts of buildings or anything affixed thereto;
 - (d) Any wall enclosing or intended to enclose any land or space, sign and outdoor display structures; etc.
 - (e) Tanks constructed or fixed for storage of chemicals or chemicals in liquid form and for storage of water, effluent, swimming pools, ponds etc.
 - (f) All types of buildings as defined in Sub-section 25 (a) to (k) below, except tents, shamianas and tarpaulin shelters erected temporarily for temporary purposes and ceremonial occasions shall be considered to be buildings.
- (14) **“Building Height”** means the vertical distance measured
- a) In the case of flat roofs, it is the vertical distance measured from the average ground level around (and contiguous to) the building to the terrace level of the last liveable floor adjacent to the external wall.
 - b) In the case of pitched/sloped roofs, it is the vertical distance measured from the average ground level around (and contiguous to) the building to the point where the external surface of the outer wall intersects the finished surface of the sloping roof.
 - c) Where the gable end of sloping roof faces the access road, it is the vertical distance measured from the average ground level around (and contiguous to) the building to the mid-point between the eaves and the ridge level.
 - d) Where the building is located on a sloped terrain, height shall be calculated from the lowest ground level.

NOTE — Architectural/decorative features extending above terrace shall be ignored for the purpose of this measurement.



- (15) **“Building Line”** means the line up to which the plinth of a building adjoining on a street or on an extension of a street or on a future street may lawfully extend. It includes the lines prescribed, if any, in any scheme.
- (16) **“Building Types”** based on use of premises or activity:
- (a) **“Residential Building”** – includes a building in which sleeping and living accommodation is provided for normal residential purposes with cooking facilities and includes one or more family dwellings, apartment houses, flats and private garages of such buildings.
 - (b) **“Educational Building”** – includes a building exclusively used for a school or college, recognized by the Appropriate Board or University or any other competent Authority involving assembly for instruction, education or recreation incidental to educational use and including a building for such other uses as research institution, it shall also include quarters for essential staff required to reside in the premises and building used as a hostel captive to an educational institution whether situated in its campus or outside.
 - (c) **“Institutional Buildings”**–includes a building constructed by Government , Semi Government Organizations or Registered Trusts and used for medical or other treatment or for an auditorium or complex for cultural and allied activities or for an hospice, care of persons suffering from physical or mental illness, handicap, disease or infirmity, care of orphans, abandoned women, children and infants, convalescents, destitute or aged persons and for penal or correctional detention with restricted liberty of the inmates ordinarily providing sleeping accommodation and includes dharamshalas, hospitals, sanatoria, custodial and penal institutions such as jails, prisons, mental hospitals, houses of correction, detention, and reformatories etc.
 - (d) **“Assembly Building”**- A building or part thereof , where groups of people (not < 50) congregate or gather for amusement, recreation , social, religious, patriotic , civil, travel and similar purposes and this includes buildings of drama and cinemas, theatres, drive in theatres, assembly halls, city halls, town halls, auditoria, exhibition halls, museums, mangal karyalayas, skating rinks, gymnasia, restaurants, eating or boarding houses, places of worship, dance halls, clubs, gymkhanas, and road, railways, air, sea, or other public transportation stations and recreation piers.
 - (e) **“Business Building”**- includes any building or part thereof used principally for transaction of business and or keeping of accounts and records including offices, banks, professional establishments, court houses etc, if their principal function is transaction of business and or keeping of books and records.
 - (f) **“Mercantile Building”** – includes a building or part thereof used as shops, stores or markets for display and sale of whole sale, and or retail goods, or merchandise, including office, storage, and service facilities incidental thereto and located in the same building.
 - (g) **“Industrial Building”**- includes a building or *part thereof wherein products or material re-fabricated, assembled, or processed* such as assembly plants, laboratories, power plants, refineries, gas plants, mills, dairies, and factories. Etc.
 - (h) **“Storage Building”** – A building or part thereof used primarily for storage or shelter of goods, wares, merchandise, and includes a building used as a warehouse, cold

storage, freight depot, transit shed, store house, public garage, hanger, truck terminal, grain elevator, barn and stables.

- (i) “Hazardous Building” – includes a building or part thereof used for:
 - i) Storage, handling, manufacture or processing of radioactive substances or highly combustible or explosive materials or of products which are liable to burn with extreme rapidity and /or producing poisonous fumes or explosive emanations.
 - ii) 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
 - (j) “Mixed Land Use Building”- A building having more than one use where the predominant use is not less than 2/3rd of the total use. The predominant use is to be in conformity with the zoning.
 - (k) “Wholesale establishment”- An establishment wholly or partly engaged in whole sale trade and manufacture, wholesale outlets, including related storage facilities, warehouses and establishments engaged in truck transport including truck transport booking agencies.
- (17) **“Building Types”** based on design and height:
- (a) “Detached Building” means a building with walls and roofs independent of any other building and with open spaces on all sides within the same plot.
 - (b) “Multi-Storied Building or High-Rise Building” means a building above 4 storeys and/or a building exceeding 15 meters or more in height (without stilt and 17.5 m (including stilt).
 - (c) “Semi-Detached Building” means a building detached on three sides with open space as specified in these regulations:
- (18) **“Building Types”** based on other features:
- (a) “Special Building”- includes all buildings like assembly, industrial, buildings used for wholesale establishment, hotels, hostels, hazardous, mixed occupancies with any of the aforesaid occupancies and centrally air-conditioned buildings having total built up area exceeding 500 sqm.
 - (b) “Multi-level car parking” – A building partly below ground level having two or more basements or above ground level primarily to be used for parking of cars, scooters or any other type of light motorized vehicle.
- (19) **“Cabin”** means a non-residential enclosure constructed of non-load bearing partitions.
- (20) **“Carpet Area”** means the covered area of the usable rooms of a dwelling unit at any floor (excluding the area of the walls)
- (21) **“Ceiling Height”** means the vertical distance between the floor and the ceiling.
- (22) **“Central Business District”** A commercial and business centre of a city which contains commercial space and offices (as earmarked in the Master Plan of the concerned towns prepared under Manipur Town & Country Planning Act, 1975).

- (23) “**Chajja**” means a slopping or horizontal structural overhang usually provided over opening on external walls to provide protection from sun and rain.
- (24) “**Chimney**” means an upright shaft containing and encasing one or more flues.
- (25) “**Cornice**” means a sloping or horizontal structural overhang usually provided over openings or external walls to provide protection from sun and rain.
- (26) “**Courtyard**” means a space permanently open to sky, enclosed fully or partially by buildings and may be at ground level or any other level within or adjacent to a building.
- (27) “**Covered Area**” means ground area covered by the building Immediately above plinth level but does not include space covered by
- (a) Garden, rockery, well and well structures, plant nursery, water pool, swimming pool (if uncovered) platform round a tree, tank, fountain, bench with open top and unenclosed on sides by walls and the like;
 - (b) Drainage, culvert, conduit, catch-pit, gully-pit, chamber, gutter and the like; and
 - (c) Compound wall, gate, porch and portico, slide swing uncovered staircases, areas covered by chajja and the like.
- (28) “**Damp Proof Course**” means a course consisting of some appropriate water proofing material provided to prevent penetration of dampness or moisture.
- (29) “**Demolition of Building**” means removal of roof and walls in such a way that the building is brought to an uninhabitable condition, water supply and electricity disconnected.
- (30) “**Demolition of Structure**” means removal of entire super structure above ground level.
- (31) “**Drain**” includes a sewer pipe, ditch, channel and any other device for carrying off sewage, offensive matter, polluted water, sullage, waste water or sub-soil water and any ejectors, compressed air mains, sealed sewage mains and special machinery and apparatus for raising, collecting, expelling or removing sewage or offensive matter to the sewage outfall.
- (32) “**Drainage**” means act, process, method or means or drainage, mode of discharge of water, the system of drains.
- (33) “**Dwelling**” means a building or a portion thereof which is designed or used wholly or principally for residential purposes.
- (34) “**Economically Weaker Section (EWS) Housing**” means the apartments or multi storeyed houses specifically developed for providing residential accommodation to the families belonging to the low-income groups viz., Economically Weaker Section (EWS) with monthly income as fixed by the Government of India from time to time with maximum carpet area of Dwelling unit as 66 sqm.
- (35) “**Encroachment**” means an act to enter into the possession of rights either of permanent or temporary nature on a land or built-up property of local body or State/Central Government.
- (36) “**Entrance**” A doorway or a passage way used as a means of accessing a building or a site.

- (37) **“Existing Building”** means a building or structure existing authorised with the approval of the Authority before the commencement of these Byelaws.
- (38) **“Existing Use”** means use of a building or structure existing authorised with the approval of the Authority before the commencement of these Byelaws.
- (39) **“Exit”** means a passage or means of egress from any building storey or floor area to a street or other open space of safety.
- i. Horizontal exit means an exit which is protected opening through or around a fire well or bridge connecting two or more buildings.
 - ii. Outside exit means an exit used from building to an open area leading to a public way or to an enclosed fire-resistant passage leading to public way.
 - iii. Vertical exit means an exit used for ascending or descending between two or more levels including stairway, fire towers, ramps and fire escapes.
- (40) **“External wall”** means an outer wall of a building not being a party wall even though adjoining to a wall of another building and also means a wall abutting on an interior open space of any building.
- (41) **“EVCI”** means Electric Vehicle Charging Infrastructure.
- (42) **“Flatted factory/industry”** means a multi-storeyed industrial building subdivided into small, separately occupied units, which are used for manufacturing, assembly and storage purposes.
- (43) **“Floor”** means the lower surface in a storey on which one normally walks in a building and does not include a mezzanine floor. The floor at Ground level with direct access to a street or open space shall be called the ground floor; the floor above it shall be termed as floor-1 with the next higher floor being as floor-2 and so on upwards.
- (44) **“Filling Station”** means an area of land including any structures thereon that is or are used or designed to be used for the supply of fuel for the propulsion of vehicles. For the purpose of these byelaws, there shall be deemed to be included within this term any area or structure used or designed to be used for polishing, greasing, washing, spraying or otherwise cleaning or servicing such motor vehicles;
- (45) **“Fire and Emergency Alarm System”** Fire Alarm system comprises of components for manually or automatically detecting a fire, initiating an alarm of fire and initiating other actions as appropriate.
- (46) **“Fire Lift”** means a special lift designed for the use of fire service personnel in the event of fire or other emergency.
- (47) **“Fire Proof Door”** means a door or shutter fitted to a wall opening and constructed and erected with the requirement to check the transmission of heat and fire for a period.
- (48) **“Floor Area Ratio”** means the quotient obtained by dividing the combined covered area (plinth area) of all floors excepting areas specifically exempted under these regulations, by the total area of the plot viz.:

$$\text{Floor Area Ratio} = \frac{\text{total covered area on all floors}}{\text{Plot Area}}$$

- (49) **“Footing”** means a foundation unit constructed in brickwork, stone masonry or concrete under the base of a wall or column for the purpose of distributing the load over a larger area.
- (50) **“Foundation”** means a substructure supporting an arrangement of columns or walls in a row or rows transmitting the loads to the soil.
- (51) **“Gallery”** means an intermediate floor or platform projecting from a wall of an auditorium or a hall providing extra floor area, and additional seating accommodation and includes the structure provided for seating in stadia.
- (52) **“Garage-Private”** means a building or a portion thereof, designed and used for the parking of vehicle.
- (53) **“Garage-Public”** means a building or portion thereof, designed other than as a private garage, operated for gain designed and used for repairing, servicing, using, selling or storing or parking motor driven and other vehicles.
- (54) **“Grey waste-water”** means waste water discharged from the bathroom, sinks, shower from washing clothes and so on.
- (55) **“Ground Floor”** means a storey which has its floor surface nearest to the ground around the building.
- (56) **“Ground Coverage”** The portion of the building within the maximum outer surface of the structural wall/column/ slab measured at ground level shall be considered as ground coverage (excluding the mentioned limits of projection/ balcony/canopy /porch /void/shaft/cladding/ curtain wall etc
- (57) **“Group Housing”** means a building unit constructed or to be constructed with one or more floors having more than two dwelling units having common service facilities where land is owned jointly (as in the case of co-operative societies or the public agencies such as local authorities or housing boards etc) and the construction is undertaken by one Agency.
- (58) **“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 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.
- (59) **“Home Stay”** means paid accommodations facilities within the residential premises of the owner or tenant.
- (60) **“Hostels”** are buildings which provide dormitory-style sleeping arrangements with food and lodging facility for a group of people such as students, workers & travellers.
- (61) **“Hotel”** means a building or a part of the building comprising of more than 15 rooms covering a floor area of more than 400 sqm in all used for the purpose of boarding of persons with or without meal.
- (62) **“Illuminated Exit Signs”** means a device for indicating the means of escape during normal circumstances and power failure.
- (63) **“Layout Plan”** means a Plan indicating configuration and sizes of all use premises. Each use Zone may have one or more than one layout Plan depending upon the extensiveness

of the area under the specific Use Zones and Vice-Versa. A layout Plan shall have at least two use premises (apart from recreational utilities and transportation and a minimum area of 1 hectare).

- (64) **“Licensed Technical Persons: Licensed Architect/Engineer/Town Planner/Firm etc.”** means a qualified Architect/ Engineer/Town Planner/Firm etc who has been given license by the Municipality and the license shall be valid for one calendar year after which it shall be renewed annually.

Note: Presently, the legislation for profession of architecture is applicable in the country in the form of Architects Act 1972. Whereas, for other professions and professionals like engineers, developers/promoters for taking up any project there is no legislative framework available/applicable in the country. In the absence of any such legislation, the appropriate qualifications, service conditions, professional fees and charges in the engineering profession etc are varying and are not based on any uniform formula. Keeping the above in view, the qualifications/responsibilities and duties of Professionals are given in Appendix A.

- (65) **“Lifeline Building”** means those buildings which are of post-earthquake importance such as hospital building, power house building, telephone exchange building and the like.
- (66) **“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 used synonymously for “lift”.
- (67) **“Lobby”** means a covered space in which all the adjoining rooms open.
- (68) **“Local Area Plan (LAP)”** is the principal statutory planning instrument for setting up of a balanced understanding, vision and spatial strategies at the local level within the framework of the Master Plan.
- (69) **“Masonry”** means an assemblage of masonry units properly bound together by mortar.
- (70) **“Masonry Unit”** means a unit whose net cross-sectional area in every Plane parallel to the bearing surface is 75% or more of its gross cross-sectional area measured in the same plane. It may be either of clay, brick, stone, concrete, sand lime brick or any other construction material.
- (71) **“Master Plan”** means a master plan formulated under the Manipur Town and Country Planning Act, 1975 approved and notified by the State Government.
- (72) **“Master Plan Areas or Notified Planning Areas”** means the area covered by Master Plan prepared and approved for any area in accordance with the provision of the Manipur Town and Country Planning Act, 1975
- (73) an area or list of villages identified/included in the Master Plan in addition to the Municipal Area as Planning Area.
- (74) **“Means of Escape”** means an escape route provided in a building for safe evacuation of occupants.
- (75) **“Mezzanine Floor”** means an intermediate floor between two floors of any storey forming an integral part of floor below.
- (76) **“Multi-storeyed Building or High-Rise Building”** means a building above 4 storeys, and/or a building exceeding 15 meters or more in height. However, chimneys, cooling

towers, boiler rooms/lift machine rooms, cold storage and non-working areas in case of industrial buildings and water tanks and architectural features in respect of other buildings may be permitted as a non-high-rise building. Buildings less than 15 meters including stilt/basement/parking floors stand excluded from the definition of high-rise buildings.

- (77) **“Mumty or stair cover”** means a structure with a covering roof over a staircase and its landing built to enclose only the stairs for the purpose of providing protection from weather and not used for human habitation.
- (78) **“Occupancy or Use”** means the principal Occupancy/use for which a building or a part of a building is intended to be used. For the purposes of classification of a building according to occupancy, occupancy shall be deemed to include the subsidiary occupancies which are contingent upon it.
- (79) **“OBPS”** means Online Building permission System.
- (80) **“Mixed Occupancy”** – buildings being those in which more than one occupancy is present in different portions of the building.
- (81) **“Open Space”** means an area forming an integral part of a site left open to the sky.
- (82) **“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 which 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.*
- (83) **“Parapet”** means a low wall or railing built along the edge of a roof or a floor.
- (84) **“Parking space”** means an enclosed or unenclosed covered or open area sufficient in size to park vehicles. Parking spaces shall be served by a driveway connecting them with a street or alley and permitting ingress and egress of vehicles.
- (85) **“Partition”** means an interior non load bearing barrier, one storey or part storey in height.
- (86) **“Partition wall includes”**
- (a) A wall forming part of a building and being used or constructed to be used in any part of the height or length of such wall for separation of adjoining buildings belonging to different owners or constructed or adopted to be occupied by different persons; or
- (b) A wall forming part of a building and standing in any part of the length of such wall to a greater extent than the projection of the footing on one side or ground of different owners.
- (87) **“Permissible building line”** means a line up to which the plinth of a building adjoining on a street or on an extension of a street or on a future street may lawfully extend. It includes the lines prescribed, if any, in any scheme.
- (88) **“Permission or permit”** means a valid permission or authorization in writing by the competent Authority to carry out development or a work regulated by the Bye –Laws.

- (89) **“Plinth”** means the portion of a structure between the surface of the surrounding ground and surface of the floor immediately above the ground.
- (90) **“Plinth Area”** means the built-up covered area measured at the floor level of the basement or of any storey.
- (91) **“Plotted development”** means a type of development layout wherein a stretch of developed land is divided into regular sized plots for uniform controlled building volumes.
- (92) **“Porch”** means a covered surface supported on pillars or otherwise for the purpose of a pedestrian or vehicular approach to a building.
- (93) **“Protected Monument”** means an ancient monument which is declared to be of national importance by or under the AMASR Act, 2010.
- (94) **“Public Building”** means a building used or intended to be used either ordinarily or occasionally as a church, chapel, temple, mosque or any place of public worship, dharmashala, college, school, theatre, cinema, public concert room, public hall, mandop, public bath, hospital hotel, restaurant, lecture room or any other place of public assembly.
- (95) **“Ramp”** A sloping surface joining two different levels, as at the entrance or between floors of a building.
- (96) **“Road Street”** means any Highway, street, lane, pathway, alley, stairway, passageway, carriageway, footway, square, place, or bridge whether a thorough - fare or over which the public have a right of passage or access or have passed and have access uninterruptedly for specified period, whether existing or proposed in any scheme and includes all bends, channels, ditches, storm water drains, culverts and railing within the street lines.
- (97) **“Road street level or grade”** means the whole extent of space within the boundaries of a road when applied to a new road/street as laid down in the city survey or development plan or prescribed road lines by any act of law and measured at right angles to the course or intended course of direction of such road.
- (98) **“Road/Street Line”** means the line defining the side limits of a road/street.
- (99) **“Road width or Width of Road/street”** means the whole extent of space within the boundaries of a road when applied to a new road/street as laid down in the city survey or development plan or prescribed road lines by any Act of Law and measured at right angles to the course or intended course of direction of such road.
- (100) **“Room Height”** The vertical distance measured from the finished floor surface to the finished ceiling surface.
- (101) **“Site/Plot”** means a parcel or piece of land enclosed by definite boundaries.
- (102) **“Site Plan”**- A detailed Plan showing the proposed placement of structures, parking areas, open space, landscaping and other development features on a parcel of land as required by specific sections of the development code.
- (103) **“Set-back line”** means the setback line given under Byelaw No. 54, 58, 59, 60, 61 and 62.

- (104) **“Settlement”**- A human settlement whether urban or rural in character. It includes habited villages, towns, townships, cities and the areas notified under the control of the Authority
- (105) **“Special Building”** means those buildings with large scale activities at a time such as hotel of 3 Star categories and above, public institutions, hospitals, shopping malls & multiplexes, educational institutions having a plinth area of 1000 sq. metre or more/ educational buildings above Ground + 1 storey irrespective of the size of the plinth area etc.
- (106) **“Standalone Industry”** means a building or complex which is free standing constructed from the point of view of single ownership and operation.
- (107) **“Storey”**- 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.
- (108) **“To erect”** means
- (a) To erect a new building on any site whether previously built upon or not
 - (b) To re-erect any building of which portion have been pulled down, burnt or destroyed.
 - (c) Conversion from one occupancy to another; and
 - (d) To carry out alterations
- (109) **“To re-erect” means**
- (a) A construction for a second time
 - (b) A construction of a building or part thereof for subsequent further times on the same plan as has been previously sanctioned.
- (110) **“Town Planner”** means a planner with graduate or post-graduate degree in Town Planning from a recognized or with qualifications required for membership of the Institute of Town Planners, India. Town Planning Officer means an officer subordinate to the Chief Town Planner and shall be under the control and supervision of the Chief Town Planner.
- (111) **“Town Planning Scheme (TPS)”** means a comprehensive plan for a particular area within the framework of the Master Plan, if any or for the Local Planning Area. The planning process consist of merging and redistribution of land parcels in the urban expansion zone.
- (112) **“Transferable Development Rights (TDR)”** means a compensation in the form of Floor Area Ratio (FAR) or Development Rights which shall entail the owner for construction of a built-up area. The FLOOR AREA RATIO (FAR) credit shall be issued in a certificate or number of certificates, which shall be called as Development Right Certificate/ Certificates (DRC).
- (113) **“Transit Oriented Development (TOD)”** means any development, macro or micro that is focused on the integration of land use and transport planning and aims to develop planned sustainable urban growth centres, having walkable and liveable communes with high density mixed land use. Citizens have access to open green and public spaces and at the same time transit facilities are efficiently used.

- (114) “**Underground/Overhead Tank**” means an installation constructed or placed for storage of water.
- (115) “**Unsafe Building**” means a building which is:
- (a) structurally unsafe
 - (b) insanitary
 - (c) not provided with adequate means of ingress or egress
 - (d) in relation to its existing use, constitutes a hazard to safety or health or public welfare by maintenance, dilapidation or abandonment.
- (116) “**Ventilation**” means supply of outside air into, or the removal of inside air from an enclosed space.
- (a) Natural Ventilation-Supply of outside air into a building through window or other openings due to wind outside and convection effects arising from temperature or vapour pressure differences (or both) between inside and outside of the building.
 - (b) Positive Ventilation- The supply of outside air by means of a mechanical device such as a fan.
 - (c) Mechanical Ventilation- Supply of outside air either by positive ventilation or by infiltration by reduction of pressure inside due to exhaust of air, or by a combination of positive ventilation and exhaust of air.
- (117) “**Verandah**” means a covered area with at least one side open to the outside with the exception of 1m high parapet on the upper floors to be provided on the open side.
- (118) “**Water Closet (W.C)**” means 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.
- (119) “**Window**” means 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 and not used as means of egress/ingress.
- (120) “**Zonal Plan**” means a plan detailing out the proposals of Master Plan and the layout Plan. It may contain a site Plan and land use plan with approximate location and extent of land uses such as public & semi – public buildings/works, utilities, roads, housing, recreation, industry, business, markets, schools, hospitals, open spaces etc. It may also specify standards of population density and various components of development of the zone.

CHAPTER II

FORM OF APPLICATION, AMOUNT OF FEES AND OTHER PARTICULARS REQUIRED TO BE SUBMITTED WITH THE APPLICATION

3. Particulars to accompany application of re-erecting a building: Every person who intends to erect or re-erect or alter a building shall give notice in writing to the Chairperson of his intention in the prescribed Form 1 and such notice shall be accompanied by Plans and Statements in triplicate as required under Bye-law 5, The Plans may be ordinary prints on paper. One set of such Plans shall

be retained in the office of the Chairperson for record after the issue of the permit or a refusal. One copy of such Plan shall be retained in the office of Town Planning Department.

4. “OBPS” Online Building Permission System:

- 1) All the online applications for buildings located within the Urban local bodies Area shall be submitted through Licence Architects or Firms registered in the name of a Licence Architect who are registered with the respective Urban local bodies
- 2) The Licensed Technical Persons (LTP) shall submit the Application online to the the Municipal Commissioner/Senior CEO/CEO/Executive Officer of the concerned ULBs along with the Building Plans in **.dxf** format and documents required as per the Building Bye-law at Chapter II of the Principal Law.
- 3) On payment of requisite fees etc. the system shall auto generate instant Planning Permit and Building Permit along with approved drawing and forward the same to empanelled LTP and the Applicant with SMS and email alert. The approved drawings, the Planning Permit and Building Permit shall be in a downloadable format by the empanelled LTP and Applicant.
- 4) In case the proposal is not as per the provisions of the Building Bye-laws and the Master Plan of the concerned towns, the system shall return the same to empanelled LTP with Email/SMS alert to the applicant.
- 5) Authorities shall carry out post approval inspection of the proposals as and when required to ensure the adherence of the Building Bye-laws and Master Plan. Any discrepancies found during the inspection, shall be treated as unauthorized as per the provisions of this Bye-law, and the Planning Permit/ Building Permit issued shall be withdrawn.
- 6) The buildings constructed under these clauses shall also obtain instant Occupancy Certificate on submission of all the documents as per provisions given in these bye-laws duly certified by the empanelled LTPs.

5. Plans accompanying Notice:-

The following shall accompany the notice:-

- (1) **Site plan**—The site plans sent with an application, for permit shall be-drawn to a scale of not less than 8 m to 1 cm (or 64 ft to 1inch) 1:100 (1m to 1cm) and shall show:
 - (a) the boundaries of the Site and of any contiguous land belonging to the owner thereof
 - (b) the position of the site relating to neighboring streets;
 - (c) the name of the street in which the building is proposed to be situated;
 - (d) all existing building standing on the site;
 - (e) the position of the building and of all other buildings, if any, which the applicant intends to erect upon his contiguous land referred to in (a) in relation to;
 - (i) the boundaries of the site, and in case where the site has been partitioned the boundaries of the portion owned by the applicant and also of the portion owned by the other owners;
 - (ii) all adjacent streets, buildings and premises within a distance of 12 m (or 40 ft) of the site and of the contiguous land, if any referred to in (a); and
 - (iii) if there is no street within a distance of 12 m. (or 40 ft) of the site, the nearest existing street;

- (f) the means of access from the street to the building and to all other buildings, if any, which the applicant intends to erect upon his contiguous land referred to in (a);
- (g) the position and the number of storeys of all other buildings within 12 m. (or 40 ft) of the site.
- (h) the position, forms and dimensions of kitchens, staircases, privies, urinals, drains, cesspools, stable's, cattle sheds, cow-houses, wells and other appurtenances of the buildings;
- (i) free passage or way in front of the building;
- (j) space to be left about the building to secure a free circulation of air admission of light and access for scavenging purposes;
- (k) the width of the street, if any, in front of the building, if any, at the side or rear of the building; and
- (l) Such other particulars as may be prescribed by the Road.
- (m) north point: and
- (n) the width of front, side and rear yard, existing road side trees, lamp and Telephone posts.
- (o) Trace map of the proposed site indicating the Dag No. Patta No. and Revenue Village;
- (p) Detailed calculation sheet of FLOOR AREA RATIO (FAR).
- (q) A certificate of supervision in Form II, Form III and Form IV:
- (r) In case of residential layout plans of plots with land area of 1.5 hectare, a minimum of 10% of the plotted area is to be earmarked / reserved for Affordable Housing category.
- (s) The owner/developer is given freedom to build these units in a separate block with separate access with option to develop only Economically Weaker Section (EWS) dwelling units in lieu of Lower Income Group (LIG), wherever applicable:
- (t) If the houses/flats/apartments are constructed by private developers/builders, and made available for Affordable Housing segment i.e. Economically Weaker Section (EWS)/ Lower Income Group (LIG) the said developers/builders, shall be entitled to an additional FLOOR AREA RATIO (FAR) of 10% to 25% over that applicable FLOOR AREA RATIO (FAR) for the relevant land use depending on the percentage of area allotted to Affordable Housing segment i.e. Economically Weaker Section (EWS) /Lower Income Group (LIG)within these limits. However, there shall be no restrictions for construction of Affordable Housing segment i.e. Economically Weaker Section (EWS) /Lower Income Group (LIG)houses within the permissible FLOOR AREA RATIO (FAR).
- (u) It is mandatory to reserve land for Economically Weaker Section (EWS) housing in areas covered under Local Area Plan (LAP) Town Planning Scheme (TPS). Not less than 5% of the area bought in by Local Area Plan (LAP) Town Planning Scheme (TPS) to be reserved for Economically Weaker Section (EWS)housing

(2) **Building plans:-** The plans of the building and elevations and sections accompanying the notice shall be accurately drawn to a scale of 1 m to 1 cm (or 8 ft. to 1 in) and coloured. Adequate arrangement for proper drainage shall also be indicated. The plans shall include;

- (a) floor plans of all floors together with the covered area, access to buildings and basement plan. Such drawing shall clearly indicate the sizes and spacing of all supporting members, sizes of room. Sizes of windows, ventilators, door openings and stair rooms;
- (b) exact location of essential services e.g. WC, sink, bath and the like;
- (c) sectional drawing showing clearly the sizes of footing, thickness of basement walls and all roof slabs and floor slabs, wall construction, sizes and spacing of framing members, ceiling heights and parapet heights with their materials. The section should indicate the drainage and slope of the roof. At least one section should be taken through the staircase,
- (d) all street elevation
- (e) details of served privy, if any;
- (f) dimensions of the projected portions beyond the permissible building line;
- (g) terrace plan indicating the drainage and the slope of the roof; and
- (h) indication of the north line;
- (i) The plans of the building and elevations and sections accompanying the notice shall be accurately drawn to scale of 1 m to 1 cm. (or 8ft. to 1 inch) and coloured showing different types of works. Adequate arrangement for proper drainage shall also be indicated.
- (j) Building plans for bamboo houses, huts and sheds may have no sections and elevations

(3) Private Water supply and Sewage Disposal System- Plan and sections of Private water supply and sewage disposal system, if any, shall also be included.

(4) Every person who intends to erect, re-erect or make material/structural alteration shall obtain building permit by giving an application in writing to the Corporation/Council in the prescribed form given in Form I to VI duly signed by the "Licensed Architect Engineer/ Town Planner etc.

(5) Specifications: - Specifications, both general and detailed, giving kind and grade of materials to be used, duly signed by the registered architect/ engineer, shall accompany the notice.

(6) Additional requirements for Multi-storeyed, Lifeline and Special Buildings:

6. Building Plans for Multi Storeyed/Special Building: Additional requirements for Multi-storeyed, Lifeline and Special Buildings:

(1) Service plan showing the following details - private water, sewerage disposal system and detail of building services where required by the Authority shall be made available on scale not less than 1:100 and it should also include the following:

(A) For outlet from the soak-pit to municipal drain if provided, an intermediate treatment chamber should be installed, details of which is to be shown in service plan, subject to approval of the Authority:

- (a) The space for a STP is mandatory to be proposed in the layout/service plan and constructed as per the approved norms and specifications in case of:
 - (i) residential layouts, areas measuring 4000 Sq.m. or more:
 - (ii) group housing/Apartment houses if the built-up area measures above 2000 Sq.m. or if the consumption of water is 20000 liters per day or if it is a multi-storied building with more than 30 apartment houses;
 - (iii) commercial Complexes/Institutional/Hotel and Lodges/ Industrial Buildings etc. if the built-up area is above 2000 Sq.m. or water consumption is 20,000 liters per day.
 - (iv) hospitals/Nursing Homes with 40 or more beds.

The STP is required to be certified by independent expert accredited by State Pollution Control Board/Department of Environment and Forest, Govt. of Manipur before the project is commenced for operation or by State Pollution Control Board.

- (b) STP provision for building/commercial project, new development project and township $\geq 20,000$ sq.m. and $< 1,50,000$ sq.m. of buildup space will be governed by environmental clearance required as per SO 1533 14th September 2006 notified by Ministry of Forest, Govt. of India.
- (c) For all other projects requiring prior environmental clearance the requirement will be as per the clearance.

(B) Garbage bin, location of which should be within the plot and such that it can be easily accessed by collecting staff of municipal authority without any difficulty.

(C) Detail of building services, which include,

- (a) air conditioning system, if any:
- (b) detail of exits including provisions of ramps, etc. for hospital and special risk building:
- (c) Location of generator, if any, transformer and switchgear and main electric panel duly certified by MSPDCL.
- (d) smoke exhauster system and fire alarm, if any;
- (e) location of centralized control of all fire alarm systems, if any.
- (f) location and dimension of static water storage and pump house,
- (g) location of fire protection installation, sprinklers, wet risers, etc, if any.

N.B.-These should generally be as per specifications of National Building Code, 2016.

- (h) location and details of fixed fire protection installation and first-aid and fire-fighting equipments / installations:

- (i) in case of nursing homes and hospitals, detail of incinerator for treatment of hospital waste is to be submitted and clearance from appropriate authority.
 - (j) detail provisions made for conservation and harvesting of rain water to be provided as required under these bye-laws:
- (D) Detailed drainage plan for both internal and external required to be constructed up to the available permanent/pucca drain of municipal/other authority.
- (2)
- (a) NOC from the Directorate of State Fire Service shall be required for building above the height of 15 m.
 - (b) In all buildings other than residential buildings irrespective of height of buildings, installation of fire safety measures to be made as per Part-IV (Fire & Life Safety) of National Building Code of India, 2016 and approved by the Directorate of Fire Services before the Occupancy Certificate is issued by the competent authority.
- (3) Supervision: Applications shall be further accompanied by a certificate of supervision in a prescribed form by the licensed architect, engineer, group or agency as the case may be.
- (4) A certificate to the effect that the maximum requirement of power in the building/ project is being intimated to MSPDCL in advance with total requirement of power.
- (5) Apartment having 20 dwelling units or more may adopt Reticulated Pipe Gas Supply System. The technical design and specification should be as per provisions of NBC, 2016 and approved design of Oil companies. However, the location of the structure in the plot should be as approved by the Authority.

7. Fees:

- 1) No notice as referred to above in bye-law 3 shall be deemed valid unless and until the person giving notice has paid the fees given below to the Corporation/Council and an attested copy of the receipt of such payment is attached with the notice:

For R.C.C., masonry & brickworks:		
1	Cost of the application Form (Form I-VI)	Rs 100/- per set
2	Buildings of plinth area upto 200 square metre	Rs 100/- per square metre
3	Buildings of plinth area from 200 square metre and above	Rs 120/- per square metre
4	For additional storey above Ground+1	Rs 100/- per square metre
5	Application Fees for Cinema, Commercial Complex, Theatre, Multiplex, Hotels with Conference Halls in addition to the normal fees	Rs 10,000/- in addition to normal fees at Sl. 1 to 3.
Loadbearing buildings		
1	The plinth area upto 200 square metre	Rs 50/- per square metre
2	The plinth area from 200 square metre and above	Rs 100/- per square metre
Revalidation of already approved Building Plans		
1	Revalidation of Plans	Rs 1,000/- Per Annum
Installation of Communication Towers		
1	Fee for installation of Towers	Rs 1,00,000/- per unit
2	For every Service Provider in case of sharing in addition to fee for installation of Towers.	Rs50,000/- per unit
3	Renewal fee for every service provider	Rs 50,000/- per unit

Opening of ATM booths		
1	Application fee for one booth	Rs 10,000/-
Application for a Filling Station		
1	Application fee for a filling station	Rs 40,000/-

- 2) The owner shall be allowed to re-submit the revised proposal after complying with all the objections raised by the Corporation/Council within a period of one year from the date of rejection after which fresh shall have to be paid. In the event of a building permit not issued, 50% of the fees so paid shall be returned to the owner.

8. Time limit for disposal of applications

- i) If within 30 days of the receipt of the notice under Bye-law 3 of these bye-laws, the Corporation/Council fails to intimate in writing to the person. who has given the notice of its refusal or sanction, the notice with its plans and statements shall be deemed to have been sanctioned provided nothing shall be construed to authorize any person to do anything in contravention of or against the terms of lease or titles of the land or against any other bye-laws regulation or ordinance, operating on the site of the work.
- ii) The approval/NOC/refusal shall be issued by the outside agency within 15 days or within the time stipulated, failing which the approval/NOC of the outside agency such as Fire Services Department, Airports Authority of India, Manipur Pollution Control Board, Department of Forest, etc on the building plan shall be deemed to be issued. The sanctioning authority shall process the application for building permit accordingly.
- iii) Once the plan has been scrutinized and objections have been pointed out, the owner giving notice shall modify the plan to comply with the objections raised and re-submit it, The Corporation/Council shall scrutinize the re-submitted plan and, if there be no further objections, the plan shall not be rejected.
- iv) Notwithstanding anything contained therein the structure contravenes any bye-law or is adjudged structurally unsound, the person shall be deemed liable under these bye-laws.

9. Occupancy certificate: No building hereafter erected, re-erected or altered materially shall be occupied in whole or in part until the issue of an occupancy certificate in the form prescribed in Appendix-A by the authorized officer of the Corporation/Council, affirming that such building conforms in all respects to the requirements of these bye-laws and is fit for occupation.

10. Unsafe Building:- All buildings or structures which are structurally unsafe, insanitary or - not provided with adequate means of egress or which in relation to existing use constitute to hazard to safety or health for any reason of in-adequate maintenance, dilapidation or abandonment are, for the purpose of this bye-law, unsafe buildings. All such buildings shall be considered to constitute danger to public safety which shall be abated by repairs or demolition or as otherwise directly by the Corporation/Council.

11. Examination of Unsafe Buildings:-The authorized Officer of the Corporation/Council shall examine every building reported to be unsafe or damaged, and shall make a written record of such examination

12. Notice to owner and occupier:- Whenever the Corporation/Council, from the report of the authorized officer, find any building or structure, or portion thereof, to be unsafe as defined under Bye-law 10, it shall give to the owner and the occupier of such building or structure a written notice stating the defects thereof: This notice shall require the owner or the occupier within 30

days to complete specified repairs or improvements or to demolish and remove the building or structure or portion thereof

13. In case the owner or occupier fails, neglects or refuse to comply with the notice to repair or to demolish. The said building or structure or portion thereof; the Corporation/Council shall cause the danger to be removed whether by demolition. or repair of the building structure or portion thereof or otherwise.
14. **Cases of Emergency:-** In cases of emergency; which in the opinion of the Corporation/Council, involves imminent danger to human life or health, the decision of the Corporation/Council shall be final,. The Corporation/Council shall forthwith or with such notice may be possible, promptly cause such building, structure or portion thereof to be rendered safe or removed for this purpose. The Corporation/Council may at once enter such structure or land on which it stands, or abutting land or structure, with such assistance and such cost as may be deemed necessary. The Corporation/Council may also get the adjacent structures vacated and protect the public by an appropriate fence or such other means as may be necessary.
15. **Costs:-** Costs incurred under byelaws 13 and 14 shall be charged to the owner of the premises involved. Such cost shall be a charge on the premises in respect of which or for the benefit of which the same have been incurred and shall be recoverable as an an-ear of revenue.
16. **Building or structure over Municipal Drain:** Any masonry building or structure shall not be constructed or extended, over any municipal drain or land.
17. **Convey Approval and Validity:**
 - (1) The Municipal Commissioner/Senior CEO/CEO/Executive Officer to sign Form VII, Building Permission Sanction to convey approval of the Building Plan.
 - (2) Before issue of the passed plans under the byelaw, the ULB shall obtain a Planning Permission ensuring that the proposed development complies with the Master Plan notified under Section 23 of the Manipur Town & Country Planning Act, 1975 from the Town Planning Department/ District Level Town Planning cell, Government of Manipur in respect of the particular plan.
 - (3) The sanction once accorded shall remain valid for 3 (three) years. The sanctioned plan may be renewed/revalidated and the Municipal Commissioner/Executive Officer to sign Form X, form for revalidation of already approved Building Plan on payment of fee prescribed in Section 7(1).
18. Enforcement of the Bye-laws without prejudice to the operation of any other law, it shall be the duty of the Corporation/Council to take necessary actions to institute proceedings against any person who contravenes any of the provision of these bye-laws.
19. Whoever erects, materially alters or commences to erect, materially alters any building without the previous sanction of the Corporation/Council. or violets the building permission sanction. issued by the Corporation/Council or contravenes with the provisions of this bye-laws or who interferes or obstruct any authorised personnel in the discharge of his duties shall be guilty of an offence. The Corporation/Council shall:
 - i. Punish the person as per the provisions of the Manipur Municipalities Act, 1994.
 - ii. Take suitable action which may include demolition of un-authorized work, sealing of premises, prosecution and criminal proceeding against the offender, in pursuance of relevant laws in force, as decided by the Corporation/Council.

- iii. Take suitable action Against licensed technical personnel and license may be withdrawn in case of an offence as decided by the Corporation/Council.
- iv. The Corporation/Council reserves the right to take action and to debar/blacklist the licensed technical personnel, if found to have deviated from professional conduct or to have made any misstatement or on the account of misrepresentation of any material fact or default either in authentication of a plan or in the supervision of the construction against the building byelaws and the sanctioned building plans.,
- v. If the Corporation/Council finds at any time any violation of the building byelaws or misrepresentation of fact, or construction at variance with the sanction or building byelaws, inclusive of prescribed documents, the Corporation/Council shall be entitled to revoke the sanction and take appropriate action-against such professional and such professional shall not be authorized to submit fresh plans till finalization of the case.

Before debarring or blacklisting a professional if found to be indulging in professional misconduct or here she/he has misrepresented any material fact as per (a) and (b) above, the Corporation/Council shall give him a show cause notice with personal hearing and shall pass an order to debar him/her for submission and supervision of the construction with full justification for the same. An appeal against this order shall lie with the Appellate Authority.

- 20.** Conviction no bar to further prosecution. The conviction of any person under the provision of these byelaws for failing to comply with any of the said requirements or obligation shall not operate as a bar to further prosecution under this bye-law for any subsequent failure on the part of such person to comply.
- 21.** Officers not liable for damages:- Any officer of the Corporation/Council acting in good faith and without malice shall be free from liability for acts done in the performance of the official duties under any provision of these bye-laws.

CHAPTER-III

SPECIFIC REQUIREMENTS

22. **Projections:-** No projection of any sort whatsoever extending more than 23cm (or 9 in) below a height of 4.3 m. (or 14ft.) such as projection on the level of Chajja, cornice, water spouts, drains, pipes, advertisement boards and the like shall project over the land of the road or over any drain or over any portion outside the boundaries of the site, provided that projections arising out of the vertical part of the rain water spouts projecting at the road level or the water pipe may be permitted in accordance with the drainage plan.

23. **Sun-shades over windows and ventilators: -**

- (a) Notwithstanding anything contained in these byelaws, no projection of any sort shall be permitted over the land of the road or over any drain or any other portion outside the boundaries of the site below a height of 4.3 m. (or 14ft.) from the ground level.
- (b) Sunshades provided above a height of 4.3 m. (or 14ft.) from the ground level shall be permitted to project up to a maximum width of 60 cm. (or 24 in) if the road over the project exceeds 9 m. (or 30ft.) in width.
- (c) No projection of any sort whatsoever shall be permitted on roads less than 9m. (or 30ft.) in width or on roads having no footpaths.

24. **Room Sizes**

- i. **Habitable Room: -** The height of all rooms for human habitation shall not be less than 2.75 m. (or 9 ft.). The size of the habitable room shall not be less than 9.5 sq. metres (or 100 sq.ft.) with a minimum width of 2.4 m. (or 8 ft). Habitable room shall be provided for the purpose of light and ventilation, with windows, doors, ventilators and other apertures having a total area of not less than 1/8th of the floor area of the room excluding doors.
- ii. **Bath room, WCs and Stores: -** The height of all such rooms measured from the floor to the lowest point in the ceiling shall not be less than 2.4 m. (or 8 ft.). Nothing on the ground floor shall be constructed in such a way as to leave a headway of less than 2.4m. (or 8 ft.) provided that in the case of a passage under the landing the minimum headway may be kept as 2.1 m. (or 7 ft.). The size of a bath room shall not less than 1.5 x 1.2 m. (or 5' x 4' ft.) or 1.8 sq. metres (or 20 sq. ft.) if it is combined bath room and water closet its floor areas shall not be less than 2.8 sq. metres (or 30 sq. ft.). The minimum floor area of a W.C. shall be 1.1 sq. metres (or 12 sq. ft.) Bath room and w.c's shall be provided with natural light and ventilation by windows and ventilators.
- iii. **Kitchen: -** The height of the kitchen measured from the floor to the lowest point the ceiling shall not be less than 2.75 m. (or 9 ft).

Every kitchen shall have a floor area of not less than 4.8 sqm (or 50 sq. ft.) if there is store of 5.6 sqm (or 60 sq. ft.). If there is no store, shall not be less than 1.8 m (or 6 ft.) in width of any part. A kitchen which is intended for use as-dining room also shall have a floor area of not less than 9.5 sqm (or 100 sq. ft.) with a minimum width of 2.4 m (or 8 ft.).

Every kitchen shall be provided with a flue and properly ventilated with doors, windows and ventilators to be standard prescribed for habitable rooms.

25. Stair Case: -

- (i) The minimum clear width of stair cases in case of residential buildings shall not be less than 1 m. (or 3 ft.).
- (ii) In case of public buildings, a stair case shall be provided for every 300 persons which are expected to use the building. No staircase shall be less than 1.5 m (or 5 ft.) in width and the farthest corner of the building shall not be more than 18 m (or 60 ft.) distant from the staircase.

The minimum riser and minimum width of tread of stair case shall be as follows:

Type of Building	Maximum riser	Minimum Tread Width
Public Buildings	15 cm. (or 6 inch)	30 cm. (or 12 inch)
Domestic Buildings	19 cm. (or 7½ inch)	25 cm. (or 10 inch)

- (iii) No flight of stair case should consist of more than 12 steps a time. After that there should be a landing or half landing
- (iv) The minimum clear head room in any stair case shall be 2.1 m. (or 7 ft.) as measured from the top of the riser upto the lowest portion of the ceiling perpendicular above it. Every stair case shall be properly lighted and ventilated.

26. Drainage and Sanitation: - Sites containing Deposited Refuses- No building shall be constructed on any site, on any part of which there is deposited refuse, excreta or other offensive matter to which the Public Health Authority object until refuse has been removed there from and the site has been prepared or left in a manner suitable for building purpose to the satisfaction of the Corporation/Council.

Provided that, where it is intended to find a building on piles or on reinforced concrete pillars, the Corporation/Council may approve the erection of such building after the refuse has been appropriately treated by chemical or in some other manner to the satisfaction of the Corporation/Council and has been covered by a layer of sand or other suitable materials to a depth of not less than 0.6 m. (or 2 ft.) or by a layer of cement concrete not less than 15 cm. (or 6 in) thick.

27. Privy, Type to be allowed in an area: -

- (i) The Corporation/Council shall determine in each case whether the premises shall be served by a connected latrine or septic tank or other type, provided that it shall be a connected latrine if a sewer is within 30 m. (or 100 ft.) of the site, provided further that until the sewer begins to function a served latrine may be permitted subject to the condition that it shall be converted into a connected latrine as and when required by the Corporation/Council.
- (ii) The Corporation/Council may refuse to permit the construction of any latrine or urinal at a particular place, if in its opinion, such latrine or urinal would be a nuisance in the neighbourhood or would be objectionable to the occupants of the neighboring buildings.
- (iii) Every house should have one latrine, pit latrines should be at least covered and away from the tank, living room and kitchen by at least 25 ft.

- (iv) Cow-sheds should be 25 ft. away from living rooms, kitchen, tank.

28. Rain water Pipes: -

(a)

- (i) A Rain water pipe shall be at least 75 mm. (or 3 in) in diameter and be constructed of cast iron, wrought iron glazed stoneware, asbestos or other equally suitable material and shall be securely fixed.
- (ii) A rain water pipe conveying rain water shall: discharge directly or by means of a channel into or over an inlet to a surface drain or shall discharge freely in a compound drain to a surface drain, but in no case shall it discharge directly into any closed drain.
- (iii) Whenever a rain water pipe cannot discharge into or over an inlet to a surface drain or in a compound drain to a surface drain and if a street drains within 30 m (or 100 ft.) from the boundary of the premises, such rain water pipe shall discharge into a gully which shall be connected with the street drain.
- (iv) If such street drain is not available within 30 in. (or 100 ft.) of the boundary of the premises, a rain water pipe may discharge over a street provided its outlet is not more than 30 cm. (or 1 ft.) above the surface of the street.
- (v) A rain water pipe shall not discharge into or connect with any soil pipe or soil ventilation pipe or any waste pipe or any waste ventilation pipe, nor shall it discharge into a sewer unless specifically permitted to do so by the Corporation/Council in which case such discharge into a sewer shall be intercepted by means of a gully trap.

- (b) All sullage drains of a building shall be connected to the back street or land and not on the main road on which the building abuts without the special permission of the Corporation/Council.

- 29.** The penalty for the infringement of any of the bye-law Nos. 22 to 29 shall be (a) a fine not exceeding Rs. 500/- and in the case of continuing infringement a daily fine not exceeding Rs. 100/- for each day after written notice of the offence is served by the Chairperson or the authorized officer.

CHAPTER-IV

HEALTH, SANITATION AND OTHER REQUIREMENTS

- 30.** Every person who erects a building shall provide a means of access to such building a clear way, not less than 3.6 m. (or 12 ft.) in which upto 3 storeys and 5 m (or 16 ft.) in width beyond three storeys from a street to the entrance door of such building, such pathway to be, so long as it is used as a means of access to that building maintained free from any obstruction and shall not at any time cause or permit any portion of any building below a height of 5 m. (16 ft.) to overhang or project over or into such passage.
- 31.** No building shall be erected so as to deprive any other building of the means of access as provided in this chapter.

32. Every person who erects a building shall indicate upon any plan, required to be furnished by him in accordance with these byelaws, the whole area of such means of access by a distinguishing colour and description.
33. Every person who erects a building shall not at any time erect or cause or permit to be erected or re-erected any building which in any way encroaches upon or diminished the area so set apart for this purpose.
34. The space so set apart shall be separately distinguished from any house gully or open space required to be provided under any other byelaw enforced by the Corporation/Council.
35. Every such means of access shall be drained and lighted to the satisfaction of the Corporation/Council and manhole covers and other drainages, water or any other fittings laid in such means of access shall be flush with the finished surface level so as not to obstruct the safe travel over the same.
36. A person who under takes construction work on building shall not reduce the access to any building previously existing below the minimum width as required under Byelaw 31.
37. The means of access under these byelaws shall not be deemed to be suitable and sufficient until they have been approved by Corporation/Council who shall have power to prescribe the width of the clear way which he shall communicate.
38. **Access to Dwelling Units and Rooms:** - In every building containing more than one dwelling, access shall be provided to each dwelling unit without the necessity of passage through any other dwelling unit
39. **Open Space Requirements:** -
 Open Air Space: - Every room intended for human habitation shall abut on an interior or exterior open-air space or on an open verandah opening on to such interior or exterior toilet open space.
40. Joint Open Air Space: - Every such interior or exterior open-air space unless the latter is a street, shall be maintained for the benefit of such building exclusively and shall be entirely within the owner's own premises.
41. If such interior or exterior open-air space is intended to be used for the benefit of more than one building belonging to the same owner, then the width of such open-air space shall be equal to one-half of the height of the tallest building on such open-air space.
42. Open Space to be open to Sky. Every open space, whether exterior or interior, provided in pursuance of any regulation or byelaw or under an agreement lodged with the Corporation/Council shall be kept free from any erection thereon shall be open to the sky. Every open space or, chowk provided under these byelaws shall have a suitable and sufficient access. No open drain, except for rain water, shall be constructed in any open space required by these byelaws
43. **Safeguard against Reduction of Open Space:** - No construction work on a building shall be allowed if such work operation to reduce an open-air space of any other adjoining building belonging to the same owner to an extent less than what is prescribed by any of the byelaws in force at the time of the proposed work or reduce further such open space if it is already less than that prescribed.
44. **Bazar Area:** - In new Bazar area and continuous shops provision shall be made for an arcade of 1.8 m. (or 6 ft.) width to be built by the allottee as public passage.

- 45. Additions or Extension to a Building:-** No addition or extension to a building shall be allowed unless the addition or extension is such as would be permissible if the whole building was re-constructed from the Plinth with the open space required under these bye-laws applicable to the site of the building at the time of proposed addition, and no addition or extension to a building shall be allowed which would diminish the extent of air space below the minimum requirement under these bye-laws.
- 46. Building line:-** The front of every building shall be in the same line as far as possible and the Corporation/Council shall see that the building or buildings are constructed in the same line after giving the provision for setback mentioned in Bye-law 54, 58 & 59

CHAPTER-V
CINEMA, THEATRE AND PUBLIC ASSEMBLY HALLS

- 47.** (i) No person shall erect a building intended to be use as cinema, theater or public assembly hall or convert the use of any existing building to any such purpose, unless such building is set back at least 9 m from the regular line of the public road and 4.5 m on rear and side.
- (ii) Cinema building shall conform also to the provisions laid down by the Cinematograph Act in force and the rules frame there under.
- (iii) The Ground Coverage and FAR of such buildings shall be 40 and 125 respectively.
- 48.** If any portion of such building is intended to be used as a domestic building, such portion (except accommodation for the caretaker and his family shall comply with the provisions of the bye-laws for domestic building.

CHAPTER-VI
GENERAL REQUIREMENTS

- 49.** (1)
- (a) All buildings under this chapter shall conform to the following general requirement in regards to water supply, drainage and sanitation.
- (b) All premises intended for human habitations, occupancy or use shall be provided as far as possible with a supply of pure and wholesome water, neither connected with unsafe water supply, nor subject to hazard of back flow
- (c) Plumbing fixtures, device and appurtenances if any shall be supplied with water in sufficient volume and at pressure adequate to enable them to function satisfactorily and without undue noise under all normal conditions of use.
- (d) Plumbing shall be designed and adjusted to use the minimum quantity of water consistent with proper performance and cleaning.
- (e) Devices for heating and storing water if any shall be so designed and installed as to prevent dangers from explosion thought over-heating.
- (f) Every building having plumbing fixtures installed and intended for human habitation, occupancy, or use on premises abutting on a public road, alley or easement in which there is a public sewer shall have connection with the sewer.
- (g) Each family dwelling unit on premises abutting on a sewer or with a private sewage-disposal system shall have, at least, one water closet and one kitchen type sink.
- (h) All other structures for human occupancy or use on premises abutting on a sewer or with a private sewage-disposal system shall have adequate sanitary facilities but in no case less than one water-closet and one other fixture for cleaning purposes.

(2) WATER SUPPLY:

- (a) Water supply shall be provided for residential building, office buildings, factories, hospitals, Nurses home and medical quarters: hostels, restaurants, cinemas, concert halls, theatres, art Galleries, Libraries, Museums, Bus Stations, Schools, Colleges, and such other buildings as maybe required by the Board for drinking and other necessary uses.
- (b) There shall be at least one tap from the piped water supply from drinking purposes for one or two houses.

(3) DRAINAGE AND SANITATION REQUIREMENTS:

- (A) There shall be at least One water tap and arrangements for drainage in the vicinity of each water closet or group of water closets in all buildings.
- (B) Residences.
 - (i) Dwellings, with individual conveniences shall have at least the following fitments: -
 - (a) One bath room provided with a tap.
 - (b) One water closet; and
 - (c) One nahanit or sink either in the floor or raised from the floor.

Where only water closet is provided in a dwelling, the bath and water closet shall be separately accommodated.

(C) Buildings other than Residences:

- (i) The requirements for fitments for drainage- and sanitation in the ease of buildings other than residences shall be in accordance with Table- I to X as follows: -

Table I	Office building
Table II	Factories
Table III	Cinemas, concert halls and theatres
Table IV	Art galleries, libraries and museums
Table V	Hospitals; indoor and outdoor patient wards
Table VI	Hospitals, administrative buildings, medical staff quarter and nurses' homes
Table VII	Hotels
Table VIII	Restaurants
Table IX	Schools
Table X	Hostels

Segregated sanitation for visitors in Public Buildings.

- (a) Special requirement of segregated sanitation for Visitors in Public buildings, Government Buildings, Hospitals, Educational Institutions, Commercial buildings etc. Provisions and occupancy shall be referred at Table 54.1 Public toilets are meant for floating population, usually located near railway stations, bus stands, market places, government hospitals, religious centres etc.
- (b) The preferable location of these toilets shall be within 200-500 metres from the main entry of the building.
- (c) The site shall be earmarked on site plan or a layout plan.
- (d) It must be accessible to visitors and general public during the operational hours of the building. However fiscal generation for maintenance may be planned w.r.t. user charges from visitors and general public.
- (e) Other factors to be considered:
 - a. Waste water conveyance/treatment and prevention of contamination. Location on site should allow easy and hygienic emptying of the pits/tanks and ensure that ground water table is not contaminated by waste water percolation.
 - b. Adequacy in provision.
 - c. Design consideration.
 - i. Adequate ventilation
 - ii. Door Design/ Direction of swing of the door (preferred outwards)
 - iii. Adequate waiting area and
 - iv. Adequate volumes of water storage.
- (f) The facilities should include
 - i. Separate toilet blocks for men and women with separate entries.
 - ii. Seats for children to be provided in both sections for men and women.
 - iii. Waiting and holding area.
 - iv. Space for facility caretaker and maintenance staff- from where they can monitor and maintain both facilities for men and women.
 - v. Urinal facilities for men.
 - vi. Waste water disposal system
 - vii. Janitor/store room for cleaning material and equipments.
- (g) Norms for differently abled within segregated toilets.
 - i. One special W.C. in a set of toilets shall be provided for the use of differently abled persons with essential provisions of wash basins near the entrance.
 - ii. Minimum clear opening of the door shall be 900 mm and the door shall swing out.

iii. Suitable arrangement for vertical and horizontal handrails with 50 mm clearance from wall shall be made in the toilet. The W.C. seat shall be 500 mm from the floor.

(h) Water requirement and facilities.

Water requirements to be kept for enough storage for a full day operation either in underground sump or overhead tank.

Table 50.1 Segregated sanitation facilities for visitors in Public Buildings.

No.	Sanitary Unit	For Male Personnel	For Female personnel
1.	Public toilet near Railway stations (24x7) (a) Water Closet (W.C) (b) Urinals (c) Ablution taps	(a) One for 100 users (b) One unit per 300-500 users (c) One in each W.C	(a) One for 50 users (b) ----- (c) One in each W.C
2.	Public Toilet near market place/offices (for working hours) (a) Water Closet (b) Urinal (c) Ablution Taps	(a) One for 100 users (b) One unit per 200-300 users (c) One in each W.C	(a) One for 50 users (b) ----- (c) One in each W.C
3.	Public toilets near Public Buildings (a) Water closet (b) Urinals (c) Ablution taps	(a) One for 100 users (b) One unit per 200 – 300 users (c) One in each W.C.	(a) One for 50 users (b) ----- (c) One in each W.C

Table 50.2 The recommended areas for different facilities at Visitors toilets

No.	Sanitary Unit	Dwelling with individual convenience	Dwelling without individual convenience
1.	Bath Room	One provided with water tap	One for every two tenements
2.	Water Closet	One	One for every two tenements
3.	Sink	One	
4.	Water Tap		One with drainage Arrangement in each tenement One in common bath room and common water closet.

CHAPTER-VII

PROVISION FOR HIGH RISE DEVELOPMENT

51. High Rise

Buildings higher than 15 m of height without stilts and above 17.5 m of height with stilts shall be considered as high-rise buildings.

52. Plot area

Plots to be used for high rise development in an approved layout Plan, Comprehensive plan or sub division as prepared and approved by competent authority.

53. Means of Access

- (a) A building shall be on a street or upon spaces directly connected from the street by a hard surface approach road; width of approach road is not less than 9 metres.
- (b) If there is any bend or curve on the approach road a sufficient width shall be provided at the curve to enable the fire appliances to turn, the turning circle being at least of 9.0 m radius.
- (c) The approach road to the building and open spaces on all its sides up to 6 m width and layout for the same shall be done with consultation with the Chief fire officer. The said open space shall be kept free from any obstruction and shall be motor able.
- (d) Main entrance to the premises shall be adequate width to allow easy access to the fire engine and in no case, it shall measure less than 6 m. The entrance gate shall fold back against the compound wall of the premises. If archway is provided, the height of the archway shall not be less than 5 m.
- (e) For multi-storeyed group housing schemes on one plot, the width of approach road to the site shall be of minimum 18m width.

54. FAR, SETBACKS AND HEIGHTS OF RESIDENTIAL BUILDINGS

Proposed setbacks and heights of residential buildings								
No	Plot Area (sq.mt.)	FAR	Maximum Height (in metres)		Setbacks proposed (in meters)			
					Front	Rear	Side 1	Side 2
1	50 - 90	150	7	G+1	1.50	0.90	0.60	0.60
2	91 - 150	180	11	G+2	1.50	0.90	0.90	0.90
3	151 - 300	180	11	G+2	2.00	1.20	1.20	1.20
4	301 - 500	180	13	G+3	3.00	2.00	1.80	1.20
5	501 - 750	200	13	G+3	4.00	3.00	2.40	1.20
6	751 -1000	200	16	G+4	5.00	4.50	4.20	2.50
Above 16 MTS								
7	1001-1500	250	19	G+5	6.00	4.50	4.50	3.00
8	1501 -2000	250	22	G+6	7.00	4.50	4.50	3.50
9	2001 -2500	250	25	G+7	8.00	4.50	4.50	4.00

Parking spaces.

- (a) The parking space shall be provided as per the provisions of the Master Plan or Zonal Plan.
- (b) In case of High-Rise building parking will be permitted at any or all of the following
 - (1) Basement
 - (2) Stilts
 - (3) Podium.
- (c) Stacked /Multilevel/Automated parking is also permitted.

Building Components.

1. Doorways

- (a) Every doorway shall open into an enclosed stairway, a horizontal exit, on a corridor or passageway providing continuous and protected means of access.
- (b) No exit doorway shall be less than 1m in width. Doorways shall be not less than 0.75 m wide.
- (c) Exit doorways shall open outwards that is away from the room but shall not obstruct the travel along any exit. No door when opened shall reduce the required width of stairway or landing to less than 0.9 m, overhead or sliding doors shall not be installed.
- (d) Exit door 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 in each doorway, level of landing shall be the same as that of the floor which it serves.
- (e) Exit doorways shall be opening able from the side which they serve without the use of a key.
- (f) Mirrors shall not be placed in exit ways or exit doors to avoid confusion regarding the direction of exit.

2 Revolving doors

Revolving doors shall not be provided as a means of fire exit.

3 Stairways.

- (a) A staircase shall not be arranged round a lift shaft.
- (b) The staircase shall be ventilated to the atmosphere at each landing and a vent at the top, the vent openings shall be of 0.5 sqm. in the external wall and the top. If the staircase cannot be ventilated, because of location or other reasons, a positive pressure 50 pa shall be maintained inside. The mechanism for pressurizing the staircase shall operate automatically with the fire alarm. The roof of the shaft shall be 1m above the surrounding roof, glazing or glass bricks if used in staircase shall have fire resistance rating of minimum 2 hour.
- (c) The minimum width of staircase shall be as given below:

Table 56. 1 Minimum width of staircase for different types of buildings

Type of building	width
Residential building(dwelling)	1.0 m
Residential hotel buildings	1.5 m
Assembly buildings like auditorium, theatre, cinemas.	2.0 m
Educational buildings up to 30m in height	1.5 m
Institutional buildings like hospitals	2.0 m
All other buildings	1.5 m

- (d) The minimum width of treads without nosing shall be 0.25 m for staircase for residential building. In case of other buildings, the minimum tread shall be 0.3 m. The treads shall be constructed and maintained in a manner to prevent slipping. The maximum height of riser shall be 0.19 m in the case of residential building and 0.15 m in the case of other buildings and shall be limited to 15 risers per flight.
- (e) Handrails shall be provided with a minimum height of 0.9 m from the centre of the tread
- (f) The minimum headroom in a passage under the landing of a staircase and under the staircase shall be 2.2 m.
- (g) Access to main staircase shall be gained through adequate resistance rating. Automatic closing door placed in the enclosing walls of the staircases. It shall be swing type door opening in the direction of the escape.
- (h) No living space, store or other for risk shall open directly to the open space, store or other fire risk shall open directly to the open spaces or can be reached without passing through any door other than a door provided to form a drought lobby.
- (i) External exit door of staircase enclosure at ground level shall open directly to the open spaces or can be reached without passing through any door other than a door provided to form a drought lobby.
- (j) The exit sign with arrow indicating the way to the escape route shall be provided at a height of 0.5 m from the floor level on the wall and shall be illuminated by electric light connected to corridor circuits. All exit way making signs shall be flushed with the wall and so designed that no mechanical damage shall occur to them due to moving of furniture or other heavy equipments. Further all landing of floors shall have floor indication boards indicating the number of floors. The floor indication board shall be placed on the wall immediately facing the flight of stairs and nearest to the landing. It shall be of size not less than 0.5 mx0.5 m and it shall be prominently on the wall facing the staircase.

- (k) In case of single staircase, it shall terminate at the ground floor and access to the basement shall be by a separate staircase. However, the second staircase may lead to basement levels provided the same is separated at ground level by either a ventilated lobby with discharge points at two different ends or through enclosures with fire resistance rating door or through a fire protected corridor.

4. Lifts

General requirements of the lifts

- (a) All the floors shall be accessible for 24 hours by the lift.
- (b) Grounding switch at ground floor level to enable the fire service to ground the lift shall also be provided.
- (c) The lift machine room shall be separate and no other machinery shall be installed therein.
- (d) Walls of lift enclosures and lift lobby shall have fire rating of 2 hour. Lifts shall have vent at the top of area not less than 0.2 sq. m
- (e) Lift car door shall have a fire resistance rating of 1 hour.
- (f) Lift lobby doors in lift enclosures shall have fire resistance as per section 11.7.1 of chapter 11.
- (g) Collapsible gates shall not be permitted for lifts and shall have solid doors with fire resistance of at least 1 hr.
- (h) If the lift shaft and lobby is in the core of the building a positive pressure between 25 and 30 pa shall be maintained in the lobby and apposite pressure of 50 pa shall be maintained in the lift shaft. The mechanism for pressurization shall act automatically with a fire alarm. It shall be possible to operate this mechanically also.
- (i) Lifts communicating with the basement, the lift lobby of the basements shall be pressurized as suggested in Clause 11.9.1 (g) and 11.9.1 (h) with self-closing door with fire resistance rating (refer section 11.7.1 of chapter 11). Telephone or other communication facilities shall be provided in lift cars and to be connected to fire control room for the building
- (j) Exit from the lift lobby, if located in the core of the building shall be through a self-closing fire door of half an hour fire resistance.
- (k) Suitable arrangements such as providing slope in the floor of lift lobby shall be made to prevent water used during firefighting etc. at any landing from entering the lift shafts.
- (l) A sign shall be posted and maintained on every floor at or near the lift indicating that in case of fire, occupants shall use the stairs unless instructed otherwise. The sign shall also contain a plan for each floor showing the

location of stairways. Alternate source of power supply shall be provided for all the lifts through a manually operated change over switch.

- (m) For pressurization specifications for various building components refer chapter 4 of NBC and lift safety clause 4.10.

5. Basements

- (a) Basements shall be permitted within the setback lines subject to clearance from the local bodies/departments concerned, Municipal Corporation and Fire Departments. Where there are no setbacks, it should be after leaving required 6 m from plot boundary (as per development control rules of Master Plan)
- (b) Each basement shall be separately ventilated. Vents with cross sectional area not less than 2.5 percent of the floor area spread evenly round the perimeter of the basement shall be provided in the form of grills or breakable stall board lights or pavement lights or by way of shafts. Alternatively, a system of air inlets shall be provided at basement floor level and smoke outlets at basement ceiling level, inlets and extracts may be terminated at ground level with stall board or pavement lights as before, but ducts to convey fresh air to the basement floor level have to be laid. Stall board and pavement lights should be in positions easily accessible to the fire brigade and clearly marked ‘SMOKE OUTLET’ or ‘AIR INLET’ with an indication of area served or near the opening.
- (c) The staircase of basement shall be of enclosed type having fire resistance rating. The staircase shall be situated at the periphery of the basement to be entered at ground level only from outside open air. The staircase shall communicate with basement through a lobby with self-closing doors with fire resistance rating as per relevant NBC code mentioned above.
- (d) For travel distance Table given below shall be followed. If travel distance exceeds that given in the table below, additional staircases may be provided.

Table 56.2 Travel distance for occupancy and type of construction

No	Group of occupancy	Maximum travel distance construction	
		Type 1 & 2	Type 3&4
i	Residential (A)	30.0	22.5
ii.	Educational (B)	30.0	22.5
ii.	Institutional	30.0	22.5
iv.	Assembly(D)	30.0	30.0
v.	Business(E)	30.0	30.0
vi.	Mercantile((F)	30.0	30.0
vii.	Industrial(G)	45.0	Construction Type 3 &4 not permitted
viii	Storage(H)	30.0	Construction Type 3 &4 not permitted
ix.	Hazardous(J)	22.5	Construction Type 3 &4 not permitted

Notes:

1. For fully sprinkled building, the travel distance may be increased by 50% of the values specified above.
 2. Ramps shall be counted as one of means of escape wherever permitted in National Building Code 2005.
- (e) In multi-story basement intake ducts may serve all basement levels but each basement level and basement compartments shall have separate smoke outlet ducts. Ducts so provided shall have the same fire resistance rating as the compartment itself. Fire rating may be taken as the required smoke extraction time for smoke extraction ducts.
- (f) Mechanical extractors for smoke venting system from lower basement levels shall also be provided. The system shall be of such design as to operate on actuation of heat/smoke sensitive detectors or sprinklers, if installed and shall have a considerably superior performance compared to the standard units. It shall also have an arrangement to start automatically.
- (g) Mechanical extractors shall have an internal locking arrangement, so that extractors shall continue to operate and supply fans for HVAC shall stop automatically with the actuation of fire detectors.
- (h) Mechanical extractors shall be designated to permit 30 air changes as per hour in case of fire or distress call. However, for normal operation, air changes schedule shall be as given in part 8, Building Services, Section 3, Air conditioning, Heating and mechanical Ventilation of National Building Code 2005.
- (i) Mechanical extractors shall have an alternative source of supply.
- (j) Ventilating ducts shall be integrated with the structure and made out of brick masonry or reinforced cement concrete and when this duct crosses the transformer area or electrical switchboard, fire dampers shall be provided.
- (k) Use of basements for kitchens working on gas fuel shall not be permitted unless air conditioned. The basement shall not be permitted ward block of a hospital/ nursing home unless it is fully sprinkled. Building services such as electrical sub stations, boiler rooms in basements shall comply with the provision of the Indian electricity Act/Rules. Boiler Room shall be provided at the first basement along the periphery wall with fire resistance rating or shall be separated with the blast wall.
- (l) If cut outs are provided from basements to the upper floors or to the atmospheres, all sides cut out openings in the basements shall be protected by sprinkler head at close spacing so as to form a water curtain in the event of a fire.
- (m) It is essential to make provisions for drainage of any such water on all floors to prevent and minimize water damage of the contents. The drain pipes should be provided on the external wall for drainage of water from all floors. On large area floors, several such pipes may be necessary which should be spaced 30 m apart. Care shall be taken to ensure that the construction of the drain pipe does not allow spread for smoke from floor to floor.

6. Compartmentation

The building should be suitably compartmentalized so that fire /smoke remains confined to the area where fire incident has occurred and does not spread to the remaining part of the building. Compartmentalization and pressurization method shall be adopted as per clause 4.10 of Para 4 of NBC 2005.

7. Ramps

- (a) The ramps to basement and parking floors shall be not less than 7.2 m wide for two-way traffic and 4 m wide for one way traffic provided with gradient 1:10 for cars and 1:15 for heavy vehicles. At curved portions of the ramp or for circular ramps the slope should not be more than 1:12.
- (b) Ramps may also be provided in setback area which can be sloped considering unhindered movement of fire engine and in no case the gradient shall be less than 1:10.
- (c) All structural safety and design aspects as per latest BIS Code and NBC, 2005 shall be complied along with consideration of weight of fire engine and in no case the gradient shall be less than 1:10
- (d) The minimum width of ramps in hospitals shall be 2.4 m for stretcher and not for vehicular movement.
- (e) In this case Handrails shall be provided on both sides of the ramp.
- (f) Ramps shall lead directly to outside open space at ground level or courtyards or safe place.

8. Corridors

- (a) Exit corridors and passageways shall be of width not less than the aggregate required width of exit doorways leading from them in the direction of travel to the exterior.
- (b) The minimum width of a corridor in a residential building shall be 1.0.m for single loaded and 1.8 m for double loaded and in all other buildings shall be 1.5 m.
- (c) Where stairways discharge through corridors and passageways, the height of corridors and passageways shall be not less than 2.4
- (d) All means of exit including staircases lifts lobbies and corridors shall be ventilated.

9. Glass facades/service ducts/Shafts/Refuge area/vents

- (a) An opening to the glass facade of min width 1.5 m and height 1.5 m shall be provided at every floor at a level of 1.2 m from the flooring facing compulsory open space as well as on road side.
- (b) Mechanism of opening. The openable glass panel shall be either left or right shall have manual opening mechanism from inside as well as outside. Such openable panels shall be marked conspicuously so as to easily identify the openable panel from outside.

- (c) Fire seal to be provided at every floor level between the external glazing and building structure.
- (d) The glazing used for the facade shall be of toughened (tempered) safety glass as per I.S.2553
- (e) To avoid Fire propagation vertically from one floor to another floor, a continuous glass must be separated internally by a smoker fire seal which is of non-combustible material having a fire resistance rating of not less than 2 hours.
- (f) Service ducts and shafts shall be enclosed by walls and doors with fire resistance rating. All such ducts and shafts shall be properly sealed and stopped fire ingress at all floor levels.
- (g) A vent opening at the top of the service shall be provided having an area between one fourth and one half of the area of the shaft.
- (h) The openable vent of minimum 2.5% of the floor area shall be provided. The openable vent can be pop out type or bottom hinged provided with fusible link opening mechanism and shall also be integrated with automatic smoke detection system.
 - 1. Alternate vertical glass panels of the facade shall be openable type with the mechanism mentioned above in order to ventilate the smoke.
 - 2. Refuge areas covered with the glass facade shall have all the panels fully openable (either left or right hinged (both from inside as well as outside)).

Glass quality practice of use of glass in buildings shall have to be in conformity with the BIS Codes.

57. BUILDING SERVICES.

1. Staircase and corridor lighting
 - (a) The staircase and corridor lighting shall be on separate service and shall be independently connected so as it could be operated by one switch installation on the ground floor, easily accessible to firefighting staff at any time irrespective of the position of the individual control of the light points, if any.
 - (b) Staircase and corridor lighting shall also be connected to alternate supply from parallel high-tension supply or to the supply from the stand by generator.
 - (c) Emergency lights shall be provided in staircase and corridor passageway, horizontal exits, refuge area and all wires and other accessories used for emergency light shall have fire retardant properly.
2. Electrical services
 - (a) The electrical distribution cables/wiring shall be laid in separate duct the duct shall be sealed at every floor with non-combustible materials having the same for resistance as that of the duct. Low and medium voltage wiring running in shaft and in false ceiling shall run in separate conduits.

- (b) Water mains, telephone cables, intercom cables, gas pipes or any other service line shall not be laid in the duct for electric cables. Use of bus ducts/ solid rising mains instead of cables is preferred.
 - (c) The provision of dedicated telecommunication ducts for all new building proposals is mandatory for conveyance of telecommunication and other data cables.
 - (d) Separate circuits for water pump lifts, staircases and corridor lighting and blowers for pressurizing system shall be provided directly from the main switchgear panel refer NBC 2005.
3. Alternate source of electric supply

A stand by electric generator shall be installed to supply power to staircase and corridor lighting circuits, fire lifts, the stand by fire pumps, pressurization, fans and blowers, smoke extraction and damper system in case of failure of normal electric supply. The generator shall be capable of taking starting current of all the machines and circuits stated above simultaneously. If the stand by pump is driven by diesel engine, the generator supply need not be connected to the stand by pump.

4. Air conditioning

Air conditioning shall conform to the following

- (a) Escape routes like staircases, common corridors, lift lobbies etc shall not be used as return air passage.
- (b) The ducting shall be constructed of sufficient gauge metal in accordance with good practice.
- (c) Where ever the ducts pass through fire walls or floors, the opening around the ducts shall be sealed with materials having fire resistance rating of the compartment.
- (d) Where duct crosses a compartment which is fire rated, the ducts shall be fire rated for same fire rating. Further depending on services passing around the duct work, which may get affected in case of the temperature rising, the ducts shall be insulated.
- (e) Metallic ducts shall be used even for the return air passage instead of space above the false ceiling.
- (f) Where plenum is used for return air passage, ceiling and its fixtures shall be of non-combustible material.
- (g) The materials used for insulating the duct system (inside or outside) shall be of non-combustible material; glass wool shall not be wrapped or secured by any material of combustible nature.
- (h) Air ducts serving main floor areas, corridors etc shall not pass through the staircase enclosures.
- (i) The air handling units shall be separate for each floor and air ducts for every floor shall be separated and in no way inter connected with the ducting of any other floor.

- (j) If the air unit handling serves more than one floor, the recommendations given above shall be complied with an addition to the conditions given below.
- (1) Proper arrangements by way of automatic fire dampers working on smoke detector/or fusible link for isolating all ducting at every floor from the main riser shall be made.
 - (2) When the automatic fire alarm operates, the respective air handling units of the air conditioning system shall automatically be switched off.
 - (3) The vertical shaft for treated fresh air shall be masonry construction.
 - (4) The air filters of the air handling units shall be of non-combustible materials or fire rated.
 - (5) The air handling unit room shall not be used for storage of any combustible materials.
 - (6) Inspection panels shall be provided in the main trunking to facilitate the cleaning of ducts of accumulated dust and to obtain access for maintenance of fire dampers.
 - (7) No combustible material shall be fixed nearer than 150 mm to any duct unless such duct is enclosed and protected spy glass with neoprene facing enclosed and wrapped with aluminium sheeting) at least 3.2 mm thick and would not readily conduct heat.

5. Transformers

- (a) If the transformers shall be dry type and shall be kept in an enclosure with walls, doors and cut outs having fire resistance rating of 4 hour. The entrance to the room shall be provided with a steel door of fire rating of 2 hours. A curb of suitable height should be provided at the entrance in order to prevent the flow of oil from ruptured transformer into other parts of the basement. The switchgear should be housed in a separate room with fire resistance not less than 4 hours.
- (b) The transformer shall be protected by an automatic foam sprinkler system. If they are housed on the ground floor, they should be cut off from the other portion of the premises by fire resistant walls of 4 hours rating.
- (c) A tank of R.C.C construction of adequate capacity shall be provided at lower basement level to collect the oil from the catch pit in case of emergency. The pipe connecting the catch pit to the tank shall be of non-combustible construction and shall be provided with a flame arrester.
- (d) The electric sub-station shall be located in a separate building in accordance I.E Rules 68(I) and 64 (I)(a).
- (e) If this is not possible due to site conditions, the sub-stations shall be located on the ground floor. As far as possible due to site conditions the sub-station shall not be installed in a basement, for such situations special provisions like mechanical ventilation, wherever required, cable ducting, cable trays, top/bottom entry of HV/LV cable, hooks on Transformers and HV Panels, adequate fire detection and fire-fighting arrangement, adequate drainage, effective measures

to prevent flooding etc. shall be provided. Adequate precautions shall also be taken for water proofing to prevent seepage of water. A ramp shall also be provided with a slope, not steeper than 1 in 7, for easy movement of equipments to and from sub – station.

- (f) Fire regulation- The installations shall be carried out in conformity with the local regulations and rules there under wherever they are in force. At other places NBC *Guidelines shall be followed.*

6. General

- (a) Architectural elements such as louvers, pergolas other sunshine materials should be free from FAR
- (b) Followings are also permitted out of FAR if not used for habitable or commercial purposes.
- (c) Building elements such as sky bridges and landscapes terraces which are meant for community purposes only shall be permitted free of FAR.
- (d) Services can be permitted on roofs with adequate screening for the same.
- (e) Service floor.
- (f) Atrium /Atria at any floor will be counted only once in the FAR. Atrium may be enclosed by light roofing or R.C.C.
- (g) Scissor staircase will be permitted provided all travel distance and fire norms are adhered to.
- (h) Stilts in high rise will not be restricted to height of 2.4 m as long as it is used for parking.
- (i) Multilevel car parking with car lifts would be permitted with adequate fire safety.

58. FAR, Setbacks, Ground Coverage and Heights of Commercial Buildings

Proposed Setbacks and Heights of Commercial Buildings other than CBD and TOD Areas									
No.	Plot Area (sq.mt)	Maximum Ground Coverage	FAR	Maximum Height Permissible (in meters)		Minimum Setbacks proposed (in meters)			
						Front	Rear	Side 1	Side 2
1	90-150	NIL	150	11	G+2	1.50	0.90	0.90	0.90
2	151-300	NIL	150	11	G+2	2.00	1.20	1.20	1.20
3	301-500	NIL	150	13	G+3	3.00	2.00	1.80	1.20
4	501-750	NIL	180	13	G+3	4.00	3.00	2.40	1.20
5	751-1000	NIL	180	16	G+4	5.00	4.50	4.20	2.50
Above 16 MTS									
6	Above 1000 (below 30m wide road)	NIL	200	19	G+5	6.00	4.50	4.50	3.00
7	1001-1500	NIL	500	27	G+8	6.00	4.50	4.50	4.50

	(above 30m wide road)								
8	Above 1500 (above 30m wide road)	NIL	500	27	G+8	7.00	5.00	5.00	5.00

Note: Requirement for parking shall be governed by Chapter XI.

59. FAR, Setbacks, Ground Coverage and Heights of Institutional/ Educational Buildings

Proposed Setbacks and Heights of Institutional/Educational Buildings									
No.	Plot Area (sq.mt)	Maximum Ground Coverage	FAR	Maximum Height Permissible (in meters)		Minimum Setbacks proposed (in meters)			
						Front	Rear	Side 1	Side 2
1	750-1000	NIL	180	16	G+4	6.00	4.50	4.20	2.50
2	1000-1500	NIL	200	19	G+5	7.50	4.50	4.50	3.00
3	Above 1500	NIL	220	22	G+6	10.00	4.50	4.50	3.50

Note:

- (a) For Government Institutions, regulations adopted by Education Department will be followed.
- (b) Requirement for parking shall be governed by Chapter XI.

60. FAR, Setbacks, Ground Coverage and Heights of Light and Service Industry, Industries permitted by Unified Zoning Regulations

No.	Plot Area (sq.mt)	Maximum Ground Coverage	FAR	Maximum Height Permissible (in meters)		Minimum Setbacks proposed (in meters)			
						Front	Rear	Side 1	Side 2
1	Upto 300	70%	180	10	G+2	1.5	1	1	1
2	300 - 500	70%	200	10	G+2	2.5	1.2	1.2	1.2
3	500 - 750	70%	200	10	G+2	4	1.2	1.5	1.5
4	750 - 1000	70%	200	10	G+2	4.5	1.5	1.8	1.8
5	1000 - 1500	70%	200	10	G+2	5	2	2	2
6	Above 1500	70%	200	10	G+2	5	2.5	3	3
		70%	250	13	G+3	6	2.5	3	3

Note: Requirement for parking shall be governed by Chapter XI.

61. FAR, Setbacks, Ground Coverage and Heights of Flatted Industry

No.	Plot Area (sq.mt)	Maximum Ground Coverage	FAR	Maximum Height Permissible (in meters)		Minimum Setbacks proposed (in meters)			
						Front	Rear	Side 1	Side 2
1	1000-2000	74%	180	7	G+1	3	2.5	2.5	2.5
		68%	275	13	G+3	4	3	3	3
		60%	300	16	G+4	5	4	4	4
2	2000 and above	65%	150	7	G+1	3	4	4	4
		61%	250	13	G+3	4	4.5	4.5	4.5
		56%	300	16	G+4	5	5	5	5

Note: Requirement for parking shall be governed by Chapter XI.

62. FAR, Setbacks, Ground Coverage and Heights of Commercial Buildings in CBD and TOD area

Proposed Setbacks and Heights of Commercial Buildings in CBD and TOD Areas									
No.	Plot Area (sq.mt)	Max. Ground Coverage	Max. Permissible FAR	Maximum Height Permissible (in meters)		Minimum Setbacks proposed (in meters)			
						Front	Rear	Side 1	Side 2
1	1001-1500 (above 30m wide road)	NIL	500+200*	40	G+1 2	6.00	4.50	4.50	4.50
2	Above 1500 (above 30m wide road)	NIL	500+200*	40	G+1 2	7.00	5.00	5.00	5.00

* The Authority shall allow use of FAR beyond Base FAR (500) on production of TDR certificate, provided that the total FAR shall be limited to the maximum permissible FAR (700) available on the plot.

63. For the purpose of calculation of FAR, the following areas are exempted from FAR Calculations:

- a) Balcony
- b) Basement if not used for office or commercial purposes
- c) Common Vertical Circulation viz., lifts, staircase, ducts/shafts
- d) Corridor open on one side
- e) Garages
- f) Mumty and Lift Machine Room

CHAPTER-VIII

STRUCTURAL SAFETY

64. (1) Structural design

For any building construction work under the jurisdiction of these bye-laws, structural design/retrofitting shall only be carried out by a Structural Engineer on Record (SER) or Structural Design Agency on Record (SDAR). Proof checking of various designs/reports shall be carried out by the Corporation/Council as per Table-VI wherever applicable.

Generally, the structural design of foundations, elements of masonry, timber, plain concrete, reinforced concrete, pre-stressed concrete and structural steel shall conform to the provisions of part VI Structural Design Section-1 Loads, Section-2 foundation, Section-3 wood, Section-4 Masonry, Section-5 Concrete & Section-6 Steel of National Building Code of India (NBC), taking into consideration the Indian Standards as given below.

(2) For General Structural Safety:

- (a) IS: 456:2000” Code of Practice for Plain and Reinforced Concrete

- (b) IS: 800-2007 “Code of Practice for General construction in Steel
- (c) IS: 801-1975 “Code of Practice for Use of Cold formed Light Gauge Steel Structural Members in General Building Construction
- (d) IS 875 (Part 2): 1987 Design Loads (other than earthquake) for buildings and structures Part 2 Imposed Loads
- (e) IS 875 (Part 3): 1987 Design Loads (other than earthquake) for buildings and structures Part 3 Wind Loads
- (f) IS 875 (Part 4): 1987 Design Loads (other than earthquake) for buildings and structures Part 4 Snow Loads
- (g) IS 875 (Part 5): 1987 Design Loads (other than earthquake) for buildings and structures Part 5 special Loads and Load Combination
- (h) IS: 883:1994 “Code of Practice for Design Structural Timber in Building
- (i) IS: 1904:1987 “Code of Practice for Structural Safety of Buildings: foundation”
- (j) IS: 1905:1987 “Code of Practice for Structural Safety of Buildings: Masonry Walls
- (k) IS: 2911 (Part I): Section 1: 2010 “Code of Practice for Design and Construction of Pile Foundation Section 1

Part 1: Section 2 Based Cast-in-situ Piles

Part 1: Section 3 Driven Pre-cast concrete Piles

Part 1: Section 4 Based Pre-cast Concrete Piles

Part 2: Timber Piles

Part 3: Under Reamed Piles

Part 4: Load Test on Piles

(3) For Cyclone/Wind Storm Protection:

- a) IS: 875 (3)-1987 “code of Practice for Design Loads (other than earthquake) for Buildings and Structures, Part 3, Wind Loads”
- b) Guidelines (Based on IS 875 (3)-1987) for improving the Cyclonic Resistance of low-rise houses and other building

(4) For Earthquake Protection:

- a) IS: 1893-2002 “Criteria for Earthquake Resistant Design of Structures (Fifth Revision)
- b) IS: 13920-1993 “Ductile Detailing of Reinforced Concrete Structures subjected to Seismic Forces-Code of Practice”
- c) IS: 4326-2013 “Earthquake Resistant Design and Construction of Buildings-Code of Practice (Second Revision)”
- d) IS: 13828-1993 “Improving Earthquake Resistant of Low Strength Masonry Buildings-Guidelines”
- e) IS: 13827-1993 “Improving Earthquake Resistant of Earthen Buildings-Guidelines”

f) IS: 13935-2009 “Repair and Seismic Strengthening of Buildings-Guidelines”

(5) **For Protection of Landslide Hazard:**

- (a) IS: 14458 (Part 1): 1998 Guidelines for retaining wall for hill area: Part 1 Selection of type wall.
- (b) IS: 14458 (Part 2): 1997 Guidelines for retaining wall for hill area: Part 2 Design of retaining/breast wall.
- (c) IS: 14458 (Part 3): 1998 Guidelines for retaining wall for hill area: Part 3 construction of dry-stone walls
- (d) IS: 14496 (Part 2): 1998 guidelines for preparation of landslide-hazard zonation maps in mountains terrains: Part 2 Macro-zonation.

Note: Whenever an Indian Standard including those referred in the National Building Code or the Indian National Building Code is referred; the latest revision of the same shall be followed except for specific criteria, if any, mentioned above against that code.

65. Fire Safety Detection and Distinguishing System:

- a) The Corporation/Council while according permission shall follow the Code of Practice and Standards of Requirement recommended in the national Building Code of India.
- b) Fire protection and extinguishing system shall conform the accepted standards and shall be installed as recommended in the National Building Code of India and to the satisfaction of Directorate of Fire Service.

CHAPTER-IX

RAIN WATER HARVESTING & RECYCLING OF WASTE WATER

66. Rain Water Harvesting:

- a) **Water Harvesting:** Water harvesting through storing of water runoff including rainwater in all existing and new buildings on plots of 100 square metre and above will be mandatory. The plans submitted shall indicate the system of storm water drainage along with points of collection of rain water in surface reservoirs or in recharge wells.
- b) **Soft Cover:** Provision for soft cover should be included in the plan for building sites:
 - I. For any building having a minimum covered area of 500 square metre, the applicant should provide soft cover of at least 15% of the plot area.
 - II. For any other building, having lesser covered area, the soft cover should be at least 10% of the plot area.

67. Recycling of waste water:

All buildings having a covered area of 500 sqm or minimum discharge of 10,000 litre and above per day shall incorporate waste water recycling system. Provisions of facilities and infrastructure to recycle the Wastewater (Grey Water) from bath rooms and kitchen sinks in following manners:

- (a) Each building shall have a separate downward pipeline to collect waste water from bath and wash basins and the collected waste water shall be treated adequately by organic or mechanical recycling and taken to a Settling tank for onward pumping to the exclusive overhead tank or to a separate collection unit of overhead tank for exclusive use of toilet flushing through cisterns. The excess waste water not reused for toilet flushing shall be suitably connected to the rain water recharge structures for ground water recharge.

Explanation: For the purposes of this bye-law in so far as the regard to recycling systems are concerned, any other modifications, additional structures, alternative designs furnished by the applicant shall be considered for approval, if it conforms to recycling concept to the satisfaction of the competent authority for building plan approval.

- (b) Settling Tanks: The tank should be large enough to hold twice the expected daily flow of wastewater plus 40% to allow sludge accumulation and surge loading. One type of settling tank well-suited for grey water treatment is a septic tank with aeration facility.
- (c) Disinfection Facility: Two chemicals viz. Chlorine and Iodine may be used to disinfect water. Organic material in grey water may combine with Chlorine to reduce amount available for disinfection.
- (d) Filters: Type of filter required depends on amount of grey water to be filtered and type of contaminates present. Viz., simple drain filter. Activated charcoal, cellulose or ceramic cartridge, slow and or multimedia filters etc could be used based on specific requirement:
- (e) Separate Collection Units and Overhead Tank: Grey water for reused to be collected in separate unit and provision is made for a separate overhead tank for storage of recycled grey water for use of toilet flushing and gardening landscaping purposes only:
- (f) Dual Pipelines: Laying of dual pipe lines is necessary viz., one for carrying potable water and other for carrying grey water duly marked in orange colour and laid separately for the ease of identifying the pipe carrying grey water.
- (g) If separate point to draw water for gardening, landscaping and washing are provided it should be provided with an adequate warning that the water is not fit for drinking.

68. Incentive for rainwater harvesting/Recycling of Waste water:

The incentives in terms of rebate of 10 % on building permission fees will be given by the Corporation/Council for owners or their successors-in-interest who undertake both recycling of waste water and rain water harvesting structures.

69. Energy Conservation Building:

Building or building complexes having a connected load of 100 KW will be regulated as per the Energy Conservation Code 2007 as amended. Generally, buildings or complexes having airconditioned area of 1,000 sqm or more will also fall under this category.

CHAPTER-X
FACILITIES FOR PERSONS WITH DISABILITIES

70. Applicability:

These byelaws are applicable to all private and public buildings (proposed and existing) used by the public and shall not be restricted to a single floor or storey but shall allow free & full accessibility to the entire building.

71. Definitions:

- a) Non-Ambulatory Disabilities: Impairment that regardless of cause or manifestation, for all practical purpose, confines individuals to wheelchairs.
- b) Semi-Ambulatory Disabilities: Impairments that cause individuals with difficulty or insecurity, individuals using braces or crutches, arthritis, and those with pulmonary and cardiac ills may be semi-ambulatory.
- c) Hearing Disabilities: Deafness or hearing handicaps that might make individual insecure in public area because he is unable to communicate or hear warning signals.
- d) Sight Disabilities: Total blindness or impairments affecting sight to the extent that the individuals functioning in public areas in insecure or exposed to danger.
- e) Wheel Chair: Chair used by disabled people for mobility. The standard size of the wheel chair shall be taken as 1050mm x 750mm.

72. Guiding/Warning Floor Materials:

The floor materials to guide or warn the visually impaired persons with a change of colour or material with different texture and easily distinguishable from the rest of the surrounding floor materials is called guiding warning floor materials. The materials with different texture give audible signals with sensory warning when a person moves on this surface with walking stick. It is meant to give the directional effect or warn a person when at critical places.

73. Visual Signage:

Appropriate identification of specific facilities within a building for the persons with disabilities 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 benefit those with hearing disabilities.

Signs should be designed and located so that they are easily readable by using suitable letter size (not less than 20 mm) high. For visually impaired persons, information board in Braille 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. Public address system may also be provided in busy public areas. The symbols/information should be in contrasting colour and properly illuminated because people with limited vision may be able to differentiate amongst primary colours.

74. Site Planning:

To accommodate the persons with disabilities and elderly people each building and its site should be planned and designed as an integral unit from the very beginning of the design process.

a) **Walks and Paths:**

Walking should be smooth, hard level surface suitable for walking and wheeling. The minimum walkway width should be 1200 mm. And for moderate two ways traffic should be 1650 mm -1800 mm. Longitudinal Walk gradient should be 3 to 5 % (30 mm to 0.50 mm in meter). When walk exceed 60 meter in length it is desirable to provide rest area adjacent to walk at convenient intervals with space for bench seats. For comfort the seat should be between 350 mm to 425 heights but not over 450 mm. Texture change in walkways adjacent to sitting will be desirable for blind persons.

b) **Parking:** For parking of vehicles, the following provisions shall be made: -

- i. Surface parking for two car spaces shall be provided near entrance for the persons with disabilities with maximum travel distance of 30 m from building entrance.
- ii. The width of parking shall be a minimum of 3.60 m
- iii. The information stating that the space is reserved for wheel chair users shall be conspicuously displayed.
- iv. Guiding floor materials shall be provided for a device, which guides visually impaired persons with audible signals, or other devices, which served the same purpose, shall be provided.

c) **Building requirements:**

The specified facilities for the building for persons with disabilities shall be as follows:

-

- a. **Approach to plinth level:** Every building should have at least one entrance accessible to the disabled and shall be indicated by proper signage. This entrance shall be approached through a ramp together with the stepped entry.
- b. **Ramped Approached:** Shall be finished with non-slip materials. Minimum width of ramp shall be 1000 mm with maximum gradient 1:12 length of ramp shall not exceed 9.0 m having 800 mm. high handrails on both sides.
- c. **Exit/Entrance Door:** Minimum clear opening of the entrance door shall be 900mm.
- d. **Entrance Landing:** Entrance landing shall be provided adjacent to ramp with a minimum dimension of 1800 mm x 2000 mm. finishes shall have a non-slip surface with a texture traversable by a wheel chair.
- e. **Corridor connecting the entrance/exit for the handicapped:** The corridor shall be provided as follows: -
 - i. "Guiding floor materials" shall be provided for device than emit sound to guide visually impaired persons.
 - ii. The minimum width shall be 1500 mm.
 - iii. In case of level difference, slope ways shall be provided with a slope of 1:2.
- f. Handrails shall be provided for ramps /slope ways.

- g. **Stairways:** One of the stairways near the entrance/exit for the disabled shall have the following provisions: -
- i. The minimum width shall be 1350 mm.
 - ii. Height of riser shall not be more than 150 mm.
 - iii. Maximum number of risers on flight shall be 12.
 - iv. Handrails shall be provided on both sides.
- h. **Lifts:** Wherever lifts are required as per bye-laws, provision for at least 1 lift shall be made for the wheel chair user with the following cage dimensions of lift recommended for passengers lifts of 13 persons capacity.
- Clear internal depth -1100 mm
- Clear internal width -2000 mm.
- Entrance door width -900 mm.
- i. A handrail not less than 600 mm long at 900mm – 1000 mm above floor level shall be fixed adjacent to the control panel
 - ii. The lift lobby shall be of minimum 1800mm x 1800 mm or more.
 - iii. The time of an automatically closing door should be minimum of 5 seconds and the closing speed should not exceed 0.25 metre/sec.
 - iv. The Cage interior should be provided with a device that audibly indicates the floor the cage has reached and indicates that the cage door for entrance/exit is either open or closed.
- i. **Toilets:** One special W.C. in a set of toilet shall be provided for the use of disabled with essential provision of wash basin near the entrances for the handicapped. The minimum size of a toilet shall be 1500 mm x 1750 mm. The minimum clear opening of the door shall be 900 mm and the door shall swing out. Suitable arrangement of vertical horizontal handrails with 50 mm clearance from wall shall be made in the toilet. The W.C. seat shall be 500 mm from the floor.
- j. **Drinking Water:** Suitable provision of drinking water shall be made for the disabled near the special toilet provided for them.

CHAPTER-XI

PARKING SPACES FOR ALL TYPES OF BUILDINGS

75. Parking Space

- 1) No off-street parking space shall be less than 15 sqm (3.0 m in width and 5.0 m in length), for a motor car, with a minimum head room of 2.4 m, if parked in a covered area.
- 2) The minimum width of circulation driveway to be provided for adequate manoeuvring vehicles shall be 4.00 m for cars and 5.00 m for trucks exclusive of parking space

referred to in (1) above. However, a projection from a height above 5.50 m from the ground level may be permitted keeping the mandatory open space open to sky.

- 3) The parking layout plan shall be so prepared that the parking space for each vehicle becomes directly accessible from driveway or circulation driveway or aisles. However, stack car parking arrangement will be allowed in such a way that every car can be moved by shifting not more than one car.
- 4) The Parking spaces shall be located beyond the mandatory setback spaces as provided in these Bye-Laws.
- 5) For building with different uses, the area of parking space shall be worked out on the basis of respective uses separately and parking space to be provided for the total number of vehicles thus required.
- 6) In case of a plot containing more than one building, parking requirement for all buildings shall be calculated on the basis of consideration of the area of respective uses.
- 7) The Minimum Off-Street Parking space shall be as shown in table below.

No.	Type of use	Open parking space for 4 (four) wheelers	Open parking space for 2 (two) wheelers
1	Residential building	1 car for every 60 sq. metre of floor space	1 for every 40 sq. metre of floor space
2	Theatres, cinemas, auditorium	1 car for every 10 seats	1 for every 5 seats
3	Retail business	1 car for every 50 sq. metre of sales area	1 for every 30 sq. metre
4	Institutional Building	1 car for every 100 sq. metre of floor space	1 for every 50 sq. metre of floor space
5	Industrial Building	1 car for every 150 sq. metre of floor space	1 for every 50 sq. metre of floor space
6	Office building	1 car for every 50 sq. metre of floor space	1 for every 30 sq. metre of floor space
7	Hospital	1 car for each cabin 1 car for every 10 beds 1 car for every 2 doctors	1 for every bed
8	Restaurants	1 car for every 5 seats	1 for every 4 seats

CHAPTER-XII

MISCELLANEOUS PROVISIONS

76. Installation of Communication Towers:

- 1) **Definition:** Communication tower shall include antennae fixtures, fabricated antenna, tower to install the telephone lines and transmission towers. This will not include the antennas installed for domestic purpose, namely television antennas or dish antennas.

2) Application for permission:

- I. Location: The telecommunication Infrastructure shall be either placed on the building roof tops or the ground or open space within the premises.
- II. Installation of base station antenna shall be allowed only on:
 - a. The building which abuts on minimum 9.00-metre-wide road in order to reduce the risk caused by an earthquake or wind related disaster.
 - b. The existing sites of the Cell Towers abutting on roads having ROW less than 9.00 metre could only be regularised after specific clearance from the Fire Department regarding the width of the road.
 - c. The base station antennas should at least be at least 3 metres away from the nearby building and antennas should not directly face the building. Further, the lower end of the antenna should be at least 3 metre above the ground or roof.
 - d. Sign Boards/Warning signs are to be provided at Base Station Antenna sites which should be clearly visible and identifiable. A warning sign should be placed at the entrance of each zone.
 - e. “Warning Sign” should discourage longer stay in the zone, even for the maintenance person. The sign board may contain the following text:
 1. Danger! RF Radiations, Do not enter.
 2. Restricted Area
 - f. The Operator shall display on board (minimum size 24”x48”) at conspicuous space of the building at Ground Floor the following details:
 1. Operators Name & Address
 2. Contact Persons Name, Address & Tel No.
 3. Address of Complaint Redressing Authorities with Tel No.
 4. Police Control Room: 000
 5. Fire Control Room: 000
 6. Ambulance: 000
 7. Details of Insurance Policy.
 - g. The operators, who have erected Cell Towers without permission, shall apply to the Corporation/Council for regularisation within 30 days.
 - h. No towers shall be permitted to be erected within 100m radius of schools, colleges, hospitals, nursing homes, religious institutions, lifeline buildings and the like. Antenna should not face hospitals nursing homes, religious institutions, lifeline buildings and the like and should be placed at a minimum of 3mts above the base.
- III. Type of structure:
 - a) Steel fabricated tower or antennas on M.S. pole

- b) Pre-fabricated shelters of fibre glass or P.V.C. on the building roof top/terrace for equipment.
- c) Masonry Structure/Shelter on the ground for equipment.

IV. Requirement: Every applicant has to furnish the following:

- a) Obtain/procure the necessary permission from the “Standing Advisory Committee on Radio Frequency Allocation” (SACFA) issued by Ministry of Telecommunications.
- b) Site plan in the scale of 1:200.
- c) Before erection of cell tower, application shall be filed by the owner(s) and the mobile service provider. Copy of the agreement between the service provider and the owner shall also be submitted along with the application.
- d) Drawing of tower with complete details including specifications of foundations and design parameters.
- e) Height of the tower along with its elevation.
- f) In case the tower is in the vicinity or adjoining to high- or low-tension line then the distance from the same shall be clearly indicated in the drawings. NOC from the Me SEB has to be furnished accordingly.
- g) Erection of Tower shall only be permitted only on regularized buildings.
- h) Produce the structural stability certificate from any one of the 6 (six) institutions are required to be obtained by the Cellular and Basic Cellular Operators:

Manipur Institute of Technology, Imphal

National Institute of Technology, Imphal

National Institute of Technology, Silchar

Indian Institute of Technology, Guwahati

Central Building Research Institute, Roorkee

Rail India Technical & Economic Services Ltd. (RITES), Delhi.

- i) In case it is a roof top tower, the applicant has to produce/submit approved buildings plans along with the structural safety certificate from the registered structural engineer that the building can take the additional load of the tower. The certificate is to be vetted by any one of the following institutions:

Manipur Institute of Technology, Imphal

National Institute of Technology, Imphal

National Institute of Technology, Silchar

Indian Institute of Technology, Guwahati

Central Building Research Institute, Roorkee

- j) For Ground Base Towers, a soil test report has to be submitted.

- k) Submission of undertaking from the Operator that the installation of cell Tower does not cause any adverse effect to the health of human being of the area.
- l) Indemnity bond to take care of any loss or injury due to accident caused by the tower (including a declaration to the effect that the application shall take special precaution for fire safety and lightning and he shall be solely responsible for paying all kinds of compensation and damages and would be responsible for any civil or criminal case arising there from).
- m) The Service provider company shall provide 3rd Party Insurance and details of the Insurance shall be depicted on the Display Board.
- n) Mobile companies shall indicate the capacity of tower or antenna in megawatt.
- o) In case the tower is proposed in residential areas or in the vicinity thereof or near public or semi-public buildings, NOC from owners of adjoining buildings and requisite stakeholders shall have to be obtained.
- p) In case the mobile tower is proposed to be installed in the vicinity of any airport, NOC from the Airport authorities shall be submitted.
- q) Generator sets installed at the tower site to cater to the power requirements of the antenna should conform to the noise and omission norms and other requirements prescribed by the Manipur Pollution Control Board.
- r) The Cellular & basic Telecom Operators shall produce a certificate from the Manufacturer of the D.G. set to the effect that set installed meets the following standards and guidelines as laid down in the Noise Pollution (Regulation and Control) Rules, 2000 as notified by the Ministry of Environment and Forest vide its notification dated 14th February, 2010.
- s) A certificate from Manipur Pollution Control Board indicating fulfilment of “o”&”p” above.
- t) Any other information / data required by the Corporation/Council.

3) Projections:

- I. No Pager and/or Telephone Tower shall project beyond the existing building envelop of the building on which it is erected in any direction.
- II. The distance of the tower from the electric line or pole or tower thereof shall not be less than the height of tower plus requisite distance from respective high- or low-tension line.

4) Inspection of tower:

The Executive Officer of the Corporation/Council or his authorised representative shall inspect the wireless telecommunication towers to:

- I. Conduct inspections of the telecommunication tower and other facility once in every 6 (six) months to ensure its structural safety and continuing compliance with these bye-law.

- II. Conduct inspections to check abandonment or discontinuation of use and issue notice of discontinuation/ notice for removal of the structures within 30 days from the date of notification.

5) Penalties for violation of Bye-law:

Whoever erects, materially alters or commences to erect, materially alters any transmission tower without the previous sanction of the Corporation/Council or violates the Tower permission sanction issued by the Corporation/Council or contravenes with the provisions of this bye-laws or who interferes or obstruct any authorised personnel in the discharge of his duties shall be guilty of an offence. The Corporation/Council shall:

1. Punish the person as per the provisions of the Manipur Municipalities act, 1994.
2. Take suitable action which may include demolition of un-authorized works, sealing of premises, prosecution and criminal proceeding against the offender, in pursuance of relevant laws in force, as decided by the Corporation/Council.
3. Take suitable action against licensed technical personnel and license may be withdrawn in case of an offence as decided by the Corporation/Council.
4. Impose a fine of not exceeding Rs 5,000/- (Rupees five thousand) only payable within one month from the date of final notification and to a further fine not exceeding two hundred rupees for every day during which the operator continues to violate this Bye-law. Final notification shall be issued only after the operator is given a reasonable opportunity of being heard for showing cause within a period of 30 days.

6) Renewal of No objection Certificate (NOC):

1. NOC issued by the Corporation/Council is valid for 5 (five) years only. The NOC shall be got renewed on payment of requisite fee as prescribed in section 7(1).
2. The Towers existing for more than 5 (five) years are also required to be renewed within 3 (three) months from the date of notification of this bye-law in the gazette on payment of requisite fee.
3. The Corporation/Council reserves its right to withdraw permission/NOC at any time without assigning any reason.

7) Sharing of tower/Co-location of Tower:

The telecom operators may share the towers for fixing their respective antennas. The same are required to adhere to the prescribed technical requirements, so as to curtail multiplicity of towers as well as to optimize the use of the existing ones.

77. In-Building Solutions for Common Telecommunication Infrastructure

For installation of In-Building Solution (IBS) / Smart Connectivity infrastructure, the procedure laid down in **Annexure-C** shall be followed.

78. Gasoline (Motor Fuel) Filling Stations and Gasoline Filling cum Service Stations:

1) Definitions:

- a) The term “Filling station” is a piece of retail business engaged in supplying and dispensing of Gasoline (Motor Fuel) and motor oil essential for the normal operation of automobiles.
- b) The term “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 Gasoline and 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) Information accompanying Notice:

- i. Clearance of installation of the Petrol Pump under provisions of the Petroleum Act, 1934 read with Petroleum rule, 1973 rules 155 of the Petroleum Rule 1937 sanctioned by the District Magistrate.
- ii. N.O.C. obtained from Public Works Department for all proposals whether in the National Highway, State Highway etc. While N.O.C. is issued, due consideration is to be given on factors like congestion of the locality, movement of vehicles traffic in the particular road etc.
- iii. Layout plans for installation of the facilities at the retail outlet such as underground tank, pipeline, dispensing pump, sale room/office drainage, toilets, electrical layout approved by the Explosive Department, Government of India.
- iv. Photocopy of receipt of the application fee issued by the Corporation/Council.

3) Layout Plans

- i. The distance to be kept from the dispensing pump of the three side i.e., side and rear should not be less than 15 meters distance from a residential house. The frontage should conform as per the Indian Road Congress 13–1967 (IRC–13-1967). For installation of Petrol Pump the recommended practice for location and layout of roadside, motor filling and motor fuel filling-cum service station should conform as per the Indian road congress 12-1983 and 13-1967 (IRC-12-1983), (IRC-13-1967).
- ii. The following shall be applicable for locating the petrol pump cum service stations:
 - A) Minimum distance from the road intersections.
 - (a) For minor roads having less than 30 m R/W: 50 m
 - (b) For major roads having R/W 30 m or more: 100 m
 - B) The minimum distance of the property line of pump from the center line of the Road should not be less than 15 meters on roads having less than 30 m R/W. In case of roads having 30 m or more R/W the R/W or the road should be protected.
 - C) Plot Size
 - (a) Only filling stations 30 m x 17 m and small size 18 m x 15 m (for two and three wheelers)

- (b) Filling-cum-service station minimum size 36 mt. x 30 mt. and maximum 45 m x 33 m
- (c) Frontage of the plot should not be less than 30 m

79. Automated Teller Machine (ATM):

- 1) **Definition:** ATM stands for Automated Teller Machine and basically used to perform bank transactions like withdrawal of money and to view bank statements.
- 2) **Requirement:** Every applicant has to furnish the following:
 - 1) Site plan in the scale of 1:200 prepared by a licensed architect.
 - 2) A photocopy of the receipt of the Application Fee issued by the Corporation/Council.
 - 3) Before opening, application shall be filed by the owner(s) and the Bank. Copy of the agreement between the Bank and the owner shall also be submitted along with the application.
 - 4) NOC from Transport Department, Traffic Police and PWD. While N.O.C. is issued, due consideration is to be given on factors like congestion of the locality, movement of vehicles traffic in the particular road, recommendations of the Master Plan for the respective town etc.
 - 5) Any other information / data required by the Corporation/Council.

80. Sanction/Approval for construction/installation:

All Building Plan Sanctions, Revalidation, Installations of Towers, Issue of permission for erection of filling stations and opening of ATM booths shall be examined under this Bye-law and issue NOC or Refusal for sanction within 30 days of the receipt of notice as envisaged under Section 8(1) after obtaining Planning permission under Section 17(2) of this Bye-law.

CHAPTER-XIII

GREEN BUILDINGS AND SUSTAINABILITY PROVISIONS

81. Green Buildings and Sustainability Provisions

- (1) Green Building Certification shall be provided where applicable in the manner prescribed in Appendix – B. These buildings will be certified by authorized agencies certifying the star rating to qualify for discount on property tax as applicable under relevant provision.
- (2) Solar Energy: New Buildings in the following categories shall be provided with the ancillary solar assisted solar heating system and it shall be shown in the plans for developments applied for Planning Permission:
 - (a) Nursing Homes / Hospitals exceeding 500 square metre in the floor area;

- (b) Hotels and Lodges exceeding 500 square metre in floor area;
 - (c) Hostels exceeding 50 rooms;
 - (d) 20% of the water heating in commercial buildings/complexes to be done through solar heating.
- (3) Planting of trees: Every person being the owner or occupier of land or premises within the municipality shall plant a minimum of 10 evergreen trees and shall provide a detailed site plan showing the location of all trees. The trees shall be watered and fertilizer applied for at least 12 months and maintained. Trees shall be planted along the boundaries of the plot and unpaved soil surface of minimum 2 feet shall be kept.

82. Provision of Composting Plant:

Every group housing scheme/apartment house and commercial complexes/institutional buildings shall be provided with installation of composting plant for bio degradable waste. Accordingly, the space for a composting plant is mandatory to be proposed in the layout and constructed as per the approved norms and specifications in case of:

- (1) residential layouts, areas measuring 4000 Sqm or more;
- (2) group housing/Apartment houses if the area measures 3000 Sqm or if it is a multi-storied building with 20 more apartment houses;
- (3) commercial complexes /institutional /hotel and lodges/industrial buildings etc. if the built-up area is 1500 Sqm and more;
- (4) hospitals/nursing Homes with 40 or more beds.

83. Provision for Bio - Medical Waste:

Bio-Medical Waste (BMW) generated by Health Care Facilities (Hospital / Nursing Homes) has to be disposed of as per Bio-Medical Waste (Management) Rules, 2016.

84. Various Guidelines for Green Rating Systems

Green Rating System for buildings may be prepared selectively combining/ adopting/ amending the provisions between the following Guidelines.

- 1. IGBC guidelines by the confederation of Indian Industries.
- 2. GRIHA guidelines by the Ministry of New and Renewable Energy, Government of India.
- 3. ECBC guidelines prepared by Bureau of Energy Efficiency, Ministry of Power, Government of India.
- 4. Model Energy Efficiency guidelines (NSMH Sub report by Bureau of Energy Efficiency).

CHAPTER-XIV

STREAMLINING OF BUILDING APPROVAL

85. Streamlining the building approval/sanction procedure (Ease of Doing Business)

Approval of the external bodies like Airport Authority of India (AAI), Fire Services etc. wherever required, the specific requirements of the external bodies are to be added in the Common Application Form (CAF) so that building proponent has to file all information at a single customized online application.

86. Options for reducing the timelines for approvals:

(a) Outsourcing procedures:

The urban Local Bodies may outsource work pertaining to clearances and appoint firms/ companies to undertake the work on behalf of the corporation/Council.

(b) Creating a Cell in all the Urban Local Bodies:

There is a need for creating a specialized cell in all the Urban Local Bodies which is manned by qualified personnel conversant with the procedures and the interpretation of development regulations. The Cell should be headed by a qualified Town Planner who should lead a team of Architects and Engineers to handle online submission and conveying the online approvals as well.

(c) Single Window System: all the Urban Local Bodies

(d) Town Planning Department shall work out the modalities for Single Window Clearance. Town Planning Department shall work out the modalities for Single Window Clearance in consultation with all the stake holders.

(e.g., Existing system of obtaining Planning Permission and Building Permission through Single Window.)

87. Risk based classification of building proposals

There is a need for make provisions for fast tracking building permission procedures for all non-automatic approvals. Therefore, in the spirit of “Ease of Doing Business” the buildings have been classified further on the basis of risk parameter/risk-based classification to clear the building permits on fast-track system.

88. Residential buildings

For approval of residential plotted and group housing buildings, risk-based classification shall be as per Table given below:

Table No 88.1 Risk Matrix for different residential buildings

Risks		Very Low	Low	Moderate	High
Criteria	Parameters				
Size of the plot	Square meters	Below 105 m ²	105-500 m ²	Above 500 m ²	All sizes
Height of building	Metres	Below 15 m	Below 15 m	Below 15 m	15m and above

Use of the premise	Various categories	Residential plotted	Residential plotted	Residential plotted	Group Housing
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* Group housing area is minimum 2000 sqm.

Suggested Fast tracking tools:

For Very Low Risk Buildings:

In case of standard building plans by the authority for residential plots up to 105 sqm. in size and forming part of the approved layout plan, the owner shall be entitled to sign such standard plans and the required documents for sanction. In such cases, certificate from professionals would not be necessary and the owner shall be bound to follow the approved standard plan in detail.

For Low-Risk Buildings:

A competent professional (qualification and competence as per Appendix-A) shall be empowered to issue the building permit, but only after submitting the plan along with requisite documents and fees to the concerned local body. If the owner/professional desires to get the building plan sanctioned by the local body, building plans prepared by a qualified architect/engineer will have to be submitted to the concerned local body along with the fees and other requisite documents and the local body shall grant the building permit within 10 days.

For Moderate Risk buildings:

Building plans and the building plans will have to be prepared by a competent professional and the building plans will have to be submitted to the concerned local body along with the fees and other requisite documents. The local body shall grant the building permit within 20 days.

For high-Risk Buildings:

Clearance from Fire Department and other necessary clearances from AAI, NMA and other Agencies have to be obtained. Building Plans will have to be prepared by a competent professional and the building plans will have to be submitted to the concerned local body along with the fees and other requisite documents. The local body shall grant the building permit within 20 days.

89. Storage/Warehouses Buildings

For approval of the buildings meant for use as storage buildings/warehouses/godowns/risk-based classification shall be as per Table

Table 89.1 Risk Matrix for Storage/ Warehouses

	Very Low	Low	Moderate	High
Area on all floors/Built up area	Upto 250 m ²	Above 250 m ² and upto 2000 m ²	Upto 2000 m ²	Above 2000 m ²
Height of	Below 15 m	Below 15m	Below 15m	Below 15m

building				
Abutting Road	Min 12 m	Min 12 m	Min 12 m	Min 12 m
Type of Material storage	Category A	Category A	Category B (Stacking height-medium)	Category B (Stacking height-High)

Note:

The level of Risk is classified according to the material stored in the warehouse/storehouse.

Suggested modes of fast tracking:

For Very Low Risk Buildings:

A competent professional (qualification and competence as per APPENDIX-A) shall be empowered to issue the building permit but only after submitting the plan along with requisite documents to issue the building permit, but only after submitting the plan along with requisite documents and fees to the concerned local body, he shall apply online to the local body and the local body shall grant the building permit within 10 days.

For Low-Risk Buildings:

Building plans will have to be prepared by a competent professional and the building plans will have to be submitted to the concerned local body along with the fees and other requisite documents. The local body shall grant the building permit within 20 days.

For Moderate Risk Buildings:

Building plans will have to be prepared by a competent professional and the building plans will have to be submitted to the concerned local body along with the fees and other requisite documents. The local body shall grant the building permit within 20 days.

For High-Risk Buildings:

Building Plans will have to be prepared by a qualified architect and the building plans will have to be submitted to the concerned local body along with the fees and other requisite documents. The local body shall grant the building permit within 30 days.

Industrial Buildings:

For approval of the building meant for use as storage buildings/warehouses/godowns, risk-based classifications shall be as per Table below

Table 89.2 Risk Matrix for industries

Risks		Low	Moderate	High
Criteria	Parameters			
Size of the plot	Square meters	Upto 350 m ²	About 350 m ²	All sizes
Height of the building	Meters	Less than 15 meters	Less than 15 meters	15 m and above
Abutting Road width	Meters	Min.12 m	Min.12 m	Min.12 m

The level of risk is classified according to the size and height of the industrial building proposed.

Suggested mode of Fast tracking;

For Low-Risk Buildings:

1. Deemed Approval with Self- Certification
2. Plans to be submitted along with Structural drawings which does not require sanction.

For Moderate Risk Buildings:

1. Plans to be submitted to the empanelled professional.
2. Fire/Structural safety certification by Fire Services/ Structural Engineers.
3. Approval to be granted within 10 working days by the empanelled professional.
4. Approved plan to be submitted to ULB/DA.

For High-Risk Buildings:

1. Online Application
2. Immediate acknowledgement by software.
3. Fire/Structural safety Certification by Fire Services/ Structural Engineers.
4. Approval by ULB/DA within 20 working days.

CHAPTER-XV

ADDITIONAL FLOOR AREA RATIO (FAR) SCHEME

- 90.** Additional FLOOR AREA RATIO (FAR) scheme shall be in the form of Manipur State Affordable Housing Policy for Urban Areas, 2022, Manipur Urban Area Transferable Development Rights (TDR) Policy, 2022 and Manipur Urban Area Transit Oriented Development (TOD) POLICY, 2022 notified by the Government of Manipur. Policies are appended as Annexure-E, F & G of this bye-law. The additional FLOOR AREA RATIO (FAR) provided in these policies shall be in addition to the BASE FLOOR AREA RATIO (FAR) admissible under this bye-laws.

CHAPTER-XVI
ELECTRIC VEHICLE CHARGING INFRASTRUCTURE

91. Electric Vehicle Charging Infrastructure

Charging infrastructure (CI) shall be provided in the premises of the various building types for Electric Vehicles (EVs) for at least 20% of the total parking capacity.

Additionally, the building premise will have to have an additional power load, equivalent to the power required for all charging points to be operated simultaneously with a safety factor of 1.25 as referred in Annexure-A.

a) Residential buildings (Plotted House)

Ownership of Station	Private (Owner)
Connection and Metering	Domestic Meter
Type of Charger	Slow Chargers as per owner's specific requirements.
Modes of Charging	AC (Single charging gun)
Norms of Provisions	Minimum one Slow Charger and additional provisions as per owner individual

b) All other buildings (including Group Housing)

Any public charging stations installed at public/private areas or building premises of any category that caters to commercial mode of charging of EVs shall be deemed as a Public Charging Station and shall have to install the minimum requirement of chargers as specified in the guidelines issued vide No. 12/2/2018-EV dated 14.12.2018 by the Ministry of Power, Government of India, as referred in Annexure-A. However, in order to provide sufficient charging for the EV share in all vehicles, the Charging Infrastructure should be at least 20% of the parking capacity. The ratio of types of chargers shall be as specified in the Table below:

Building Type	Any building type			
Ownership of Station	Commercial Metering and Payment			
Types of Chargers	as per minimum requirements specified in Ministry of Power guidelines as referred in Annexure-A.			
Additional chargers	PCS service provider shall install additional number of kiosk or chargers beyond the minimum specified requirements to meet the ratio of charging points as prescribed below. (by the type of vehicles)			
Norms of Provisions for charging points	4-Wheelers (i) 1 Slow Charger (SC) each 3 EVs. (ii) 1 Fast Charger (FC) each 10 EVs	3-Wheelers (i) 1 Slow Charger (SC) each 2 EVs	2-Wheelers (i) 1 Slow Charger (SC) each 2 EVs	PV (Buses) (i) 1 Fast Charger (FC) each 10 EVs

Note:

1. Charging bays shall be planned currently at 20% capacity of all vehicles including 2-wheelers and 4-wheelers.
2. Open metering and on-spot payment options to be available for all users.
3. Provision of Fuel Cooled Battery Charging Station (FCB CS) and Battery Swap (BS) shall not be mandatory and will be at the discretion of the service provider.”

CHAPTER-XVII

REQUIREMENTS FOR SPECIAL DEVELOPMENTS AND BUILDINGS

92. Development Control for Hilly areas:

No construction shall be permitted on land above 600 m from the mean sea level and with an average slope of 30 degrees.

93. Flood risk prone areas:

Prohibit any new construction within the designated buffer zone to minimize human exposure to flood risk and preserve the natural integrity of natural ecosystems.

Reach	Left Bank Boundary	Right bank boundary
Imphal River		
Koirengei to Lilong	55 m from the mid-stream or 6 m from the outer toe of the bund whichever is further from the mid-stream	55 m from the mid-stream or 6 m from the outer toe of the bund whichever is farther from the mid-stream
Lilong to Sekmajjin	60 m from the mid-stream or 6 m from the outer toe of the bund whichever is further from the mid-stream	60 m from the mid-stream or 6 m from the outer toe of the bund whichever is further from the mid-stream
Sekmajjin to Ithai	62 m from the mid-stream or 6 m from the outer toe of the bund whichever is further from the mid-stream	62 m from the mid-stream or 6 m from the outer toe of the bund whichever is further from the mid-stream
Wangjing River		
Heirolk bridge to Kharungpat	31 m from the mid-stream or 6 m from the outer toe of the bund whichever is further from the mid-stream	31 m from the mid-stream or 6 m from the outer toe of the bund whichever is further from the mid-stream
Nambul River		
Within Greater Imphal Area	30 m from the mid-stream or 6 m from the outer toe of the bund whichever is further from the mid-stream	30 m from the mid-stream or 6 m from the outer toe of the bund whichever is further from the mid-stream
Merakhong River		

Yurembam to Tiddim Road crossing	22.5 m from the mid-stream	22.5 m from the mid-stream
Tiddim Road crossing to Langpok	24.2 m from the mid-stream	24.2 m from the mid-stream
Langpok to Chingphu	28 m from the midstream	28 m from the midstream
Iril River		
Sawombung to Lilong	50 m from the mid-stream or 6 m from the outer toe of the bund whichever is further from the mid-stream	50 m from the mid-stream or 6 m from the outer toe of the bund whichever is further from the mid-stream
Thoubal River		
Yairipok to Irong Ichil	48 m from the mid-stream or 6 m from the outer toe of the bund whichever is further from the mid-stream	48 m from the mid-stream or 6 m from the outer toe of the bund whichever is further from the mid-stream
Kongba River		
Chairenthong to Kiyamgei	35 m from the mid-stream	35 m from the mid-stream
Nambol River		
Maklang to Heikrujam	25 m from midstream	25 m from midstream
Heikrujam to Yangoi	25 m from midstream	25 m from midstream
Sekmai River		
Pallel Bridge to confluence of Imphal River at Sekmajin	35 m from the mid-stream or 6 m from the outer toe of the bund whichever is further from the mid-stream	35 m from the mid-stream or 6 m from the outer toe of the bund whichever is further from the mid-stream
Arong River		
Charangpat to Ikop pat	30 m from the mid-stream or 6 m from the outer toe of the bund whichever is further from the mid-stream	30 m from the mid-stream or 6 m from the outer toe of the bund whichever is further from the mid-stream

No person shall undertake any activity within the prohibited area or restricted area except with the previous permission of the Flood Zoning Authority constituted under the Flood Plain Zoning Act, 1978

94. Construction in High Flood Risk Area

In high Flood Risk Areas identified in the Master Plan of the towns, the plinth level should be above 1m above the highest flood level of the surrounding areas.

CHAPTER-XVIII

PROMOTION OF TRADITIONAL BUILDING MATERIALS

95. Encourage and mandate the use of local construction materials

- 95.1 The structural design of different building elements shall conform to the relevant Indian standards provided in Part 6 'Structural Design' of NBC 2016, Section 3 on bamboo and timber to promote traditional building materials.
- 95.2 To regulate the traditional materials used in construction should strictly follow the recommendations in Part 6 'Structural Design' of NBC 2016.
- 95.3 No building Permission fee will be charged by the concerned ULBs if the structure is made of traditional materials following the recommendations in Part 6 'Structural Design' of NBC 2016.

APPENDIX-A

A.1. QUALIFICATIONS OF THE TECHNICAL PERSONNEL

The qualifications of the technical personnel and their Competence to carry out different jobs for building permit and supervision for the purpose of licensing by the Corporation/Council shall be as given below.

A.1.1. ARCHITECT:

Practice of Profession of Architecture by the registered Architect should strictly be as per provision of the Architect Act, 1972 and their competence be as per comprehensive services as specified in Architect (Professional Conduct) regulation, 1989 and all Architects will be competent to carry out these works.

A.1.2. ENGINEER

The minimum qualification for an Engineer shall be graduate in Civil Engineering/Structural Engineering of recognized Indian or foreign University

Competence:

Scope of Work: To prepare structural design and structural drawings of High rise buildings, Educational Institutes, Hospitals, Public Buildings, Special Structures, Lifeline Buildings and the likes.

Eligibility:

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 designer OR;

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 structural designer.

The experience as stated above shall be under a Structural Engineer on Record (This requirement shall be waived for the first ten years of the promulgation of these Regulations).

Grade-II

Scope of work: To prepare structural design and structural drawings of various buildings having ground floor+3 upper floors (Plinth Area up to 2000 square metre).

Eligibility:

B.E. Civil or equivalent with minimum 2 years' experience (after attaining the degree) in structural design work at a responsible position as a structural designer

OR;

M.E. Structures/Earthquake Engineering or Ph.D. in Structural Engineering

The experience as stated above shall be under a Structural Engineer on Record

Grade-III

Scope of work: To prepare structural design and structural drawings of various buildings G+2 and up to 200 sqm total floor area.

Eligibility (Civil) / Diploma in Civil engineering + AMIE

A.2. REGISTRATION OF PROFESSIONALS:

The Corporation/Council shall register Town Planners (RTP), Architects (RA), Structural Engineers (RSE), Structural Design Agencies (RSDA), Geo-Technical Engineers (RGE), Construction Engineers (RCE), Construction Management Agency (RCMA), Quality Audit Agencies (RQAA), Developers (RD), wherever applicable, till such time there is no legislative frame for the professionals like engineers and others similar to Architects Act, 1972. Application for registration shall be submitted by these professionals to the Corporation/Council. Registration shall be valid for a period of one year and shall be renewable.

A.2.1. REGISTERED CONSTRUCTION ENGINEER (RCE):

- 1) The requirements for registration shall be:
 - a) B.E. Civil; or equivalent with two years' experience in construction OR;
 - b) Diploma in civil Engineering with seven years' experience in construction
 - c) B. Arch or its equivalent with two years of experience in construction.

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 of companies established within or outside the area of jurisdiction of the Corporation/Council shall be of minimum ten years of standing.

- 2) The registration shall be renewed every one year.
- 3) The registration may be cancelled for unprofessional conduct permanently on for a specified period.

A.2.2. REGISTERED CONSTRUCTION MANAGEMENT AGENCY (RCMA)

- 1) The requirement for registration shall be
 - a) Owner of a proprietary firm shall be an RCE
 - b) Fifty percent partners of a partnership firm shall be RCE
 - c) A designed officer of a limited company shall be RCE
- 2) The registration shall be renewed every one year.
- 3) The registration may be cancelled for unprofessional conduct permanently or for a specified period.

A.2.3. REGISTERED QUALITY AUDITOR (RQA)

- 1) The requirements for registration shall be:
 - a) 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

- b) M.E. (Civil) or equivalent with two years' experience as above
 - c) B.Arch. or equivalent with five years of experience in quality control aspects of construction
 - d) The experience as stated above shall be under one or more registered quality inspector/s of one or more reputed construction agencies of minimum ten years of standing from within or outside the area of jurisdiction of the Corporation/Council.
- 2) The registration shall be renewed after every one year.
 - 3) The registration may be cancelled for unprofessional conduct permanently or for a specified period

A.2.4. REGISTERED QUALITY AUDIT AGENCY (RQAA)

- 1) The requirement for registration shall be
 - a) Owner of a proprietary firm shall be QAR
 - b) Fifty percent partners of a partnership firm shall be QAR
 - c) A designed officer of a limited company shall be QAR
- 2) The registration shall be renewed every three years
- 3) The registration may be cancelled for unprofessional conduct permanently or for a specified period

A.2.5. REGISTERED GEO-TECHNICAL AGENCY (RGA)

For foundation work, where required as per Regulation services of a Geo-Technical Agency on Record

- 1) The requirement for registration shall be
 - a) Owner of a propriety firm shall be M.E (or equivalent) in Geo-Technical Engineering with minimum 10 years of experience
 - b) Fifty percent of a partnership firm shall have educational qualifications as in (a) but a minimum 5 years' experience
 - c) A designated officer of a limited company shall have qualifications as (a)
 - d) The experience as stated above shall be under one or more Geo-Technical Agency on Record. Such agencies established within or outside the area of jurisdiction of the Corporation/Council shall be of minimum ten years of standing
 - e) The agency has a Registered Laboratory. Any individual possessing qualifications as in (a) and hiring services of either RGA or Registered Testing Laboratory shall also be eligible for registration.
- 2) The registration shall be renewed every one year.
- 3) The registration may be cancelled for unprofessional conduct permanently or for a specified period.

A.2.6. TOWN PLANNER ON RECORD (TPR)

The qualifications, responsibility and the professional charges shall be applicable as prescribed by the Institute of Town Planners, India for their members for rendering professional services.

A.3. APPOINTMENT OF PROFESSIONALS:

The Owner/ Developer shall appoint 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), (CMAR), and Quality Auditor on Record (QAR) and Quality Audit Agency on Record (QAAR) as required. A proper written agreement(s), in a standard format(s), should be entered upon with such professional(s) engaged.

A.3.1. The Owner/Developer shall appoint the following professionals, out of the registered professionals described in B.1 above for every project as required.

- Town Planner on Record (TPR)
- Architect on Record (AR)
- 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)

A.3.2. The Owner/Developer shall submit a list of the appointed professionals on Record with the application for building permission to the Corporation/Council. (Consent/undertaking from these professionals needed in the required format at the time of seeking building permission)

A.3.3. In case the Owner/Developer changes 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.

A.4. GENERAL DUTIES AND RESPONSIBILITIES OF PROFESSIONALS:

- 1) Each professional shall clearly indicate on every plan, document and 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.
- 2) The Structural Engineer on Record and Architect on Record shall be responsible for adhering to the provisions of the relevant and prevailing 'Indian Standard Specifications'. They will not be held responsible for the severe damage or beyond the design forces provided in the above 'Indian Standard Specifications'.

A.4.1. STRUCTURAL ENGINEER ON RECORD (SER):

Duties and Responsibilities:

- 1) At the time of seeking permission from Corporation/Council for starting construction, the owner shall submit an undertaking from SER or SDAR that

- a) The SER/SDAR is agreeable to accept the assignment to prepare designs, drawings
 - b) The designs shall be carried out according to relevant national codes and specifications and good engineering practice.
 - c) A structural design report giving salient features of the structure, loads and soil characteristics and capacity, etc. shall be submitted in the prescribed format.
- 2) In the case of high-rise buildings and special structures, SER/SDAR shall
- a) Prepare preliminary design of the structure in addition to the Report indicated in 1 (c) above.
 - b) Get required soil (geo-technical) investigation done from an approved laboratory and submit the report concerning the same in prescribed format to the Authority
 - c) 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 Corporation/Council. 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.
- 3) All Reports and other submissions to the Corporation/Council 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.
- 4) 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 advise the Owner/Architect/Engineer for arranging for tests and their reports for soil, building material etc. for his evaluation and design consideration
 - d) To prepare the revised calculations & drawings in case of any revision with reference to the earlier submission of drawings & design in a particular case
 - e) To inform in writing the Corporation/Council within 7 days, if for any reason, he/she is relieved of his appointment/responsibilities as the registered structural designer for the development.

A.4.2. CONSTRUCTION ENGINEER ON RECORD (CER)

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

- 1) To adhere strictly to the structural drawings, specifications and written instructions of the Structural Engineer on Record and Architect on Record/Engineer on Record

- 2) To follow the provisions of N.B.C. or I.S. specifications as regards materials, components, quality control and the process of construction
- 3) To provide for safety of workers and others during excavation, construction and erection
- 4) To provide safe and adequate temporary structure required for construction and erection
- 5) 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
- 6) To deposit with the Authority one set of working drawings of the works executed along with the progress certificates before proceeding with the next stage of the work.
- 7) He/she shall be in overall charge of the site and responsible for overall supervision of the work
- 8) 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
- 9) He/she shall take adequate measures to ensure that no damage is caused to the work under construction and adjoining properties
- 10) He/she shall also ensure that no undue inconvenience is caused in the course of his/her work to the people in the neighbourhood.
- 11) He shall also ensure that no nuisance is caused to traffic & neighbouring people by way of noise, dust, smell, vibration etc. in the course of his/her work

A.4.3. 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:

- 1) At the time of seeking permission from Corporation/Council for starting construction of a high rise building or special structures, the Owner shall submit an undertaking from CMAR that
 - a) The CMAR is agreeable to accept the assignment to execute the project as per designs, drawings and specifications
 - b) *The CMAR shall install a Quality Assurance programme 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 Corporation/Council. The appointed QAAR shall be acceptable to the Owner/Developer. (The text is put in italics as it does not specifically apply/relate for registration.)*

- 2) 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 as per guidance of the QAAR
- 3) The CMAR shall submit a report and certificate in the prescribed format from the QAAR that the quality assurance programme 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 Authority
- 4) 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 as a designated officer of the company.

A.4.4. QUALITY AUDITOR ON RECORD (QAR)

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

A.4.5. QUALITY AUDIT AGENCY ON RECORD (QAAR)

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

- 1) At the time of seeking permission from Corporation/Council for starting construction of a high-rise building, lifeline buildings or special structures CMAR shall submit an undertaking from QAAR that:
 - a) The QAAR is agreeable to accept the assignment to implement the quality inspection programme and that the appointed QAAR is acceptable to the Owner/Developer
 - b) The QAAR will get all the testing of building materials, concrete etc. done by an independent approved testing laboratory.
- 2) During construction of a high-rise building and special structures the QAAR shall carry out necessary testing of materials as well as non-destructive 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 programme.
- 3) 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 programme. This report and certificate will be submitted to the CMAR and the owner/developer for final submission to the Authority.
- 4) 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.

A.4.6. GEO-TECHNICAL AGENCY ON RECORD (GAR)

All buildings described in Section 57 shall have, for foundation work, services of a Geotechnical Agency on Record.

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 met with
- d) To list out precautionary measures so that there is no damage to adjacent property

A.5. DEVELOPER:

Duties and responsibilities:

- 1) To obtain and submit to the Corporation/Council/Authority, along with application for development permission, 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 Corporation/Council, 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 GDCR Regulations.
- 4) To appoint a registered CER as site supervisor
- 5) To obtain and adhere to the quality assurance procedure prepared by the registered site supervisor
- 6) To adequately enable the site supervisor to carry out his responsibilities
- 7) To certify along with the 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
- 8) To obtain building permission from the Authority prior to commencement of construction of the real estate development
- 9) To regularly submit progress reports and certificates as required by the Authority
- 10) To inform in writing the 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
- 11) To inform in writing the 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
- 12) 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.

- 13) 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/Site Supervisor on Record/Clerk of Works 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.
- 14) When no registered construction contractor or site supervisor is required to be appointed, he shall be responsible for their duties and responsibilities under the byelaws.
- 15) 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 Authority
- 16) 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 regulations.
- 17) He shall exhibit the names of registered persons only on site and no additional names will be exhibited/displayed
- 18) He shall explain the construction design and its intended use as per approved plan only, to the prospective purchaser of the premises under construction
- 19) He shall make available copies of titles for the land, approved plans and all certificates issued to the Authority under these Byelaws.

A.6. 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.

A.7. Annual Rate of License/Annual Fees of Technical Personnel:

Annual license fee of Town Planner on Record (TPR), Architect on Record (AR), 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) and Quality Audit Agency on Record (QAAR) is Rs 2,000/- (Rupees two thousand) only per year. For the Architects on record who had already registered with the Council of Architecture, New Delhi, no payment of fee is required at the time of registration.

F. PENAL ACTION AGAINST DEFAULTING ARCHITECTS/ ENGINEERS/ TOWN PLANNERS:

The Authority reserves the exclusive right to declare black listed, cancel license or take any other action that the Authority may decide to take against Architect/ Engineers/ Town Planners if found to have diverged from the aesthetic and professional conduct or has made any misstatement or has misrepresented any material fact or has suppressed material facts.

FORM I

BUILDING PLAN APPLICATION FORM

To,

The Municipal Commissioner/Senior CEO/CEO/Executive Officer,
..... Municipal Corporation/Council,

Sub: Building Plan Application.

Sir/Madam,

I/We hereby apply for permission to undertake development and carry out:

1. Construction ofstoried building.
2. Re-construction of an existing building.
3. Alteration/addition to the existing building.
4. Revalidation/Renewal of plan for construction of allstoried building.
5. Certificate of Undertaking as per Form I(d)
6. (if any other please specify)

In respect of Patta No..... Dag No..... Village No..... at
....., Ward No. of
..... Municipal Corporation/Council. The said land and building shall be used for
..... purpose.

I/ We enclosed herewith the following 4 (four) plans, other details and specifications duly signed by me and the Architect/Engineer/Group Agency.....bearing Registered No. Licence No. who has/have prepared the plan, designs etc. And who will supervise the developments.

I/We the owner(s) of every part of the land/building to which this application relates. Request, permission for the above development may kindly be considered.

The Building permit fee as required under bye-laws..... has been deposited vide receipt No. dated(photocopy enclosed)

Place:

Signature of Owner(s)

Date:

Name of Owner(s)

FORM II

CERTIFICATE OF UNDERTAKING BY ARCHITECT

With respect to the building work of erection, re-erection or for making alteration in the building located at..... Patta No.....Dag No.....Village No..... of Ward No.....of Municipal Corporation/Council, I certify that I am a Licensed Architect duly registered with the Corporation/Council vide Registration No..... or that I am an Architect by profession and duly registered with the Council of Architecture, New Delhi vide Registration No.

1. That I have been engaged as an Architect for preparing the building plans and to supervise construction in respect of building of Shri/Smt.....situated at ward No. of Municipal Corporation/Council.
2. That I have personally inspected the site. The plot has been demarcated at site and the size, shape and area of plot available at site tallies with the land document.
3. That there is no construction in existence at the plot and no construction shall be started before sanction of the building plans.
4. That there is no encroachment on the Municipal land/road/other property and road widths as shown in the layout plan are available at site.
5. That the proposal has been prepared strictly in accordance with the Building Byelaws/rules/regulation and practice of the Corporation/Council and no misinterpretation on inference of provision of Building Bye-Law has been done while preparing the plans.
6. The construction shall be carried out strictly in accordance with the sanctioned building plans and in case any deviation is carried out, I shall inform the Corporation/Council within 48 hours.
7. That in case the owner dispenses with my services at any stage whatsoever, I shall inform the Corporation within 48 hours.
8. That mandatory setbacks have been proposed and shall be maintained in accordance with the setbacks marked in the layout plan/Master Plan/byelaws.
9. That nothing has been concealed and no misrepresentation has been made while preparing and submitting the building plans.
10. That in case anything contrary to the above is found or established at any stage, the Corporation/Council shall be at liberty to take any action as it may deem fit including revocation of sanction of building plans and debarring me for submission of building plans with the Corporation and also lodge a complaint with the Council of Architecture for appropriate action/take action as deemed fit. (Strike out whichever is inapplicable).

Signature of owner
With date

Signature of the Registered Architect/
Architect on Record with Registration No. & date.

Name:.....

Address:.....

FORM III

CERTIFICATE OF UNDERTAKING BY STRUCTURAL ENGINEER ON RECORD (SER)
(Only in respect of Lifeline & Special Building and Special Structures)

With respect to the building work of erection, re-erection or for making alteration in the building located at..... Patta No.....Dag No.....Village No..... of Ward No.....of Municipal Corporation/Council, I certify that I am a Licensed/Registered Structural Engineer duly registered with the Corporation vide Registration No.....

1. That I have been engaged as a Registered Structural Engineer for preparing the Structural Design Basis Report, detailed structural design and detailed structural drawings for preparing the building plans of Shri/Smt..... situated at ward No. of Municipal Corporation/Council.
2. That I am fully conversant of my duties and responsibilities under the regulations and assure that I shall fulfil them in all respects.
3. That I have prepared and signed a structural design basis report (SDBR).
4. That I undertake to carry out a detailed structural design and prepare structural drawings of the proposed building as per the latest Indian standard Specifications, the structural safety requirements for all situations including natural disasters like cyclone & earth quake etc., as applicable, as stipulated under Chapter VII of this Bye-law, Part- 6 (Structural Design) of the National Building Code of India, 2005 and other relevant codes.
5. That I undertake to supply the owner and the Registered Construction Engineer the detailed structural drawings. If my services are terminated, I undertake to intimate the Corporation in writing.

Signature of owner
With date

Signature of the Structural Engineer
on Record with Registration No. & date.

Name:.....

Address:.....

.....

Tel. No:.....

FORM IV

CERTIFICATE FOR STRUCTURAL SAFETY

With respect to the building work of erection, re-erection or for making alteration in the building located at Patta No. Dag No.....and Village No.....of Ward No.of Municipal Corporation/Council, I certify that the structural plans and details of the building submitted for approval satisfy the structural safety requirements for all situations including natural disasters like cyclone & earth quake etc., as applicable, as stipulated under Chapter VII of this Bye-law, Part- 6 (Structural Design) of the National Building Code of India, 2005 and other relevant codes; and the information given therein is factually correct to the best of my knowledge. I will be responsible and liable for action by the Corporation if the plan/design contain misrepresentation or fraudulent information and the construction is made in deviation of approved plan or if there is any structural failure due to wrong /unsafe structural design. If my services are terminated, I undertake to intimate the Corporation in writing.

Signature of owner
With date

Signature of the Registered Structural
Engineer on Record with Registration & date.

Name:.....

Address:.....

FORM V

CERTIFICATE OF UNDERTAKING BY CONSTRUCTION ENGINEER ON RECORD (CER)

With respect to the building work of erection, re-erection or for making alteration in the building located at..... Patta No.....Dag No.....Village No..... of Ward No.....of Municipal Corporation/Council, I certify that I am a Licensed/Registered Construction Engineer on Record duly registered with the Corporation/Council vide Registration No.....

1. That I have been engaged as a Construction Engineer on Record for Building plans of Shri/Smt..... situated at ward No.....of Municipal Corporation/Council.
2. That I am fully conversant of my duties and responsibilities under the regulations and assure that all the works under my charge shall be executed in accordance with the drawings and specifications prepared for this project

Signature of owner
With date

Signature of the Construction Engineer
on Record with Registration No. & date.

Name:.....

Address:.....
.....

Tel. No:.....

FORM VI

Statement of the Proposal and Certificate

By the owner and Registered Architect

With respect to the building work of erection, re-erection or for making alteration in the building located at..... of Shri/SmtPatta No..... Dag No..... of Village No..... of Ward No..... of Municipal Corporation/Council.
Plot Area :.....Square Metre.

AREA STATEMENT

DESCRIPTION	PERMISSIBLE	PROPOSED SQ. MT	REMARKS SQ. MT
Maximum Ground Coverage			
Basement			
Ground Floor			
First Floor			
Second Floor			
Third Floor			
Total Floor Area			
Floor Area Ratio			
Maximum height (in meters) Permissible:		Proposed:	
Setbacks	PERMISSIBLE	PROPOSED (in metres)	
Front			
Rear			
Left			
Right			
Parking Spaces			
Parking (No. of Cars)	Ground Floor covered parking	Open Space Parking	

We hereby certify that

- Plot is lying vacant and no construction shall be started before sanction.
- The plot is free from all encumbrances.

Signature of Owners(s)

Signature of Registered Architect

Name.....
(in block letters) (in block letters)

Name.....

Address.....
.....

Address.....
.....

Dated:

Dated:

FORM VII

**OFFICE OF THE
..... MUNICIPAL CORPORATION/COUNCIL**

BPS No.,

.....the 00/00/0000

To,

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

Subject: Building Permission Sanction

Sir/Madam,

With reference to your application dated for the grant of sanction to construction/re-construction/alteration/addition in the building to carry out the development specified in the said application situated in/at..... Ward No. of Municipal Corporation/Council, I am to state that the Corporation/Council subject to the following conditions and corrections done in the plans has sanctioned the same on

- 1) The plans are valid up o.....day.....months.....year.
- 2) The construction will be undertaken as per sanctioned plan only and no deviation from the bye-laws will be permitted without prior sanction. Any deviation done against the bye-laws is liable to be demolished and the supervising licensed Architect/ Engineer on Record engaged on the job will run the risk of being black listed.
- 3) It will be the duty of the owner of the plot and the Architect / Engineer preparing the plans to ensure that the sanctioned plans are as per prevalent Master Plan/Zonal Plan/Building Bye-laws. If any infringement of bye-laws remains unnoticed, the Corporation reserves the right to amend the plans as and when infringement come to the notice and Corporation will stand indemnified against any claim on this account.
- 4) A notice in writing shall be sent to Corporation/Council before commencement of the constructions of the building as per bye-laws. Similar notice will be sent to Corporation/Council when the building has reached up to foundation/foundation base/plinth level and at any other level as desired by the Corporation/Council.
- 5) The owner shall not occupy or permit to occupy the building or use or permit to use the building or any part thereof affected by any such work until occupancy certificates issued by the Corporation/Council.
- 6) Corporation/Council will stand indemnified and kept harmless from all proceedings in court and before other authorities of all expenses/claims which the Corporation/Council may incur or become liable to pay as a result or in consequences of the sanction accorded by it to these building plans.
- 7) Building permission accorded cannot be construed as evidence in respect of right title interest of the plot over which the plan is approved.

- 8) Any dispute arising out of the land record or in respect of right/title/interest after this approval, the plan shall be treated automatically cancelled during the period of dispute.
- 9) The doors and window leaves shall be fixed in such a way that they shall not, when open project on any street.
- 10) The owner will not convert the house into more dwelling units on each floor than the sanctioned.
- 11) The building shall not be constructed within minimum distance as specified in Indian Electric Rules from voltage lines running on side of the plot.
- 12) The sanction will be void if auxiliary conditions mentioned above and other conditions imposed hereunder are not complied.
- 13) The owner will use the premises for the use, which has been sanctioned.
- 14) The owner will not proceed with the construction without having the supervision of an Architect/Engineer as the case may be. If he/she changes his Architect/Engineer he/she shall inform the Corporation/Council about the appointment of new Architect/Engineer within 48 hours, with a proper certificate from him.
- 15) The permission is valid for a period of one year with effect from the date of issue.
- 16) Other conditions, if any.....

Yours faithfully,

Encl: 2 sets of sanctioned plan.

..... Municipal Corporation/Council

Municipal Commissioner/Senior CEO/CEO/Executive Officer

FORM VIII

**OFFICE OF THE
..... MUNICIPAL CORPORATION/COUNCIL**

BPS No.,the 00/00/0000

To,

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

Subject: Refusal of Building Permission Sanction

Sir/Madam,

With reference to your application dated for the grant of sanction to construction/re-construction/alteration/addition in the building to carry out the development specified in the said application situated in/at..... Ward No. of Municipal Corporation/ Council, I am to inform you that the sanction has been refused by Corporation/Council as the work does not comply with the following provisions of Manipur Municipality Act, 1994 and Bye-laws made there under.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Yours faithfully,

Encl: A set of plan.

.....Municipal Corporation/Council

The Municipal Commissioner/Senior CEO/CEO/Executive Officer

FORM IX

FORM FOR NOTICE FOR COMMENCEMENT OF BUILDING WORK

....., the 00,00,0000

To,

The Municipal Commissioner/Senior CEO/CEO/Executive Officer,
..... Municipal Corporation/Council,
.....

Sub: Notice for commencement of work.

Dear Sir,

I/We hereby certify that the building work of erection, re-erection or for making alteration in the building located at..... Patta No.....Dag No.....Village No..... of Ward No.....of Municipal Corporation/ Council will commence on 00.00.0000 as per your permission vide office communication No. BPS/0000/0000-ULBS dated 00.00.0000 under the supervision of Shri/Smt.....Architect/Construction Engineer on Record/Supervisor/Group, License No.....and in accordance with the plans sanctioned.

Signature of Owner (s):.....
Name (s) of the Owners (in block letters):.....
.....
Address:.....
.....

FORM X

**OFFICE OF THE
.....MUNICIPAL CORPORATION/COUNCIL**

BPS Revalidation No., the 00/00/0000

To,

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

Subject: Revalidation of Building Plans

Sir/Madam,

With reference to your application dated for the grant of sanction to construction/re-construction/alteration/addition in the building to carry out the development specified in the said application situated in/at..... Ward No. of Municipal Corporation/ Council, I am directed to inform you that your building plan which were sanctioned on..... vide this office BPS No..... have been revalidated up to

Original sanctioned plan submitted by you is also returned herewith and kindly acknowledge receipt.

Yours faithfully,

Encl: A set of plan.

..... Municipal Corporation/Council

The Municipal Commissioner/Senior CEO/CEO/Executive Officer

Form XI

Intimation of Completion at different stages of construction work

....., the 00,,0000

To,

The Municipal Commissioner/Senior CEO/CEO/Executive Officer,
..... Municipal Corporation/Council,
.....

Sub: Intimation of completion at different stages of construction work.

Dear Sir,

I/We hereby certify that the building work of erection, re-erection or for making alteration in the building of Shri/Smt.....located at..... Patta No.....Dag No.....Village No..... of Ward No.....of Municipal Corporation/ Council has been completed up to footing trench/column up to plinth/plinth/slab level in accordance with your permission vide office communication No. BPS/0000/0000-ULBS dated 00.00.0000 under my supervision and in accordance with the sanctioned plan.

You may please fix a convenient date and time to confirm the same.

Yours faithfully,

Signature of Licensed Architect/Engineer/Supervisor

Name:

(In Block letters)

Address:.....
.....

FORM XII

Form of Notice of Completion

....., the 00,,0000

To,

The Municipal Commissioner/Senior CEO/CEO/Executive Officer,
.....Municipal Corporation/Council,
.....

Sub: Notice of Completion.

Dear Sir,

I/We hereby give notice that I/We have completed the erection of building/execution of the building situated at..... Patta No.....Dag No.....Village No..... of Ward No.....of Municipal Corporation/ Council in pursuance of the sanction granted by the Corporation vide office communication No. BPS/0000/0000-ULBS dated 00.00.0000

Permission to occupy or use the building may be granted.

Yours faithfully,

Signature of owner:.....

Name of owner:.....

(In Block letters)

Address of the owner:.....

.....

FORM XIII

Form For Certificate of Architect/Engineer/Supervisor

(To be submitted along with notice of completion)

To,

The Municipal Commissioner/Senior CEO/CEO/Executive Officer,
..... Municipal Corporation/Council,
.....

Sub: Notice of Completion.

Dear Sir,

I/We hereby certify that the erection, re-erection or material alteration in/at building of Shri/Smt..... situated atWard No.....of Municipal Corporation/Council has been supervised by me and has been completed on 00.00.0000 according to the plans sanctioned, sanction granted by the Corporation vide office communication No. BPS/0000/0000-ULBS dated 00.00.0000. The work has been completed to our best satisfaction, the workmanship and all the materials (type & grade) have been used strictly in accordance with general and detailed specifications under our supervision and as per Building Bye-Laws. No provisions of the Building Bye-Laws and condition prescribed or order issued there under have been transgressed in the course of the work. The building is fit for use for which it has been erected/re-erected or altered and constructed.

2. Certificate:

- a. Certified that the building(s) has been constructed according to the sanctioned plan and structural design (one set of structural drawings as executed is enclosing) which incorporate the provisions of structural safety as specified in relevant prevailing IS codes standards/Guidelines.
- b. Further, certified that water harvesting as well as waste water re-cycling systems has been provided as per the sanctioned building plan.
- c. It is also certified that construction has been one under our supervision and guidelines and adheres to the drawings submitted and the records of supervision have been maintained by us.
- d. Permission to occupy of use the building may be granted.

Signature of Structural Engineer

Signature of Registered Architect

Name.....

Name.....

License No.....

License No.....

Address.....

Address.....

.....

.....

Dated:

Dated:

FORM XIV

**OFFICE OF THE
.....MUNICIPAL CORPORATION/COUNCIL**

BPS No. BPS/0000/0000-ULBS

....., the 00/00/0000

To,

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

Subject: Completion-cum-Occupancy Certificate

Sir/Madam,

With reference to your notice of completion dated for the issue of completion cum occupation certificate in respect of the building plan sanctioned by the Corporation/Council vide office communication No. BPS/0000/0000-ULBS dated 00.00.0000 has been inspected with reference to building bye-laws in respect of the structural safety, hygienic and sanitary conditions inside and in the surroundings and is declared fit for occupation/ release of water/ electricity connections and permitted to be occupied.

Yours faithfully,

..... Municipal Corporation/Council

The Municipal Commissioner/Senior CEO/CEO/Executive Officer

FORM XV

**OFFICE OF THE
..... MUNICIPAL CORPORATION/COUNCIL**

BPS No. BPS/0000/0000-ULBS

....., the 00/00/0000

To,

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

Subject: Rejection of Completion-cum-Occupancy Certificate

Sir/Madam,

With reference to your notice of completion dated for the issue of completion cum occupation certificate in respect of the building plan sanctioned by the Corporation/Council vide office communication No.BPS/0000/0000-ULBS dated 00.00.0000 has been inspected with reference to building bye-laws in respect of the structural safety, hygienic and sanitary conditions inside and in the surroundings and is rejected for the reasons given below:

- 1.....
- 2.....
- 3.....
- 4.....

Yours faithfully

..... Municipal Corporation/Council

The Municipal Commissioner/Senior CEO/CEO/Executive Officer

FORM-XVI

INDEMNITY BOND FOR BASEMENT

(To be submitted on non-judicial stamp paper of Rs 10/- duly attested by Oath Commissioner)

This Indemnity Bond is executed by Shri/Smt..... S/O,D/O,W/O
Shri/Smt_____ hereinafter called the owners in favour
of Municipal Corporation/ Council, its successors or entitled.

Whereas the owner has submitted to theMunicipal Corporation/Council the plans for, sanction of basement/4storey building and above in the plot located at..... Patta Municipal Corporation/Council under the provisions of the Act and Rules and Building Regulations made there under:-

And whereas the owners have agreed to sanction the aforesaid construction subject to the conditions that the owner shall indemnify the Corporation in the event of any loss or damage being cause to the adjoining building on account of the construction of the said basement either at the time of digging of its foundations or in the course of its construction or even thereafter and also against any claim of any concern thereto.

And, whereas, the owners have further agreed to execute an indemnity bond to the above affect and also to abide by the terms imposed by the Corporation to the grant of sanction for construction of the basement/4storey and above building.

Now this deed witnesses:

1. That in consideration of the sanction of the plans by Municipal Corporation/ Council for construction of the basement the executants undertakes that he/she shall at all times keep authority free from any liability, loss or damages/flowing from any injury or damage caused to the adjoining built-up properties or to any person as a consequence of the construction of at the time of digging of its foundations or during the course of its construction or at any time thereafter.
2. The owner agreed and undertakes that in the event of any claim being made by any person or persons against Municipal Corporation/ Council either in respect of the sanction granted by the Corporation to the owner for the construction of basement or in respect of the construction or manner of construct ion of the basement by the owner of the consequences flowing from the said sanction the executants shall be responsible and liable and not authority.
3. The owner agrees and undertake to indemnify the Corporation fully in respect of any amount which the Corporation may be required to pay to any person either by way of compensation or on any other account as a result of any claim or suitor any other proceedings concerning the sanctioning of the construction of the basement or the making thereof and also in respect of the costs and expenses which the Corporation may incur on defending any action.
4. Without prejudice to the above undertaking the owners hereby binds itself to pay to the Corporation/Council to the full extent any amount which the Corporation may be required to pay to any person in connection with, relating to or concerning the sanctioning of the basement or the making thereof.

5. The owner further agrees and undertakes that this bond shall remain in full force and effect till the owner faithfully observes/performs the undertaking herein before contained.
6. In witness whereof the owner above named has signed this bond on this _____ day of at

Indemnifier

Witness:
(Signatures)
Name:
Full Address:

(Signatures).....
2. Name:
Full Address:

N.B. Corporation will ask for this Bond for building with basement/4 storey and above.

FORM-XVII

**Application for Enrolment as Competent Technical Personnel
..... Municipal Corporation /Council(individual)**

To,

The Municipal Commissioner/Senior CEO/CEO/Executive Officer,
..... Municipal Corporation/Council,

Sub: Enrolment as competent technical personnel

Dear Sir,

I hereby apply for enrolment of my name as Licensed Architect/Engineer/Town Planner/Firm to do the various works of schemes for Building Permit and supervision under Section 2(20a) of Municipal Corporation/ Council Building Bye-laws, in response to your Notification No. as Architect/ Engineer/Town Planner/Firm.

I do hereby also declare that I shall follow and will abide by all the rules and regulations now in force and that may be framed from time under the provision of the Municipal Corporation/Council Building Bye-laws.

My personal bio-data are as follows-

Name :
Qualification :
(Certificate to be enclosed)
Past experience :
Father's Name :
Age :
Present Address :

Permanent Address :

I deposit herewith annual enrolment fees of Rs..... (Rupees.....) only in cash as required.

Signature:

Dated:

N.B. I am not associated with any other similar group or agency in any manner for this purpose.

FORM-XVIII

Application for Enrolment as Competent Technical Personnel in Municipal Corporation/Council (in Group or Agency)

To,

..... The Municipal Commissioner/Senior CEO/CEO/Executive Officer,
..... Municipal Corporation/Council,

Sub: Enrolment as competent technical personnel

Dear Sir,

We hereby apply for enrolment of our Group/Agency in the name and style as mentioned below, as competent technical personnel to do the various works of schemes for Building Permit and supervision under Section 2(20a) of Municipal Corporation/Council Building Bye-laws in response to your notification No.

We do hereby also declare that we shall follow and will abide by all the rules and regulations now in force and that may be framed from time to time under the provision of the Municipal Corporation/Council Building Bye. Name of the group and persons associated with personal bio-data are as follows-

1. Name of the Group or Agency:
2. Present & Permanent Address: -
3. Name of persons associated: - with his/ her personal capacity and rank and personal bio-data (Certificates enclosed)

(A)
(B)
(C)
(D)

We deposit herewith the annual enrolment fees of Rs..... (Rupees.....) only in cash as required.

Signature of head of the group or agency.

Dated:

N.B. Any person associated with any group or agency will not be eligible for enrolment as an individual.

“Annexure A”

Technology, options, specification of EV charging and PCS infrastructure.

1. EV Charging Technology

1.1 Electric Vehicle Supply Equipment (EVSE): An EVSE shall be a wall mounted box that supplies electric energy for recharging of electric vehicle batteries and shall have a safety lock-out feature that does not allow current to flow from the device until the plug is physically inserted into the car. EVSEs may be customized with added features as mentioned, namely:

- a) Authentication;
- b) Integrated payment gateways; and
- c) Software for remote monitoring.

1.2 Types of EVSE:

- (a) **Charging speeds:** Charging power, which determines the time required to charge a vehicle, may vary by orders of magnitude across charge points, as shown in Table 91.1. A small household outlet may charge as slowly as 1.2 KW, while the most advanced rapid charging stations can charge up to 350 KW. Charging infrastructure is broadly broken into three categories based on speed: Level 1, Level 2, and direct current (DC) fast-charging (sometimes referred to as Level 3).
- (b) **Private Charging:** Charging batteries of privately owned cars through domestic charging points. Billing shall be part of home or domestic metering.
- (c) **AC-Slow Charging:** The house private chargers are generally used with 230V/15A single phase plug which can deliver a maximum of up to about 2.5 KW of power. The EVSE supplies AC current to the vehicle's onboard charger which in turn shall convert the AC power to DC, allowing the battery to be charged.
- (d) **Public Charging:** For charging outside the house premises, electric power shall be billed and payment shall be collected. The power drawn by these chargers shall be managed from time to time.
- (e) **DC-Fast Charging:** DC current shall be sent to the electric car's battery directly via the charge port. FC chargers (usually 50 KW or more) may supply 100 or more kilometers of range per hour of charging. The fast chargers shall be used as a top-up, rather than fully charging vehicles, for cab companies and corporate users who have a fleet of electric cars.

2. EV share in all vehicles

The charging infrastructure prescriptions in all urban development guidelines shall be at least 20%.

2. Power Load sanction to premises

While adding Charging Infrastructures to the proposed set of building types, enhanced Power Load shall be added for each such building type by the Power Electric Supply Companies ESCOMs, commensurate to the total additional power requirement of simultaneous operation of all the specified charging points in the premise. The load capacity assigned to each premise shall be kept with a safety factor of 1.25 with a long-term vision of thirty years.

Table 1.1
EVs charging modes and availability:

Vehicle type	Slow Charging	Fast Charging	Public CI
2-Wheelers	Y	N	Yes/Limited
3-Wheelers	Y	N	Yes/Limited
PVs (Cars)	Y	Y	Yes
PVs (Buses)	N	Y	Yes

Table 1.2
Charging options for EV types (by ownership)

Vehicle type	Private CI	Public CS	Predominant place of charging
2-Wheelers	SC/BS	SC	Point of residence / Work
3-Wheelers	SC/BS	SC/BS	Residence / Parking stations
PVs (Cars)	SC/BS	FC	Residence / Point of work / other public places
PVs (Buses)	SC/BS	FC/BS	Bus Terminals/Depots

- 1) The option of Battery Swapping (BS) for privately owned 2-Wheelers and PV(Cars) shall be limited to Private CI.
- 2) For 3-Wheelers, the BS shall be made available in PCS, for faster recharge experience only.
- 3) For PV (Buses), Captive Fast charging infrastructure for 100% internal use for fleets may be adopted by privately owned Depots/Garages.
- 4) The charging infrastructure, installed at every Public Charging Station (PCS), shall follow the guidelines and standards for setting up Charging Infrastructure for Electric

Vehicles, dated 14.12.2018, issued by the Ministry of Power and the connectivity regulations and safety norms shall be defined by respective authorities such as Central Electric Authority or Ministry of Power for grid access to such PCS or any other charging station or infrastructure.

4. Charger Specifications and PCS Infrastructure:

- 1) Any installed PCS shall have one or more electric kiosk or boards with installation of all charger models as prescribed in the guidelines and standards notified by the Ministry of Power, dated 14 December 2018, for Charging Infrastructure for EVs (at Annexure-B), with other necessary arrangements as deemed necessary.
- 2) Public Charging Station service providers shall be free to create charging hubs and to install additional number of kiosk or chargers in addition to the minimum chargers prescribed vide the guidelines and standards notified by Ministry of Power, dated 14 December 2018, including options for installation of additional chargers, if required.

Note:

- i. Minimum infrastructure requirements shall not apply to Private Charging Points which are meant for self-use of individual EV owners (non-commercial basis).
- ii. Captive charging infrastructure for 100% internal use for a company's own fleet shall not be required to install all type of chargers and to have Network Service Providers (NSPs) tie ups.

5. Location of Public Charging Station (PCS)/ Fluid Cooled Batteries (FCBs) CS in local area/ building precincts.

In accordance with the guidelines and standards notified by the Ministry of Power, dated 14 December 2018, following minimum standards with regard to density of/distance between PCS in local level facilities in building premise/ urban precincts shall be followed, as per provisions in the Model Building Bye-Laws, namely:

- (1) At the local levels, within the urban area, at least one Public Charging Station is to be available within a grid of 3Km x 3Km.
- (2) At the building premise levels, for various building types:-
 - (a) Private charging infrastructure (non-commercial use) for individuals.
 - (b) For all commercial modes of charging EVs, at least one PCS, as per the minimum specifications laid under the guidelines and standards notified by the Ministry of Power, dated 14 December 2018.
 - (c) Stand-alone Battery Swapping Stations may be added with the PCs.

Annexure-B

Charging Infrastructure for Electric Vehicles - Guidelines and Standards (Issued by the Ministry of Power, Government of India vide letter No. 12/2/2018-EV dated 14.12.2018:

1. Private charging at residences or offices shall be permitted and ESCOMs may facilitate the same.
2. Setting up of Public Charging Stations (PCS) shall be a de-licensed activity and any individual or entity is free to set up public charging stations:

Provided that, such stations shall meet the technical as well as performance standards and protocols laid down below, as well as any further norms, standards or specifications laid down by the Ministry of Power and Central Electricity Authority from time to time.

(a) Any person seeking to set up a Public Charging Station may apply for connectivity and he shall be provided connectivity on priority by the Distribution Company licensee to supply power in the area.

(b) Any Charging Station or Chain of Charging Stations may also obtain electricity from any generation company through open access.

3. Minimum requirements for Public Charging Infrastructure (PCI): Every Public Charging Station (PCS) shall have the following minimum infrastructure: an exclusive transformer with all related substation equipment including safety appliance;
 - (i) 33 or 11 KV line or cables with associated equipment including as needed for line termination, metering etc.;
 - (ii) appropriate civil works;
 - (iii) adequate space for charging and entry or exit of vehicles;
 - (iv) current international standards that are prevalent and used by most vehicle manufacturers internationally like CCS and CHaDeMO. Hence, Public Charging Stations shall have one or more electric kiosk or boards with installation of all the charger models as follows:

Charger Type	Charger Connectors*	Rated Voltage (V)	No. of Charging Points/No. of Voltage (V) Connector guns (CG)
Fast	CCS (min. 50 kW)	200-1000	1/ 1 CG
	CHAdeMO (min. 50 kW)	200-1000	1/ 1 CG
	Type-2 AC (min. 22 kW)	380-480	1/ 1 CG
Slow/ Moderate	Bharat DC-00 I (15 kW)	72-200	1/ 1 CG
	Bharat AC-001 (JO kW)	230	3/3 CG of 3.3 kW each
*In addition, any other fast/slow/moderate charger as per approved BIS standards whenever notified.			

- (v) the kiosk or board may have options for installation or additional chargers if required;
- (vi) the Public Charging Station Providers shall be free to create Charging Hubs and to install additional number of Kiosk or Chargers in addition to the minimum number of chargers prescribed above; 6
- (vii) tie-up with at least one online Network Service Providers (NSPs) to enable advance remote or online booking of charging slots by EV owners. Such online information to EV owners shall include information regarding location, types and numbers of chargers installed or available etc.;
- (viii) share charging station data with appropriate ESCOM and to maintain appropriate protocols as prescribed by such ESCOM for this purpose. CEA shall have access to this database;
- (ix) appropriate public amenities; and
- (x) in addition to the above, fast charging facility are provided at the PCS by the PCI provider, the following additional infrastructure shall be provided, namely:
 - (a) appropriate Liquid Cooled cables, if High Speed Charging Facility for onboard charging of Fluid Cooled Batteries (FCBs) is provided; and
 - (b) appropriate Climate Control Equipment for Fast Charging of Batteries to be used for swapping (i.e. not onboard).

Every Public Charging Station (PCS) shall be operational only after inspection and clearance as communicated by a suitable clearance certificate, by the concerned electrical inspector or technical personnel, designated specifically by the respective ESCOM for this purpose. ESCOMs may also empanel one or more third party authorized technical agencies for this purpose.

4. Electric Vehicle Service Equipment (EVSE) shall be type tested by an appropriate reputed authority.
5. The above minimum infrastructure requirements shall not apply to Private Charging Points meant for self-use of individual EV owners (non-commercial basis).
6. Captive charging infrastructure for 100% internal use for a company's own or leased fleet for its own use shall not be required to install all type of chargers and to have NSP tie-ups.
7. Public Charging Station may have the option to add Stand-alone battery swapping facilities in addition to the above mandatory facilities, provided space and other conditions permit.
8. Public charging Infrastructure (PCI) for long distance EVs and/or heavy duty EVs like trucks, buses etc. shall have the following minimum requirements, namely:
 - i. at least two chargers of minimum 100 kW (with 200-1000 V), each of different specification (CCS & CHAdeMO) and with single connector gun, each in addition to the minimum charging infrastructure requirements as mandated for Public Charging Stations in para 3.
 - ii. appropriate Liquid Cooled Cables for high-speed charging facility for on board charging of Fluid Cooled Batteries, currently available in some long range EVs.
 - iii. in addition to above, the Fast-Charging Stations (FCS) for Long Distance EVs and/or Heavy Duty EVs may also have the option of swapping facilities for batteries, for meeting the charging requirements as per para 3. For Fast Charging or Long-Distance use of EVs and/or for Heavy Duty Vehicles like buses/trucks etc. FCBs shall have higher charging rate and longer life. Such Fast-Charging Stations (FCS) which are meant only for 100% in house/captive utilization, for example buses of a company, shall be free to decide the charging specifications as per requirement for its in-house company EVs.
9. Location of Public Charging Stations: In case of Public Charging Stations, the following minimum requirements are laid down with regard to density/distance between two charging points, namely

- (i) at least one Charging Station shall be available in a grid of 3 km X 3 km. Further, one Charging Station shall be set up at every 25 km on both sides of highways or roads; and 7
- (ii) for long range EVs, like long range SUVs and heavy duty EVs like buses, trucks etc., there shall be at least one Fast Charging Station with Charging Infrastructure Specifications at every 100 km, one on each side of the highway or road located preferably within or alongside the stations. Within cities, such charging facilities for heavy duty EVs shall be located within Transport Nagars, bus depots. Swapping facilities shall not be mandatory within cities for Buses, trucks, etc.
10. Additional public charging stations shall be set up in any area only after meeting the above requirements.
11. The above density or distance requirements shall be used by the state Governments or their Agencies for the twin purposes of arrangement of land in any manner for public charging stations, as well as for priority in installation of distribution network including transformers, feeders etc. This shall be done in all cases including where no central or state subsidy is provided.
12. The Central or State Government may also give priority to existing retail outlets (ROs) of Oil Marketing Companies (OMCs) for installation of Public EV Charging Stations, in compliance with safety norms including firewalls, etc., to meet the requirements. Further, within such ROs, Company Owned and Company Operated (COCO) ROs may be given higher preference.
13. Any deviation from above norms shall be admissible only after specific approval of State Nodal Agency, in consultation with the Central Nodal Agency.
14. Database of Public EV Charging Stations: Central Electricity Authority (CEA) shall create and maintain a national online database of all the Public Charging Stations through ESCOMs. Appropriate protocols shall be notified by ESCOMs for this purpose which shall be mandatorily complied by the PCS or BCS. This database shall have restricted access as finalized between CEA and Ministry of Power.
15. Tariff for supply of electricity to EV Public Charging Stations.
- (a) The tariff for supply of electricity to EV Public Charging Station shall be determined by the appropriate commission: Provided that, the tariff shall not be more than the average cost of supply plus fifteen percent.
- (b) The tariff applicable for domestic consumption shall be applicable for domestic charging.

16. Service charges at PCS or BCS. Charging of EVs is a service, as clarified by Ministry of Power, Government of India, vide letter No. 23i08/2018-R&R, dated 13.04.2018. The State Nodal Agency shall fix the ceiling of the Service Charges to be charged by the Public Charging Stations.
17. Priority for rollout of EV Public Charging Infrastructure:
- a) Phase-I (1-3 Years): All Mega cities with population of 4 million plus as per census 2011, all existing expressways connected to these Mega cities and important highways connected with each of these Mega Cities shall be taken up for coverage. A list of these Mega Cities and existing connected expressways is attached at Annexure-1.
 - b) Phase-II (3-5 Years): Big cities like State Capitals, at headquarters shall be covered for distributed and demonstrative effect. Further, important Highways connected with each of these Mega Cities shall be taken up for coverage.
 - c) The above priorities for phasing of rollout shall be kept in mind by all concerned including, different agencies of Central/State Governments while framing of further policies/ guidelines for Public Charging Infrastructure if EVs, including for declaring further incentives/subsidies for such infrastructure and for such other purposes.
18. Implementation Mechanism for Rollout. -
- a) The Ministry of Power shall designate a Central Nodal Agency for the rollout. All relevant agencies, including Central electricity Authority (CEA) shall provide necessary support to this nodal agency.
 - b) The State Government shall nominate a Nodal Agency for that State for setting up charging infrastructure. The State DISCOM shall generally be the Nodal Agency for such purposes. However, State Government shall be free to select a Central or State Public Sector Undertaking (PSU), including Urban Local Bodies (ULBs), Urban or Area Development Authorities etc. as its Nodal Agency.
19. Selection of Implementation Agency for Rollout. -
- a) The Central Nodal Agency shall finalize the cities and Expressways/Highways to be finally taken up from the above phasing, in consultation with the respective State Government.
 - b) An Implementation Agency shall be selected by the State Nodal Agency and shall be entrusted with responsibility of installation, operation and maintenance of PCS/FCS/BCS/BSF for designated period, as per parameters specified and as entrusted by the concerned Nodal Agency. The Implementation Agency may be an Aggregator as mutually decided between Central and State Nodal Agencies: Provided that, they

may decide to choose different PCS/FCS providers for bundled packages or for individual locations as mutually decided. Provided further that, whenever bundled packages are carved for bidding, such packages shall necessarily include at least one identified expressway/highway or part thereof to prepare a cohesive regional package. The selected identified cities may be divided into one or more parts as necessary for such purposes.

- c) Where Implementing Agency is selected by bidding, all bidding shall be conducted by the State Nodal Agency.
- d) There shall be an upper cap on the Service Charges declared by the State Nodal Agency. Subsidy, if admissible from Central or State Government, shall be suitably factored in such calculations of Upper Cap or Bid Variable.”

Annexure-C

In-Building Solutions for CTI

1. Introduction: Communication System

Data growth is exploding globally and in India as per Nokia MBit 2021 Report, the average monthly data usage per user in India has increased almost 17 times over the past 5 years. Covid 19 has further pushed data consumption with people staying indoors. Government has facilitated Work from Home (WFH) guidelines with a Work from Anywhere (within India) permitted. Home consumption of data has therefore grown exponentially through 2020. According to the Tower and Infrastructure Providers Association, almost 85% data traffic and 70% voice traffic is now generated indoors.

The World Bank has clearly demonstrated that every 10% increase in broadband penetration leads to nearly 1.40% increase in GDP growth rate. While that is a global average, even the India specific study by the reputed quasi-Government research agency, ICRIER, has shown that every 10% increase in internet traffic delivers 3.1% increase in GDP per capita and a 10% increase in investment in Telecom Infrastructure will increase GDP by 3.3% The entire consumer pull today is focused on data and broadband now with the new digital services providing voice services free with the data services. Video and app-based services are driving the demand for broadband with Apps for e-commerce, e-healthcare etc. in everyday use. It is very clear that internet traffic and Apps are contributing to GDP growth and for this to grow even further, conventional connectivity needs to be replaced with duct-sharing and fibre especially, which is an essential requirement In-Building as much as it is for FTTx and Tower Fibreization.

{Note - “Service Provider”: an agency that provides any type of telecom / IT services in a building complex, as per scope defined by DOT i.e. TSP / ISP / IP1 etc.}

A broad variety of Information Communication Technology (ICT) systems are expected to be installed in buildings. In order to facilitate proper cabling and installation /up gradation of ICT systems and their cost effectiveness and maintenance, adequate physical infrastructure is required within buildings. This infrastructure will include common ducts, cable riser systems, conduits, cable trays and utility closets etc. among other things. The same can also be retrofitted into existing buildings wherever possible and feasible and must be designed in all new, re-developed and renovated structures. This section describes the general and specific requirements of such an ICT infrastructure in Building specially in respect of cabling aspects.

Communication systems are general utility in much the same way as water, power, gas, cable TV & CCTV/Security. Unlike traditional communication systems which are constantly evolving, the recommended Digital infrastructure has to be designed to be flexible enough to accommodate a variety of ICT systems and emerging technologies and be future proof for the next 25-30 years. Space and power is required for installation of common ducts, optical fibre, small cells, antennas, smart sensors etc, space, power and earthing is required for electronic equipment installation for supporting the various digital technologies of now and the future. Most communication utilities can share the same space since the physical topology and wiring requirements are similar and no significant power is present in the cables. However, in some cases state-of-the – art communication cabling or equipment will involve new or more specific requirements for utility spaces such as:

- Cable routing layout and cable length restrictions between Work-Space and utility closet.
- Bending radius and working clearance requirements for different cable types, e.g. Fibreoptic cables, Cat-6 Cables and co-axial cables
- Isolated power circuits for permanent communication equipment,
- Protection, Safety, Grounding and environmental requirements of communication equipment.

2. Emerging Technologies in Telecommunication Services

The technologies used for telecommunications have changed greatly and over the past few years and particularly during the pandemic, India has experienced a massive surge in indoor voice and data consumption. According to the Tower and Infrastructure Providers Association, almost 85% data traffic and 70% voice traffic is now generated indoors. Telecommunication network architecture is changing to meet new requirements for a number of services/applications viz. 5G, massive Internet of things, Artificial Intelligence etc.

Choosing efficient and cost-effective and fast-deployment technologies such as wired and wireless networks will improve accessibility. Based on type of building and profile of customers in the buildings, the needs of wired and wireless may vary. Further, the architecture of the information and communication infrastructure is changing to accommodate the requirements of a growing number of ICT-enabled services/applications (broadband, IP, mobile, multimedia, surveillance, IoT etc.)

In line with the changing market needs, the Digital Service Providers (TSPs)/ISPs/IP-1's have been scaling up the deployment of in-building solutions (IBS) and FTTx, covering active and/or passive infrastructure. Further, industry stakeholders are putting greater emphasis on sharing in-

building infrastructure to save capex and capex, as well as to avoid the duplication of infrastructure deployment.

Moving forward, the humungous growth of data traffic riding on the use of the digital infrastructure during the pandemic and with the new WFH (Work-from-Home) and work-from-anywhere paradigms and with the emergence of 5G are expected to create huge opportunities for extension of ubiquitous, reliable and high-speed digital infrastructure into the homes and inside residential buildings, and lead to huge growth of shared in-Building Solutions sites.

Theoretically, wireless services can be provided from outside the building. However, there are appreciable losses in signal strength when it penetrates building walls. While all wireless services can suffer from poor in-building coverage, this problem is particularly pronounced for the high-speed services. These services require a much better signal quality than their voice counterpart. Therefore, in order to improve in-building coverage and to offer better-quality high-speed data services, there is a definite need to install in- building solutions (IBS) for augmenting the wireless-based voice and data services. This is equally true for installing 5G and Wi-Fi hotspots along with Fibre to x(FTTX) distribution network of Fiber and Cat-6 Cables for seamless data connectivity.

Provisioning of telecom services and broadcasting services viz. Cable TV, DTH and Security Services viz. CCTV Cameras and futuristic services viz. IoT based sensors would require suitable wireline connectivity inside the buildings inside buildings are not confined to wireless medium only. Wireline services through cables such as copper cables, optical fibre cables (OFC), LAN Cat-6 cables are also equally important for having uninterrupted connectivity. Also, for services such as Cable TV, DTH and Smart Devices Solutions (IoT), suitable cabling within building premises is a pre- requisite and for that, shared duct space across the building riser and floors is critical to achieve the flexibility in the future.

Improved IBS coverage MNOs / Network operators should be allowed to install such appropriate instruments as provided by licensor/ Regulator from time to time.

3. Policy Efforts

The proliferation of in-building connectivity has become a key component of government policies. The National Digital Communications Policy, 2018 proposes to make the installation of telecom infrastructure and associated cabling and in-building solutions mandatory in all commercial, residential and official buildings (including government buildings) by amending the National Building Code of India with the help of the Bureau of Indian Standards.

The Government has been taking a number of steps for promoting the sharing of in-building infrastructure, in line with TRAI recommendations.

- a) In October 2019, the Digital Communications Commission (DCC) approved in-building access and sharing of infrastructure among TSPs, thereby allowing them to share infrastructure and, in the process, curbing TSPs' monopoly to install infrastructure through exclusive contracts with the owners/builders.
- b) In November 2019, the Department of Telecommunications issued an advisory to encourage all TSPs/IP-1s to share their in-building infrastructure such as systems, optical fibre, other cables, ducts and boosters on government premises and other public places such as airports, railway stations, bus terminals and hospitals.

The government's policy and regulatory push coupled with the ever-expanding data usage has propelled TSPs/IP-1s to scale up the deployment of IBS. There is an urgent requirement to allow TSPs/IP-1s to own active built and manage active infrastructure in addition to passive infrastructure to help them cater to the ever-increasing data demand.

Bureau of Indian Standards (BIS) has framed National Building Code of India under which provision of Common Telecom Infrastructure (CTI) housed inside the buildings for convenient provision of telecom services has been envisaged.

Making cities smarter: Ministry of Housing and Urban Affairs led Smart Cities Mission is another key driver that is encouraging the adoption of in-building solutions (IBS) and FTTx/ IP networks covering Fiber and LAN cables. Since, the success of the mission relies on the underlying digital communications infrastructure, the cities identified under this programme have mandated to install common infrastructure inside buildings to enable seamless connectivity. To this end, certain smart cities have started collaborating with infrastructure providers to scale up the deployment of IBS and Fiber network. Moving forward, IBS and FTTx/ IP networks covering Fiber and LAN cables should be included as one of the key parameters in the selection of smart cities for granting financial assistance.

4. In- Building and Gated Buildings Solutions

It is important to ensure quality telecom services inside a building – in residential, multi-story building, commercial complex, hotel or airport, police/Government offices/buildings etc. It is also essential for Telecommunication Service Providers/IP-1s to work on sharing of telecom infrastructure which may be made mandatory as they extend the services in the buildings.

Telecom Service Providers/IP-1s require a non-discriminatory and unhindered access inside the building / along the premises to install the telecom infrastructure or lay their cables.

At present, mobile operators and the building owner or building developer or Resident Welfare Associations (RWA) enter into commercial agreements for inbuilding deployment. Building owners or building developers delay the negotiations or request exorbitant rents — slowing down the speed of deployment. The Urban Local Body /Urban Development Authority may intervene in this regard wherein commercial agreements are insisted upon. TSPs/IP-1s should be given legal rights and permissions to use the Common Telecom Infrastructure (CTI) within the premises of Building / Gated Society free of charge or for a standardized nominal charge just like other essential services like water electricity and/or gas. Provision of CTI in a building should not be deemed as a revenue source in any way, much as the water and electricity utilities are not. Sufficient space should be provided within the premises to install telecom services by MNOs/ network operators.

The issue is not limited to sharing of IBS/ Distributed Antenna System (DAS) systems only, but TSP should get access to all telecom infrastructures including Fiber Cable and LAN cables for provision of wired and wireless network, other telecom/ ICT and IoT services.

It is important for telecom service providers to provide mobile coverage / network presence/high speed connectivity inside big residential / commercial complexes to improve QoS of their networks. It may not be practical to install individual in-building infrastructure by TSPs/IP-1s as this will result in not only duplication of network resources but will also entail huge avoidable cost. It may also be not advisable to lay down cables again and again on the same land / building by several TSPs/IP-1s.

5. Incorporation in State /UT Building Bye Laws

The buildings are to be constructed in such a way that they are 'Digital Infrastructure deployment' / 'Digital Connectivity' ready. There should be provision of telecom ducts / common pathways / runways (digital access paths) to reach to the accessible parts of the buildings. The common ducts /digital access paths to access buildings from outside should invariably be part of the CTI, which could be used by TSPs/IP-1s for laying/deploying digital infrastructure including cables.

While approving the building plans, it has to be ensured that plan for creation of CTI including the common duct to access the common space used as telecom room inside the building is also prepared and separate set of drawings showing the inter / intra connectivity access to the building with distribution network need to be furnished.

Occupancy-cum-Completion certificate to a building to be granted only after ensuring that the CTI as per the prescribed standards is in place and an undertaking by the Architect or Engineer to be insisted to certify that building has ensured common access to all digital infrastructure to all Service providers in accordance with plan of creation of CTI. Provision of visit from Department of Telecom (DoT) / TRAI officials along-with joint inspection with TSPs - who may suggest any relevant modification in the plan to be ensured.

As part of Building Bye-Laws, the builder/RWA should be mandated to ensure that

1. While preparing the building plans, there is a need to mandate to have properly demarcated sections within buildings and on rooftops for housing Broadband / digital connectivity infrastructure / antenna. These areas should have access to power supply for reliable, always-on services.
2. Access to building as well as CTI facilities inside the building should be available on a fair, transparent and non-discriminatory manner to all Service Providers /IP1's.
3. The Service Providers / IP1's should have unrestricted access for maintenance work.
4. The permission to in-building access and/or CTI facilities inside the building should not be seen as a source of revenue generation for builder(s)/RWA(s) but as a means for facilitating penetration of broadband access and thereby helping in socio-economic growth of all the residents.
5. Charges (rentals/power rates etc.) levied to the TSPs/IP-1s should be fair, transparent and non-discriminatory and should be on residential rates.

Suitable provision for the creation of Common Telecom Infrastructure (CTI) inside the newly constructed public places like Airports, commercial complexes and residential complexes, be incorporated in State/UT Building Bye Laws.

6. **At Layout Level**

While developing Greenfield cities/towns, the layout plans should clearly indicate the telecom as Utility infrastructure lines. Standards followed for Utility planning shall be published and work shall be done by the respective department for bringing in the standardization of the utility coding and sequences. The placement and sequence of above- and below-ground utilities at the appropriate location in the right-of-way to be ensured for unconstrained movement as well as easy access for maintenance. Telecommunication cables should be placed in a duct that can be accessed at frequent service points with sufficient spare capacity to enable scaling and future expansion, and empty pipes (large size hume pipes / HDPE pipes) should be laid before planting trees in order to accommodate additional infrastructure.

Digital Readiness Rating of Buildings / Society in line to the GREEN ratings shall be created where the existing and new buildings shall be rated on standardized parameters such as; but not limited to; Digital Infrastructure access, provisions for Emerging Technologies, Maintenance and Operational ease to TSPs / IPv1, Quality of Wireless Services, Quality / Interchangeability ease of Wireline Services till each Unit Security, redundancy and Expandability of the digital infrastructure etc. A detailed rating parameters and calculation mechanism of Points / Stars shall be devised and benchmarked for all new / retrofitting of buildings/ societies.

Digital Asset repository which will ensure Proper planning and mapping of utilities through GIS is necessary especially when the alignments of telecommunication cables are identified. Design criteria and standards Utilities should meet the following criteria:

- Telecommunication cables should ideally be placed below the parking area or service lane, which may be dug up easily without causing major inconvenience. Where this is not possible, the cables may be placed at the outer edge of the right-of-way.
- There is a need to reduce conflicts with pedestrian movements is to place telecom boxes in easements just off the right-of-way. Where this is not possible, they should be placed within parking or landscaping areas. If cables have to be located in the pedestrian path, a space of at least 2m should be maintained for the through movement of pedestrians. Telecom boxes should never constrain the width of a cycle track.
- In order to minimize disruptions, cables should be installed with proper maintenance infrastructure.

7. **Other procedures for setting up In-Building Solution (IBS)/ Fiber Networks**

1. There is a need to promote installation of In-Building Solution (IBS) / Smart Connectivity infrastructure, where there is a poor connectivity in terms of weak signal strength inside the office, shopping mall, hospitals, multi-story building, education institutions and the objective has to be to strengthen quality of service of the voice & data of mobile and Fiber broadband network and access to digital services being offered by TSP And IP1's

A) Procedures of obtaining IBS-NOC during plan approval and completion:

- a) While submitting the proposed Building plan seeking approval from the relevant sanctioning Authority, applicant shall also submit
 - i. A complete Service Plan for IBS-infrastructure along with required specifications (in consultation with, and certified by a credible Telecom Networking hardware-consultant)
 - ii. An undertaking that such IBS Infrastructure, when constructed shall be available for sharing by various TSPs/IP-Is.
 - iii. Such Service Plan (IBS) shall be forwarded by the concerned Local Authority to the Telecom Enforcement Resource and Monitoring (TERM) cell of the State (external NOC agency) – for approval NOC.
 - iv. During the Joint Site Inspection of the completed building structure the TERM cell shall undertake inspection of the constructed/installed IBS infrastructure – for issuance of NOC for OCC.
- b) The Local Authority shall liaise with the TERM cell as per its relevant online/offline process of communication to seek the relevant NOCs within the specified time as per the Service Charter/ Service Guarantee Act and rules in place. Separate communication from the applicant shall be needed to secure the IBS NOC.

B) Provision of IBS components in building premises: (as per NBC 2016)

Entrance Facilities (EF) /Lead-in conduits: (clause 3.1.4, of Part 8: Sec 6) min. 1.2m x 1.83m space to be allocated for each TSP adjacent to the EF.

Underground conduits/pipes to MDF room: min 100mm dia encased conduits.

Main Distribution Frame (MDF)/Equipment Room(ER):
(clause 3.1.2, Part 8: Sec 6)

- prescribed size with L:W ratio between 1:1 to 2:1
- appropriate ventilation of MDF room
- proper Lighting for vision of equipments,
- located at a level above from the Natural Ground lvl to avoid incidence of flooding

Electric distribution panels, isolaters, sockets and earthing as per specific requirements w.r.t the area proposed for coverage (DUs/ service subscribers)

Telecommunications Room (TR) at each building block unless provided with MDF room:
(all provisions of space to be as per clause 3.1.3.2, Part 8: Sec 6)

Appropriate nos. of Service/Telecom risers (vertical shafts) for all multi storeyed buildings w.r.t the area proposed for coverage (DUs/ service subscribers):

- of appropriate nos and size (width & depth) to accommodate cable trays
- with of access door at each floor.

Telecommunications Enclosures (TE) at each floor of a block or TR (clause 3.1.5, Part 8: Sec 6)

Telecom Media and Connecting Hardware (TE):(clause 3.2, Part 8: Sec6)

Various cabling system and trays:(clause 3.2.4, Part 8: Sec6)

Wireless systems:(clause 3.2.5, Part 8: Sec6)

Backbone Cabling Media Distribution and Bldg. pathways (clause 3.3, Part 8: Sec6)

Horizontal Cabling Media Distribution and Bldg. pathways (clause 3.4, Part 8: Sec6)

IBS installation spaces: area for rooms or systems (e.g. antennas, base stations, remote units, power distribution boxes etc.) to be provided as per requirements w.r.t the area proposed for coverage/ no. of proposed users (as per clause 3.1.3.2, Part 8: Sec6, table stated below)

1 Telecom room space norm for buildings with Built-up area >465 sqmt

Sl.	Area to be covered by IBS	Size of Telecom Room (all dimension in m)
1	Upto 465 sqmt	3.0 x 2.4
2	465.0 sqmt to 930.0 sqmt	3.0 x 3.4
3	More than 930.0 sqmt	Additional TR required with same space norms

Space requirements for smaller buildings with Built-up area <465 sqmt

1	Area to be covered by IBS	Space provisions (all dimensions in m)
2	Upto 93.0 sqmt	Wall cabinets, self-contained enclosed cabinets.
3	93.0 sqmt to 465.0 sqmt	Shallow Room (0.6 x 2.6)
		Walk-in Room (1.3 x 1.3)

IBS installation spaces, so provided, should be:

- not susceptible to flooding
- not exposed to water, moisture, fumes, gases or dust
- able to withstand designed equipment load (to be specified in design)
- located away from any vibrations to avoid dislocation/dislodgement

For any other necessary detailing of building components and service installations with respect to common Telecom/Digital connectivity Infrastructure, architects/ developers and other service consultants involved in preparing building and service drawings may refer Part 8 – Section 6: Information and Communication Enabled Installations of Volume 2 of the National Building Code, 2016

(2) Mode of deployment of In-Building, FTTx/IP Solution: There shall be various mode of deployment of In Building solutions such as: The possible modes are deployment by a neutral host infrastructure provider or build and managed by mobile operator and sharing

with other service providers on non-discriminatory basis. The In-Build Solutions (IBS), FTTx/IP Solutions can also be deployed by TSPs/ IPs. Moreover, if TSP/ IP1 requires to install optical fiber for connecting In-Building Solution (IBS)/ Distributed Antenna System (DAS) nodes/ FTTx solutions, RoW/ permissions should be granted by the road owning agency through online mode (if same is working seamlessly) or offline mode till online system is established. For deploying indoor solutions these companies should have deemed permissions from the premises owners for installation of Distribution Network within the utility shafts / common spaces with provisions for common / shared Points of Interconnect for Connectivity to individual units. Moreover, if the TSP/IP requires to install optical fiber for connecting In-Building Solution (IBS) / Distributed Antenna System (DAS) nodes, FTTx/ IP Solutions. for which RoW / permissions should be granted by the road owning agency through online mode.

- (3) Permissibility: The IBS, FTTx/ IP component being small equipment can be installed on any type of land/building/utility pole and shall be exempted from obtaining the permission for installation of these components from the respective Urban Local Body/Urban Development Authority but should get permission from the Administrative Authority of the concerned premises.
- (4) Procedure for submitting application for obtaining clearance: TSP/ IP-1 will apply to the administrative authority of the building/ head of the office with layout diagram for implementing IBS in the building as mentioned in the RoW Rules 2016 or State notified RoW Policy
- (5) Fees: No fee will be charged for IBS/ FTTx Network. However, charges may be levied for power (as per Industry tariffs), fixtures, etc. provided by building owners to TSP/ IP-1s as per actuals.
- (6) Access and Distribution Fiber and IP/LAN networks for connectivity for the shopping malls, Multi-Storey Residential Buildings, Cooperative Housing Societies, Residential Welfare Association and Commercial Buildings to be planned and deployed by TSP/IP-1s as per standard requirement of providing high bandwidth and adequate indoor coverage to each unit/apartment in these complexes.

ANNEXURE-D

GREEN BUILDING CERTIFICATION

Green Building Certification shall evaluate the environmental performance of a building holistically over its entire life cycle, thereby providing a definitive standard of a building that is environmentally friendly and to optimize the conservation and utilisation of resources land, water, natural habitat and energy.

Construction of Green Buildings may be guided by the provisions of part-II of NBC 2016 and/or ECBC 2017 for commercial buildings and Eco-Niwas Samhita 2018 for residential buildings.

A building shall be rated based on criteria prescribed. Applicant shall apply for eligibility for certification with detail plan of action for fulfilment of each criterion to the authorized agency certifying the star rating. The authorized agency may also follow their own criteria for star rating of these buildings.

(A) CRITERIONS FOR CERTIFICATION

Criteria 1: Preserve and protect the landscape during construction / compensatory depository forestation.

Objective: Proper timing of construction, preserve top soil and existing vegetation, staging and spill prevention, and erosion and sedimentation control. Replant, onsite, trees in the ratio 1:5 to those removed during construction.

Criteria 2: Reduce hard paving on-site and /or provide shaded hard- paved surfaces.

Objective: Minimize storm water run-off from site by reducing hard paving on site.

Criteria 3: Enhance outdoor lighting system efficiency.

Objective: Meet minimum allowable luminous efficacy (as per lamp type) and make progressive use of solar lighting system.

Criteria 4: Reduce landscape water requirement.

Objective: Landscape using native species and reduce lawn areas while enhancing the irrigation efficiency, reduction in water requirement for landscaping purposes managing slope and water retention.

Criterion 5: Reduce building water use.

Objective Reduce building water use by applying auto-stop fixtures etc.

Criterion 6: Optimise building design to reduce the conventional energy demand.

Objective: Plan appropriately to reflect climate responsiveness, adopt an adequate comfort range, less air-conditioned areas, day-lighting, avoid over-design of the lighting and air- conditioning systems.

Criterion 7: Reduce volume, weight, and time of construction by adopting an efficient technology (eg. pre-cast systems, ready-mix concrete, etc.).

Objective: Replace a part of the energy-intensive materials with less energy intensive materials and/or utilize regionally available materials and lightweight materials in (internal partitions, panelling /false ceiling/interior wood finishes/ in-built furniture door/window frames, flooring etc.).

Criterion 8: Renewable energy utilization.

Objective: Provide solar energy system equivalent to at least 20% of connected load. Energy requirements will be calculated based on realistic assumptions which will be subject to verification during appraisal.

Criterion 9: Water recycle, reuse and rainwater harvesting.

Objective: Provide wastewater treatment on-site for achieving prescribed concentration, rainwater harvesting, reuse of treated waste water and rainwater for meeting the building's water and irrigation demand.

Criterion 10: Waste management.

Objective: Ensure maximum resource recovery and safe disposal of wastes generated during construction and reduce the burden on landfill. Use different coloured bins for collecting different categories of waste from the building. Allocate separate space for the collected waste before transferring it to the recycling/disposal stations, resource recovery systems for biodegradable waste as per the Solid Waste Management and handling Rules, 2016 of the MoEF.

Criterion 11: Ensure water quality.

Objective: Ensure groundwater or the source of water meet the water quality norms as prescribed in the Indian Standards for various applications (Indian Standards for drinking [IS 10500-1991], irrigation applications [IS 11624-1986]. In case the water quality cannot be ensured, provide necessary treatment of raw water for achieving the desired concentration for various applications.

Criterion 12: Acceptable outdoor and indoor noise levels.

Objective: Ensure outdoor noise level conforms to the Central Pollution Control Board Environmental Standards-Noise (ambient standards) and indoor noise level conforms to the National Building Code of India, 2005, Bureau of Indian Standards, Part 8-Building Services: Section 4-Acoustics, sound insulation, and noise control.

Criterion 13: Universal accessibility

Objective: To ensure accessibility and usability of the building and its facilities by employees, visitors and clients with disabilities.

Criterion 14: Operation and maintenance protocol for electrical and mechanical equipment.

Objective: Ensure the inclusion of specific clauses in the contract document for the commissioning of all electrical and mechanical systems to be maintained by the owner, supplier, or operator. Provide a core facility/service management group. If applicable, which will be responsible for the operation and maintenance of the building and the electrical and mechanical systems after the commissioning. Owner/ builder/ occupants/ service or facility management group to prepare a fully documented operations and maintenance manual, CD, multimedia or an information brochure listing the best practices/ do's and don'ts/ maintenance requirements for the building and the electrical and mechanical systems along with the names and addresses of the manufacturers/suppliers of the respective system.

Criterion 15: Innovation points.

One innovation points are available under the rating system for adopting criteria which enhance the green intent of a project, and the applicant can apply for this bonus point.

(B) PROCEDURE OF CERTIFICATION

Each criterion has 6 (six) number of points assigned to it. It means that a project intending to meet the criterion would qualify for the points. Compliances, as specified in the relevant criterion, have to be submitted before Authority with a detail plan of action. The points related to these criteria are awarded provisionally while certifying and are converted to firm points through monitoring, validation, and documents/photographs to support the award of point. Evaluation shall be done by an expert committee constituted for the purpose by the Authority. Examination of plan of action, monitoring during the construction stage and post construction period shall be done by an Engineer dedicated for the purpose. Report of such findings shall be submitted before the Expert committee for evaluation, rating and certification. Standards shall conform to relevant BIS code and standards as prescribed. There will be in total 100 point for 15 (fifteen) criterions, 6 (six) points each for 14 criterions and 16 (sixteen) points for the innovation points. Different levels of certification (one star to five star) are awarded based on the number of points earned. The minimum points required for certification is 50. Buildings scoring 50 to 60 points, 61 to 70 points, 71 to 80 points, and 81 to 90 points shall get one star, two stars', 'three stars' and 'four stars respectively. A building scoring 91 to 100 points will get the maximum rating viz. five stars.

The building having qualified under the star rating will get Certificate of Star rating. The building qualified under star rating may shall apply before building permit issuing Authority for property tax rebate.

Annexure-E

MANIPUR URBAN AREA TRANSFERABLE DEVELOPMENT RIGHTS (TDR) POLICY, 2022

INTRODUCTION:

In order to promote planned, Integrated and Sustainable Development of Urban Areas, small and medium towns etc. by providing major facilities like affordable housing, public facilities, parks and open spaces in the urban areas of Manipur, the Government envisages introduction of the Manipur Urban Area Transferable Development Rights (TDR) Policy, 2022. TDR is a planning instrument which is used for providing land development rights (permitted to be used on new and existing buildings) issued by the urban local bodies in the form of a Certificate regulated under the Building Bye Laws or in conjunction with a TDR Guidelines framed by the State Government from time to time. It is an immovable property. TDR certificate shall be issued by the ULBs in lieu of land surrendered by the private party/developer free of cost, free from all encumbrances or by way of declared incentives by State Government. The TDR allows a land owner to sell part of his/her right to develop his/her own or other land. Once the TDR transaction between private developer and administrative head of a ULB, under prescribed guidelines is completed then the developer or purchaser is entitled to build more than the permissible FAR (Floor Area Ratio) subject to TDR use guidelines.

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99. Hence, the Policy.

100.

1. Short title and commencement.

1) This may be called the Manipur Urban Area Transferable Development Rights (TDR) Policy, 2022.

2) It shall come into force from the date of its publication in the official Gazette.

101.

2. Definition:

a) Transferable Development Right (TDR)

TDR is land development rights (permitted to be used on new and existing buildings) issued by the Urban Local Bodies (Municipal body and Planning and Development Authority) in the form of a certificate regulated under the building byelaws or in conjunction with the TDR guidelines framed by State Government from time to time. The TDR in short enables the transfer of development potential partly or fully from one plot to another. **TDR** certificate shall be issued by ULB's in lieu of land surrendered by the Owner/ private developer, free of cost and free from all encumbrances or by way of declared incentives by State Government for -

i. Development of affordable houses under State Affordable Housing Policy in lieu of Floor Area Ratio (FAR) granted as per the Policy.

- II. Development of Green spaces- Parks/ Open Spaces/Playgrounds Water Bodies etc. as per the provision of Master Plan.
- III. Development of Master Plan roads including road widening
- IV. Development of Public Parking lots,
- V. Development of City level Facilities/other public purposes as per Master Plan proposal.
- VI. In lieu of land surrendered for other purposes as specified by State Government.

Provision of item No. b to e can be used by the urban local body as part of implementation of a Development Scheme or Master Plan proposals.

Normally FAR/FSI is the maximum permissible extent of built-up area up to which a plot can be developed. A Developer/Owner/Lessee can use TDR for self-use fully or partly or he can sell and dispose off the same to other parties fully or partly. Once the TDR transaction between owner/ private developer and ULB under prescribed guidelines is completed, the owner/ developer / purchaser is entitled to construct up to the maximum permissible FAR subject to TDR guidelines or as per the provisions of Building Regulations.

b) Competent Authority:

An Officer of the Local Body/Development Authority designated for the purpose of TDR not below the rank of Municipal Commissioner in Municipal Corporations, Executive Officers in Municipal Councils or Secretary in case of Development Authority.

3. Eligibility: Eligibility for TDR will be against the land surrendered free of cost for following uses:

- a) In lieu of the EWS / LIG flats / dwelling units constructed by the owner/private developers and handed over to the local bodies at fixed price. The TDR certificate shall be issued by the urban local bodies as per the guidelines prescribed in the TDR Policy,2022.
- b) In lieu of land surrendered for Green Space- Parks/ Open Spaces/ Playgrounds, Water Bodies etc., as earmarked in Development/Master Plan.
- c) In lieu of land surrendered for Master Plan/ Development Scheme Road including widening of road,
- d) In lieu of land surrendered for creating facility for public parking,
- e) In lieu of land surrendered for development of City-Level Facilities as earmarked in Master Plan.
- f) In lieu of land surrendered for other purposes as specified by Government. In the first phase only Greater Imphal Area will be considered for grant of TDR under this Policy. The State Govt may include more towns to be covered under this policy as and when required.

4. Legal Requirements:

- a) The private land owner shall produce all the legal documents in support of the title of the land proposed to be surrendered for generating TDR (Title documents shall be thoroughly scrutinized by the ULB with help of available old records). A legal undertaking may also be taken from the applicant about correctness of his documents.
- b) In case of a developer where he has a development agreement with the land owners (pattadars), then the original land owner shall surrender the land free of cost to the ULB showing his interest that land is to be surrendered for the purposes shown in clause 3. The pattadars can authorize the developer to act further on his behalf through registered Power of Attorney or through development agreement in case it is registered as conveyance. In such cases TDR will be issued to the owner or developer or to both of them as per the agreement between them or as per the development agreement proportionately as per agreement.
- c) The following land shall not be eligible for TDR
 - i. The land prohibited by order of any court.
 - ii. For lands under acquisition.

102.

5. Technical Requirements:

- a) The owner will have to demarcate the land proposed to be surrendered for the purposes shown in the clause 3.
- b) For open lands surrendered for the public purposes as defined in clause 3(b), 3(d) and 3(e) the owner shall demarcate the areas with pillars at the interval of 30 meter and on every corner and each pillar shall be 1 mtr X 0.5 mtr X 0.5 mtr.

6. Schedule of Fees / Other Charges:

- a) A processing fee at the rate of 1% of actual valuation of TDR value on the basis of prevailing Minimum Guidance Value of the area from where TDR is generated shall be charged at the time of issue of TDR Certificate. However, no such charges will be applicable for the land mentioned at 3(a).
- b) For executing the agreement as per para 7.3 registration charges @ 1% of actual valuation of TDR value on the basis of prevailing Minimum Guidance Value at the time of issue of TDR certificate shall be charged. In case TDR certificate is issued to other than the land owner registration charges will be at the rate prescribed for transfer/transaction of TDR.
- c) The advertisement charges for inviting public objections to verify the ownership of land and objections against change of land use (if not in conformity with the master plan) shall be paid by the developer/owner of the land.

7. General procedure to be followed for obtaining Transferable Development Right Certificate:

a) For Development Projects other than Affordable Housing Schemes.

I. Step-1

Whenever ULB's intend to acquire land or the land owner submits proposal to surrender his/her land for the purpose mentioned in para 3, the owner(s) shall apply in writing in the form in Annexure 'A'. The application shall be submitted to the concerned Urban Local Body (ULB).

II. Step-2

- a. Legal / revenue clearance of land from the concerned authorized officer.
- b. Technical clearance of the proposed land by the Town Planning Officer of Town Planning Department as per prevailing Master Plan.
- c. On land proposed to be surrendered for Road/Public Parking/Facilities/ Green space full TDR equivalent to the permissible maximum FAR will be given.

b) For Affordable Housing Scheme

I. Step-3

In case of Affordable Housing Scheme, after getting principal approval of State Government and acceptance of proposal by the ULB and after inviting public objections, the Competent Authority in the concerned urban local body shall execute an agreement in the prescribed format with the developer/owner regarding issue of TDR certificate. The TDR shall be released to the developer as under:-

- a. The TDR shall be calculated on the total plot area being reserved for affordable housing project (including EWS / LIG) subject to the norms as prescribed by the Government from time to time.
- b. The maximum TDR in terms of area shall not be more than 1.5 times of the total land area. In case of Affordable Housing projects, the developer shall be provided double of the permissible FAR.
- c. The land earmarked for EWS/ LIG/MIG will be surrendered to urban local bodies free of cost and the surrender deed will be registered and fully stamped, however, it will be exempted from stamp duty and registration fee.
- d. Transferable Development Rights (TDR) Certificates in the prescribed format bearing certificate number will be issued by the Competent Authority of ULB's as notified. Transferable Development Rights (TDR) will be granted to an owner or lessee, who is eligible to surrender land subject to Clause 4 of Chapter-1 (Nomination facility may be provided at the time of issue of TDR certificate and such nomination shall be entered on the TDR certificate at the time of its issue. This will be valid only in case of death of TDR holder and on application of nominee with the production of death certificate). The certificate shall specify the FAR credit in square meters of the built-up area in figures and in words to which the owner/ developer of such and

is entitled. The revenue village, road width, use zone and Minimum Guidance Value in which the TDR is earned shall also be mentioned in the certificate.

- e. TDR certificate is to be got registered within the prescribed period as per the provisions of Registration Act, if its value is more than Rupees 100 and necessary registration fee shall be paid by the owner of the land at the time of issue of TDR certificate.

8. General Terms and Conditions:

- a) The Transferable Development Rights Certificate will be issued only in the name of individuals, Private Limited and Limited companies, Statutory Corporations or institutions & registered trusts. It shall not be issued in the name of partnership firms, nominees, agents or any other such persons. If the property stands in the name of partnership firms, TDR shall be issued in the name of partnership firm.
- b) The transfer / utilization of TDR in favour of NRI and Foreign Nationals will be subject to rules and regulations of the Reserve Bank of India/ Government of India.
- c) The specimen signature / thumb impression in application for grant of TDR shall have to be attested by a Magistrate under his official seal.
- d) In respect of property held jointly by several persons, the Competent Authority of ULG's shall issue only one certificate and delivery of TDR Certificate to one of the several joint holders only on the written request made through an application duly signed by all and the same shall be treated as sufficient delivery to all such holders. However, it will be necessary to obtain a registered relinquish deed from other co-owners for issuing TDR certificate in the name of one owner.
- e) TDR shall be issued under the seal & signature of the Competent Authority of ULB's. Two original TDR certificates shall be prepared. of which one is required to be kept in official record of the Competent Authority and second will be issued to the applicant after entry in a ledger and an account number shall be assigned.
- f) The Competent Authority of ULB's may reject the application for grant of TDR in the following circumstances: -
 - i. If any dues payable by the owner of the property, to the State Govt./Municipal Corporation prior to date of submission of the proposal for surrender of the land or submission of the project, the Competent Authority can withhold issue of TDR till all the dues are paid by owner(s).
 - ii. If the property so handed over to the ULB's and application for TDR is submitted by fraudulent means.
- g) The TDR shall be revalidated after 15 years for next 5 years subject to payment of processing fee. of revalidation @ of 0.5% of actual valuation of TDR value on the basis of prevailing Minimum Guidance Value of the area from where TDR is

generated except land surrendered under Affordable Housing Policy. In case of affordable housing projects 0.1% of actual valuation of TDR value on the basis of prevailing Minimum Guidance Value of the area from where TDR is generated shall be charged. However, after a period of 20 years from the date of issue of TDR certificate revalidation can be done every 5 years only after payment of processing fee @ 5% of actual valuation to be calculated on the basis of prevailing Minimum Guidance Value at the time of revalidation.

- h) On full utilization of the TDR, the TDR certificate shall not be returned to the TDR holders and the same shall be cancelled by the ULB.
- i) A TDR Certificate will be prepared in two copies only on the satisfactory compliance of the conditions prescribed in these guidelines. One original copy of the TDR certificate should also be kept with the Competent Authority in safe custody and second copy shall be issued to the applicant. Subsequent entries about part transfer shall be made as & when required to update the balance TDR. Record of TDR Certificate will be computerized and necessary measures for security will be ensured. Security audit may be carried out from time to time (at least once a year).
- j) The specimen signatures and thumb impression in the application of utilization form shall be attested by Magistrate or Notary Public under his official seal.
- k) The registered holders of the TDR shall not mortgage, pawn, pledge, hypothecate or create any charge or claim on the TDR. The local bodies will not accept any application or claim for transfer of TDR on the basis of any charge as aforesaid created on the TDR. The TDR will not be split on the basis of any charge created on the TDR.
- l) In case the TDR Certificate is defaced, lost or destroyed and sufficient proof thereof is submitted to the Competent Authority of ULB, the same may be replaced on payment of charges as 0.1% of the prevailing Minimum Guidance Values of the land on which TDR has been issued and on submitting the necessary undertaking, indemnity bond, investigating evidences (copy of FIR) etc., and by giving advertisement in 2 leading local newspapers.
- m) It is important to note that after surrendering of agriculture land for affordable housing project and other public purpose, on which TDR is to be generated will be considered as residential, whereas non-agriculture land surrendered for other uses, calculation of TDR will be based on the present use of the land as per lease deed/patta.

Chapter: 2

9. Utilization of Transferable Development Right Certificate

General Terms and Conditions:

- a) TDR generated in an urban area can be utilized within the same urban area only.
- b) In case the applicant is holder of power of attorney or limited company or corporate body of registered societies and trust, the registered power of attorney or relevant resolution regarding authority to file application or request for transfer, together with certified copy of the Memorandum & Article of Association and / or Bye-laws should accompany the application and utilization form.
- c) The TDR shall be utilized in various receiving zones over and above the prescribed standard FAR subject to the maximum FAR in Building Regulations or as per the directions issued by the Government from time to time.
- d) In case there are two Competent Authorities in any urban area, before permitting utilization of TDR, NOC will be obtained from the agency in whose jurisdiction land falls where it is proposed to be used,
- e) The utilization of TDR in favour of an NRI and a foreign national will be subject to rules and regulations of the Reserve Bank of India/Government of India.
- f) The utilization of TDR shall be in multiples of 50 sq. mts. only except the last remainder. Any request of the transferor or of transferee for utilization of TDR other than in multiples of 50sq.mts. shall not be considered.
- g) The Competent Authority may reject the application for utilization of TDR in the following circumstances: -
 - I. if any dues payable by the owner of the property, to the State Govt. / ULB prior to the date of submission of project or surrender of land, then the Competent Authority can withhold utilization of the TDR unless all the State Govt. / ULB dues are paid by the owners.
 - II. If the property is handed over to the ULB's and TDR is obtained by fraudulent means (illegal title of land surrendered/ wrong measurement etc.), then the Competent Authority shall reserve the rights for granting permission to transfer / utilize the TDR and or forfeiting TDR.
- h) In case of a utilization of TDR jointly held all the joint holders of TDR Certificate shall have to sign the application form to be used for utilization.

- i) The utilization of the TDR shall not be accepted unless and until the entry for utilization of TDR is authenticated by the Competent Authority.
- j) Any utilization of TDR shall be charged at the rate of Rs. 10/- per sq. mts. subject to minimum of Rs. 1000/- as utilization fees.
- k) The utilization of TDR can be considered by the Competent Authority only if the application for utilization is submitted in prescribed form along with the necessary documents and on making payment of utilization fees. The procedure for utilization of TDR shall be as under:-

- I. The applicant seeking to use the TDR shall obtain a letter in the prescribed format from the building plan approving officer of the concerned local body stating the extent to which TDR can be utilized on the proposed plot of land. Building Plan approving officer shall issue this certificate within a period of 3 months.
- II. The applicant shall submit the above letter with an application to the

competent authority of ULB for issue of authority letter for utilization of TDR in the name of building plan approval authority with full details where the TDR is proposed to be used.

- III. The competent authority (who had issued TDR certificate) after examination of the TDR certificate and records shall issue a authority letter for the full or part utilization of FAR to the concerned local body (who will approve the building plan) in a prescribed format after cancellation or deduction of FAR used as the case may be.
- IV. It shall be the responsibility of the competent authority to ensure that necessary entries are made in the records prior to issue of authority letter.
- V. The applicant shall submit the authority letter to the local authority for utilization of TDR. The building plan approving authority shall inform the competent authority on utilization of authority letter so that the utilization of authority letter can be entered as final settlement as the office of competent authority.
- l) The Competent Authority may reject the application for utilization of TDR under the following circumstances: -
 - I. Under direction from the competent court.

- II. If the Competent Authority is of the opinion that transfer has been obtained by fraudulent means and in such situation, the TDR Certificate will be forfeited
 - III. If the agreement of utilization of TDR is not duly signed by the transferor(s) and transferees(s).
 - IV. If the agreement utilization is riot accompanied by the original TDR Certificate.
- m) Every utilization of the TDR shall be got approved from the Competent Authority and it shall be entered on the Certificate.
 - n) In case the TDR Certificate holder is minor, the utilization will be considered only if application is made by the natural guardian or a guardian appointed by the competent court.
 - o) The application for utilization of TDR shall be considered provided: -
 - p) The TDR Certificate holder(s) intends to utilize the TDR shall have to submit the proof showing that the building plans on the land situated in a Receiving zone are approvable as per building regulations.
 - q) For each request to utilize the TDR, separate application shall be submitted.
 - r) The prescribed utilization form requesting the Competent Authority of ULB's to utilize the TDR shall be valid only for 6 (six) months.
 - s) The TDR generated from any area and proportionate TDR proposed to be transferred in any eligible receiving zone, shall be eligible for residential use only in case of Affordable Housing, whereas for other cases use at generating zone shall be proportionate to same use in receiving zone i.e. if commercial land is surrendered for facilities and TDR is generated will be eligible for proportionate TDR at receiving zone for the same use.
 - t) The TDR receiving plot should satisfy the following minimum requirement:
 - I. There shall be no change in the setbacks of the receiving plot.
 - II. Receiving plot must satisfy the additional parking requirement (if any) in proportion to TDR being utilized to be worked out in accordance with the prevailing building byelaws.
 - III. Receiving plot should satisfy the minimum fire safety norms as specified in the building byelaws.
 - IV. Receiving plot shall be eligible to receive a maximum TDR, within the maximum permissible FAR in accordance with the building byelaws.
 - u) The movement of TDR from the generating zone to receiving zone shall be in proportion of the prevailing Minimum Guidance Value of the concerned area as specified by the State Govt. The TDR shall be subject to proportionate increase or decrease as per Minimum Guidance Value. For example, if the residential Minimum Guidance Value in generating zone is

Rs 2000 per sqm. from where TDR has generated and the residential Minimum Guidance Value is Rs. 20,000/- per sqm. in receiving zone then the proportionate TDR to be transferred shall be 1/10th of the total TDR generated subject to minimum of 10% of total TDR.

- v) If a holder of TDR intends to transfer it to any other person, he will submit the TDR Certificate to the Competent Authority with an application for an endorsement of the new holder's name i.e., transferee on the said Certificate. It is important to note that without such an endorsement by the Competent Authority, the transfer shall not be valid.
- w) A TDR Certificate holder who desires to use the FAR out of the TDR available in credit, on a particular plot of land shall attach TDR Certificate with his application for building permission.
- x) TDR shall not be valid for use on receiving plots in the areas listed below, identified as No-TDR Zone which will be notified before the issue of TDR certificate.
 - i. Any congested area looking to the traffic intensity as notified by the concerned ULB/ State Government.
 - ii. Restricted Area notified by the concerned urban local bodies/ Airport Authority/state Government.
 - iii. Beyond the prescribed height on Street/roads/areas on which the height is restricted as per prevailing Building Regulations.
 - iv. On structures listed as heritage precincts or structure identified by ASI or State Archaeology Department. TDR should not be permitted within the radius as prescribed by ASI or State Archaeology Department from time to time from the periphery of these identified structures.

Chapter: 3

10. Transfer of Transferable Development Right Certificate

General Terms and Conditions

- a) The specimen signature and thumb impression in the application of transfer form shall have to be attested by a Magistrate or Notary Public under his Official seal.
- b) Transfer of TDR shall be permitted if the TDR is to be utilized in receiving zone as specified in guidelines of use of TDR.
- c) The transfer of TDR in favor of NRI and foreign Nationals will be subject to rules and regulations of the Reserve Bank of India.
- d) The Competent Authority may reject the application for transfer of TDR in the following circumstances –
 - i. If any dues payable by the owners of the property to the State Govt. / Urban Local Bodies prior to date of submission of the project level of the property to the ULB's, then the Competent Authority can withhold transfer of the TDR unless all the State Govt. / ULB dues are paid by the owners.
 - ii. If the property so handed over to the ULB's and TDR is obtained by fraudulent means, then the Competent Authority shall reserve right for granting permission to transfer the TDR and / or forfeit the TDR.
- e) The transfer form shall be signed by all the joint holders of the TDR.
- f) Agreement of transfer of TDR shall have to be executed by both the transferor's and transferee's and stamp duty as applicable under provision of Registration Act as conveyance deed shall be paid on each transaction/transfer.
- g) The transferor's will not be treated as registered holder of TDR until authenticated by the Competent Authority.
- h) Any transfer of TDR shall be charged at the rate of Rs. 10/- per sq. mts. subject to minimum of Rs. 1000/- which will be part of Urban Poor Fund in the Local Body.
- i) That the transfer TDR can be considered by the Competent Authority only if the transfer application is submitted in the prescribed form along with necessary documents and on making payment of transfer fees.
- j) That the Competent Authority may decline to transfer any TDR under the following circumstances –
 - i. Under direction from the competent court.
 - ii. If the Competent Authority is of opinion that transfer has been obtained by fraudulent means and in such situation the TDR will be forfeited.
 - iii. If the transfer application does not comply with the terms and conditions or rules which may be prescribed by the Competent Authority from time to time.
 - iv. If the agreement of transfer of TDR is not duly signed by the transferor's and transferee's.

- v. If the agreement of transfer is not accompanied by the original TDR certificate.
- vi. If the instrument of transfer does not include any such evidence as may be required by Competent Authority to show right of transferors to make the transfer.
- k) That every transfer of TDR shall be got approved from the Competent Authority
- l) In case of death of holders of TDR certificate, the TDR will be transferred only on production of succession certificate / letter of Administrative and / or probate in case of a will. On production of aforesaid documents names of the legal heirs will be included in the TDR.
- m) in case if the TDR holder is minor the transfer will be considered as per the prevalent practice in the concerned ULB's
- n) The transferee/s if so desire will be permitted to take a search before making any application to transfer of the TDR / utilization of TDR on making payment of prescribed fees to the ULB.
- o) For each TDR, separate transfer application shall have to be submitted to the Competent Authority.
- p) The request for the transfer of the TDR shall not be considered if the same is not accompanied with the transfer application in the prescribed Performa along with transfer fee and original TDR certificate and agreement for transfer / utilization of TDR.
- q) Removal of Difficulties: -
In case of any difficulty in the implementation of the Policy matter may be placed before the Empowered Committee headed by Minister, Municipal Administration, Housing & Urban Development Department. Empowered Committee may take a decision in such cases and issue such direction as are deemed necessary for implementation of the Policy.
- r) In the instance of omission and commission, the State Government may make amendments from time to time.

Annexure-E(1)

APPLICATION FOR TRANSFERABLE DEVELOPMENT RIGHT CERTIFICATE

To

The Competent Authority,

Urban Local Bodies,

(Name of City)

Sir/Madam,

I intend to surrender the under mentioned land bearing khasra number having area sqm situated at village road / sector road / master plan road in the Master Plan area reserved for the land proposed as per the provisions of Affordable Housing Policy 2009 / for other uses as specified in TDR Policy for allotment of "Transferable Development Right Certificate" under use of TDR Policy.

1	Full Name of the applicant	
	Name of the Owner(s)	
3	Address Name of the applicant	
4	Address and Name of the Owner(s)	
5	Name & Address of the Licensed Architect employed	
6	Jamabandi of the land as issued by the concerned area patwari / tehsildar	Enclosed at annexure-....
7	Khasra trace of the proposed land certified by the concerned patwari	Enclosed at annexure-....
8	Total area of the land for which in principal approval has been obtained in case of Affordable Housing Scheme	
9	Minimum Guidance Value of the land proposed to be surrendered I proposed for affordable housing scheme.	
10	Master Plan Zone in which the land is situated	
11	Permissible FSI on the land for residential / group housing purpose.	
12	Permissible use of land as per master plan, width of road on which project land is situated (i.e. width of sector road/master plan road / road network plan/any other road)	
13	Location and distance of project land from existing sector plan / National	

	Highway I State Highway I Master Plan Road	
14	Layout plan of the project land showing the key area map w.r.t sector plan I master plan / Road area network plan	Enclosed at annexure-....
15	Is there any need to acquire the land for approach road. If yes, then, suggest the appropriate proposal.	
16	Is there any need to have change in Master Plan to make the affordable housing project most viable, if yes, then please suggest the appropriate proposal	
17	Details of the nearby feature of the land with respect to (i) Abadi (ii) School (iii) Bus Stand (iv) Informal market (v) Any other information as given by developer in support of site	

The developer shall produce information pertaining to Land Conversion, change in land use, approval of layout plan etc.

Date:

Signature of Applicant(s)

Annexure- E(2)
Format for TDR certificate

I, Shri _____ Competent Authority of ULB's
Certify that the person(s) within named in this certificate is I are the registered holder(s) of the
TRANSFERABLE DEVELOPMENT RIGHT CERTIFICATE issued subject to the provisions
of (prevailing building regulations) & Manipur Urban Area Transferable Development
Rights (TDR) Policy, 2022.

Location & details of the land surrendered:

Area of the land in sq.mts.

Land handed over to ULB Vide Possession Receipt No. & Date

Minimum Guidance Value of the land surrendered

Proposed use of the land surrendered

The area where TDR cannot be utilized

Follo No.

Certificate No.

Names of TDR Certificate Holder(s)

F.A.R. Credit of built-up area in sq. mts. (in figures)
(In words)

Given under Common Seal on this

Day

Year

Director (Town Planning)

Competent Authority of ULB.

Follo No.

D.P. Res/Road

Certificate No.:

Name(s) of the TDR Holders(s)

- 1)
- A)
- B)
- C)

D)

2)

3)

4)

F.S.I. Credit of the Built up
area in sq.mt. (In figure)
(In Words)

Given under Common seal
on this day of

Clerk Town Planner/Engineer

Received on this Day of Year

Name(s) of TDR Holder

Annexure-F
Manipur Urban Area Transit Oriented Development (TOD) Policy, 2022

Chapter 1

Introduction

Urbanization has led to horizontal growth of the cities thus creating problems of urban sprawl. This has resulted in increase of trip lengths and higher usage of private vehicles, problems of pollution and increased demand of infrastructure. To address these issues, the urban areas of Manipur need to strengthen Public Transport System. It is however, important to efficiently use the public transport system by integrating the land use with the transport infrastructure to make the cities liveable, healthy and smart.

Further with increase in urban spread, the travel lengths and time are also increasing which is leading to use of un-sustainable means of transport. This together with the increased number of trips have made sustainable modes of transport such as public transport unviable and often falling short to meet the huge travel demands. Government of Manipur intends to promote smart growth in the urban areas to deal with the problems related to urban development and transport faced by cities by way of developing these cities on Transit Oriented Development principles.

This Policy applies to whole of urban areas in Manipur as a guiding tool for preparation of Master Plans/Development Plans, formulation of Development Control Regulations etc.

Hence, the Policy

1. Short title and commencement:

- 1) This may be called the Manipur Urban Area Transit Oriented Development (TOD), Policy, 2022.
- 2) It shall come into force from the date of its publication in the official Gazette.

2. Definition:

Transit Oriented Development (TOD): The integration of land use with transport systems is called “Transit Oriented Development”, which is essentially “any development, macro or micro that is focused around a transit node, and facilitates complete ease of access to the transit facility thereby inducing people to prefer to walk and use public transportation over personal modes of transport”. This entails planning for compact cities and reducing urban sprawl and dependency on the large-scale developments in the periphery which induce shift from non-motorized to motorized modes of travel. Approach to TOD highly depends on establishing mixed land-use zone as part of strategic densification.

TOD focuses on creation of high-density mixed land use development in the influence zone of transit stations, i.e. within the walking distance of 500 m transit station. TOD advocates pedestrian trips to access various facilities such as shopping, entertainment and work. Transit Oriented is to describe a type of community or district design to capitalize on transit.

TOD increases the accessibility of the transit stations by creating pedestrian and Non-Motorised Transport (NMT) friendly infrastructure that benefits large number of people, thereby increasing the ridership of the transit facility and improving the economic and financial viability of the system. Since the transit corridor has mixed land-use, where the transit stations are either origin

(housing) or destination (work), the corridor experiencing peak hour traffic in both directions would optimize the use of the transit system.

3. Vision of TOD Policy

The vision of the TOD policy is threefold:

- 1) **Enable Transformation:** to assist in transformation of cities from private vehicle dependent city to public transport-oriented development,
- 2) **Accessible Public Transport:** to promote the usage of public transport by making it accessible, encourage green mobility by encouraging people to walk and cycle and at the same time curb pollution and other negative impacts of motorization.
- 3) **Compact Walkable Communities:** to create liveable and affordable communities, which are compact and walkable.

4. Objectives of TOD Policy

TOD integrates land use and transport planning to develop compact growth centres within the influence zone of 500 m on either side of the transit stations i.e., areas within walking distance, to achieve the following objectives:

- 1) To promote the use of public transport by developing high density zones in the influence area, which would increase the share of transit and walk trips made by the residents/ workers to meet the daily needs and also result in reduction in pollution and congestion in the influence area.
- 2) To provide all the basic needs of work/ job, shopping, public amenities, entertainment in the influence zone with mixed land-use development which would reduce the need for travel.
- 3) To establish a dense road network within the development area for safe and easy movement and connectivity of NMT and pedestrians between various uses as well as to transit stations.
- 4) To achieve reduction in the private vehicle ownership, traffic and associated parking demand.
- 5) To develop inclusive habitat in the influence area so that the people dependent on public transport can live in the liveable communities within the walkable distance of transit stations.
- 6) To prevent urban sprawl by accommodating the growing population in a compact area with access to the transit corridor, which would also consolidate investments and bring down the infrastructure cost for development.

5. Benefits of TOD Policy

TOD shall provide the following benefits to Cities:

- 1) Mobility Options for all - Change the paradigm of mobility by enabling a shift from use of private vehicles towards the use of public transport and alternative modes.
- 2) Better Quality of Life for All - Provide a variety of high-density, mixed-use, mixed-income housing, employment and recreation options within walking/cycling distance of each other and Mass Transit Station– in order to induce a lifestyle, change towards healthier living and better quality of life. Integrate communities rather than segregating them and reduce social stigma and dissent.
- 3) Reduce Environmental Degradation - Set a clear vision for the growth and redevelopment of the city in a compact manner, by minimizing sprawl (low-density spread-out development). Help save environmentally sensitive lands and virgin lands through high-density compact development.
- 4) Increased ridership due to larger population living/working within walking distance.

6. Approach for TOD Implementation

1) Influence Zone

- a) The area in the immediate vicinity of the transit station, i.e. within a walking distance, having high density compact development with mixed land use to support all basic needs of the residents is called the influence zone of a transit station/ corridor.
- b) Influence zone is either established at a transit stations or along the transit corridors. It is up to a radius of nearly 500 m of the transit station.
- c) The area of influence, where the TOD is planned for implementation, should be demarcated and notified through master plan and local area plans before implementation. If in any case the TOD is to be implemented in a phased manner, the influence area of the TOD can also be notified in phases. The principles for delineating the influence area should be clearly indicated so that there is no speculation or confusion regarding the influence zone.

2) High Density Compact Development

- a) TOD promotes densification in the influence area by providing higher Floor Area Ratio (FAR)/ Floor Space Index (FSI) and higher population & job density as compared to the area around and beyond the influence areas. To ensure sustainable development, the minimum FAR should be upto 250 and can be higher. This will promote higher concentration of people within the walking distances of transit station, thereby increasing the ridership of the public transport and resulting in increased fare revenue, pollution and congestion reduction.
- b) It is not necessary to keep the density and FAR norms consistent for the influence areas across the city. It can vary depending on the infrastructure available, land use zoning, transit capacity etc

- c) Cities should follow green building norms, adopt renewal sources of energy such as solar and waste to energy options, adopt rain water harvesting and ground water recharge techniques, which would encourage water conservation, utilization of clean energy and promote sustainable waste management so as to make them self-sustaining through efficient use of resources and infrastructure.

3) Mixed Use Development

- a) Mixed land use should be stipulated for development/ redevelopment in the TOD zone as it would reduce the need for travel by providing most of the activities such as shopping, entertainment and public amenities such as schools, parks, playgrounds, hospitals etc. within the walking distance of the residents. It would also improve the accessibility of the transit facilities and at the same time link origins and destinations, i.e. residences with work places or activity nodes. This would ensure better utilization of transit fleet by distributing loads in both directions, rather than creating unidirectional peak hour flows.
- b) A blend of land-uses helps in the optimization of physical infrastructure and resources, as all components like roads, parking, water, sewerage etc., remain functional at all times of the day.
- c) The TOD benefits cannot be realized with the kind of developments that encourage the use of personalized vehicles. It is therefore imperative to restrict developments such as low-density housing, low-rise development, warehouses, petrol pumps/CNG stations, cremation ground and surface/Multilevel parking etc. in the influence area.
- d) Mix of uses within the TOD can be achieved either by horizontal mixing i.e. separate activities in separate plots/ buildings or vertical mixing i.e. combining different activities within the same building.
- e) The mix of uses to be proposed shall be decided as per the local conditions and the trends in real estate market, however, the minimum percentage of built-up area for housing, commercial and other amenities should be fixed. The use of balance built up area may depend on the prevailing market conditions and demand of the city.

4) Mandatory and Inclusive Housing

- a) The cities should fix a minimum percentage (20% or higher) of allowed FAR for affordable housing in all development/redevelopment in the influence zones.
- b) Housing in the influence zone should have a mix of all economic groups/ sections. The development control regulation should stipulate housing for Economically Weaker Sections (EWS) as well as LIG/MIG, or other types based on Census

definition, in the influence area to give an opportunity to the people who depend on public transport for daily commuting to live in walkable neighbourhoods.

- c) The upper limit to the area of individual dwelling unit should be fixed as a regulatory component in the influence zones to ensure housing for LIG/MIG.

5) Multimodal Integration

- a) The influence area should have high quality integrated multi-modal transport system for the optimum use of the facilities by the residents/ users. The system should have seamless physical connectivity, information integration and fare integration across modes so that the first and last mile connectivity does not become a bottleneck in the use of public transport system by the citizens.
- b) The mass transit system, including its stations, should be designed to provide high quality services that assure user satisfaction in terms of safety and comfort. The citizens should have barrier free access to all the required amenities in the transit system as well as around the transit centers.
- c) The hierarchy of the facilities at the transit system should prioritize pedestrians followed by bicycle, feeder buses, drop-off facilities and park and ride facility in the given order.
- d) The transit stations should have ample bicycle parking spaces with scope for future expansion if need arises.
- e) Intermediate Public Transport (IPT), Non-Motorized Transport (NMT) and feeder buses perform a significant role in providing first and last mile connectivity to the populace beyond the influence zone. To ensure that the area around the transit station remain congestion free and to facilitate easy transfers, it is important to provide adequate parking and pickup/ drop-off facilities for the above modes at suitable locations at the stations and in the influence zone.
- f) To support TOD, park and ride facilities may be provided, if needed. The facilities, with suitable pricing that deters private vehicle use, may be planned primarily at the end stations and can variably decrease according to the requirement on the intermediate nodes. On-street parking should be prohibited in the influence area and if necessary, it should be priced higher than off street parking.

6) Focus on pedestrians, cyclists and NMT users

- a) The streets should be designed for users of all age groups and for all types of commuters including pedestrians, bicyclists, motorists and transit riders. They should be safe and accessible by all.
- b) The influence zone should have development in smaller blocks with a finer street network having provision for pedestrians, bicyclists and NMT users. This will create a grid of small, traversable blocks which has sidewalks and amenities like lighting and information signage etc. and ensure accessibility of the transit stations by pedestrians and cyclist.
- c) Right of Way (ROW) should not dictate the pedestrian circulation network, it should rather be designed based on the pedestrian volume and adjoining land-

use. Smaller ROWs should be made 'pedestrian and NMT only' or one-way streets so that pedestrian circulation is not compromised.

- d) Continuous and unobstructed footpaths of suitable width should be provided on either side of the streets. To protect the footpaths from encroachment and parking, buffers or bollards etc. may be provided.
- e) **Traffic Calming:** To promote a safe and secure environment for pedestrian and NMT users, necessary measures should be taken to reduce speed as well as volume of motorized traffic in the influence zone. On streets which are primarily designed for movement of pedestrian and NMT as well as those having ROW less or equal to 12m, the maximum speed limit should be restricted to 20 kmph by design by use of table top crossings, carriage way surfaces etc. For all other streets, in and around the influence zone, the speed should not exceed 40 kmph.

7) Street Oriented Buildings and Vibrant Public Spaces

- a) Retail and other 'active uses' should be supported on the ground floor along the main streets, key intersections, stations and parking garages to ensure high quality pedestrian environments.
- b) To promote natural surveillance of public spaces, all boundary walls and setbacks should be removed and buildings should be permitted up to the edge of the street. Also, the orientation of the buildings should be such so as to face the pedestrian facilities.
- c) The streets should have a natural surveillance system by providing mixed-use active frontage, vending zones and avoiding opaque wall, which would ensure a safe environment for pedestrians, especially women, children and elderly.
- d) Ground floor should support commercial activity, with at least 50% untinted transparent frontage.
- e) The height of compound wall, if present, should be transparent above 100 cm, with exception of high security government buildings.
- f) The frontage of all parking structure/podiums or stilts on the ground floor should support active frontage on all primary streets.
- g) **Preserve Open Spaces:** All open areas such as amenity spaces, green spaces, playgrounds, parks and natural areas should be preserved as part of TOD. The open space provision within TOD should meet the Urban and Regional Development Plans Formulation and Implementation (URDPFI) guideline of 10-12 sq.mt. per person.
- h) **Safety and Security:** To ensure a safe and secure environment for pedestrian and NMT users, especially women and children, the influence zone should be designed to maximize natural surveillance. For this purpose, street lighting should be provided, active frontage and vendors zone etc. should be created. Further, facilities such a CCTV cameras and panic buttons etc. should also be installed for round the clock surveillance.

8) Building Design Details

Buildings higher than 2-3 storey shall step back higher floors in order to maintain a human scale along the sidewalk and reduce shadow impacts on the public street.

9) Managed Parking

- a) To discourage the use of private vehicles and to manage parking in TOD, it is essential that the supply of the parking is reduced and made expensive within the influence zone.
- b) On-street parking should be prohibited within 100 m of the transit station, except for freight delivery and pickup or drop-off of the differently abled.
- c) The use of parking spaces within the influence zone can be maximized by sharing of spaces between uses that have demand during different times of the day. For example, parking requirements for office/work can be shared with the parking spaces for residences as their hours for demands do not coincide with each other.
- d) TOD aims to promote NMT which includes use of bicycle. Therefore, bicycle parking facilities should be provided at regular intervals and suitable locations within the influence zone. Public bicycle sharing systems may also be planned to promote the use of bicycles.
- e) Parking should not be allowed in a manner wherein the aesthetics of the city is lost. The neighbourhood is generally adversely affected by parking of vehicles in front of the buildings on the primary streets, therefore, on-street parking should be avoided. In case, if on-street parking is needed, it should be provided in a manner, wherein it acts as a buffer for the pedestrians and cyclists from motorized traffic.
- f) To restrict unauthorized parking and to avoid congestion caused due to on-street parking, it is important to have an enforcement mechanism in place. Cities should have a parking policy with heavy penalty for unregulated parking in the influence zone and ensure that the same is implemented. Also, the parking should have price variations according to time of day and duration of parking.

CHAPTER 3

7. Role & Responsibilities of various Agencies

1) Town Planning Department, Govt. of Manipur

- a) Formulation of TOD Policy
- b) Prepare/revise various Development Plans incorporating separate chapter for TOD, enabling provisions and amendments for implementation of TOD, zoning regulations, development controls and subdivision/amalgamation regulations for various uses/activities, building byelaws for various uses/activities and design guidelines for TOD Areas.

2) Planning and Development Authority, Manipur.

- a) Implementation of TOD Area Zonal Plans, TOD Layout Plan/TD Schemes/TP Schemes/Redevelopment Schemes etc. in TOD Areas in sole capacity or in partnership with land owners/developers as applicable.
- b) Preparation and implementation of proposals for strengthening of trunk infrastructure and integrated infrastructure and services systems plan for infrastructure components in TOD.

3) Municipal Corporation/ Municipal Councils

- a) Implementation of TOD Area Zonal Plans for TOD Areas.
- b) Promote, control and regulate the developments in the TOD areas.
- c) Promote, Control and Regulate the building construction activities in the TOD Areas.
- d) Preparation and implementation of integrated Multi-modal Public Transport operations service plan.

Chapter 4

8. Statutory Framework:

- 1) TOD policy should be notified as part of the Master Plan/Development plan of the city. The policy document should clearly outline the importance of the high capacity transit networks in the city's development.
- 2) The vision of the Master Plan/ Development Plan should be resonated by all the stakeholders, especially those involved in infrastructure development and preparation of development plans. The building bye-laws and development control regulations need to incorporate the changes required for implementing TOD.
- 3) The influence zone of the TOD should be clearly notified by the concerned Authority.
- 4) To ensure that the infrastructure created in the influence zone is provided in a planned manner, the ULBs and the Development Authority should prepare a comprehensive plan integrating all the utilities, physical infrastructure and essential facilities such as roads, sewers, drainage, electric lines, green spaces, police post, fire post, electric sub-stations, etc. The plan would be useful to assess the carrying capacity of the existing infrastructure and the upgradation needed to meet the increased demand once TOD is implemented.

9. Communications and Outreach

ULBs may launch awareness program about the components of TOD, its benefits, incentives to be reaped by the land owners, developers, infrastructure agencies and other bodies, reduced per unit cost for creating and maintaining infrastructure etc. and provide improved quality of life.

Annexure-G

Manipur State Affordable Housing Policy for Urban Areas, 2022

Chapter 1

1. INTRODUCTION

- 1.1** The urban areas in the State are emerging as centers of economic growth. This growing importance of urban areas in the economic sphere and the opportunities it presents has led to migration and increase in rate of urbanization. However, the state of planning and preparedness of the urban local bodies in the state to cater to the current or future demands leaves much to be desired.
- 1.2** The lack of housing and basic services at the required pace to meet the challenges of urbanization has resulted in the development of new unplanned settlements with wider ramifications on the health, safety and well - being of the citizens in Indian Cities. The gap between the supply and demand of the housing has been widening thus pushing up the market rates for housing though the situation is not that alarming in the state of Manipur.
- 1.3** As per the Draft GIS Based Master Plan for Greater Imphal for the horizon year 2041, the future need of housing for the projected population of 2041 is 78,173 dwelling units assuming that the average household size census 2011 (i.e. 4.7) will remain constant between 2011 and 2041. The calculation of quantitative housing shortage based on number of census houses and the number of residential occupied census houses revealed a shortage of 507 dwelling units only.
- 1.4** A report of the Technical Group on Urban Housing Shortage (2012-17) constituted by the Ministry of Housing and Urban Poverty Alleviation (MoHUPA), Government of India there is a shortage of 18.78 million dwelling units out of which nearly 96% belongs to the Economically Weaker Sections (EWS) and Lower Income Group (LIG) Households. The income distribution of households by monthly average income brackets for Manipur Urban areas worked out from the distribution of expenditure class 1983-84 published data indicates that nearly 71% belongs to EWS and LIG Households.
- 1.5** Although there is no apparent housing shortage in 2011, it is likely to grow in 2041 as the rate of supply of houses at present is very low compared to the very high expected growth of population. This indicates an urgent need for appropriate public agencies and financial

institutions to encourage cooperative housing and private entrepreneurs to boost the rate of housing supply drastically within this short period of time. An appropriate policy and programme is needed to be formulated for the future likely distribution of various income groups population within the limited resources of the public agencies.

- 1.6** However, the mammoth investments needed for creation of the housing infrastructure is much above the limited public resources available with the governments and therefore private sector needs to play an important role in this regard.
- 1.7** In order to address the various issues illustrated thus far, The Ministry of Housing and Urban Poverty Alleviation, Government of India had come up with the National Housing and Habitat Policy (NUHHP), 2007 which has outlined “Affordable Housing to All” as its mandate. The NUHHP, 2007 had envisaged that the States would prepare a State Urban Housing and Habitat Policy and also a State Urban Housing & Habitat Action Plan.
- 1.8** This policy empowers the States to include passing of specific Acts by the States to achieve the housing policy objectives through institutional, legal & regulatory reforms, fiscal concessions, financial sector reforms and innovations in the area of resource mobilization for housing and related infrastructure development including promotion of cost effective building materials and technologies at the State level. The policy will also include an action plan and a pragmatic road map to achieve the objectives of the policy.
- 1.9** Later, the government has set 2022 as the target year to realize this objective by making specific initiatives for the promotion of housing. Two components under Pradhan Mantri Awas Yojana – the PMAY (Urban) and PMAY (Rural) were launched by the government for achieving housing for all by 2022.
- 1.10** The State has been striving to achieve housing security to all residents through appropriate policy and programmatic interventions since past few decades. In line with the recent initiatives taken by the State in this direction, creation of a specific policy namely “State Affordable Housing Policy for Urban Areas” with a clear mandate to synergize and facilitate efforts in the direction of providing affordable housing for all had become the need of the hour.

Hence, the Policy.

2. Short title and commencement.

- 1) This may be called the Manipur State Affordable Housing Policy for Urban Areas, 2022.
- 2) It shall come into force from the date of publication in the official gazette.

3. Aim of the State Affordable Housing Policy for Urban Areas.

The aim of this policy is to create an enabling environment for providing “affordable housing for all” with special emphasis on EWS and LIG and other vulnerable sections of society such as Scheduled castes/Scheduled Tribes, Backward Classes, Minorities and senior citizens, physically challenged persons in the State and to ensure that no individual is left shelter less. The Policy further aims to promote Public Private People Participation (PPPP) for addressing the shortage of adequate and affordable housing.

The terms affordable housing refers to home ownership rather than rental housing. Affordability is described as the provision of a long-term shelter with basic amenities at a reasonable cost. Affordability can be achieved by adjusting the following factors namely, (i) land cost, (ii) construction cost, and (iii) financial support.

4. Target groups

The target group for this policy are urban poor classified by Ministry of Housing and Urban Affairs, Government of India as persons belonging to the Economically Weaker Sections (EWS) and Lower Income Groups (LIG) etc. based on income criteria as under:

Group	Annual Household Income range
Economically Weaker Sections (EWS)	Up to Rs 3 (three) lakhs per annum
Lower Income Group (LIG)	From Rs. 3 (three) to 6 (six) lakhs per annum

5. Area of coverage.

The policy is applicable to all the municipal areas and as notified by the Government in the State Gazette from time to time.

6. Definition:

6.1 Affordable housing: Individual dwelling units with a Carpet Area of not more than 60 sq. mt. and preferably within the price range of 5 times the annual income of the household as notified, either as a single unit or part of a building complex with multiple dwelling units. The areas of the dwelling units for the EWS and LIG are given below:

Group	Area (in Sq. m)
Economically Weaker Sections (EWS)	30
Lower Income Group (LIG)	60

6.2 Affordable Housing Project:

Projects using at least 60 percent of the FAR/ FSI for dwelling units of Carpet Area not more than 60 sqm. will be considered as Affordable housing projects. In addition, 35 percent of the total number of dwelling units constructed should be of carpet area 30 sqm for EWS category. Such projects can have a mix of EWS/LIG/Higher Category DUs and commercial units. Provision of servant's quarters along with the main dwelling unit will not be counted as dwelling units for EWS/LIG under Affordable Housing (AH) project.

6.3 Beneficiary/End User: A beneficiary family will comprise husband, wife and unmarried children. The beneficiary family should not own a pucca house (an all-weather dwelling unit) either in his/ her name or in the name of any member of his/ her family in any part of India.

6.4 Built up area and Plinth Area

Plinth area shall mean the built up covered measured at the floor level of the basement or of any storey, the same as defined in detail in the IS code – IS 3861: 2002, "Indian Standard Method of Measurement of Plinth, Carpet and Rentable Areas (Second Revision)".

6.5 Carpet Area for an Affordable Housing Dwelling Unit

The carpet area is the usable and habitable rooms at any floor level (excluding the area of the wall). While *the method of* measurement of carpet area will include carpet area of the living room(s), bedroom(s), kitchen area, lavatory(s) and bathroom(s).

Chapter 2

2. Strategies/ Models for housing

The State seeks to address housing shortage through the following models:

- 2.1 **Ownership housing:** A number of policy initiatives of the state have helped in the past to meet the challenges of ownership housing to some extent. This policy will thus focus on provision of affordable ownership housing for all its residents who can afford the same.
- 2.2 **Incremental housing:** Congestion of dwelling units is one of the critical factors resulting in housing shortages. The policy shall thus focus on incremental housing which will allow for pacing of construction as per the convenience of the owner and also allow additions and extensions to existing dwelling units.
- 2.3 **Rental housing:** For the workers with ownership housing elsewhere or not preferring ownership housing or who cannot afford ownership housing, the state shall endeavor to facilitate rental housing by creating conducive environment for creation of affordable rental housing stock.
- 2.4 **Shelters and other form of housing:** The State Government shall ensure that no person is left homeless in the State. To this effect, transit homes, shelters for homeless, dormitories and hostels with allied facilities, at affordable rates for those who can pay and free for the destitute will be encouraged. Further, the State shall endeavor to cater to the housing needs of other categories of citizens such as the senior citizens, women, students, physically and mentally challenged, SC/ST/OBC and Minorities, etc.

Chapter 3

3 State interventions and specific action points

Since the Constitution of India envisages provision of Housing as the primary responsibility of the State Government, major initiatives are proposed to be taken by the state as part of the vision of the Government to provide affordable housing for all residents. In addition to the initiatives of the State Government so far, some of the additional initiatives are enumerated below:

3.1 Land

- i. At least 60% of the total project Floor Area Ratio (FAR)/Floor Space Index (FSI) will

be reserved for EWS/LIG Category. Out of the total reserved for EWS/LIG category, 35% of the total number of dwelling units will be reserved for EWS category.

- ii. The State Government including that of its agencies such as the Urban Development Authorities, Housing Boards, other parastatal agencies and Urban Local Bodies (ULBs) will, as far as possible, provide land for affordable housing projects.
- iii. Various models for assembling land will be encouraged in both Government and Private sectors by offering trunk infrastructure facilities and transportation linkages to such site.
- iv. The policy aims to create an inventory of land holdings in cities to constitute a land bank and prepare an asset management plan for better management of the available land and targeting its supply to create affordable housing dwelling units. The State shall compile and maintain the inventory.
- v. The State will also develop innovative ways for capturing the value of land by way of developing infrastructure and regional connectivity.
- vi. Mortgageable leasehold property rights and land titles for the EWS and LIG categories shall be facilitated by the Revenue Department and the ULBs.
- vii. Infrastructure services including water supply, sanitation, health, education facilities to existing housing colonies where there is absence of such facilities will be ensured
- viii. Special dispensation to the socially vulnerable sections like senior citizens, women, students, physically challenged, SC/ST/OBC and Minorities, etc. of the State shall be made.

3.2 Finance

The State shall strive to provide financial incentives towards reducing the cost of the dwelling units through monetary interventions and/or concessions to housing providers so that they are incentivized to increase the supply of dwelling units in the Affordable Housing segment, thereby bringing down the costs of such dwelling units. The following key incentives are envisaged:

- i. The State shall provide appropriate targeted subsidies for creation of affordable housing stock on both supply and demand side.
- ii. The State shall endeavor to establish linkages and bring convergence with the various fiscal initiatives provided by the Government of India for Affordable Housing

Projects and other schemes that are operationalized from time to time.

- iii. The State shall also encourage private developers and ULBs/Development Authorities/Housing Boards etc. to undertake affordable housing projects under various schemes being implemented by the Central Government.
- iv. Innovative and demand driven Public Private People Participation (PPPP) projects for affordable housing will be promoted.
- v. The policy seeks to promote linkages to formal lending institutions including Micro Housing Finance Institutions to all desiring beneficiaries wishing to access financial institutions for housing purposes. The State Level Bankers Committees and District Level Bankers Committees will be consulted for facilitating greater flow of funds to the EWS and LIG segments.
- vi. The policy seeks to promote financial incentives to private developers which could include:
 - a) Tailored incentives for different types of cities/towns – the State shall endeavor to provide targeted subsidies and incentives that bring in the best value for the city/town under consideration and based on the ULBs' capacity to match the incentives both in financial and physical resources perspectives.
 - b) The States will consider concessions and or exemptions from State charges/taxes for Affordable Housing Projects for EWS/LIG as below:
 - Waiver of or/Nominal Stamp duty
 - Waiver of or /Nominal Land Conversion Charges
 - Waiver of or /Nominal Building Plan Approval Fees
- vii. The policy lays special focus on increasing financial literacy of the EWS and LIG segments and State shall seek to achieve complete financial inclusion of these segments of the society.
- viii. The policy proposes that social security programmes for urban poor are dovetailed with the housing programmes of the State/Centre.

Chapter 4

4. Legal and Regulatory Reforms

The state shall create an enabling environment for the development of affordable housing segment through appropriate legal and regulatory reforms illustrated as under:

4.1 The State shall prepare a 10 years affordable housing action plan to ensure housing is provided for the immediate near future. The target of the plan however, would be to saturate the housing requirement within a set time frame.

4.2 In order to fast track the building permits for Affordable Housing Projects, the State shall:

- Endeavour to establish a Single Window Clearance cell with an aim to provide building permits within 30 days from the date of application.
- Issue simplified set of regulations and procedures for issue of such permits.
- Develop an online/e-enabled and transparent Single Window Approval System for fast-track clearances and to track applications.
- Set up a Nodal Agency for implementation of the policy to be constituted which will oversee and coordinate fast track clearance for Affordable Housing projects.
- Set up an Empowered State Level Sanctioning and Monitoring Committee (SLSMC) under the Chairmanship of Chief Secretary, Government of Manipur. to meet regularly to prioritize, approve, sanction various affordable housing projects, monitor progress in streamlining building approvals, to promote public private partnership (PPP), streamline various procedures and bring in interdepartmental coordination etc.
- Provide for special dispensation for affordable housing projects and green housing projects.

4.3 The policy seeks creation of an institutional mechanism to facilitate faster conversion of agricultural land to non-agricultural land within the boundary of the urban planning area, if in compliance with the Master Plan.

4.4 Technology Support and its transfer

The State shall provide support for appropriate building and construction technologies and its transfer from lab to land. For this, the State shall:

4.4.1 Promote innovative technology and building materials for low-cost and mass housing.

4.4.2 The State shall encourage the following technologies for mass housing and

provide for special dispensation for these:

- Prefab technologies.
- Green Housing.
- Low energy consuming building materials.
- Rainwater harvesting and water conservation technologies..
- Other latest technologies.

4.4.3 Necessary support will be provided to the above technologies through incorporation into the standard schedule of rates, allowing price preference etc.

4.5 Institutions

4.5.1 The existing institutional mechanisms for creation of affordable housing such as the Municipal Corporations, Municipal Corporation/Councils, Manipur State Housing Board, Planning and Development Authority etc. will be rejuvenated to meet the ever growing demands of the sector.

4.5.2 Need based Special Purpose Vehicles for promoting affordable housing projects shall be launched.

4.6 Capacity building

The capacities of the functionaries in State/Housing Boards and ULBs including parastatals shall be enhanced for effective and efficient provision of housing services. Dedicated Municipal Cadre for the effective delivery of services and housing shall be put in place.

TABLE –I
OFFICE BUILDING
(Clause C (i))

Fitments For Accommodation other than principals

Water Closets	For male personnel 1 for every 25 persons or part thereof	For female personnel 1 for every 15 persons or part thereof.
Ablution taps	1 in each water closet	1 in each water closet
	1 water tap with drainage arrangements shall be provided for every 50 persons or part thereof in the vicinity of water closet and urinals.	
Urinals	Nil upto 6 persons 1 for 7-20 persons 2 for 21-45 persons 3 for 46-70 persons 4 for 71-100 persons From 101 -200 persons add at the rate of 3% From over 200 persons Add at the rate 2.5%	
Wash Basins	1 for every 100 persons with a minimum of one each floor	
Drinking Water Fountains	1 for every 100 persons with a minimum of one each floor	
Baths	Preferably 1 on each floor	
Cleaner's sinks	1 per floor, minimum, preferable in or adjacent to sanitary rooms.	

TABLE –II
FACTORIES
(Clause C (i))

Fitments	For male personnel 1 for 1 -15 persons 2 for 16- 35 persons 3 for 36-65 persons 4 for 66 -100 persons.	For Female Personnel 1 for 1-12 persons 2 for 13-25 persons 3 for 26-40 persons 4 for 41-57 persons 5 for 58-77 persons 6 for 78-100 persons
Water closets	From 101-200 persons add at the rate of 3% For every 200 persons add at the rate of 2.5%.	From 101-200 persons add at the rate of 5% For over 200 persons add at the rate of 4 percent.
Ablution taps	1 in each water closet.	1 in each water closet.
	1 water tap with drainage arrangements shall be provided for every 50 persons or part thereof in the vicinity of water closet and urinals.	
Urinals	Nil upto 6 persons 1 for 7-20 persons 2 for 21-45 persons 3 for 46-70 persons 4 for 71-100 persons From 101 -200 persons add at the rate of 3% From over 200 persons Add at the rate 2.5%	
Washing taps with draining arrangement	1 for every 25 persons or part thereof	
Drinking water fountains	1 for every 100 persons with a minimum of one each floor	
Bath (preferable showers)	As required for particular trades or occupations.	

Note: For many trades of a dirty or dangerous character, more extensive provisions are required by law.

TABLE III
CINEMAS, CONCERT HALLS AND THEATRES

(Clause C (I))

Fitments	For Male public	For female public	For Male Staff	For female Staff
Water Closets	1 per 100 persons upto 400 persons For over 400 persons add at the rate of 1 part thereof	2 per 100 persons upto 200 persons For over 200 persons add at the rate of 1 per 100 persons or part thereof	1 for 1-15 persons	1 for 1-12 persons
Ablution taps	1 in each water closet	1 in each water closet	1 in each water closet	1 in each water closet
1 water tap with draining arrangement shall be provided for every 50 persons or part thereof in the vicinity of water closets and urinals.				
Urinals	1 for every 50 persons or part thereof		Nil up to 6 persons 1 for 7-20 persons 2 for 21-45 persons	
Wash Basins	1 for every 200 persons or part thereof	1 for every 200 persons or part thereof	1 for 1-15 persons 2 for 16-35 persons	1 for 1-12 persons 2 for 13-25 persons

Note: It may be assumed that two –thirds of the members are males and one –third females.

TABLE IV
ART GALLERIES, LIBRARIES AND MUSEUMS

(Clause C(I))

Fitments	For Male public	For female public	For Male Staff	For female Staff
Water Closets	1 per 200 persons upto 400 persons For over 400 persons add at the rate of 1 per 250 persons or part thereof	1 per 100 persons upto 200 persons For over 200 persons add at the rate of 1 per 150 persons or part thereof	1 for 1-15 persons	1 for 1-12 persons
Ablution taps	1 in each water closet	1 in each water closet	1 in each water closet	1 in each water closet
	1 water tap with draining arrangement shall be provided for every 50 persons or part thereof in the vicinity of water closets and urinals.			
Urinals	1 for every 50 persons or part thereof		Nil up to 6 persons 1 for 7-20 persons 2 for 21-45 persons	
Wash Basins	1 for every 200 persons or part thereof. For over 400 persons add at the rate of 1 per 250 persons or part thereof.	1 for every 200 persons or part thereof. For over 200 persons, add 1 per 150 persons or part thereof.	1 for 1-15 persons 2 for 16-35 persons	1 for 1-12 persons 2 for 13-25 persons

Note: It may be assumed that two –thirds of the members are males and one –third females.

TABLE –V
HOSPITALS, INDOOR AND OUTDOOR PATIENT WARDS

(Clause C (i))

	Indoor Patient Wards		Outdoor Patient Wards	
	For Males and Females		For Males	For Females
Water Closets	1 for every 8 beds or part thereof	Water Closets	1 for every 100 persons or part thereof	2 for every 100 persons or part thereof
Ablution taps	1 in each water closet plus one water tap with draining arrangement in the vicinity for every 50 beds or part thereof	Ablution taps	1 in each water closet	1 in each water closet
Wash Basins	2 upto 30 beds add 1 for every additional 30 beds or part thereof		1 water tap with draining arrangement shall be provided for every 50 persons or part thereof in the vicinity of water closets and urinals.	
Baths	1 bath with shower for every 8 beds or part thereof	Urinals	1 for every 50 persons or part thereof	
Bed pans washing sinks	1 for each ward			
Cleaner's sinks	1 for each ward	Wash Basins	1 for every 100 persons or part thereof	1 for every 100 persons or part thereof
Kitchen sinks and dish washers(where kitchen is provided)	1 for each ward			

TABLE –VI

HOSPITALS

(Administrative Buildings, Medical, Staff Quarters and Nurse Homes)

Fitments	For Administrative Buildings		For Medical Staff Quarters		For Nurses Home(Hostel type)
	For male personnel	For Female personnel	For male personnel	For Female personnel	
Water	1 for every 25 persons or part thereof	1 for every 15 persons or part thereof	1 for 4 persons	1 for 4 persons	1 for 4-6 persons or part thereof
Ablution Type	1 in each water closet	1 in each water closet	1 in each water closet	1 in each water closet	1 in each water closet
	1 water tap with draining arrangement shall be provided for every 50 persons or part thereof in the vicinity of water closets and urinals.				
Urinals	Nil upto 6 persons 1 for 7-20 persons 2 for 21-45 persons 3 for 46-70 persons 4 for 71-100 persons From 101-200 add at the rate of 3 percent. For over 200, add at the rate of 2.5%				
Wash Basins	1 for every 25 persons or part thereof	1 for every 25 persons or part thereof	1 for every 25 persons or part thereof	1 for every 25 persons or part thereof	1 for every 25 persons or part thereof
Bath (with shower)	1 for each floor	1 for each floor	1 for 4 persons or part thereof	1 for 4 persons or part thereof	1 for 4-6 persons or part thereof
Cleaner's sinks		1 per floor, min	1 per floor, min		1 per floor, min

**TABLE –VII
HOTELS**

Fitments	For Residential Public and Staff	For Public Rooms		For Non-Residential Staff	
	For Male personnel	For Females personnel	For Males Staff	For Female Staff	
Water	1 for every 25 persons or part thereof	1 for every 15 persons or part thereof	1 per 4 persons	1 per 4 persons	1 for 4-6 persons or part thereof
Ablution taps	1 in each water closet	1 in each water closet	1 in each water closet	1 in each water closet	1 in each water closet
	1 water tap with draining arrangements shall be provided for every 50 persons or part thereof in the vicinity of water closets and urinals				
Urinals	Nil upto 6 persons 1 for 7-20 persons 2 For 21-45, persons 3 For 46-70 persons 4 For 71-100 persons From 101 to 200, add at the rate of 3 percent. For over 200, add at the rate Of 2.5 percent				
Wash Basins	1 for every 25 persons or part thereof	1 for every 25 persons or Part thereof	1 for every 25 persons or part thereof	1 for every 25 persons or part thereof	1 for every 25 persons or part thereof

Baths (with shower)	1 for each floor	1 for each floor	1 for 4 persons or part thereof	1 for 4. persons or part thereof	1 for 4-6 persons or part thereof
Cleaner's sinks		1 per floor, min	1 per floor, min		1 per floor, min

[Clause C (i)]

TABLE –VII
HOTEL
[Clause C (i)]

Fitments	For residential Public and staff	For Public Rooms		For non-residential Staff	
		For Males	For Females	For Male Staff	For Female staff
Water Closets	1 per 8 persons omitting occupants of the room with attached water closets minimum of 2 if both sexes are lodged.	1 per 100 persons upto 400 persons. For over 400 add at the rate of 1 per 250 persons or part thereof	2 per 100 persons upto 200 persons. For over 200 add at the rate of 1 per 100 persons or part thereof.	1 for 1-15 persons 2 for 16-35 persons. 3 for 36-65 persons. 4 for 65-100 persons	1 for 1-12 persons 2 for 13-25 persons. 3 for 26-40 persons. 4 for 41-57 persons 5 for 58 -77 persons 6 for 78-100 persons
Ablution tap	1 in each water closet	1 in each water closet	1 in each water closet	1 in each water closet	1 in each water closet
Urinals	_____	1 per 50 persons or part thereof	_____	Nil upto 6 persons 1 for 7-20 persons 2 for 21-45 persons 3 for 46-70 persons 4 for 71-100 persons	_____
Wash Basins	1 for every 10 persons omitting the wash basins installed in the room suite	1 per each water closet and urinal provided	1 per each water closet provided	1 for 1-15 persons 2 for 16-35 persons 3 for 36-65 persons 4 for 66-100 persons	1 for 1-12 persons 2 for 13-25 persons 3 for 26- 40 persons 4 for 41-57 persons 5 for 58-77 persons 6 for 78-100 persons
Baths	1 for every 10 persons omitting occupants of the room with bathing suite	_____	_____	_____	_____
Slop	1 per 30 bedrooms: minimum				
Sinks	1 per floor				
Kitchen Sinks and dish washers	1 in each kitchen				

Note: It may be assumed that two- thirds of the numbers are male and one –third females.

TABLE – VIII
RESTAURANTS
[Clause C(i)]

Fitments	For Male Public	For Females Public	For Male staff	For Female Staff
Water Closets	1 per 50 persons upto 200 seats. For over 200 seats add at the rate of 1 per 100 persons or part thereof.	1 per 50 persons upto 200 persons. For over 200 seats add at the rate of 1 per 100 persons or part thereof.	1 for 1-15 persons 2 for 16-35 persons 3 for 36-65 persons 4 for 66-100 persons	1 for 1-12 persons 2 for 13-25 persons 3 for 26-40 persons 4 for 41 -57 persons 5 for 58- 77 persons 6 for 78-100 persons
Ablution Taps	1 in each water closet	1 in each water closet	1 in each water closet	1 in each water closet
	1 water tap with draining arrangement shall be provided for every 50 persons or part thereof in the vicinity of water closets and urinals			
Urinals				
Wash Basins	1 for every water closet provided			
Kitchen Sinks and dish washers	1 in each kitchen			
Slope or service sinks	1 in the restaurant			

Note: It may be assumed that two- thirds of the numbers are male and one –third females.

TABLE IX
SCHOOLS
[Clause C (i)]

Fitments	Nursery School	Schools other than Nursery Schools		Boarding schools	
		For boys	For Girls	For Boys	For Girls
Water closets	1 per 25 pupils or part thereof	1 per 60 pupils or part thereof	1 per 40 pupils or part thereof	1 per every 10 pupils or part thereof	1 per every 8 pupils or part thereof
Ablution tap	1 in each water closet	1 in each water closet	1 in each water closet	1 in each water closet	1 in each water closet
	1 water tap with draining arrangement shall be provided for every 50 persons or part thereof in the vicinity				
Urinals		1 per 50 pupils or part thereof	1 per 60 pupils or part thereof	1 for every 50 pupils or part thereof	
Wash basins	1 per 25 pupils or part thereof	1 per 60 pupils or part thereof	1 per 60 pupils or part thereof	1 per 10 pupils or part thereof	1 per 10 pupils or part thereof
Baths	1 bath –sink per 40 pupils			1 per 10 pupils or part thereof	1 per 10 pupils or part thereof
Drinking Water Fountains	1 per 100 pupils or part thereof	1 per 100 pupils or part thereof	1 per 100 pupils or part thereof	1 per 100 pupils or part thereof	1 per 100 pupils or part thereof
Cleaner's Sinks			1 per floor min.		1 per floor min.

** For teaching staff, the schedule of fitments to be provided shall be the same as in the case of office buildings (See Table –II)

TABLE - X
HOSTEL
(Clause C (i))

Fitments	For Residents and Residential Staff		For non-residential staff		Rooms wherein outsiders are received	
	For Males	For Females	For Males	For Females	For Males	For Females
Water Closets	1 for every 10 persons or part thereof	1 for every 8 persons or part thereof	1 for 1-12 persons 2 for 13-25 persons 3 for 36-65 persons 4 for 66-100 persons 5 for 58-77 persons 6 for 78-100 persons	1 for 1-12 persons 2 for 13-25 persons 3 for 26-40 persons 4 for 41-57 persons Rate of 1 for 250 persons or part thereof.	1 per 100 persons upto 400 persons. For over 400 persons add at the rate of 1 for 100 persons or part thereof.	2 per 100 persons upto 200 persons. For over 200 persons add at the rate of 1 for 100 persons or part thereof.
Ablution taps	1 in each Water Closet	1 in each Water Closet	1 in each Water Closet	1 in each Water Closet	1 in each Water Closet	1 in each Water Closet
Urinals	1 for 25 persons or part thereof	-----	Nil upto 6 persons 1 for 7-20 persons 2 for 21-45 persons 3 for 46-70 persons 4 for 71-100 persons	-----	1 per 50 persons or part thereof	-----
Wash Basins	1 for 10 persons or part thereof	1 for 10 persons or part thereof	1 for 1-15 persons 2 for 16-35 persons 3 for 36-65 persons 4 for 66-100 persons	1 for 1-12 persons 2 for 13-25 persons 3 for 26-40 persons 4 for 41-57 persons 5 for 58-77 persons 6 for 78-100 persons	1 per each water closet and urinal provided	1 per each water closet provided
Baths	1 per 10 persons or part thereof	1 per 10 persons or part thereof	-----	-----	-----	-----
Cleaner's				1 on every floor		

