DELHI DEVELOPMENT AUTHORITY

NOTIFICATION

New Delhi, the   2nd   August, 2019

S.O.2777 (E).—In exercise of powers conferred by **Section 57 of Delhi Development Act, 1957** (61 of 1957), the Delhi Development Authority, with the prior approval of the Central Government, hereby makes the **Regulations for Enhancing Walkability in Delhi**.

REGULATIONS FOR ENHANCING WALKABILITY IN DELHI

1.   NEED FOR THE REGULATIONS

1.1.   Delhi has high volumes of pedestrian movement throughout the city. As many as 34% of all daily person trips are 'walk-only', with 58% of all education trips and 31% of all business and service trips being walking trips. Almost 50% of metro users travel to/from the stations on foot. Walking is also the dominant mode of travel for 77% of the urban poor who commute on foot. Additionally, almost 60% of all trips are less than 4km and 80% below 6km - an ideal distance for walking and cycling. Despite such high numbers of people actually walking, the quality of walking environments in the city is far from desirable, with the result that Delhi's potential as a 'walkable city' has not been fully explored and realised [1].

1.2.   Following are the major issues related to walking in Delhi:

o   Weak enforcement of traffic rules concerning pedestrian space and movement -this leads to general lack of respect for pedestrians on streets. Accidents occur due to unruly motorist behaviour in the form of use of footpaths by motorised vehicles, non-compliance with traffic rules at intersections and pedestrian crossings, parking of vehicles on footpaths and other pedestrian-only areas, etc.

o   Absence of adequate pedestrian infrastructure - almost 40% of road length has no footpaths (basic walking infrastructure). In several stretches the existing footpaths are not designed as per standard widths and other norms. This is compounded by the lack of supporting infrastructure like seating, street furniture, shade-giving trees, public utilities like toilets and drinking water fountains, etc. that can improve the pedestrian experience.

o   Inadequate maintenance of available pedestrian infrastructure – leading to broken and unsafe footpath surfaces and kerbs and unusable street furniture.

o   Presence of barriers to walking – existing pedestrian space is blocked by various utilities, unregulated hawking, parked vehicles, and encroachment by home owners and local businesses.

o   Pedestrian infrastructure is not designed as per principles of universal accessibility –the needs of the elderly, children, women or those with disabilities are not considered in the standards of design and materials.

o   Lack of safety and security – People are discouraged from walking due to inadequate illumination, long block lengths of buildings, inactive public spaces, negligence in the form of open manholes and piles of garbage or unutilized construction material occupying space on footpaths etc. The threat of exposure to air pollution is also a major deterrent to walking.

1.3   Delhi has largely experienced an automobile-centric planning characterised by mono-functional land use distribution resulting in long trip distances, gated areas and streets, long block lengths, low availability of pedestrian-only or low-speed street networks, etc. This has led to negative externalities such as air pollution and road congestion due to overt dependence on private vehicles, loss of productivity associated with long travel distances, limited availability of active and walkable public areas and in general, a reduced quality of urban environment. Moving to a more pedestrian-centric planning approach is widely recognised as a critical strategy for ensuring sustainable development, leading to direct benefits for citizens in the long term. These include:

o   improved physical health and reduced risk of lifestyle diseases; reduced healthcare costs

o   reduced congestion and improved traffic safety

o   reduced carbon emissions and air pollution

o   improved quality of public spaces for social interaction, enhanced opportunities to attract businesses, and increased tourism in areas that are walkable and active

o   increased transportation equity through prioritization of affordable mobility options

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[1] All figures are taken from UTTIPEC Reports, recent academic studies and news paper articles.

     o   overall improvement in the urban environment and quality of life of citizens

1.4 Improving overall walkability is therefore an important policy imperative for Delhi, which aspires to become a healthy, safe, vibrant and ecologically sustainable city, which acknowledges walking as an essential every-day freedom of an individual and promotes a 'pedestrian-first' approach by adopting a comprehensive framework for planning and development of barrier-free pedestrian infrastructure, seamless intermodal connectivity and an active public realm, thereby offering safe and healthy mobility options toall residents, irrespective of age or ability, and enriching the overall urban experience in the city.

2. APPROACH

2.1. The Regulations provide a guiding framework for making Delhi pedestrian-friendly where more people are encouraged to walk as the first choice to undertake short journeys. These shall be dovetailed with the larger strategies for urban transport and sustainable mobility in the city, and complemented by a number of policies for parking management, transit-oriented development, cycling, e-vehicles, multi-modal integration, traffic management, public transport, etc.

2.2. These Regulations aim to prioritize pedestrians and improve conditions both for 'destination walking' i.e. walking to work, school, place of worship, stores, theatres, public transit etc., as well as 'recreation walking' i.e. walking for leisure or exercise. The following multi-pronged strategy shall be adopted to enhance walkability across the city:

2.2.1. Area level interventions to create/improve pedestrian infrastructure. This will include implementation or improvement of pedestrian infrastructure as part of specific 'Walk Plans' developed for neighbourhoods, identified walkable districts, special projects identified as per Clause 7, etc

2.2.2. Policy level interventions to ensure walkability as a planning outcome across all greenfield and brownfield developments in the city. To achieve this, 'walkability' will be embedded as a core objective in all relevant policies for land development, public transport, environment, health, education, tourism, economy and culture, recreation and open spaces, etc. This will ensure that projects and interventions arising from such policies facilitate the creation of a pedestrian-friendly Delhi.

2.2.3. Use of technology to enhance user experience and ensure pedestrian safety by bringing in greater compliance and efficient enforcement of traffic rules.

2.2.4. Generating public awareness regarding the benefits of walking and improving stakeholder participation for implementing local projects and initiatives. Greater public participation and ownership towards pedestrian infrastructure will ensure better maintenance and upkeep of such common public goods and assets. This will also encourage walking and active lifestyle amongst residents of all ages.

2.2.5. Giving priority to the rights of pedestrians in the development of legal provisions and their enforcement.

3. AREA-LEVEL IMPROVEMENT/PROVISION OF PEDESTRIAN INFRASTRUCTURE

3.1. This will include strengthening of existing pedestrian infrastructure in areas where it is inadequate or ill-maintained and development of new pedestrian infrastructure in areas where it is not presently available. This will be done through an 'area-based approach' allowing the interventions to be customised to local needs.

3.2. The concept of 'Complete Streets' shall be applied that will accommodate multiple modes of transport, provide space for various uses that can activate the public realm, provide barrier free movement using utility trenches, and enhance the experience of walking by providing street furniture, landscaping, safety features and public amenities.

3.3. The following key components will be included as part of improvement of pedestrian movement and infrastructure, taking into consideration the hierarchy of roads:

     o   Provision of barrier-free footpaths and creation of a continuous pedestrian network ,including integration with existing public places, parks, green areas and open spaces.

     o   Provision of a seamless pedestrian network as per master plan norms, facilitating people to cover short distances on foot. This would require opening up of missing links and other impediments which may be preventing pedestrians from finding the shortest and most comfortable routes.

     o   Provision of safe at-grade crossings, foot-over bridges and subways, as per desire lines of origin/destination and patterns of pedestrian movement in the area. Pedestrian crossings shall be at-

grade as far as possible. Wherever subways or foot over bridges are provided, the same should be cross-programmed through commercial activity, public art, street performances etc. to ensure these remain safe and vibrant at all times.

o   Installation of 10-20 second pedestrian signals shall be preferred over grade-separated crossings for pedestrians, wheelchair users, and cyclists, especially considering the need for universal accessibility.

o   Provision of pelican crossings near schools and other major pedestrian crossings which cater to children, elderly and infirm.

o   Identification of no-vehicle zones for creating public plazas.

o   Provision of street furniture such as benches and other seating, garbage receptacles, signage giving information regarding directions, location of various public utilities, etc.

o   Provision of public utilities such as restrooms and drinking water spouts at regular intervals.

o   Provision of appropriate trees of native species and other landscaping elements, as well as green features such as pervious surface, bio-swales etc.

o   Provision of adequate street lighting and illumination to ensure safety and security.

o   Earmarking of multi-utility zones (MUZs) to accommodate street vendors and kiosks, spaces for public art, and other public activities.

o   Provision for bus shelters and bicycle parking, space for on-street parking with e-charging infrastructure, bays for pick-up and drop-off for private vehicles, taxis and intermediate para-transit (IPT), dedicated bicycle lanes as required.

o   Alternate utilization of on-street parking space at different times of the day or at time of emergency for providing extra movement space for pedestrians or cyclists, cycle parking, and movement and parking space for emergency vehicles on need basis.

o   Demarcation of zones where on-street parking shall be prohibited to provide efficient dispersal of people and traffic such as near MLCPs, transit stations and as per needs of the area.

o   Special attention shall be given to the aspect of place-making in the design of street sections, seating areas, MUZs and public plazas so as to create active and aesthetically attractive spaces for street life and activity.

3.4.   All infrastructure and street improvements will be based on design standards and guidelines prescribed in the latest IRC Code and UTTIPEC Street Design Guidelines. UTTIPEC shall act as a nodal agency to ensure that appropriate design standards and guidelines are made available for all elements detailed in Clause 8. All improvements shall mandatorily comply with universal design principles as per the Harmonised Guidelines and Space Standards for Barrier Free Built Environment for Persons with Disability and Elderly Persons 2016 of the MoHUA to ensure accessibility to the elderly, children and those with disabilities.

3.5.   Dedicated Walk Plans for improving walking infrastructure shall be included as part of local area plans, all layout plans, heritage zone/precinct management plans, influence zone plans for TOD Nodes, special projects for green-blue corridors, sector-level layout plans in the land pooling zones, etc. Such Walk Plans will be customized to specific needs of the respective areas and shall be prepared in consultation with stakeholders to understand local needs. The Walk Plans shall also take due cognizance of any ongoing/upcoming projects that are likely to impact the design of pedestrian infrastructure.

3.6.   DDA/UTTIPEC or concerned local body in consultation with UTTIPEC shall identify and delineate special areas of strategic city-level importance to be developed as walkable districts from time to time:

3.6.1.   These shall include areas around critical destination nodes such as metro stations and interchanges, multi-modal hubs, market areas, heritage precincts and cultural hubs of city-level significance.

3.6.2.   Dedicated Walk Plans shall be prepared and implemented in a time bound manner for such walkable districts by the concerned authority.

3.6.3.   The Walk Plan must cover an influence zone of at least 400-500m (5-10 minutes walking distance) around the specific destination node. Actual delineation of improvement area shall be based on ped-sheds and/or desire lines.

3.6.4.   The concerned local body and all other agencies responsible for provision/ O&M of infrastructure in that area shall implement such Walk Plans on the principle that each will develop/improve their part of the infrastructure.

3.7.   On a priority basis, DDA/UTTIPEC may prepare Walk Plans for the following pilot areas:

- ITO junction
- Delhi University (North Campus and South Campus)
- Uttam Nagar crossing
- Chandni Chowk
- All ISBTs
- INA market and metro station
- Hauz Khas – IIT Delhi
- Nehru Place
- Bhikaji Cama Place
- Karol Bagh
- Saket – Malviya Nagar
- Kamla Nagar
- Lajpat Nagar
- Lakshmi Nagar
- Sector-21 metro station, Dwarka
- Adhchini area on Aurobindo Marg
- Old Delhi Railway Station
- New Delhi Railway Station
- Mandi House
- Purana Qila, Pragati Maidan and Delhi Zoo area
- Inderlok Station area
- Rajendra Place Station and DC area
- Azadpur Mandi and Metro station area
- Asaf Ali Road and JLN Marg area

3.8.   A Walk Plan shall include the following:

3.8.1.   **Walkability Audit** of the selected area, which shall comprise of status analysis of existing pedestrian infrastructure with reference to the components detailed in Clause 3.3, volume of walk trips, identification of desire lines and the shortest/ most direct routes, identification of the bottlenecks and barriers existing in these routes and a ped-shed to assess influence area, etc.

3.8.2.   **Seamless Pedestrian Network Plan** – including locations for opening of median cuts, opening of gates on public roads (if any), provision of new pedestrian-only crossings, scramble crossings, signalized pedestrian crossings, FOBs/ subways (if necessary), etc., as per MPD-2021 provisions & UTTIPEC Street Design Guidelines (e.g. pedestrian grid every 80-100m c/c)

3.8.3.   **Pedestrian Infrastructure Improvement Plan** as per components detailed in Clause 3.3. This will include retrofitting of existing streets to redistribute pedestrian space with clearly defined Dead Zone, Walking Zone and Multi-Utility Zone (MUZ). The MUZ shall incorporate amenities for pedestrian comfort and convenience such as seating, tree pits, drinking water, signage, easy-to read maps showing shortest walking routes to near-by destinations and transport modes as well as space for vendors/ kiosks to support an active street life.

3.8.4.   **Traffic Management Plan** – including identification of walk-only streets and public areas, regulation of on-street parking areas, restrictions on traffic directionality (one-way/ two way), multi-modal integration, etc.

3.9. Walk Plans shall also be prepared for improving walkability near schools and hospitals. The influence area for such plans shall be based on ped-sheds and/or desire lines. Such plans may be integrated with respective Local Area Plans or taken up on a stand-alone basis as per priority accorded by the concerned local body.

4. INTEGRATION OF WALKABILITY INTO VARIOUS POLICIES AND PLANS

4.1. Walkability will be embedded as a core objective in all policies for the city. This will include policies developed under the Master Plan for Delhi as well as any other policies implemented by the local bodies and the Government of National Capital Territory of Delhi(GNCTD), particularly the Department of Transport, Public Works Department, and Department of Tourism, Delhi Police, Delhi Traffic Police, and any other concerned agencies in the areas of land development, public transport, environment, health, education, tourism, economy and culture, recreation and open spaces, etc.

4.2. In addition to provision of specific pedestrian infrastructure, the following city-level outcomes will be targeted collectively through the various existing policies and Statutes:

o Mix of uses – This will facilitate the placement of multiple complementary destinations within walking distance of a home or office.

o Walkable block lengths – Implementing ideal block size of approximately 80-100m leading to more walkable neighbourhoods and increasing the overall road network density.

o Multi-modal integration - Improving efficient multi-modal integration and interchange (including e-vehicles for para-transit and feeder services for last mile connectivity)

o Accessible city transit service – Frequent and reliable city transit service with well-placed stops and shelters providing a reliable alternative to use of private vehicles.

o Pedestrian-friendly urban form - Controls and norms for building placement, build-to lines, active frontage, street connectivity, and aesthetics.

o Connected public realm – establishing and fostering pedestrian-friendly linkages between streets, open spaces, greens, cultural spaces and sites of historic/ecological interest

o Accordance of highest priority to pedestrians in traffic/transport policies – in terms of share of street space, prioritization at signals, parking management, enforcement of traffic rules concerning safety and convenience of pedestrians, etc.

4.3. All future policies for Delhi shall incorporate specific guidelines and development controls (existing or new if required) for achieving the above-mentioned planning objectives.

5. USE OF TECHNOLOGY TO IMPROVE WALKABILITY

5.1. Smart technology shall be implemented at various scales to improve overall traffic management in the city and enhance pedestrian experience and safety, as well as encourage use of public transport. This will be implemented as part of various Walk Plans developed for different areas and integrated at the city level through smart solutions developed by the GNCTD and local bodies.

5.2. The following elements shall be are necessary for the successful implementation of Walk Plans and for raising public interest in walking. These shall be enabled through the use of state-of-the-art technology:

o Improved traffic management and reduction in traffic congestion and air pollution through implementation of city-wide intelligent traffic management systems (ITMS);

o Implementation of public information systems for public transport (at stops, within transit, and through apps), provision of common mobility cards, encouraging people to walk to the nearest transit nodes and use public transport;

o Implementation of walk audit apps allowing scoring on walkability of neighbourhoods and ranking across the city, providing a mechanism for citizens to report issues regarding infrastructure and facilities;

o Such apps can also provide information on various walking tours (heritage walks, nature trails, food walks, etc.), information on location of transit services, location and availability of nearest parking spots, popular destinations, eateries, cultural events as well as locations of utilities like public toilets, drinking water fountains, etc.;

o Use of smart sensors for measurement of air quality at traffic signals, street lights, etc. providing vital information such as air quality to citizens;

- o Use of innovative materials and devices such as energy generating tiles for pavements, which coupled with solar energy can be used to power street lights as well as provide charging points for mobiles and other electronic gadgets near seating or resting spots along streets;

- o Use of state-of-the-art surveillance technology to ensure safety of pedestrians, adherence to traffic rules and prevention of vandalism of street furniture.

6. FACILITATING PUBLIC PARTICIPATION

6.1. The Delhi Traffic Police, the Transport Department, GNCTD, urban local bodies and DDA shall undertake dedicated city level programmes of awareness generation for various citizen groups to inform them about the benefits of walking. Specific area-based awareness programmes for school children, elderly and people with disability shall be undertaken to provide information on shortest routes, safety measures adopted and improvements in pedestrian infrastructure.

6.2. Such awareness programmes will also encourage people's participation by providing information about local level strategies that can be implemented collectively by residents of a neighbourhood such as creation of home zones (walk-only street sections), play streets, converting streets into cultural spaces on weekends through initiatives similar to Raahgiri or Happy Streets, etc. Such public initiatives will be facilitated by the local body and Delhi Traffic Police so as to prevent any major disruptions in traffic flow and movement. RWAs and other local stakeholders should be involved in identifying black spots, locations in need of improved accessibility, etc.

6.3. Concerned local bodies shall endeavour to create local institutional frameworks for watch and ward as well as upkeep of public facilities and pedestrian infrastructure through tie-ups with local Residents' Associations and Traders' Associations and other local stakeholders.

6.4. The Transport Department of GNCTD shall develop and maintain a 'Walk Delhi' website and mobile application dedicated to providing walking information including annual calendar of city-wide walking events and activities. Such interfaces can also be used for citizen-based audit of streets, identification and reporting of issues, and promotion of various local events/initiatives taken by citizens to improve local level walkability.

6.5. Delhi Traffic Police shall organise focused campaigns regarding strict enforcement of traffic rules and regulations especially in support of rights of pedestrians. These campaigns shall educate people to respect pedestrian spaces, follow traffic rules and understand the related penalties and action that may be taken against violation of traffic rules, vandalism, etc.

7. DEVELOPMENT OF SPECIAL PROJECTS

7.1. DDA/UTTIPEC shall identify city level trails connecting key heritage/cultural assets and/or ecological assets such as nallahs, forests, bio-diversity parks, with the potential to be developed as continuous walking trails. Such 'cultural' or 'green-blue' corridors will be developed as priority projects of strategic importance and value to the city.

7.2. DDA and concerned agencies shall identify and delineate project areas for development of such corridors, and make detailed Walk Plans for the project areas.

7.3. DDA shall implement such projects in a time bound manner in collaboration with concerned local bodies, and any other concerned department/agency through public private partnerships, CSR initiatives, identification of remunerative real estate projects, etc.

8. IMPLEMENTATION AND MONITORING

8.1. Walkability is a critical outcome that must be targeted in a comprehensive manner by all departments and agencies working in Delhi. All agencies responsible for policy making and implementation of public works in the city shall prepare annual plans for improving walkability, including identification of projects proposed to be executed during the year.

8.2. All such agencies like local bodies, Transport Department, Delhi Traffic Police, Tourism Department, etc. will implement the public works in a time bound manner by allocating adequate own resources for the purpose. In case of Special Projects or any works that cannot be specifically attributed to any agency, the funds can be obtained under the Urban Development Fund or other grants.

8.3. Public agencies shall also identify potential commercial sources of revenue such as advertisement rights, leasing of commercial spaces in sub-ways and parking fees, etc. and explore innovative arrangements such as street adoption schemes by private partners, pooling of CSR funds, providing co-branding rights to companies and private developers etc. to fund the street improvement works.

8.4.   Implementation of various Walk Plans can be undertaken through creation of Special Purpose Vehicles (SPVs) for fast-tracking the process.

8.5.   All departments/agencies shall integrate their awareness campaigns and public engagement strategies with the proposed interventions/plans.

8.6.   Delhi Traffic Police shall set up a city-wide digital surveillance and monitoring system integrated through a centralised control room (command and control centre) and ensure strict enforcement of all pedestrian-centric traffic rules.

8.7.   All such departmental plans shall be submitted to a city-level 'Walk Delhi' Coordination and Monitoring Committee, which will be set up to coordinate and monitor the efforts of various agencies. The Committee shall comprise of representatives from all concerned departments, citizens' groups and other stakeholder groups, with the Lieutenant Governor of Delhi as the Chairperson. It shall also facilitate coordination between multiple agencies executing the various projects and those responsible for maintenance. The Committee shall regularly measure the overall progress of outcomes in the city.

8.8.   UTTIPEC shall provide technical support to the Committee for monitoring the financing and implementation of various Walk Plans and related projects/initiatives.

[No. F.1(331)/2018/UTTIPEC]

D. SARKAR, Commissioner-Cum-Secy.

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