

1. Context and introduction:

- Having achieved the milestone of an ODF India in a time bound manner during the Swachh Bharat Mission (SBM(G)) Phase I, efforts on access to improved sanitation for all and behaviour change communication have to continue to sustain the gains made under the SBM-G, to ensure no one is left behind and to ensure overall cleanliness in villages are achieved and maintained.
- Following the success of the Phase I of SBM(G), its phase II was launched with a unique design to leverage the capacity of individuals and communities in rural India to create people's movement to ensure the ODF status of rural areas is sustained, people continue to practice safe hygienic behaviour and that all villages have solid and liquid waste management arrangements.
- The community sanitary complexes (CSC) form a key component of SBM(G) phase II to deliver the objectives of ODF-sustainability. The provisions of CSCs include for households having space constraints of IHHL, floating/migrant population.
- The CSCs shall have separate facilities for men and women, and shall consist of an appropriate number of toilet seats, bathing cubicles, washing platforms, wash basins etc, The CSC should be accessible for Divyangjans (persons with disabilities (PWD)).
- The Swachh Bharat Mission (G) promotes accessible toilets for PwDs. Depending on the type of disability, PwDs, often face difficulties with accessing toilet facilities especially in community settings and in public spaces such as schools, anganwadi centres, healthcare facilities and other common spaces. These design considerations for "accessible community toilets in rural areas" are developed to ensure accessibility, inclusion and responsiveness with universal design approach.

This document will detail on design measures to be considered to ensure accessible and inclusive sanitation facilities in community spaces for all persons with disabilities in rural context.

While the core attention of this document is on accessible and inclusive community sanitary complexes persons with disabilities and elderly persons, accessible and inclusive community sanitary complexes will be helpful for people with temporary access challenges such as pregnant women or mothers with young children or individuals who are suffering from short term physical ailments, since they too face similar barriers while accessing sanitation facilities. In case availability of improved accessible sanitation facilities is getting delayed, interim arrangements for accessible sanitation alike arrangements can be organised.

Note: The National Building Code (NBC) Guidelines as well as the Harmonised Guidelines and Space Standards for Barrier Free Built Environment for Persons with Disabilities and Elderly Persons and the Department of Empowerment of Persons with Disabilities within the Ministry of Social Justice and Empowerment recommend that entrances and exits of all public spaces are made accessible (if they

are not, already). For this, specific design considerations for ramps, pavements, markers, space requirements, assistive devices, etc. have been provided.

As the focus of this document is towards accessible sanitation solutions at community level, Universal Design Approach for Sanitary Facilities and/ or the Harmonized Guidelines and Standards for Universal Accessibility in India are suggested for further consideration. Furthermore, it is to be noted that the proposed suggestions are made taking into consideration realistic possibilities for community operated and maintained (and in some cases owned) rural areas. While there are many technology-intensive solutions such as sensor-based taps, dustbins, doors, etc., and cost intensive hardware which can make them more accessible, the same are not immediately realistic for rural areas given their high capital costs and need for regular operations and maintenance.

2. Design solutions for accessible community toilets in rural areas

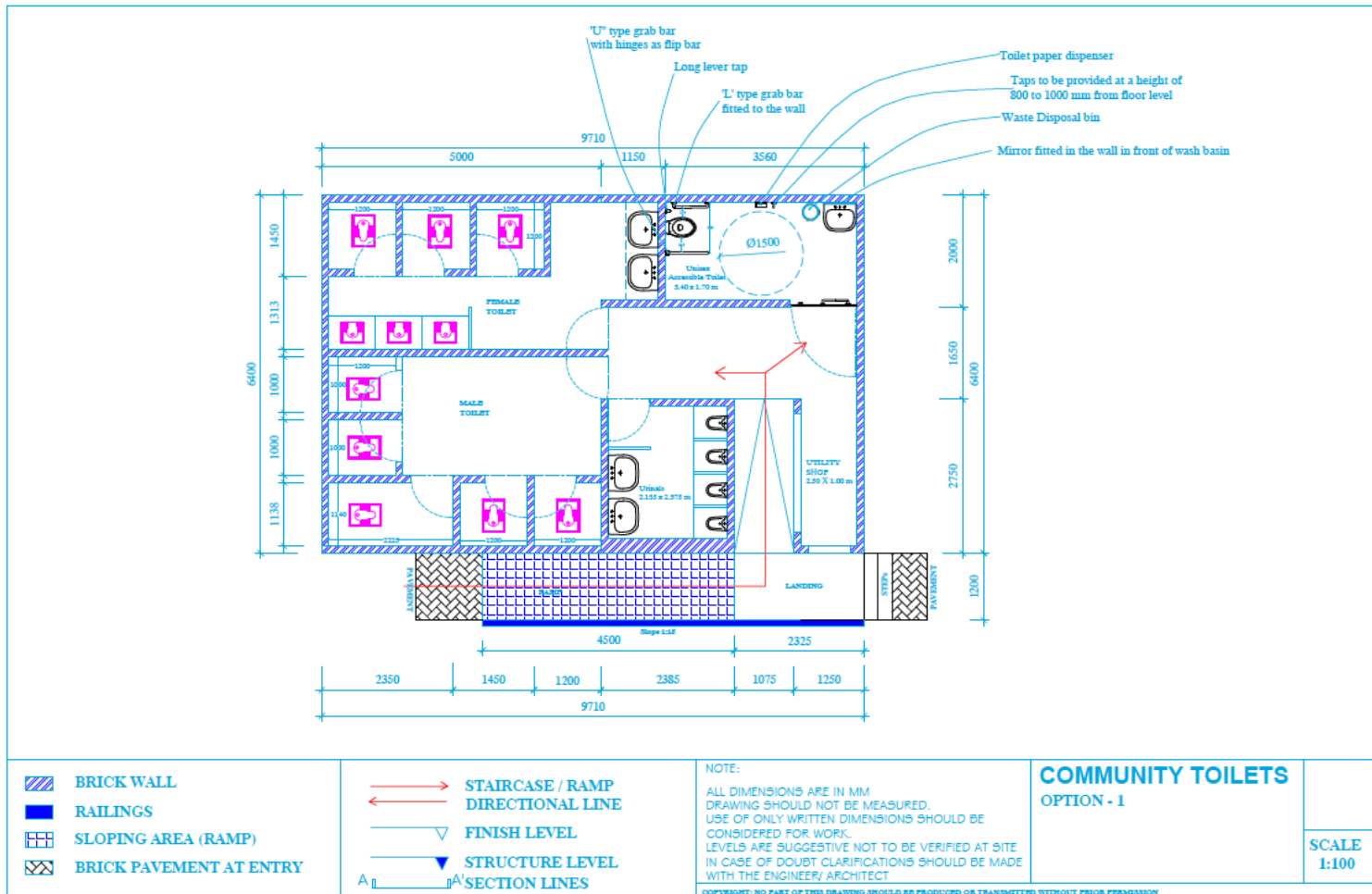
Type of disability	Identified difficulties faced in accessing/ using toilets	Examples of design considerations/solutions being envisaged
Physical disability/ mobility impairments (such as Cerebral Palsy, Locomotor Disability, Muscular Dystrophy, Multiple Sclerosis, etc.)	<ul style="list-style-type: none"> • Difficulties in maintaining balance • Difficulties in squatting, getting up and/or turning • Difficulty in finding and/or holding objects such as doorknob, water container etc. • Extreme pain while movement 	<ul style="list-style-type: none"> • Path leading to toilet smooth and free of barriers • Handrail along path for support • Ramps with adequate slope • Floor made of non-slippery material • Toilet entrance adequate for a wheelchair to enter • Toilet cubicle space adequate for a person with a wheelchair to move and close door comfortably • Handrail/grab bar inside toilet cubicle • Raised seat • Height/level of fixtures adjusted as per requirement • Modifications in the door to ensure privacy and ease of use
Vision impairments (blindness or low vision)	<ul style="list-style-type: none"> • Difficulty in finding path • Difficulty in maintaining balance • Difficulty in finding and/or holding objects such as doorknob, water container etc. 	<ul style="list-style-type: none"> • Landmark posts/guide strings along the path leading to toilet • Handrail/grab bar inside toilet cubicle • Floor made of non-slippery material • Toilet and area outside toilet well illuminated • Adequate colour/tonal contrast between walls, floor and fixtures
Intellectual disabilities or sensory impairments	<ul style="list-style-type: none"> • Sensitivity to sight/ smell • Fear in dark/closed space 	<ul style="list-style-type: none"> • Adequate space and ventilation in toilets • Toilet and area outside the toilet well illuminated
Speech and Hearing Impairment	<ul style="list-style-type: none"> • Difficulty in locating the building 	<ul style="list-style-type: none"> • Use of proper sign age with

	<ul style="list-style-type: none"> Difficulty in accessing the facilities inside the block with privacy 	<p>appropriate position to locate the building, to access the facilities like toilets/urinals.</p> <ul style="list-style-type: none"> The signages may contain the symbol and text together for easy access. The letter sizes are to be bold with 18 pt size generally and to be usually placed at 1500 to 1800 mm from ground on the wall. Contrast colour may be used for the wall painting with symbol and text together.
Multiple Disabilities	<p>Difficult in accessing the facilities Difficult in movement/ squatting, cleaning</p>	<ul style="list-style-type: none"> The design for the accessible toilet may be as per the universal design standards The toilet facility should include all accessible features such as accessible pathway, ramp, steps, handrails, entrance door, corridor, inner moving space, grab bars, handrails, contrast colour brand on the inner wall etc.

3. Sample designs for community toilets with accessible toilet cubicles in rural context

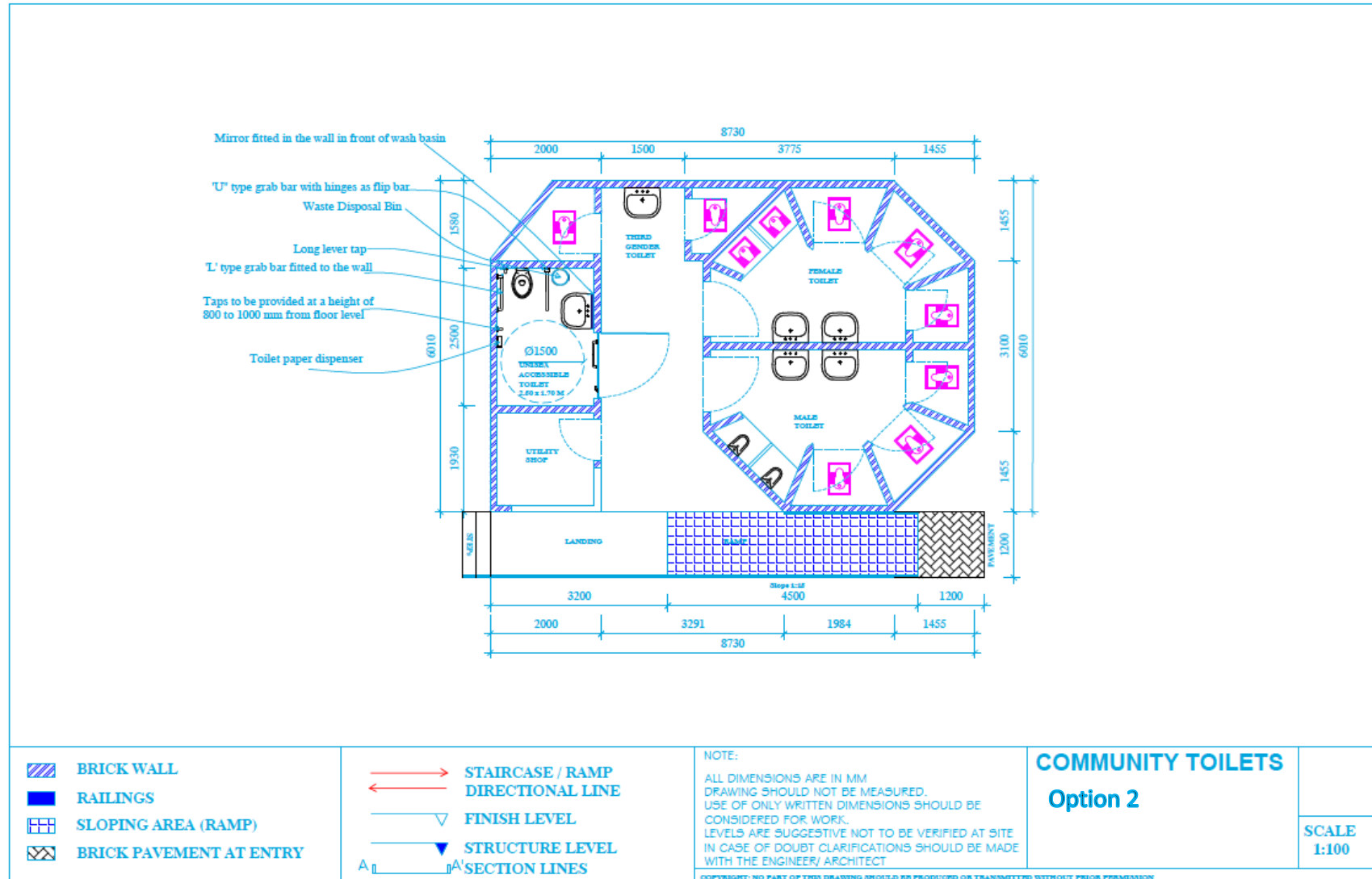
Design Sample – 1

Sample community sanitary complex design for areas with sufficient land availability - with accessible and inclusive toilet cubicle along with regular sectioned male and female toilet units.



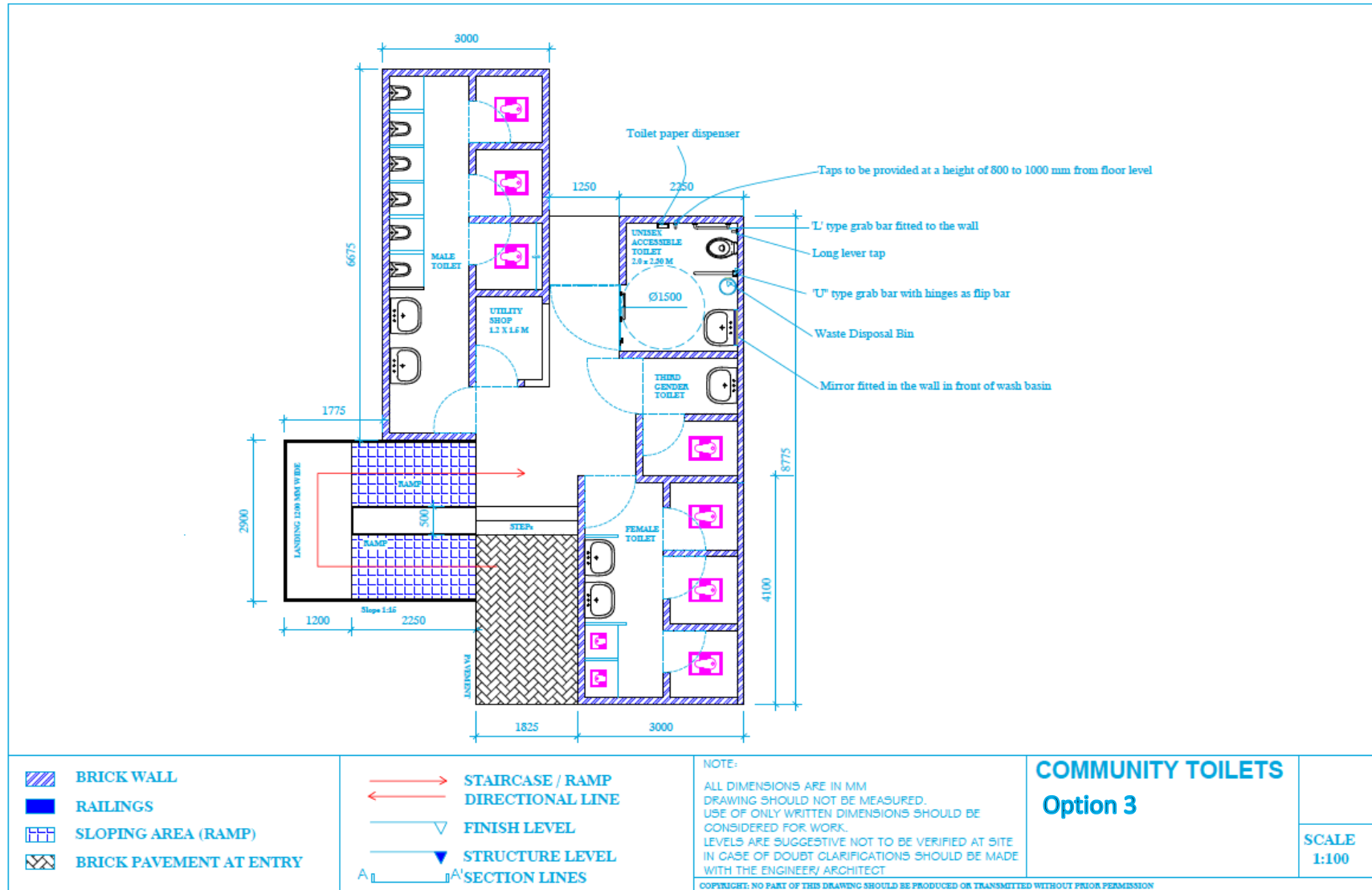
Design Sample – 2

Sample community sanitary complex design for areas with less land availability - with accessible and inclusive toilet cubicles along with regular sectioned male and female toilet units.



Design Sample – 3

Sample community sanitary complex design for areas with uneven land availability - with accessible and inclusive toilet cubicles along with regular sectioned male and female toilet units.



4. 1Key design considerations:

Following are standards described (with measurements/ dimensions) that may be appropriate for a community sanitary complex in rural context:

a. Signage and colour

- The accessible signage (both the symbol and the text with 18 pts) should be fixed at the entry of the toilet at 1.5 meters above the floor level. The signage should be painted with a contrast colour with Braille facility in it.
- Contrast colour band may be provided surrounding the door of the toilet and at the inner wall for easy access of the people with low vision. Similarly, the commode, wash basins and other fixtures inside the toilet should be of contrast to the inner wall colour.

b. Accessibility

- The Pathway (access) to the toilet should have clear and smooth and antiskid floor having tactile tile fixing as per proper specification. There should not be any obstacle (either fixed or movable) from the approach road to the toilet complex. The width of the pathway may be minimum 1200mm or more.
- The entrance of the toilet complex should have a ramp (moderately with a slope of 1:15 or less). The clear width of the ramp should preferably be 1200mm or more depending on the footfall. The landing before the ramp should be at least,1200mm X 1200mm clear space. For a wheel chair user, the minimum clear width should be 900mm.
- Ramp should have Hand Rails on both sides and at two levels. The lower one at 700 to 750mm height and the upper rail should be fixed at 850 to 900 mm height from the finished floor. Both ends should be rounded and grouted and extend up to 300mm beyond the top and bottom of the ramp. If there is a level difference between two floors inside the toilet building, a ramp of 1:15 gradient may be provided for easy and smooth access.
- The accessible steps should be provided with a uniform riser of maximum height: 150mm and uniform Tread of minimum width: 300mm. The steps should have an unobstructed width of at least 1200mm. There should have continuous handrails on both sides at two levels. The lower rail should be fixed at 700 to 750mm height and the upper rail at 850 to 900mm height from the finished floor. Both ends should be rounded and grouted and extend up to 300mm beyond the top and bottom of stairs.
- The corridor inside the building should have a clear passage width of 1200mm to access the toilets in a wheel chair.

c. Accessible toilet

- In the suggested sample designs, one specific toilet has been kept for Persons with Disability to access. There is adequate corridor width, door opening outside, adequate inner space, commode with grab bars etc. that makes easy accessibility into the toilet for all people with disabilities.
- It may be proposed that the inner space should preferably be 1.80mt x 2.00mt wherein there should be a clear space of 1200mm in front of the water closet (WC), for easy circular movement of the wheelchair.
- The door width to the toilet should be 900mm clear width and should be opening outside clearly. Contrast colour band, surrounding the door frame & shutters may be provided for the visually impaired people to access easily.
- The doors of water closet should open outside for convenience. A sliding door is also advisable. The

handle should have a D shaped frame of circular section and fitted at 850 to 1000mm from floor level, horizontally on the door frame.

- The WC should be of European style (Commode) wall mounted @0.48 mtrs above the floor level & should have alarm bell for warning purposes.
- Adjacent to WC there should be L-shaped grab bar 700 x 700 mm mounted at 0.7m high from the floor level on the wall side & should have U shaped grab bars mounted at 480mm from the floor level on the transfer side.
- In rural context, the grab bars may be fixed to support the person with disability to transfer themselves into the commode base. Sometimes, 25mm to 35mm dia G.I. pipe or stainless-steel bars fixed at both sides of the commode at appropriate height (may be at 700mm from ground), as mentioned in the MOHUA's harmonized guidelines.

d. Wash Basin and Taps

- The wash basin should be mounted between 700 to 800 mm (top edge) above the floor level with clear knee space of at least 760mm wide by 200mm deep and by 650mm-680mm high.
- The colour of the wash basin should contrast with the wall colour.
- All the taps should have long lever type handles and preferably fixed at 0.7 to 0.8mt from the floor level. Preferably there should be one water faucet fixed for easy cleaning purposes nearer to the toilet.

e. Others

- The level difference should not be more than 6-12 mm between the toilet & W.C. area.
- In other context the Water Closet may be a modified commode type (a raised structure of masonry work on which Indian pan is fixed)
- Mirror bottom edge is to be placed at 900-100 mm from the floor and the mirror may be inclined at an appropriate angle.
- At urinal place no steps should be provided.
- At least one of the urinals should have grab bars installed on each side and in front of the urinal to support ambulant persons with disabilities (for example, crutch user).
- As mentioned in the designs, cubicle doors for accessible toilet cubicles shall be outward facing to making them better meet the needs of users.
- One of the urinal seats may be fixed at a lower height and may be fixed with grab bars.
- There should not be any door seal to access the toilet/ urinals.
- Toilet paper dispensers may be provided in each toilet cubicles.

Note: Note: Above mentioned Unisex Accessible Community Sanitary Complex – Designs and specifications are as per the standards and designs of mentioned in the “Harmonized Guidelines and standards for Universal accessibility in India 2021” published by Ministry of Housing and Urban Affairs, Gol.

Please refer to the Harmonised Guidelines for detailed designs of the hardware components.