

**GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)**

No. 2000/LMB/2/330

New Delhi, dt. $\frac{21.09.06}{28}$

General Manager,
All Indian Railways (Except Northern Railway).

General Manager (Construction)
All Indian Railways

Sub: Implementation of the Access Audit report of New Delhi Railway Station.

A copy of the second Access Audit of New Delhi Railway station organized by Chief Commissioner for Persons with Disabilities Ministry of Social Justice & Empowerment is enclosed for necessary action and guidance.

19/9

Dup6
(DESH RATAN GUPTA)
Director (L & A),
Railway Board

291
GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)

No. 2000/LMB/2/330

New Delhi, dt. 21.09.06

General Manager,
Northern Railway,
New Delhi.

Sub: Implementation of the Access Audit report of New Delhi Railway Station.

A copy of the second Access Audit of New Delhi Railway station organized by Chief Commissioner for Persons with Disabilities Ministry of Social Justice & Empowerment is enclosed.

It is requested to intimate the status of implementation of the recommendations contained in the review access audit report by 26.9.06 positively.

This may be treated as MOST URGENT.

60up6
(DESHRATAN GUPTA)
Director (L & A),
Railway Board



By hand 8Ndy

Office of the Chief Commissioner for Persons with Disabilities
Ministry of Social Justice & Empowerment
Government of India

No.20-11/I(AA)/CCD/2002

14th Sept. 2006

To

The Director (L & A)
Room No. 110, Ministry of Railways,
Railway Board,
New Delhi - 110 001.

- urgent
1. Call for N.Ry's compliance report by 26.9.06. ^{to all stps.}
 2. Circulate a copy of Audit report. It contains ^{correct designs for PWD, we may circulate to} construction units too.

TA

4/9
21/9
6/10/06

Subject: Access audit to review the access facilities at New Delhi Railway station.

Sir,

The second Access Audit of New Delhi Railway station was organised by this office on 09-4-2005 (copy enclosed) for reviewing the access facilities for persons with disabilities incorporated after the first access audit was done by this office in 2001.

You are requested to intimate the status of implementation of the recommendations contained in the review access audit report by 29-09-2006.

Yours faithfully,

(T. D. Dhariyal)

Dy. Chief Commissioner

Encl:- Access Audit Report of 09-04-2005.

NEW DELHI RAILWAY STATION

Second Access Audit Report (Review)

9th April 2005

Organised by O/o Chief Commissioner for Persons with Disabilities
(Ministry of Social Justice & Empowerment, Govt. of India)

INTRODUCTION

Access Audit of the New Delhi Railway Station was conducted by O/o the Chief Commissioner for PwDs, in the year 2001. A review access audit was conducted on 9th April 2005, to observe the changes incorporated there after. The New Delhi Railway Station has taken into consideration the needs and requirements of PwDs. However, little modifications as per the internationally accepted standards would make it more user friendly.

The team was warmly received and provided with all relevant information and data, asked for. The team covered exteriors-approach, parking, entrance etc. and internal-counters, telephones, toilets, drinking water facilities, signages, resting area and waiting rooms etc.

The presence of senior railway officials all through the audit and discussion on minute details clearly reflected their personal commitment and dedication of Ministry of Railways to provide better facilities to PwDs. They all deserve special appreciation.

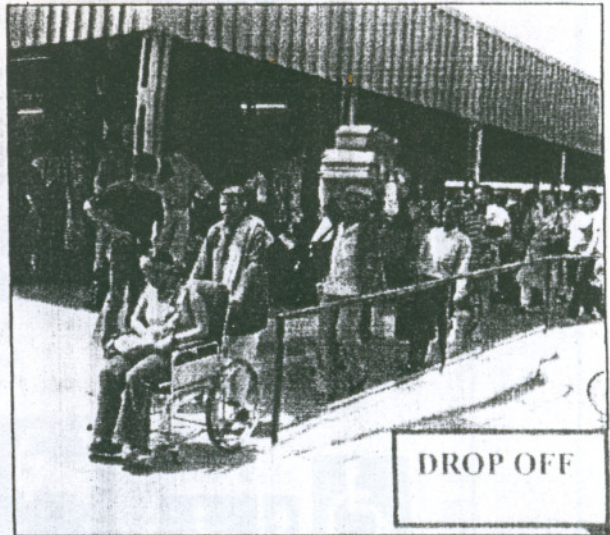


EXTERIORS

Drop off zone

There is no demarcated drop off zone for vehicles carrying persons with disabilities.

- A drop off zone to be provided with signages, near the ramp as shown in the photo.
- It should have the international signage painted on the ground and also on a signpost\ board put near it.



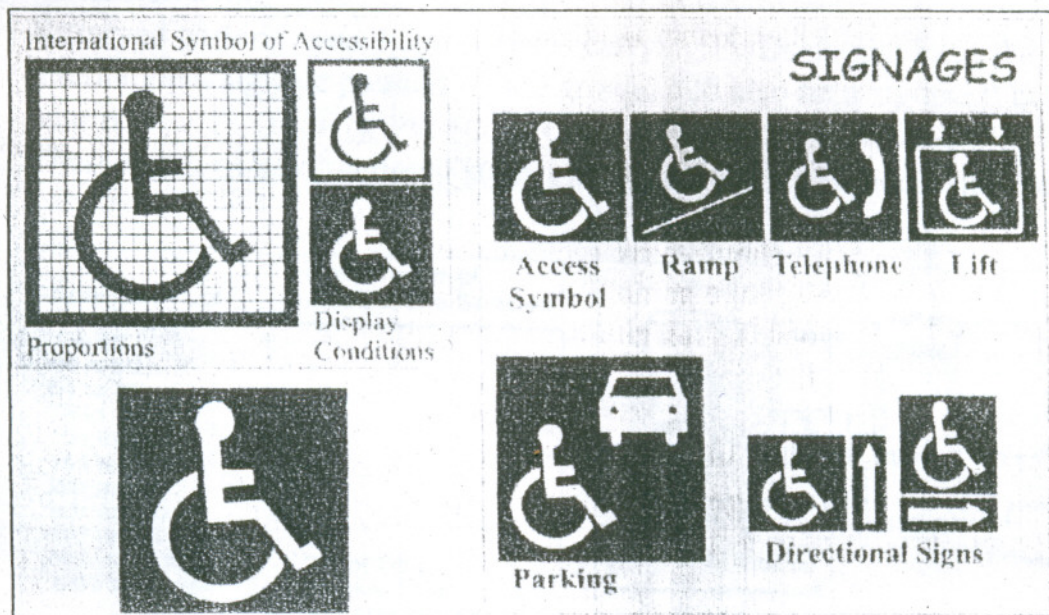
Existing Signages



PARKING SIGNAGE

All signages need modifications.

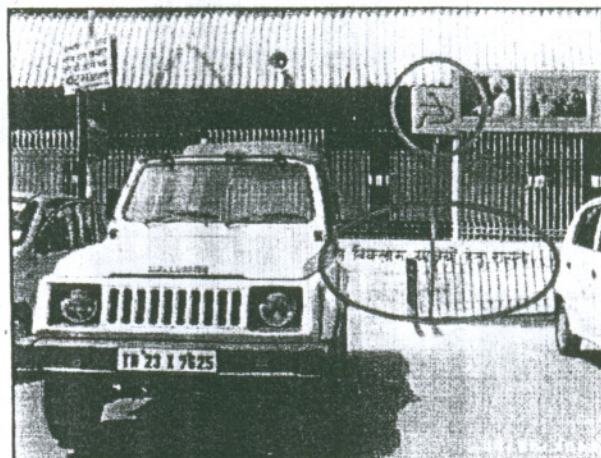
Access symbol which is internationally used and universally accepted should be provided as per the standards mentioned below.



Reserved parking (in the VIP area)

There is ample of parking space and designated/reserved parking for the PwDs is provided at the entrance to the station.

1. Parking contractors do not allow vehicles carrying disabled persons, as this is identified as VIP parking lot.
2. They are not aware of the usage/priority parking of special parking labels provided by DCP traffic, to vehicles owned by persons with disability.
3. Other cars are parked in the space designated for reserved parking for disabled persons.
4. Signage is not clearly visible from a distance and there is no access symbol painted on the ground.



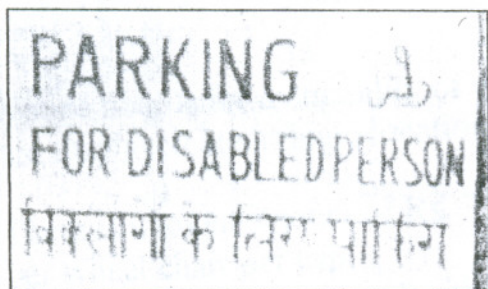
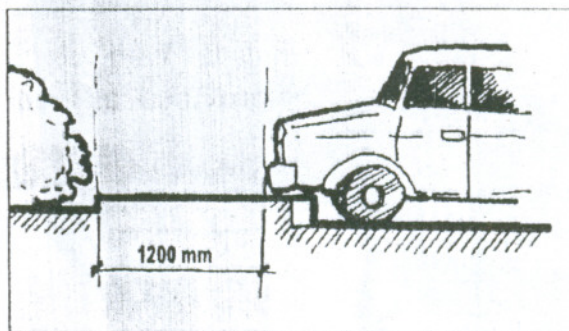
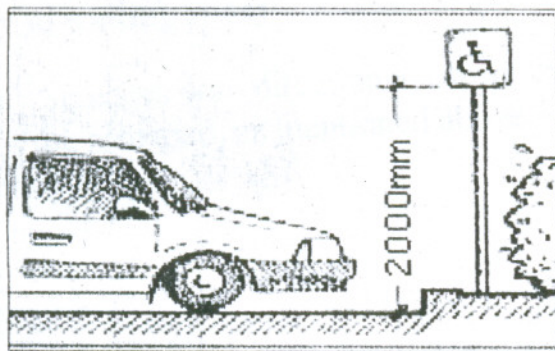
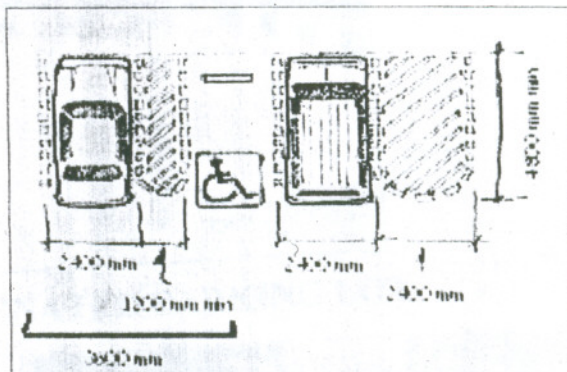
REMARKS:

All parking contractors and traffic personnel to be well informed of the usage of reserved parking space and priority parking stickers.

Designated parking lot to be:

- The minimum width of an accessible parking is 3600mm. (Overall minimum dimension being 3600mm -4800mm)
- Reserved parking spaces for vehicles carrying PwDs should have the international signage painted on the ground and also on a signpost\ board put near it.
- There needs to be directional signs guiding people to the accessible parking.

Spaces in Lot	Required # of Accessible Spaces
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	2% of Total
1001 and over	20 plus 1 per 100 above 1000



Existing signage



Proposed signage



EXAMPLE OF A DESIGNATED PARKING LOT

Way to waiting room

- Signages with directional arrows to be provided, as mentioned above.



Notice boards for availability of wheel chairs are displayed at strategic locations.

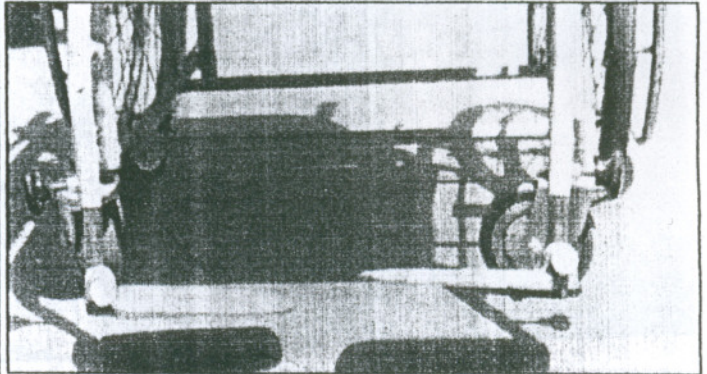
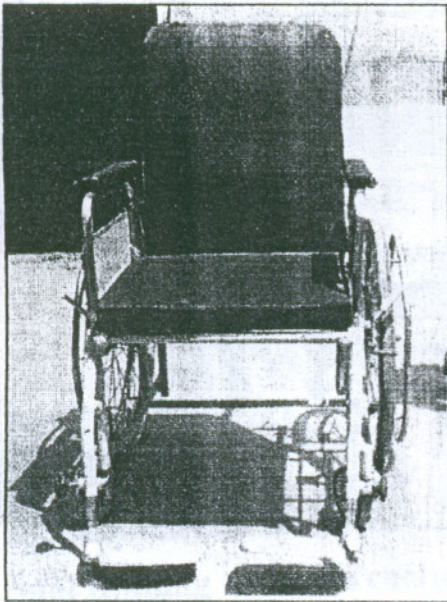
There is a token amount of Rs. 25/- charged per wheel chair per trip.

A porter/coolie is entrusted with the duty of getting the slip for the same and leave passengers to the train in the wheel chairs.

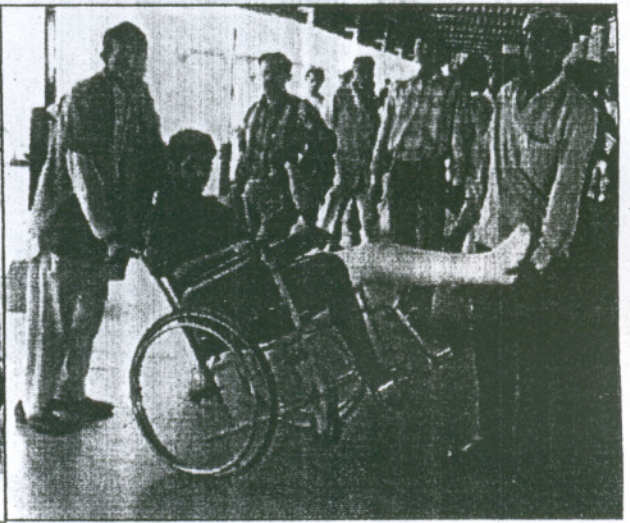
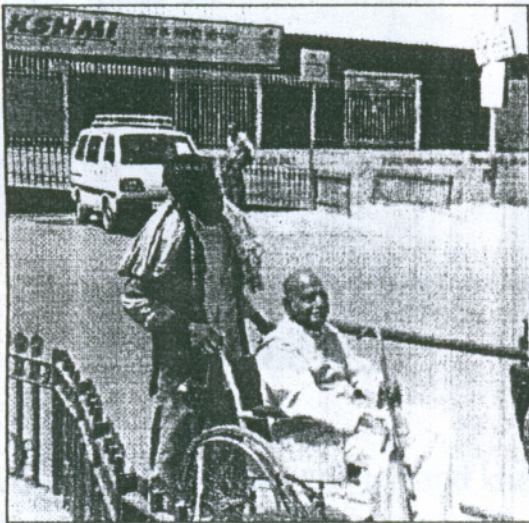
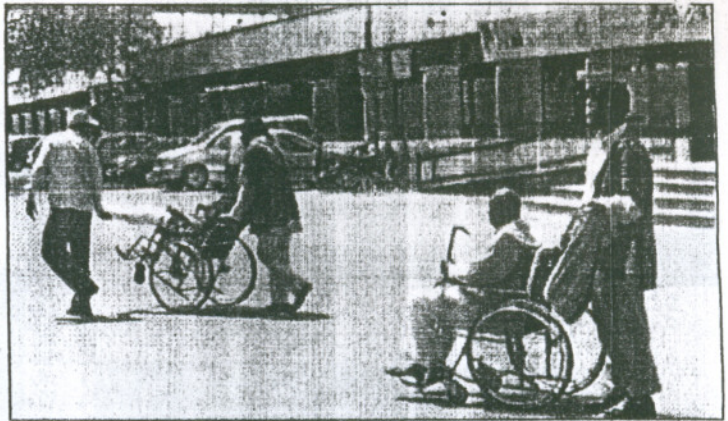


There are number of wheel chairs available, for use by persons with reduced mobility and persons with disabilities.

- It was observed that after dropping the passengers, coolies bring wheel chair back from the stair cases causing damage, wear and tear.
- All wheel chairs should be given general maintenance from time to time for example foot rest should be on the same level; etc.
- Porters/coolies to be trained about the mobility needs of wheel chair users, transfer techniques etc.



Porters/coolies carrying persons with temporary ailments, senior citizens and persons with disabilities- as observed during access audit.



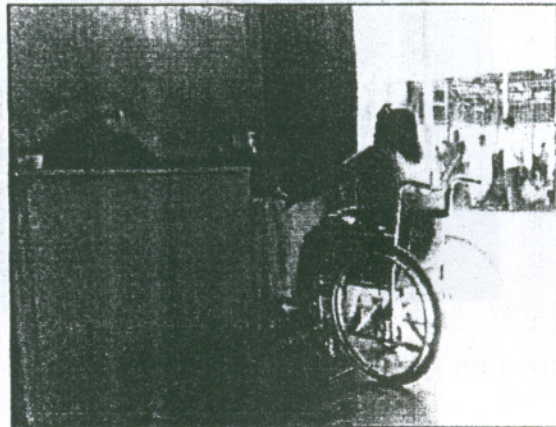
Formal training to all the coolies/porters for handling persons with diverse disabilities to be given, as priority issue.



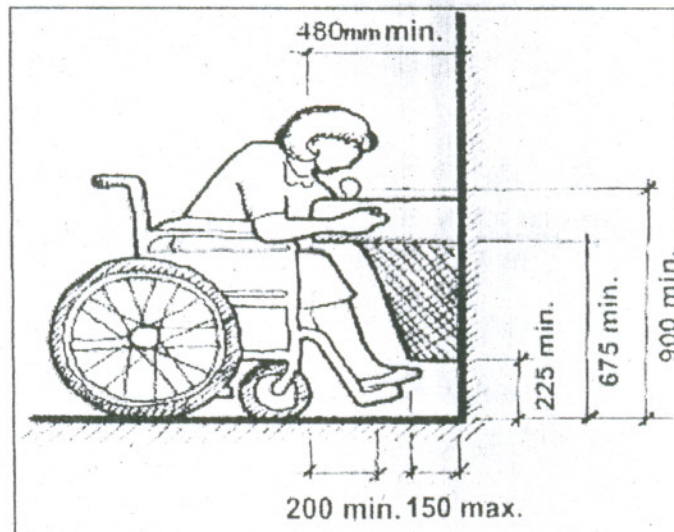
A member of the access audit team simulating coolie/porter, for the mobility needs of persons with vision impairment.

Drinking water facility

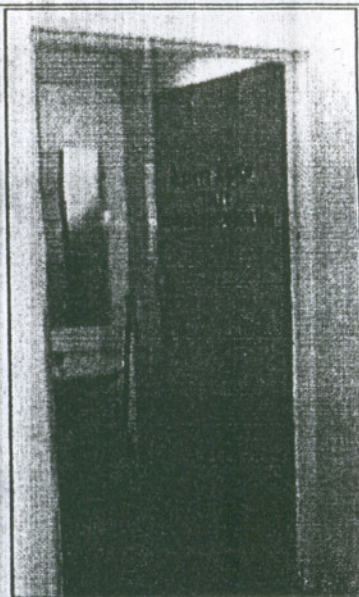
There is a separate lowered drinking water tap for disabled persons. However due to lack of knee and leg space, it becomes difficult for wheel chair users to reach the tap.



- A water fountain with leg and knee space may be provided as per the figure.

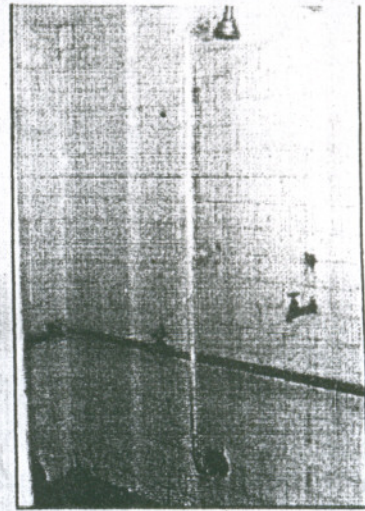
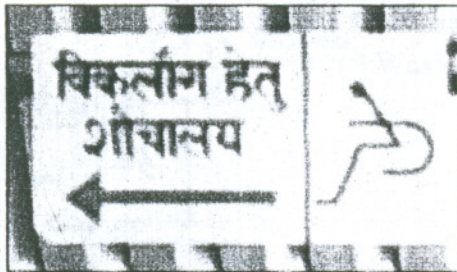
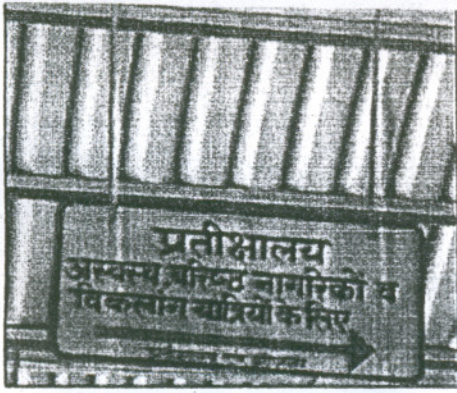


Waiting Room



Exteriors Waiting room

Entry to attached unisex toilet and washroom



Existing signages and washroom



Existing toilet and washroom: needs modification

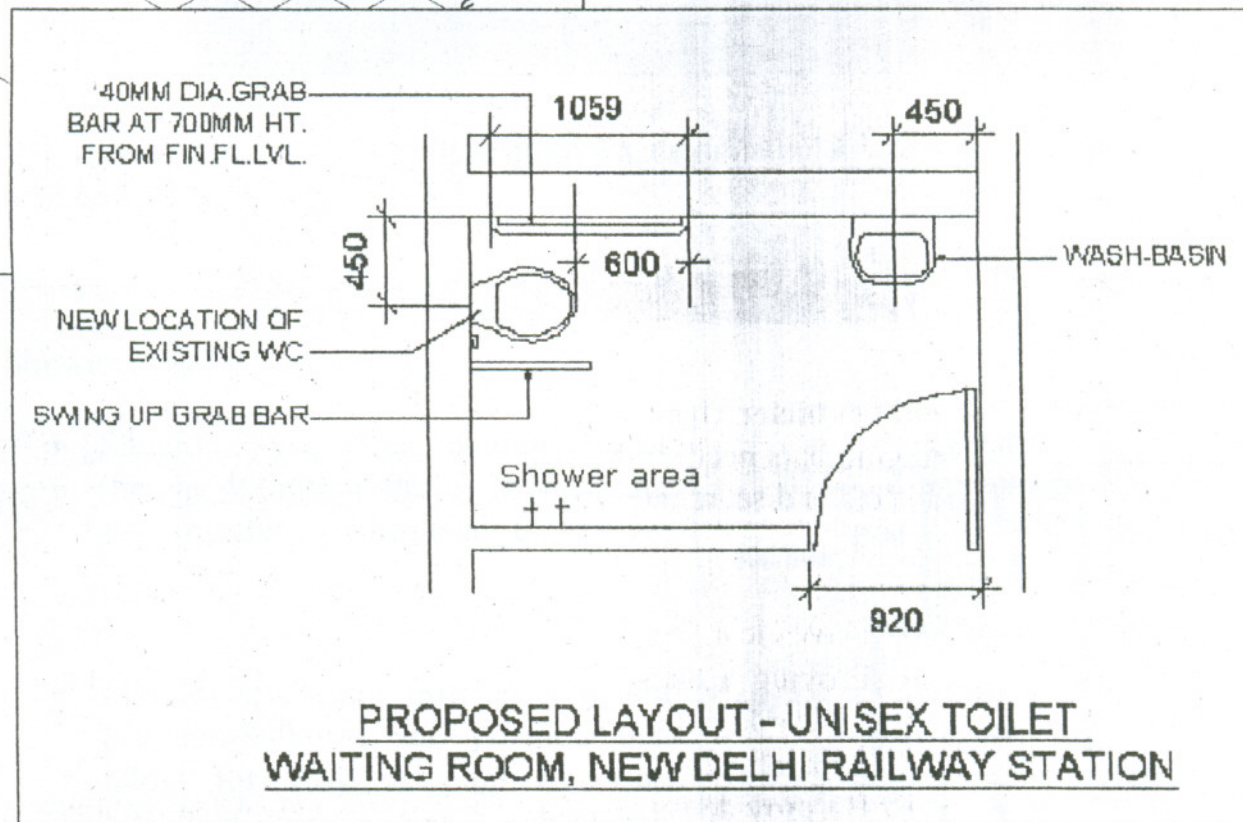
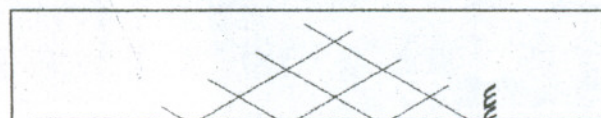
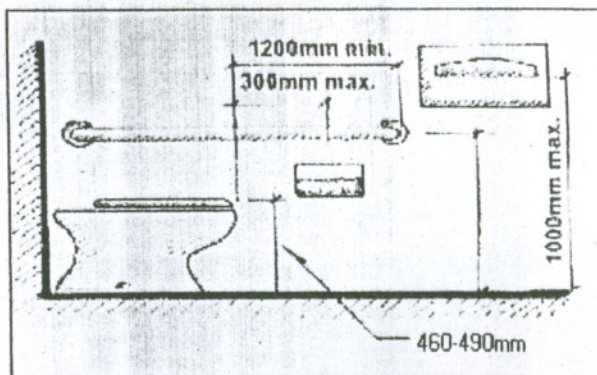
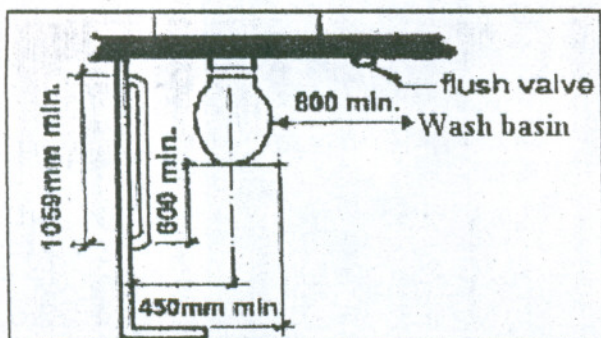
Toilet cubicle: There is enough space inside the toilet. However WC, washbasin and grab bars needs to be relocated, to provide front and parallel wheelchair transfers and segregate between the wet and dry area.

It should:

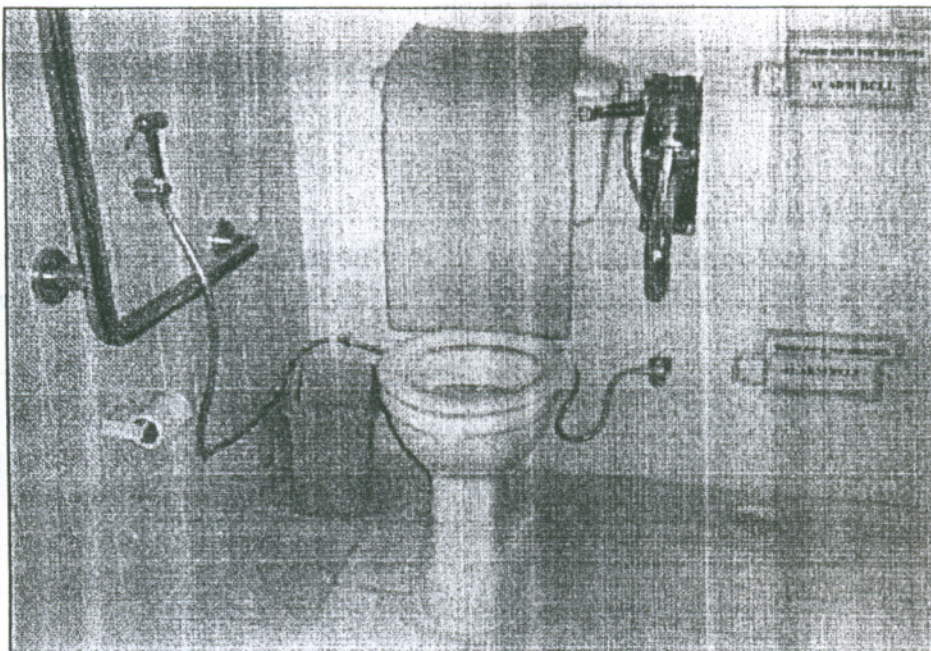
- Have clear space of not less than 900mm wide next to the water closet.
- Provide a door of clear opening of at least 900mm with the door swing outwards or be folding or be sliding type.
- Should have slip resistant flooring.
- Be provided with a horizontal pull bar at least 600mm long on the inside and 140mm long on the outside, at a height of 1100mm.

Water Closet (WC):

- Be located between 460mm to 480mm from the centerline of the WC to the adjacent wall and have a clear dimension of 750mm from the edge of the WC to the rear wall to facilitate side transfer.
- The top of the WC to be 450mm-490mm from the floor



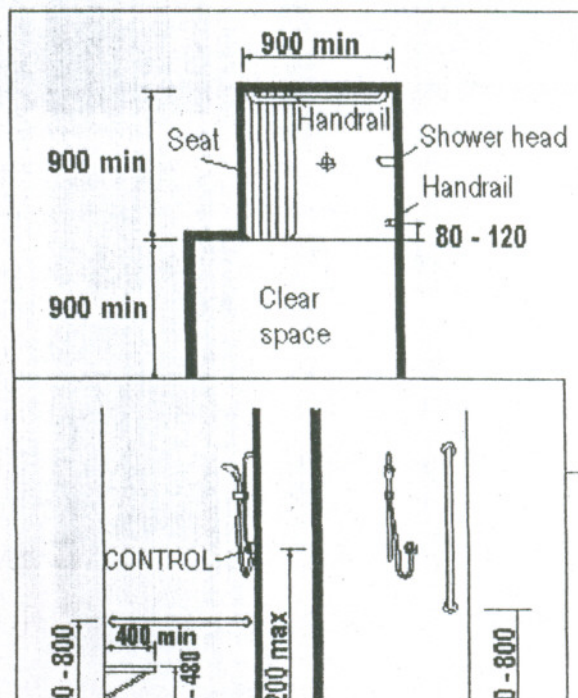
L-shape grab bar



Example of accessible toilet

Shower area

- Should have seat/bathing stool (height 460mm-490mm) to facilitate easy transfer by wheelchair users.
- Should have grab rails at a height (700mm-800mm) and position that allow for easy gripping by semi ambulant persons and wheelchair users.



- Fixed shower apparatus to be replaced by telephone hand shower.

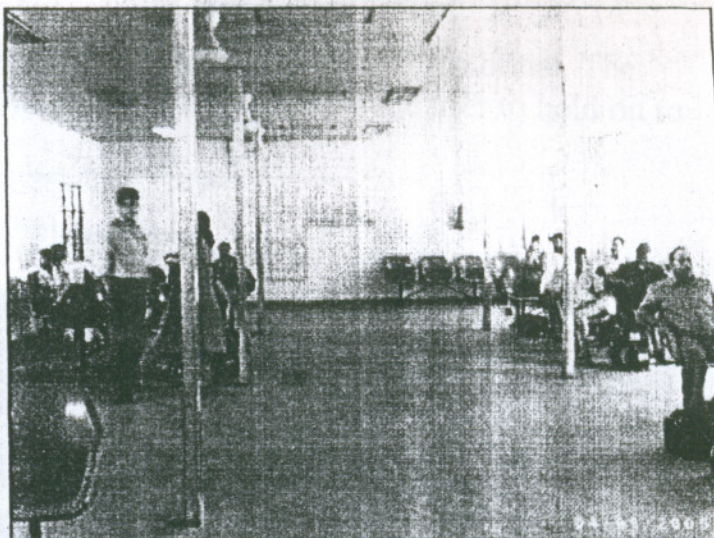
All platforms should have at least one accessible toilet (shower area is optional) with signage boards with directional arrows leading to the toilet.

General Waiting Room

It is quite spacious and sitting arrangement is nicely done with enough aisle space for persons with reduced mobility.

To locate the entrance door, it is suggested to provide:

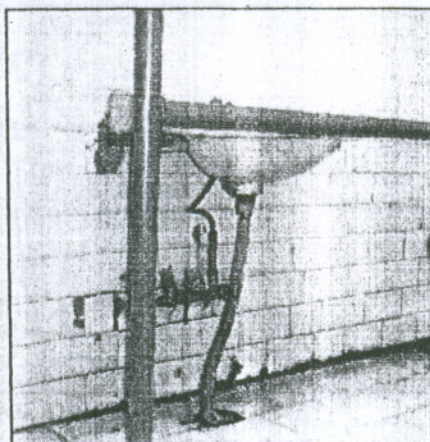
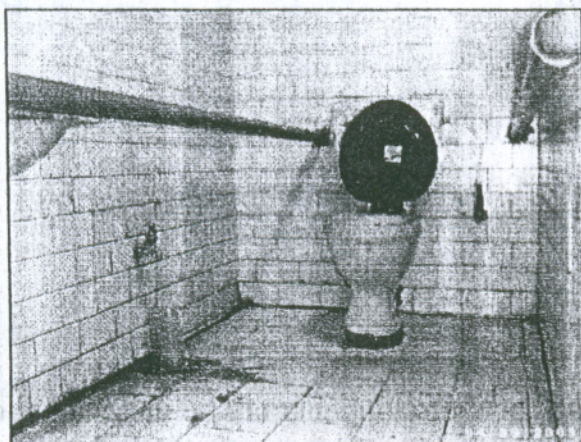
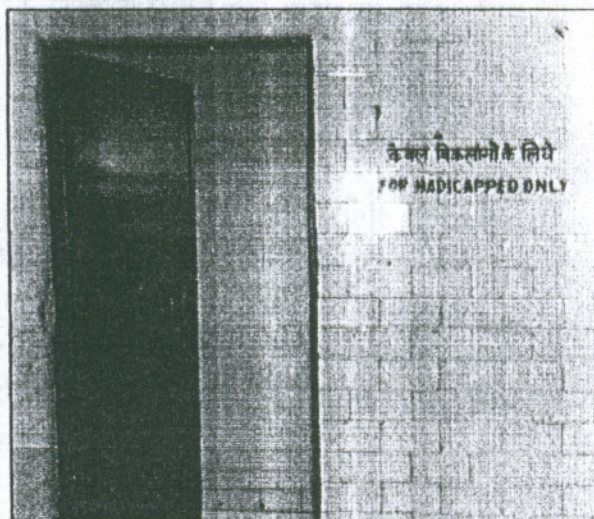
- A warning block strip in front of the doors, for visually impaired persons to locate the entrance easily.
- Rubber foot mats are also an option for the same, if put in front of each entrance.
- All foot mats to be embedded in the ground in a niche to avoid people from tripping on them.



General Toilet

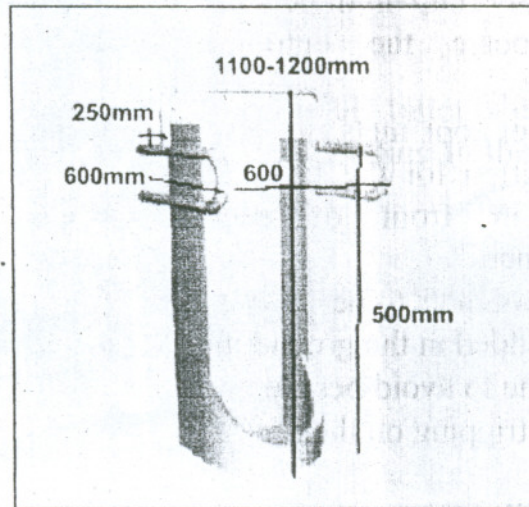
This toilet also has a cubicle for disabled persons, which can be used by persons with reduced mobility.

To locate the toilet door, warning blocks/rubber foot mats as per above standards to be provided.

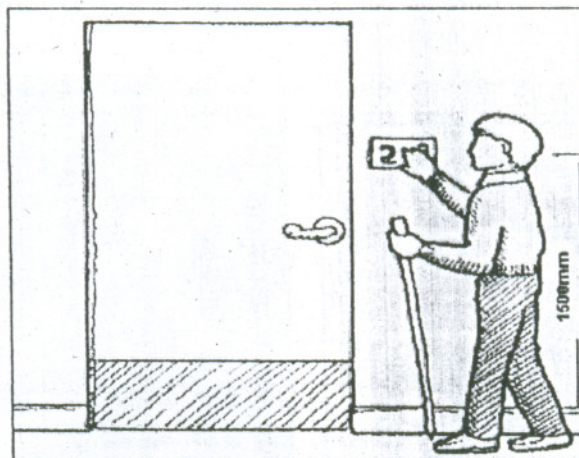


Urinals

- At least one of the urinals should have grab bars to support ambulant persons with disabilities (for example, crutch users).
- A stall-type urinal is recommended.
- Grab bars may be installed on each side, and in the front, of the urinal. The front bar is to provide chest support; the sidebars are for the user to hold on to while standing.



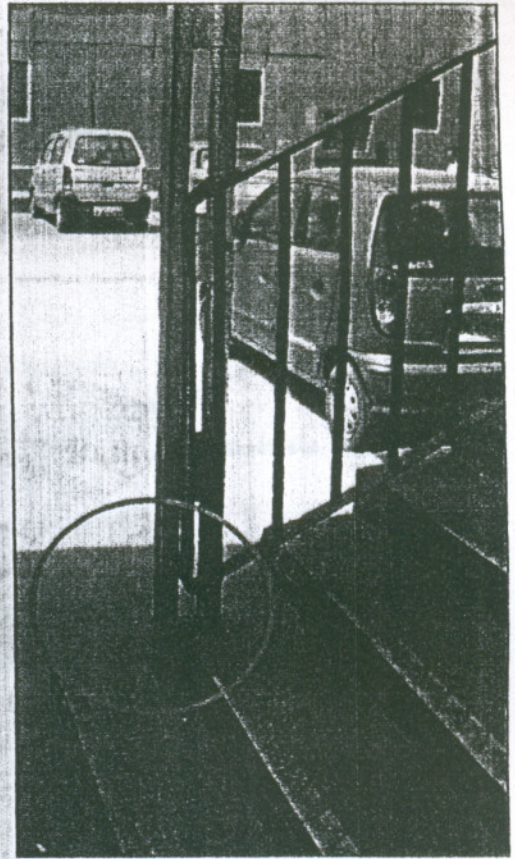
- For the benefit of the vision-impaired people, all toilets to have male or female marked on plates with raised alphabets and put on wall next to door.
- Signs should be mounted between 1400mm and 1700mm from floor level.
- The individual characters between 15mm-50mm tall, raised by 1-1.5mm and bold & colour contrasted with their background.



- A distinct audio sound (beeper/clapper) may be installed above the entrance door for identification of the toilets.

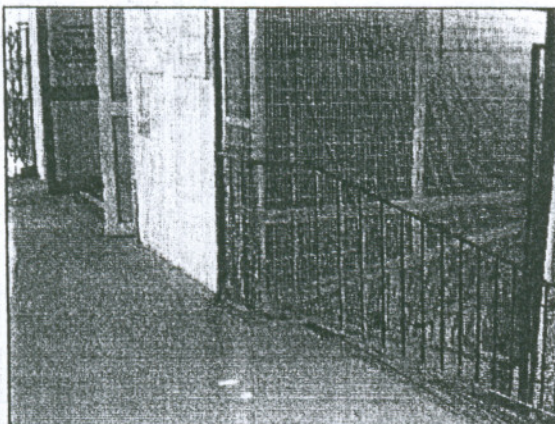
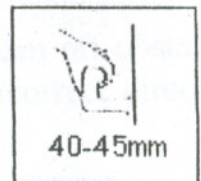
Over head/foot over bridges

Handrails on the foot over bridges start after one step, there by making it difficult for persons with reduced mobility and PwDs to move up/down the steps.

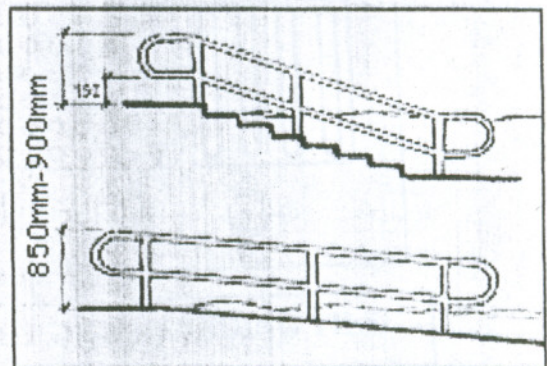


Handrails

- Should be circular in section with a diameter of 40-45mm;
- At least 45mm clear of the surface to which they are attached;
- At the height of 850mm-900mm from the floor,
- Extend by at least 300mm beyond the head and foot of the flight in the line of travel and grouted in the ground.



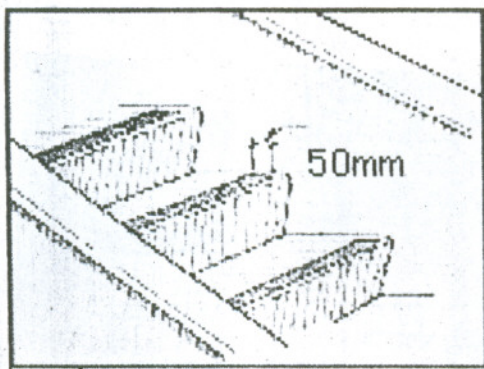
Existing



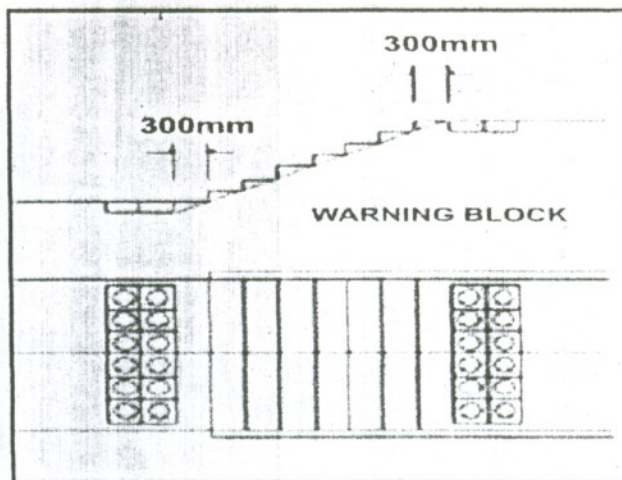
Proposed

Steps and stairs

- Stair edges should have anti skid and bright contrasting colors strip: 50mm min.
- Warning blocks to be placed 300mm at the beginning and at the end of all stairs.
- Nosing to be avoided.

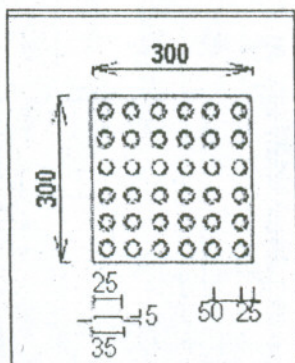


Step edges in contrast color

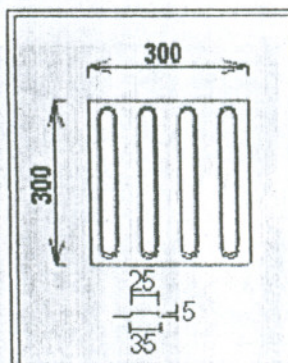


Tactile Surfaces / Guiding Path:

- Dot-type blocks give a warning signal. They are used to screen off obstacles, drop-offs or other hazards, to discourage movement in an incorrect direction, and to warn of a corner or junction.
- Line-type blocks indicate the correct route to follow.



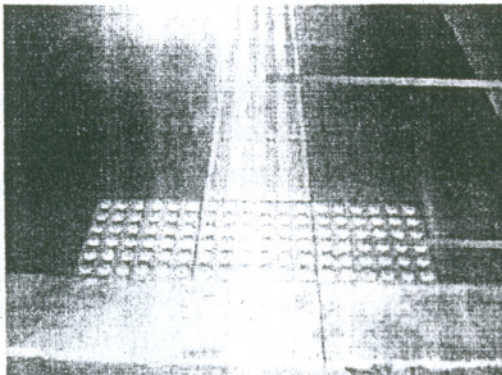
WARNING TILES



GUIDING TILE

Places to install Guiding path & Warning strip:

- In front of an area where traffic is present.
- In front of an entrance/exit to and from a staircase or multi-level crossing facility.
- Sidewalk section of an approach road to a building.



Guiding
Path

Warning
Strip

Protruding objects

There are hoardings and other signages on the poles etc., obstruct movement of persons with vision impairment and can cause injuries.

- All protruding objects to be above 2100mm from the floor level.



Foot over bridges

1. Steps and stairs

Steps are painted in contrasting colors that serve as a good orientation cue for persons with low vision.

However handrails are too high and start from the second step.

- Handrails to be as mentioned earlier.

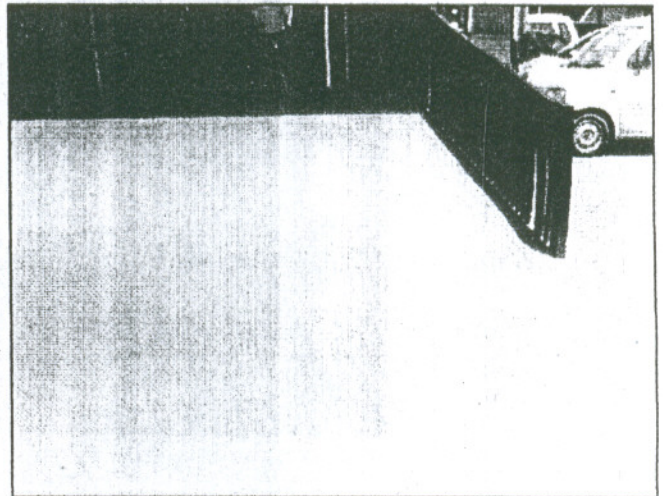
To guide persons with vision impairment and to identify the platforms,

- all foot over bridges turning to have Braille markings with signages either on the wall (as stated earlier) or
- a Braille Guide plate on the handrails (both sides) of staircase leading to the respective platforms.



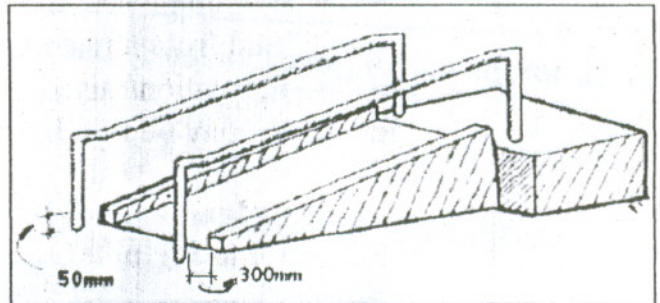
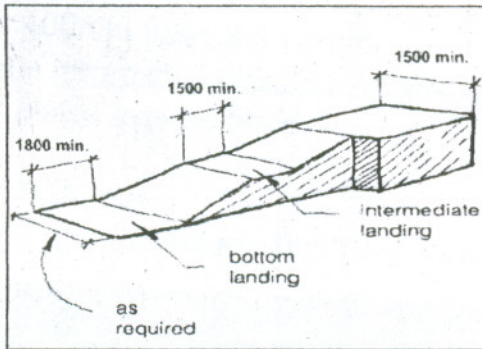
1. Escalators

Entrance to escalators is marked by a steep ramp (1:5) with iron grill.



Ramps

- Gentle slope (1:12 minimum).
- Landings (every 750 mm of vertical rise). Width (1200 mm or more).
- Handrails to be on both sides at a height of 850mm-900mm; both ends to be rounded and grouted and extend 300mm beyond top and bottom of ramp.
- Surfaces (ramp + landing) should be slip resistant.
- Wherever possible a ramp should be accompanied by a flight of easy going steps.
- Warning blocks to be placed 300mm at the beginning and at the end of all stairs and ramps.



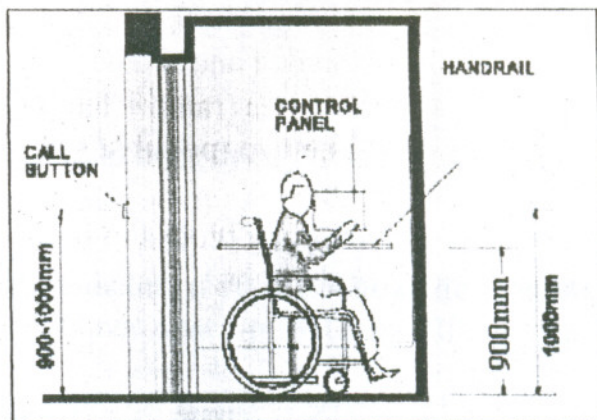
- Warning blocks to be placed 300mm at the beginning and at the end of escalators also.
- Escalators to be provided on all platforms.



3. Lifts

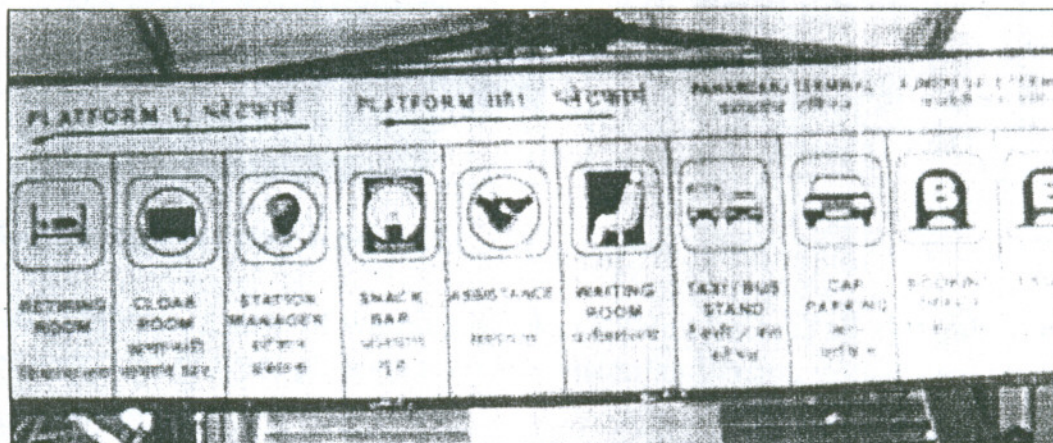
Lifts should be installed on all the platforms to assist persons with reduced mobility and persons with disabilities.

- Floor space: Sufficient space for persons using mobility aids and persons carrying luggage.
- Doors: 900mm (min.) wide.
- Door closing mechanism: Adjustable to give adequate entry time.
- Call button & Control button: At a reach of 900mm-1000mm; at least 400mm from any corner.
- Braille information/raised numbers, audio and visual indicator, review mirror & kick plates may be fitted.



Over head signages

All signages should include facilities provided for the persons with disabilities.



May I help You/ Assistance counters

- Tactile guiding path to be given from the ramp leading to the May I help You / Assistance Counter.
- Access symbol to be provided.
- All platforms to have May I help you/Assistance counters, with the facility of availability of wheel chairs.
- Counter attendant to know sign language for communicating with



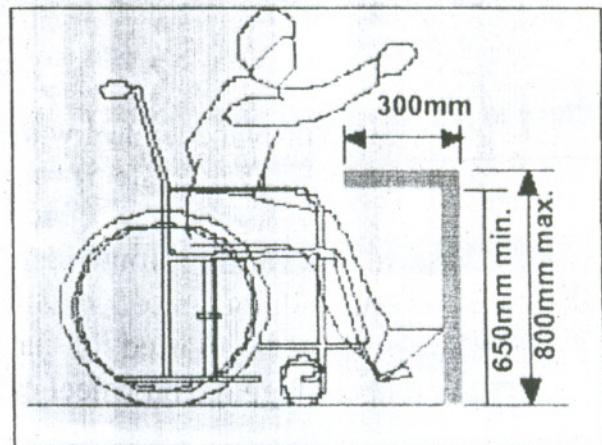
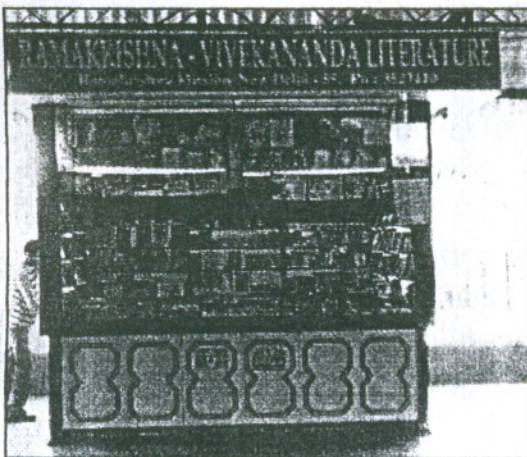
persons with hearing impairment.

- Should have Induction Loop System.
- **Intercom facility to be provided at the counters, connected with the other enquiry counters.** (It was observed during off timings, there was no one manning the counter).

Other counters/stalls

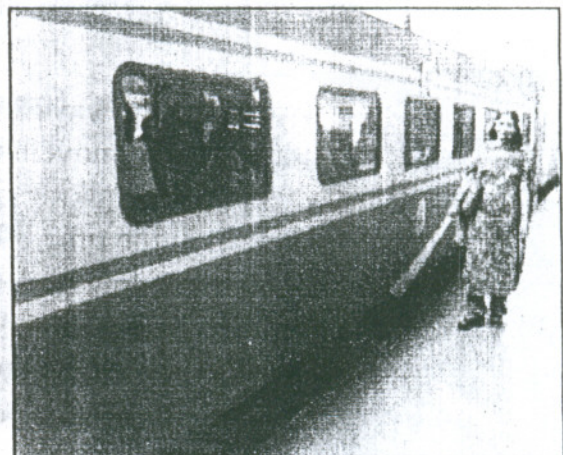
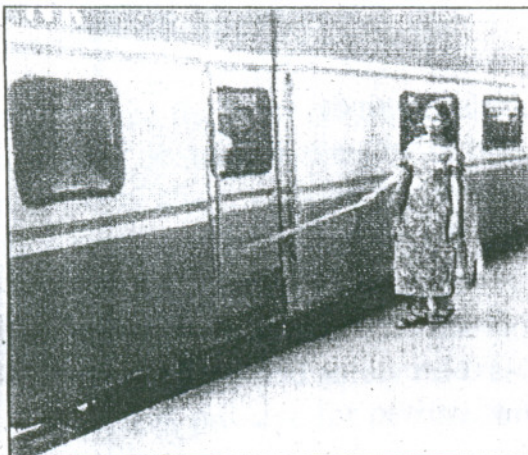
All eatable/book and other service stalls should comply with the standards mentioned below.

- Writing surfaces and public dealing counters should not be more than 800mm from the floor, with a minimum clear knee space of 650mm-680mm high and 280mm-300mm deep.



Platforms and railway tracks

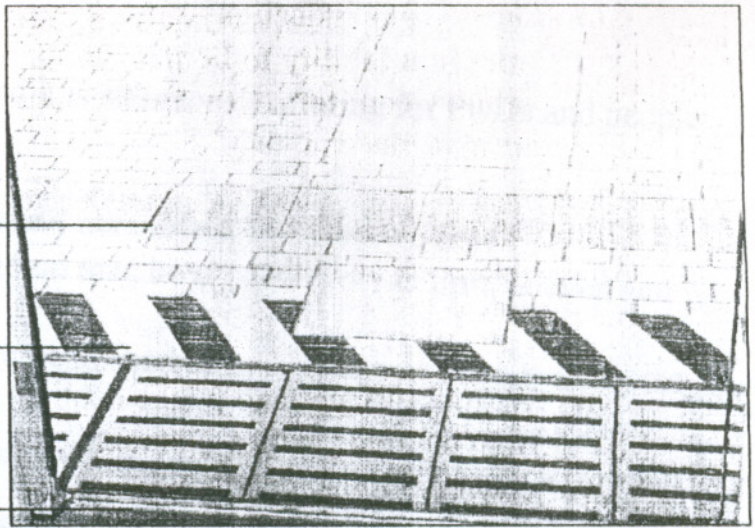
On all platforms, a strip of warning blocks (460mm before) all along the edge should be provided, to prevent persons with low vision and vision impairment from falling into the tracks.



Warning strip for
VI's

Yellow line for
warning other
passengers

Anti skid tiles



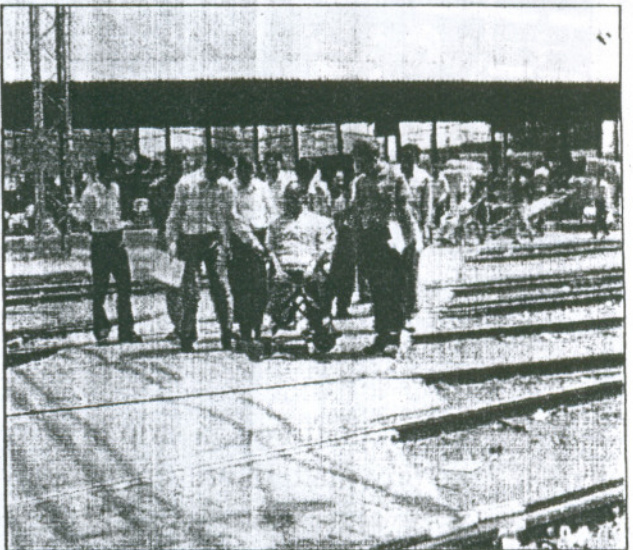
(Example of placement of warning tactile tiles for boarding coach no. 11, at Platform at Tokyo Subway System)

Platform crossing- route identified for persons with loco motor disabilities, over the tracks, is used for carrying parcels & luggage on wheel carts.

In absence of lifts for all foot over bridges, this pathway is identified and used by persons with loco motor disabilities.

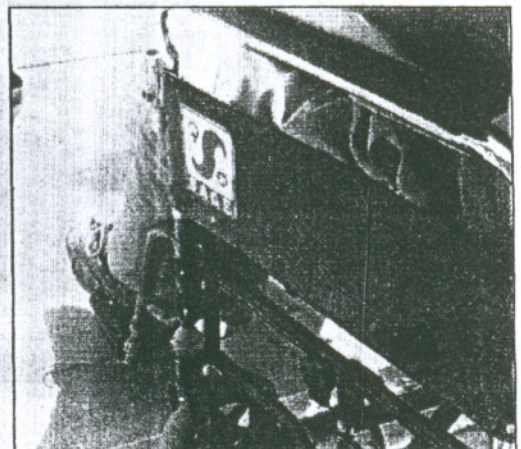
Ramp leading to crossing is very steep.

- Gentle gradient of 1:12 is recommended.



Gap between the railways tracks are too wide, which may obstruct movement of persons using wheel chair, walking frame and crutches etc. Till the time lifts are installed:

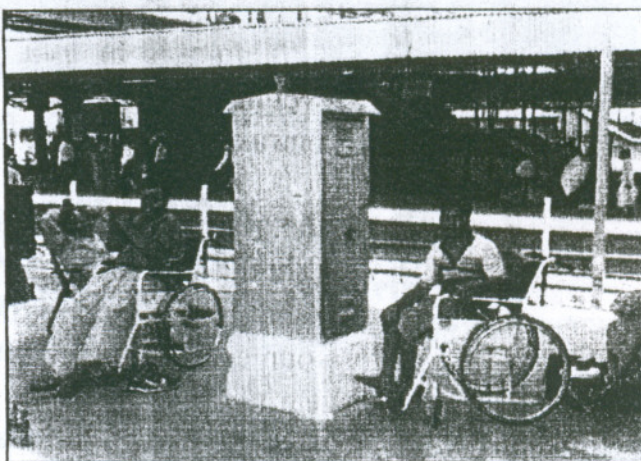
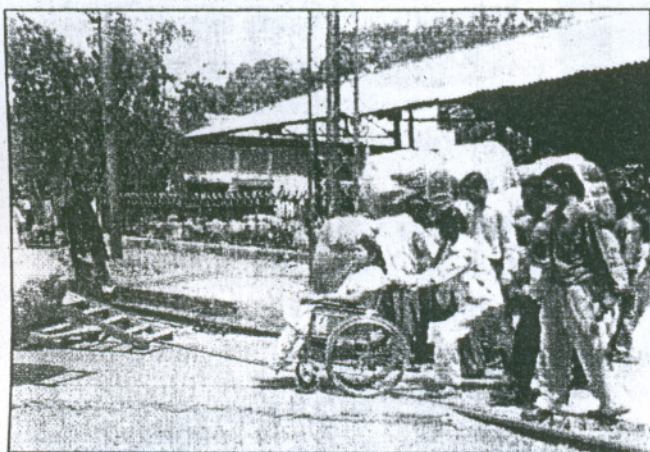
- Rubber beading to detail (or other options which may be worked out keeping in mind safety rules) - to allow smooth passage for persons with loco



motor disabilities- may fill gap on the tracks.

Surface of the pathway is uneven and it is strenuous and tiring for PwDs and people carrying heavy luggage.

- Surface needs to be leveled out and maintained from time to time.
- Cement/concrete/any other material may be used to provide firm, uneven and slip resistant surface.
- It is suggested to provide an overhead shed to save everyone from the adverse climate conditions.



Ticket Counter

There is a reserved ticket booking counter on the Paharganj side entrance.

Signage is placed too high and text is not clearly visible.

Access symbol is not provided.

- Signs should be mounted at 2000mm from floor level in bold & contrasting colors, with access symbol as per standards.



Cut in the glass for communication is too low.

- It should be provided at the eye level also for easy communication.
- It should be equipped with two way mike system and speakers.
- Counter attendant to know sign language for communicating with persons with hearing impairment.
- It should have Induction Loop System.



There is no reserved counter at the Ajmeri Gate side.



Reserved ticket counter with single window facility

- Should be provided on all entrances to New Delhi Railway station including Ajmeri Gate side.
- Should comply with the standards mentioned above.



Digital display screen is placed too high and is not clearly visible due to glare produced on the screen.

- To be lowered down to eye level and at strategic location where there is no glare.



GENERAL REMARKS

1. **Sensitization exercise** for the staff and the security may be held.
2. **Tactile Map** at the entrance of the station (preferably near the Assistance Counter also) to be provided. Audio information should also be available on pressing a buzzer.
3. **Digitized visual display information system** on all platforms, foot over bridges and waiting rooms for hearing impaired people. Important information like change of platform no., emergency etc may also be flashed through this system.
4. At the beginning and end of all handrails on the stairs of the foot over bridges, a small **bilingual Braille plate** to be provided- for identification of platform nos. and directions for persons with vision impairment.
5. **Transfers from the platform to the coach and vice-a-versa** -raising the platform height is one of the options/ manually operated pulley trolley with 900mm x 1200mm, which takes the wheel chair up to the coach level/inbuilt telescopic ramp in the coach for the disabled.



**Mr. T. D. Dhariyal, Deputy Commissioner for PwDs
With Railway Officers
And Access Audit Team**

Team Members

1. Ms. Anjlee Agarwal, Samarthya
2. Mr. Sanjeev Sachdeva, Samarthya
3. Shri Sandeep Sharma, Hearing Impairment
4. Ms. Sweety Bhalla, Vision Impairment
5. Shri Subhash C. Vashishth, Advocate, Samarthya
6. Shri Manish Gupta, Architect
7. Shri Manvi Gupta, Architect
8. Ms. Jasjeet Plaha, Samarthya
9. Ms. Tripti Gupta, Samarthya
10. Ms. Rajni Kaushal, O/o the Chief Commissioner, Disabilities