

# The Expanding Role of the Architects, Towards the Barrier-Free Environment for Persons With Disabilities

Ar. Jaime Silva

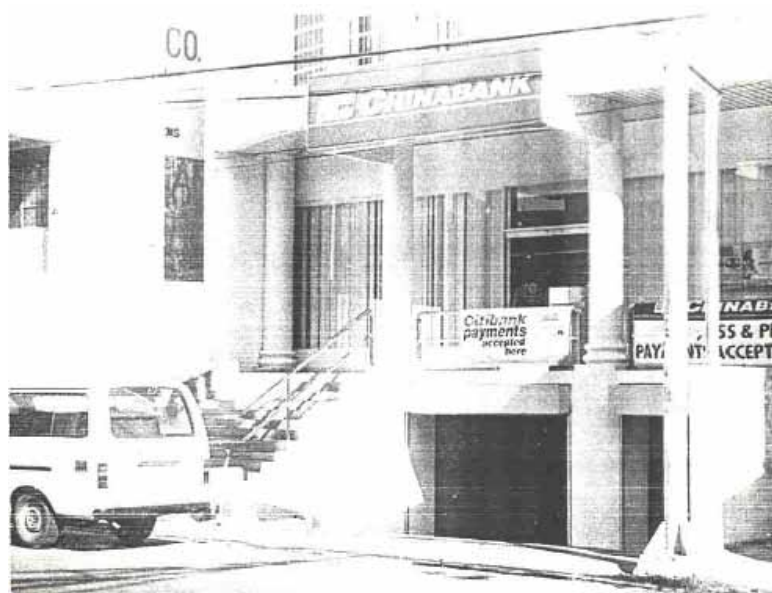
## I. The Past.

### A. Background.

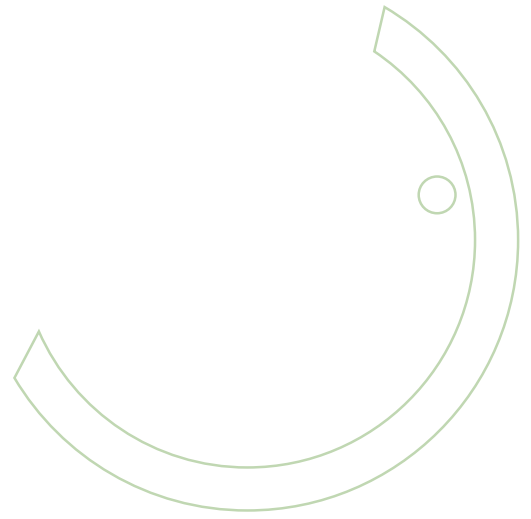
Before the formulation of Batas Pambansa 344 or otherwise known as the Accessibility Law in the Philippines, Persons With Disabilities (PWDs) were considered subjects of welfare and dole-outs. Accessibility facilities were never considered then. But when the Accessibility law was enacted, it became a landmark legislation for the PWDs. The Accessibility Law is an act to enhance the mobility of disabled persons, by requiring certain buildings, institutions, establishments, and public utilities, to install facilities and other devices. In effect, it mandates to enhance the independent mobility of PWDs in the built environment. Several years later, RA 7277 or otherwise known as the Magna carta for the Disabled, was passed. Both these laws, the Accessibility Law and the Magna carta for the Disabled, compelled the equal access to the built environment. It was also then when the National Council for the Welfare of the Disabled Persons (NCWDP) invited the United Architects of the Philippines (UAP) to help disseminate the Accessibility Law.

### B. Barriers in the Past.

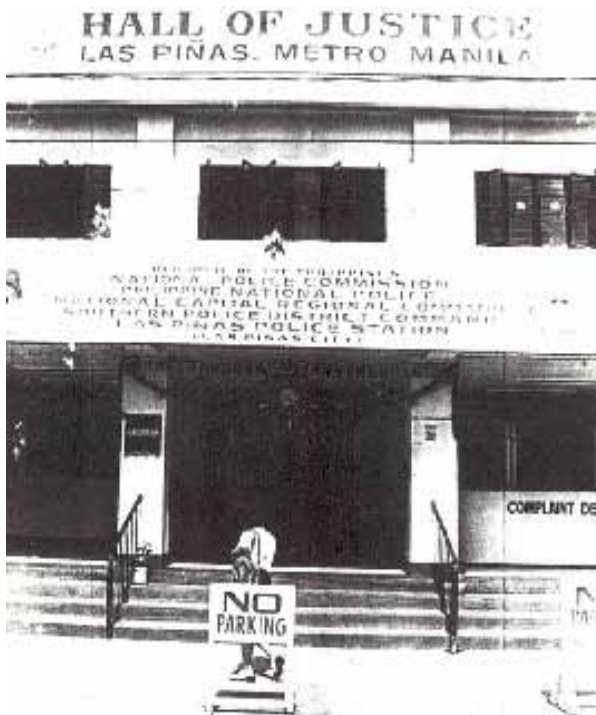
Below are photos in the past, showing the non-accessible Philippine built environment.



*Illustration 1*  
Shows a bank with 14 steps but without any vertical access. The structure has a semi basement, which required the ground floor to elevate 2.00 meters above the sidewalk. there was no vertical access, other than the stairs.



*Illustration 2*  
A cinema at the mall, which is elevated 6 steps above the main floor level. There are 8 cinemas on this level with the same condition.



*Illustration 3*  
A Hall of Justice, with 4 steps but no ramp. This is a judicial agency that safeguards the rights of the public.



*Illustration 4*  
*Illustration 5*  
The photo on the left (illustration 4) shows Dunkin Donut with 14 steps. The photo on the right (illustration 5) shows Red Ribbon with 4 steps. Both establishments are fastfood networks, with branches nationwide.

## II. The Present.

After the enactment of the Magna carta for the Disabled, the NCWDP, together with the Department of Public Works (DPWH), and the UAP, revised the Implementing Rules and Regulations (IRR) of the Accessibility Law. The revision was circulated and a series of dissemination were performed. At the same time, the DPWH retro-fitted the sidewalks, with curb cut-outs, throughout Metro manila. Below are sets of photos showing the present violation of, and present compliances to, the Accessibility Law.



*Illustration 6  
A wheelchair user needing assistance to descend  
the sidewalk.*

### A. Violations.



Illustration 7

A complying curb cut-out but  
the passage is blocked by a  
shuttle bus.



*Illustration 8  
A complying curb cut-out but leads to a narrow sidewalk, because of obstructions, along the passageway, such as, a light post and several potted plants.*



*Illustration 9  
A complying curb cut-out but the passage is blocked by a car.*



*Illustration 10  
A complying curb cut-out but the passage is blocked by a vendor's fruit cart.*





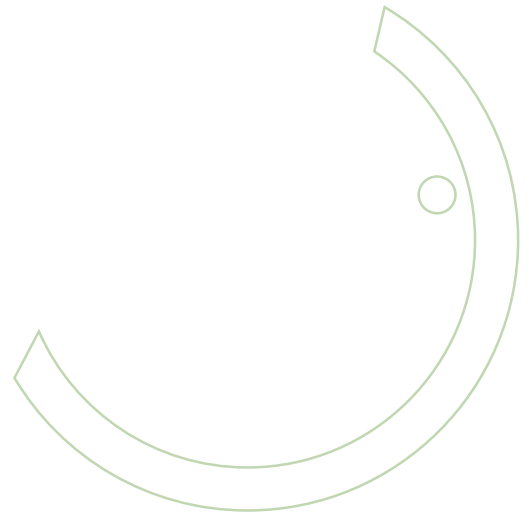
*Illustration 11*  
10 steps with no ramp, leading to the main entrance of a residential condominium.



*Illustration 12*  
34 steps leading to a terminal station of the Light Rail Transit (LRT), but with no elevator. Currently, the newly constructed terminals are now provided either with an elevator or an escalator.

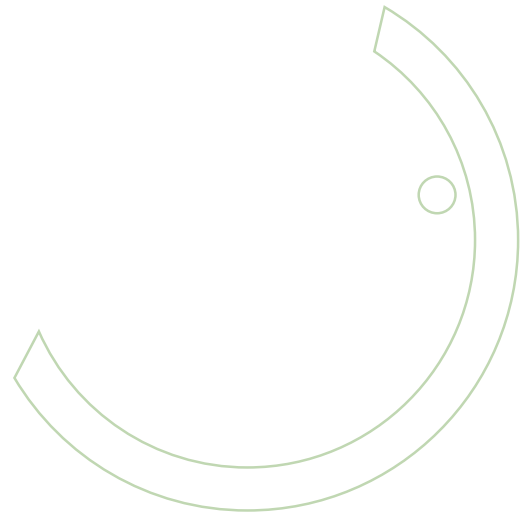


*Illustration 13*  
9 steps leading to a restaurant, but with no ramp. 4 steps leading to an outdoor dining, and another 5 steps leading to the main doorway entrance.

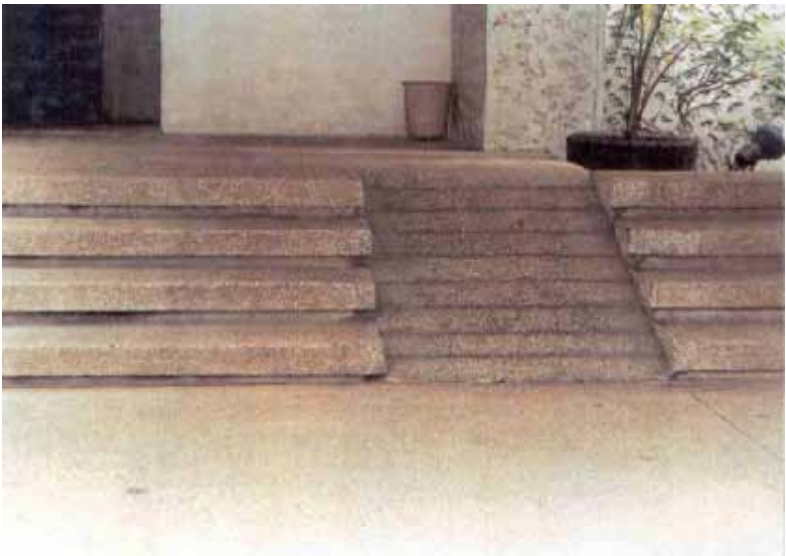




*Illustration 14  
A steep ramp with a 2-level handrail on one side.  
The slope gradient of the ramp is equal to the run of the 4 steps.*



*Illustration 15  
A steep ramp with 2-level handrail on one side.  
The slope gradient of the ramp is equal to the run of the 5 steps.*



*Illustration 16  
A steep ramp but with no handrails. The slope gradient of the ramp is equal to the run of the 4 steps.*



*Illustration 17*  
*A steep and straight ramp, but with no handrails. Slope gradient of the ramp is equal to the run of the 10 steps.*



*Illustration 18*  
*A long, straight and steep ramp, leading to the main entrance of a resort establishment. The slope gradient is about 1 is to 4.*

## B. Compliances.



*Illustration 18*  
A curved cut out with UN symbol of accessibility on the pavement. Major sidewalks of Metro Manila have been retrofitted by the DPWH to accommodate wheelchair user.



*Illustration 19*  
The ramp entrance of a KFC restaurant, with conforming ramp gradient, and with complying handrails.



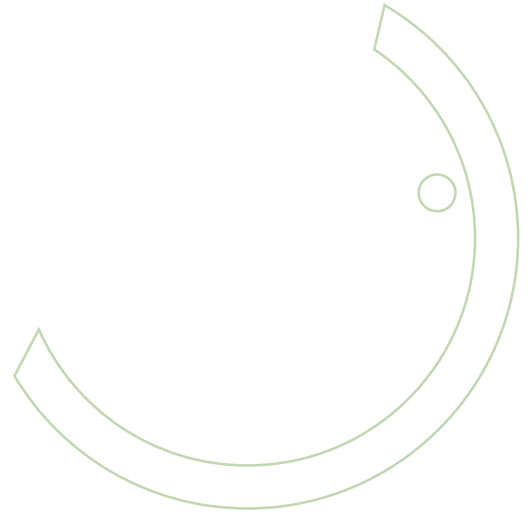
*Illustration 20*  
 An L-shape ramp with conforming ramp gradient, and innovated handrail design. As shown, there is a 2-level handrail on one side and a granite with handrail on the other side. Design innovations on ramps and handrails, have developed.



*Illustration 21*  
 A loading/unloading, rear entrance of a building, wherein it indicates that ramps are not located only at the main entrance, but also at the rear entrance of the building.



*Illustration 22*  
 A ramp with conforming ramp gradient, and complying handrails. In addition, there is a signage which states that the ramp is for the wheelchair user.





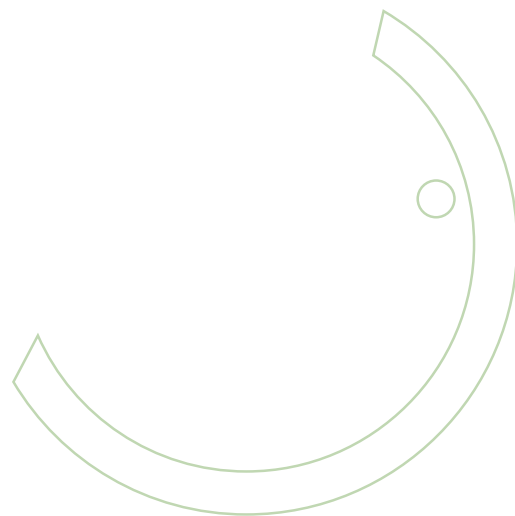
*Illustration 22*  
 A ramp, leading to the main entrance of a bank, with conforming ramp gradient, and a UN symbol of accessibility. An innovative CHB handrail on both sides, is provided.



*Illustration 23*  
 A ramp, leading to the main entrance of another bank, with conforming ramp gradient, and 2-level handrails on both sides.



*Illustration 24*  
 The elevator at the LRT terminal station, with an access symbol indicating give way to the handicap.



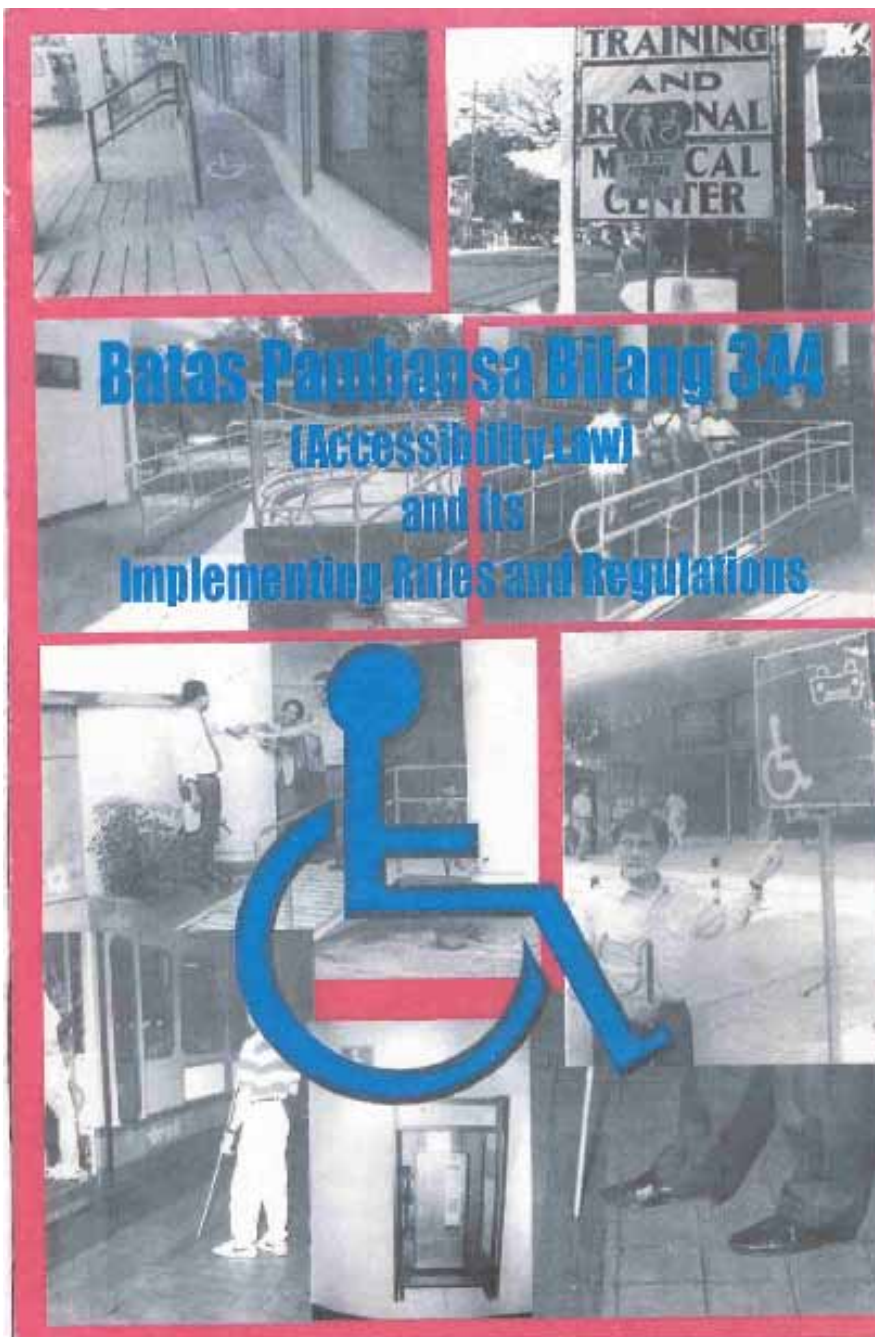
*Illustration 25*  
An accessible toilet for PWDs, with hand  
grabs, ample maneuvering space and lavatory  
legroom clearance.



*Illustration 26*  
Another accessible toilet for PWDs, with ample  
maneuvering space and lavatory legroom  
clearance.

### III. How This Was Realized.

*Illustration 27*  
The cover of the first revision on the Implementing Rules and Regulation of the Accessibility Law. The DPWH, together with the NCWDP and the UAP worked together in 1994, on this first revision.



## MINIMUM REQUIREMENTS OF B.P. 344 (Accessibility Law)

The following are the minimum requirements of the law:

### A. Ramp

- Gradient is 1:12
- Located at the main entrance
- Not steep, with two handrails located at both sides
- If the ramp required is long, a landing area for rest is needed midway
- Minimum clear width for wheelchair passage
- Place where they will not pose as safety hazard

### B. Parking Areas/Slots

- Located at the nearest entrance with signage
- Parking slot with width enough to fit in a car and a wheelchair beside it
- Allows sufficient clear space between parked cars to allow persons with disability to transfer to a wheelchair

### C. Washrooms and Toilets

- Non-skid materials should be used
- At least 1.70 x 1.80 meters cubicle dimension
- At least 0.80 meter width of door
- Permit easy passage of wheelchair to allow occupant to enter a stall, close the door and transfer to the water closet from either frontal or lateral position
- One (1) movable grab bar and one (1) fixed to the adjacent wall
- Functional areas accessible at entrance/exit level
- With sufficient turning space and adequate dimension for wheelchairs provided outside water closet stalls similar to the cubicle dimension
- Width of door should have a passage wide enough for an ordinary wheelchair
- Toilet accessories, fittings, plumbing fixtures such as mirrors, tissue dispensers, towel racks, faucets mounted at heights reachable by person in wheelchair

### D. Non-skid flooring for comfort room, ramp, stair nosing

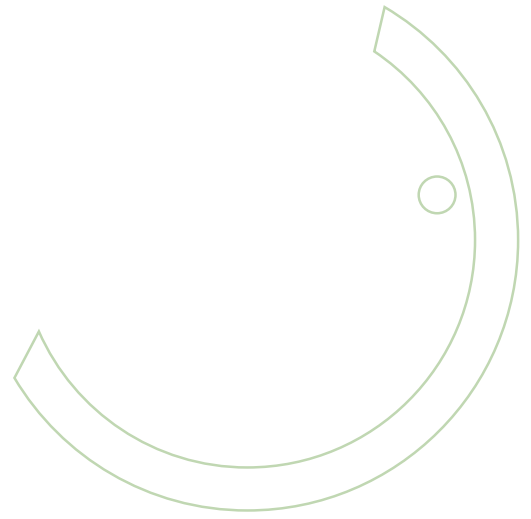
### E. Signages-directional signs

#### Illustration 29

The 5 Basic Minimum Requirement of the Accessibility Law, which the DPWH had devised. The technical requirements conforms to the provisions found in the Accessibility Law. This was intended to simplify the interpretation and serve as a guidelines for building officials. The 5 Basic Minimum Requirement are: 1) Ramp, 2) Toilet for PWDs, 3) Reserve Parking for PWDs, 4) Non-skid materials on stairs, ramps, and toilets, and 5) Directional Signages.



*Illustration 30  
Illustration 31  
The picture on the left (illustration 30) shows NCWDP together with DPWH and UAP, conducting monitoring inspection on the built environment. The picture on the right (illustration 31) Government and non-government buildings are being monitored for compliances.*



*Illustration 32  
Illustration 33  
The pictures shows architects conducting Accessibility seminars to building officials, architects, engineers, students of architecture, and other organizations of PWDs.*



*Illustration 34  
The cover of the newly revised Implementing rules and Regulations of the Accessibility Law. This revision is currently being disseminated. The UAP architects helped in the review and recommendation, of the 2004 revised IRR.*

DPWH ANCILLARY FORM NO. 2003-001-A

Republic of the Philippines  
 Department of Public Works & Highways  
 Pamahalaang Lungsod/Bayan ng \_\_\_\_\_  
 Kalakhang Maynila/Lalawigan ng \_\_\_\_\_

**TANGGAPAN NG PINUNONG PANGGUSALI**  
 (Office of the Building Official)  
 PROCESSING AND EVALUATION DIVISION  
**Architectural Section**  
**ARCHITECTURAL PERMIT**

APPLICATION NO. \_\_\_\_\_ AP NO. \_\_\_\_\_ BUILDING PERMIT NO. \_\_\_\_\_

**BOX 1 (TO BE ACCOMPLISHED IN PRINT BY THE OWNER/APPLICANT)**

OWNER/APPLICANT LAST NAME FIRST NAME M.I. TIN

FOR CONSTRUCTION OWNED BY AN ENTERPRISE FORM OF OWNERSHIP USE OR CHARACTER OF OCCUPANCY

ADDRESS NO. STREET, BARANGAY, CITY/MUNICIPALITY ZIP CODE TELEPHONE NO

LOCATION OF CONSTRUCTION LOT NO. BLK NO. TCT NO. TAX DEC. NO.  
 STREET BARANGAY CITY/MUNICIPALITY OF

**SCOPE OF WORK**

NEW CONSTRUCTION  RENOVATION  DEMOLITION  
 ERECTION  CONVERSION  ACCESSORY BUILDING/STRUCTURE  
 ADDITION  REPAIR  OTHERS (Specify) \_\_\_\_\_  
 ALTERATION  MOVING

**BOX 2 (TO BE ACCOMPLISHED BY THE DESIGN PROFESSIONAL)**

**1. ARCHITECTURAL FACILITIES AND OTHER FEATURES PURSUANT TO BATAS PAMBANSA BILANG 344, REQUIRING CERTAIN BUILDINGS, INSTITUTIONS, ESTABLISHMENTS AND PUBLIC UTILITIES TO INSTALL FACILITIES AND OTHER DEVICES.**

STAIRS  WASH ROOMS AND TOILETS  SWITCHES, CONTROLS, BUZZERS  DRINKING FOUNTAINS  
 WALKWAYS  LIFTS/ELEVATORS  HANDRAILS  PUBLIC TELEPHONES  
 CORRIDORS  RAMPS  THRESHOLDS  SEATING ACCOMMODATIONS  
 DOORS, ENTRANCES & THRESHOLDS  PARKING AREAS  FLOOR FINISHES  OTHERS (Specify) \_\_\_\_\_

**2. PERCENTAGE OF SITE OCCUPANCY**

PERCENTAGE OF BUILDING FOOTPRINT \_\_\_\_\_ %  
 PERCENTAGE OF IMPERVIOUS SURFACE AREA \_\_\_\_\_ %  
 PERCENTAGE OF UNPAVED SURFACE AREA \_\_\_\_\_ %  
 OTHERS (Specify) \_\_\_\_\_

**3. CONFORMANCE TO FIRE CODE OF THE PHILIPPINES (P.D. 1185)**

NUMBER AND WIDTH OF EXIT DOORS  FIRE WALLS  OTHERS (Specify) \_\_\_\_\_  
 WIDTH OF CORRIDORS  FIRE FIGHTING AND SAFETY FACILITIES  
 DISTANCE TO FIRE EXITS  SMOKE DETECTORS  
 ACCESS TO PUBLIC STREET  EMERGENCY LIGHTS

**BOX 3**  
**DESIGN PROFESSIONAL, PLANS AND SPECIFICATIONS**

ARCHITECT  
 (Signed and Sealed Over Printed Name)

Address \_\_\_\_\_  
 PRC No. \_\_\_\_\_ Validity \_\_\_\_\_  
 PTR No. \_\_\_\_\_ Date Issued \_\_\_\_\_  
 Issued at \_\_\_\_\_ TIN \_\_\_\_\_

**BOX 4**  
**FULL-TIME INSPECTOR AND SUPERVISOR OF CONSTRUCTION WORK**

ARCHITECT OR CIVIL ENGINEER  
 (Signed and Sealed Over Printed Name)

Address \_\_\_\_\_  
 PRC No. \_\_\_\_\_ Validity \_\_\_\_\_  
 PTR No. \_\_\_\_\_ Date Issued \_\_\_\_\_  
 Issued at \_\_\_\_\_ TIN \_\_\_\_\_

**BOX 5**  
**BUILDING OWNER**

(Signature Over Printed Name)

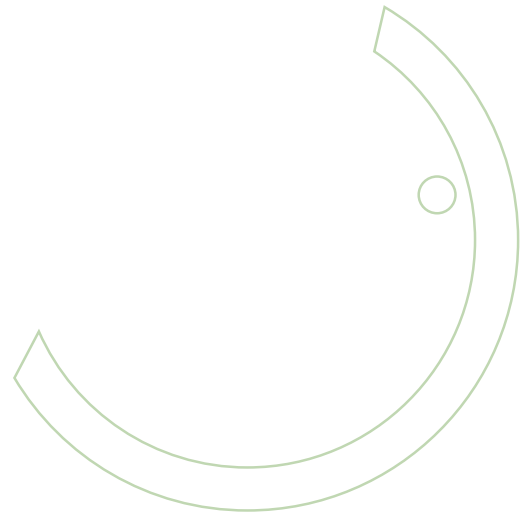
Address \_\_\_\_\_  
 C.T.C. No. \_\_\_\_\_ Date Issued \_\_\_\_\_ Place Issued \_\_\_\_\_

**BOX 5**  
**WITH MY CONSENT: LOT OWNER**

(Signature Over Printed Name)

Address \_\_\_\_\_  
 C.T.C. No. \_\_\_\_\_ Date Issued \_\_\_\_\_ Place Issued \_\_\_\_\_

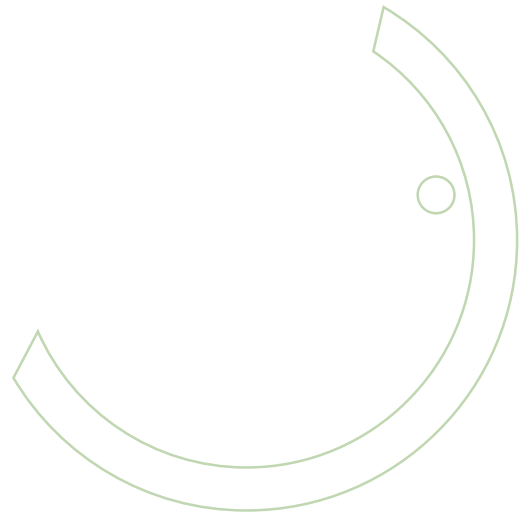
*Illustration 35*  
 The front page of the Architectural Permit. Unlike the previous Building Permit, the new Architectural permit have included a checklists to determine the inclusion of architectural facilities, conforming to the Accessibility Law. These architectural facilities and features are: Stairs, Walkways, Corridors, Doors, Washrooms, Elevators, Ramps, Parkings, Switches, Handrails, Thresholds, Floor Finishes, Drinking Fountains, Public telephones, and Seating Accommodations.



#### **IV. Final Photo with a Message.**

Final Slide shows an old building, which combined harmoniously with a newly constructed ramp. The provision of the ramp, enabled the PWDs to access the built environment, independently.





## Jaime Silva

Jaime Silva is a blind architect, but in spite of his disability, continues to be self-reliant. He is presently employed as a property manager, overseeing office, commercial, and residential buildings. Aside from pursuing a successful career in property management, he has actively involved himself in the promotion of a barrier-free environment for persons with disabilities, in the Philippines. His emergence to the sector of disability and commitment to the implementation of the Accessibility Law, began in 1995, when the United Architects of the Philippines assisted the National Council for the Welfare of the Disabled Persons, in its thrust to have a barrier free environment.

Since then, Jaime Silva had involved himself in various government and non-government organizations that advanced the dissemination and implementation of the Accessibility Law. Throughout those years of active participation, he has earned him the "Apolinario Mabini Presidential Award". Only 6 individuals have been granted this award, since 1978. This is the highest honor given to an individual as a recognition for the works done for the sector of disability. Last April 2003, he was elevated to the "College of Fellows" of the United Architects of the Philippines.

### Present and past positions held:

1. Chairman, Committee on Accessibility, United Architects of the Philippines, 2000 to present
2. Vice-Chairman, Subcommittee on Accessibility / Telecommunication, National Council for the Welfare of Disabled Persons, 2001 to present
3. Member, Consultative Advisory Group, National Council for the Welfare of Disabled Persons, 2001 to present
4. Consultant on Accessibility, Philippines blind Union, 1998 to present
5. Acting chairman, Inter-Agency Committee on Accessibility, National Council for the Welfare of Disabled Persons, 1998 to 2001
6. Chairman, Monitoring support Group, National Council for the Welfare of Disabled Persons, 1996 to 2001
7. Committee chairman, National Photo contest on disability, National Council for the Welfare of disabled Persons, 1997 to 2001
8. Member, Reviewing committee during the Amendment of the Implementing Rules and Regulations of the National Building code of the Philippines, 2001