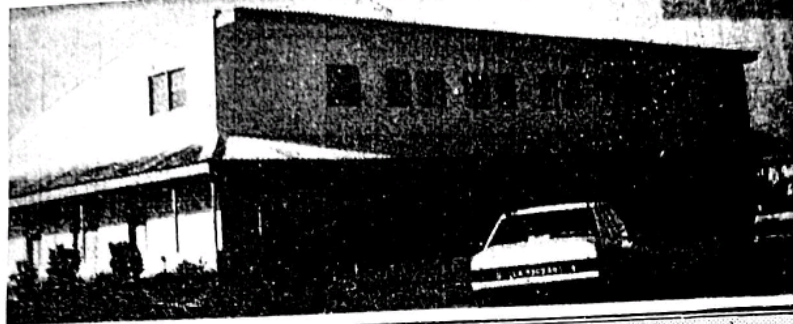


Journal of Tropical Architecture



OUTLINE

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• Submission	4
• Tropical News	5
• Mass Housing and the Community	10
• The cultural implications of Housing Design Policy in Nigeria	
• Result Oriented Architectural Education	16
• Research: Natural Fibre Shwischcrete Technology for low cost Roof Sheets Development	19
• Pedestrianizing our urban centres	26
• Down to Earth: Developing a Technically Appropriate Manual Press for Soil Blocks Applicable to the Housing Industry in Nigeria	32
• The Socio- Economic factors for Urban Growth	37
• The Pontificator	41

BRIEF

In this issue, we take a look at the matter of the moment — **HOUSING**. Not that housing has never enjoyed government largesse or attention in the past. But what makes it topical today is the importance and urgency the present military government seems to be giving its implementation with the recent inauguration of the national housing policy. One only hopes that this dream doesn't end up like the others before it.

... and now future expectations.

We note with concern, the communication breakdown between us and our readers in these past months. We apologise. However, we have decided to compensate you by remaining, from now, more stable, bigger, and better.

This is in view of the ongoing re-organisation in the publication.

We are poised to take back our enviable leadership position as the pioneers of architectural journalism in Africa.

Henceforth, we hope to keep up with the dynamic nature of the architectural and building construction industry, especially in Nigeria, plus an update on all you need to read on environment, real estate and properties, interiors. The list is endless. We hope you'll stay tuned.

Signature

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Pedestrianizing our Urban Centres

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ABSTRACT:

With little attention paid to mass transportation in the oil-boom years, the private automobile became an indispensable part of the urban dweller in this country. In these years and up till today, the pedestrian nature of most urban dwellers suffered benign neglect. Development and provision of infrastructures then, as now were pivoted exclusively on facilities and amenities for the movement of motor vehicles.

Today, economic strains are re-ordering our lives and re-opening the largely pedestrian nature of our cities and towns. Yet street scenes from these place point conclusively to:

- (a) the gross inadequacy of pedestrian facilities and
- (b) to the debilitating lack of awareness to restore the pedestrian to his pride of place in urban infrastructure and spaces.

This essay which is based on field observation of street scenes, highlights the problems. Further, it recommends solutions which could appropriately be integrated in the urban mass transportation planning, urban redevelopment or in the new impetus of rural urban integration.

The Pedestrian: The automobile has seemingly become an inseparable part of our lifestyle in this country that the urban dweller hardly considers himself or herself a pedestrian. The private car especially has become so indispensable as many people are prone to drive it literally into their bedrooms or offices, if possible. Before proceeding further however, it might suffice to state succinctly the meaning of 'pedestrian' as the word apparently does not

enjoy common usage. A pedestrian is one who goes about or travels on foot. Popular parlance in Nigeria refers to it as 'footron' where the act is performed regularly. Whether it is done periodically or regularly, there are certain activities which are performed while on foot, which are appropriate termed pedestrian activities.

Pedestrian Activities. Pedestrian activities can be thought of as consisting of six primary actions namely: walking, standing, sitting, lying, running and playing or exercising. Walking, standing and sitting are by far the most frequently performed.

Some of these actions can be considered as 'necessary' while others are 'optional'. The necessary ones are so because they are performed regularly without choice. Examples of these include walking to a shop or office from a car park or bus stop, standing while waiting for a bus or a friend or to cross an intersection and sitting to rest after a long walk. Optional actions include strolling, window shopping, standing to watch a passing scene or view, visiting friends on foot, running and playing. These are optional because their performance is mainly based on the individual's disposition, space arrangement and weather conditions.

Except where a person is confined permanently to a wheelchair, everyone is potentially a pedestrian. Irrespective of whether an individual owns six cars or none at all, he performs at least one of the necessary pedestrian actions in a public space at some point in his daily endeavours. Whether it is escorting a visitor to the car to catch a taxi cab, going to the store or market or window-shopping, moving to and away from the car into the house or office etc., we all perform these movements

we do leave the confines and comfort of the automobile (Whether we own it or not) to confront the vagaries of walking on foot.

Street Scenes — Automobile vs. Pedestrian. Perhaps typical street scenes in business districts might serve to dramatize the degree of pedestrian activities occurring in our urban streets. On the Lagos Island for example, Marina, Broad Street, Balogun and Nnamdi Azikiwe Streets (just to mention a few) are captivating theatres of pedestrian/vehicular conflict during business hours. Always it appears as if these streets are bursting with people walking everywhere. If one paused to watch, there is a variety of these people: tall and short, some corporate-looking and not so corporate-looking, some in a haste, others really mellow, but all are apparently very mindful of the tight space within which they are moving. During lunch hours and closing time, there is strikingly more people on foot than there are automobiles. Yet, the latter owns up most of the available space. Usually, except where a traffic warden is on duty, the scenes at intersections are amusingly chaotic. The automobile and the pedestrians jostle precariously for the first right to cross the intersection. The driver with his horn blaring and the engine highly revved up ultimately forces the pedestrians into a quick jump to reach safety on the other side of the street. Both the driver and the pedestrian would have unleashed verbal abuses on each other (Fig. 1, CMS Marina).

These street scenes are by no means peculiar to Lagos Island nor Lagos alone. Indeed, such are common occurrences in our urban centres, albeit with varying intensity. Lagos no doubt is in a class of its own. Be it in Ibadan, Benin, Abuja, Enugu or Kaduna etc., near or fatal knock-downs at intersection and even in presumably quiet residential neighbourhoods are threats which pedestrians in those areas are continually exposed to. (Fig. 2 Okpara Ave., Enugu). The common denominator in these conflicts is that the drivers in such situations assume that streets are built just for automobiles, period! Equally, the pedestrian feels he has some rights too on the streets, as he presumably pays his taxes. Therefore he expects part of the street, paid for by his tax money to be for his use and enjoyment. The question is, apart from the impulsive

etiquette of respect for human life and safety, which of these parties is to be blamed?



Fig. CMS, Marina, Lagos.

When we cared for the Pedestrian. Looking back in time at our rural areas, it could be said that we have largely been pedestrians in this country until very recently. Except for a few in the areas where horses and camel thrived, most of the rural folks previously moved about on foot. The focus of the rural pedestrian life was (and largely still is) the Village or Town square. Whether the square served for town meetings, weekly markets or merely for socialization, the ambience was one in which the rural pedestrian was totally at peace with his surroundings, quite removed from the threat to his physical safety. Even with the advent of vehicles, the village squares have largely maintained their pedestrian character as vehicles are somewhat restricted to their periphery.

The pedestrian nature of these village or town squares/markets has found some expression perhaps unconsciously in our urban markets. Some of the urban markets by their sheer extent have made it impossible for the automobile to enter all sections. Penetration in these instances are not hindered apparently by conscious exclusionary effort, but by the narrowness of the interconnecting pathways. If they were wider, surely some of the patrons would wish to drive as close as possible to the stalls.

Neglect of Pedestrian Facilities. Given this past, one wonders why these appears to be a consistent neglect of the pedestrian in our urban plans and urban infrastructures. Our urban



Fig 2. Okpara Ave., Enugu.

streets today are largely shaped to the requirements of the automobile and the pedestrian is left to care for himself in the sea of vehicles. Ideally, pedestrian circulation or movement systems are planned as part of the total urban transportation system. Certain physical and spatial elements are planned and designed to encourage or discourage pedestrian flow in appropriate places. These include differentiated pedestrian and vehicular routes at the same or different levels (streets, side-walks, footbridges), physical obstructions, traffic lights etc. More importantly though, the overall quality of the planned environment in terms of safety plays a key role in the pedestrian's decision to walk and the extent to do so. But the reality is that

one would be at a loss to observe these things in any of our urban centres. It is nearly uncommon to find any part of the towns where the pedestrian is effectively catered for with appropriate sidewalks or paths, pedestrian crossings are wholly designated pedestrian zones, be it in the residential, public or business areas, be it in Victoria Island or Tudun Wada!

In Lagos for instance, aside from the foot bridges across Ikorodu Road, Apapa-Oshodi Expressway and a few other roads it is a common sight to see pedestrians dashing across these high speed roads. Living dangerously, you would say! (Fig. 3a). At the same time however, the heavy use made of those existing foot bridges attests to their desirability at every critical pedestrian/vehicular circulation conflict on the expressways. (Fig. 3b). Similarly, in the Garki area of Abuja, without the benefit of a traffic warden, constant conflict and chaos

occur in crossing over to FCDA offices from Festival Road or vice versa. Numerous conflicts of this nature occur repeatedly in many of our cities, be it Kaduna, Jos, Enugu, Benin, Ilorin etc.



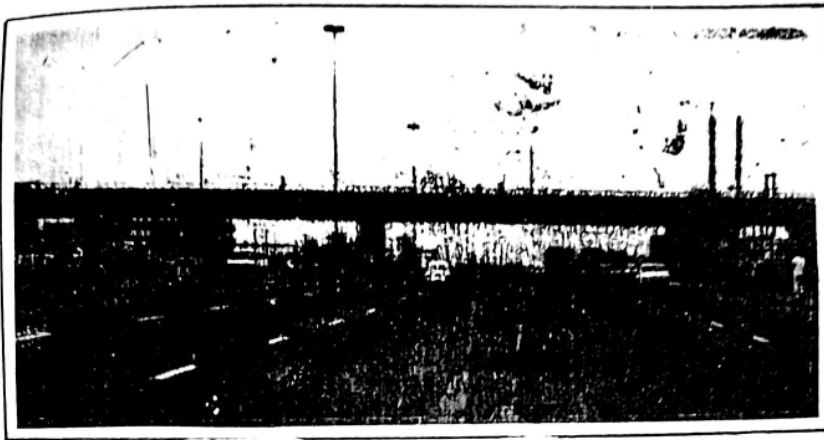


Fig 3, Apapa/Oshodi Expressway, Lagos.

Possibly contributing to this state of affairs is action or inaction best characterized here as 'planning by default'. A legally constituted and effective planning agency, ideally, will not only prescribe the standards for pedestrian facilities in the Building Regulations, but will ensure their adherence through enforcement. In reality, what obtains in the few urban centres with planning authorities or agencies, is that minimal requirements are prescribed but never enforced. Citing Lagos again as an example, in spite of the requirement of 3 metre footpath enshrined in the 1983 Building Regulations of Lagos State, new developments have Festac Town and 1004 Flats, hardly provide for it. In many other cities without such regulations of planning authorities, many areas are laid out with little or no regard for pedestrian circulation. Nevertheless in either situation, characteristically streets or roads are built with or without drainage ditches. The verges if any, consequently taken over by pedestrians are mere left-over spaces, not the result of articulated planning or design action. Quite often, there is intense competition for these spaces as they are hardly converted into on-street parking spaces, or taken over by street traders.

Basis for Concern For Pedestrians.

The issue of pedestrian rights or facilities comes to mind now not because it has not always been there. Rather a number of current issues coalesce to call attention to it.

First, Federal and some State Governments seem to be reverting to the sensible approach to urban housing and industrial development. This approach entails only the provision of site and services, while individuals



Fig 3b. Mile 2 Bus Stop Lagos.

and private organizations build. In such a situation, pedestrian facilities need therefore be considered as part of the total services provided. Secondly, recreation and tourism are gradually creeping into our consciousness as forms of keeping fit as well as relaxation. Walking can be for business, pleasure or exercise. Since it serves all these functions, it ought to be provided for in all development where people will congregate, be that residential, commercial or industrial.

Thirdly, with almost the total elimination of subsidies on petroleum as part of the economic recovery measures, the era of cheap gasoline or petrol is gone. In addition, the prohibitive cost of vehicles renders new vehicles largely unaffordable and old ones very expensive to maintain. Consequently, the higher cost of moving around might compel many to perform certain activities solely on foot. Tagged on to this is the belated, and poorly executed Federal Government programme on mass transportation.

Moving people in mass calls for provision of pedestrian facilities both at points of embarkation or disembarkation from homes or to business centres respectively. With practically no attention in the boom years, these facilities are severely lacking. Lastly, the current Federal Government programme of rural development deals with rural-urban integration. Rural pedestrian lifestyles and patterns could appropriately be integrated into the urban spaces and lifestyles.

Facilities for the Pedestrian. Considering these factors therefore, attention of the relevant organizations need to be drawn to possible actions through which safe pedestrian circula-

tion can be provided in the existing and future urban layouts. Generally, these involve actions geared towards traffic management, landscape design measures, reduction of barriers and conflicts through appropriate crossings on the primary roads or streets. Specifically, these measure largely enforceable by the planning authorities and driver licensing authorities/Police, include:

1. Better street design/Wider Rights of way. Specification of wider 'Rights of Way' for new city streets to accommodate walkways and planting strips, particularly in residential areas and industrial layouts; simultaneous construction of such walkways with streets where site and services are provided.
2. Redevelopment of existing streets to provide walkways over spaces taken up by open gutters, in this case these gutters can be covered and converted to walkways (Fig. 4a, b, c). Where possible, existing streets in business districts and residential areas can

be restructured in terms of vehicular circulation. Converting a two way street into a one-way where possible, can narrow the roadway width and consequently increase the verges. The resultant verges can be wholly devoted to pedestrian circulation or mutually shared with vehicular parking. (Fig. 5).

3. Designation of pedestrian zones:
Designation and development of

pedestrian zones in residential neighbourhoods, markets and business areas e.g. squares, plaza etc., designation of cross-walks or zebra crossing at intersections and appropriate places, such facilities as traffic lights, stop signs at intersections help define rights of way. Unequivocal specification of who yields way at intersection and roundabouts. Signs such as 'STOP' or 'YIELD'

effectively convey this.

4. More foot bridges and restraints in streets or road medians, The provision of more pedestrian bridges and crossing points at critical points on the expressways and busy streets, but stops and schools. Some attempt to meet this demand has recently been made in Lagos particularly on Apapa expressway. The solu-

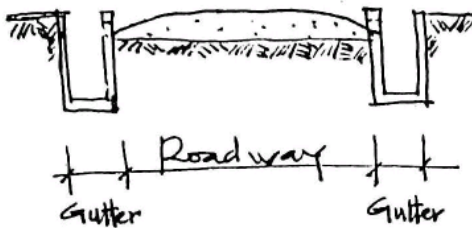


FIG. 4a Existing Roadway Section

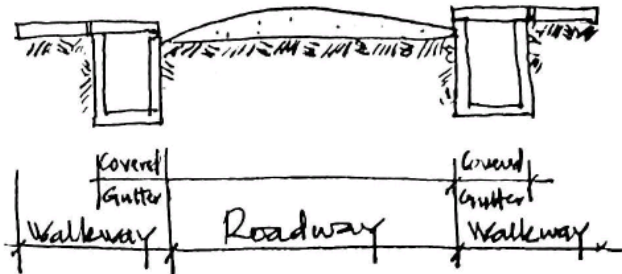


FIG. 4b Redeveloped Section

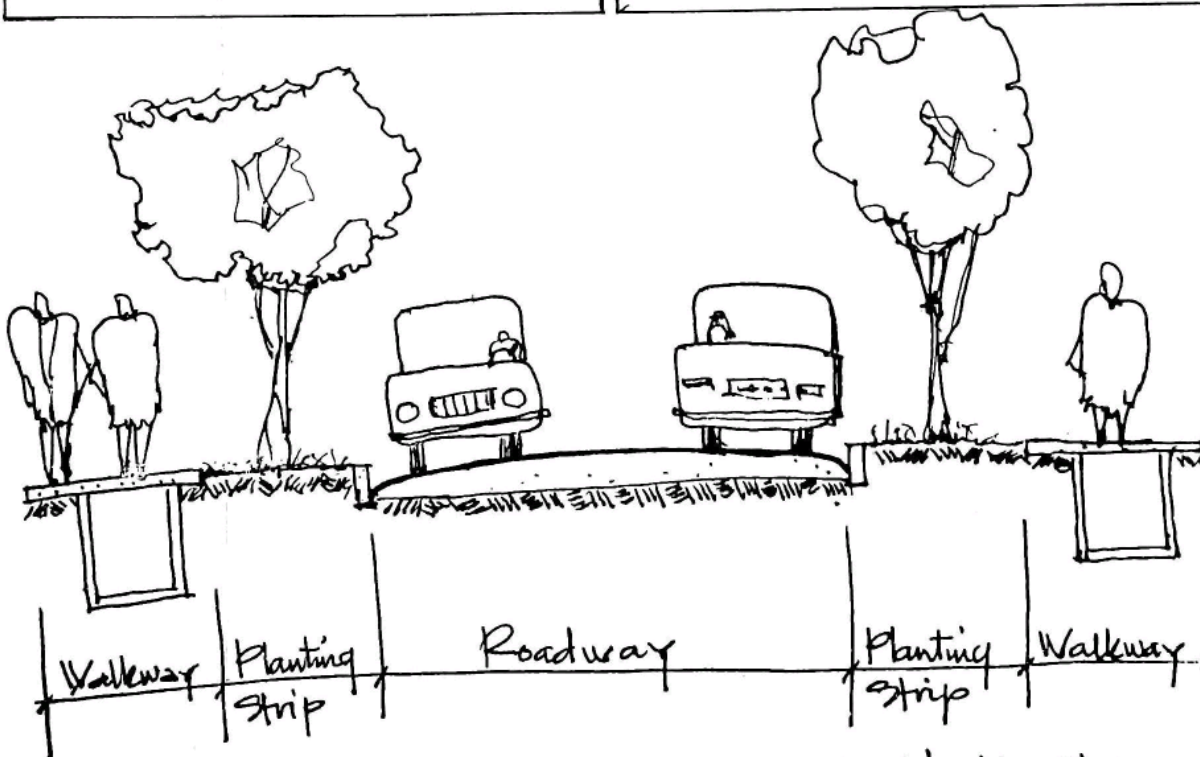
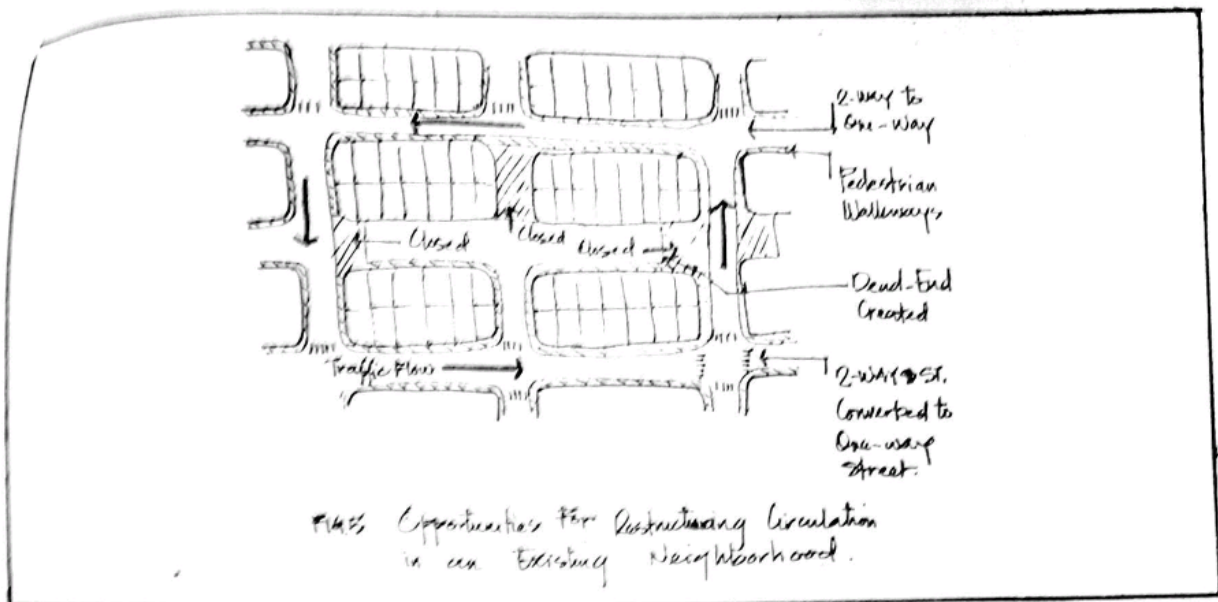


FIG. 4c. Redeveloped Section Accommodating Planting Strips



ions so far appear inadequate. It is instructive however, to caution from observation (Fig. 6) that mere provision of foot bridges is not a complete solution to persisting attempts to run across busy streets. People still dash across expressways even under foot bridges! From evidence, continuous physical restraints or barriers in the expressway medians when coupled with pedestrian bridges effectively curtail pedestrian crossing. Precast concrete medians of about 1.5m high are commonly in use to separate opposing moving lanes. These concrete barriers alone have not effectively restrained pedestrians as they are easily scaled over or gaps within them utilized for thoroughfare. A continuous or unbroken line of wire fence mounted on metal poles inserted into the precast concrete separators have been found to effectively check pedestrians forays across the high speed roads or streets. The obvious short-coming of this is its not-so-pleasing visual quality. It is gratifying to note that these metallic restraints have recently been put in place in many expressways in Lagos since the conception of this essay.

On avenues or boulevards, a raised planted median of a minimum of 1.0m high and 1.2m wide between opposing moving lanes can be a visually pleasing alternative restricting device. Where possible in a median with a minimum of 1.5m wide, a planted earth berm or mound of the same

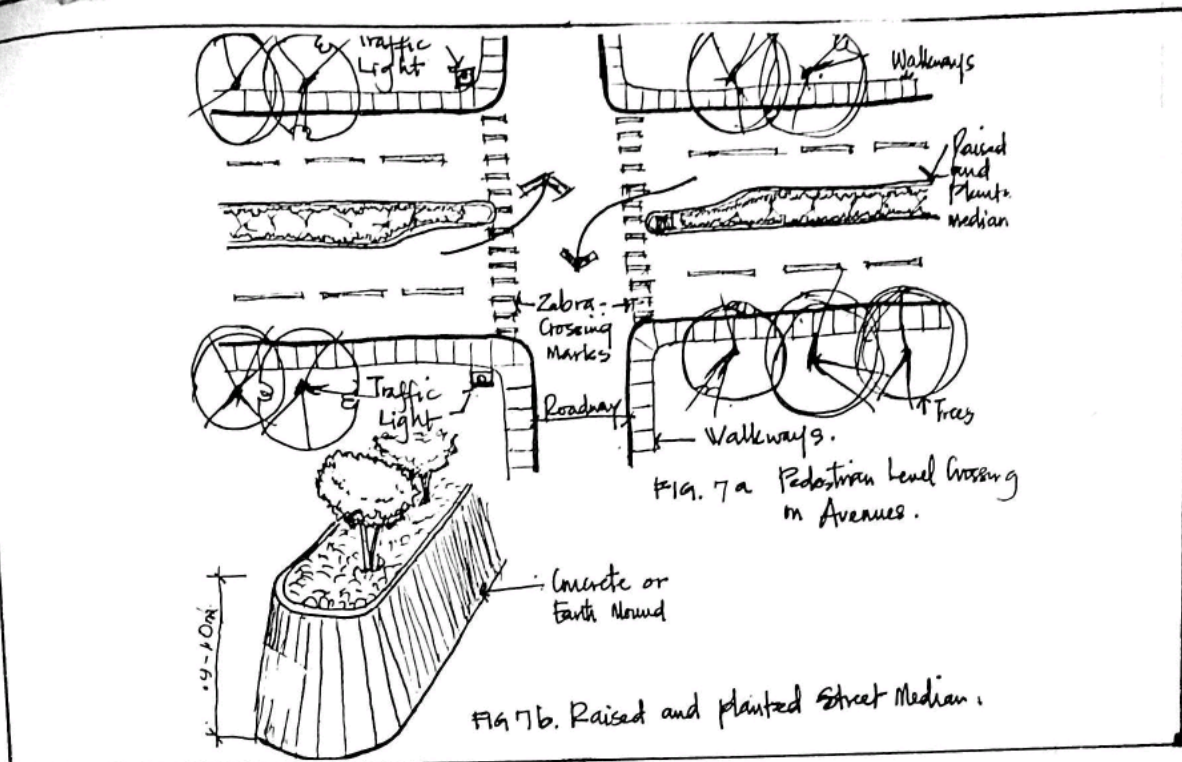
height will achieve the same effect. In these cases, the height and width of the median will make it only possible for pedestrians to cross the road only at selected catchment areas (Fig 7a, b). The main drawback of these alternatives in their application is that wider 'Rights of Way' (R.O.W) or more space for the roadway will be required. Consequently, implementing them in existing multi-lane streets or roads would translate into higher costs for acquisition of wider R.O.W.

Education and pedestrian data. There is need above all for proper training of drivers and education of pedestrians alike on road and street manners. Drivers need to be educated that in

addition to the supposed natural respect for human life and safety, pedestrians (which include themselves when not driving) have certain respectable rights on our roads and city streets. Similarly, pedestrians need to be educated on proper street behavior which minimizes threat to their safety. Towards accomplishing these, the lack of and the extreme need for more concrete data on urban behaviour and pedestrian behaviour from our sociologists, psychologists, urban/environmental designers can hardly be over-emphasized. This data will be invaluable both in improving the few existing pedestrian facilities and providing new ones.



Fig. 6 Pedestrian Bridge & bus stop, CMS, Marina



Conclusion. Pedestrian circulation forms an important linkage in relating various activities in one area of town or in the entire town. In fact, it may be a major structuring element where the pedestrian is accorded primary importance in laying out facilities or urban layouts. Apart from improving the aesthetic quality of our urban environments, the real purpose of providing pedestrian circulation is that of improvement of traffic flow, safety and quality of life. As Frederick Law Olmstead, a famous American Landscape Architect once said "the value of defined pedestrian circulation routes lies not so much in greater safety to pedestrians and still less in the freedom from distraction and greater comfort for people who come to the town for its enjoyment". (Zolony, 1976). We cannot remain eternally cooped up on our homes and offices in the urban and sub-urban areas. We need and have to walk around sometimes! But this must be without undue threat to our personal safety and comfort.

The key to achieving safe and pleasurable pedestrian circulation and facilities in our urban areas lies first in our recognition that everyone is a pedestrian. As such, it is incumbent on

us to respect and provide for pedestrian rights and safety at all times. Secondly, enunciated requirements in the Building Codes are hardly effective in themselves, as many situations in this country have proven. Rather strict and unbiased enforcement of such requirements is the real mechanism for nurturing this. Upon these actions rest that someday the pedestrian will

be accorded his pride of place in our future urban development, redevelopment or provision of urban infrastructure.

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