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## Renewal of central Beirut: The BCD Master Plan and the shaping of architectural form

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In my presentation I will touch very briefly on some of the main features and intentions behind Beirut's city center Master Plan, then concentrate on the building envelope and design guidelines that are intended to shape architectural form. I will point out some of the benefits and some of the difficulties in administering these design controls and illustrate the outcome in a selection of projects. You must judge for yourselves whether we are on the right track, and whether the ongoing work in the city center is beginning to make a contribution to city-making and to a new, postwar architectural identity for Lebanon.

want to clarify some common misconceptions about the city center Master Plan. First, it is not 'SOLIDERE's plan'. It was prepared by Dar Al Handasah before the foundation of SOLIDERE – in fact, one of the pre-requisites for the company's formation was the existence of a government-approved Master Plan that, essentially, protects the public interest. Secondly, the plan is very different from the earlier 'Henri Edde plan' and its later adaptation, approved by the Council of Ministers in 1992, which it replaced, both as Master Plan and Detailed Plan for city center renewal.

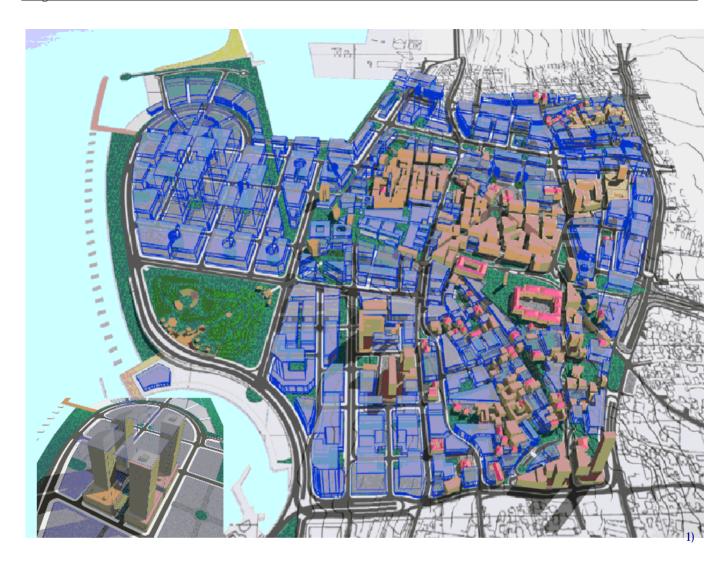
First – some of the general characteristics of the city center plan. It is not a conventional, fixed Master Plan. For instance it contains no land use plan or predetermined parcelization, but remains intentionally flexible and market-oriented, encouraging mixed-use through the multiple choices of developers. The expectation is that these choices can replicate an organic process of city making over a relatively short time span – say 25

years.

The public domain is, on the other hand, precisely determined – although more open to future definition in later phases – and comprises half the total land area, in marked contrast to the rest of Beirut. A regular program of Master Plan updates was anticipated, to take account of archaeological discoveries, as-built infrastructure and the ongoing detailed planning of separate phases. This process is, at the moment, somewhat impeded by the political and economic climate of the

The intentions of the plan are more ambitious than simply the renewal of Beirut's Central Business District. They aim to create an active, residential and mixed-use city core that is both the living heart of the capital, its major visitor destination, historic and cultural focus as well as the focus of the national economy. The final aim is for this creation to become Lebanon's flagship opportunity that can enable Beirut to re-establish its international role within the region. The plan's social objectives are also ambitious - to re-create the city's meeting point and busy neutral ground that somehow embodies the Levantine pluralist ideal, symbolizing a common heritage and identity.

Turning now to the more specific aspects that affect urban and architectural form. As I have indicated, our Master Plan is not a traditional, 2-dimensional land-use plan. In fact it is a 3-dimensional urban design plan, based on, if you like, *picturesque* principles of building massing (Fig.1). These principles aim to balance development opportunities with the



protection of sea and mountain views, the preservation and creation of a traditional street form, the preservation of valuable buildings (Almost 300 as opposed to 120 proposed to be retained in earlier *tabula rasa* plans for the city center), integration of the archaeological heritage and the creation of a multiplicity of place-making opportunities to which developers and their architects can respond.

In your visit to the city center this afternoon you will be especially aware of the extensive – and substantially complete – restoration program, altogether 291 buildings were salvaged. They occupy more than 35% of developable land in the original city center (i.e. excluding the reclaimed area), and will exert a significant impact on adjacent new development. I would like now to dwell briefly on 3 strategies behind the Master Plan: first,

the notion of transferred development rights; secondly, the making of streets; and thirdly, the idea of contextual design. The BCD Master Plan dispensed with the coefficients of exploitation (plot ratios) that determine development rights elsewhere in Beirut and throughout Lebanon. These sacrosanct rights have led to overdensification in the city, over-development in mountain and rural areas and the ongoing destruction of the architectural heritage. By the time the dust has settled it looks as though the majority of Beirut's heritage will be concentrated in the city center - it is here that you will find protected both the city's architectural and archaeological memory and identity. First, then, the city center Master Plan incorporates the transfer of development rights away from areas where valued buildings have been preserved, where

Fig 1: Master Plan – a 3-dimensional urban design plan that defines street form, building envelopes or control surfaces and maximum development heights. Specific areas are planned for low density, other appropriate areas for high density. Buildings must be designed to fit within defined envelope limits.

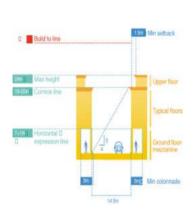


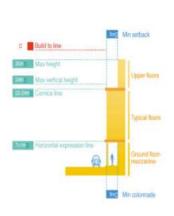
view corridors are protected and where a traditional building form – such as in the Souks quarter – is called for. Compensating high-rise zones were specified in the plan, at locations where these have positive townscape meaning, creating special design and development opportunities of contemporary urban scale for the city.

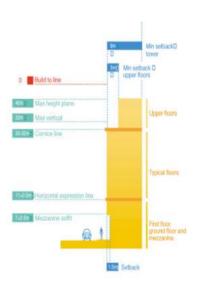
Secondly, the plan is unashamedly *street-based*, moving away from the Modernist tradition of individual, object buildings (for example, the podium-and-tower of the Starco complex in central Beirut), to the more traditional and recently re-discovered typology of the street. In this typology, individual buildings are seen as combining to form the broader urban context, each contributing to a greater whole, that of the public space of the street.

The strategy stemmed first, from a belief in the street as the tried-and-tested arena for city making; secondly, from observation of exceptional examples in the beaux-arts streets of Beirut's surviving historic core (Fig.2); and finally, from the knowledge that a traditional street pattern offers and extremely efficient distribution of floorspace. The corollary of the street is perimeter block development - the distribution of built form around the edges of city blocks. The move, in the BCD Master Plan, towards this form of development enabled the number of highrise buildings to be more than halved in comparison with previous postwar plans for the city center, while achieving the same target floorspace. The strategy, however, requires a disciplined approach by individual architects. With the exception of identified key sites, their designs must

Fig 2: "The street as the tried-and-tested arena for city-making'. Rue Foch is one of the key beaux-arts streets in the Conservation Area from which specific features were derived for the Street-wall controls that apply to new city center development.







contribute to the street as a whole, rather than proclaim themselves as individual monuments to modernism, post-modernism or even to the architects themselves.

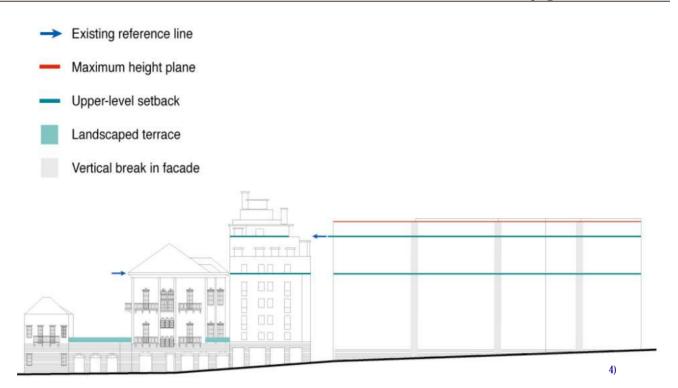
The techniques used in the Master Plan to achieve built-forms that combine to create streets, with their sense of enclosure, pedestrian scale and continuity, are those of the Street-wall Control and various forms of build-to-line and mandated setback. These derive from an analysis of the dimensional rules behind the design of buildings on the colonnaded Maarad Street - modeled in the 20s on Paris' Rue de Rivoli - and Foch Street, with its distinctive 'jetty' form. A family of Streetwall Controls was developed. These are applied along all main streets and in particular to those that connect to the historic core, stepping up in scale as they pass through new development areas beyond the core and in the new waterfront district (Fig.3). Greater freedom is permitted in the two 'special residential policy areas' of the city center. Through the application of these Street-wall Controls, the scale and form of the street is maintained, with high-rise elements set back from the street façade. Such envelope controls are relatively sophisticated compared with planning regimes that exist elsewhere in Beirut. These tend to encourage the developer to arbitrarily set his building

back from the street façade in order to gain valuable height and floorspace, thereby destroying the traditional street form and leaving undefined ground-level space, usually dedicated to car parking.

Thirdly, the Master Plan implies, and SOLIDERE is attempting to encourage, what I have called a *contextual* approach to design. For example, new development in areas where existing buildings have been preserved, should be in the form of *infill development* in scale and in keeping with the retained fabric (the reason why development rights were transferred out of the zone in the first place). Design guidelines were devised for such areas in order to achieve this objective. I will illustrate this with a few of the envelope controls applied in Saifi urban village (Fig.4).

But the *contextual* approach has wider application. Designs are encouraged to respond to specific place-making opportunities. Areas where a particular architectural response is called for are indicated on the Master Plan. I will return to the broader implications of *contextualism* at the end of my talk. Now, though, I need to show you an example of a Sector Plan, the key component of the regulatory framework that sets the limits for built form (Fig.5).

Fig 3: Street-wall family – this shows an array of some of the Street-wall controls that are applied in the city center, to encourage both the reinstatement of existing streets and the continuity of new streets and boulevards linked to Beirut's historic core.



This Sector Plan covers the Martyrs' Square Axis (Sector H) and Saifi Village (Sector I). Here you can see all the main features of 3-D massing control required by the Master Plan. For example, maximum building heights vary between 20m, adjacent to heritage buildings in Saifi, to 120m (30 Storeys) at the NE Gateway site, where minimum setbacks for towers are also shown. (Note that amendments are called for in this area in response to major archaeological discoveries).

The Sector Plan indicates mandated buildto-lines and Street-wall references, where these more specific façade controls are applied on main streets and public spaces. We have experienced some difficulties with application of Street-wall regulations on sloping sites - also the requirements for setbacks to towers - but have benefited from refinements made in the Hotel District study (Koetter Kim). The refinements of 'continuous' and 'discontinuous' build-tolines - the latter where breaks are allowed - have been difficult to enforce and have led to differences in interpretation by the Municipality. Another area of difficulty has been in the new blocks immediately adjacent to the historic core, where parcels

developed in the 1930s have 100% site coverage. The Master Plan intent was for these new blocks to be designed to context, with similar 100% site coverage – Street-wall Controls were, therefore, applied to all four street frontages. Unfortunately, however, the general regulations require 70% site coverage. The incompatibility of these two requirements has led to an impasse that is not yet resolved with the Municipality.

Required 'special building features' are also shown, often on key corner sites. Limited additional height above the 'maximum height plane' is permitted for architectural features in these locations. I believe that, after a rather dull start, these are beginning to encourage some creative design responses.

The plan shows required pedestrian crossblock links. In Saifi, you will see that they form a continuous network of pathways and public spaces that was further enhanced in the detailed structural plan. In my view this kind of pedestrian permeability is essential for successful downtown revitalization, but we have run into difficulties with national regulations.

Fig 4: Saifi envelope controls – shows requirements for continuity of comice, parapet and roof lines as well as vertical breaks in facades, all designed to achieve the contextual infill of new development in keeping with the scale and massing of adjacent preserved buildings.



Fig 5: The Sector Plan defines the 'main features of 3dimensional massing control required by the Master Plan': maximum building heights, Street-wall controls, mandated setbacks, other façade and building envelope regulations and plot access controls

The Lebanese Share Holding Company (Solidere) in charge of the reconstruction of the historic city center of Beirut is shaping its program along an ambitious Master plan based on a speculative vision of a city that is struggling to regain its competitive location in the global/regional economy. This project discloses itself through a binary reading of the city and a historicism in the urban design strategy that strives to build the city center market value on the basis of its past character

and a state-of-the-art financial district. Solidere's intentions are manifested in the form of well-staged aphorisms, images, rationalized infrastructure, and historic preservation scheme that exclude and contrast with the remaining city. This paper, on the one hand, offers a critical review of these images, plans, and the liminal spaces that they produce based on conceptual themes of perception and representation as a visual arrangement/control of knowledge. On the other hand, positioned upon the ideological representation of the city center floats an informal and transient city of culture and public space whose tensions criticize the formal scheme of Solidere. Building on the actual dynamics of the city center, the paper sheds light on the problematic of

Solidere's formal strategies while arguing for a new and different mechanism in mediating a "public space" that helps the reconciliation and healing process of the wartom society.

Excessive 5m rights-of-way are required and, in Lebanon, there is apparently no such thing as a covered pedestrian passage with privately owned floorspace above. City center renewal will suffer unless these sorts of anomalies are resolved and some way can be found to implement the spirit of the Master Plan.

The Sector Plan indicated controls vehicular access into blocks or parcels. These have proved to be a little too sophisticated and could be simplified. Undefined open space, such as those indicated on the plan, has also led to difficulties of interpretation - is it 'public' or 'private'? In such cases the Master Plan specifically did not prescribe 'public open space', stating that such spaces could equally well be provided in the private domain, with guaranteed rights of public access. The BCD Regulations permit such spaces to be provided as covered atrium spaces within buildings. Such a situation was envisaged for the high-density key site at the northeastern end of the Martyrs' Square Axis.

I have highlighted some of the difficulties we have been experiencing over interpretation of the Master Plan. Such problems. Many of them minor, have had the effect of stalling development for more than a year. While there are signs of light at the end of the tunnel, I would suggest that there is a clear need for some sort of Committee, presumably chaired by the General Directorate of Urbanism, which can arbitrate over such discrepancies and matters of interpretation on a regular basis. Such a solution would have prevented the current hold-up of development throughout the city center pending the issue of a new Master Plan amendment by Council of Ministers decree.

I would now like to give you an idea of the variety of new development projects ongoing or already completed in the city center. They range from commercial offices, bank headquarters, government buildings and UN House, the Souks shopping and entertainment complex, embassies, a museum, a conference and exhibition center, a health clinic, a variety of housing projects and several hotels. (Some 30 projects were illustrated in the presentation, 10 of which were complete, 12 on site or in advanced design stage and the remainder at the feasibility stage).

To conclude. I want to return to the idea of contextualism and its broader implications. Beirut has a strong, eclectic and indigenous architectural tradition that combines cultural influences from East and West. All have been valid in Beirut in the past, and should remain so for its future. This tradition needs to be rediscovered and reinforced, especially during this postwar period of search for renewed identity. Ongoing work in the city center can help the country define a new, contemporary architectural identity that is rooted in Lebanon's own culture and climate, an identity that can counteract the forces of placeless globalization that have been re-shaping cities around the world over the past half century.

In SOLIDERE, we and the developers to whom we sell land work with both local and international architects, sometimes to the dismay of the Order of Engineers and Architects, whose interests are to protect the local constituency. This is understandable, but we believe that you cannot renew the heart of a capital city without applying world-class, international design talent. If Berlin can do it, so should Beirut. We very much want the architecture of the city's New Age to be worthy of Beirut's future, re-emerging role as a world city of the region. Much of its needs are to be an architecture of the street, that may seem modest, but which can help stitch together and re-connect the damaged city. But there are also many opportunity sites, especially on the future New Waterfront District that will call for flair, exuberance and world class design skill. In either case, however, the architecture needs to be an architecture of place and context, somehow rooted in the rich, distinctive identity of Beirut, and not in the freeways of Dallas or in the extravaganzas – both eastern and western – of the Gulf.