

Melrose Arch – Phase 1

	Areas
‘Corporate Offices’ – (Up to 180 000 sq ft in one building)	399 500 sq ft
‘Multi-Use Offices’ – (suites of 1 000 sq ft upwards in small buildings with direct access to lift lobby and street address i.e. no long corridors)	150 400 sq ft
Service-type Retail	28 100 sq ft
Restaurants	41 900 sq ft
Entertainment (Theatre)	13 800 sq ft
Health Club	40 500 sq ft
Business Hotel & Conference Facility	65 000 sq ft
Creche	4 500 sq ft
Post Office	1 000 sq ft
Residential Penthouses (over offices) – 11 No.	43 500 sq ft
Residential Apartments – 33 No.	80 000 sq ftj

Melrose Arch

- Location: Johannesburg, South Africa
- Size: 18 Hectares (135-190 residential units, 2,820 ,000 sq ft commercial planned)
- Status: Phase I complete (Construction began in 1998)
- Summary:

The project is a private initiative by a Pension Fund as a long-term property investment. Initially conceived in the early 1990s as a shopping centre/business park, the concept has been enriched by embracing the principles of New Urbanism to create a neighbourhood development.

Phase I, now complete, was consciously developed as a 'microcosm of the whole' incorporating as many elements of mixed use as possible – including residential, offices, retail, restaurants, theatre, a hotel etc. These uses are incorporated in a plan that consists of eleven 4 storey perimeter-block buildings arranged around interconnected pedestrian-orientated streets, including the first lengths of a High Street, a completed 'boulevard' and two public squares. In order to achieve the required density of development a 'Superbasement' runs under all this accommodating 2619 parking spaces. The urban form is traditional while the architecture is modern. Melrose Arch is a commercial success commanding the highest rents in South Africa.



South Africa. Colonial influence



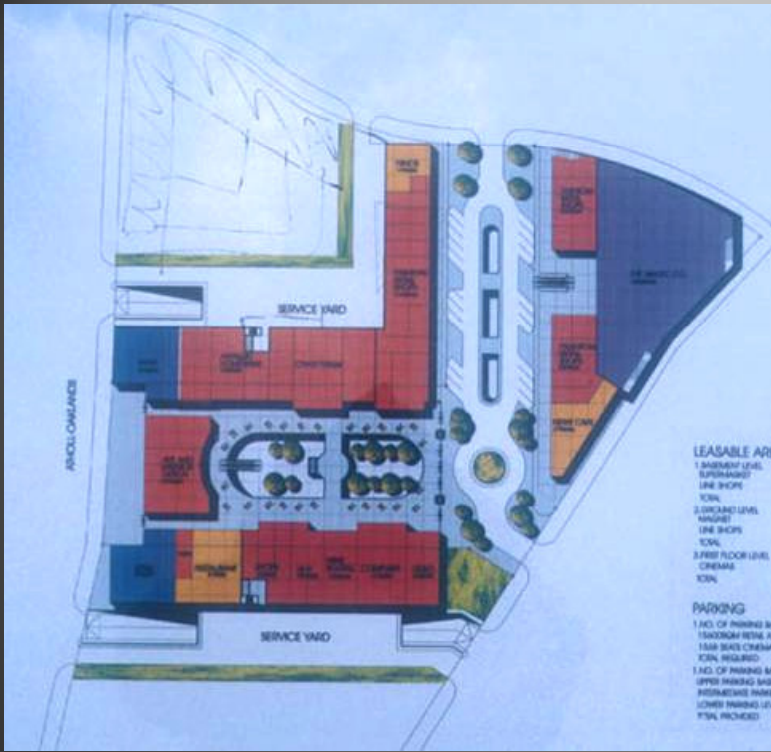
Johannesburg today







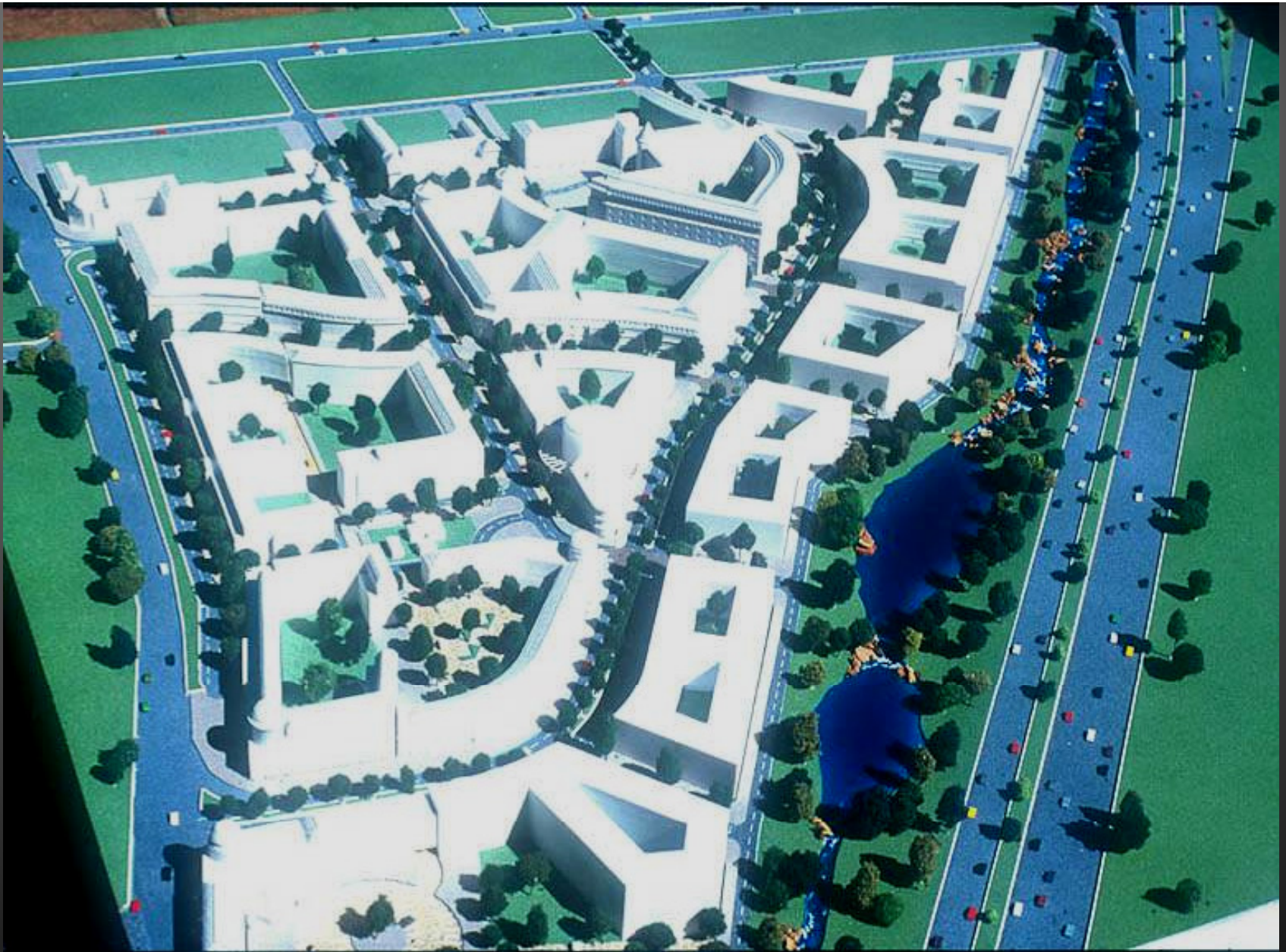
Melrose Arch. Adjacent Office Park





Melrose Arch Phase One





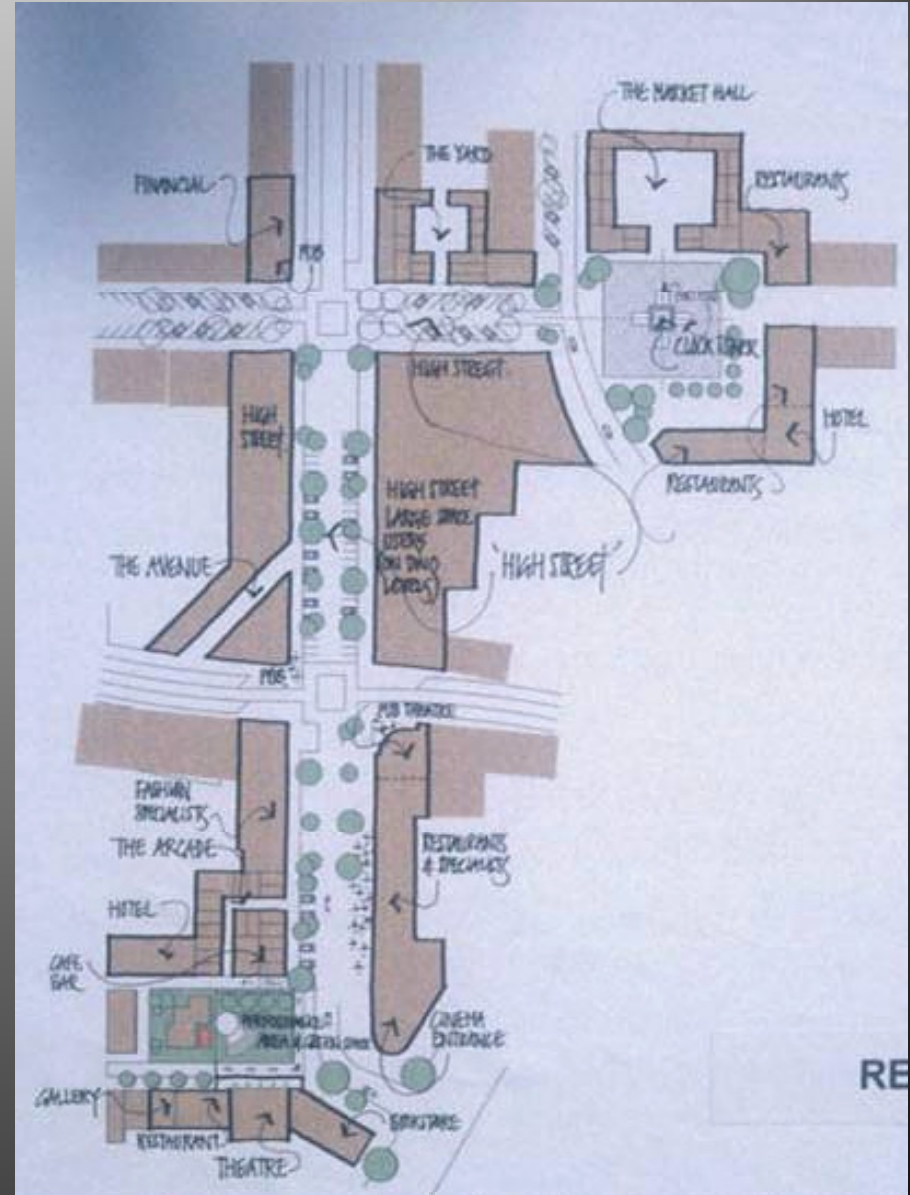
Beware Misinterpretation







Main Street







Melrose Arch.
Apartments over offices over shops

Acreage:	+ 45 acres
Number of Residential Units:	9 implemented; 33 under construction 135-190 planned
Commercial Square Footage:	Phase 1: - 731 980 sq ft Complete all phases: - 2 820 000 sq ft
Industrial Square Footage:	0
Parks/Open Space:	- 2 Squares/Pocket Park inside development area: 2 acres - Public Open Space along Watercourse adjacent to development area: 9 acres
Civic Uses:	0
Project Cost (optional):	Phase 1: - US: \$100 million Complete all phases: - \$400 million (final)
Location of project:	Johannesburg, South Africa

A critical mass to demonstrate the first phase of mixed-use town

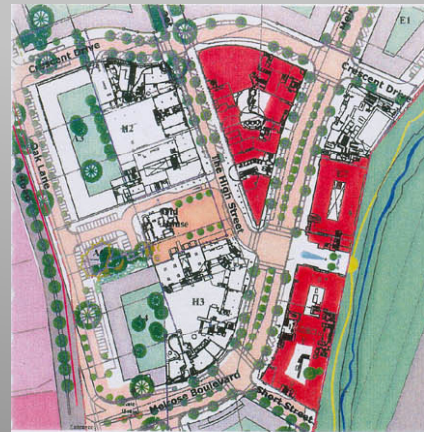


1st Phase

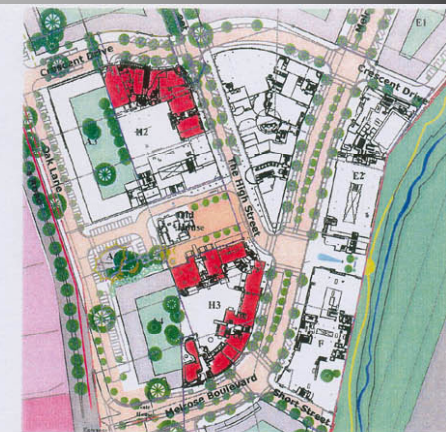
11 buildings put out to invited competition, with the code



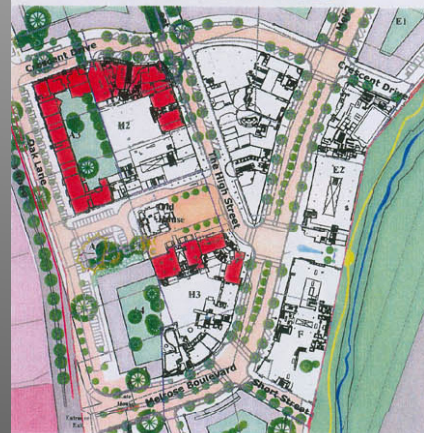
Melrose Arch – Phase 1 Building Use



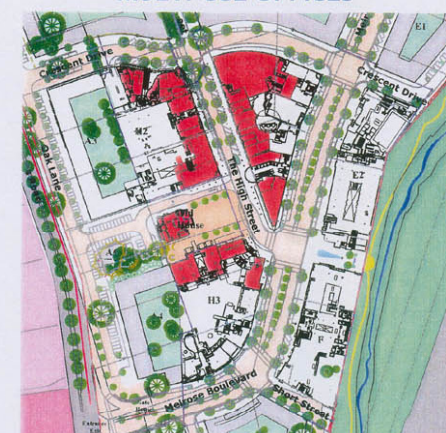
CORPORATE OFFICES



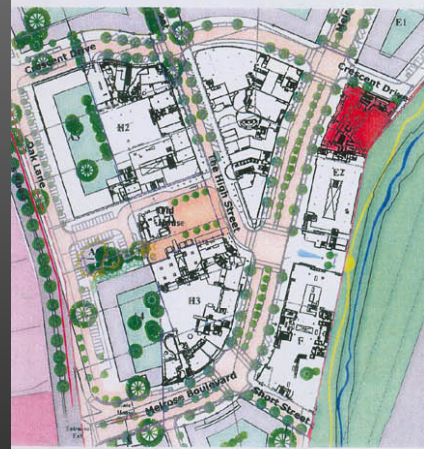
MULTI-USE OFFICES



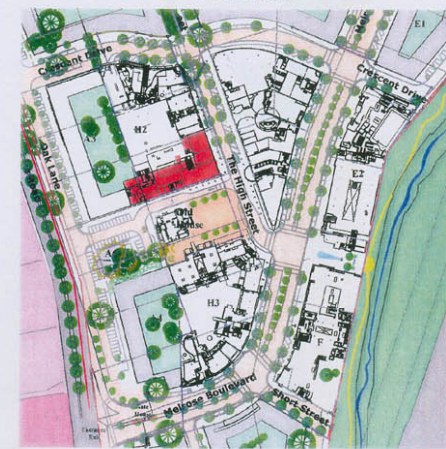
RESIDENTIAL



RETAIL



GYM

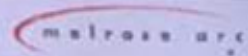


HOTEL

PHASE 1 USAGE



Perimeter Blocks - Defining and Creating a Public Domain



PAVILION BUILDINGS

PAVILION BUILDINGS vs PERIMETER BLOCKS

Pavilion buildings sit in indeterminate space, retreating from the public realm of the interconnected streets.



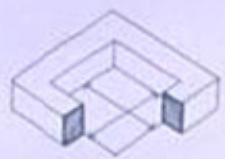
PERIMETER BLOCKS

Perimeter Blocks *define* the public realm, only backing away from the street system to form focal nodes. This creates continuity of the streetscape which improves cohesiveness and assists the user in terms of legibility and orientation.

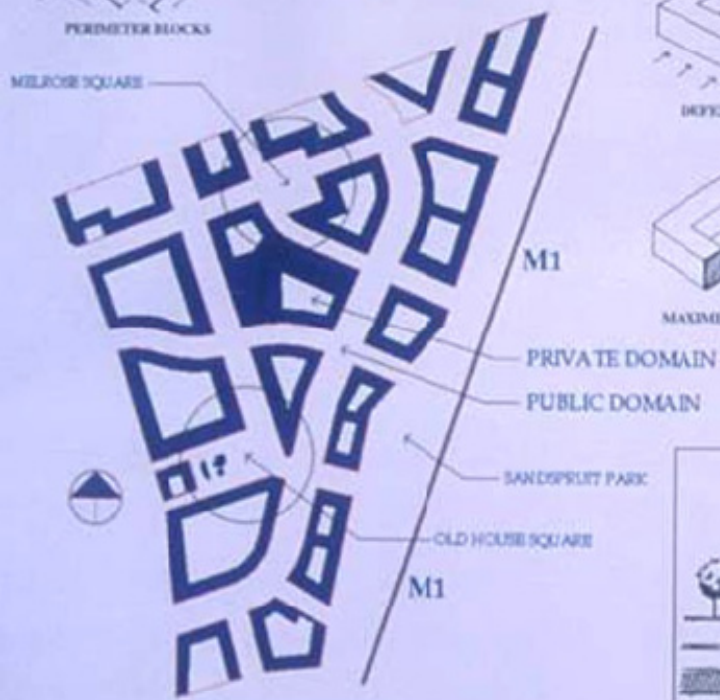
Perimeter blocks also *define* a private realm that offers security, privacy and perceptual softness. The integrity of the 'walls' of the Perimeter Block assist in this regard.



DEFENSIBLE SPACE

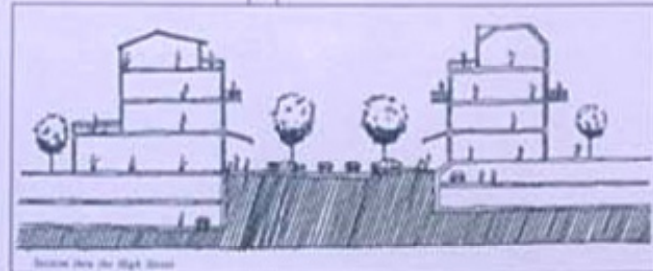
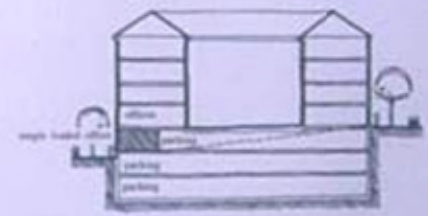
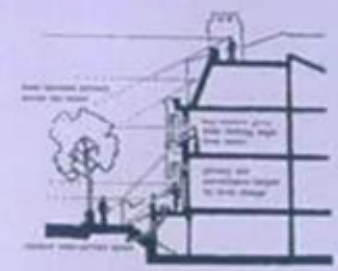


MAXIMISED DIMENSIONS

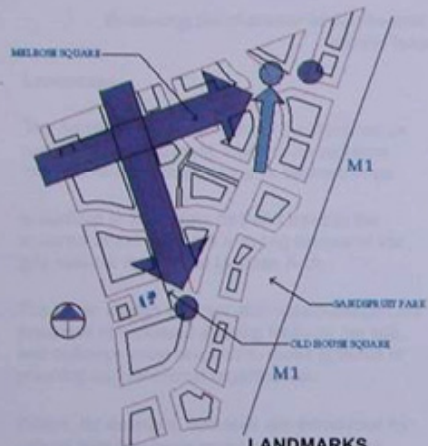


Urban Design Rationale

1. Streets are vibrant when they are interesting and safe. They are safer when people inside can watch over those outside. They are more interesting when those outside feel some contact with people in adjacent buildings.
2. Locating buildings close to the pavement contributes to successfully achieving both the interest and the safety.
3. Floor levels are adjusted to allow privacy to office and residential uses.
4. The perimeter block gives a clear distinction between public and private space. Wasteful, ambiguous space does not exist.
5. The vast majority of service functions are behind or below the buildings.
6. On the rare occasion when levels dictate that basement parking faces the public street, single loaded offices are used to mask the presence of parking.
7. A vital component of the public realm is active pavements. Where appropriate, they are up to 5m wide, allowing activities to move out from the building if desired.



Strategic Locations - Enhancing Legibility



LANDMARKS



Significant Corners



GATEWAYS

Legibility

Basic levels of legibility have been established by the pattern of streets, the concentration of activity on the High Street, and the two Squares.

Certain specific locations, however, demand a more detailed response at an architectural level.

Interest and intrigue are also enhanced by the use of significant elements that may form part of specific buildings.

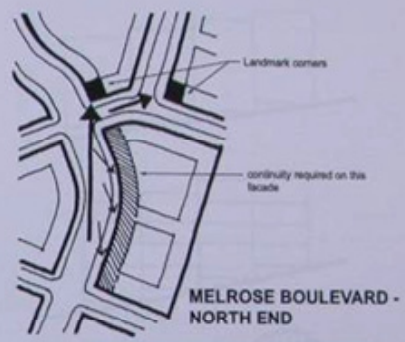
Landmarks & Gateways

1. Where a portion of a Building Site is identified as a Landmark the architect must create an element that responds to this location and significance without detracting from the overall requirement of the building location.
2. Where a Building Site is identified as part of a Gateway the architect must acknowledge both the significance of the Gateway and the existence (if any) of other buildings relating to that Gateway.

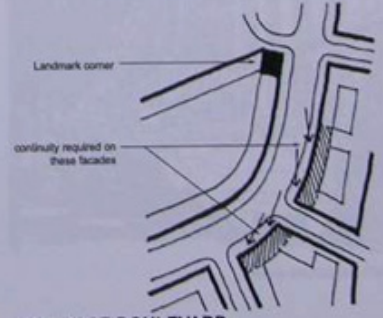
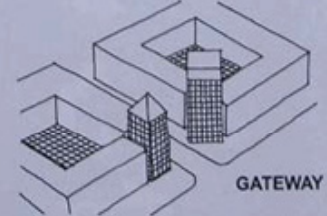
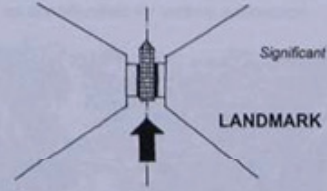
Significant Facades

Certain facades have an important topological role to play, and must therefore display continuity of architectural treatment across individual buildings.

Specific examples of this occur in Melrose Boulevard, which is a major through-route for the Precinct and thus requires specific treatment on certain facades to direct the view and close off the extended vista.



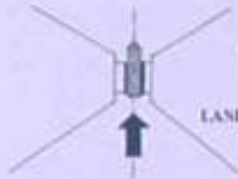
MELROSE BOULEVARD - NORTH END



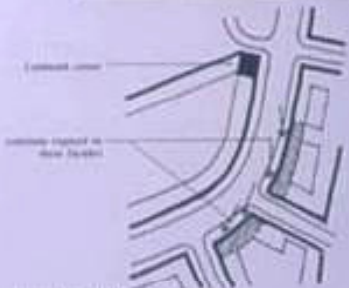
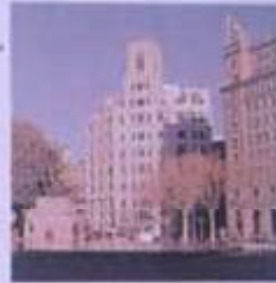
MELROSE BOULEVARD - SOUTH END

Enhancing Legibility

melrose arch



Significant Corners - Barometric



BUILDING CONTINUITY AROUND CORNER

MELROSE BOULEVARD - SOUTH END





"... lively, diverse, intense cities contain the seeds of their own regeneration, with energy to carry over for problems and needs outside themselves."

Jane Jacobs, *The Death & Life of Great American Cities*

Traditionally buildings in cities changed use and form whilst the public realm stayed constant and coherent. That combination of efficiency and flexibility can be created again without discouraging or delaying investment in the public spaces.

The fine grained grid gives many options to phase and to manage construction access.

The dimensions of the blocks offer many alternatives whilst consistently creating public streets.

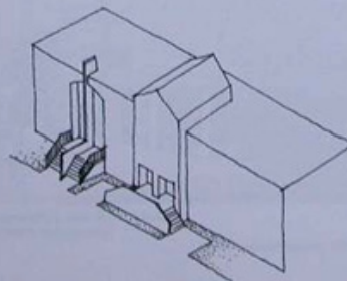
The basic footprints allow the urban design framework to remain, whilst uses respond to changing market demands.

The object is to promote the creation of robustness in building design - to develop buildings that respond to a current brief without compromising future potential.

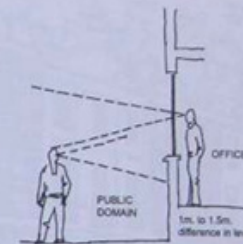
1. Structural flexibility is required, to accommodate varying space needs and loadings.
2. Adaptability in facade element design is necessary - entrances, fenestration, building signage, etc.
3. Ground floor areas adjoining public space (the Public Domain) must be occupied by 'active' rather than 'passive' uses.
4. 'Hard' zones (cores and services) must be located in plan so as not to restrict alternative uses of 'soft' (functional) areas.
5. Multiple entrances must be created to encourage interaction between private and public areas, and to improve planning adaptability.
6. Shallow plans must be built to maximise the use of natural lighting.



ACCOMMODATING CHANGE



7. In locations where the privacy of ground floor activities should be preserved (apartment buildings for example), a level change between pavement and ground floor should be introduced. This serves the double function of reducing overlooking from outside while improving outlook from inside.
8. Balconies on the public facades of all building types are required, as a means of allowing the Private Domain to interact with public areas and to enhance surveillance of the Public Domain.
9. Ground floor apartments and offices should be entered directly from the Public Domain where possible, in order to enliven the building edge.



Active street front, Paris



ACTIVE EDGES



Infill Housing, North Kensington, London



- Typologies

Building Depth

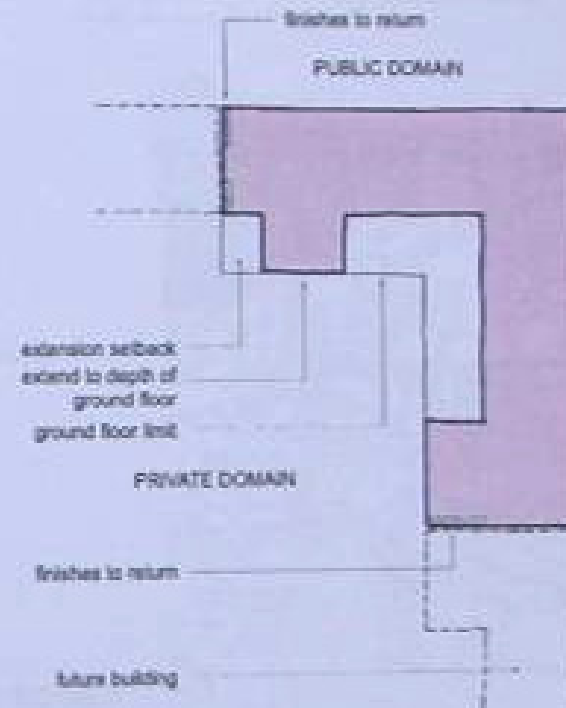
Preferred building depths are indicated in the Table. The intent in urban design terms is to maximise the dimensions of the Private Domains.

The dimensions given are measured to the inner face of external walls.

Extensions into the Private Domain are permitted, provided they fall within the following limits:

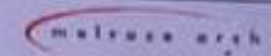
1. Depth of extension may not exceed depth of ground floor in the case of ground floor retail zonings, or 10m. elsewhere.
2. If an extension has openings facing across a boundary then a setback of 7.5m. is prescribed.
3. If an extension occurs at the boundary adjacent to a future building, the finishing of the facade must return the depth of the extension along the shared boundary.

BUILDING FUNCTION	BUILDING DEPTH
Offices	12.0m.
Retail	17.0m.
Residential	10.0m.
Hotel	18.0m.
Entertainment	varies





Building Design - Facades



Introduction

A facade contributes to urban amenity to the extent that it provides opportunities for interaction between public and private realms.

Facades that are made up of a number of individual elements enhance qualities of richness and life, and assist with generating a separate identity for the building.

At the same time the facade must respect its location as a component of the urban fabric, adding to the continuity of the street edge and cohesiveness of the whole.



Covent Garden, London



Copenhagen, Historic Zone



Vertical signposts, new & old housing, Upper District, Copenhagen

Gloucester Green, Oxford

Components of Facade Design

Vertical building expression

- Facade broken into a number of small elements
- Vertical expression in window form

Projecting canopies

- Shop canopies project beyond build-to-line. For Malmoe Arch canopies may project to pavement edge.

Active building fronts

- Enhancing the levels of activity in the Public Domain
- Making buildings more robust

Continuity to edge in Public Domain

- Continuity of facade along build-to-line
- Continuity of street line

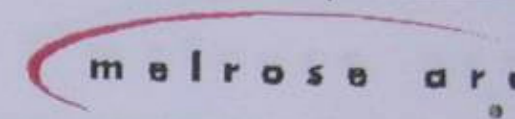


High Street, Oxford



Streets in Historic Parts, Copenhagen

- Facades



Components of Facade Design

Vertical building expression

- Facade broken into a number of small elements
- Vertical expression in window form

Projecting canopies

- Shop canopies project beyond build-to line. For Melrose Arch canopies may project to pavement edge.

Active building fronts

- Enhancing the levels of activity in the Public Domain
- Making buildings more robust

Continuity to edge to Public Domain

- Continuity of facade along build-to line
- Continuity of eaves line

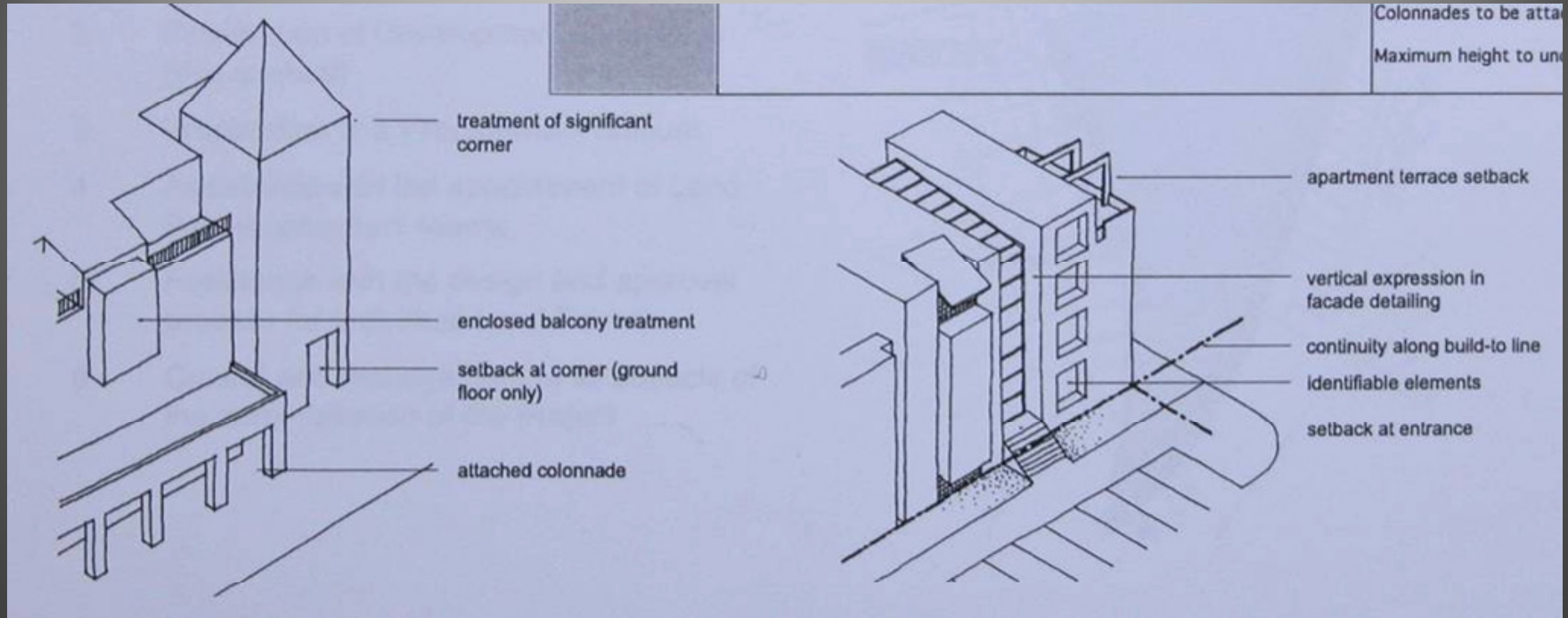


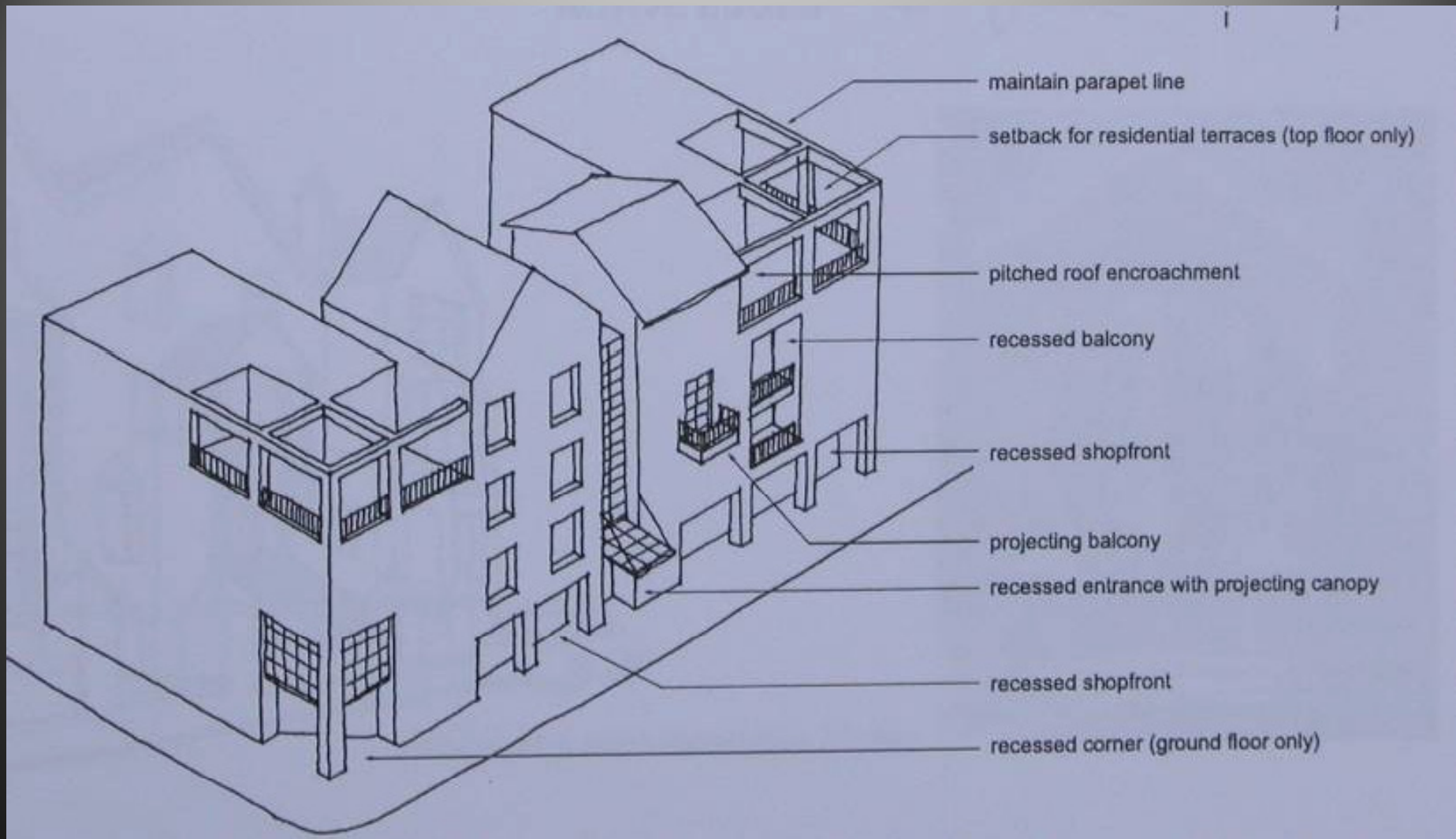
Bedford Square, London



To achieve well-balanced compositions in which all elements are individually recognisable, and the whole acknowledges its position and role in the urban context.

	MATERIALS	CONFIGURATION	TECHNIQUE
FACADES	<p>Facebrick, plastered or stone-faced as appropriate to facade design.</p> <p>Paint colour to be predominantly shades of white with earth-colour highlights permitted. All other colours subject to approval.</p> <p>Applied panel materials may not exceed 10% of the facade area.</p>	<p>Visual character required is that of solid facades with individual window openings. Solid to void ratio should therefore be in the order of 65:35.</p> <p>Expression of visual continuity along build-to lines.</p> <p>Setbacks and encroachments limited to 1.5m. each, or as indicated on Land Parcel sheets.</p> <p>Vertical expression required in facade detailing.</p> <p>Visually solid building bases are required.</p> <p>Cantilevered upper floors are not permitted.</p> <p>Gable walls at boundaries must project a minimum of 0.5m. above a pitched roof.</p> <p>Vertical controlling dimensions shown on Land Parcel sheets are to be used as a minimum standard.</p>	<p>Wall design to demonstrate high energy efficiency.</p> <p>Where a future building will be attached to the facade the materials and finish must be returned onto the gable end for a minimum of 2.0m., and the balance of the wall must be finished in a visually acceptable manner.</p>
WINDOWS	<p>Frames powder-coated aluminium or timber (painted or natural).</p> <p>Mirror glass is not permitted.</p>	<p>Visual character required is that of solid facades with individual window openings. Solid to void ratio should therefore be in the order of 65:35.</p> <p>No continuous strip windows - individually identifiable elements required.</p> <p>Curtain walling permitted only at entrances or for specific effect, and subject to assessment panel approval.</p>	<p>The percentage of opening may be increased on the top floor, where a limited horizontal strip glazing may be permitted subject to assessment panel approval.</p>
SHOPFRONTS	<p>Frames powder-coated aluminium or timber (painted or natural).</p> <p>Glass to be heat-absorbing or heat-reflecting.</p> <p>Mirror glass is not permitted.</p>	<p>No continuous strip windows - individually identifiable elements required.</p>	
ROOFS	<p>Pitched roofs to be finished with materials appropriate to the architectural character of the facades of the building.</p> <p>Flat roofs to have trafficable surfaces.</p>	<p>Roofs to be pitched - minimum 15 degrees.</p> <p>Maximum eaves overhang - 1 m.</p> <p>Sculptural roof elements permitted to enhance entrances or at landmark situations (as identified on Land Parcel sheets), subject to assessment panel approval.</p>	<p>Where the roof is set back to form a terrace, the normal eaves lines must be maintained using beams or pergolas as appropriate.</p>
BALCONIES	<p>As appropriate to the design of the facades.</p>	<p>Maximum projection to comply with encroachment lines for building site as defined in site specific documentation.</p> <p>Must be at least 2.5m. from adjoining building site boundary.</p> <p>May be enclosed, open, projecting or recessed - subject to limits of setback and encroachment lines, and required continuity of facade along build-to line (if enclosed material should be transparent to ensure visual continuity of facade).</p>	<p>Use of balconies on street-facing facades is encouraged.</p>
CANOPIES & COLONNADES	<p>As appropriate to location and facade design.</p> <p>Retractable canopy systems permitted.</p>	<p>Encouraged for ground floor retail frontages.</p> <p>Maximum canopy projection to full width of pavement.</p> <p>Colonnades to be attached and to extend full width of pavement.</p> <p>Maximum height to underside of first floor slab.</p>	<p>Canopies may be cantilevered or supported by a lightweight structure - subject to assessment panel approval.</p> <p>Colonnades to be lightweight in structure and appearance, with steel or timber columns as appropriate to design. Use of upper surface as a terrace is encouraged.</p>





maintain parapet line

setback for residential terraces (top floor only)

pitched roof encroachment

recessed balcony

recessed shopfront

projecting balcony

recessed entrance with projecting canopy

recessed shopfront

recessed corner (ground floor only)



H2 Land Parcel

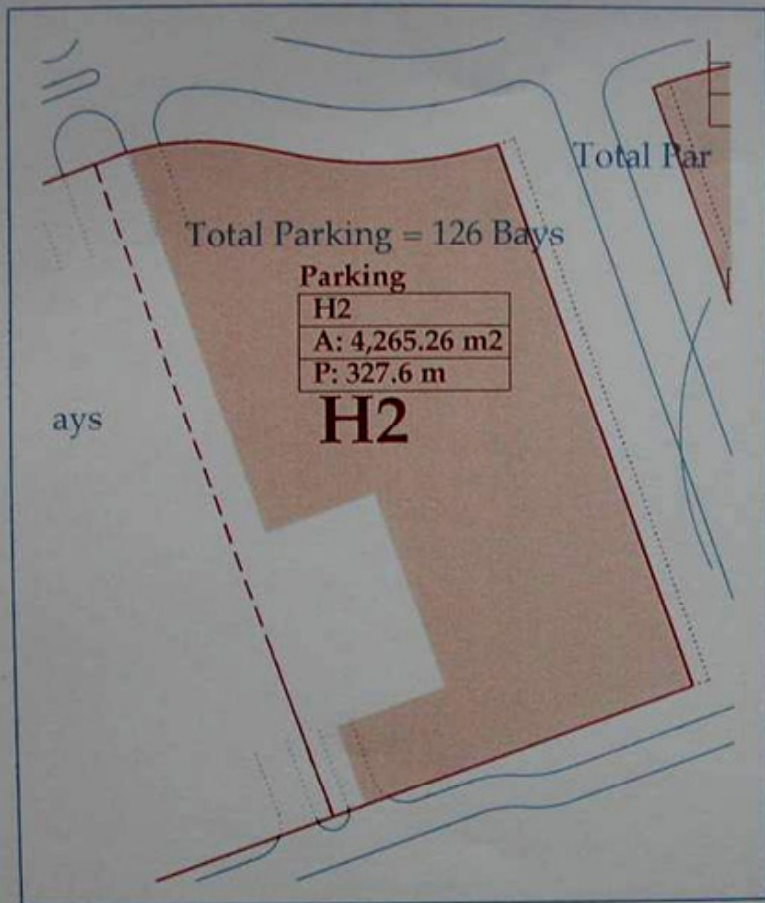
Buildings

- H201
- H202
- H203
- H204

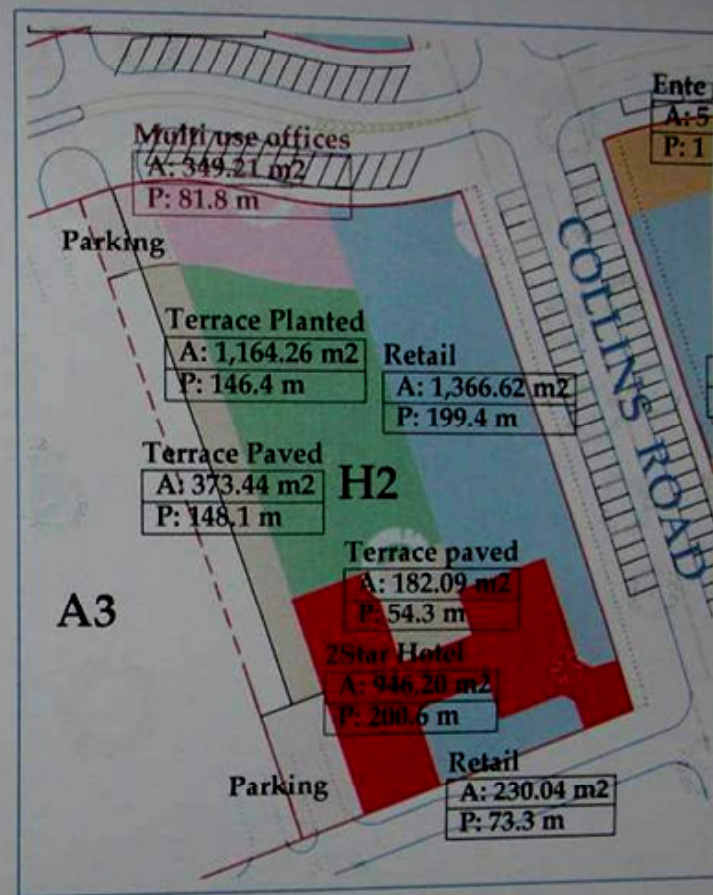


H2

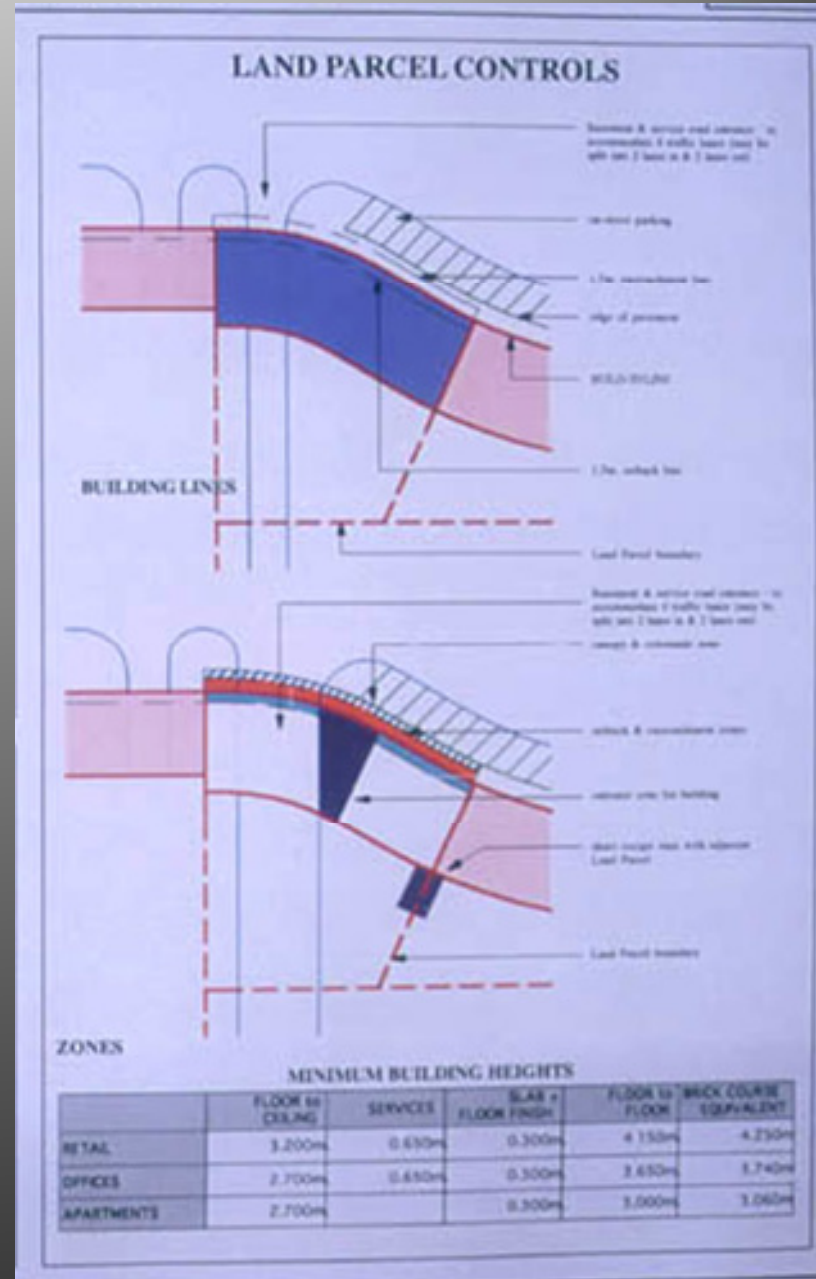
Melrose Arch
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Bulk Model



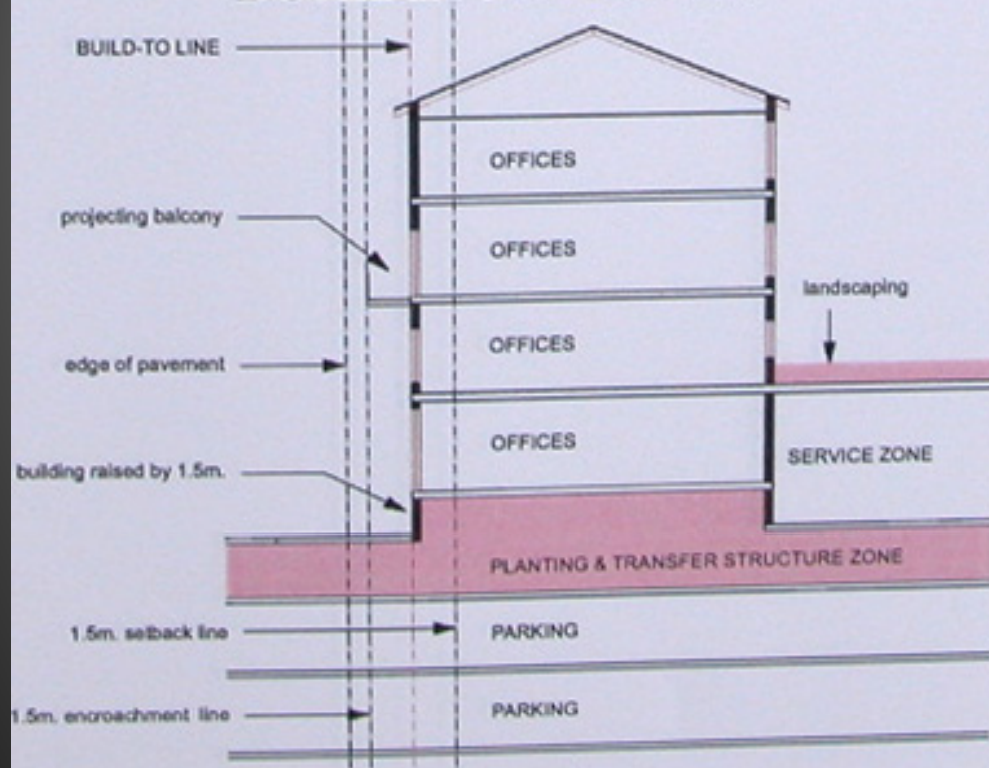
Basement 1 / Lower Ground Floor Plan



Ground Floor Plan



BUILDING SECTION



BUILDING DETAILS

PLACEMENT

1. Position of building to be as shown on adjacent plan.
2. Substantial portion of street facades (80%) to lie on land parcel boundary (Build-to line).
3. Ground floor street frontage to follow parcel boundary.
4. Variations to street facade line limited to setback and encroachment zones. No encroachment permitted at ground floor level.
5. Building facade facing Old House Square to step by 3m. as shown.

ELEMENTS

1. Projecting balconies to occur within encroachment zone.
2. Recessed balconies to occur within setback zone.
3. If canopies and attached colonnades are provided they are to occur within the zone indicated on the adjacent plan.
4. Attached colonnades must be lightweight in structure and appearance, and must extend the full width of the pavement. Provision to be made to use roof as First Floor terrace.
5. Building must provide direct access to Basement parking for tenants.

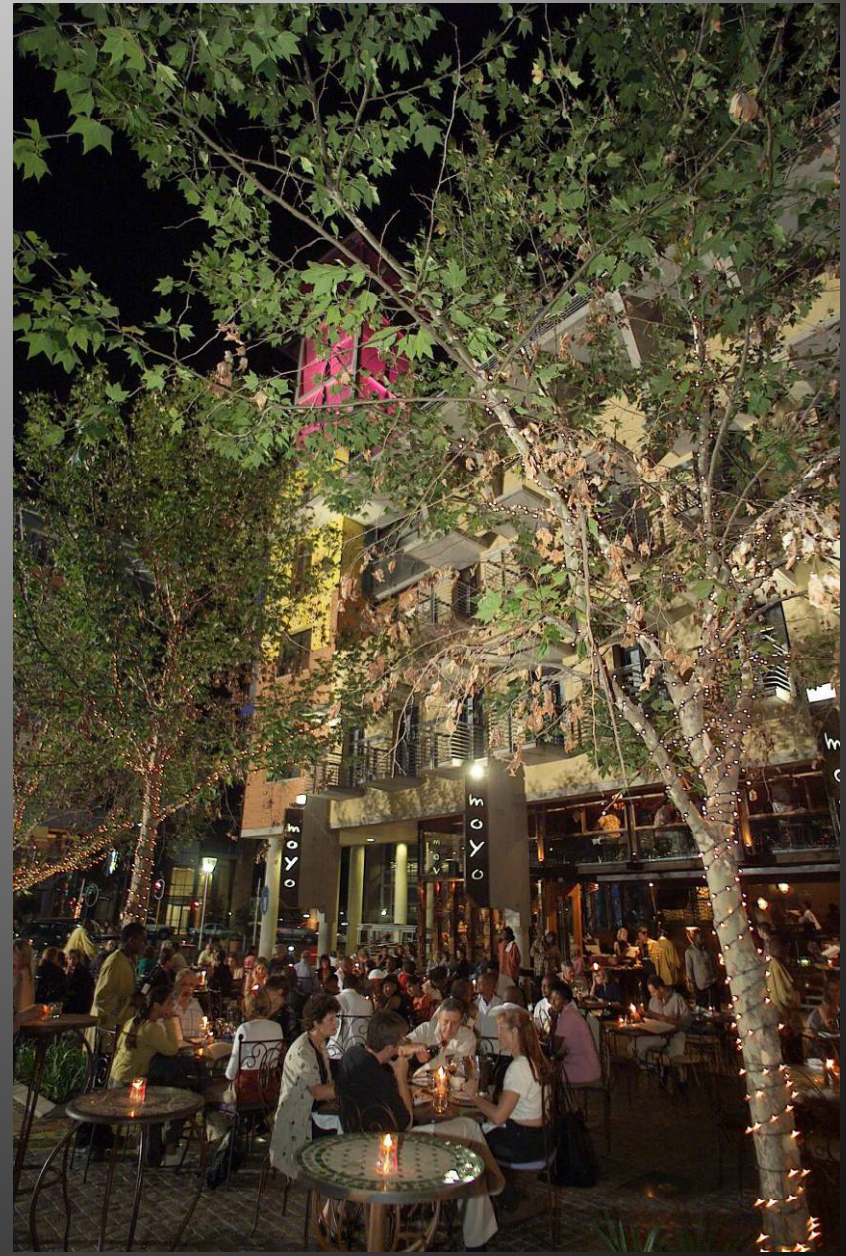
FUNCTIONS

1. Specialist Retail.
2. Small floor plate Offices.
3. Luxury Apartments.

Melrose Arch. Code: Placement, Elements, Function.



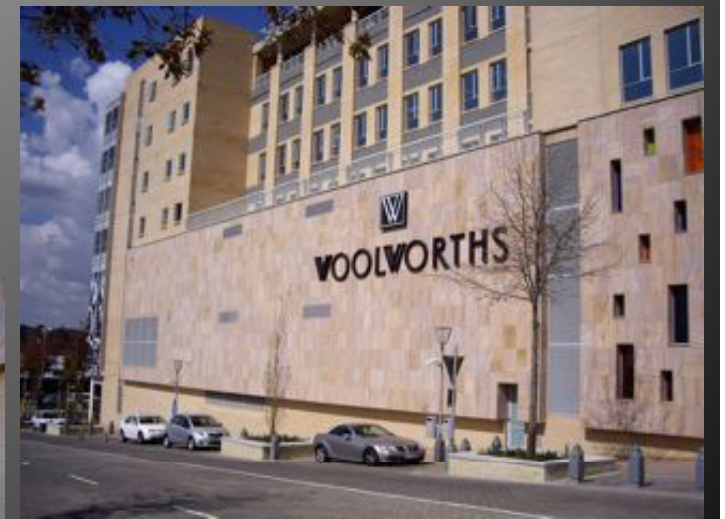
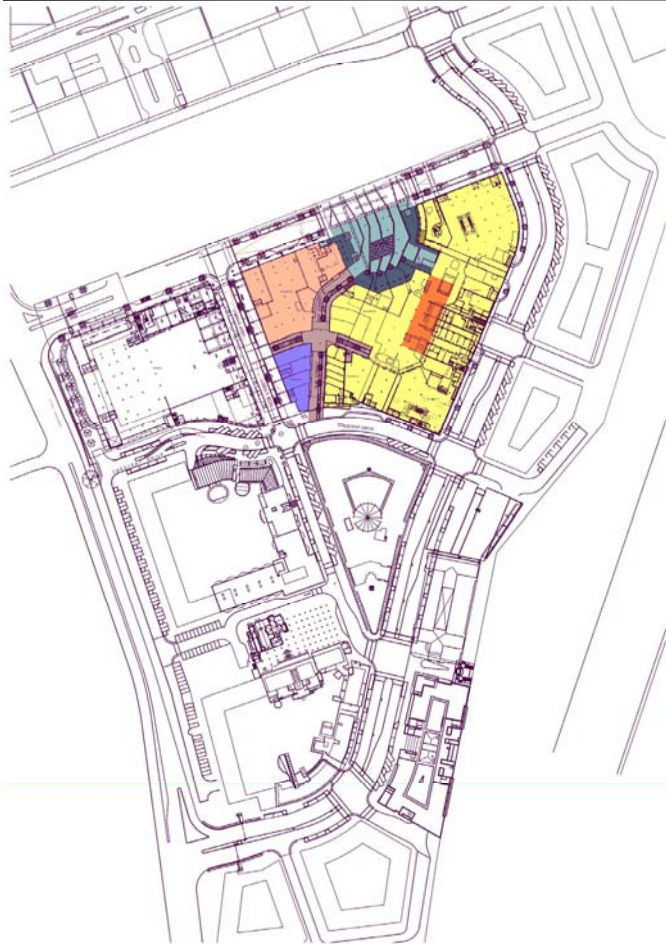








Beware new owners
Beware Phase 2



Lose the street wall you lose the street
Lose the street you lose the City
Lose the city you lose civility





SKETCH VIEW OF PHASES 4 & 5 LOOKING EAST DOWN WHITELEY ROAD

Commercial / Offices