

Studio Staff

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SEMESTER ONE

BAR 313: Architectural Design 01/03

MIXED USE DEVELOPMENT ON MOKTAH DADAH STREET, JEEVANJEE GARDENS, NAIROBI

YEAR 2015 - 2016

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ARCHITECTURE

INTRODUCTION

A client has approached you to re-develop twin plots each measuring 18m x 30m in Nairobi's CBD. The mixed use development (MUD) will replace an old dilapidated building whose 99 year lease has since expired. Currently there are tenants on notice to pave way for the redevelopment as soon as the building plans are ready. The project endeavors to meet the expectations of the ever demanding URBAN population in Nairobi and specifically target to meet client's objectives.

The site: located between **Moktah dadah Street and Njugu lane**, Key urban elements within the neighborhood are; Jeevanjee gardens, University of Nairobi – Main campus, City market, Jamia mosque, Khoja mosque, Mcmillan library, I&M building, Muindi mbingu Street, University way, Kenyatta Avenue, Koinange street etc.

THE BRIEF

The Client wants to put up a Mixed Use Development (MUD) comprising of;

- 3 no. two bedroom apartments
- 3 no. studio flats on upper levels
- A restaurant and bar on ground floor with options of extending to mezzanine floor
- Retail shops in line with the neighborhood trends
- Offices for startup professional firms' i.e. legal, artists etc.
- On street and basement parking. Please consider parking for bicycle, motorcycles.
- Any other lucrative activity. He desires to see Jeevanjee Gardens and neighboring building intergrated into a 24 hr hub targeting the youthfull population in the neighborhood.

PROJECT OBJECTIVES

Building up on previous projects specifically employing lessons gathered thereof: of site analysis, form making, space making, activity analysis, presentation techniques etc. The project seek to introduce specific objective of designing in a rich and complex urban milieu, exploring opportunities, challenges and possibly obstacles presented there in, these includes:

- Introduction to local council by-laws and regulations
- Introduction to urban design concepts and principles (redevelopment, pedestrian connections, streetscapes, urban structure and form)
- Designing and characterization of public spaces (setbacks, walkways, canopies, shop fronts etc.)
- Street furniture and landscape
- The Building as a major contributor to urban character
- Circulation in commercial buildings: Pedestrian, vehicular, etc
- Health and safety Issues in buildings
- Exploring Architectural use of materials and technology
- Exploring Architectural language through historic Nairobi

CASE STUDIES & ANALYSIS

You are required to carry out relevant local case studies of similar developments. This will help in concretizing clients brief (to be agreed later) and formulating design concepts. For each case study that you undertake, a clear demonstration of the significant lessons and features drawn, will be applied in your proposal.

Like in our previous project, you will explore:

- Site Analysis and investigation
- Measured drawings of existing buildings
- Detailed brief Formulation
- Materiality and Technology in general
- Third dimension, additive and subtractive space making
- Sensorial stimulation
- Social, visual and Physical Controls in urban space
- Perception, among others

THE PROCESS

CONCEPT DEVELOPMENT

Concept formulation and development is about developing an idea(s). The key mission is to create quality spaces that are meaningful, based on the delicate interplay between several factors of: function, aesthetics, and clients and public expectations. Concept development requires one to explore volumes and area, functional inter-relationships of various parts of the project, organizational principles, movement through space; both horizontal and vertical and the visuals of space the space through scale and proportion.

For this project, it is expected; you show specific sensitivity to site orientation, the existing activities on and around the site, its urban setting, pedestrian and vehicular circulation, environmental factors and existing architectural character and heritage of the site. Your design concept will follow the stages given below.

- Detailed brief development
- Activity studies & analysis
- Site Analysis including neighborhood study
- Functional relationships and analysis

Outputs for this stage include;

- Sketch models
- Thumb nail perspectives studies of interior/ exterior space use and character
- Activity analysis: Neighborhood study, street elevations, etc
- Adjacency/ bubble diagrams
- Massing/ block diagrams illustrating spatial relationships of various functions.

DESIGN DEVELOPMENT

It involves synthesis of various factors, using work produced in conceptual phase to develop it to greater detail to quantifiable aspects of the project. For example physical extents, features of spaces such as vaulted/ angled ceilings, window type and location, doorways connecting interior spaces shown.

In this stage through your design decision, you will demonstrate an understanding of how volume, area, material etc of a building are assembled. This task requires a mastery of building and construction technology, structural support among others.

Outputs for this stage include;

- Floor plans, sections and elevations all annotated with general partition types, fittings, furniture and finishes
- Visual representation of the spaces through models
- Axonometric projections and other artistic impression methods
- Sketches of construction details.

PRESENTATION

Part of the process is selecting appropriate presentation media/tools that can most succinctly describe the proposed building concepts. Your final work is expected to contain a story line with important concepts given more prominence.

- Location plans 1 : 500
- Site plan 1 : 200
- Floor plans (all) 1 : 50
- Sections 1 : 100, 1 : 50
- Elevations 1 : 50
- 3D CAD models showing both interiors and exterior
- Physical models of form, space and the proposal.

REFERENCES

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2. Corbusier, L. (1986). *Towards a new Architecture*. New York: Dover Publications.
3. Edwards, B. (2008). *Understanding Architecture through Drawing (2nd Ed.)*. Milton Park, Abingdon, Oxon: Taylor & Francis.
4. Fleming, E. (2005). *Construction Technology: An illustrated introduction*. Oxford, UK: Blackwell Publishing Ltd.
5. Frederick, M. (2007). *101 things I learnt in Architecture School*. London: THE MIT PRESS.
6. Guthrie, P. (2003). *The Architect's portable Handbook (3rd ed.)*. New Delhi: McGraw-Hill.
7. Urban Land Institute. *Urban Spaces: The design of Public space*.

APPENDIX: PROJECT SCHEDULE AND DELIVERABLES

Wk	Date	Activity	Remarks
	29.06.2015 MONDAY	INTRODUCTION Program introduction and site visit I.	3 RD YEAR STUDIO, with studio staff.
	30.06.2015 TUESDAY	Visit II to the site and the neighborhood	3 RD YEAR STUDIO, with studio staff.
	02.07.2015 THURSDAY	SITE ANALYSIS Site analysis and urban factors	3 RD YEAR STUDIO, with studio staff.
	06.07.2015 MONDAY	CASE STUDIES Activity studies, case studies, accommodation schedule and functional relationship diagrams	Selected students to present
	07.07.2015 TUESDAY	THEORITICAL INPUT I Urban issues: Streetscape, urban context, MUD etc	
	09.07.2015 THURSDAY	CONCEPT FORMULATION Disposition of functions, scheme designs: plans, sections, elevations, models (CAD and Physical models)	Selected students to present (based class list)
	13.07.2015 MONDAY	SCHEME DESIGN I Detail design, materials, space exploration, circulation, levels, etc	Selected students to present
	14.07.2015 TUESDAY	THEORITICAL INPUT II Phenomenology, perceptual space, imperical space, universal space etc	
	16.07.2015 THURSDAY	Desk Crits	All staff and students: Studio 3
	20.07.2015 MONDAY	SCHEME DESIGN II Detail design, materials, space exploration, circulation, levels, etc	
	21.07.2015 TUESDAY	THEORITICAL INPUT III Urban issues: Circulation in MUD	
	23.07.2015 THURSDAY	Desk Crits	All staff and students: Studio 3
	27.07.2015 MONDAY	DETAILED DESIGN I Detail design, materials, space exploration, circulation, levels, etc	Selected students to present (based class list)
	28.07.2015 TUESDAY	DETAILED DESIGN I Detail design, materials, space exploration, circulation, levels, etc	Selected students to present (based class list)
	30.07.2015 THURSDAY	PRESENTATION Final interim presentation Presentation: A2 paper size	All students
	03.08.2015 MONDAY	DETAILED DESIGN I Detail design, materials, space exploration, circulation, levels, etc	All staff and students: Studio 3
	04.08.2015 TUESDAY	Desk Crits	All staff and students: Studio 3
	11.08.2015	GRADING - PIN UP at 9.00am	All students