1.0 PROJECT RATIONALE & INTRODUCTION

This design problem requires you to conceptualize and design a two-storey residence for a young couple with specific professional and lifestyle needs. The project is an exercise in fundamental spatial planning, response to site, and the development of a strong, unifying design concept. You are to be the architect who translates the clients' aspirations into a functional, meaningful, and well-articulated living space. The challenge lies in creating a home that is both a private sanctuary and an inspiring workspace, all within a compact suburban lot.

2.0 CLIENT PROFILE

- The Clients: A young professional couple in their early 30s.
 - Client A: A writer and an avid collector of rare books. They work from home and require a quiet, dedicated library/study space with ample shelving and natural light for reading.
 - Client B: A ceramicist/potter who needs a small, durable workshop space (a
 "pottery studio") with good ventilation and direct access to an outdoor area
 for drying and firing. This space can get messy, so its relationship with the
 main living areas must be carefully considered.
- **Lifestyle:** The couple values minimalism, natural materials (wood, stone, concrete), and an abundance of natural light. They enjoy quiet evenings at home and occasionally host small dinner parties for a few friends. They have one car. The concept of "home as a lantern"—a source of warmth, creativity, and light—appeals to them.

3.0 SITE DESCRIPTION

- Lot Size: 12 meters by 15 meters (180 sq.m.).
- Frontage: The 12-meter side faces west along a minor subdivision road.
- **Topography:** The lot is flat.
- Setbacks:
 - Front (West): 3 meters
 - Rear (East): 2 meters

- Sides (North & South): 2 meters on both sides
- **Considerations:** The westward orientation of the front facade presents a challenge regarding afternoon sun exposure. Your design must address this through creative solutions.

4.0 SPATIAL & PROGRAMMATIC REQUIREMENTS

You must thoughtfully integrate the following spaces within the allowable building footprint.

GROUND FLOOR:

- Entry Porch
- Living Area: A comfortable space for relaxation and entertaining.
- Dining Area
- **Kitchen:** An efficient U-shaped or L-shaped kitchen.
- **Powder Room** (Toilet & Wash Basin)
- **Pottery Studio:** Must have good ventilation, durable flooring, and direct access to the outside.
- Service/Laundry Area
- 1-Car Garage

SECOND FLOOR:

- Master Bedroom: With an en-suite (private) toilet and bath.
- **Library/Study:** The writer's workspace. This is a key feature of the house. Consider its lighting, atmosphere, and integration of bookshelves.
- One (1) Common Bedroom: To serve as a guest room.
- One (1) Common Toilet & Bath.
- **Balcony:** A small outdoor space to enjoy the morning sun (facing east).

5.0 DESIGN CONCEPT: "THE LANTERN"

Your design must be a clear and compelling interpretation of "The Lantern House." This concept should inform your decisions on form, materiality, and the treatment of light. How

does the house become a beacon of warmth and creativity? This could be explored through:

- Form & Massing: A simple, strong building form.
- **Light & Shadow:** The strategic use of windows, skylights, screens, and openings to create dramatic and serene interior effects. How does the house "glow" at night?
- **Materiality:** The interplay between solid (concrete, wood) and transparent/translucent (glass, screens) materials.
- **Circulation:** The journey through the house, connecting the creative workspaces with the tranquil living areas.

DRAWING REQUIREMENTS

General Instructions:

- **Paper Size:** A3 (297mm x 420mm)
- Format: Manual Drafting. Use appropriate technical pens and line weights.
- **Title Block:** A standardized title block is required on the bottom right of each sheet, containing your name, course & section, plate number, and sheet title.

SHEET NO. 1: CONCEPT BOARD

- Format: A single, well-composed A3 sheet.
- Content: This board must visually narrate your design story.
 - o **Project Title:** "The Lantern House"
 - Design Concept Statement: A concise paragraph explaining your interpretation of the concept.
 - Diagrams: Site analysis (sun path, wind), spatial relationship diagrams (bubble diagrams), and conceptual sketches.
 - Inspiration Imagery: Images that convey the mood, materials, and aesthetic of your design.

SHEET NO. 2: FLOOR PLANS

• Scale: 1:100 Meters

Content:

- o Ground Floor Plan & Second Floor Plan.
- Label all spaces clearly.
- o Include basic furniture layout to show scale.
- Indicate door and window openings.
- Provide key dimensions and grid lines.

SHEET NO. 3: ELEVATIONS & SECTION

• **Scale:** 1:100 Meters

Content:

- o **Two (2) Elevations:** Front (West) Elevation and Rear (East) Elevation.
- One (1) Cross-Section: Your section line should cut through the most interesting parts of the house (e.g., through the library and living area) to show the vertical relationship of spaces.
- Indicate material textures/hatching.
- Label floor levels and show critical vertical dimensions (floor-to-floor heights, roof apex).

EVALUATION CRITERIA:

- **Conceptual Strength (30%):** How well did you interpret and execute the "Lantern House" concept?
- **Design Solution & Functionality (40%):** The logic of your spatial layout, circulation, and response to the clients' needs and site conditions.
- **Graphic Quality & Technical Skill (30%):** The clarity, precision, and aesthetic quality of your drawings and presentation.

Good luck, architects. I expect to see thoughtful, well-executed work. Show me what you can do.