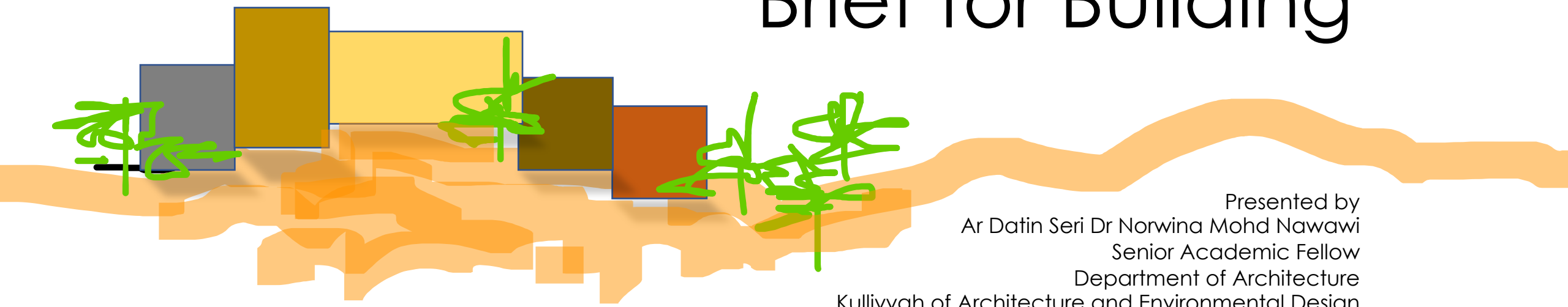
Lecture Input for SGA 3382 Architectural Studio VI
University Malaysia Kelantan

Creating Architectural **Design** Brief for Building



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Outline

- INTRODUCTION
- STEPS IN CREATING ARCHITECTURAL DESIGN BRIEF
  - Theory
  - Practical steps
- EMERGING ISSUES
- CODES, GUIDELINES & REGULATION
- SUMMARY
- CONCLUSION

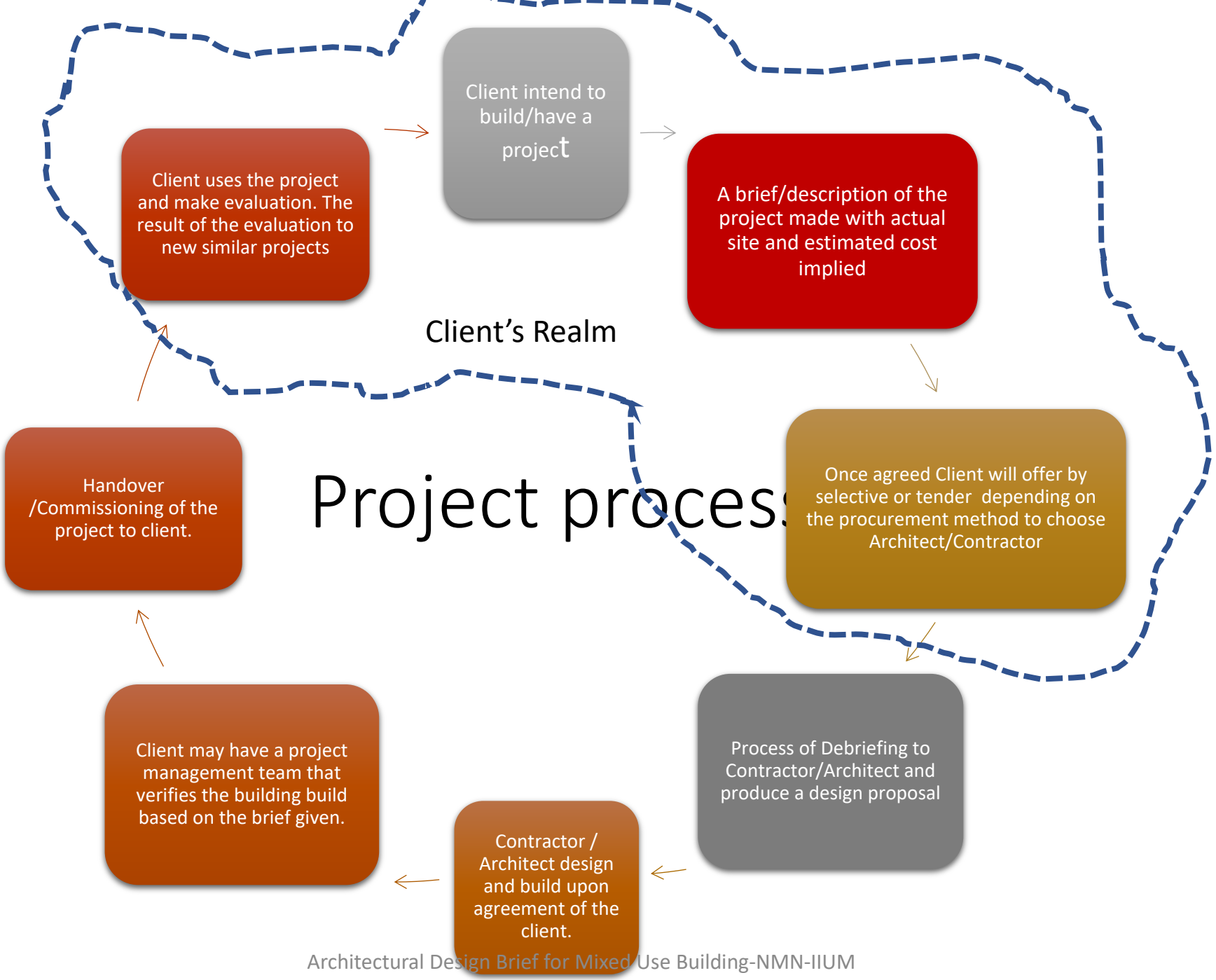
INTRODUCTION

Architectural Design Brief

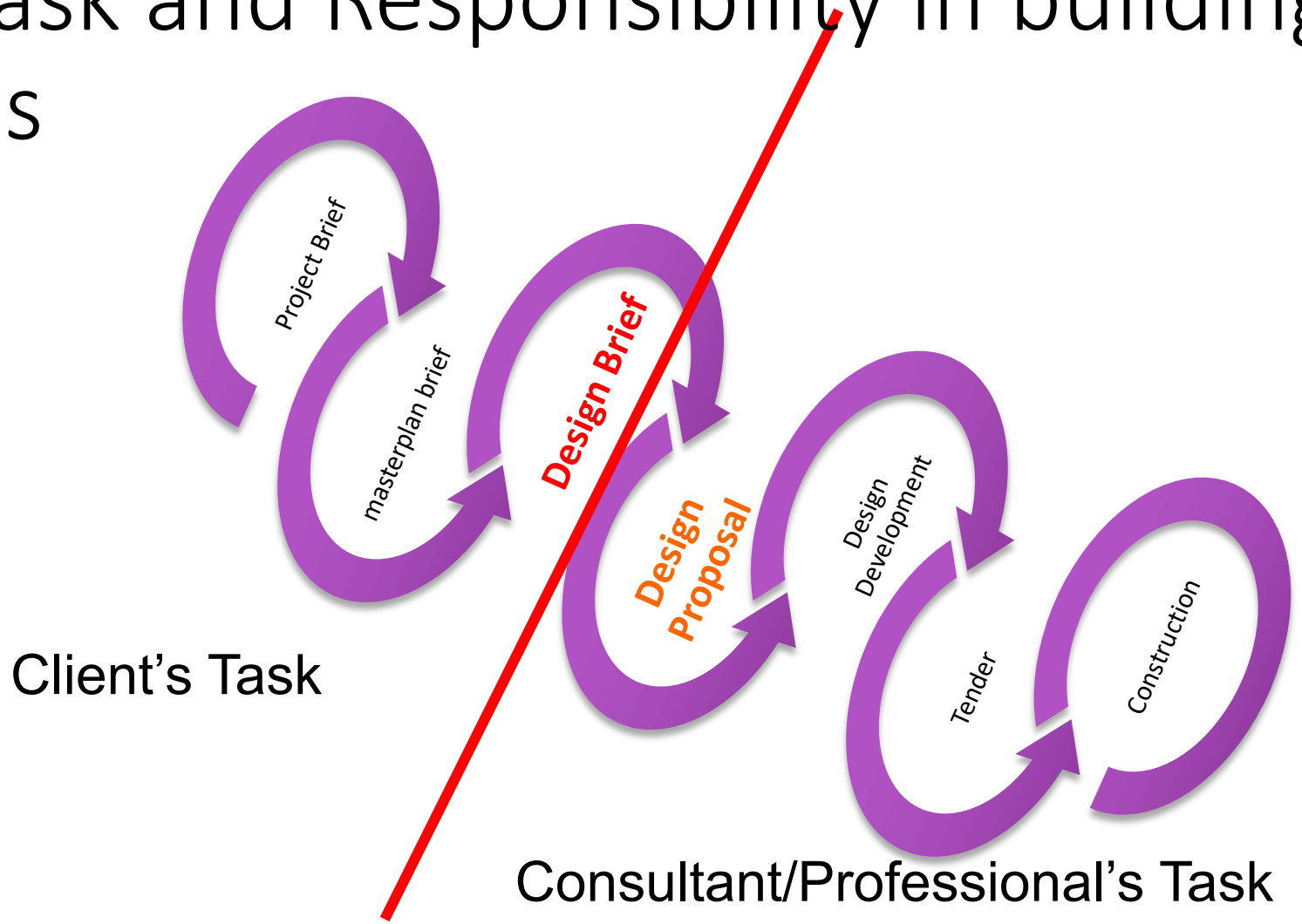
The question……

ARCHITECTURAL
DESIGN BRIEF

- WHAT
- WHEN
- FOR WHOM
- BY WHOM
- WHY
- WHERE
- HOW


Client intend to build/have a project
A brief/description of the project made with actual site and estimated cost implied
Once agreed Client will offer by selective or tender depending on the procurement method to choose Architect/Contractor
Process of Debriefing to Contractor/Architect and produce a design proposal
Contractor / Architect design and build upon agreement of the client.
Client may have a project management team that verifies the building build based on the brief given.
Handover /Commissioning of the project to client.
Client uses the project and make evaluation. The result of the evaluation to new similar projects
Client's Realm
Project process

Role/Task and Responsibility in building process



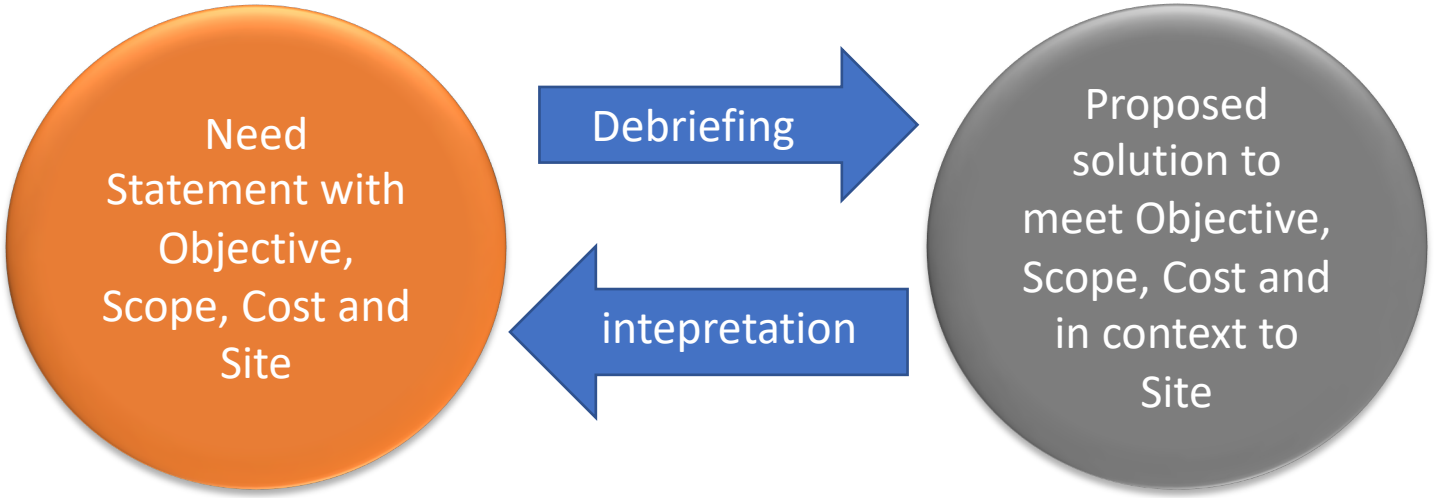
Design Brief vs Design Proposal

What is Design Brief?

- Clients Realm

What is Design Proposal ?

- Designers/Consultants Realm



What is a Brief?

"Brief" is a word derived form the Latin word "*brevis*" meaning short and concise. The dictionary definition also include " a short statement of any kind" with the verb defined it as " to give instructions, necessary information to".

What is a Design Brief?

It represent the user's requirements and is therefore a **set of guidelines and instructions for building designers.**
It describes the attributes of a facility providing accommodation for the users and activities and thus detailed documented instructions from the client to the designer.

Why do you need a Design Brief?

The primary aim of the design is that it **should answer a specified need.**

Thus, a designer need to have the needs stated so that the designer can understand what the design intended to do, how it may be used, who is likely to use it, where it is likely to be used and how much cost to provide and run it. This set of statements about needs, purposes and limitations is the "Brief".

Purpose of the Design Brief

- The brief provides a basis for synthesizing design options and evaluating designs in use.
- Thus, when use for this purpose, a design brief should include criteria for assessment as well as objectives to be met.
- The results of evaluation (including case or precedent studies) then become an input to subsequent briefing and design.

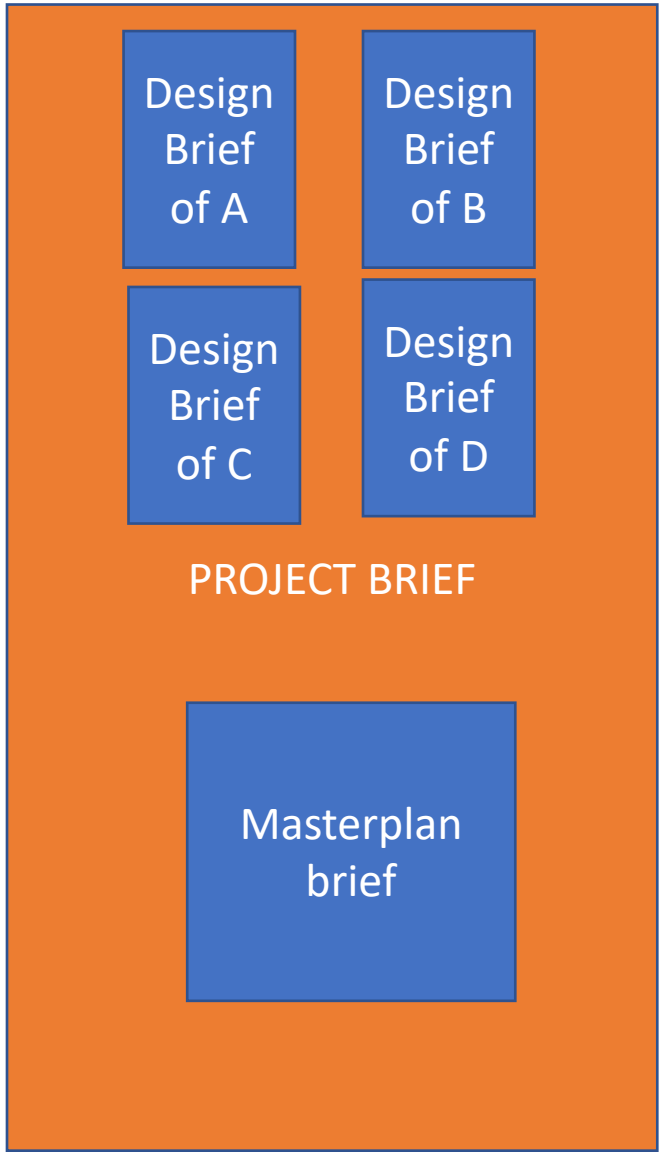
Purpose of theDesignBrief

- It serves as a bridge between the client and designer;
- It is more crucial for projects which are complex such as hospital, radio station, airline terminal, where it will help the architect to understand as completely as possible the client's needs;
- The brief is intended to describe how the building will operate at the completion of the construction;
- Aim at assisting the architect in exploring design implications of the users needs;
- Assist in comparing various options for meeting the project requirement;
- Provide statement of objectives for evaluation of the design in use.

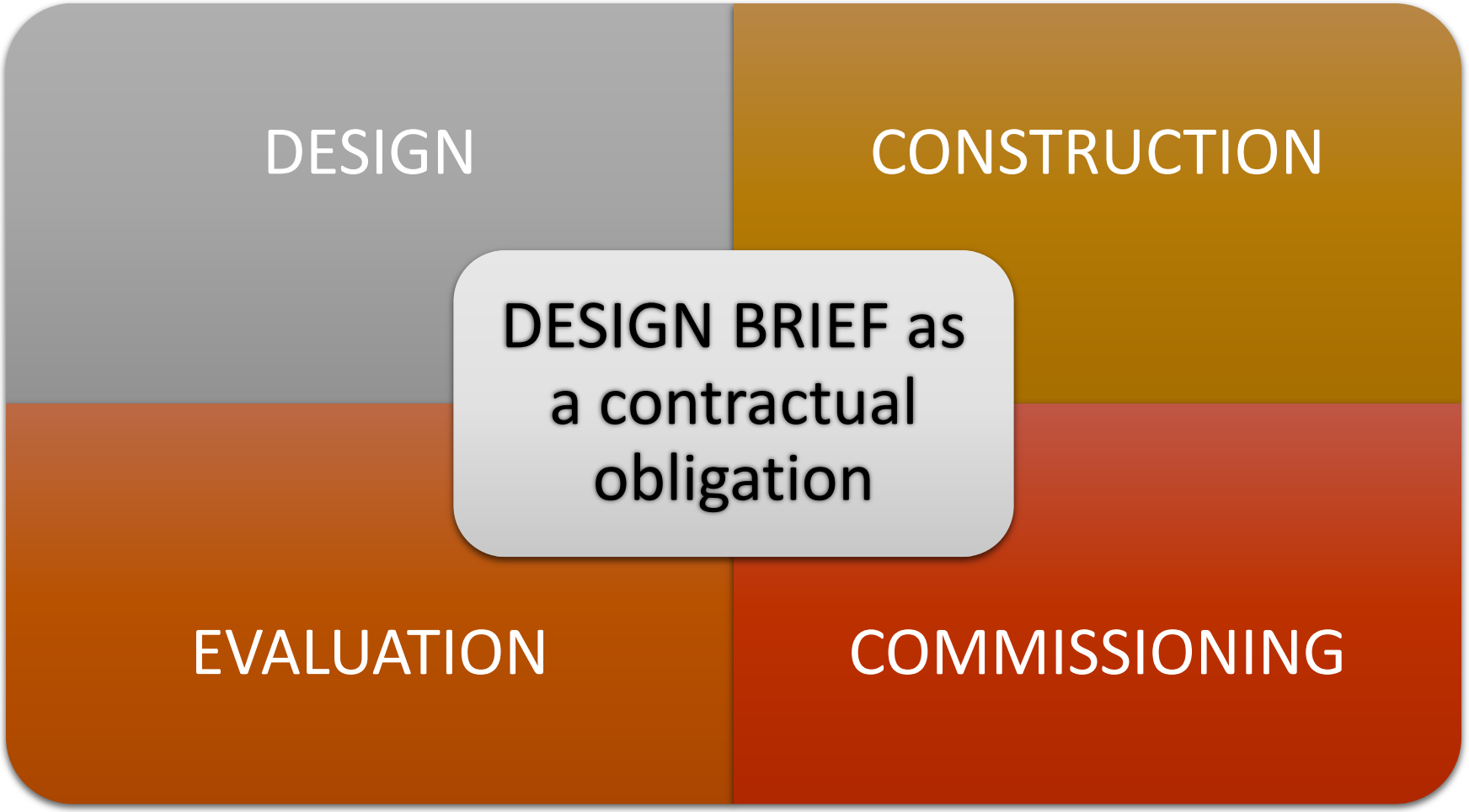
Project Brief Vs Design Brief

- Generally, **project briefs** are the macro description of the Project. **Design Brief** is part of the overall project but specific to design a certain facility

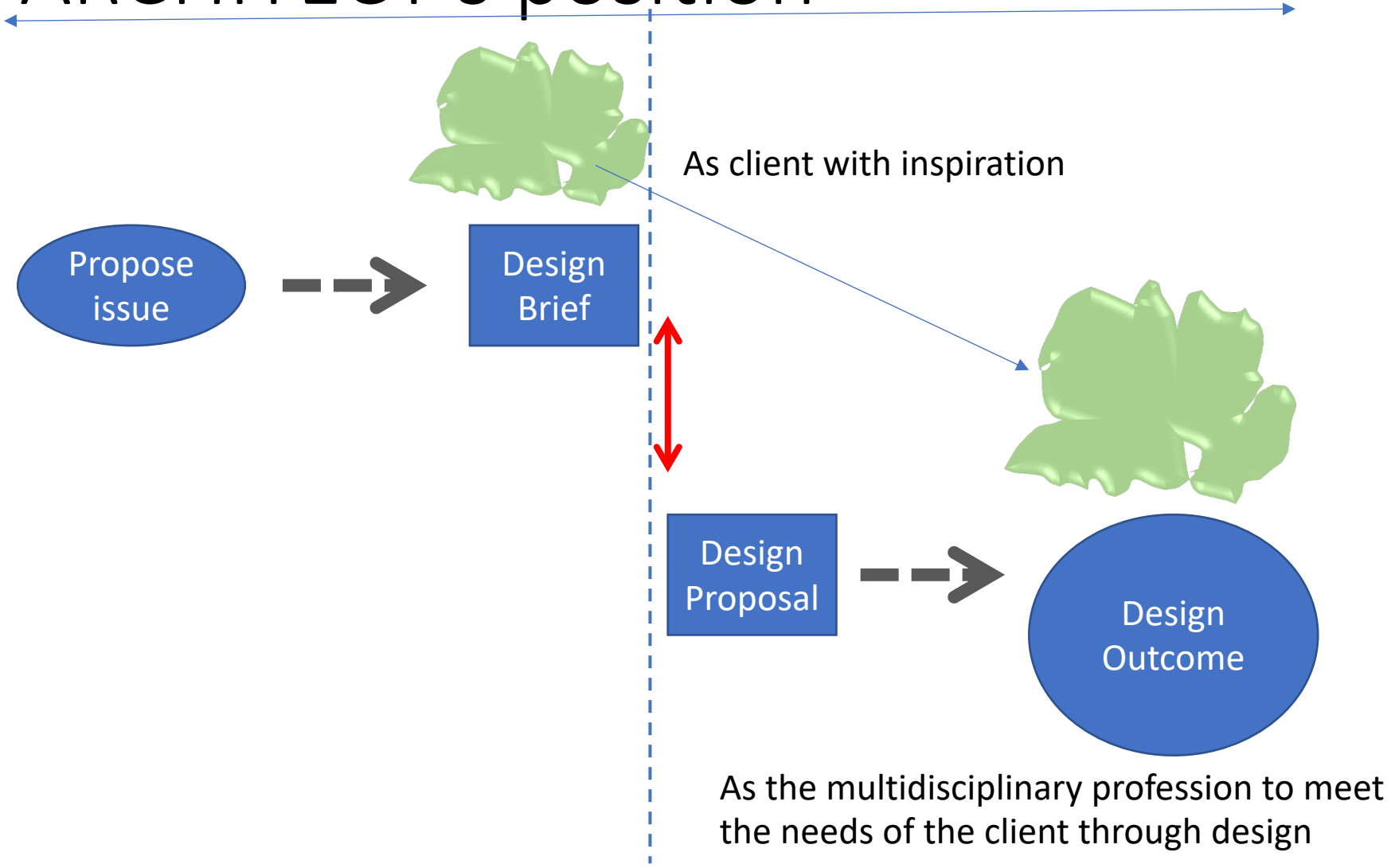
- The **Design Brief**, thus described briefly in the introduction, how the facility to be designed serves the overall project objectives.



Importance of Design Brief



ARCHITECT's position



DESIGN BRIEF-for whom

- FOR CLIENT (SCOPE, SCALE, *COST, TIME*)
- FOR ARCHITECT TO DESIGN to Scope, scale, *cost and time*
- FOR ENGINEER & OTHER DESIGN CONSULTANTS TO DESIGN
- FOR QS or COST CONSULTANT as monitoring tool to Scope Scale *Cost and Time*
- FOR CONTRACTORS to built according to Scope Scale *Cost and Time*
- *FOR USER AS MANUAL to use the building*
- *FOR CLIENT TO EVALUATE once completed*

Architectural Programming

- **Architectural programming** can be defined as the *research and decision-making process that helps to identify the scope of work to be designed and performed*.
- Some of the advantages **architectural programming** offers are:

1. Involvement of interested/relevant parties in the definition of the scope of work prior to design

THE TEAM FORMATION

2. Gathering and analyzing data early in the process so the design is based on sound decisions

DATA COLLECTION

3. Efficient use of time by avoiding redesign as requirements emerge during architectural design development

PLANNING

Programming | BCA Architecture & Construction Services
https://www.bc-architecture.com › programming

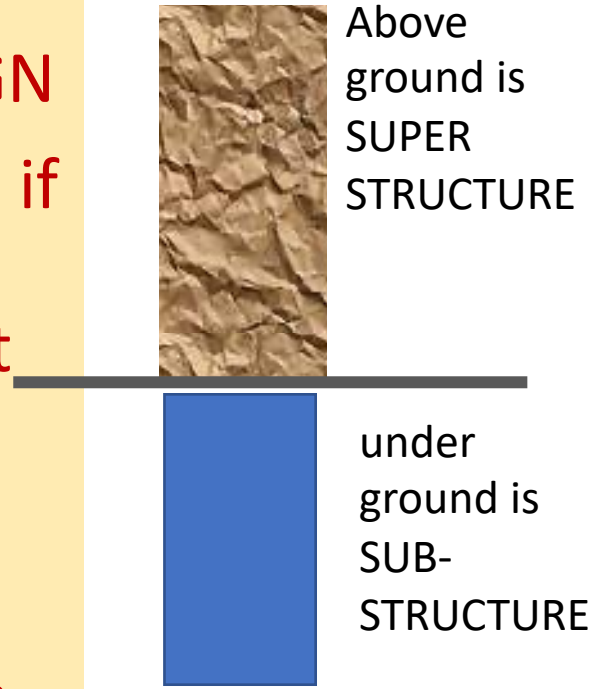
Architectural Programming

- According to Cherry (2016), architectural programming is defined today as **the research and decision-making process that identifies the scope of work to be designed.**
- Other synonyms (terms) include "facility programming," "functional and operational requirements,", "brief of requirements", and "scoping."
- In the early 1960s, William Peña, John Focke, and Bill Caudill of Caudill, Rowlett, and Scott (CRS) developed a process for organizing programming efforts. Their work was documented in *Problem Seeking*, the text that guided many architects and clients who sought to identify the scope of a design problem prior to beginning the design, which is intended to solve the problem.

Edith Cherry, Architectural Programming , 11-02-2016 at https://www.wbdg.org/design-disciplines/architectural-programming

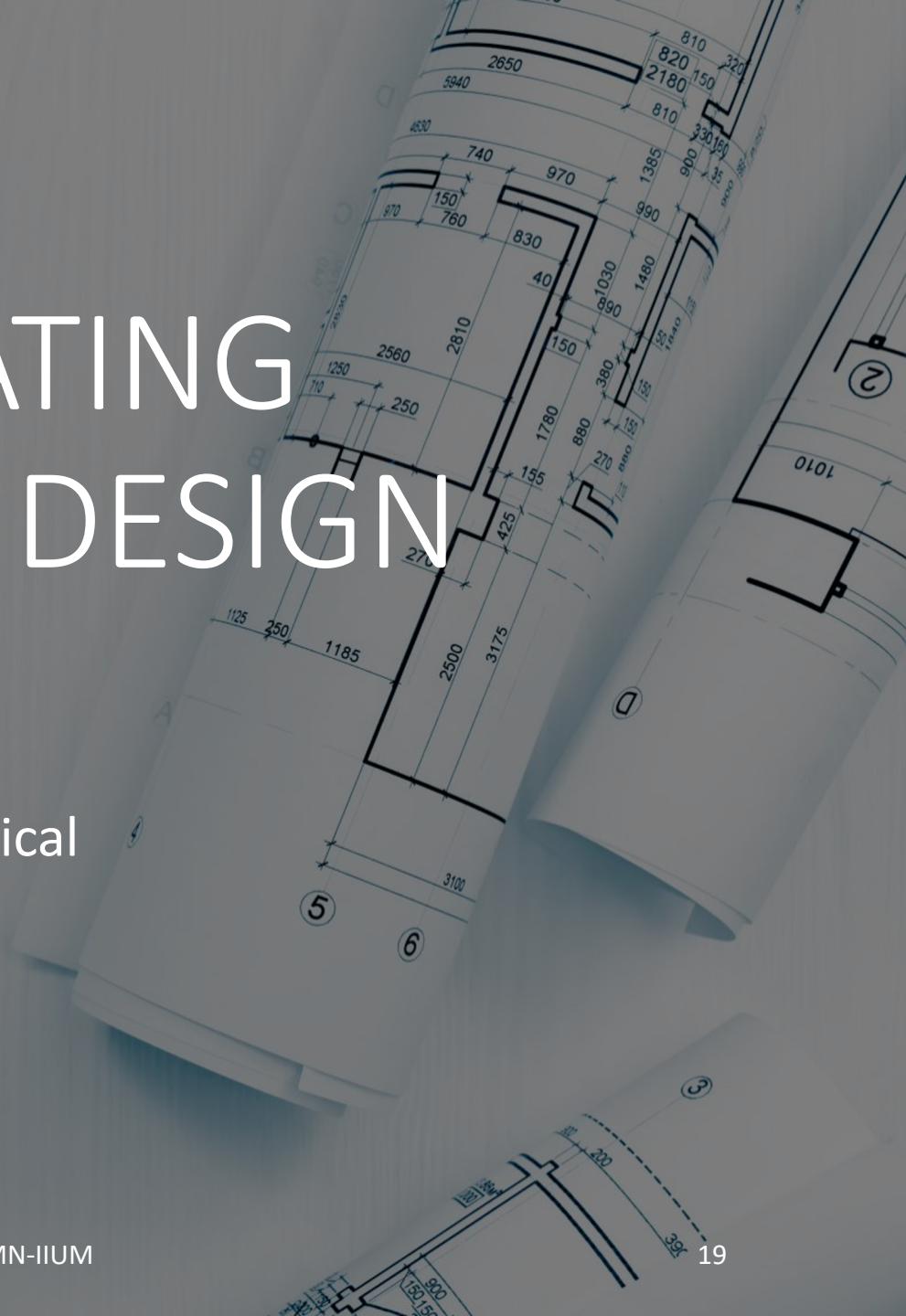
The Brief

- The Design is as Good as the Brief.
- BAD BRIEF will produce BAD DESIGN
- NO two briefs are the same except if it is a similar project where the SUPER STRUCTURE is the same but the context, i.e. site or SUB STRUCTURE is different.
- Any environmental or CORE requirement is change constitute a new brief



STEPS IN CREATING ARCHITECTURAL DESIGN BRIEF

The Theory and The Practical



The Theory

Creating Architectural Design Brief

Architectural Programming-2

- The first step in beginning the programming process of a project is clearly **identifying the individuals** to be involved.
- Open lines of communication must be established and maintained to determine how and when meetings will be held, what the agenda will be, how contacts will be made, and how records of the meetings will be kept.
- It is the architect's role to oversee and guide this process.
- The architect will make recommendations to the client when necessary and appropriate.
- The client must make the ultimate decisions to help keep the process moving forward in an efficient manner.

Edith Cherry, Architectural Programming , 11-02-2016 at https://www.wbdg.org/design-disciplines/architectural-programming

Steps to programming/brief

1. Research the project type
2. Establish goals and objectives
3. Gather relevant information
4. Identify strategies
5. Determine quantitative requirements
6. Summarize the program

https://www.bc-architecture.com/programming/#:~:text=Architectural%20programming%20can%20be%20defined,of%20work%20prior%20to%20design

Edith Cherry, Architectural Programming , 11-02-2016 at https://www.wbdg.org/design-disciplines/architectural-programming

1. RESEARCH THE PROJECT TYPE-1

This step is necessary if the programmer is working on a project type for the first time.

The programmer should become familiar with some of the following relevant information:

The types of spaces frequently included in the building type,

The space criteria (number of square feet per person or unit) for those spaces,

Typical relationships of spaces for these functions,

- *Typical ratios of net assignable square footage*
  - *(NASF/NFA—areas that are assigned to a function) to gross square footage /net floor area (sq.m/sq.ft)*
  - *(GSF/GFA—total area to the outside walls) for this building type/Gross Floor Area)*

Edith Cherry, Architectural Programming , 11-02-2016 at https://www.wbdg.org/design-disciplines/architectural-programming

1. RESEARCH THE PROJECT TYPE-2

- *Typical **costs per square** foot/square meter for this building type,*
- *Typical **site requirements** for the project type,*
- *Regional/**contextual issues** that might alter the accuracy of the data above in the case of this project,*
- *and*
- ***Technical**, mechanical, electrical, security, or other issues unique to the project type.*

Edith Cherry, Architectural Programming , 11-02-2016 at https://www.wbdg.org/design-disciplines/architectural-programming

1. RESEARCH THE PROJECT TYPE-2

This information can be obtained from

- literature on the building type,
- analysis of plans/drawings of existing projects,
- Interview of expert consultants familiar with the building type,
- cost estimating services, and/ or
- Learning from precedent and case studies through stages of post occupancy evaluation (POE)

2.ESTABLISH GOALS AND OBJECTIVES -1

Each of the following categories of goals should be addressed:

Organizational Goals:

- What are the goals of the owners?
- Where do they see their organization headed?
- How does this architectural project fit into this broad picture?

Form and Image Goals:

- What should be the aesthetic and psychological impact of the design?
- How should it relate to the surroundings? Should its image be similar to or distinct from its neighbours?
- From other buildings belonging to the owner that are located elsewhere?
- Are there historic, cultural, and/or context implications?

Function Goals:

- What major functions will take place in the building?
- How many people are to be accommodated?
- How might the building design enhance or impact occupant interactions?

Edith Cherry, Architectural Programming , 11-02-2016 at https://www.wbdg.org/design-disciplines/architectural-programming

2.ESTABLISH GOALS AND OBJECTIVES -2

Economic Goals:

- What is the total project budget?
- What is the attitude toward initial costs versus long-range operating and maintenance costs?
- What level of quality is desired (often stated in relation to other existing projects)?
- What is the attitude toward conservation of resources and sustainability (energy, water, etc.)?

Time Goals:

- When is the project to be occupied?
- What types of changes are expected over the next 5, 10, 15, and 20 years?

Management Goals:

- These goals are not so much an issue of the nature of the project as they are the circumstances of the owner, clients, programmer, or architect.
- For example, perhaps the *schematic design* must be completed in time for a legislative request application deadline.

Edith Cherry, Architectural Programming , 11-02-2016 at https://www.wbdg.org/design-disciplines/architectural-programming

3. GATHER RELEVANT INFORMATION-1

Based upon the goals, the categories of relevant information can be determined and researched.

Typical categories include:

Facility users, activities, and schedules:
Who is doing what, how many people are doing each activity, and,
when are they doing it?

- **What equipment is necessary for activities to function properly?**
- **What is the size of the equipment**?

- **What aspects of the project need to be projected into the future?**
- **What is the history of growth of each aspect that requires projection?**

- **What other design criteria may affect architectural programming: access to daylight, acoustics, accessibility, campus/area design guidelines, historic preservation, etc.?**

- **Are there licensing or policy standards for minimum area for various functions?**
- **What are these standards?**
- **What are the energy usage and requirements?**

- **What are the space criteria (square feet per person or unit) for the functions to take place?**
- **What code/ regulation information may affect programming decisions?**

Edith Cherry, Architectural Programming , 11-02-2016 at https://www.wbdg.org/design-disciplines/architectural-programming

3. GATHER RELEVANT INFORMATION-2

- **Site analysis:** the site is always a major aspect of the design problem and therefore should be included in the program.
- Site analysis components that often affect design include:
  - Legal description
  - Zoning, design guidelines, and deed restrictions and requirements
  - Traffic (bus, automobile, and pedestrian) considerations
  - Utility availability (a potentially highcost item)
  - Topography
  - Views
  - Built features
  - Climate (if not familiar to the designer)
  - Vegetation and wildlife

Edith Cherry, Architectural Programming , 11-02-2016 at https://www.wbdg.org/design-disciplines/architectural-programming

3. GATHER RELEVANT INFORMATION-3

- **Client's existing facility as a resource**

  - If the client is already participating in the activities to be housed in the new facility, it may be possible to make use of information at hand. Determine if the existing facility is satisfactory or obsolete as a resource.

  - If a floor plan exists, do a square foot take-off of the areas for various functions. Determine the building efficiency (the ratio of existing net-to-gross area). This ratio is useful in establishing the building efficiency target for the new facility.

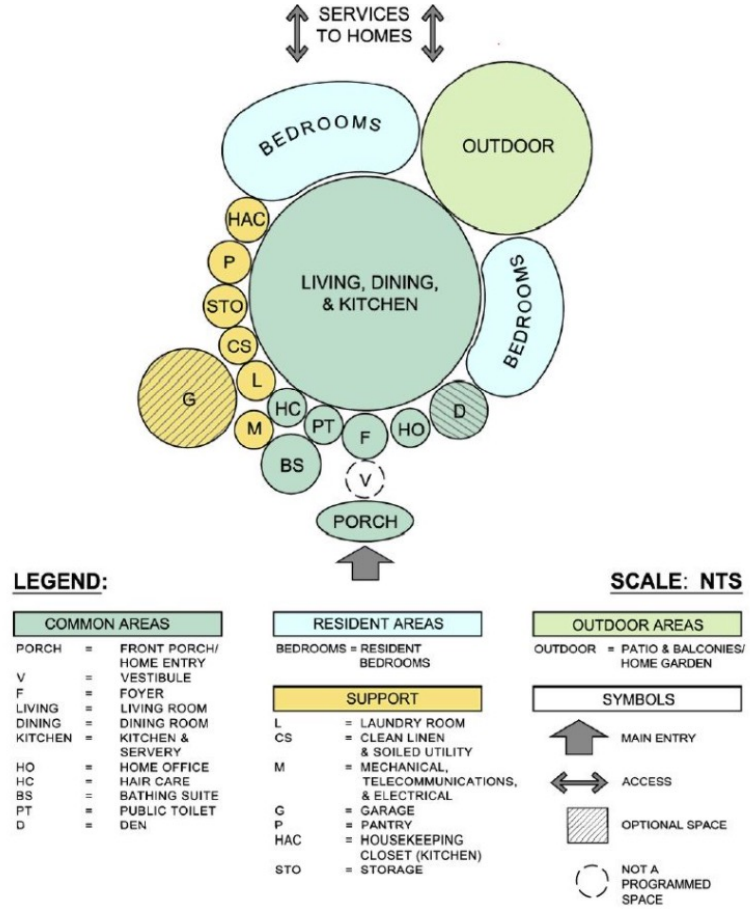
  - If the client is a repeat builder (school districts, public library, public office building, etc.), obtain plans and do area take-offs; determine typical building efficiencies.

  - Use the existing square footages for comparison when you propose future amounts of space. People can relate to what they already have. (See illustration above in *Step 5, Determine quantitative requirements*.)

Edith Cherry, Architectural Programming , 11-02-2016 at https://www.wbdg.org/design-disciplines/architectural-programming

4. IDENTIFY STRATEGIES -1

- Programmatic strategies suggest a way to accomplish the goals given what one now knows about the opportunities and constraints.
- A familiar example of a programmatic strategy is the **relationship or "bubble" diagram**.
  - These diagrams indicate what functions should be near each other in order for the project to function smoothly.
  - Relationship diagrams can also indicate the desired circulation connections between spaces, what spaces require security or audio privacy, or other aspects of special relationships.



Source: Pinterest

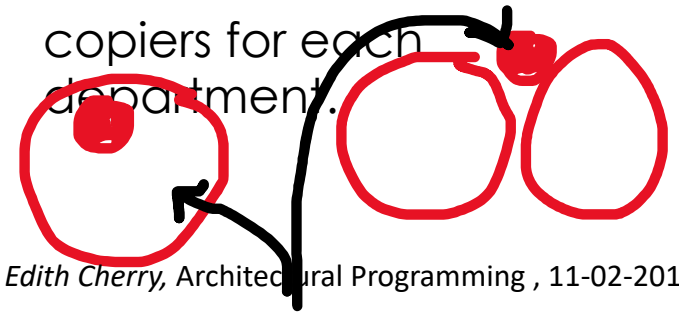
Edith Cherry, Architectural Programming , 11-02-2016 at https://www.wbdg.org/design-disciplines/architectural-programming

4. IDENTIFY STRATEGIES - 2

Other types of strategies recur in programs for many different types of projects. Some examples of common categories of programmatic strategies include:

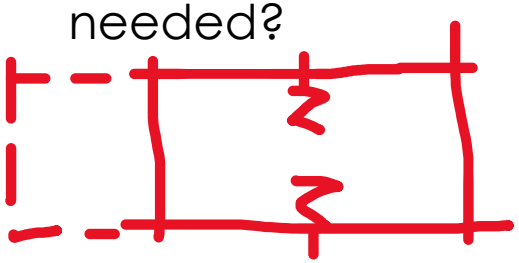
Centralization and decentralization:

- What function components are grouped together and which are segregated?
- For example, in some offices the copying function is centralized, while in others there are copiers for each department.



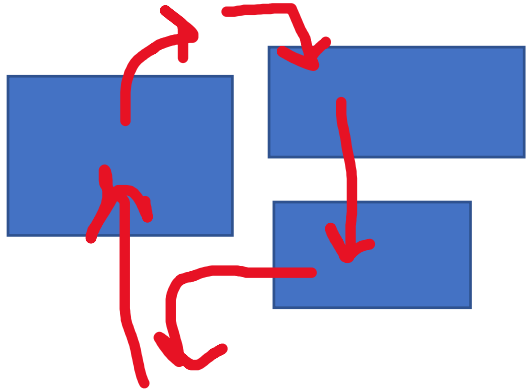
Flexibility:

- What types of changes are expected for various functions?
- Do facilities need to change over a period of a few hours? A few days? A summer recess? Or is an addition what is really needed?



Flow:

- What goods, services, and people move through the project?
- What is needed at each step of the way to accommodate that flow?



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4. IDENTIFY STRATEGIES - 3

- ***Priorities and phasing***:
- What are the most important functions of the project?
- What could be added later?
- Are there ongoing existing operations that must be maintained?

Levels of access:

- Who is allowed where?
- What security levels are there?

Notes:

- Ideally, each of the goals and objectives identified in **Step 2** will have some sort of strategy for addressing that goal.
- Otherwise, either the goal is not very important, or more discussion is required to address how to achieve that goal or objective.

Edith Cherry, Architectural Programming , 11-02-2016 at https://www.wbdg.org/design-disciplines/architectural-programming

5.DETERMINE QUANTITATIVE REQUIREMENTS-1

- In **Step 5**, one must reconcile the available budget with the amount of improvements desired within the project time frame.

Cost, schedule, and affordable area are interdependent. Costs are affected by inflation through time. Affordable area is determined by available budgets.

Edith Cherry, Architectural Programming , 11-02-2016 at https://www.wbdg.org/design-disciplines/architectural-programming

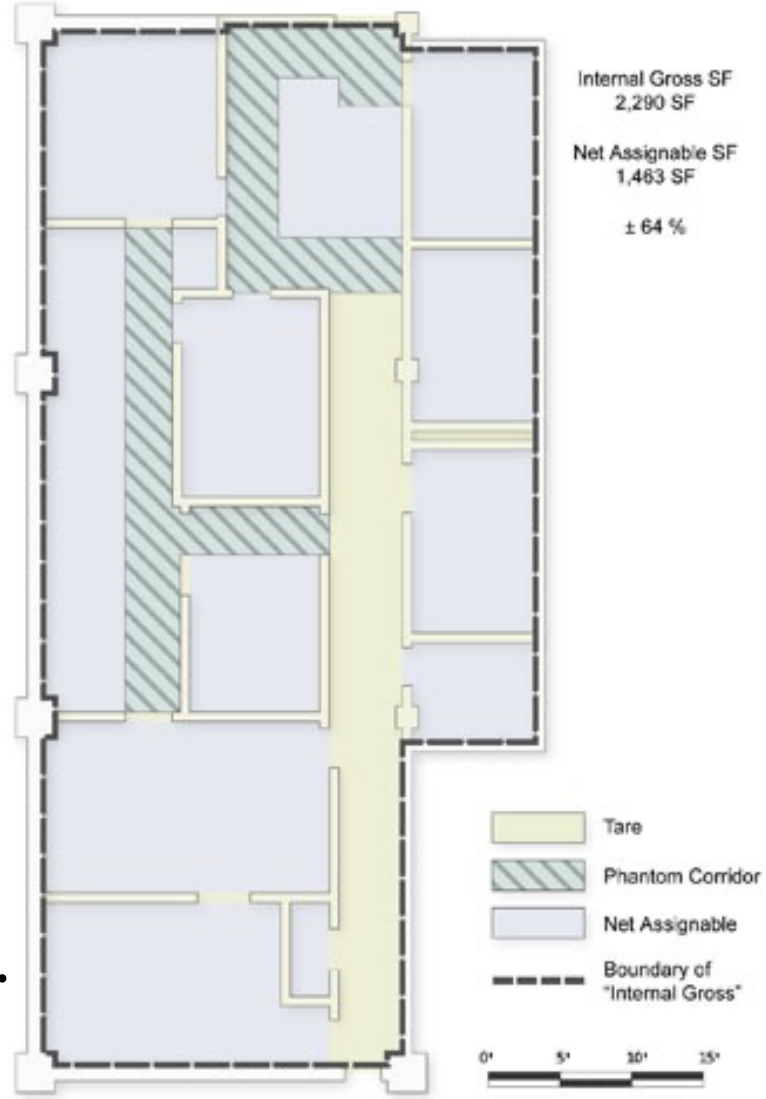
5.DETERMINE QUANTITATIVE REQUIREMENTS-2

- First, a **list of spaces is developed to accommodate all of the activities** desired.
- The space criteria researched in **Step 3** are the basis of this list of space requirements.
- The space requirements are listed as **net assignable square feet/Net floor area** (NASF/NFA), referring to the space assigned to an activity, not including circulation to that space.

Edith Cherry, Architectural Programming , 11-02-2016 at https://www.wbdg.org/design-disciplines/architectural-programming

5.DETERMINE QUANTITATIVE REQUIREMENTS-3

- A percentage for **"tare"/Utility+circulation** space is added to the total NASF/NFA.
- **Tare space** is the area needed for circulation, walls, mechanical, electrical and telephone equipment, wall thickness, and public toilets.
- **Building efficiency** is the ratio of NASF/NFA to gross square feet (GSF/GFA), the total area including the NASF and tare areas.
- Building efficiency equals NASF/GSF.
- The building efficiency for a building type was researched in **Step 1** and possibly **Step 3**.



6. SUMMARISE THE PROGRAM

- Finally, once all of the preceding steps are done, **summary statements can be written defining "in a nutshell" the results of the programming effort.**
- All of the pertinent information included above can be documented for the owner, committee members, and the design team as well.
- The decision-makers should sign-off on the scope of work as described in the program.
- Once a program is completed and approved by the client, the information must be integrated into the design process.
- Some clients want the programmer to stay involved after the programming phase to ensure that the requirements defined in the program are realized in the design work.

Edith Cherry, Architectural Programming , 11-02-2016 at https://www.wbdg.org/design-disciplines/architectural-programming

The Practical Step

PRACTICAL STEPS IN FORMULATING DESIGN BRIEFS FOR CURRENT PROJECT

- Read the Project Brief given you for this semester
- **Identify the design project** you.
- You are assigned to design a Mixed-Use Development project.
- Read the project requirements… so that you can gauged the type of project and from which sources of information you may gather to provide the required information to design the facility.

SGA 3382 ARCHITECTURAL STUDIO VI
SEMESTER 06– MARCH 2021

Universiti Malaysia KELANTAN

PROJECT BRIEF – PROJECT 2(a) : Part 1 Design Brief

Duration: 1 Weeks
Marks: 5 %

Part 1 - Design Brief

TASK

From Project 1, each student has to come out with a project brief which has to include:

- Overview (200-300 words)
- Studies of key users and client vision
- Site Description – Opportunities & Constrains
- Building Typology Studies (With precedent)
- Regulatory Requirements
- Architectural Conceptual Responses (Analytical Diagrams & Drawings)
- Functional Requirements & Sschedule of Accommodation (S.O.A)

Source: Najah, UMK (2021)

Your Project

Mixed Use Building Typology

What is a mixed used Building Typology?
It can have residential, commercial, institutional and other all in one project.

Tall Buildings ...
mdpi.com

Maxis Tower, KLCC – NRY Architects
nry.com.my

constructing low carbon cities ...
greendkinsea.com

Design Parameters

DESIGN PARAMETERS FOR STUDIO VI

Site:	Urban Area
User:	Up to 100 persons
Built-Up Area:	2000m2 (Up t0 5+Basement carpark)
Structure:	Composite + Mixed
Sustainability:	GBI Requirement, SDG 17
Regional Identity:	Historical Response, Merging of multi concepts
Course Integration:	Environmental Sustainability Building Technology, Architectural Science, Building Services, Architectural Practice

Source: Najah, UMK (2021)

GUIDELINES & DESIGN REQUIREMENT

From the pre-design studies in the project 1, student have to come out with a design brief base on the chosen site.

These are general requirements for the building:

- No larger than 2500 m^2
- 5 levels (Including Basement/Elevated Parking)
- Fully open spaces and landscaping are not to be included in area calculation
- The building should allow for a minimum of car park spaces (refer UBBL guidelines and Local Authorities Guidelines)
- Provide a loading/unloading space for a minimum of 1 service truck
- Provide proper drop off zone for user
- Considerations for universal design and Covid-19 considerations.

Practical STEPS TO FORMULATE DESIGN BRIEF for your client

Academic purposes

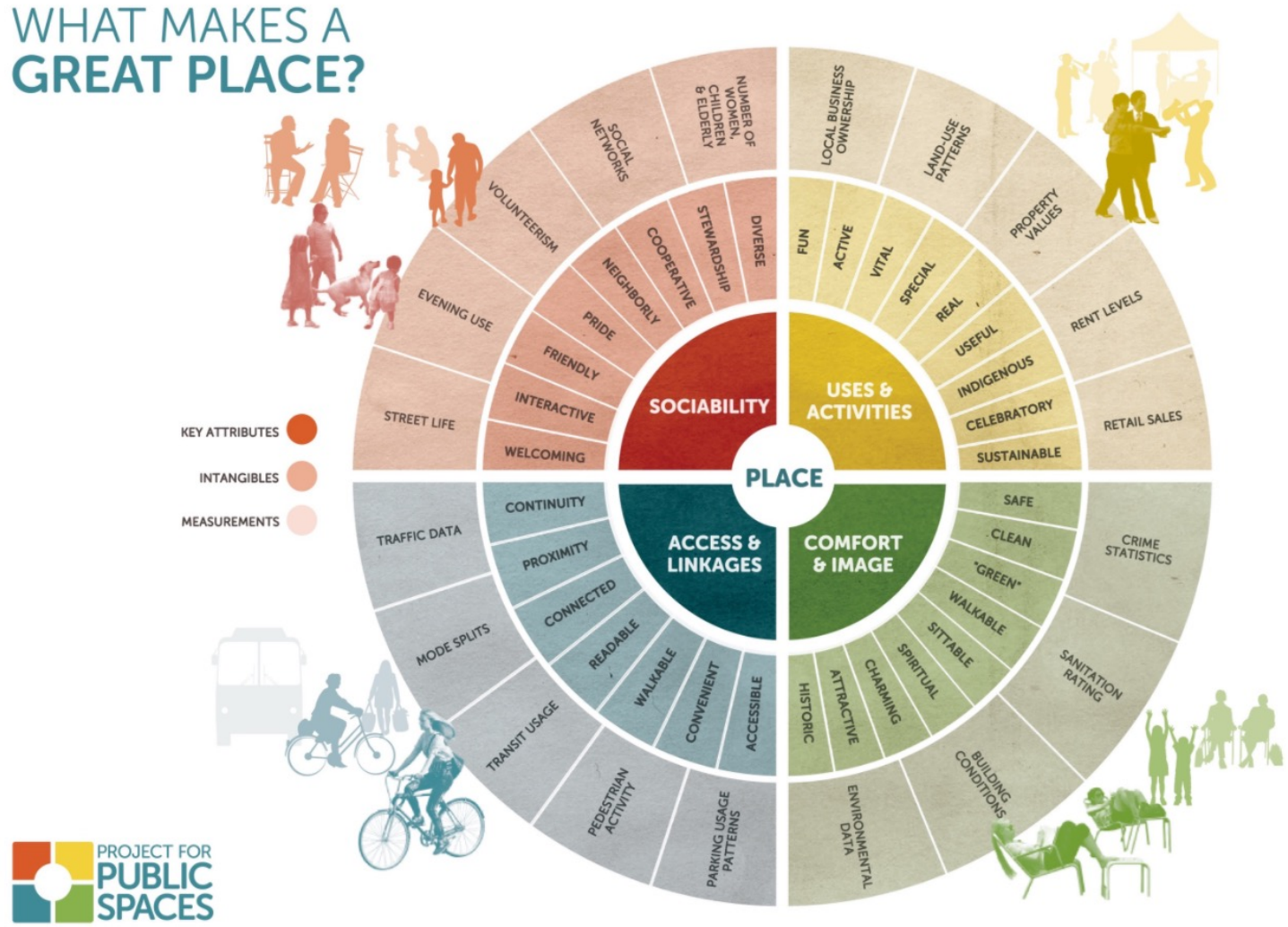
How to Write The Design Brief

- Need to know
  - What is your *design* project
  - Who is the client to your project
  - What is your clients' vision and mission, dreams and aspiration of the project- benefit
  - The SCOPE of the project
  - The SITE of the project
  - The Detail of the Project
  - When do you need the project to be completed
  - How much budget you have estimated for the project

PRACTICAL STEPS IN FORMULATING DESIGN BRIEFS FOR CURRENT PROJECT

- Read the Project Brief your lecturers has given you for this semester
- Identify the design project you are assigned to and read the client's project requirement

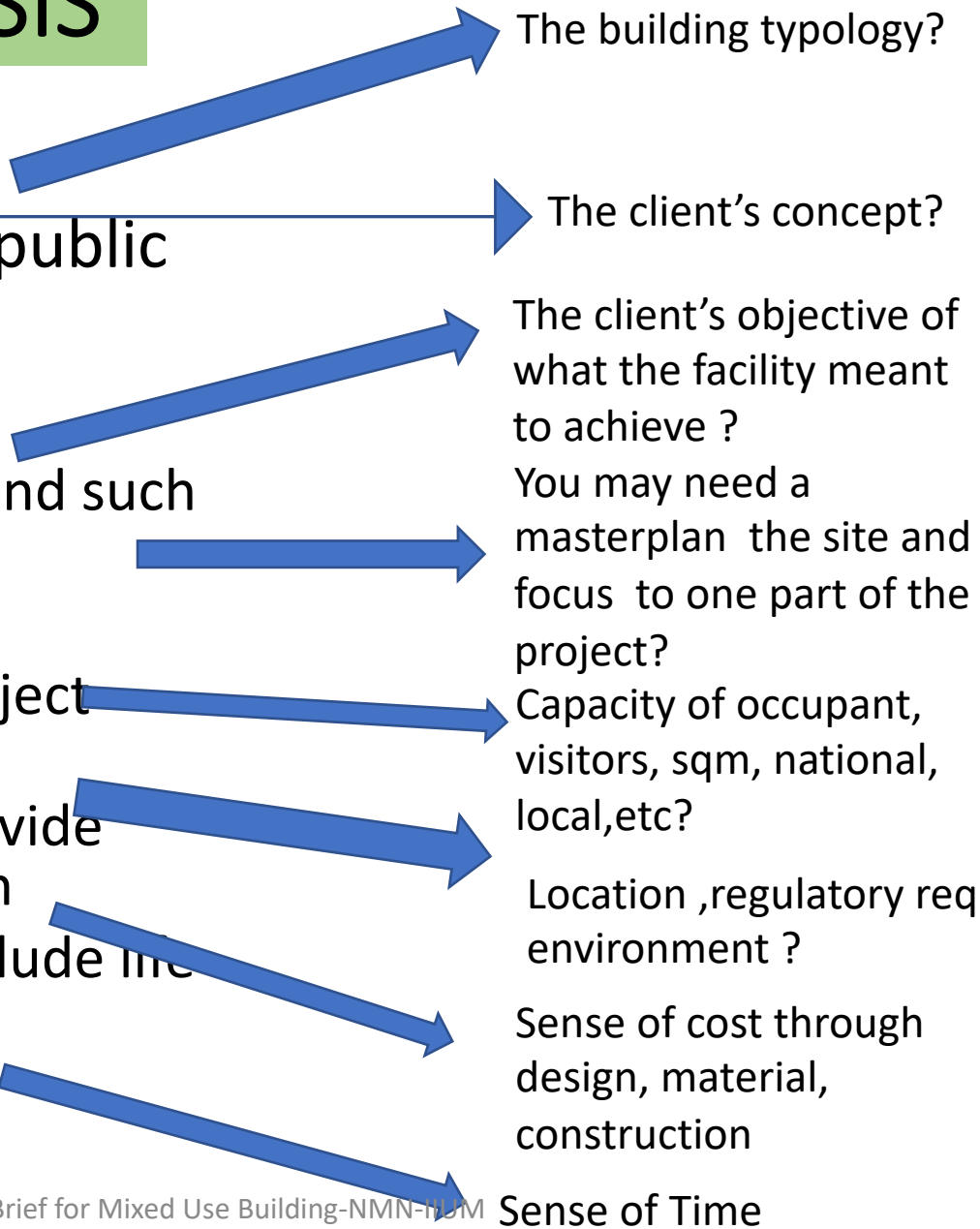
- ***identify the design project***…e.g. **Urban Sanctuary in Kuala Lumpur**…so that you could gauged /extract/feel the type of project and from which sources of information you may gather to provide the required information to design the facility.



Source: https://www.pps.org/article/grplacefeat

The process of SYNTHESIS

- TITLE OF THE PROJECT
- THE CLIENT-private or public
  - Inspiration, vision
- THE PROJECT
  - OBJECTIVE – for such and such
  - SCOPE – provide the limitation/boundary
  - SCALE – size of the project capacity
  - Proposed SITE – to provide contextual connotation
  - Budget estimate to include life cycle cost/economics
  - Implementation



The building typology?

The client's concept?

The client's objective of what the facility meant to achieve ?

You may need a masterplan the site and focus to one part of the project?

Capacity of occupant, visitors, sqm, national, local,etc?

Location ,regulatory req. environment ?

Sense of cost through design, material, construction

Sense of Time

Understand the **Concept of Urban Sanctuary'** from the Client's perspective

The FUNCTION Addressing ISSUES

Function: *Urban communal activities and enhancement of Islamic knowledge, social interaction, a place for refuge and rest, economic, recreation and welfare for all.*

- Key words…FUNDAMENTAL and IMPLICIT

e.g. "overcoming social problems and economic sustenance in the cities " , "aimed at balancing cities with areas that stimulate economic regeneration and social identity. The concept can revive the inner-city areas by boosting the local economy. "…" reducing urban expansion and making spaces more compact, socially integrated and using energy effectively " "integrates residential functions, work compatible activities, adequate activities and spaces, culture and social integration with leisure, spiritual and sports activities. ".." encouraging the integration and mixed functional development of pedestrian-scaled neighbourhoods and the enhancement of the city's open space "

Extract from the IIUM Project Brief, Zaiton (2020)

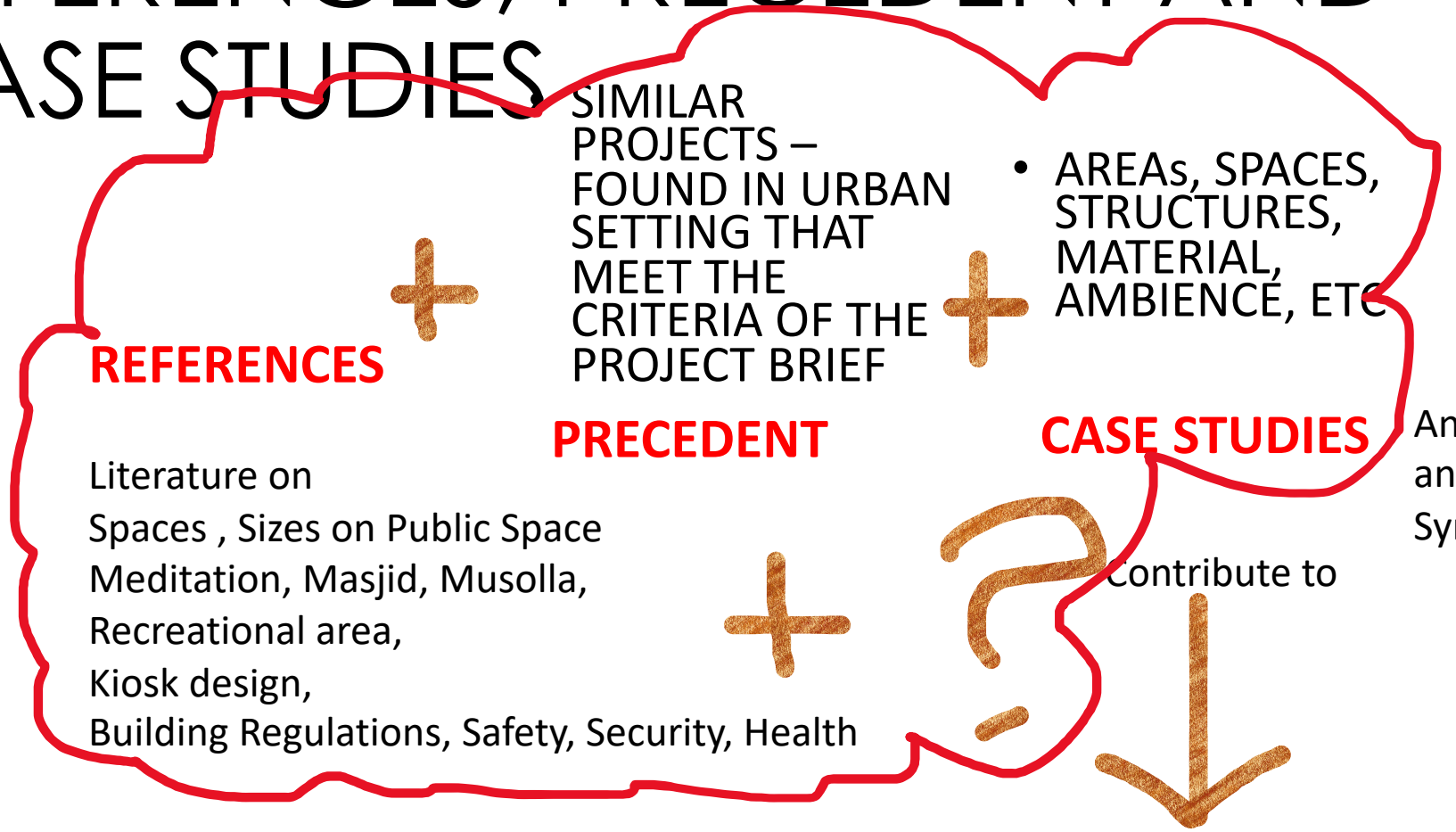
REALISING THE VISION AND MISSION OF THE CLIENT

- ***Formulate design (including planning) concepts / vision*** for the project,
  - taking into account the project objectives idea…..e.g. permeable, accessible, anytime, flexible, fast, maintenance free, sustenance, etc)
- **Remember the objective of the project**….

THE ARCHITECT POSITION HERE IS TO WRITE THE DESIGN BRIEF FOR THE CLIENT and RESPECT CLIENT'S ASPIRATION

Eg. Clients Mission and Vision or Organisational Philosophy
(Source: Pinterest)

REFERENCES, PRECEDENT AND CASE STUDIES



SPATIAL , ENVIRONMENTAL & INFRASTRUCTURAL **CONCEPTUAL REQUIREMENT** OF THE PROJECTS

Source: Norwina.IIUM (2020)

Just need to note:

THE CLIENTS

In DESIGN BRIEF FORMULATION/CREATION, the CLIENT has many choices:

To provide the consultants with detail requirements of the facility (especially it is specialised and regulated facility) as in Traditional or Conventional or

To allow the designers or consultant to proposed based on scanty requirements. As in Design and Built Contract

The Choice depends on TIME, NEEDS, COSTS

SPACES OF THE FACILITIES IN THE DESIGN BRIEF

Each of the spaces listed should be described in the brief as to the

- purpose and function;
- expected equipment
- activity expected within
- how many people or persons will be in the space at one time.
- duration of use, night & daytime
- environment requirement

From **Case studies** of the spaces, eg. Musolla..

Do take note of the following as per design guidelines or mandatory requirements:

- Sizes Length x Breadth x Height configuration
- Special equipment required to function in the room and electrical requirement
- The environment required such as cool temperature, ventilation, lux etc
- Number of personnel involved as well as the peak time used.

Schedule of Accommodation or Spatial Requirements

List the spaces and gather information on its actual spaces from the design data, precedent and case studies analyses, etc.

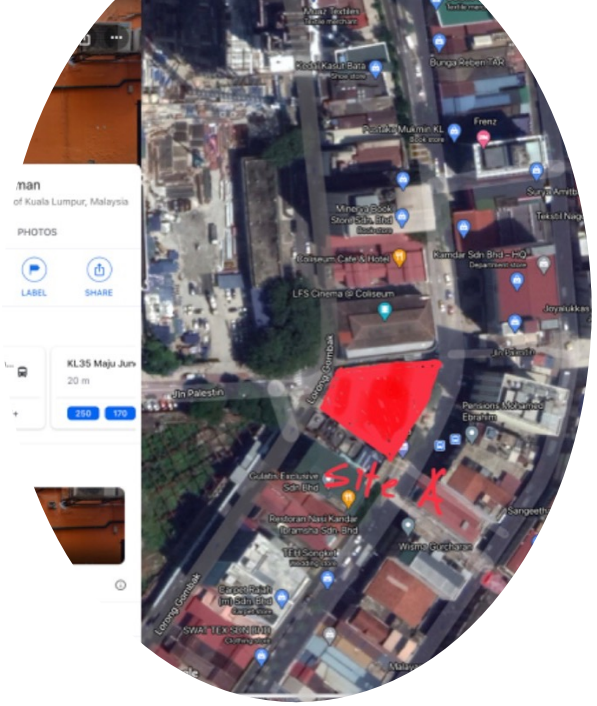
Calculation of functional spaces, areas for building services (mechanical & electrical spaces such as ducting, plant room etc) to add circulation spaces inter and intra, such as corridors, connecting spaces, etc by accepted %.

KAMPUNG PUAH COMMUNITY CENTRE-SITE C

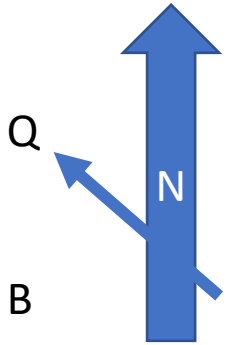
NO	SPACE		CAPACITY	UNIT AREA (sqm)	QUANTITY	AREA (max sqm)	DESCRIPTION & REQUIREMENTS	HOURS OF OPERATION
	A. PRIMARY/MAIN SPACES/SOCIAL AMENITIES							
A.1	Recreational Spaces	Indoor recreational area	30	4	1	120	For Tai Chi/Aerobic/other	6.00 a.m. - 12.00 a.m.
		Interactive play area	20	4	1	80	A play area that also provide a learning experiences	
		Gymnasium	20	5	1	100	supervised	
		Coaching workshop	20	4	2	160		
		Changing room	15	2.5	2	75		
		Locker space	5	2	2	20		
		Storage	2	6	1	12		
			Total Net Area			567		
		Circulation (15%) and M&E (5%)		30%		170.1		
				Total Gross Area		737.1		
A.2	Community Café	Cafe counter	3	3	3	27		6.00 a.m. - 11.00 p.m.
		Storage	1	3	3	9		
		Dining area	30	4	1	120	Seated including handwashbasin station.	
			Total net area			156		
		Circulation (15%) and M&E (5%)		25%		51.25		
				Total Gross Area		207.25		
A.3	Multipurpose Community Hall	Registration Area	2	3	1	6	with counter and storage	During Event Only
		Pre-function space	150	1.5	1	225		
		Multi Purpose Event Space	150	4	1	600	For exhibition, community event with flexible	
		Secretariat Rooms	4	2.5	1	10	For secretarial purposes	
		Guest Room with ensuite toilet	6	3	1	18		
		Media/Interview Room	6	3	1	18		
		Management Office	3	3	1	9		
		Storage	2	6	2	24	Furniture, stage and equipment.	
		Audio Visual Room	3	3	1	9	For video, audio and lighting	
		Catering and Servery Area	10	4	1	40	Access to delivery area for catering	
		Changing room	2	4	2	16	Male and female.	
		Janitor/Cleaners store	1	3	1	3	Storage of cleaning equipment, detergent	
		Toilet for Disable	1	4	2	8	Male and female.	
		Toilet	4	4	2	32	Male and female.	
			Total net area			787		
		Circulation (20%) and M&E (10%		30%		75.6		
				Total Gross Area		862.6		

Source: Norwina ,SOA Community Project, IIUM 2021

Extract from the IIUM Project Brief, Zaiton (2020)



SITE B



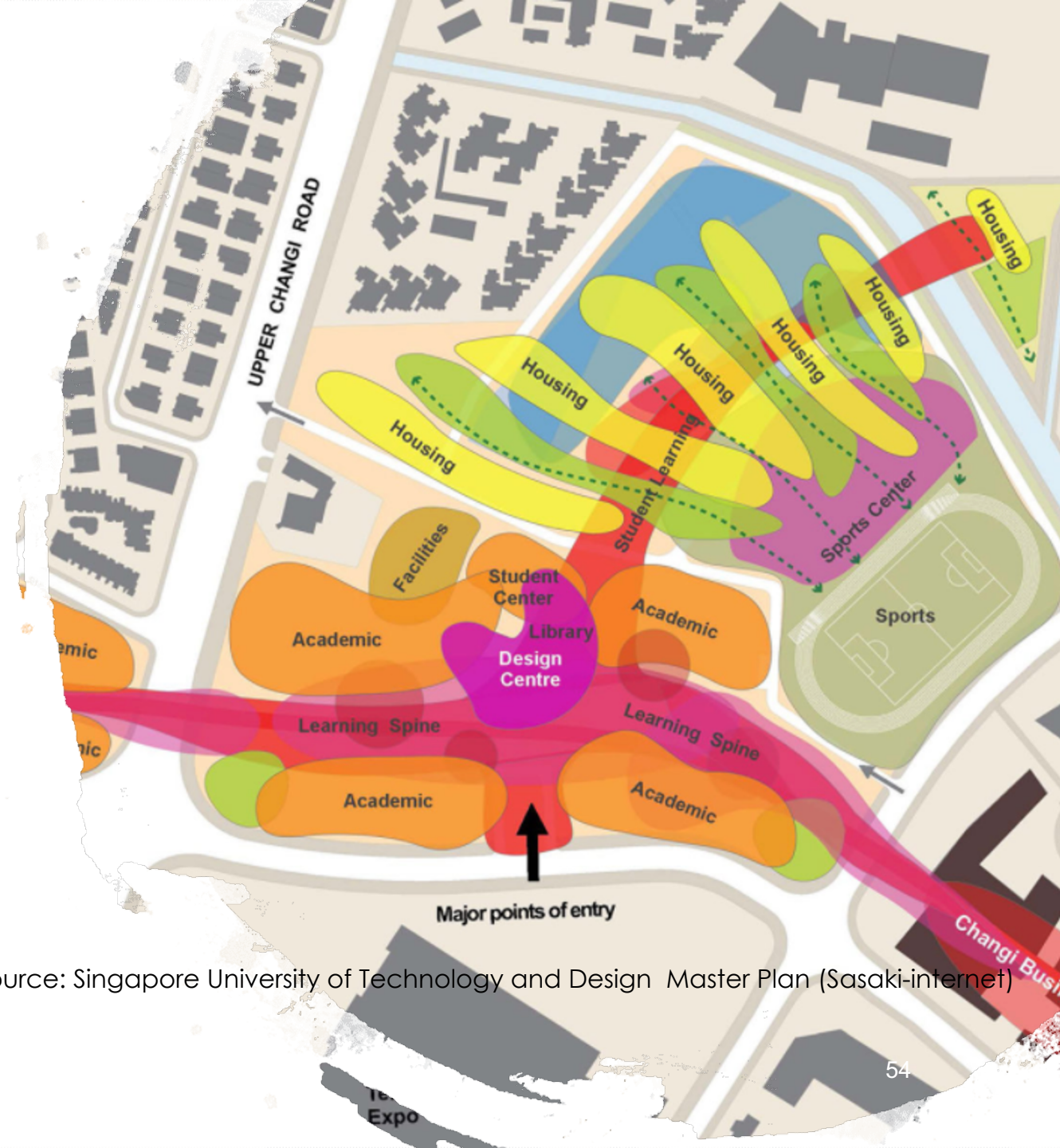
THE SITES FOR URBAN SANCTUARY PROJECT

Identify location so that you could attuned to the site context such as history, climatic, regulatory, topography, relationship of vicinity facility and access as the PLACE and SPACE

PRACTICAL STEPS IN FORMULATING DESIGN BRIEFS FOR CURRENT PROJECT

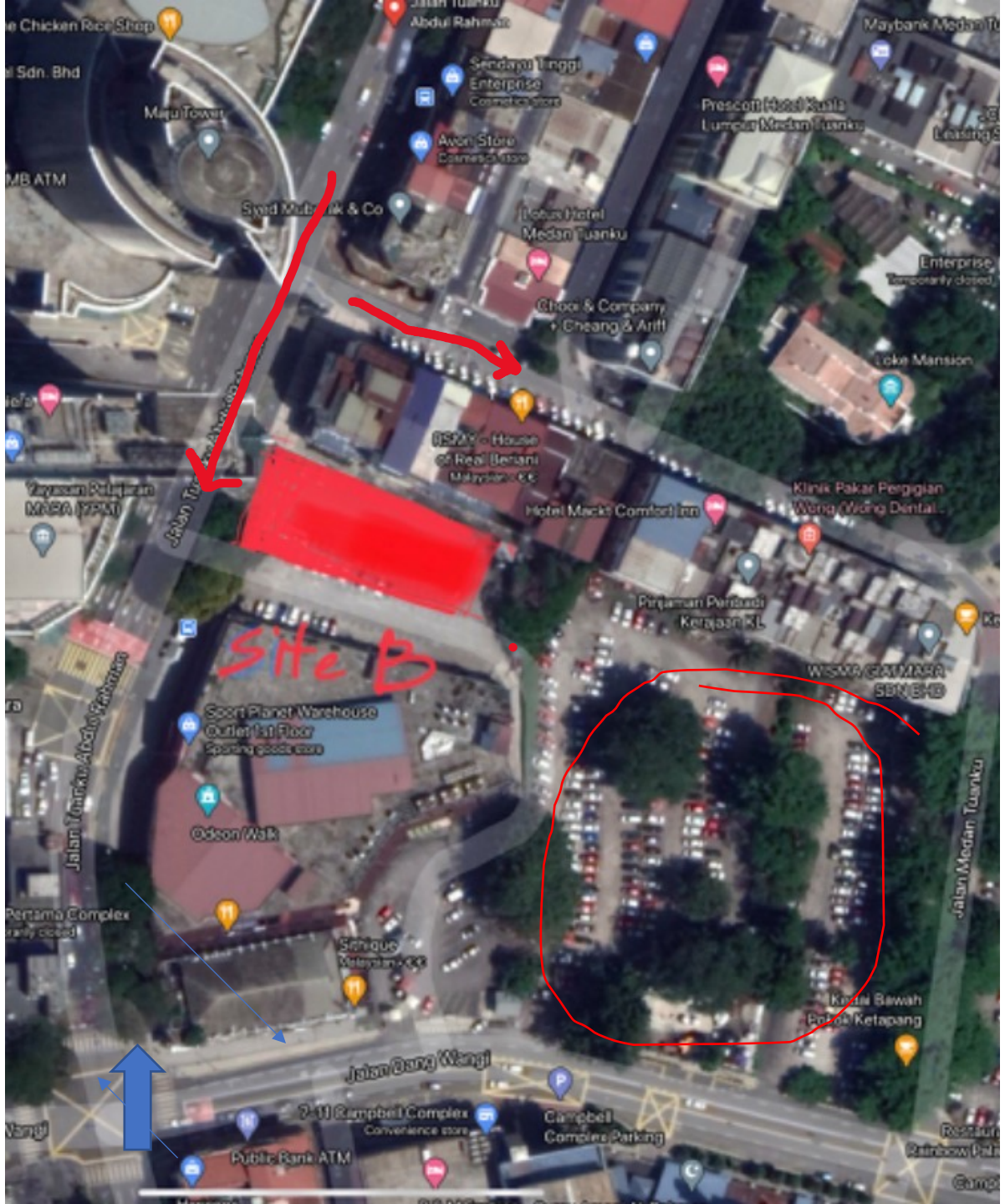
- ***Describe the site*** where the project will be located and how the facility will be set out (using the group site analysis data) to the best of the advantages in terms of accessibility, orientation, etc, but as a *concept only*

- ***Masterplan Layout concept*** of the facility in terms of groupings/ zoning/ adjacencies of the spaces listed out in the Schedule of the Accommodation (in words and in graphical symbols).



Source: Singapore University of Technology and Design Master Plan (Sasaki-internet)

Extract from the IIUM Project Brief, Zaiton (2020)



Example

- State Context – Commercial entity
- State acreage-size of land
- State Location
- State Access road and its interconnectivity to main roads
- State other mode of transport hub and circulation pattern and flow direction
- State existing green lung, landmarks to preserve,
- State main and special activities of the area
- State intent of connectivity to other main facility
- State the relevant regulatory requirements the designers need to comply eg –sewerage, drainage, roads, building height, etc

EMERGING ISSUES

Architectural Design Brief

EMERGING ISSUES

Some of the emerging issues in the discipline of architectural programming include:

- Development of **standards and guidelines for owners that build similar facilities** frequently. These efforts include:

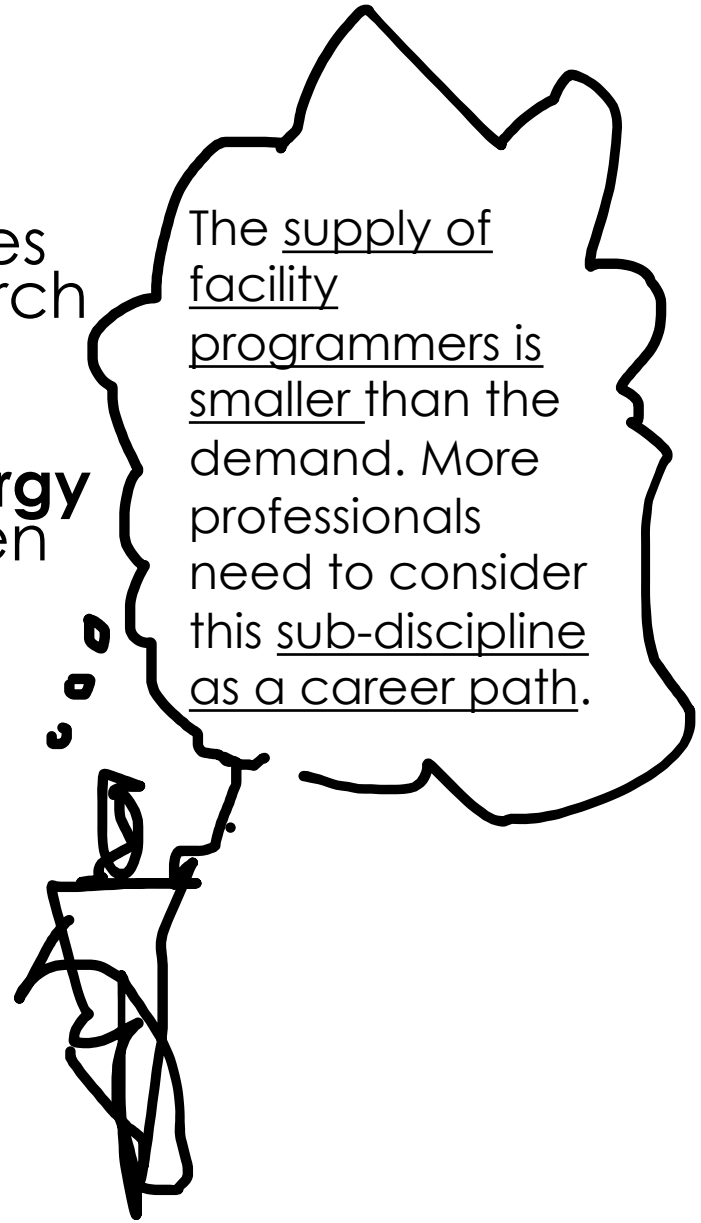
Formalizing (computerizing) building facility requirements for Web-based consumption—for example, the National Park Service has developed Facility Planning Model Web-based software to assist park superintendents and other staff in the development of space and cost predictions for legislative requests. The intention is to make budget requests more realistic and more comprehensive.

Facility programming *to make early predictions to aid in early capital budgeting*

Client-owners are increasingly requiring verification that the design complies with the program.

EMERGING ISSUES

- **New technologies** are generating a need for types of space which have no precedents. Basic research on these technologies is required to determine standards and guidelines.
- As more clients require measures for **building energy and resource conservation** standards (LEED, Green Globes, etc), the programming process needs to reflect these requirements in goals, costs, scheduling, and process.
- **Pandemic** or health issues
- **Safety and rights** of the workers in building construction
- **Design responsibilities**



CODES, GUIDELINES, REGULATIONS

Architectural Design Brief

RELEVANT CODES AND STANDARDS

- A very important part of programming is identifying relevant codes and standards that apply to the project (see **Steps 1 and 3** above).
- Codes, covenants, deed restrictions, zoning requirements, licensing requirements, and other legal obligations can have significant influence on costs and therefore, affordable GSF/GFA.
- These factors must be identified prior to design.

RELEVANT CODES AND STANDARDS

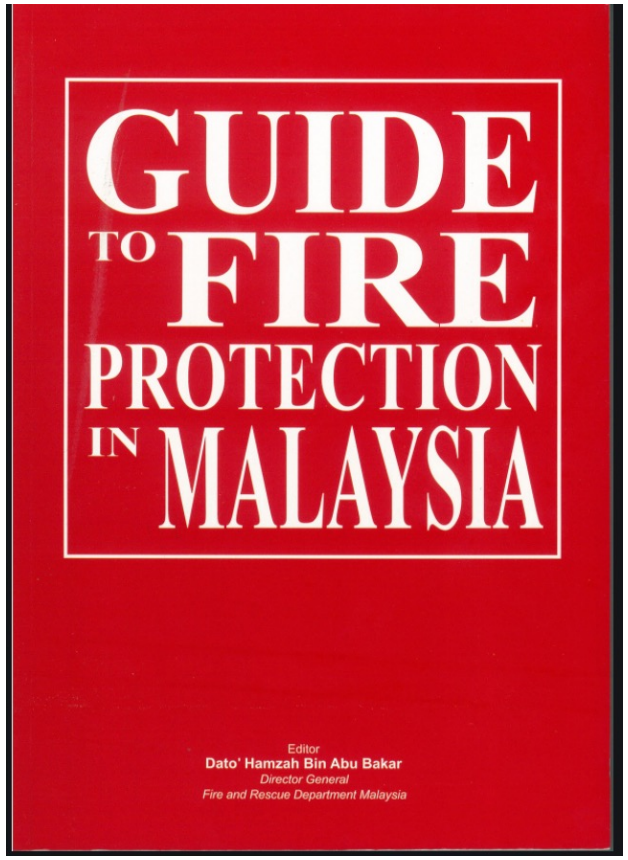
- Many governments and institutions have developed **standards and guidelines for space allocations.**
  - For example, the General Services Administration (GSA/GFA), military, and higher education institutions all have standards and guidelines.
  - These standards must be adhered to in programming projects for these clients.
  - The standards are also useful as guidelines for agencies that have not developed their own standards.
- Some **standards are mandated by statutes** in some jurisdictions for licensing, accreditation, or equity purposes.
  - Eg. Schools, hospitals, correctional facilities, and other licensed or accredited institutions may be required to meet these standards prior to opening their doors.

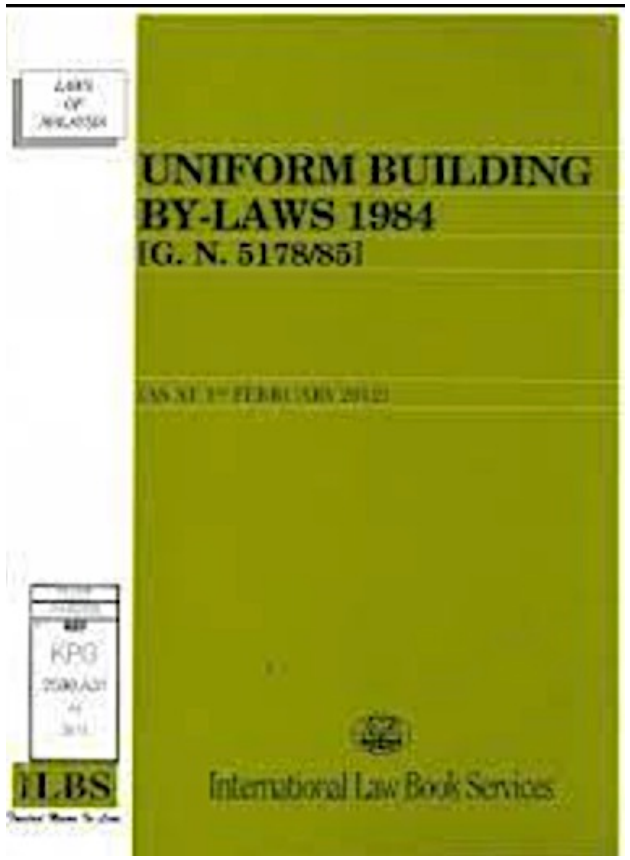
RELEVANT CODES AND STANDARDS

- Some building codes identify the number of square feet/square meter allocated per person for certain types of occupancy. However, while these ratios may determine the legal occupancy numbers for the facility, exiting requirements, fire separations, etc., they represent the minimum requirements.
- It may be necessary to accommodate specific activities adequately with more space.

Eg. Pandemic Design Guidelines, Fire Protection and Escape Design Guidelines

RELEVANT CODES AND STANDARDS

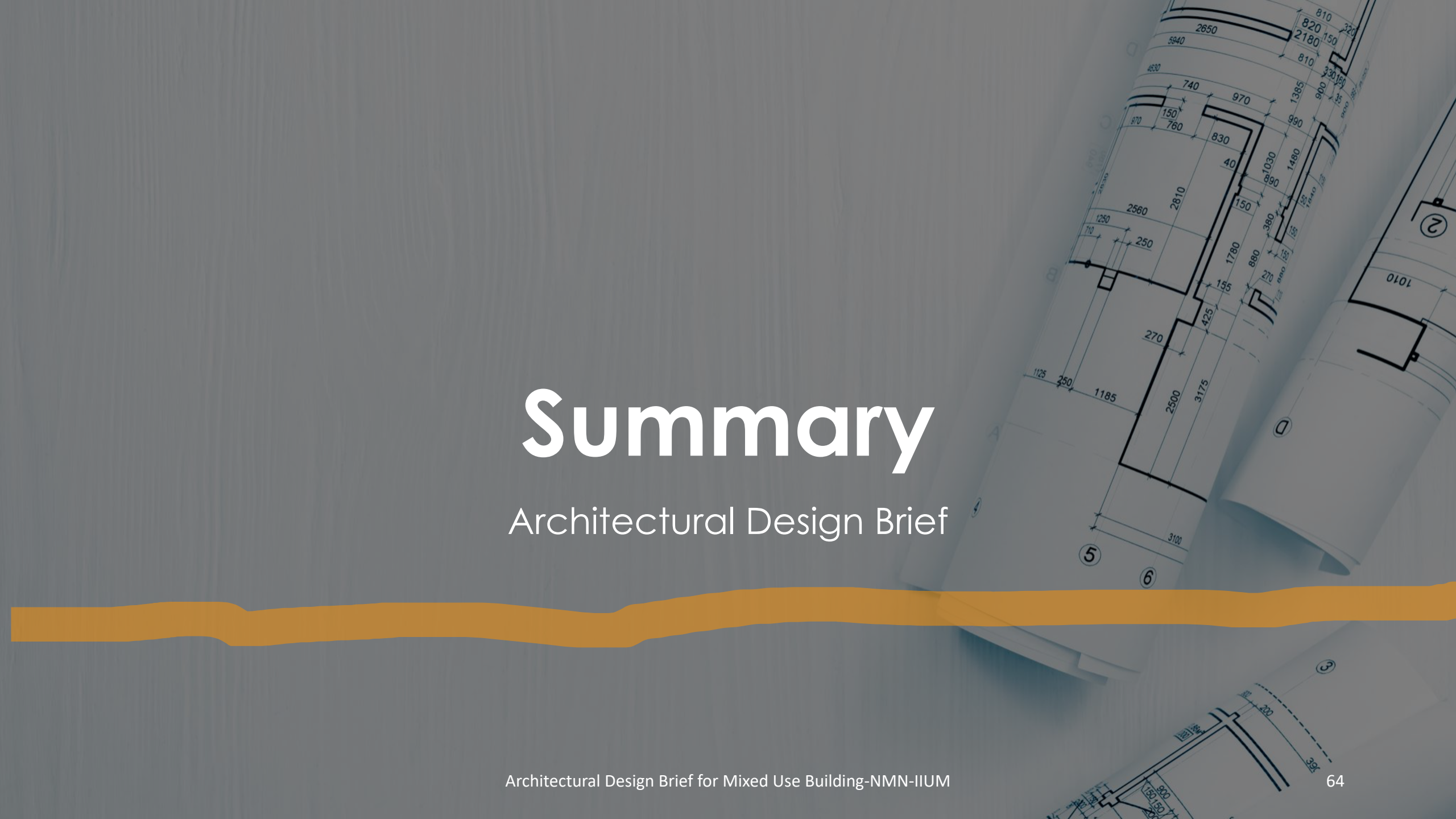




More……..

Summary

Architectural Design Brief



CONTENT OF A DESIGN BRIEF

- Introduction
- Concept /Role Statement (**planning principles and design concept** including environmental and engineering policies)
- Organisation Structure (of the management of the facility)

Introduction : State your CLIENT
A summary overview of the masterplan/vision as a background to the brief

Role Statement gave outline of the services of every department and note what the centre would be provided.

Provides simple description of the proposed organisation that will operate on completion

CONTENT OF A OVERALL DESIGN BRIEFS

- Centre overall Policies
- Departmental Briefs
- Cost Summary
- Appendices

An overview of the systems in terms of management staff, public users of various backgrounds and status (disable, poor, homeless, etc supplies; disposal; maintenance etc.

Description in detail for each functional entity eg. Musolla or management office, public toilet, shops, etc.

Sample of spaces or Regulatory requirements

Preliminary estimates

CONTENT OF A **DEPARTMENTAL/UNIT DESIGN BRIEFS**

Functional Description (based on spaces listed in SOA)

Workload

Planning Principles and Workflow Diagram

Management and Staffing

Application of Overall polici
Eg. Waste disposal, maintenance

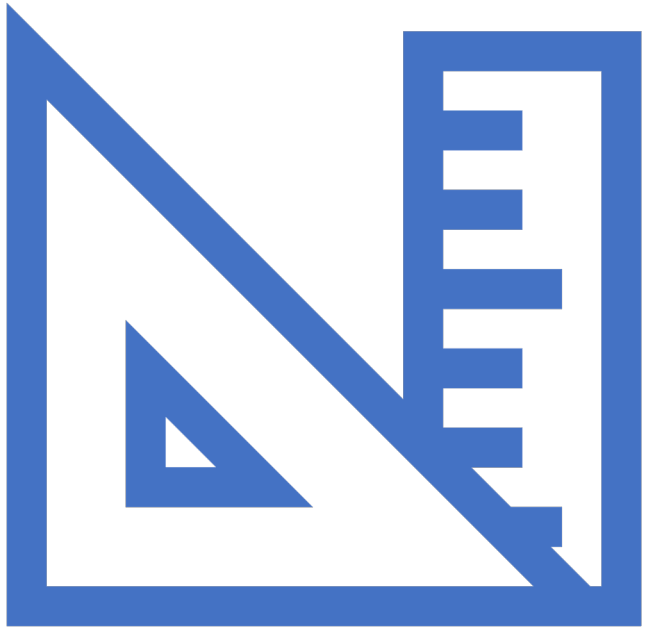
Planning & Design Principles of Philosophy eg. Barrier Free and Muslim Friendly,

Engineering & Environmental Services

Locational Factors

Relationship with other department

Space provisions/ Schedule of Accommodation (SOA)



FUNCTIONAL DESCRIPTION

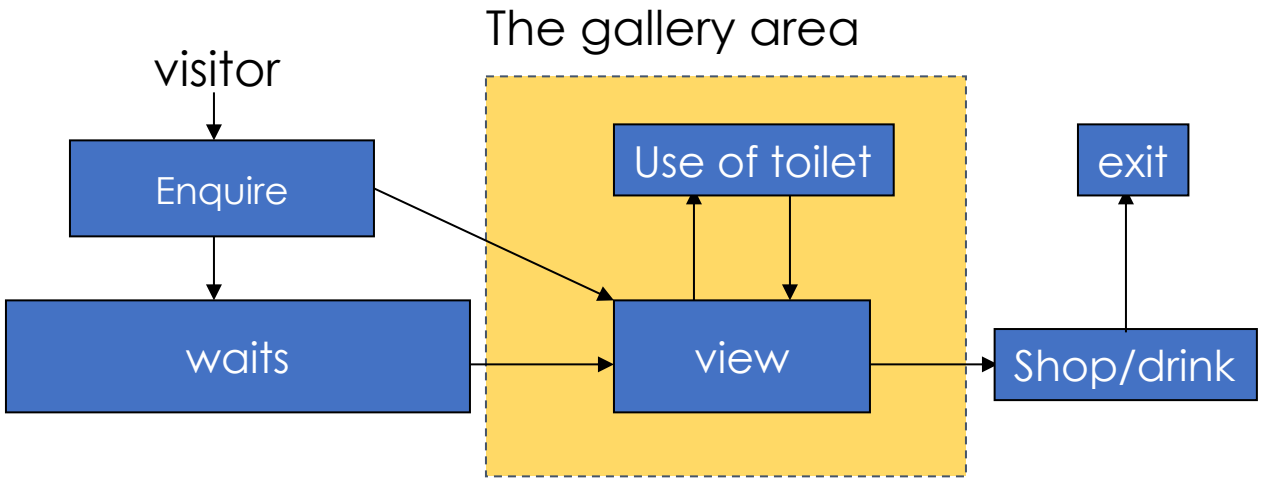
- Summary of **definition of the scope** of the department/unit as it is expected to operate at the time of completion.
- It should provide **description to the operational principles** which governed this particular department and the philosophy of service

WORKLOAD

- Summary of the workload for this unit/centre/facility defining the size of service and the factors which influence this.
- Projections for the workload will be displayed for the period when the new facility begins.
- A table showing workloads for the year (if any, otherwise assume) and footnotes as to the assumptions will be recorded here.

PLANNING PRINCIPLES AND WORKFLOW

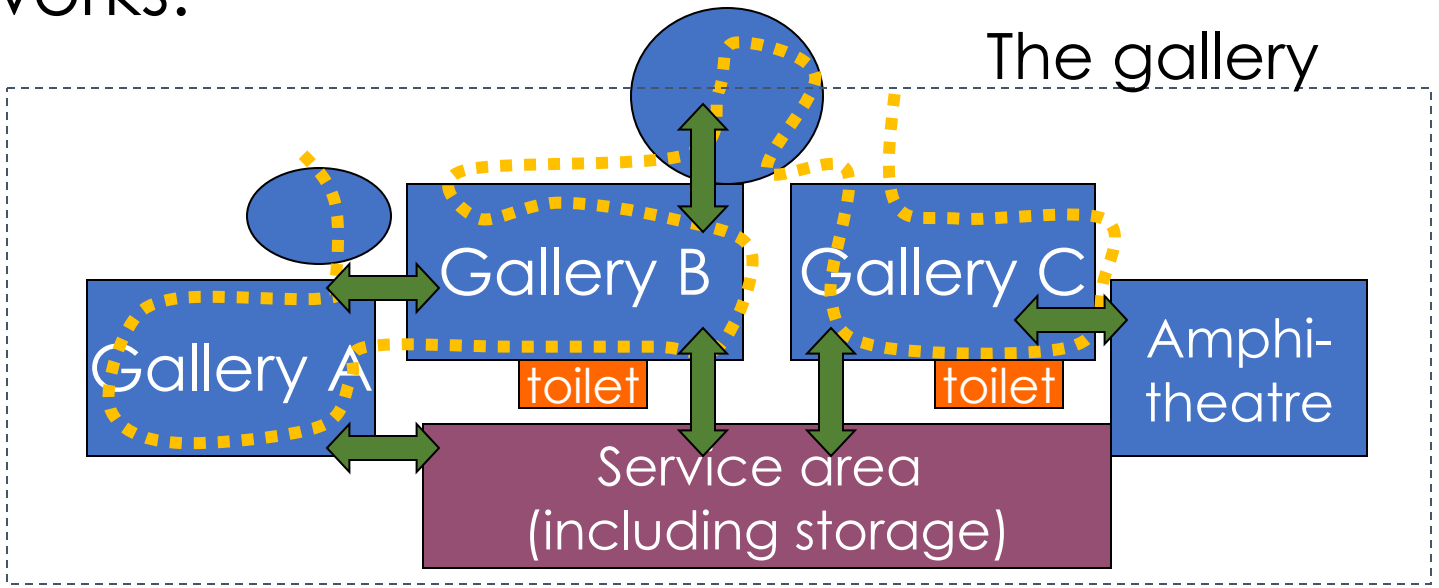
- This section described the way the supply and disposal, workers and services as well as all other activities will take place (happening) throughout the department.
- A workflow diagram is required.



E.g. Workflow diagram of a visitor to the gallery

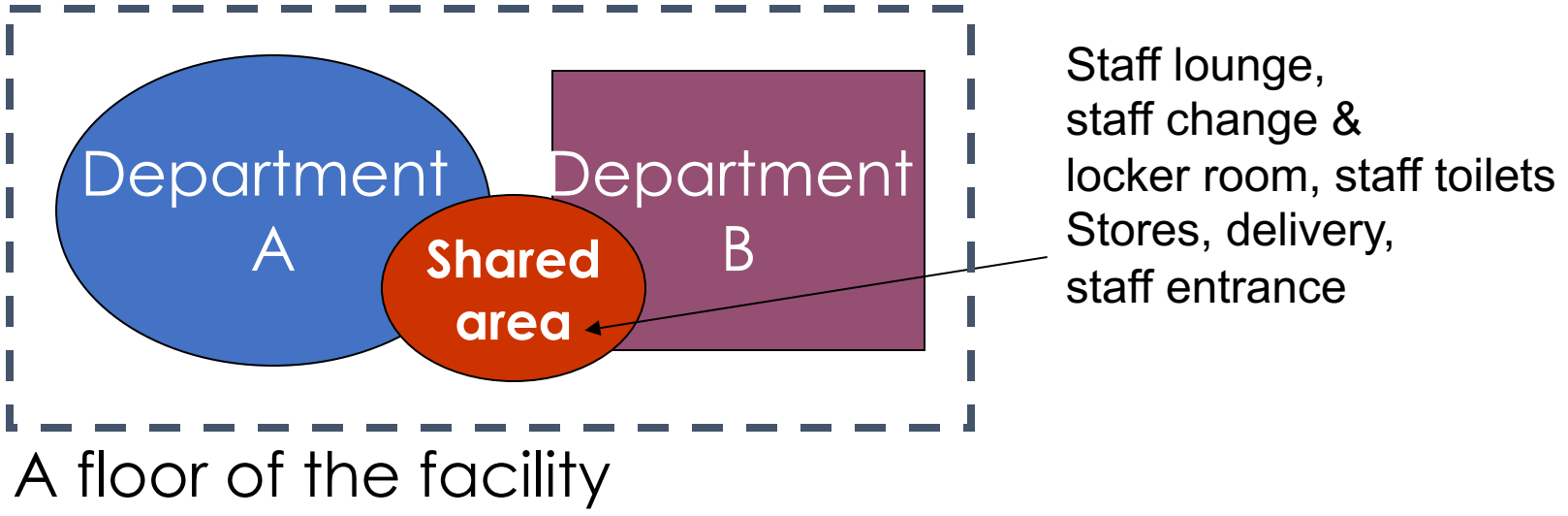
PLANNING PRINCIPLES AND WORK contd

- A description will be provided regarding the use to be made of the significant rooms or groups of spaces in the departments.This is to help to understand how the department works.



PLANNING PRINCIPLES AND WORK contd

- Shared accommodation with other departments together with the arrangement for and any constraints upon sharing will be outlined in this section.

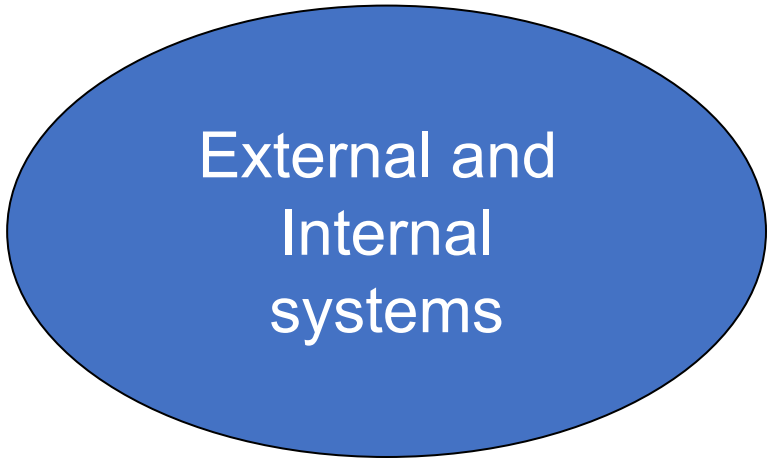


MANAGEMENT & STAFFING

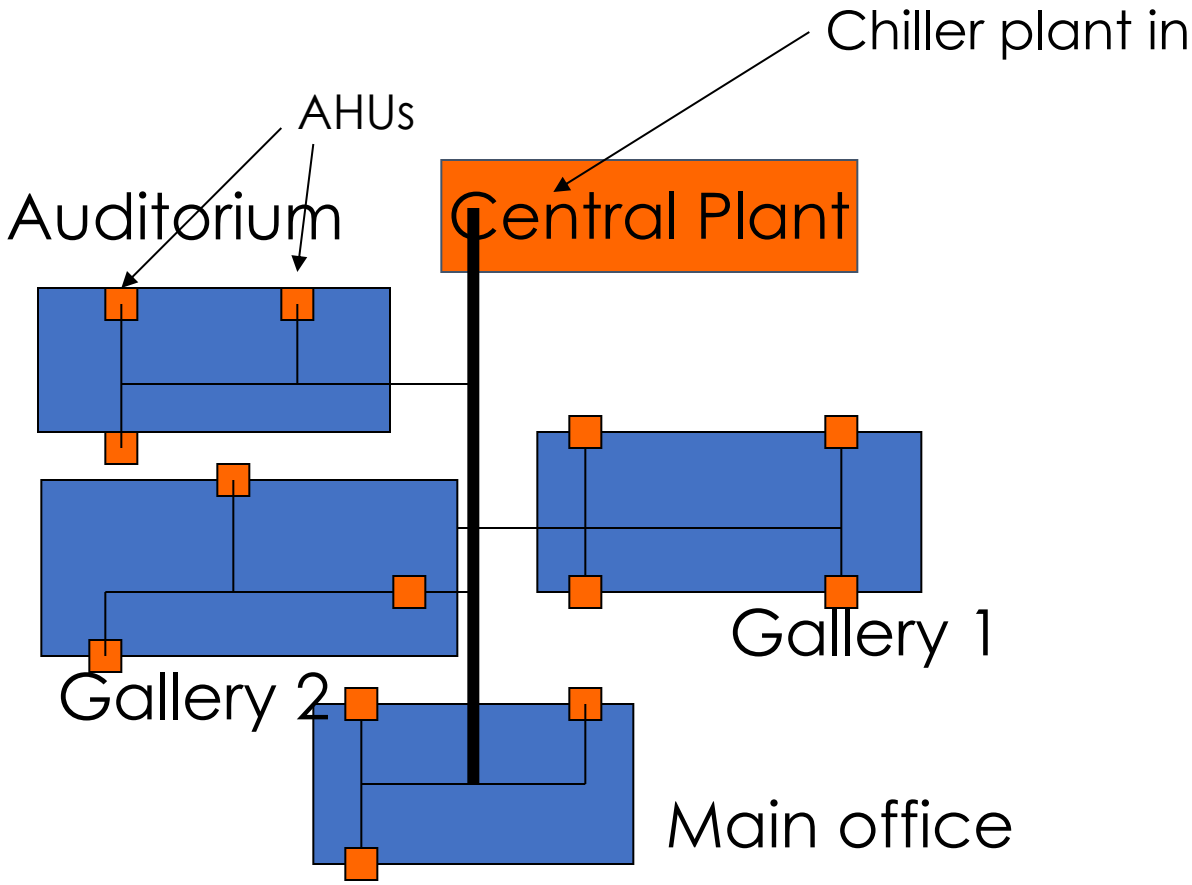
- This sub section describes in tabulated form,
  - hours of operation, e.g. 8am-4.30pm, 24 hours
  - The number of staff and (incl.types/category)
  - Peak numbers on duty (e.g.11 staff at weekends)
  - And note any specific issues related to staffing organisation if this is significant. E.g. during convention, launching..etc

APPLICATION OF THE WHOLE OFFICE/UNIT/ SYSTEMS/POLICIES

- The purpose of this subsection is to relate the operations of the department to the whole office systems by describing the effects and the link to:
  - Supplies,
  - Transport systems,
  - Security,
  - Personnel,
  - Visitors flows,
  - etc



APPLICATION OF THE WHOLE OFFICE/UNIT SYSTEMS/POLICIES

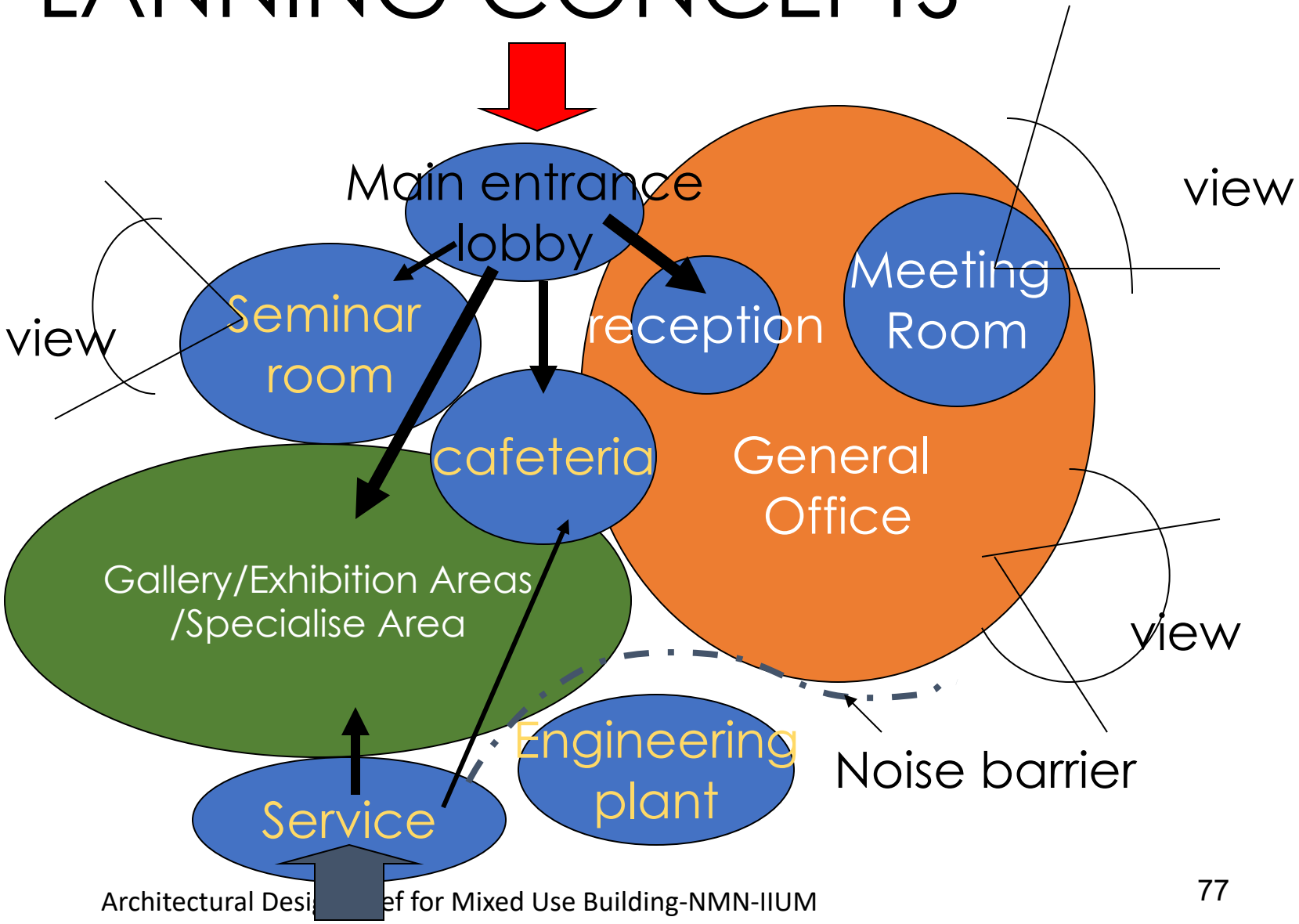


E.g. A/C chiller distribution system

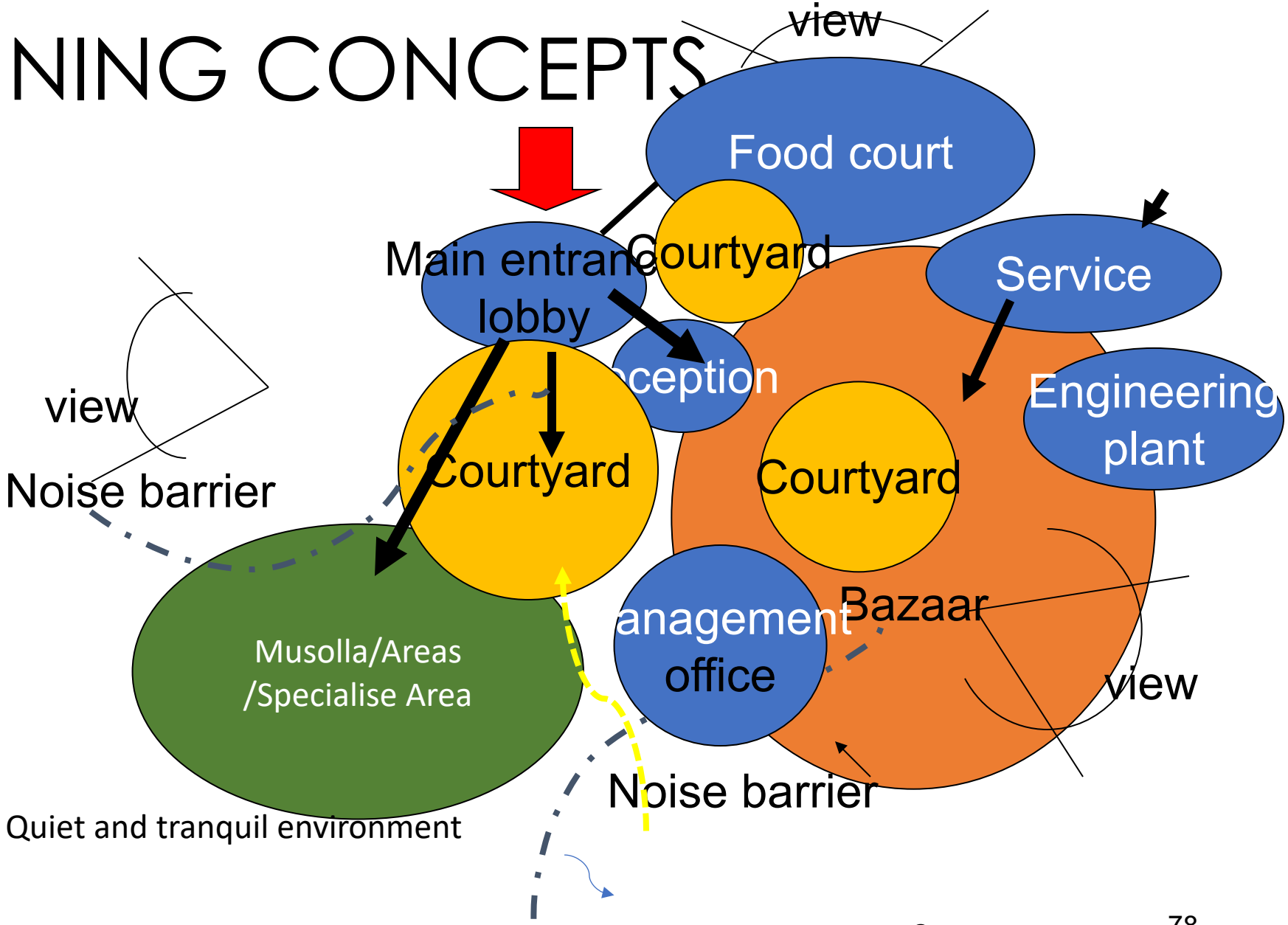
PLANNING CONCEPTS

- This contains **instructions to the architect** as to what specific requirements must be met to provide a satisfactory design solution.
- It will contain information on the **key relationships within the department** which need to be maintained (*illustrated by bubble diagrams*) and any special aspects concerning location which affect staffs; functioning well being such as visibility, lighting, privacy, security,etc

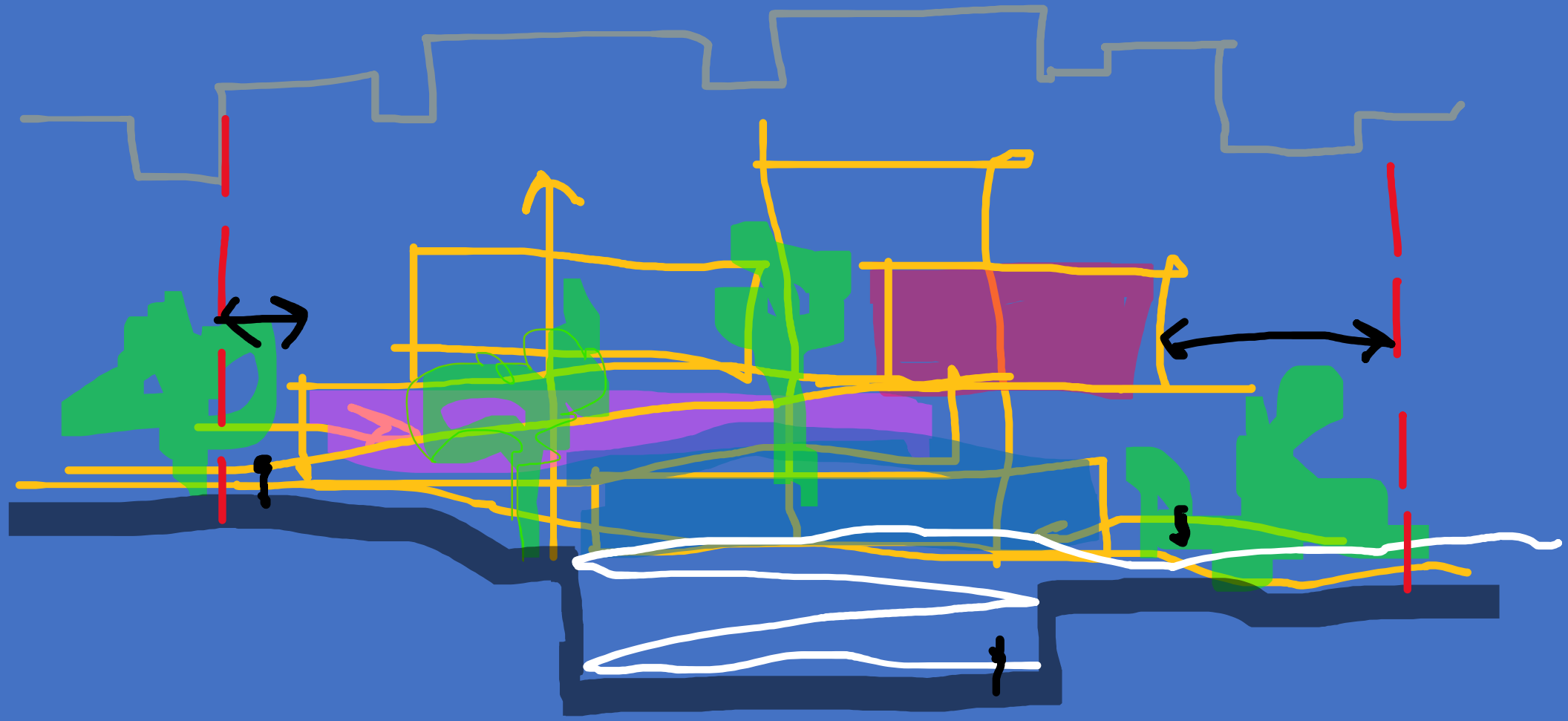
PLANNING CONCEPTS



PLANNING CONCEPTS



BO RIZONTAL & VERTICAL



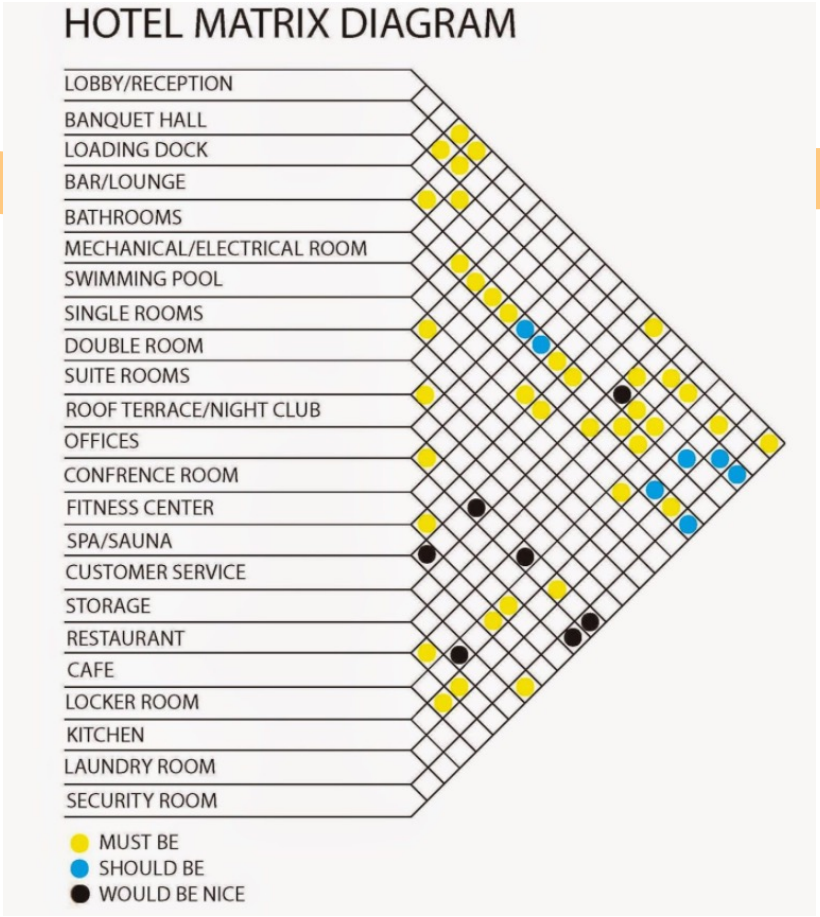
ELEVATIONAL/SECTIONAL VIEW

ENGINEERING AND ENVIRONMENTAL SERVICES

- Note is to be made to the principle building and engineering services design criteria.
- A guide will be provided concerning engineering aspects for the overall department e.g. Special room temperature, ventilation needs, acoustic protection, electrical screening, water supply, gas supply, communication, etc, ..any special data related to each department.

LOCATIONAL FACTORS

- This will use a tabular form to illustrate and explain the priorities and essential relationships between this department and the other departments with which it primarily relates, functional or traffic purposes.
- It is not necessary to show its relationship to all other unrelated departments.

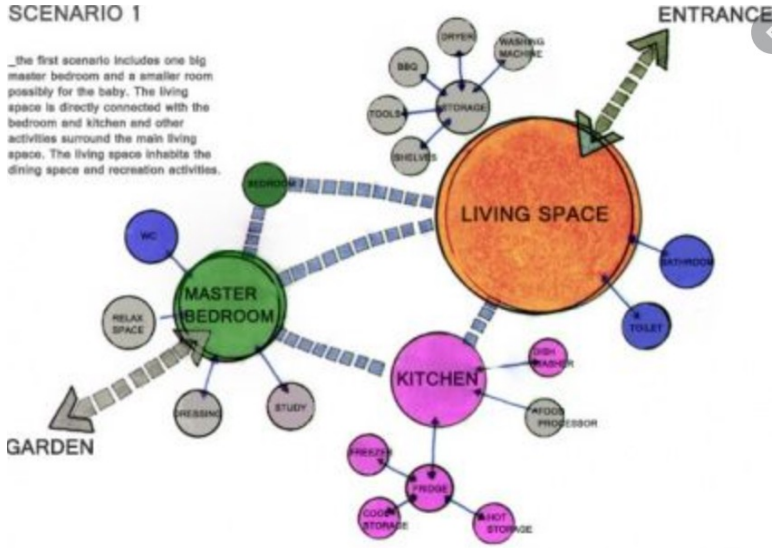


Relationship matrix diagram

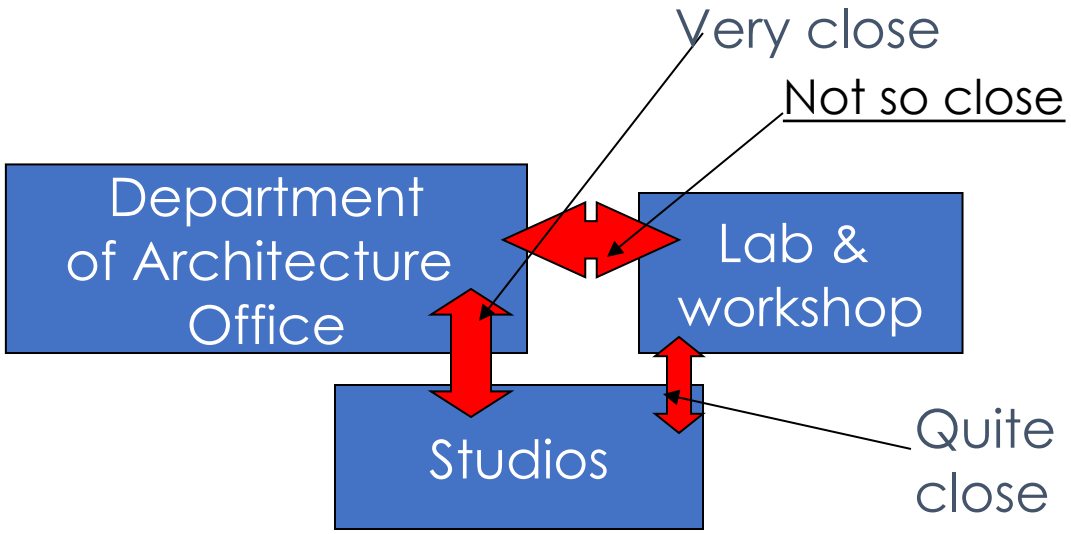
Source: Pinterest

RELATIONSHIP WITH OTHER DEPARTMENT

- This section described in **graphic form the relationship** of this department with other department of the overall facility in terms of distance, proximity and mode of relationship.



Source: Pinterest

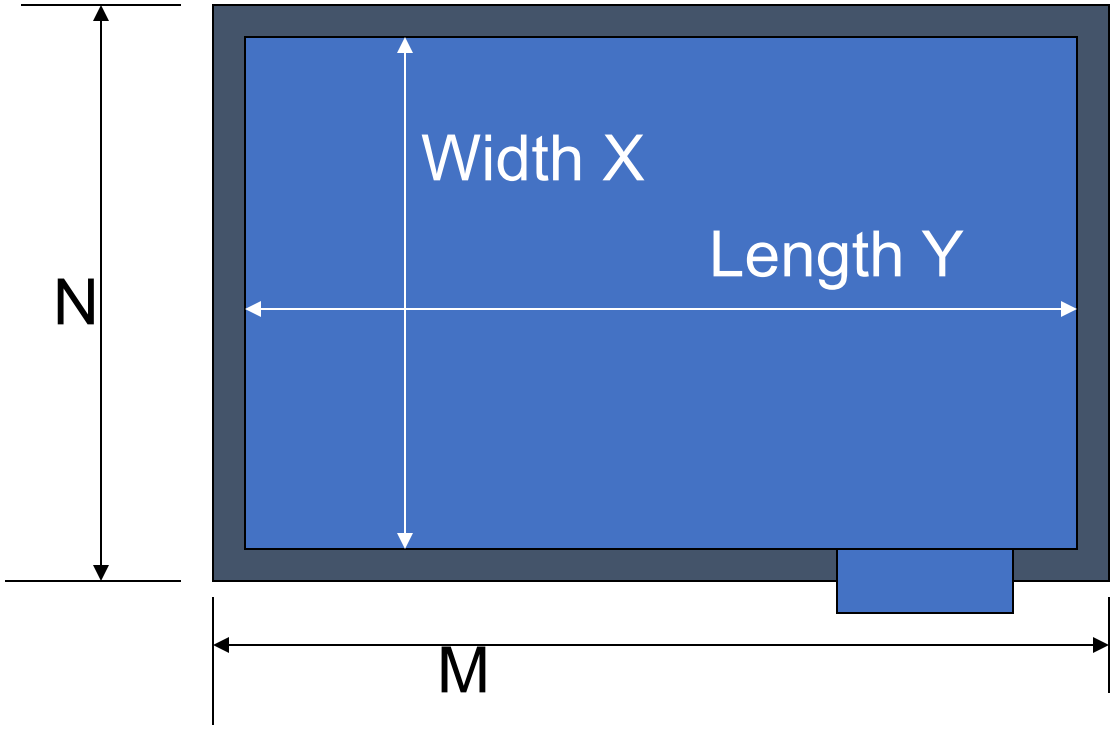


Eg.Relationship of spaces

SPACE PROVISION

- The rooms in the department are to be tabulated in a schedule of accommodation format.
- This is usually standardised using groupings of rooms within the department which have natural affinity and reflect the internal adjacency outlined earlier.
- Each room must be identified, the Net Area (internal usable space) of each room must be stated, the number of rooms in a group sub-totalled and the whole department totalled.

SPACE PROVISION



Net-Usable area
Gross include walls, columns,etc

Nett area is X x Y=Xy sq area

Gross Area is M x N = MN sq area

SPACE PROVISION (CONTD)

- The total of the **Net Areas** must be multiplied by a " grossing factor" to allow for internal circulation , walls, columns etc within the department.
- The Grossing Factor must be agreed with the relevant organisation.
- A Department Accommodations as well as Grossing Factors must be in keeping with the established norms and guideline available.
- There should be a summation of the department included in the Brief.
- This summary will show the Department Gross Area and their total will allow a factor for inter-departmental corridors, mechanical spaces, stairs, external wall thickness, etc..providing a **Building Gross Area**.

SPACE PROVISION

No	Space	Function	Unit Area (m^3)	Quantity	Total (m^2)	Space occupying equipment	Special Services requirement
1	Reception	Receive quests & queries	12	1	12	Reception table, computer , chair	Good ventilation, task light, power supply
2	Lounge Area	Rest & Waiting	30	2	60	Lounge chairs, coffee table, TV	Good ventilation, viewing, background music
	Nett Area				72		
	Circulation	30%			?		
	M & E	15%			?		
	Total Gross Area				?		

Eg. Schedule of Accommodation (SOA)

BRIEFING COST SUMMARY

- The costing of the project with exact space calculations and taking account of the allowances which might not have been evident earlier.
- The format should include cost per square metre and percentage provisions for fees, inflation, equipment, contingencies etc. plus revocation costs and engineering infrastructure.
- The result should be a total project costs based upon a stipulated time schedule for completion.

APPENDIX

- This section contain any additional data which may be considered appropriate and show acknowledgements to the people involved and possibly definitions of the terminology used.
- Eg. Space standards, relevant guidelines, etc

CONCLUSION

- An ideal brief caters for almost every aspects of the project requirements in clear and concise manner from the start of the project. It has to be a brief that designers or architects can comprehend or understand and thus able to execute the project to the satisfaction of the client without much changes, construct the facility without much variation and the users occupy the facility as per planned and designed without the need to do any extra adaptation.
- As the saying goes..'' The building is as good as the brief ''. A bad brief will constitute a bad building…wallahualam!

WHAT NEXT?

DESIGN PROPOSAL- individual design strategy

- Individual proposal based on the design brief
- Includes DESIGN CONCEPTS, PLANNING CONCEPTS
- PRELIMINARY DESIGN, STRUCTURAL CONCEPTS, SERVICES CONCEPTS, LANDSCAPE CONCEPTS
- SCHEDULE OF ACCOMMODATION & PRELIMINARY COST ….CRIT 1

REFERENCES

- IIUM 2020 Lecture Input on Design Brief
- Experiences from the Consultancy fieldwork
- Programming | BCA Architecture & Construction Services at https://www.bc-architecture.com › programming
- *Edith Cherry,* Architectural Programming , 11-02-2016 at https://www.wbdg.org/design-disciplines/architectural-programming
- Pinterest
- IIUM Project Brief, Zaiton (2020)

THANK YOU AND ENJOY YOUR LAST SEMESTER

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