5-1 THE PLANNING AND DESIGN PROCESS.

The translation of a space program into a design requires a series of planning and design decisions. This process is expressed in Tables 5-1 and 5-2.

5-2 THE STEPS IN THE PLANNING AND DESIGN PROCESS.

Each step, A, B, C, D, etc., involves the evaluation of a number of options. Examples of these options are shown in the table to indicate the level of decision-making at each step. As decisions are made they must be checked back with preceding steps to ensure that early decisions are not invalidated by later ones. The arrows shown in the chart adjoining PROCESS RECYCLE indicate this process. Finally, all decisions are conditioned by the basic parameter of cost as expressed in the quantity (the amount of space desired) and the quality (the standards of construction and finish).

5-3 SEQUENCE OF STEPS IN PLANNING AND DESIGN PROCESS.

The earlier steps, A through E, are performed in sequence. Later steps may be performed concurrently, or in no specific sequence, since the decisions are interrelated and their effect on one another must constantly be checked. Thus, floor plans and sections will be developed concurrently, and each may modify the other, as work proceeds. Planning Alternatives (STEP L) may be developed early in the process, before a definitive floor plan is developed.

Table 5-1

PLANNING AND DESIGN PROCESS

Planning → Design →

Planning Steps	A Space Program	B Affinity Matrix	C Affinity Diagram (no scale)	D Affinity Diagram (to scale)	E Planning Diagram	F Structural Framing	G Subsystem Choices	H Floor Plan	I Section	J Site Plan	K Design Analysis	L Design Alternatives	M Utility & Thermal Loads
Planning & Design Options	1 Given	1 Given	1 No Satellites	1 Program Areas	1 1-Story	1 Bearing & Shear Wall	1 H.V.A.C.	1 Simple Plan	1 Ceiling Heights	1 Orientation	1 Design & Review	1 General	1 Electrical Load
			2 Satellite Bar		2 2-Story	2 2-Way Rigid Frame	2 Exterior Skin	2 Fragmented Plan	2 Roof Forms	2 Entries		2 Detail	2 Water Usage
			3 Satellite Entries		3 Linear Plan	3 Cantilever Columns	3 Interior Partitions	3 Non-Rectilinear		3 Parking			3 Sewage
			4 Satellite Kitchen		4 2-Way Plan	4 Combination	4 Ceiling			4 Pools			4 Heating Load
			5 Satellite Dining		5 3-Way Plan		5 Lighting						5 Cooling Load
					6 Inward Looking		6 Miscellaneous						
					7 Outward Looking								
					8 Design Image								
					9 Orientating Site								
Process Recycle													
Conditioners	Cost Quantity Quality	Proximities			Climate Site Constraints								

Design → Development

Table 5-2 Explanation of Steps in the Planning and Design Process

A.	SPACE PROGRAM	Development of the space program by the using serv ce initiates the planning process. (See Section 2-2.3)
B.	AFFINITY MATR x	The affinity matrix indicates desirable relations p between spaces. These are established through review of the planning criteria and discussions with club operators and users.
c.	AFFINITY DIAGRAM	A graphic expression of the affinity matrix. (not to scale)
D.	AFFINITY DIAGRAM	A development of STEP C, in which the spaces are graphical ly represented to scale, based on areas called for in the space program.
E.	PLANNING DIAGRAM	A graphic representation of the proposed club plan, showing number of floors, basic planning principles, orientation, etc.
F.	STRUCTURAL FRAMING	Selection of appropriate structural framing systems.
G.	SUBSYSTEM CHOICES	A statement on proposed choice of subsystems.
H.	FLOOR PLAN	Delineation of floor plan, showing accurate size of spaces, location of doors, windows, and general indication of service counters and work areas.
1.	SECTIONS	Selected to show all necessary ceiling heights, and changes of floor level.
J.	SITE PLAN	Indicates extent of site development, and delineates paved and landscaped areas.
K.	DESIGN ANALYSIS	Evaluation and commentary on major features of proposed plan.
L.	DESIGN ALTERNATIVES	Delineation of significantly different functional design alternatives that can readily be accomplished.
M.	UTILITY & THERMAL LOADS	Outline analysis of energy, and waste disposal requirements for the plan shown: 'useful for evaluating site needs and capability.

NOTE: ILLUSTRATIVE CRITERIA APPLICATIONS (SECTION 7) are expressed in a format that illustrate each of the steps shown above.