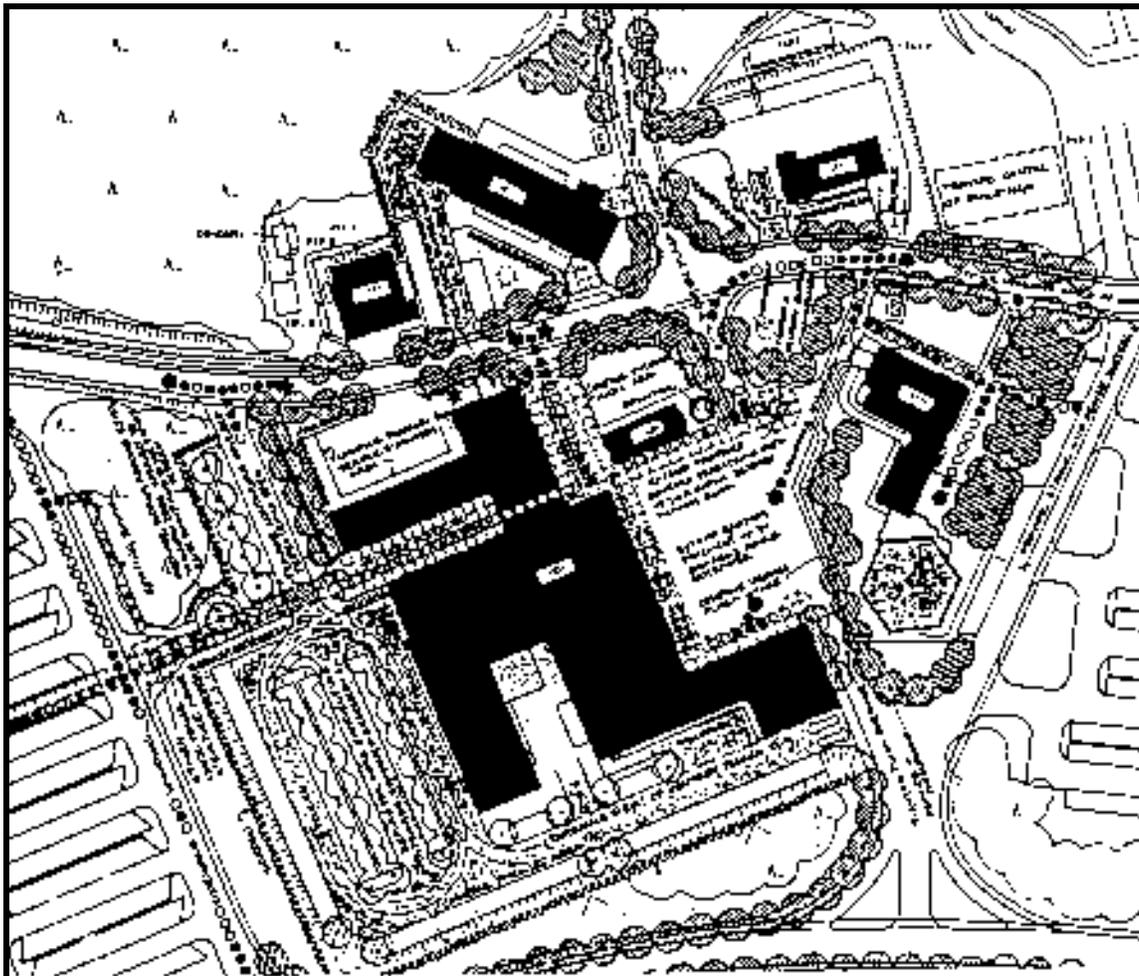


ARCHITECTURAL COMPATIBILITY BULLETIN



PREPARED BY HQ USAF/LEEVX DECEMBER 1987

**BASE
COMPREHENSIVE
PLANNING**

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ARCHITECTURAL COMPATIBILITY GUIDELINES

CHAPTER ONE

INTRODUCTION

1. PURPOSE

This pamphlet is intended to help planners and architects: (1) analyze current architectural compatibility; (2) prepare base architectural compatibility guidelines; and (3) implement the program. These guidelines are a component of AFR 86-4 Base Comprehensive Planning (BCP), and are prepared interactively with land use, transportation, landscape development, utilities and other BCP components. In some cases, base architectural compatibility guidelines may be developed in advance of the BCP and incorporated later. This pamphlet gives practical examples of architectural compatibility planning applied to the specific needs of bases. AFM 88-43, Installation Design, and AF Pamphlets from the 88 series should also be used for siting or design of individual facilities and outdoor details, and as an input to base architectural compatibility guidelines.



The regional influence with its own particular indigeous style of Spanish Mission architecture found on Randolph AFB, Texas, has created a comfortable, pleasant and appropriate environment for the military community on this installation. it is an exception. It stands in stark contrast to other bases that did not develop from a regional theme or plan and have not made any efforts to promote architectural compatibility.

2. SCOPE AND USE

The major objective of this pamphlet is to improve the working and living environments on our bases, focusing on both function and appearance. A key step in this effort is developing and implementing an architectural compatibility program which supports the base mission(s), and respects the regional and local physical and manmade characteristics such as climate, history, culture, landscape, and architecture.

Military installations should provide efficient and pleasant physical environments conducive to attracting and retaining skilled and motivated personnel. The design, location, and maintenance of individual elements such as buildings, roads, parking lots, signs, and landscaping create the quality of the environment. Each of these elements should be functional, attractive, and harmonious with each other. This helps to create an environment that enhances the capability of the installations to support their mission(s), and fosters pride in, and a commitment to, military service.

Architectural compatibility considerations are those planning and design factors which influence and enhance a base's physical appearance. The decision as to what should be considered is determined by the situation and particular requirements of the base, and the overall environment within which the base exists.

Developing an architectural compatibility program will provide a record of established goals, objectives, and decisions. This will lead to more consistent decisions when a change in base leadership occurs.

This pamphlet is divided into three chapters and provides a logical approach to understanding and achieving base architectural compatibility:

A. Chapter One, Introduction, addresses the problem, provides background, defines architectural compatibility and outlines some general guidelines. Examples from both civilian and Air Force base communities are provided.

B. Chapter Two, Architectural Compatibility Considerations, contains general criteria and principles that must be considered in order to achieve architectural compatibility. The chapter

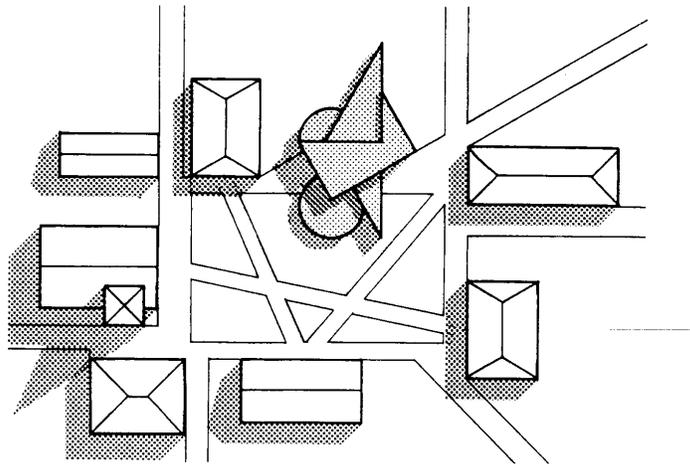
concludes with a questionnaire checklist to assist bases in analyzing existing architectural compatibility and suggests goals and objectives.

C. Chapter Three, Implementation, presents some key ideas and thoughts on the process of developing, using, and maintaining the base architectural compatibility guidelines, a component of the BCP.

3. BACKGROUND

The quality of life on Air Force bases is closely related to the physical environment created for people. The environment conveys many messages, either positive or negative. Planning and design concerns on AF bases should be studied from at least two points of view, compatibility and awareness:

Although many major projects may be considered good examples of individual architectural design, they may not be compatible with other base facilities.



It is important to be aware of the environment and to take positive action that conveys to decision-makers, managers, designers, and others, the type of environment that is desired.

In developing guidelines, design choices should achieve unity, coherence, and harmony. However, it is also important to leave room for design creativity. If guidelines become too rigid or confining, the base could project a monotonous, sterile environment.

"There is a traditional belief that the physical environment can have a positive impact on the social environment of the city - that the way to an ideal social environment in the city is through the creation of an appropriate physical environment."

Catanese and Snyder

The highly contrasting building in this cluster of buildings is sited in the same manner as its neighbors. By its nature it is attacking the fundamental order of the entire complex and through the use of destructive contrast claims supremacy for itself.

"The free-standing building, an object in space, seldom contributes to urban design but that concept dominates America today... and results in our seldom building 'places', but collections of free-standing objects, unrelated to each other or to their particular surroundings.

Paul Rudolph"

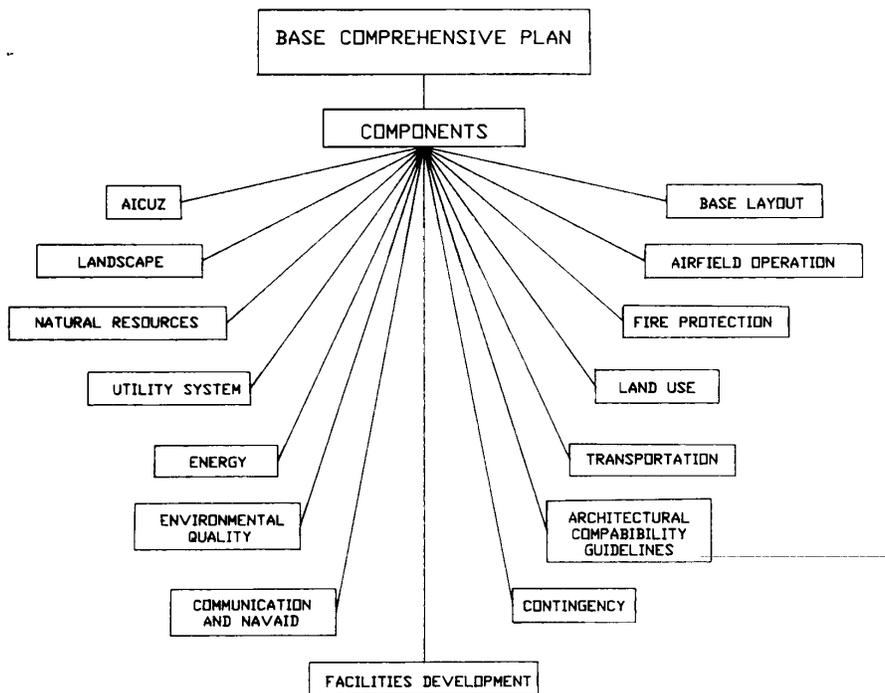
4. ARCHITECTURAL COMPATIBILITY PROGRAM

Architectural compatibility results from designing and building facilities in harmony with their natural and man-made surroundings and environment. To understand architectural compatibility and how it affects the Air Force, an understanding of the term is necessary. Compatible is generally defined as "capable of existing together in harmony, or to be consistent." Architectural compatibility would therefore be concerned with such factors as style, scale, form, harmony, appearance, landscaping and accessories, materials color, and appropriateness.

5. BASE COMPREHENSIVE PLAN

Landscape plans, land use plans, environmental protection plans, in conjunction with transportation, energy, utility, and natural resources plans should be considered in developing the architectural compatibility guidelines. Similarly, architectural compatibility objectives, and to some extent, interior design guidelines, influence each of those above-mentioned plans.

The Base Comprehensive Plan provides an appropriate framework to ensure overall coordination and compatibility among individual program needs. Preparing installation Architectural Compatibility Guidelines is a mechanism for guiding improvement of the functional and visual quality of an installation.



6. GUIDELINES for the Architectural Compatibility Program:

Improve the base environment through the installation's construction projects.

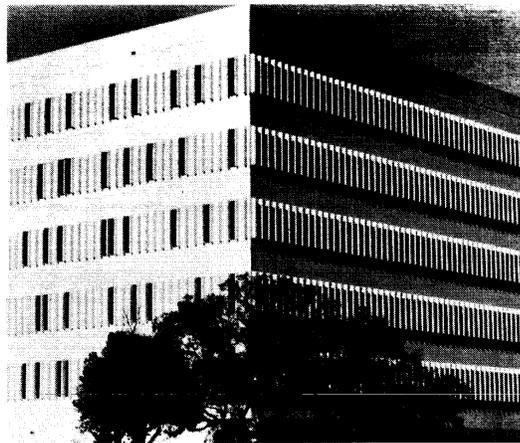
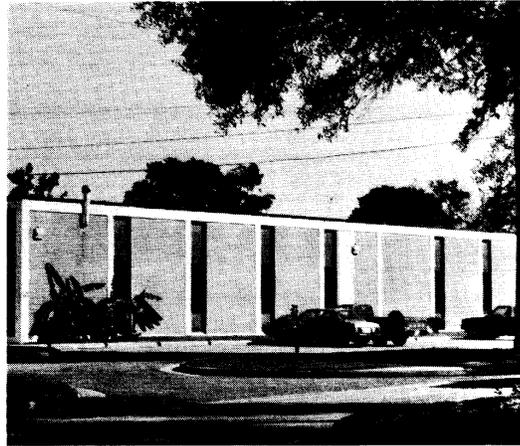
Provide a mechanism for environmental design continuity.

Develop a baseline for review and, if necessary, for changes that may occur as a result of redirections in goals and objectives.

Establish consistency in base development which takes into account all elements of the environment.

Control design expression. These controls should not be so specific that design freedom is restricted. A designer should have sufficient latitude for creativity.

There is sufficient latitude for creativity and design expression within the design controls established on this base. All the buildings are compatible even though they are not identical or repetitious because they employ a common style (emphasizing the vertical window treatment and similar external surface composition).



Provide clear and consistent communication between the Air Force as a client and designers whether they are in-house or contracted professionals.

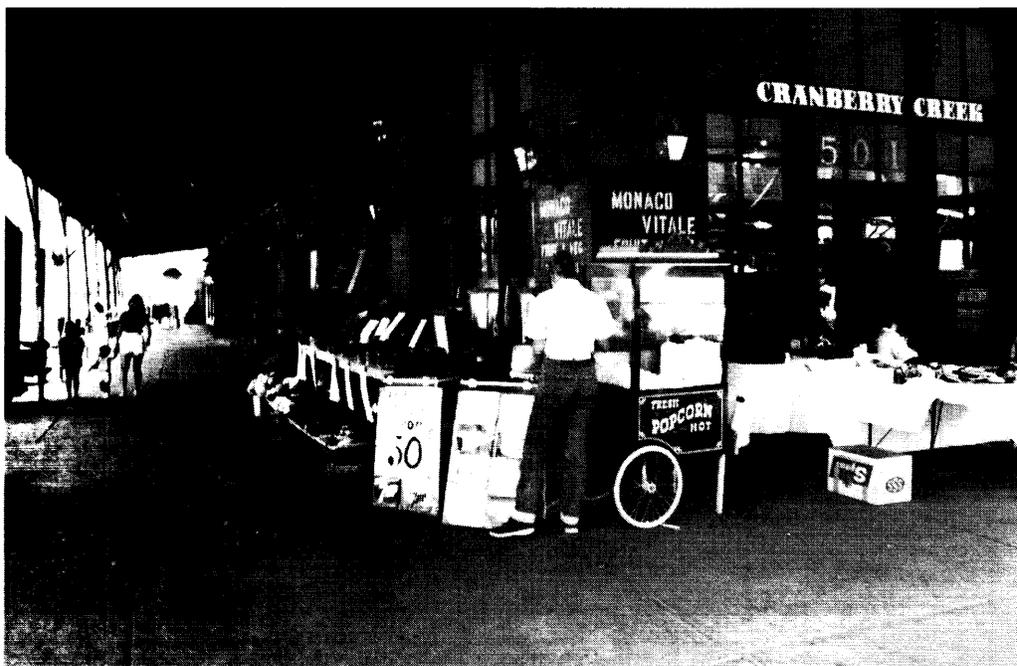
Improve programming and budgeting by limiting the range of options and promoting consistency. Programmers must use Architectural Compatibility Guidelines, in development of 1391 packages and Project Books.

Impart a sense of pride, organization, vitality, and good management. The base should convey the feeling that it is a good place to work and live. It should reflect a leadership that cares about its people.

7. EXAMPLES

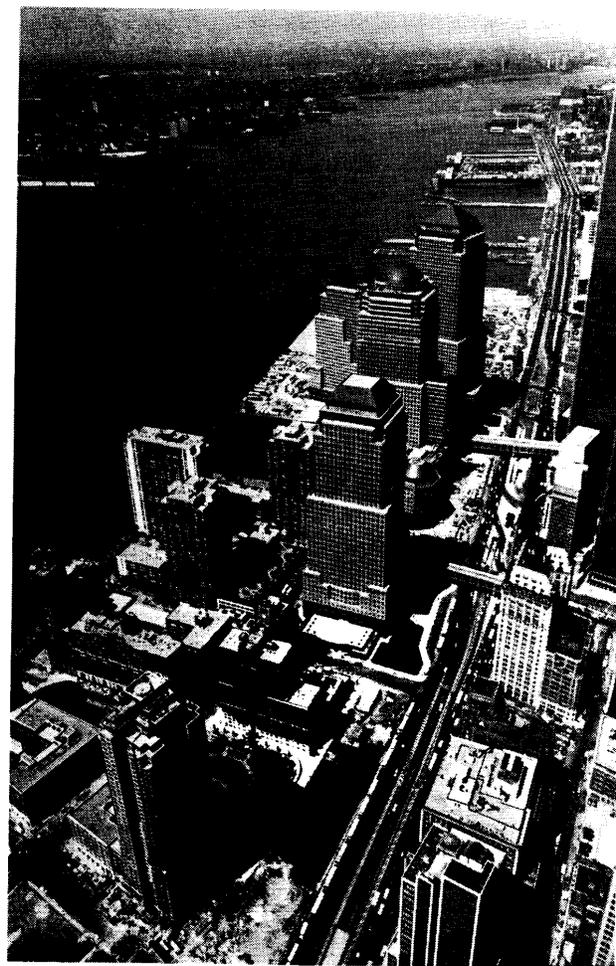
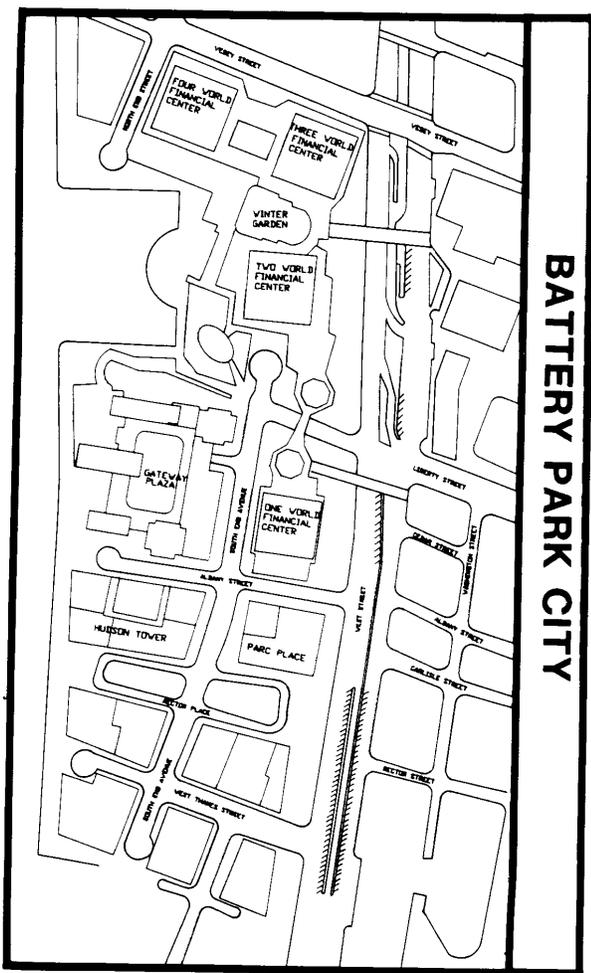
General examples of pleasant environments that were created using carefully controlled design guidelines would include major shopping centers, planned unit developments, historic preservation overlay districts and industrial parks. In these examples there may be more than one user, but the developer retains strict control of the architecture and related improvements, i.e. parking, landscaping, signage, materials, setback, entrances, graphics, and so forth. Examples range from single buildings to entire cities such as Reston, Virginia and Columbia, Maryland. The following are representative examples of architectural compatibility in the civilian and Air Force sector:

A. The Old Market Area of Downtown Omaha, Nebraska. Old brick facades were saved. Similar materials, scale, openings, and details were used. Brick paved streets, covered sidewalks and old-fashioned street lights tie the entire area together. City streets traverse the area and street parking exists (similar to the adjoining downtown area), but traffic is controlled. The pedestrian has the right of way.



B. Battery Park City, a residential and commercial redevelopment project in lower Manhattan. A master plan was prepared which "purposely tried to emulate the diversified architectural ambiance" of the area with detailed design guidelines. Some of those guidelines are:

- (1) Extend the city's historic grid system.



(2) Residential units at street level must face the park. Commercial street fronts must be on cross streets.

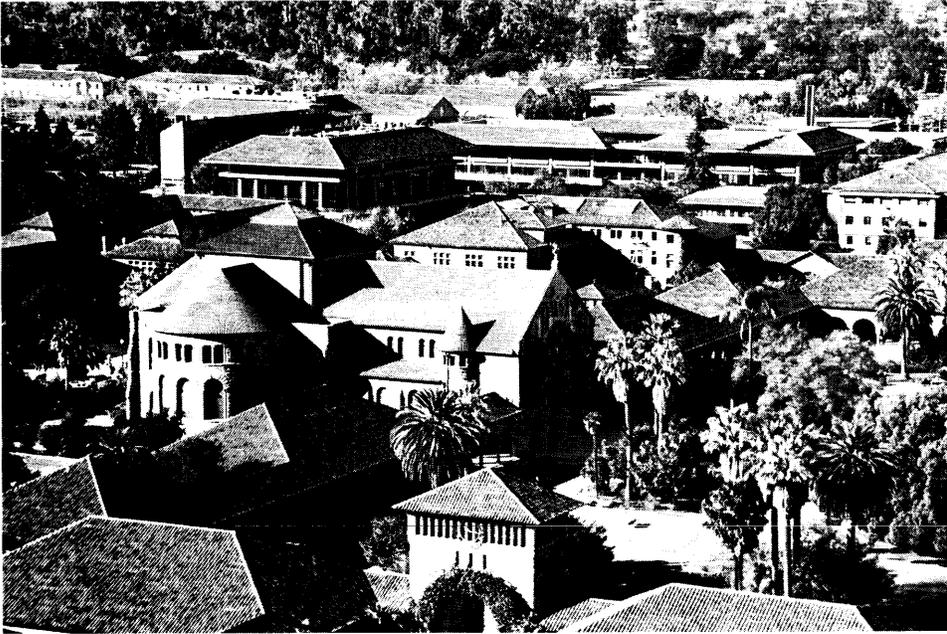
(3) Each building must have a two-story stone base. Earth-toned brick is preferred for upper stories. Metal and glass curtainwalls are prohibited.

(4) Upper floors must be designed to create a special and interesting effect that will complement the skyline of lower Manhattan.

(5) Tall buildings require cornices or change in window configuration or corner detail periodically, to reduce the apparent scale of the facades and unify the street wall.



C. The Stanford University Campus.



The campus provides a situation similar to AF bases. It has developed over a period of time during which people, values, activities, and goals changed. A very unique and pleasant environment has been created and maintained for the people working, living and learning there. At Stanford, the concern is for the whole, not individual monuments. Although individual buildings may vary in quality, the overall composition works. There is a pleasing sense of unity. It is a community of buildings that work for their users as intended, each draws upon the other and reflects the changes that have occurred in education and society.



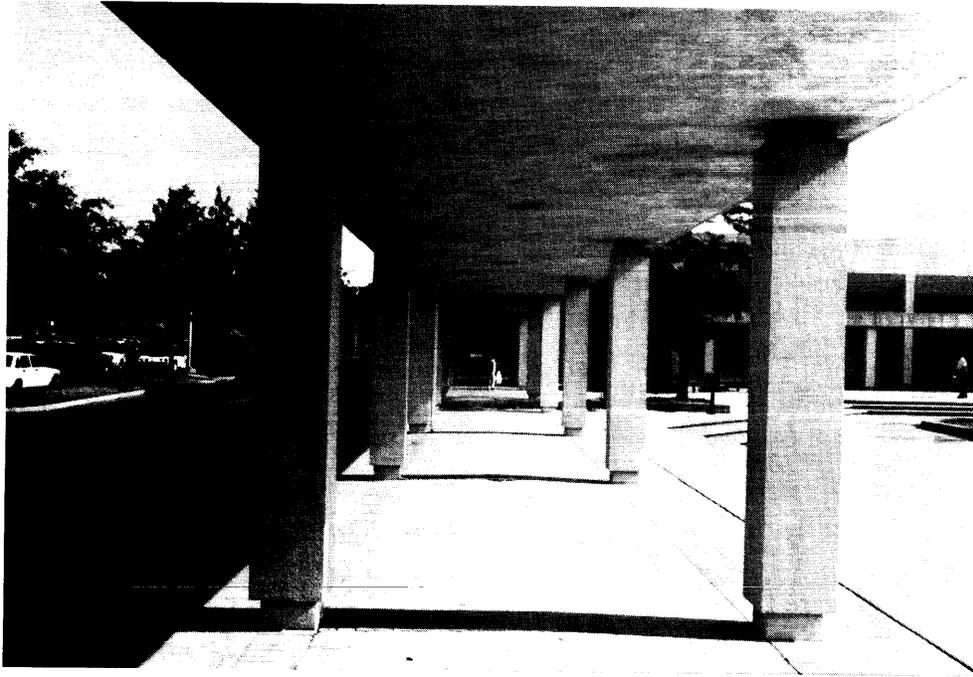
D. Randolph AFB, Texas.



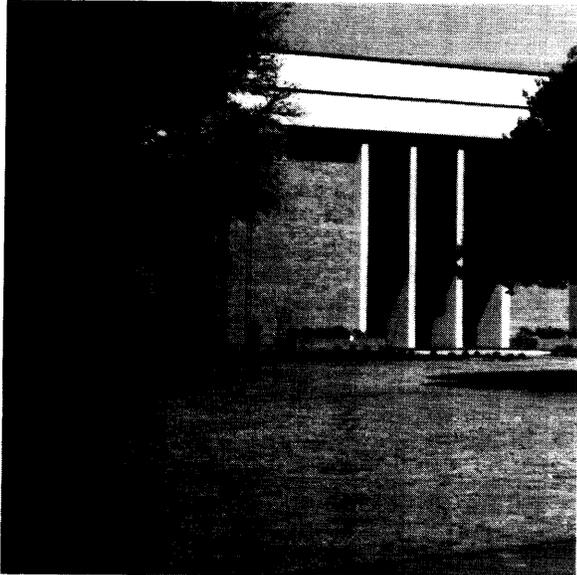
A Spanish theme is emphasized with white stucco walls and red tile roofs.



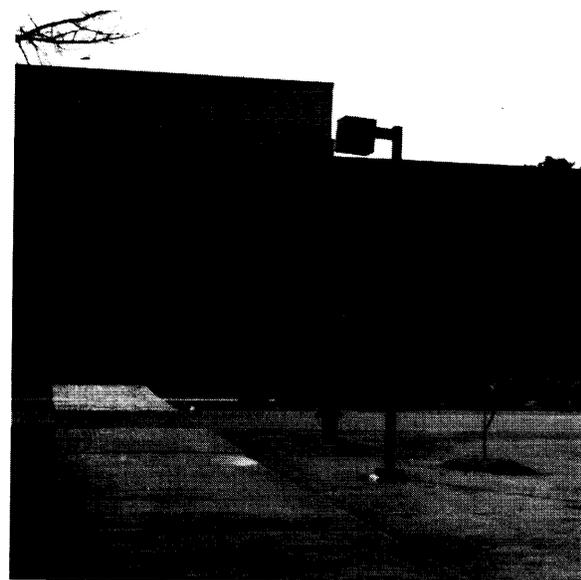
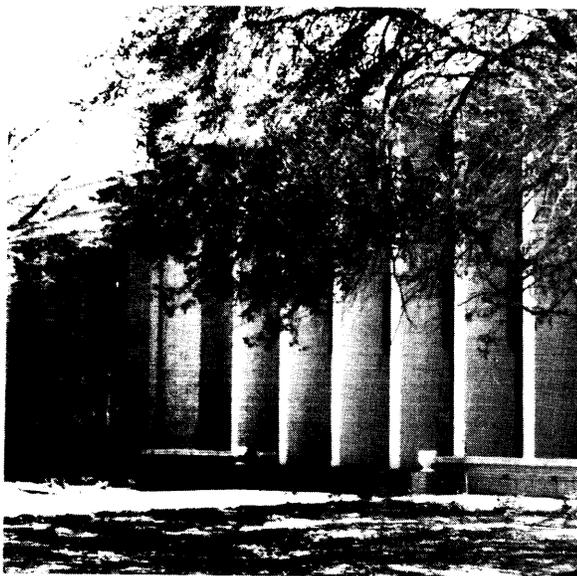
E. Andrews AFB. The community center, the BX and concessions, commissary, theater, bowling alley, bank, and credit union are constructed of similar materials and compatibly designed. The different activities are tied together by a covered walkway. Customers can walk among activities without interference from vehicles.



F. Maxwell AFB. The academic circle is a campus plan containing the Air War College, Air Command and Staff College, Squadron Officers School, the Leadership and Management Development Center, and the Center for Aerospace Doctrine Research and Education. These facilities encircle the library.



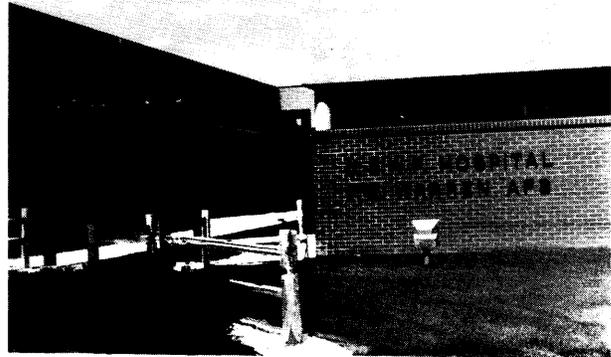
Buildings on Academic Circle at Maxwell AFB, demonstrate unity of design.



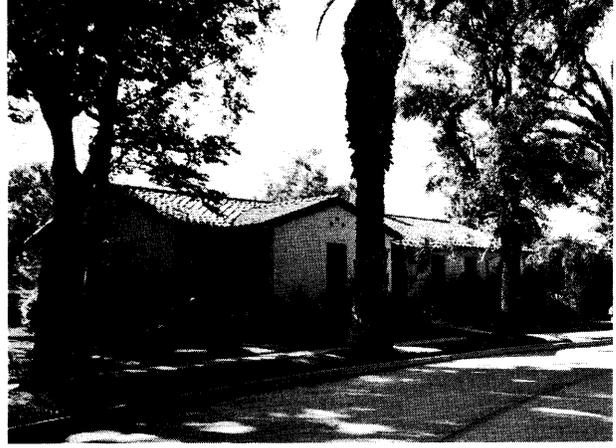
All the buildings are constructed of similar materials and compatibly designed. They have similar layouts, site plans and landscaping and are oriented externally to the street and internally toward the library. Cars are prohibited from the internal areas.



G. F.E. Warren AFB. The historic district consists of 19th century red brick homes, barracks, stables, and other structures of similar design. The hospital, separated from most of the historical buildings by a stand of trees, respects the historical building with its choice of materials, colors and scale.



8. March AFB. In Southern California, an established Spanish mission theme exists.



References

- AFR 864, Base Comprehensive Planning
- AFM 88-15, Air Force Design Manual - Criteria and Standards for Air Force Construction
- AFM 88-40, Sign Standards
- AFM 88-43, Installation Design

ARCHITECTURAL COMPATIBILITY

CHAPTER TWO

CRITERIA AND CONSIDERATIONS

The following criteria and principles should be considered in order to achieve architectural compatibility.

1. BUILDINGS.

Architecture is the art of designing buildings. The architectural style, scale, form, and contrast should be compatible with other related structures. These elements are necessary for judging the compatibility of an existing or proposed structure.

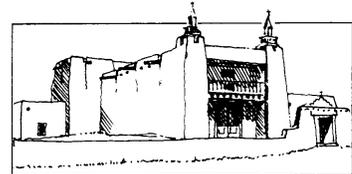
A. Architectural Style or Theme.

(1) Architectural style is a combination of materials, textures, colors, type of construction, details, decoration, and building systems. Repetition of design elements in similar ways on separate buildings, helps establish an architectural style.

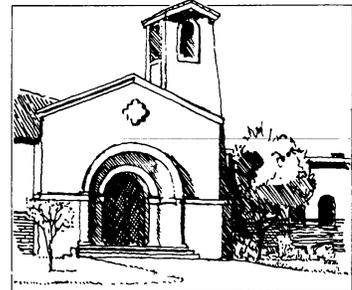
(2) A theme may be based on historical, cultural, technological, and other standards. Examples include Spanish, Western, modern, colonial and high-tech. A theme should not be arbitrarily chosen. A Spanish theme would not be appropriate in the Northeast. Themes may reflect energy consciousness through passive and active solar design; they may reflect a historical period such as exists in many old brick buildings; they may simply reflect an appreciation and respect for the natural beauty and resources native to a region. Themes should reflect the base's mission, heritage and regional characteristics, and emphasize human scale.

(3) Regional and local resources should be studied in evaluating existing themes. Materials that are native to the region should be used. Colors and textures should also be reflective of the region. Details and type of construction should be characteristic of the area.

MISSION STYLE ARCHITECTURE



BASE CHAPEL, KELLY A.F.B.



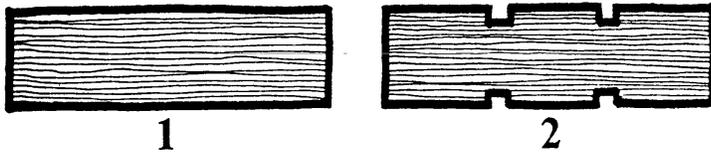
In any consideration of architectural styles for the base, it is clear that the regional influence with its own particular indigenous style of architecture should be taken into account.

(4) The style or theme must be considered when adding to, altering, maintaining and repairing facilities.

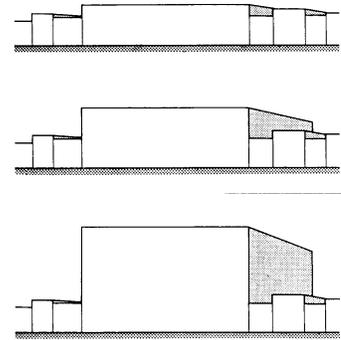
B. Scale. Scale is a ratio of the dimensions of various components of a building to other related elements and to human dimensions. Scale also refers to the size relationships between adjacent buildings, and between buildings and adjacent open spaces.

C. Form. Mass, shape, articulation, define form.

(1) Mass relates to the volume defined by a structure relative to its surroundings and to its apparent solidity or weight.



Massing and form play a major role in establishing the character and scale of a structure. Huge massive warehouses and aircraft hangars are the predominant visual image at most bases. This type of facility could be articulated in a series of smaller forms which would reduce the visual impact of their mass and create a scale which is easier for people to relate to.



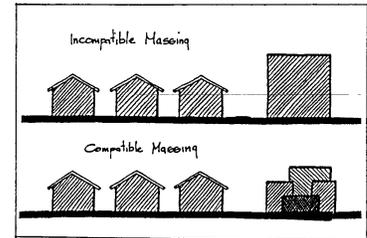
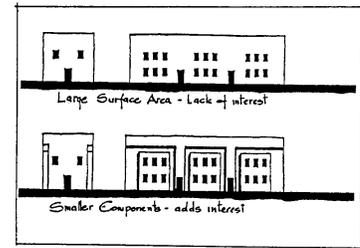
As very wide buildings rise above smaller neighbors, they present increasingly difficult design problems that cannot be corrected by minor articulation of the facade.

Large massive structures can be designed to read as a series of smaller forms, thereby decreasing the apparent size and scale of the building.

Whenever a large building is located adjacent to a series of smaller structures, manipulation of the floor plan and height can help to compatibly relate them by dividing its mass into smaller components. A building can be improved by expressing certain features and shifting planes to create shadows. This variety of massing and form not only reduces the perception of scale but adds dimension.

(2) Shape is the complexity of the surface planes.

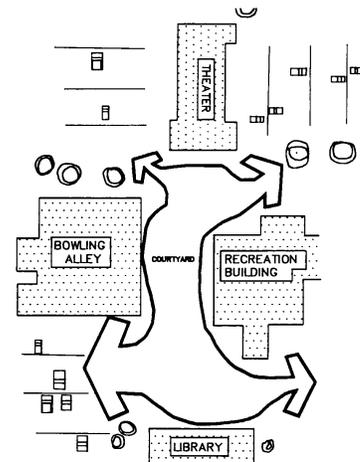
(3) Articulation is the discrete definition of architectural systems from bottom to top, from foundation to corners, to floor levels, to roofline.



2. OUTDOOR SPACES.

The infrastructure of roads, pedestrian systems and open spaces link the individual structures on bases into a complete and functioning military installation. When designed properly, they contribute greatly to the ease and pleasure of using a facility; when poorly developed, they can lead to disorientation, frustration, and a negative image of the base. This section takes a closer look at these important aspects.

A. Site Selection occurs before a facility is designed and built and has a major influence on the design of the facility. This selection should consider all aspects of the base environment with particular emphasis on spatial and functional relationships, architecture, and the landscape. Consideration should also be given to the visible environment immediately around and between buildings. Other aspects of concern include regional considerations, land use, functional relationships and constraints.



B. Site Design. Aspects to consider in site design are as follows:

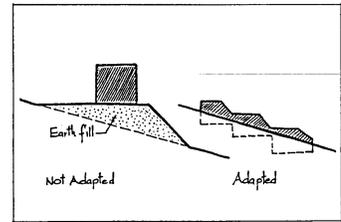
- (1) Topography.
- (2) Setbacks.
- (3) Facility orientation.
- (4) Building footprint.
- (5) Solar orientation.
- (6) Separation between buildings.
- (7) Views or lines of sight.
- (8) Relationship to outdoor or open spaces.
- (9) Tie in to sidewalks, streets, planting.
- (10) Lighting walkways.
- (11) Shading of windows and within parking areas.
- (12) Emphasizing entries.
- (13) Establishing human scale.
- (14) Visually softening hard lines or edges.
- (15) Providing color and texture.

C. Outdoor Spaces. Outdoor spaces can be:

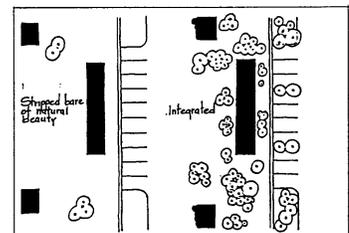
- (1) Next to or between buildings to serve as extensions of the buildings.
- (2) Used for visual enhancement and relief when viewed from inside.
- (3) Considered as break or relaxation areas.
- (4) Designed in conjunction with the buildings.
- (5) The primary context in which a building unites with other buildings.
- (6) Isolated from structures (i.e. recreational spaces or parade grounds).

D. Landscape Design. Landscaping can unify separate areas of a base when regionally strong landscape species are used. Use landscaping to:

- (1) Transition structure to the site.
- (2) Enhance circulation routes.
- (3) Screen or buffer.
- (4) Provide visual relief.
- (5) Highlight entrances.
- (6) Provide color and texture.
- (7) Establish human scale.
- (8) Separate diverse functional areas.



The design of buildings should relate harmoniously to the surrounding context and be representative of the natural site topography not only in form and massing but also in scale and materials. They should never appear as intrusions in the landscape but rather as elements which will strengthen and complement. Mass grading should always be kept to a minimum in order to preserve mature trees and vegetation, as certain benefits can be realized when the natural landscaping is planned as an integral part of design.



Standardized maintenance practices must be established, to enhance architectural compatibility. See AFP 86-10 "Landscape Planning and Design" for more details.

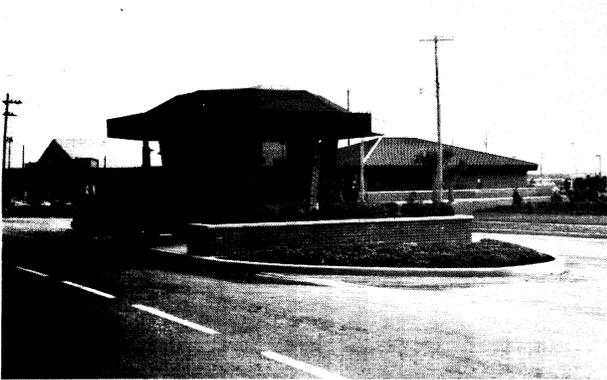
E. Fences.

- (1) Fences on an installation or within specified areas should be of similar materials, design, detail, size, and placement, and should be compatible with adjacent structures.
- (2) Standard designs should be established for various applications such as:
 - (a) Screening in utility areas.
 - (b) Privacy screens in residential areas.
 - (c) Security.
 - (d) Safety.
 - (e) Separation of diverse functions.
 - (f) Decoration.



Examples of architecturally compatible fences and screening.

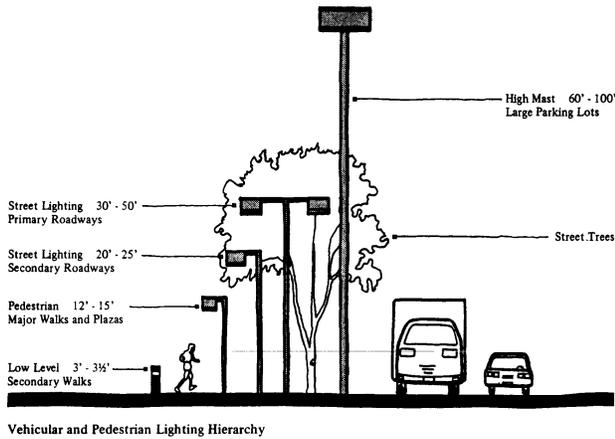
F. Entrances. Base entrances should reflect the base character. Entrances should reflect quality, organization, mission, and functional efficiency and should express and be compatible with the dominant design themes.



Base entrance which enhances the mission and design theme of the base.

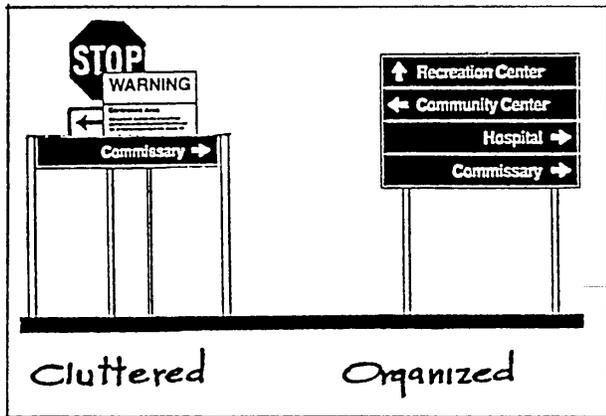
G. Exterior Lighting. Exterior lighting should be of similar design and materials within specified areas and should complement the facilities. Light selection should consider energy, facilities and function. If accent lighting is used to highlight important structures, the lighting approach should be tailored to the specific structure and effect desired, but should employ standardized fixtures and engineering approaches to the greatest degree possible.

If each of the previously mentioned elements is treated in a consistent and thoughtful way, they can help to create harmony and continuity throughout the base or within a particular area of the base. The same materials and design should be used for each of the elements and should be coordinated with nearby facilities.



(H) Signs. Signs should follow the guidelines in AFP 88-40 Sign Standards. The base should determine standard sizes, materials, lettering, placement, color, etc. Signs should be in harmony with the structures and other components of architectural compatibility.

It is especially important not to over sign or present too much information for the motorist to comprehend as this leads to confusion and can be a contributor to traffic accidents. Rather than erecting a separate sign for each message, several lines of information should be combined on one sign where possible. This is not only cost effective but helps to reduce the visual clutter.



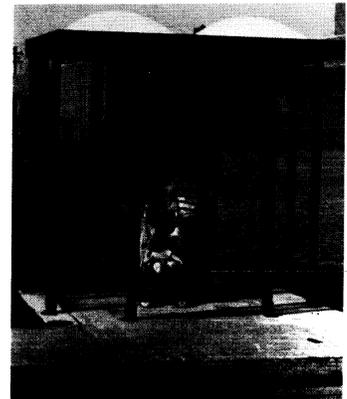
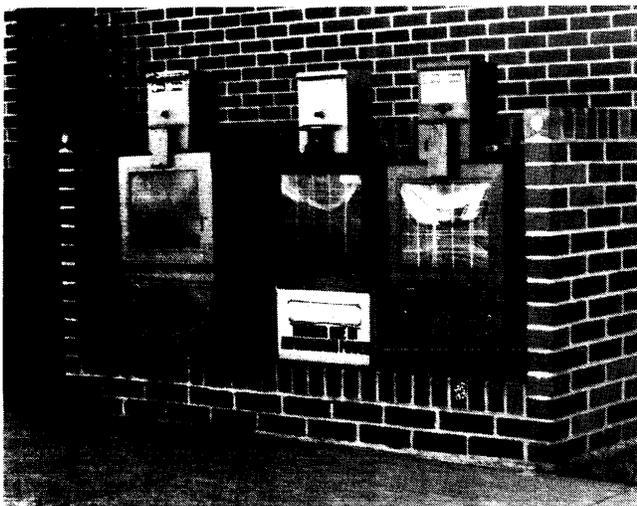
I. Other Design Elements.

(1) Street furniture. Street furniture can be incorporated as the "finishing touches" to complete and complement the architectural and aesthetic character of an area. Some of these elements are:

- (a) Benches.
- (b) Planters.
- (c) Waste receptacles.
- (d) Tables and chairs.
- (e) Weather shelters for bus stop (waiting areas).



Street accessories need defined, screened places.



Even small changes can improve the quality of life.

3. INFRASTRUCTURE.

This is a base-wide network of systems of which base circulation and utility systems are the two main elements.

A. The Circulation System includes roads, bicycle paths, parking areas, and walkways. Circulation elements must move the required number of people quickly, comfortably, and safely and should be efficiently designed.

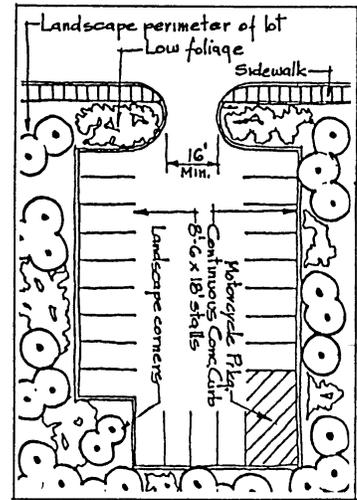
(1) Roads should be sized to support the required traffic. They should be a part of the planned approach to a given building and should connect efficiently and appropriately to the entries. The overall design should provide accommodations for service and other special purpose access.

(2) Parking areas must provide a logical, convenient and aesthetic transition from driving to walking. Parking should include integrated provisions for bicycles and motorcycles.

(3) Walkways should encourage walking, not inhibit it. Location, width, and materials selection can enhance the design and emphasize the relationship with the structure.

B. Utility Supply or Distribution Networks and plants are major influences on the visual environment.

(1) The planning and design of utility plants including power generation, substations, water treatment, sewage treatment, and central heat plants often reflect only their utilitarian function regardless of where they are located. These facilities should also adhere to the visual design requirements for the areas in which they are located.



(2) The elimination of power poles and overhead distribution lines has the double benefit of reducing maintenance and repair costs by reducing exposure or vulnerability to damage while reducing clutter in the visual environment. Electrical service drops, panel boxes, transformers, and meters detract from building design. The objective is to design these necessary services as an integral part of a structure. Similar design solutions should be repeated as appropriate. Additions, alterations, and repairs seem particularly susceptible to setting the stage for unsightly utility solutions and must, therefore, adhere to unified guidelines. In fact, addition, alteration, and repair projects can serve as opportunities to improve existing unsightly installations.



Electrical Substation, power poles and overhead distribution lines creating visual clutter at entrance to a base.

4. REGIONAL AND BASE-WIDE CONSIDERATIONS.

A. Regional Considerations These can be, but are not limited to the following:

- (1) Geography, Topography
- (2) Regional economics, social factors, and demographics.
- (3) Interface with regional transportation network, utilities.

- (4) Local weather conditions.
- (5) Density of development in the surrounding area.
- (6) Character of the area (urban and rural).
- (7) Adjacent off base land uses and activities.
- (8) Visual aspects.

B. Base-wide Considerations. Land use.

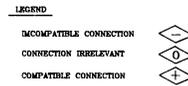
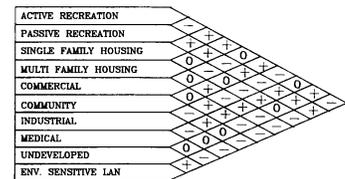
Facilities should be sited in areas consistent with the base's future land use plan, a component of the BCP.

Special design attention is required to achieve architectural compatibility on a base-wide scale where different land uses interface.

Buffer zones may be appropriate to help enhance architectural compatibility and provide desired separation or protection in a particular land use composition.

C. Functional Relationships.

Facilities should be sited to relate to other existing and planned facilities. The nature of that relationship will influence the siting, .i.e. some facilities need to functionally tie together while some require isolation. Architectural compatibility components may be used to either identify or emphasize closely related functions. Refer to the Land Use Bulletin for more detailed discussion of functional relationships.



Functional Land Use relationships

D. Constraints.

(1) Safety.

(a) Observe explosive safety quantity distance criteria.

(b) Observe clearance around small arms ranges, and aircraft accident potential zones and airfield clearance surfaces.

(2) Natural.

- (a) Geology.
- (b) Water table depth.
- (c) Topography.

(3) Legal.

- (a) Impact on any threatened or endangered species.
- (b) Use of prime or unique farmland, floodplains, and wetlands.

5. BASE SYSTEMS AND USE AREAS

A. Base Systems. A number of systems or networks exist which influence or make up the fabric of the base. These systems include:

- (1) Regional factors
- (2) Vehicular traffic systems
- (3) Pedestrian walkway systems
- (4) Transit systems
- (5) Buildings
- (6) Signage
- (7) Landscaping
- (8) Utilities
- (9) Land use
- (10) Other

B. Use Areas. Each of the systems can be used to evaluate the base at two levels: base- wide, and at a smaller scale within individual land use areas. Examples of land use areas include:

- (1) Airfield
- (2) Aircraft Operational Maintenance
- (3) Industrial
- (4) Administrative
- (5) Community (Commercial)
- (6) Community (Service)
- (7) Medical
- (8) Housing (Accompanied)
- (9) Housing (Unaccompanied)
- (10) Outdoor Recreation
- (11) Open Space
- (12) Water

The following two sets of questions (C and D) should be used for each system to help define and establish architectural compatibility guidelines. Following the systems questions, some questions relative to the specific land use areas are provided.

C. System Questions. From architectural perspective.

(1) Regional factors:

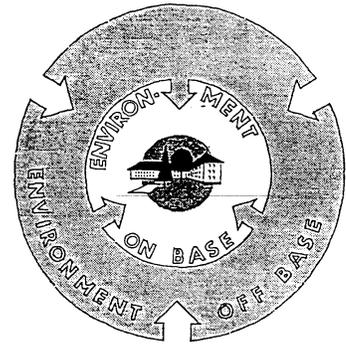
(a) What is the history of the base? Old army fort, WWII or Korean conflict? Prior missions, weapon systems? Did any famous soldiers or airmen serve here?

(b) Were there any significant historical events in the surrounding areas? Any joint efforts or projects of note?

(c) Is the base history tied to local historical events? What is the origin of the base property?

(d) Are there any significant historic structures or areas or archaeological sites on base? in the area? Any museums or historical displays? Any Indian settlements, artifacts, culture, or history?

(e) What major traditions, celebrations, or cultural events are held on base or in the local community?



(f) Is a basic urban design concept evident on base? in the community?

(g) Is any general architectural character or theme evident on base or in the community?

(h) Is the base and area in harmony with its surroundings?

(i) Is there a sense of organization on the base or in the area? What are the major focal points or landmarks, if any?

(j) Are there any particular symbols that characterize the base or surrounding area?

(k) What are the regional economic structure and patterns? Major product, import or export? heavy industry, agricultural, ranching, mining, regional service center for government, business, medical, or education?

(l) What is the climate? temperature, winds, precipitation, humidity, sunshine or cloud cover, etc.

(m) What are major local land features? soils, geology, topography?

(n) What construction and landscape materials are native to and available in the area?

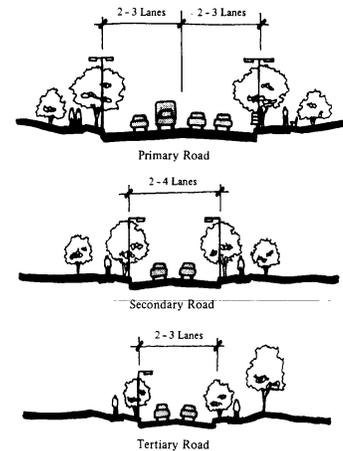
(2) Vehicular traffic systems. (See Transportation Bulletin)

(a) Does the overall base road network have the capacity to meet normal and peak requirements? Any problem areas, intersections?

(b) Are the streets visually confusing? or is there a clear sense of direction? arrival?

(c) Do visual cues let a driver know what to do? Are turns clearly marked?

(d) Are base entrances attractive visual gateways? Do they function efficiently? Is it clear what actions a driver should take at the gate?



(e) What type of visual impacts do the base parking areas have? Are parking areas efficiently laid out? convenient? understandable? congested?

(3) Pedestrian systems

(a) Are different paving materials used for emphasis, transition, interest, compatibility?

(b) Is shelter provided for protection from sun, rain, wind, cold, traffic?

(c) Are courtyards, street furniture, landscaping or other amenities provided?

(4) Buildings. Three primary elements for judging either an existing or proposed building's architectural compatibility are scale, style, and form. The question asked with each of the elements and its components is: what is the degree of contrast or replication with the surrounding buildings?

(a) Scale or external site organization

(1) Is the building footprint similar to others in the area?

(2) Is the building linked with existing circulation patterns?

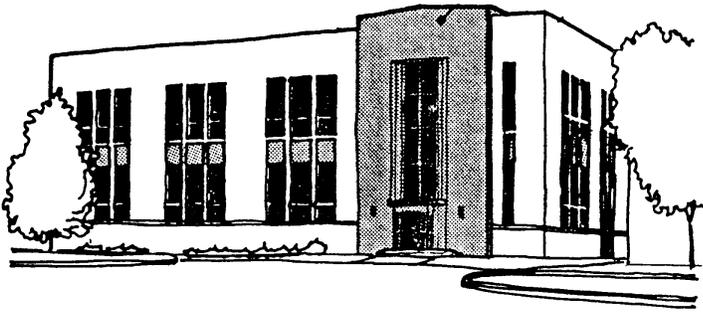
(3) Is vehicle access appropriate to the building in terms of drives and parking?

(4) Is landscaping and site demarcation consistent with the area?

(5) Is the scale appropriate to the function of the building?

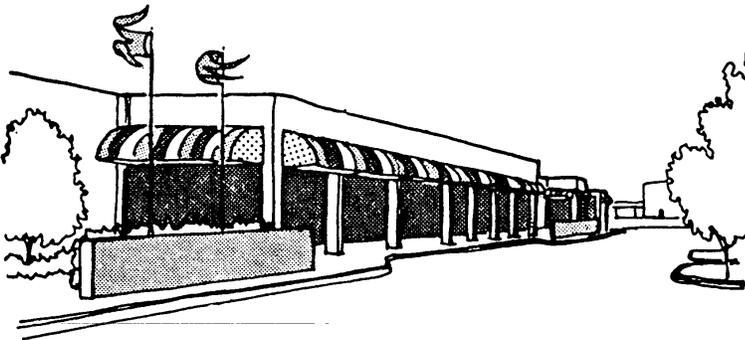
(6) Do important buildings reflect prominence in site location, scale, or contrast?

(7) Do large warehouse or industrial buildings respect the human scale?



“Background Building”

This simple, subdued color scheme reflects its role as a "background" building. The scheme consists of a base color and a single complementary trim color.



“Destination Building”

These brightly colored awnings, in contrast, make liberal use of bright accent colors, drawing attention and reflecting the "destination" role of the building.

(b) Style or external surface composition.

(1) Does the building's color blend or contrast with adjacent structures?

(2) Are the materials the same as surrounding buildings? similar? or completely different?

(3) What type of ornament, detail, or relief is used? Is it consistent with adjacent buildings?

(4) Does the rhythm and proportion of the fenestration replicate that of the surrounding buildings?

(5) What type of texture is applied and is it compatible with surrounding buildings?

(c) Form or volumetric composition.

(1) Are shapes or complexity of form similar to or in contrast to other buildings?

(2) Is articulation of the building from top to bottom similar to other buildings?

(3) Are the roofline and any vertical projections consistent with other buildings on base or in the area?

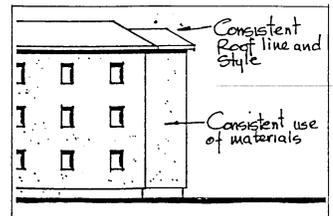
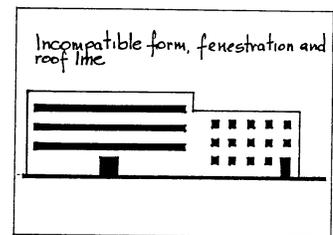
(d) Additional architectural considerations for buildings.

(1) Is there an overall architectural style or theme across the base or in different use areas? If so, does it have aesthetic value? Is it worth using, refining, or perpetuating? Or is it best forgotten?

(2) Do the buildings on base or in particular use areas exhibit visual continuity or harmony?

(3) Do buildings respond to climate through orientation, overhangs, screening, shading devices, landscaping, etc.? If so, are these applications logical and consistent or dissimilar and detracting?

(4) Are solar panels or collectors integrated into the building design?



(5) Are passive solar design techniques employed?

(6) Are mechanical and electrical equipment such as ducts, panel boxes, service drops, or pipes, integrated into the building?

(7) Are additions and alterations stuck on or integrated into the design? Are materials, colors, textures, forms, etc. replicated?

(8) Do interior spaces seem to relate well to adjacent outdoor spaces?

(9) Are entries obvious, inviting, efficiently connected to walkways and parking areas?

(10) Are small components such as handrails, canopies, and trim carefully thought out and applied?

(11) Do window framing and details blend in with other structures? Is the same type and color of glazing used consistently from building to building?

(12) Are historic structures identified, inventoried, and design integrity preserved?

(5) Signage

(a) What degree of uniformity is there among the signs and graphics on base? Are various styles or kinds used for the same purpose?

(b) Are the size, color and shape of signs controlled?

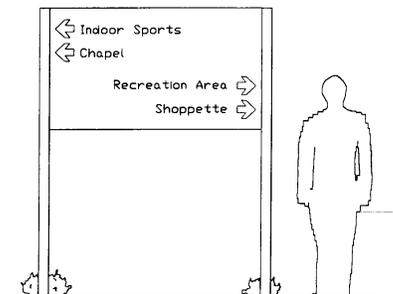
(c) Are various lettering styles and letter and line space used?

(d) Are there standards for the location and placement of signs?

(e) Are building numbers logically sequenced, consistently placed, and readable but not detracting?

(f) Is symbology standardized or variable? Is AFP 88-40 followed?

(g) Are sign materials and construction controlled as appropriate for different functions?



Typical directional sign (one to four directions)

(h) Are super graphics used? Is the use positive and appealing? Are they properly used as a design tool? Do they look outdated, contrived?

(6) Landscaping. (See AFP 86-10, "Landscape Planning and Design" for more details.)

(a) What is the overall description and condition of landscaping on the base? in different use areas?

(b) Are base entrances attractively landscaped?

(c) Are plants used to define major spaces, indicate direction, and delineate boundaries.

(d) Is landscaping used to buffer noise, dust, and wind where appropriate? Do trees provide visual relief and screen less pleasant views?

(e) Are plants used for climate control? near buildings and walkways? in parking areas?

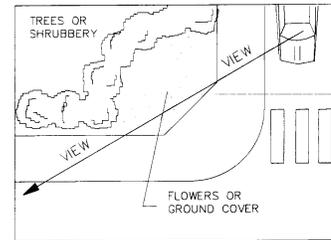
(f) Do buildings have foundation plantings? Are similar plant materials used throughout the base.

(g) Are proper plant selections made for the climate, soils, function and maintenance? Are native plant materials used?

(h) Is street furniture provided? Are quality, design, color, placement, and materials consistent? Are bicycle racks, trash containers, mail boxes, vending machines, and newspaper racks all consciously integrated into the overall planning and design scheme?

(i) Are artwork, monuments, and static displays thoughtfully made a part of the landscape and not an ill-maintained imposition on it? Can people walk up to these attractions and enjoy them?

(j) Are courtyards provided in densely populated areas as an attractive and comfortable place for taking breaks, eating lunch, reading, thinking, and casual meetings?



When planting trees along roadways, care must be exercised to allow good visibility at intersections.

(k) Are the water and watering requirements for plants provided for on a systematic basis?

(7) Utilities

(a) Are steam, power, water, and sewer plants sited to avoid land use and architectural conflicts?

(b) Are substations, chillers, cooling towers, compressors, transformers, etc. integrated into building designs to reduce visual clutter? If not, are they effectively screened or camouflaged?

(c) Is overhead distribution minimized or planned to avoid cluttering the visual environment?

(d) Are color and landscaping considered with the above equipment as well as for large above ground storage tanks and water towers?

(e) Are street lighting poles and fixtures considered as visual elements in addition to their utilitarian function? Are there problems with light pollution or glare because of size, placement or type of lamp or fixture?

(8) Land Use

(a) Are land uses compatible?

(b) Are buildings or activities within ~ designated land use area appropriate for or compatible with that land use area?

(c) Do land uses and activities therein recognize and abide by constraints such as noise, Q-D, safety, odors, and floodplains?

(d) Have areas for future development or expansion been identified and are they compatible with existing land use?

(9) Other systems. These may include maintenance, security, or other special considerations unique to your base.



Before – Overhead Utilities



After – Underground Utilities

Overhead utilities add visual clutter to the streetscape. By placing utilities underground, this clutter is removed, and the eye can concentrate on other elements of the streetscape.

D. Use Area Questions

(1) Housing area

(a) Applicable to neighborhoods.

Are neighborhoods visually and functionally separate from operational activities?

Is the entrance to the neighborhood identified and attractively landscaped?

Is there high speed or high volume traffic in the neighborhood?

Are recreational opportunities provided for various groups?

Do houses or apartments all look the same?

Are foundations attractively planted?

Are houses all painted the same color? standard colors or odd colors? pastels or bold colors? Combination or solid?

Are the facades of multiple units broken up by color, accents, or shadowlines?

(b) Applicable to clusters.

Are vehicle entrances to clusters attractively landscaped and identified?

Is each cluster visually separated from highways or major traffic roads?

Are individual patios provided and visually screened from other patios, public streets and open spaces?

Are there mature trees in the landscape and along the streets?

Are parking areas screened by trees, shrubs, berms, or fences?

What is prominent in the streetscape, houses, trees, cars, boats, trailers, campers, utility poles and lines, bikes and toys, mailboxes?

Is adequate storage provided for lawnmowers, bikes, etc.? Are outdoor storage sheds or structures complementary with adjacent buildings? Are they properly maintained? Have standards been set and adhered to for fences? Do the fences look good and fit in with the housing units?

Are at least two off street parking spaces provided for each family? Or as required by regulations.

What is the overall appearance and condition of the cluster?

(c) Applicable to other housing areas, particularly dormitories.

Are the units sited and landscaped for view, privacy, and quiet?

Are parking areas adequate, convenient, and landscaped?

Is the automobile subordinated to the pedestrian? Are walkways separated from roadways?

Does the area have an identity? Some essential character?

Is the scale of the open spaces appropriate to the units?

Is landscaping used to screen parking, trash receptacles, and utility areas?

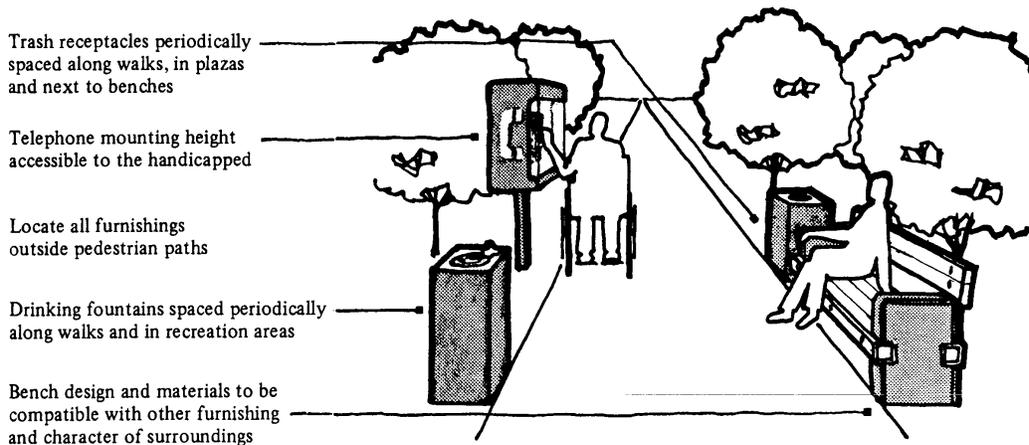
(2) Community Center, including both commercial and community service type facilities.

(a) Are buildings located close together to provide customer convenience and optimize outdoor spaces?

(b) Is high quality design used to promote a strong sense of identity and community?

(c) Are building materials, form, and color carefully coordinated to reinforce the image of the local area and region?

(d) Are signs, landscaping and street furniture aesthetically integrated?



(e) Is access clear, direct, easy and not in conflict with other base roads or functions?

(3) Medical Use Area

(a) Are direction and identification signs clear, direct, and easily understandable?

(b) Is the area quiet? compatible with adjoining land uses?

(c) Is human scale thoughtfully applied?

(d) Are the approach and entrance pleasant, warm, and inviting?

(e) Are hard building forms softened through landscaping?

(f) Is it evident that views and light are important design considerations?

(4) Institutional areas

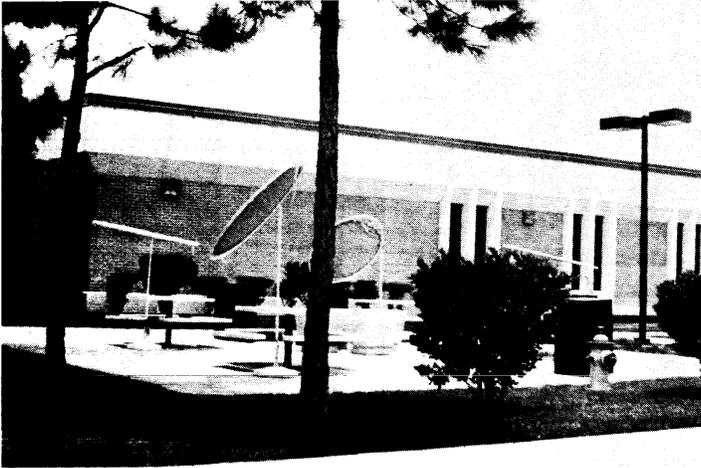
(a) Is there adequate separation from noise sources, such as aircraft or traffic?

(b) Is the base pedestrian network tied into these facilities?

(c) Is scale carefully considered particularly where buildings may be set near different use areas?

(d) Do the buildings promote an atmosphere conducive to learning? one of openness and creativity? of energy? and of thought?

(e) Does the planning and structure provide for small informal meeting, talking and thinking areas?



Lunch/picnic area located between major work areas.

(5) Administrative areas

(a) Is landscaping used to tie buildings together and for visual relief?

(b) Are attractive areas provided for breaks and to eat lunch, talk, or wait for a bus?

(c) Has human scale been considered and built into facility designs?

(6) Industrial Areas

(a) Is scale carefully considered so as not to give these buildings undue importance and to allow people to comfortably relate to them?

(b) Are large, unbroken, wall planes avoided?

(c) Are forms simple?

(d) Is landscaping used to soften and scale down what may be very large structures?

(7) Utility or Public Work Areas

(a) Are these buildings sited away from other, more people intensive areas, and where they do not clutter the landscape or obstruct views?

(b) Is landscaping used to screen unsightly areas?

(c) Is simple, functional design used? Or where such a building may be in another use area, is the design compatible with surrounding buildings?

(8) Aircraft Operational/Maintenance/Support Areas

(a) Is access controlled through visual cues, signs, landscaping, or other means?

(b) Are reflective surfaces avoided where they might interfere with aircraft operations or movements?

(c) Do these facilities convey a neat, clean, and efficient image?

(d) Is the function or purpose of this area clearly conveyed? Are security functions visible?

(e) Are surrounding land uses compatible?

(f) Is landscaping minimized to enhance security?

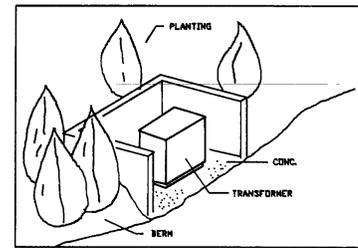
(9) Recreation, Open Space

(a) Are activities within these areas compatible with adjacent land uses?

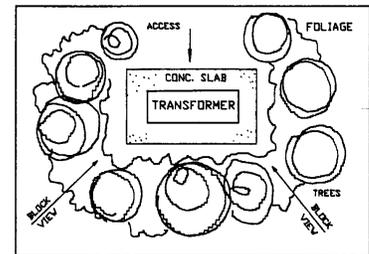
(b) Is lighting in sports areas designed to minimize glare in housing areas?

(c) Are noisy activities remote from schools, hospitals, and housing areas?

(d) Are supporting structures designed to be compatible with adjacent land uses?



Ideally, these transformers and substations should have been located to visually minimize their presence, but since it was not feasible, they should be screened from public view by means of plant material or enclosure walls.



ARCHITECTURAL COMPATIBILITY

CHAPTER THREE

IMPLEMENTATION

1. MAJOR OBJECTIVES

Here are some major objectives to follow when implementing base architectural compatibility guidelines. Depending on the leadership, management organization and structure at a particular base, guidelines will vary, as will the applicability of the objectives that should be considered.

Program objectives must be clearly stated. The guidelines must be practical, not theoretical. They must be specific, but not confining. Plans and procedures for implementation must be developed and incorporated into the existing base organization and management structure.

Involvement and commitment must start at the top and filter down. The wing and base commander, plus key participants in facilities construction, maintenance, repair, and disposal decisions must be involved. Other participants should be determined by the situation. Major commands (MAJCOM) and Air Force Regional Civil Engineers (ARFCE) must also be involved in the development and use of the guidelines at an early stage.

One person should be given the responsibility and the authority for managing the base's architectural compatibility program. Responsibilities would include: developing the guidelines and implementing their use; reviewing programming and design documents for compliance; briefing base leadership, designers, and other participants in the design process, and reviewing and updating the document. Authority would also include reviewing of planning, programming, and design documents as they relate to architectural compatibility. Since architectural compatibility is an integral part of the BCP, the base community planner should play an important role in this program.

2. THE PROCESS

Architectural Compatibility Guidelines or Standards, as a BCP component, may be included in the base comprehensive plan, or prepared separately. They may be used in other related studies. There are four steps to preparing base architectural compatibility guidelines:

A. Examine existing conditions using the questionnaire checklist in previous chapter to identify applicable architectural compatibility considerations.

B. Evaluate existing conditions against established planning and design standards:

(1) These may be in writing and/or simply good planning and design principles and practices.

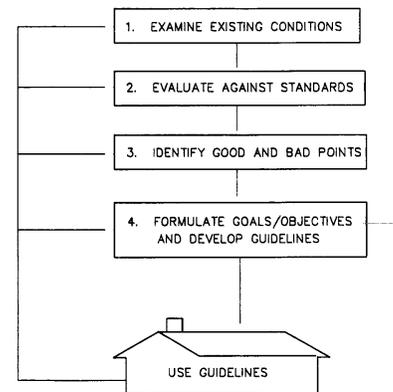
(2) Record visual elements. Photographs, sketches, and drawings of key elements such as architecture, open areas, landscaping, views, main boulevards, groups of buildings, base entrances, landmarks, monuments, or other significant visual features are necessary.

(3) Materials, form, texture, color, scale, style, proportion as well as architectural details should be recorded.

(4) Typical supporting urban design elements such as street lighting, curbs, sidewalks, signs, benches, bus shelters, planter boxes, and screening materials can be used as standards.

(5) Poor examples can be used to show problems and undesirable or unacceptable elements.

(6) Review other BCP component plans and guidelines such as the energy conservation plan, natural resources plan, and paint color plan. Examine the Military Construction Program as well as maintenance, repair, minor construction and non-appropriated funded construction programs. Review planning and design guidance or standards currently being used on base. Are published or unpublished maintenance guidelines being used? Are siding or roofing materials specified in terms of size, color, finish or other qualities that would affect the visual environment? Are certain types of window frames and glazing materials



specified ahead of time? Are standard fencing materials and details employed?

C. Identify issues, problems, and needs as well as possible features of the base or area on which to build.

D. Develop base architectural compatibility guidelines from base architectural compatibility goals and objectives.

(1) Collect and review any similar documents from the surrounding area and communities.

(2) Assess the physical environment of the base. Identify strong points and weaknesses with the physical structure or plant.

(3) Develop the guidelines as responses to questions which help determine the direction of base development in the future.

(a) What should the base convey to people who work there? live there? visit there?

(b) What message should be conveyed?

(c) What image should be relayed?

(d) What feeling should be relayed?

(e) What changes or improvements should occur in the near term? in the longer term?

(4) It is important to ask as many questions and to generate as many ideas as possible, to be imaginative, and to visualize the future.

3. SAMPLE EFFORT

The study, analysis, and planning results should be used to determine objectives. Goals should encompass the broad picture. Objectives are more specific, measurable actions taken to accomplish goals. For example:

A. Goal: Improve the main entrance to the base.
Objectives might include:

(1) Reduce visual clutter such as unnecessary signs, fences, etc.

(2) Construct a permanent entry shelter consistent with base architecture.

(3) Create a sense of entry or arrival through facility design, landscaping, and control elements.

B. Goal: Improve visual orientation to base functions and activities. Objectives might include:

(1) Group functionally related facilities together.

(2) Use similar exterior finishes to designate a particular area.

(3) Use landscaping to buffer different areas.

This process includes the time to involve a broad cross-section of base personnel. Base leadership, including all appropriate direct mission and support elements, should be involved, as well as other groups, such as people who live in the dorms or family housing; civilians who work on base; people who shop at the BX and commissary, use the hospital, commercial and community services facilities, and recreational facilities. The determination of goals and objectives marks the end of the preliminary studies and analyses and signals the beginning of the actual preparation of the guidelines. The users of the base Architectural Compatibility Guidelines need to be identified early, and the Guidelines should serve those users.

CONCLUSION

The successful development and implementation of Architectural Compatibility Guidelines is essential to the systematic evolution of the Air Force installation as an efficient military operation center, with a pleasant working and living environment.

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