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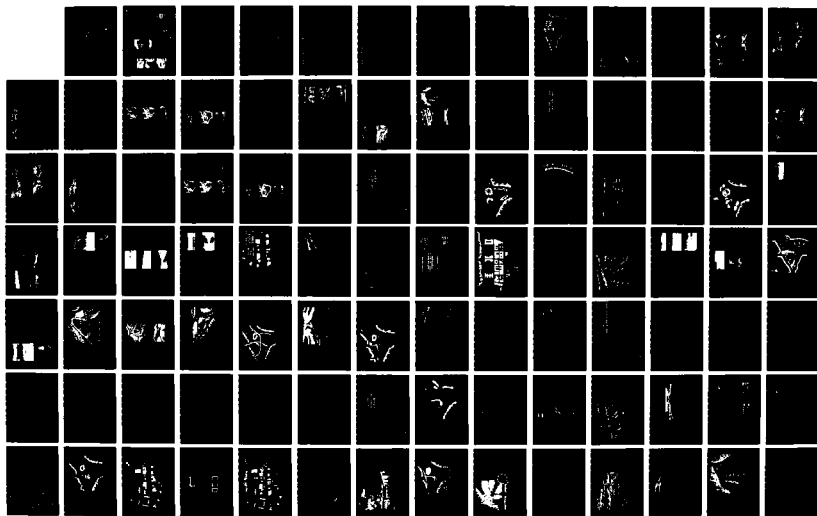
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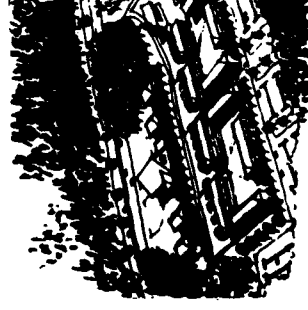
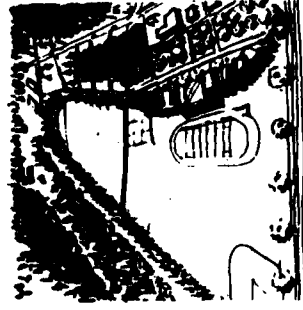
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FORT LEWIS DESIGN THEME STUDY

Final Report

University of Washington
Urban Design Program

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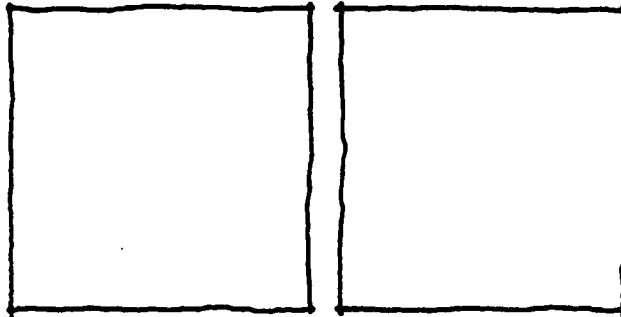
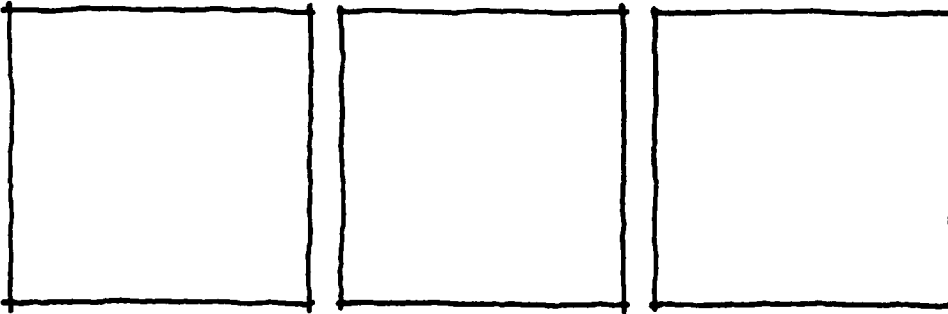
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This report is the result of a 9-month study to investigate the possibility of developing and implementing a design theme for Ft. Lewis, WA. Part 1 is a summary of the Military Park Theme's concepts. Part 2 contains a set of general guidelines aimed at fortwide application. Part 3 is an analysis of current planning procedures. Part 4 outlines detailed design guidelines for new developments which are planned for the future. The appendix contains a summary of background information about the fort's evolution and development, it's mission, culture and the physical setting.		



Visual Character and Design Theme
Study of Fort Lewis, Washington

sponsored by the:

Seattle District Corps of Engineers
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Architectural Theme Study
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FORT LEWIS DESIGN THEME STUDY

Final Report

Consultant: University of Washington
Urban Design Program
Ryan Luth Wilson Woodcock
August 1984

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INTRODUCTION

Statement of Purpose

This report is the final product of a nine-month study undertaken in response to the directive issued by the Department of the Army that all permanent Army installations take steps to establish a suitable architectural character wherever feasible and practical, utilizing good master planning and principles of design. To carry out that directive, the Seattle District Corps of Engineers contracted the University of Washington's Urban Design Program to investigate the possibility of developing and implementing a design theme for Fort Lewis.

In January 1984 the first phase of the two-phase study was presented to the Corps of Engineers and fort officials. The purpose of Phase 1 was to develop a preliminary recommendation for the fort's Design Theme. To accomplish this, the report presented an analysis of the present character and heritage of Fort Lewis and identified issues that currently exist in the fort's planning and development. It identified both natural and man-made features, suggesting ways these could be used to create a visually pleasing and functional environment. Finally, the preliminary report

recommended that the fort adopt the Military Park Theme based on the early cultural and military values expressed in the historic Garrison Area.

After a review of this document and recommendation, fort officials approved the Military Park Theme for Fort Lewis. The Corps of Engineers subsequently directed the University to develop more detailed recommendations and guidelines for the theme.

The primary objectives of the second phase of the work have been to develop a means for implementing the Military Park Theme and to create guidelines both for existing and new developments. This work is based on conclusions drawn from the preliminary report and from working with fort officials and the Corps of Engineers.

As part of the Phase II work, the University has developed design guidelines for the new Jackson Avenue Troop Complex Facility. The examination of this complex, soon to be constructed along Jackson Avenue, has provided a unique opportunity to actually test guidelines of the Military Park Theme on a new troop

facility. These guidelines have been useful to the consultants designing the facility and have assisted the fort planners in directing the design and site plan of the complex.

Organization of Report

This report is presented in four parts. Part I provides a summary of the Military Park Theme's concepts. It includes a definition of the goals, design objectives, and design policy statements necessary for achieving a fortwide theme.

Part 2 contains a set of general guidelines aimed at a fortwide application. Presently, there is no clear intent or consistency in design approach for the fort's built and unbuilt areas and circulation system. These fortwide design guidelines work to establish over time a more unified and aesthetically pleasing image.

Part 3 presents an analysis of current planning procedures and the primary actor's roles in planning at the fort. Based on this analysis a strategy for incorporating the theme into the Master Plan is outlined. A set of actions is outlined to ensure the successful integration of the Design Theme into the fort's planning process.

Part 4 outlines detailed design guidelines for new developments which are planned for the near future. Also included are

guidelines for improving the main entry point to the fort.

The appendix contains a summary of background information about the fort's evolution and development, its mission, culture, and the physical setting. This information served as the rationale for the initial development of the Military Park Theme and is included to further assist in understanding the final recommendations.

Who Will Use This Report?

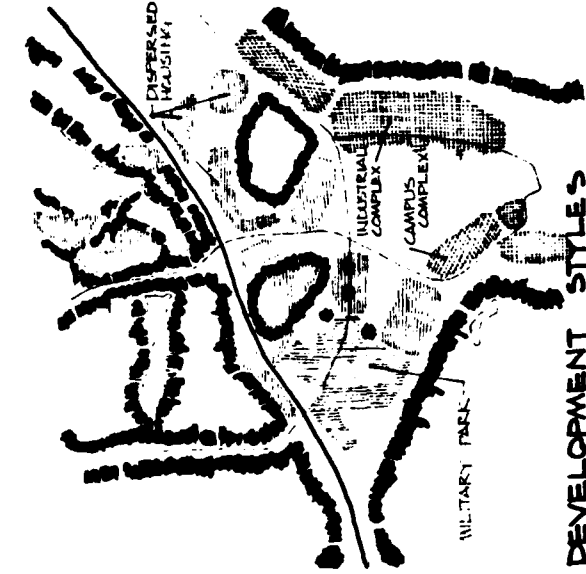
This report contains a set of directives dealing with the fort as it exists today as well as how it can be in the future. When adopted, the directives will foster the use of design at Fort Lewis to reflect important ideas about Army life, such as discipline, order and dedication to military service. It is of primary importance that the goals, design objectives, and design policies for the Military Park Theme be adopted as the fort's principle philosophy of development. The theme can be used to decide long-term physical development, as well as the day-to-day decisions that affect the appearance and functioning of the fort.

To be effective, the theme will be used by a number of administrators, planners and consultants at the fort. The Army's consultants will need the theme guidelines to design new buildings, roads and

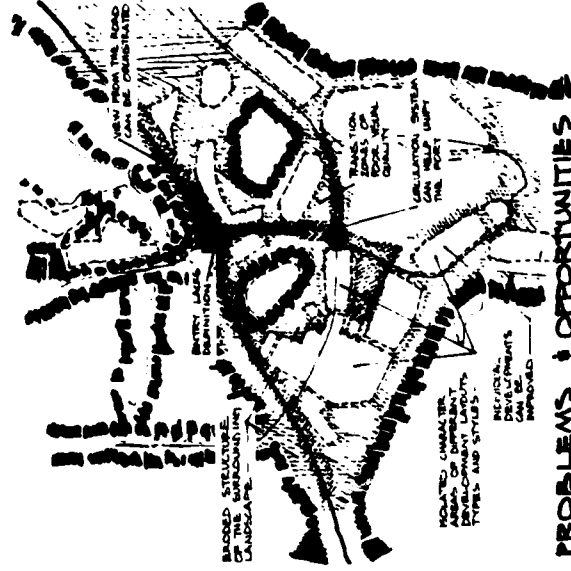
landscaping. The Army Corps of Engineers will use the guidelines as criteria for evaluating these new design proposals. Finally, personnel responsible for maintaining the grounds and buildings can, among other things, use the theme to determine landscaping and routine maintenance policies.

By using the theme as a way of coordinating the efforts of many, a greater degree of consistency can be developed in the processes of planning and design. The result will be an environment that not only functions well in a practical sense, but that will be visually attractive and inspiring to the fort's users and visitors.

EXECUTIVE SUMMARY



DEVELOPMENT STYLES



PROBLEMS & OPPORTUNITIES

today. But what is more significant for today's planning and design is the way that the whole urban design of the Military Park development expresses so well the military values of order and discipline, engendering for those who use the fort a feeling of pride, sense of belonging, and common purpose.

The Military Park Theme is a matter of architecture and site planning, of establishing meaningful relationships between buildings and using the magnificent natural environment of the fort to enhance its sense of permanence and uniqueness as an installation. It is also a matter of creating centers of activity and infilling new developments in with existing areas, of planning for views, organizing paths and spaces, and using the circulation system to shape development patterns and manipulate the experience of seeing, thus understanding, the fort's environment.

The concept of a Military Park as the Fort Lewis theme is based upon the ideals of the military. In essence, the theme says use architecture, site planning, landscape, and circulation to express the fort's military culture and values. Use them together, gradually building upon all of the present development patterns to get a stronger and more unified image.

The meat of this final report is how the concept of a Military Park Theme, approved earlier by fort officials, can be used to guide decisions of development and presentation on Fort Lewis.

SECTION I GOALS, OBJECTIVES, AND POLICIES

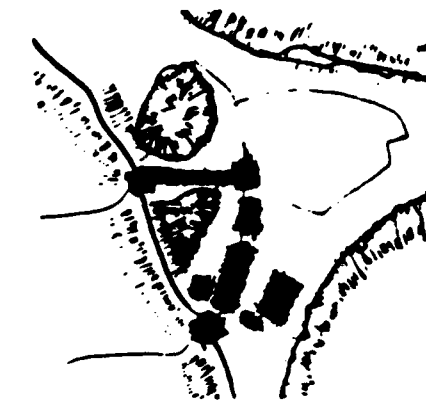
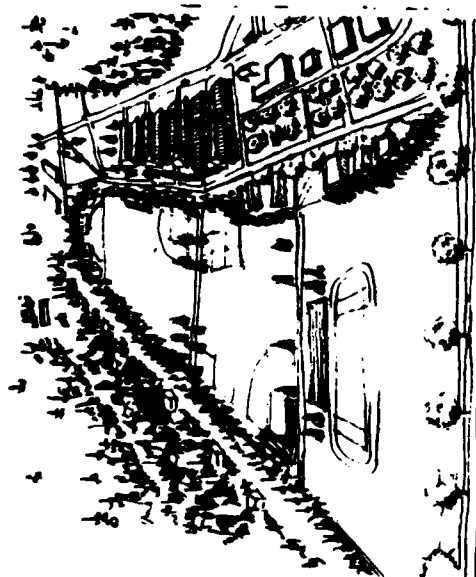
The first section of the report contains Goals, Objectives and Design Policies. These are the fundamentals; they provide the framework and rationale for the theme. They are broad, general statements about what Fort Lewis ought to be. Think of them as the fort's design beliefs.

The five major goals, with accompanying objectives and the six policies can be adopted by the fort as part of the Master Plan, thus providing a continuing guide for official design decision-making.

PART 1.3 MILITARY PARK THEME GOALS AND DESIGN OBJECTIVES

The Military Park Theme establishes an organizing framework to unite different areas and elements on the fort into a perceivable whole. The theme helps to define why there is a fort, how the fort operates, who lives and works there, and what their values are. It is important that common attitudes about the role and function of both the military and the fort are agreed upon to implement a theme. The goals and objectives stated below are intended to help establish that common consensus. When adopted and incorporated into the fort's planning process they will serve as the general direction-setting statements to guide decisions.

GOAL: 1

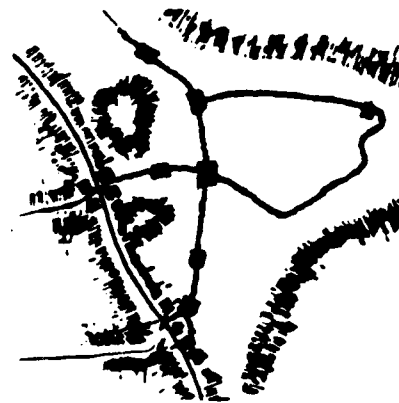


GOAL 1
Revive the military values of order, discipline and tradition and express those values in the physical environment at Fort Lewis.

Design Objectives

- Use planning, landscaping, building layout and architectural design to express the fort's activities and the relative importance of a facility, place or district within its environment.
- Preserve the fort's historically valued districts, monuments, architectural and landscape characteristics and views to ensure that a strong sense of military character and history is maintained.
- Maintain existing and create new symbolic spaces to carry on the fort's early tradition of expressing its military values in the design of the environment.

GOAL: 2



GOAL 2

Improve the clarity of the fort's physical organization and layout.

Design Objectives

- Develop road hierarchies and standard treatments to express the relative importance of each element in the circulation system.
- Express entries and edges of districts with defined spatial treatments.
- Cluster similar functional elements together to create districts or centers of use.

GOAL 3

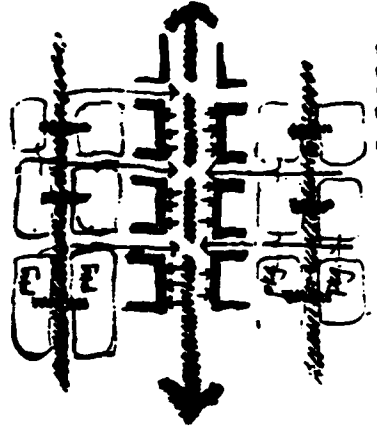
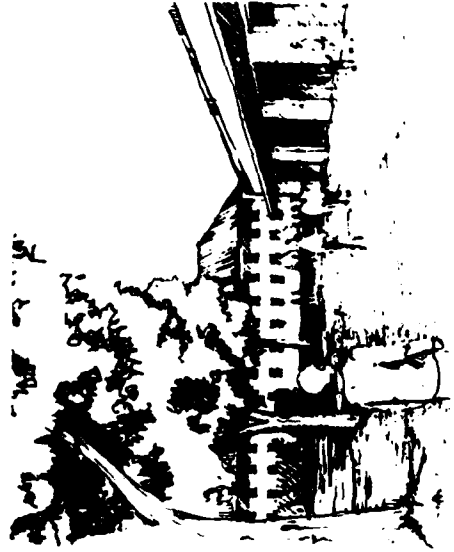
Enhance the fort's quality of life.

Design Objectives

Develop a convenient and safe environment for the users by accommodating their complex needs.

Create centers within the fort to serve as focal points of activity and reinforce the identity of places.

Design for both the public and private needs of families and individuals by defining spaces for their use.



GOAL: 3

GOAL 4

Enhance the locational identity of Fort Lewis to maintain its distinct character and its relationship to the surrounding region.

Design Objectives

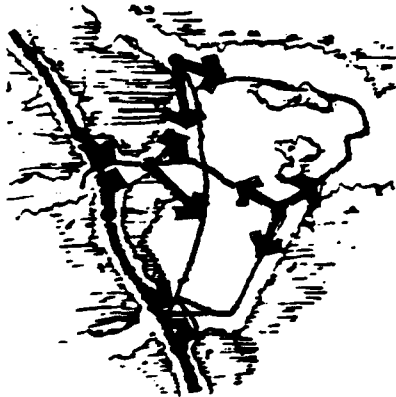
Use native vegetation in the fort's landscaping.

Preserve natural topographic features and direct views within developed areas to prominent natural features.



GOAL: 4

GOAL: 5



GOAL 5

Clarify the military identity of the fort and project a positive image to the surrounding civilian population.

Design Objectives

Focus views to important fort landmarks from I-5 and the main arterials on the fort.

Establish strong edges to the fort's boundaries with prominent gates and defined landscaping.

PART 1.4 DESIGN POLICY STATEMENT

The Military Park Theme is designed to guide decision-making concerning the development and preservation of Fort Lewis. A series of policies necessary to achieve this represents a move toward recognizing the positive aspects of the fort, to enhance and conserve them, and to enrich the social environment. These policies are meant to be adopted by the fort, along with the more general goals and objectives to provide a continuing guide for fort officials involved in its planning.

POLICY



1. HISTORIC CONTINUITY

Preserve the historic Garrison Area. Build upon its Military Park principles of site planning and architectural design throughout the fort to ensure the continuing presence of the unique military character at Fort Lewis.

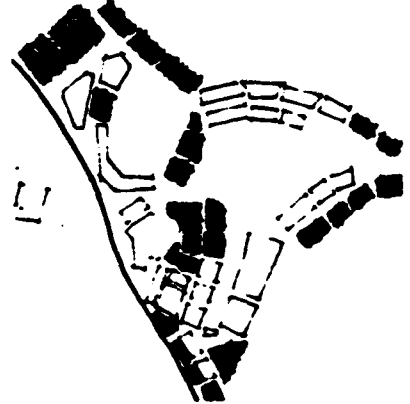
POLICY



2. THE COMMUNITY CENTER

Reaffirm the importance of the Community Center as a unique and vital part of the fort's social structure. Emphasis should be placed on promoting a strong sense of community and providing greater opportunity for social interaction particularly within the Center's public spaces.

POLICY



3. INFILL DEVELOPMENT

Use infill development to reverse the present trend toward isolated and dispersed developments. Fit new developments into the context of existing areas. Use the Military Park principles of design for building layout, architectural character, landscape and circulation to achieve the theme.

4. CIRCULATION

Integrate a traffic management strategy into the fort's design. Discourage the use of single-occupancy vehicles and build a fortwide pedestrian and bicycle network to serve as an alternative to the private automobile. Improve shuttle-bus service between points of high demand. Limit the amount of surface parking available and design parking facilities so as to reduce their impact on the fort's visual environment.



POLICY

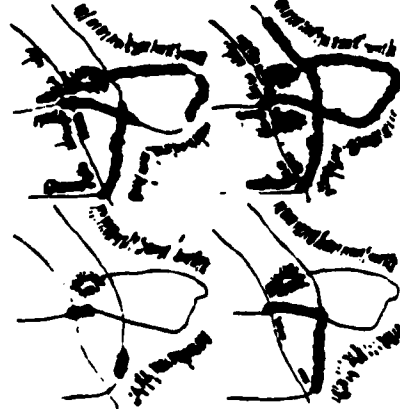
5. LANDSCAPE PRESERVATION
Preserve the qualities of the fort's natural landscape. It is a valuable resource for regional identity. The use of existing and native vegetation should be integrated into the design of all new fort developments. Distinctions should be clearly made between areas requiring formal landscape treatments, informal and those where the natural characteristics of the environment should remain essentially undeveloped.



POLICY

6. MAINTENANCE

Pursue a strategy of design-related maintenance on a fort-wide level. Vary the level of landscape maintenance according to Policy 5: Use the incremental nature of routine maintenance of buildings and grounds to help achieve the Fort Lewis design theme.



POLICY

Compliance with the above design policies should neither increase fort operational expenditures nor add to the cost associated with new development. They are intended to be applicable, in an incremental fashion, to existing areas. For new developments, they should be incorporated as a matter of procedure into the design scheme. Through the acceptance and on-going application of these policy statements, they will serve as a guide in achieving the Military Park Theme.

SECTION II DESIGN GUIDELINES

The second section of the report contains specific design guidelines for the whole fort on an area by area basis. It is organized into three parts: guidelines for the builtup areas, for the unbuilt or undeveloped areas, and for circulation throughout the fort. Each area is treated separately because each has its own unique design problems and potentials. And like Section I, the guidelines may be adopted as part of the fort's Master Plan to provide a basis for design decisions and improvements.

BUILT AREAS

For the Built Areas, such as Troop and Family Housing, the Community Center and Administration areas, the aim is to enhance the design of these centers of activity to make them more enjoyable and identifiable as places with a recognizable thematic character.

In the Troop Housing, for example, design recommendations are made to implement the Military Park Theme incrementally through changes to landscaping and building color and by redefining the outdoor spaces and activities to once again establish the military traditions of formality and reinforce unit identity.

Theme guidelines are provided for the Headquarters/Administration

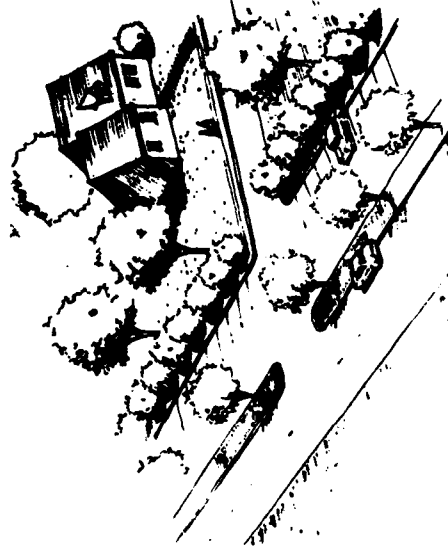
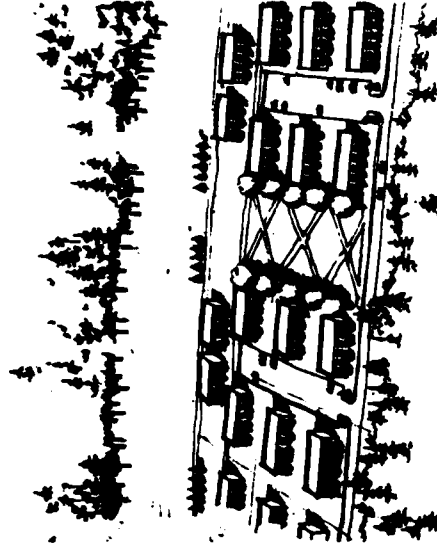
Areas to ensure that they provide a visual sense of command authority and create a strong image as the fort's military center.

Design theme guidelines for the Community Center are aimed at 1) providing for the social interaction needs of the Army personnel and their families; 2) developing the image of a pleasant, pedestrian-scaled, well built up central business district on the fort and; 3) expressing military dignity in the environment through the design of buildings and outdoor spaces.

UNBUILT AREAS

Design guidelines for the fort's unbuilt open spaces seek to use these areas as design resources to create a comprehensive unified visual image. Three types of open spaces are dealt with: 1) formal areas - the ceremonial open places which can be better used within the fort to convey powerful clues about military values of order, central focus and disciplines; 2) recreational areas - the settings for physical activities and social interaction; and 3) natural areas - the physical organizing features which frame the various building settings on the fort.

The guidelines make it quite clear that all three types of open spaces have a role to play in building the Fort Lewis theme; each type of space needs to be treated in design terms



according to its function, and maintenance levels need to reflect these differences. For example, some areas should be left to develop into a purely natural state that requires very little or no maintenance.

CIRCULATION SYSTEM

Design guidelines for the circulation system - the most well-used design element on the fort - are based on the theme's objectives of clarifying Fort Lewis's image, character, and identity as a military installation. There should be an obvious hierarchy, expressed through visual design, between arterial roads, collector and local streets. Entries into different developments should also be clarified and major points of crossing should be identified through special design treatments.

SECTION III IMPLEMENTATION

A strategy to incorporate the Military Park Theme into the planning and design processes at Fort Lewis is outlined in Section III. This is a section about responsibility and about who can make the theme happen. Three key actors for theme implementation are identified.

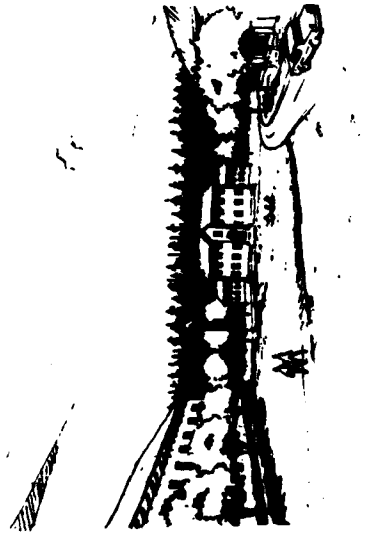
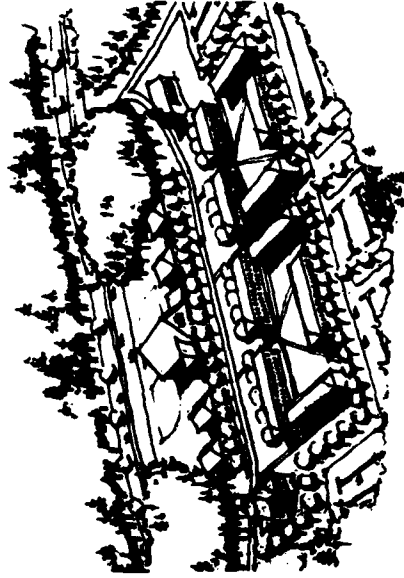
- 1) The Fort Command and Installation Planning Board - the voice of the military personnel on the fort and the ultimate proponents of the theme's military, social and livability based objectives.
- 2) Fort Lewis Master Planning Branch - the major on base agency for achieving local coordination of plans and policies; the "watch dog" of design theme concerns through master plan review and on-going maintenance efforts.
- 3) Seattle District Corps of Engineers - the crucial intermediary between the fort itself and private contractors of fort developments. The Corps as project manager must see that the fort's theme goals and design intentions are incorporated into all work undertaken on the installation.

SECTION IV SPECIAL PROJECTS

This section addresses four specific projects, the first three of which have been programmed by the Army for action in the near future and afford unique opportunities to begin to establish the fort's Military Park Theme right away:

1. Jackson Avenue Troop Complex
2. 1 Corps Headquarters Complex
3. Community Facilities Expansion
4. The Main Entrance

The guidelines for Special Projects are more detailed and site specific than the fort wide Design Guidelines in Section II. They are intended to provide the rationale, criteria and design theme terms of reference for assisting in design development and evaluation of these projects.



WHAT HAPPENS NEXT?

The report provides the basis for developing a Fort Lewis Military Park Theme. It sets the framework in terms of goals, objectives and design policies. It gives forthwile design guidelines on an area by area basis for accomplishing the theme and takes four special projects into even greater detail in terms of design recommendations. The report however cannot make the theme happen. Only coordinated efforts of the three major agencies - the Fort Lewis Master Planning Branch, the Seattle District Office of the Corps of Engineers and the Fort Commander with the Installation Planning Board - can see that the Military Park Theme becomes a reality.

It is our recommendation that after careful review and refinement of this report, if necessary, Sections I and II be adopted as part of the Fort Lewis Master Plan. This will provide the above mentioned three agencies with a common basis for making design related decisions.

The report is not really a technical manual although it is written and organized in a way that can be helpful for informing any and all readers about the design intentions of Fort Lewis. We believe it would be prudent to place a good deal of design theme responsibility with the Master Planning Branch to augment and develop further the means for carrying out the theme. In essence,

someone should become the manager of the design theme: the spokesperson for it in dealing with both internal and external design related projects, design review, project initiation and on-going maintenance procedures on base. It would be ideal to have someone with planning and design skills in this position to not only represent the design theme objectives expressed in the results of this report but to carry some of the work further, as necessary. Very little of the theme as proposed here is to be carried out separately from on going fort planning and development. Implementation of the theme will be gradual, shirt-tailed on to all projects including landscape replacement, street changes, building maintenance, and signing, as well as new projects. Someone needs to be there, up front on all of these kinds of projects, to see that decisions are made so as to foster the Military Park Theme on Fort Lewis.

SUMMARY OF NEXT STEPS

Action 1 - Incorporate Military Park Design Theme into the Master Planning Process.

Action 2 - Identify a Manager of the Design Theme to monitor and update implementation.

Action 3 - Establish procedures and refine objectives for developing new areas and adapting existing ones into the Military Park Theme.

Action 4 - Establish review processes and procedures to be followed by architectural and engineering firms to ensure theme integrity.

Action 5 - Establish maintenance procedures consistent with Military Park Theme concept.

Action 6 - Develop special projects from time to time to achieve design features of the theme. Get them funded and built.

Action 7 - Ensure clear communications between all parties involved in the planning and implementation process.

SECTION I

THE MILITARY

PARK THEME

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PART 1.1

WHAT IS A THEME?

A fundamental assumption made at the beginning of this study was that a design theme requires a more comprehensive outlook than the term theme might suggest.

A theme, as defined in Webster's, is a "recurring, unifying subject or idea...". Similarly, but stated in another way is the often used phrase "there are some common threads here." "Recurring ideas", "common threads", "underlying patterns"; all are familiar terms that broadly define the concept of a theme.

Applied to an environment, a place with a design theme is one that expresses a sense of wholeness and unity. There are various ways of achieving this unity. For example, the recurring threads of a theme can come from the architectural character, siting and building relationships, and landscape treatment. Elements in the environment can also relate to one another because of some consistency in materials, color, or style. At Fort Lewis a design theme will not be a matter of adding one or two visually apparent treatments to the fort's buildings or grounds. Instead it will integrate a number of elements to establish an overall sense of design unity.

PART 1.2

THE MILITARY PARK THEME... A REVIVAL OF A TRADITION

The recommendation to adopt the Military Park Theme is based on what a theme should do for the fort. It should build on the fort's existing physical qualities in order to create a strong image to visitors and to those who live there. It should help define why there is a fort, how the fort operates, who lives there, and what their values are. The Military Park concept, based on these ideals, is rooted in the belief that a theme should express a commonly held idea of military service that is reinforced by a sense of history and tradition.

The Garrison Area: A Model for the Theme

At the time the Garrison Area was developed, the Army Officer's Corps believed that military life with its discipline, routine, and reliance on command should be carried out in a park-like and formal setting distinctly separate from civilian life. The Garrison was designed to specifically express these objectives through its physical design. By taking advantage of the natural environment and providing different areas for living, drill,

and display, it generated a sense of pride and belonging for military personnel. Two tree-covered ridges and a dramatic view of a distant mountain were used as powerful design elements to order the arrangement of buildings. Formal rows of vegetation, now mature, created a spectacular ceremonial setting for day-to-day activities. Even today, the layout of the buildings, landscaping and the architectural style of the buildings reinforce the image of a park and communicate how troops, officers and the command work together for a common purpose.

Garrison Area Design Principles

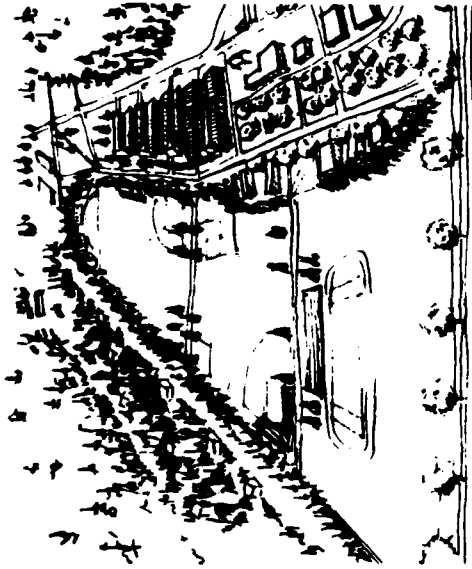
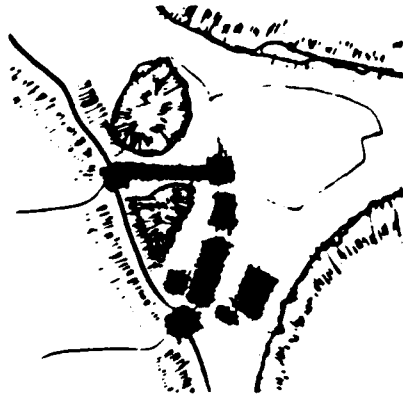
The principles used in the design of the Garrison Area are not new. They have been used throughout history in the design of environments, especially at a time when the role of the individual in relation to others and to society as a whole has been particularly important. The principles used in the Garrison include, among others, establishing meaningful axial relationships between buildings, using the natural environment to enhance a sense of permanence and place, creating centers, planning for views, organizing paths, forming spaces, and using the circulation system to shape development patterns and manipulate the experience of seeing the fort's environment.

The use of these principles in future development does not mean that the Garrison Area should be copied. There are functional and economic reasons not to do so. However, many of the design ideas used in the Garrison, carefully reinterpreted for today's realities, can be used to build a bridge with the past. The Military Park Theme will be cultivated through the use of the fort's natural and built resources, through sensible traffic management and by sensitive maintenance and development of its remaining unbuilt portions.

PART 1.3 MILITARY PARK THEME GOALS AND DESIGN OBJECTIVES

The Military Park Theme establishes an organizing framework to unite different areas and elements on the fort into a perceivable whole. The theme helps to define why there is a fort, how the fort operates, who lives and works there, and what their values are. It is important that common attitudes about the role and function of both the military and the fort are agreed upon to implement a theme. The goals and objectives stated below are intended to help establish that common consensus. When adopted and incorporated into the fort's planning process they will serve as the general direction-setting statements to guide decisions.

GOAL: 1



GOAL 1

Revive the military values of order, discipline and tradition and express those values in the physical environment at Fort Lewis.

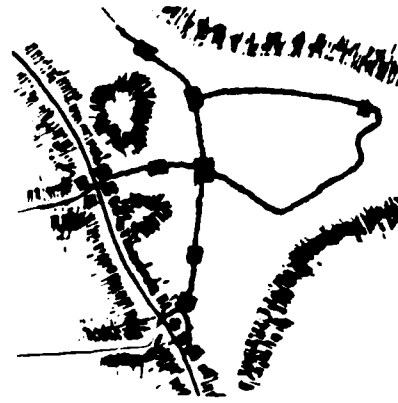
Design Objectives

Use planning, landscaping, building layout and architectural design to express the fort's activities and the relative importance of a facility, place or district within its environment.

Preserve the fort's historically valued districts, monuments, architectural and landscape characteristics and views to ensure that a strong sense of military character and history is maintained.

Maintain existing and create new symbolic spaces to carry on the fort's early tradition of expressing its military values in the design of the environment.

GOAL: 2



GOAL 2

Improve the clarity of the fort's physical organization and layout.

Design Objectives

Develop road hierarchies and standard treatments to express the relative importance of each element in the circulation system.

Express entries and edges of districts with defined spatial treatments.

Cluster similar functional elements together to create districts or centers of use.

GOAL 3

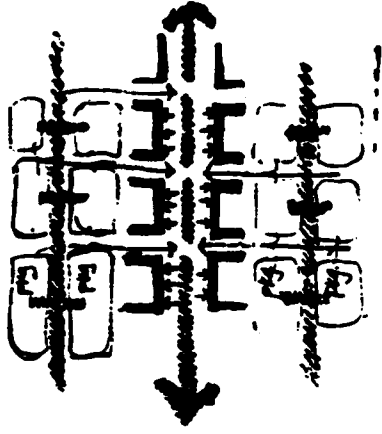
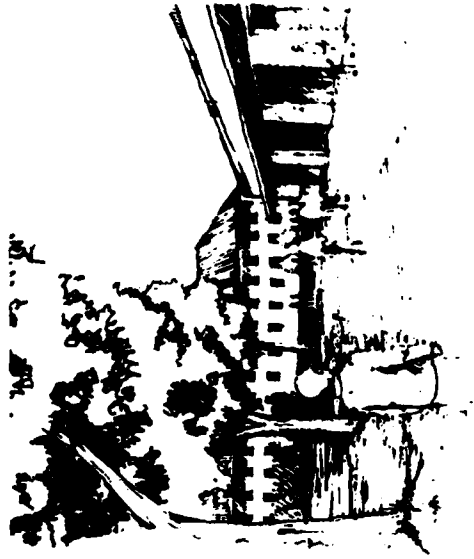
Enhance the fort's quality of life.

Design Objectives

Develop a convenient and safe environment for the users by accommodating their complex needs.

Create centers within the fort to serve as focal points of activity and reinforce the identity of places.

Design for both the public and private needs of families and individuals by defining spaces for their use.



GOAL: 3

GOAL 4

Enhance the locational identity of Fort Lewis to maintain its distinct character and its relationship to the surrounding region.

Design Objectives

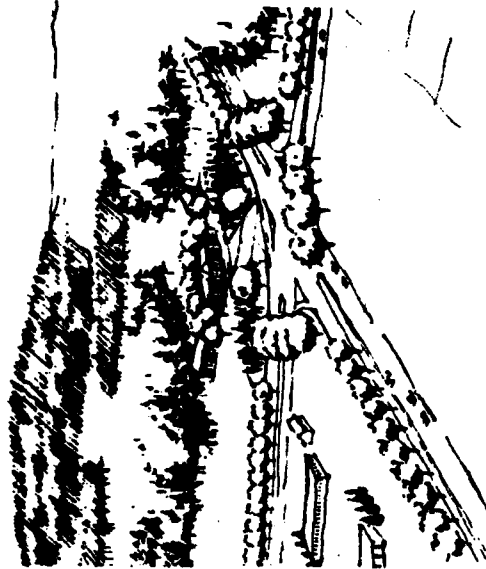
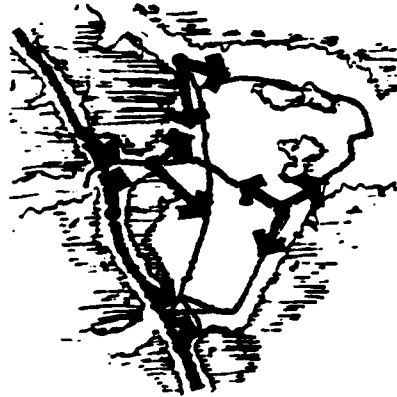
Use native vegetation in the fort's landscaping.

Preserve natural topographic features and direct views within developed areas to prominent natural features.



GOAL: 4

GOAL: 5



GOAL 5

Clarify the military identity of the fort and project a positive image to the surrounding civilian population.

Design Objectives

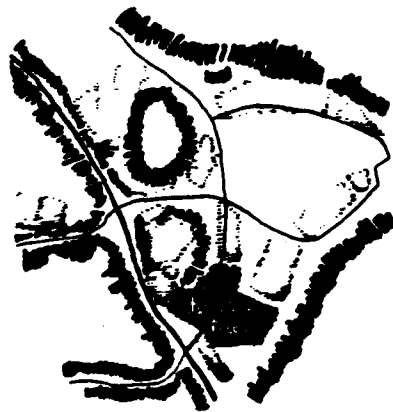
Focus views to important fort landmarks from I-5 and the main arterials on the fort.

Establish strong edges to the fort's boundaries with prominent gates and defined landscaping.

PART 1.4 DESIGN POLICY STATEMENT

The Military Park Theme is designed to guide decision-making concerning the development and preservation of Fort Lewis. A series of policies necessary to achieve this represents a move toward recognizing the positive aspects of the fort, to enhance and conserve them, and to enrich the social environment. These policies are meant to be adopted by the fort, along with the more general goals and objectives to provide a continuing guide for fort officials involved in its planning.

POLICY



1. HISTORIC CONTINUITY
Preserve the historic Garrison Area. Build upon its Military Park principles of site planning and architectural design throughout the fort to ensure the continuing presence of the unique military character at Fort Lewis.

POLICY



2. THE COMMUNITY CENTER
Reaffirm the importance of the Community Center as a unique and vital part of the fort's social structure. Emphasis should be placed on promoting a strong sense of community and providing greater opportunity for social interaction particularly within the Center's public spaces.

POLICY



3. INFILL DEVELOPMENT
Use infill development to reverse the present trend toward isolated and dispersed developments. Fit new developments into the context of existing areas. Use the Military Park principles of design for building layout, architectural character, landscape and circulation to achieve the theme.

4. CIRCULATION

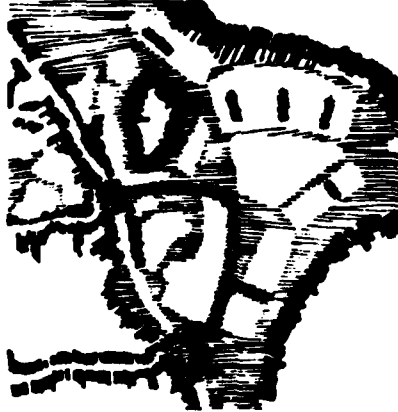
Integrate a traffic management strategy into the fort's design. Discourage the use of single-occupancy vehicles and build a fortwide pedestrian and bicycle network to serve as an alternative to the private automobile. Improve shuttle-bus service between points of high demand. Limit the amount of surface parking available and design parking facilities so as to reduce their impact on the fort's visual environment.



POLICY

5. LANDSCAPE PRESERVATION

Preserve the qualities of the fort's natural landscape. It is a valuable resource for regional identity. The use of existing and native vegetation should be integrated into the design of all new fort developments. Distinctions should be clearly made between areas requiring formal landscape treatments, informal and those where the natural characteristics of the environment should remain essentially undeveloped.



POLICY

6. MAINTENANCE

Pursue a strategy of design-related maintenance on a fort-wide level. Vary the level of landscape maintenance according to Policy 5: Use the incremental nature of routine maintenance of buildings and grounds to help achieve the Fort Lewis design theme.



POLICY

Compliance with the above design policies should neither increase fort operational expenditures nor add to the cost associated with new development. They are intended to be applicable, in an incremental fashion, to existing areas. For new developments, they should be incorporated as a matter of procedure into the design scheme. Through the acceptance and on-going application of these policy statements, they will serve as a guide in achieving the Military Park Theme.

SECTION 2 DESIGN GUIDELINES

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PART 2.1 DESIGN GUIDELINES

Introduction

The design guidelines are a means of treating common recurring design problems to improve the overall visual image of the fort. The aim is to enhance the different built areas or centers of activities to make them more enjoyable and identifiable as places with a recognizable character. Another component of the design guidelines is the unbuilt areas. The fort's previous development patterns have left underdeveloped spaces between the built areas. They are used as buffer zones with no distinguishable qualities. The suggested treatments for these areas are designed to create strong edges which promote a visual awareness of the inside and outside qualities of the built areas.

The circulation system is an important component in developing design guidelines. The primary way in which people move and see the physical environment is by the circulation network. The suggested treatments for the circulation system are designed to increase the observer's perception and awareness of the surrounding setting and to create a sequence of experiences.

The treatments are intended to work at two levels. The first is to improve the visual and environmental qualities of a specific area for the users. The second is to promote a consistent method of applying these treatments to achieve a unified image of the fort. It is important to understand that both of these must be done within the context of the whole fort. Changing one part of the fort's appearance will not achieve the theme at a fortwide scale. It is a procedure that will require coordination in blending the diverse and sometimes incompatible elements into a functioning whole to reinforce the image of the fort.

The treatments described in the following guidelines are aimed at establishing the ideals of a fortwide theme concept. In practice, of course, the process of changing and unifying the fort's image will take a long time. The ideal concept for the fort is to have the built areas develop into identifiable places, recognizable by their distinct activity patterns. The unbuilt areas would be left natural for the most part to provide definitive boundaries to the built areas. The circulation system would connect these and provide the means of experiencing these different settings.

PART 2.2 BUILT AREAS

What should the 'character' be of the different built areas on the fort? The theme is not only a physical display of recurring architectural elements, but also involves an interpretation about the social and psychological aspects of the military life-style. Thus the following guidelines are based upon both physical and social characteristics.

The existing built areas are:

1. Troop Housing Areas
2. Family Housing Areas
3. Headquarters/ Administration Areas
4. Community Center Facilities
5. Maintenance/ Supply Areas

TROOP HOUSING AREAS

Troop housing areas can help single enlisted troops develop a sense of community within the fort. Troops are usually the young, single military personnel with low incomes. Their housing areas provide them with living quarters, dining, recreational and religious facilities, as well as serving as the workplace and training area. The troops in general consider themselves members of an 'elite' group, the military. This feeling of membership, combined with the self-contained community setting,



TROOP HOUSING AREAS ON THE MAIN FORT

produce a unique social and psychological environment found nowhere else on the fort.

It is important that the soldier feel "at home" in the complex, as well as feel part of a unit or group. The complex should be structured into formal military spaces and informal semiprivate spaces. Formal military spaces allow soldiers to display their pride and integrity as members of the military. The semiprivate spaces have a dual role; one for the expression of individual identity and the other for group or unit identity.

The troop housing area should be recognized as a special place. It should have a center and edges. Elements should be placed according to their symbolic meaning. The entry should delineate outside from inside.

Except in North Fort, the troop housing areas are considered to be 'fixed' on the fort. Buildings in these areas are constructed of brick, concrete or concrete block. Their physical structure and layout will not change in the near future. This means that to implement the theme in most of the existing troop areas, it will be necessary to adopt an incremental approach involving changes to landscaping and building color and redefining spaces and activities.

The key element in implementing the theme is consistent treatment of all troop areas, which will help establish a cohesive character for them. Within the fort's already developed areas there is little that actually can be done to change the layout of buildings. The troop housing areas do have a similar layout. Only in the 3rd Brigade area does the pattern of formal and informal arrangements change. The Garrison Area is a good example of building layout creating a formal facade facing the street with an informal back to the work areas. This type of arrangement is desirable in building layout.

Troop Housing Areas EM Barracks No. 1-7

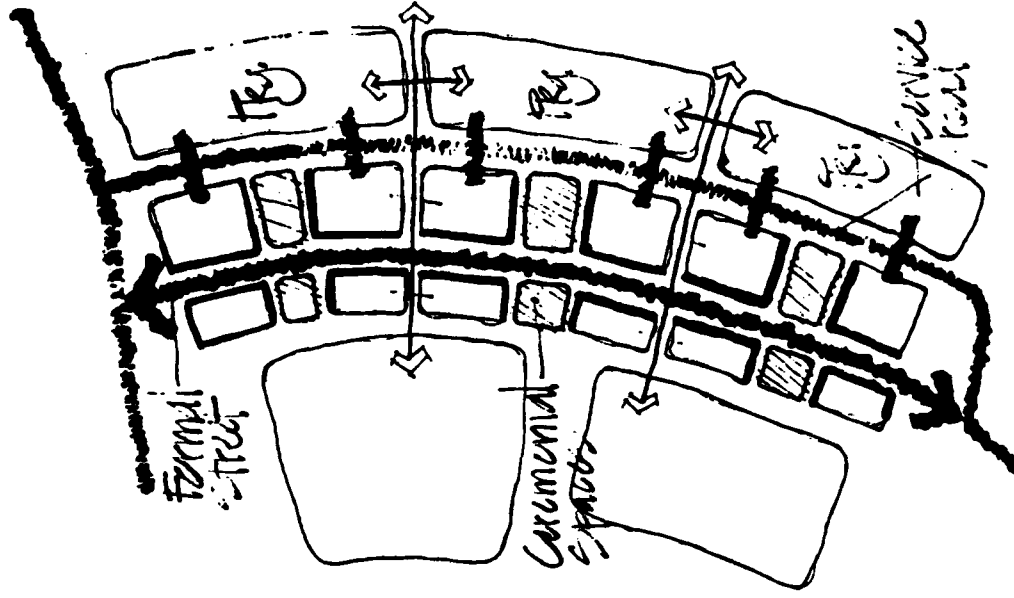
Building Layout

The troop housing areas lack the traditional hierarchical relationship between buildings in their arrangement around a symbolic ceremonial space.

Guidelines

Develop a hierarchy of spaces within the complex to accommodate a series of activities.

Establish a ceremonial space for formal unit reviews. It should be the 'front yard' of the complex and the most formally landscaped.



Proposed spatial and circulation layout for EM Barracks 1-7

Create informal spaces to provide the different units of the complex an area for group gatherings.

Develop smaller court areas to provide the residents with a sense of privacy within the complex.

Define the street system to enhance the military character of the troop complex.

Establish a formal street to display the 'front yards' of the buildings and to provide a sense of orientation to the complex.

Establish a collector street to provide direct access to the complex. The streetscape should be natural and informal.

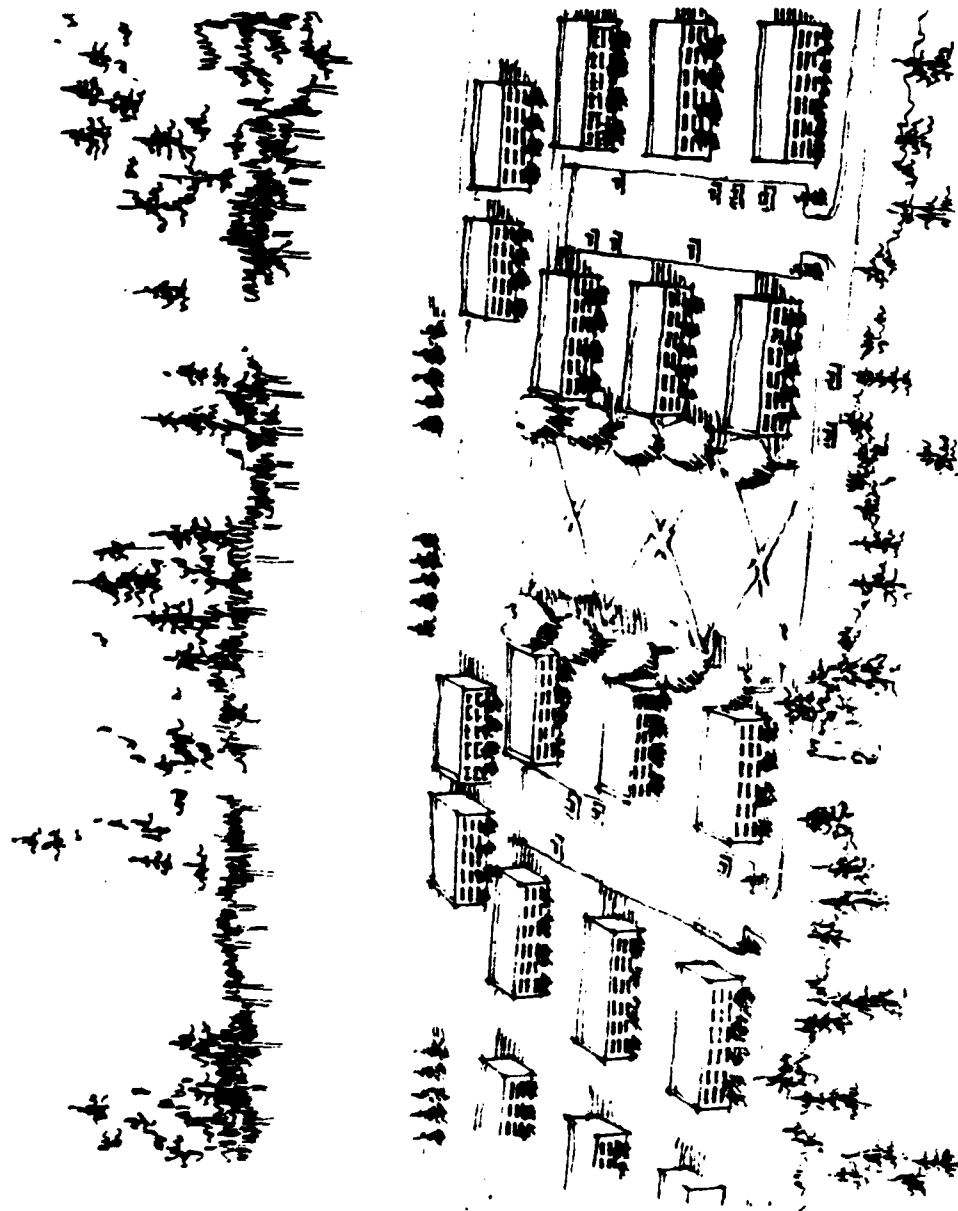
Develop a service street to provide access to the parking and delivery areas of the complex.

Landscaping

The lack of consistent landscaping produces a stark building appearance. This situation creates long sight lines from the street with no definition of public and private spaces.

Guidelines

a. Develop a formal 'front yard' with the planting of deciduous trees to emphasize the formal entry of the building. The planting of these



Aerial perspective of proposed troop complex

trees should be symmetrical, with the same number, size and type lining the street and sidewalks to the formal or main entrance of the building.

b. Plant Douglas Fir trees to create an overstory or canopy zone, when the trees mature. This will provide an umbrella of evergreen vegetation to give the area sense of human scale.

c. The large undefined area within the complex should be divided to create space for the different units. Using a combination of understory trees and shrubs, territories can be created for unit use. The vegetation should be natural and require very little maintenance.

d. Parking areas within the complex should be visually screened to improve the military character of the troop complex. Understory and shrub planting should be used to screen these areas from street views.

Circulation

There is poor pedestrian and bicycle circulation within the troop complex and poor access to other parts of the fort for the pedestrian and bicycle users.

Guidelines

a. Develop a pedestrian pathway network which is continuous and safe to use. Amenities for the

pedestrians should be provided to encourage people to use the pathways. Street furniture, drinking fountains, trash receptacles and lighting should be part of the overall design scheme to provide for their needs and to increase the enjoyment of walking on the fort.

b. Develop a bike path network to provide for safe and continuous movement on the fort. These paths should be separated from the vehicular traffic for safety and comfort of the bicycle user.

c. Pedestrian and bike pathways should be incorporated in the overall design of the street system on the fort.

FAMILY HOUSING AREAS

The family housing areas are grouped according to rank. This is an important factor in establishing the character of a housing area. It is consistent with the Military Park Theme because it displays the hierarchy of rank and the order of elements.

The fort's different housing areas reflect a constantly changing attitude of the Army in treatment and development of family housing. Originally family housing was reserved for the Officer's Corps, but gradually the attitude shifted to include married enlisted personnel. This introduction of a broader range of permanent residents presents an excellent opportunity to develop a complete community of military personnel on the fort and, with that, display the hierarchy and order that is expressly military.

The family housing areas should provide the opportunity for the military personnel to include their families in a military environment. The area's layout and design should help instruct family members about the values and traditions of the Army. This does not mean that each family housing area is to have the character of a troop housing area, rather they should be less rigid or orthogonal in layout to reflect the family orientated atmosphere while at the same time maintaining the quiet dignity and order



characteristic of military installations.

It is also important to allow distinctions among the family housing areas. Each area should have its own character, especially to express differences in the rank of personnel from one area to the next. Within an area the individual units should also have some means of allowing residents to express themselves. The division of private and public spaces is the best means of achieving this need.

The definition of personal or family space and public or military space should be recognizable to the user. Personal or family space is necessary for the family for privacy and to enhance close family relationships. Public or military spaces provide for the interaction with users who share the same social values.

Attached Family Housing Areas

Davis Hill/ Hillside/ Parkway/
Beachwood/ Miller Hill

Landscaping

The lack of different types and scale of vegetation in the area causes a stark and monotonous residential environment.

Guidelines

Davis Hill

Plant native evergreen trees (Douglas Fir) to create an overstory or canopy zone when they mature. This umbrella of evergreen vegetation, with the existing deciduous understory vegetation, will give the area an appropriate sense of human scale.

Hillside/ Parkway

Plant native evergreen trees (Douglas fir) along the I-5 freeway and 41st Division Drive to buffer and soften views into the area. This planting should consist of a combination of overstory, understory and shrubs to create a strong barrier of natural vegetation with limited views into the housing areas.

Plant the same number, size and type of deciduous trees in a symmetrical arrangement to create a formal streetscape.

Millerwoods/ Beachwood

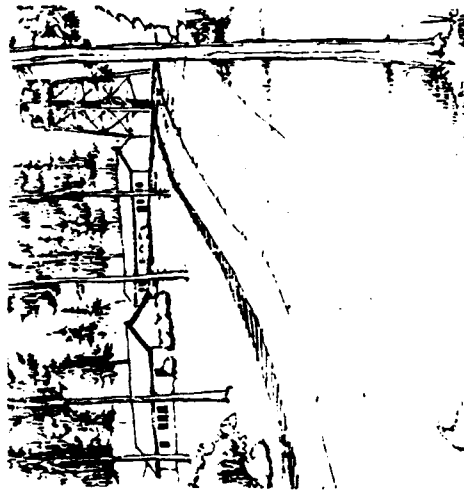
Plant deciduous trees and shrubs at and around the housing units to create a balance with the overstory vegetation.

Hillside/ Parkway

Plant understory trees and shrubs to provide visual screening for the clustered parking areas.



Existing



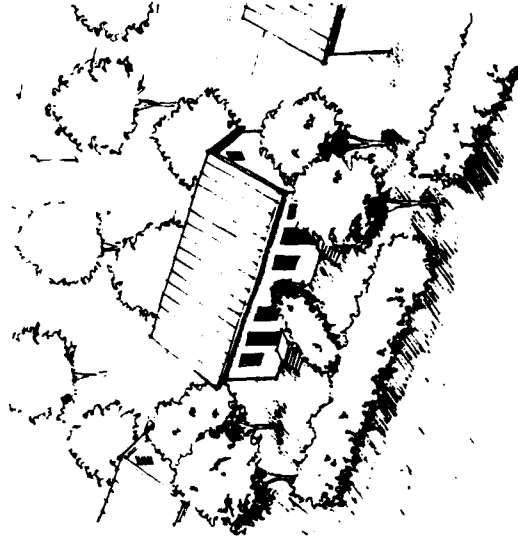
Proposed



Existing



Proposed



Proposed screens



Formal streetscape

Public and Private Spaces

Housing units lack a clear definition of public and private spaces for the residents. The yard areas are completely exposed and have no sense of privacy.

Guidelines

Millerwoods/Beachwood/Parkway/Hillside/Davis Hill

Screen the rear yards with fencing or planting to provide a more private outdoor space.

Fencing should be earthtone in color, built of wood and of a consistent height throughout the housing area.

Landscaping should provide privacy and fit into the context of the existing vegetation in the housing area.

Front yard planting should be of a formal character to emphasize the approach and entry of the individual units.

Circulation

All Areas

No continuous pedestrian and bike path network exists to provide safe access to other areas of the fort.

Guidelines

Improve sidewalks and intersections in the areas and link them with the

fort's pedestrian network.

- b. Establish bike lanes and link them with the fort's bike path network.

Detached Family Housing Areas Greenwood/Broadmoor

Public and Private Spaces

The lack of spatial delineation around the housing units does not provide for private family activities. The lack of vegetation allows unscreened views of back yards from the street.

Guidelines

Greenwood

Develop a formal front yard to be viewed from the street by emphasizing the entry of the unit with formal landscaping.

Develop a formal streetscape by planting the same number, size and type of deciduous trees to create a consistent pattern throughout the area.

Screen the rear yard to define its edges and improve the privacy of the individual units. This can be accomplished by fencing or landscaping.

Fencing should be consistent in color (earthtone), material (wood) and height throughout the housing area.

Landscaping should provide privacy and fit into the context of the existing vegetation.

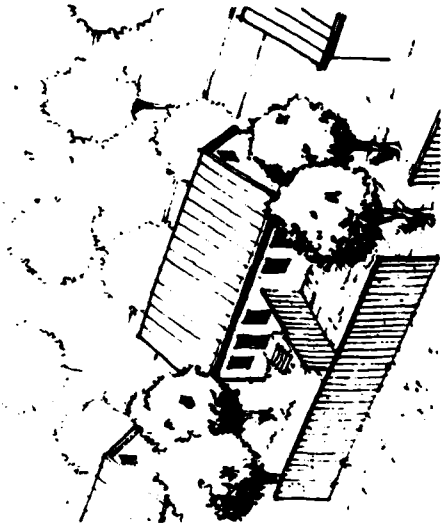
Landscape Buffer

Noise pollution from adjacent arterials creates an undesirable residential environment.

Guidelines

Greenwood

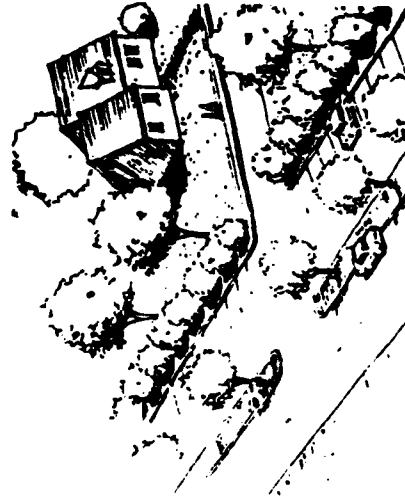
Develop a landscape buffer between the housing area edge and the arterial street. The landscape buffer should be a dense shrub planting in a natural setting to decrease the sense noise (if not the actual amount) and to visually screen the street from the residents.



Proposed screens



existing



Landscape buffer

HEADQUARTERS/ ADMINISTRATIVE AREAS

The Headquarters/Administrative areas of Fort Lewis serve as the decision-making centers. It is the work place for high ranking officers. To support the administrative process, a large number of enlisted and civilian personnel are required to work at these sites. The Headquarters Area is the site most often seen by the public and by officials visiting the fort.

Because of their administrative role, the Headquarters/Administrative areas should be a symbol of the military command for Fort Lewis. They should provide a sense of authority and structure to the fort and display a degree of professional pride in the military

Identifiable Center

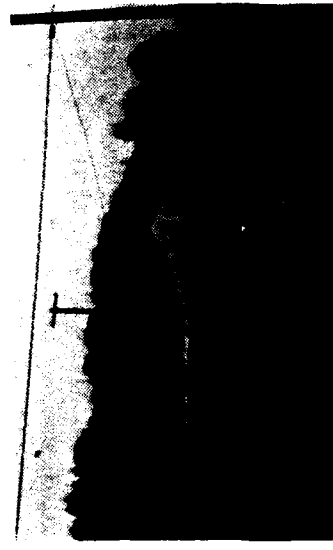
The administrative functions are dispersed throughout the fort causing it to have no strong sense of centrality or core. Some of these activities are located in old temporary wood structures. The structures don't enhance the sense of authority or power which is associated with Headquarters.

Guidelines

To establish a sense of centrality, the administrative support activities should be relocated into



Isolated areas



Isolated areas



Strong sense of identity

the Garrison Area of the fort. The troops housed in these buildings should be relocated to other troop housing areas.

The Post Headquarters should remain in the Garrison Area to help establish an identifiable center to the fort. Locating the Post Headquarters, financial and judicial activities in the historic Garrison Area will create a strong image of a military center.

Circulation

Traffic access and parking to the Post Headquarters is a major problem. The increased traffic has begun to overflow onto Liggett Avenue. This situation has changed the formal character of Liggett Avenue to that of a service street. On-street parking and parking lots in front of the building are unattractive and detract from the visual image of the building.

Guidelines

Limit the use of parking spaces in front of the Post Headquarters to short term use with a drop off-lane. The parking in the front should be removed from the street into a landscaped buffer parking lot off Liggett Avenue.

The formal streetscape on Liggett Avenue should be extended down to the Post Headquarters complex. The existing pattern and rhythm

established along the Parade Field by the vegetation should be continued the entire length of Liggett Avenue.

The parking lots in the courtyard areas of all the Garrison Area buildings should be redesigned to create a parking scheme that does not detract from the view of the building. It should minimize any pedestrian/vehicle conflicts in the courtyard areas.

The vehicular access to the sites should be from Pendleton Avenue into the parking lots. Access from Liggett Avenue should be for formal events only.



Garrison Area parking lots



Formal streetscape

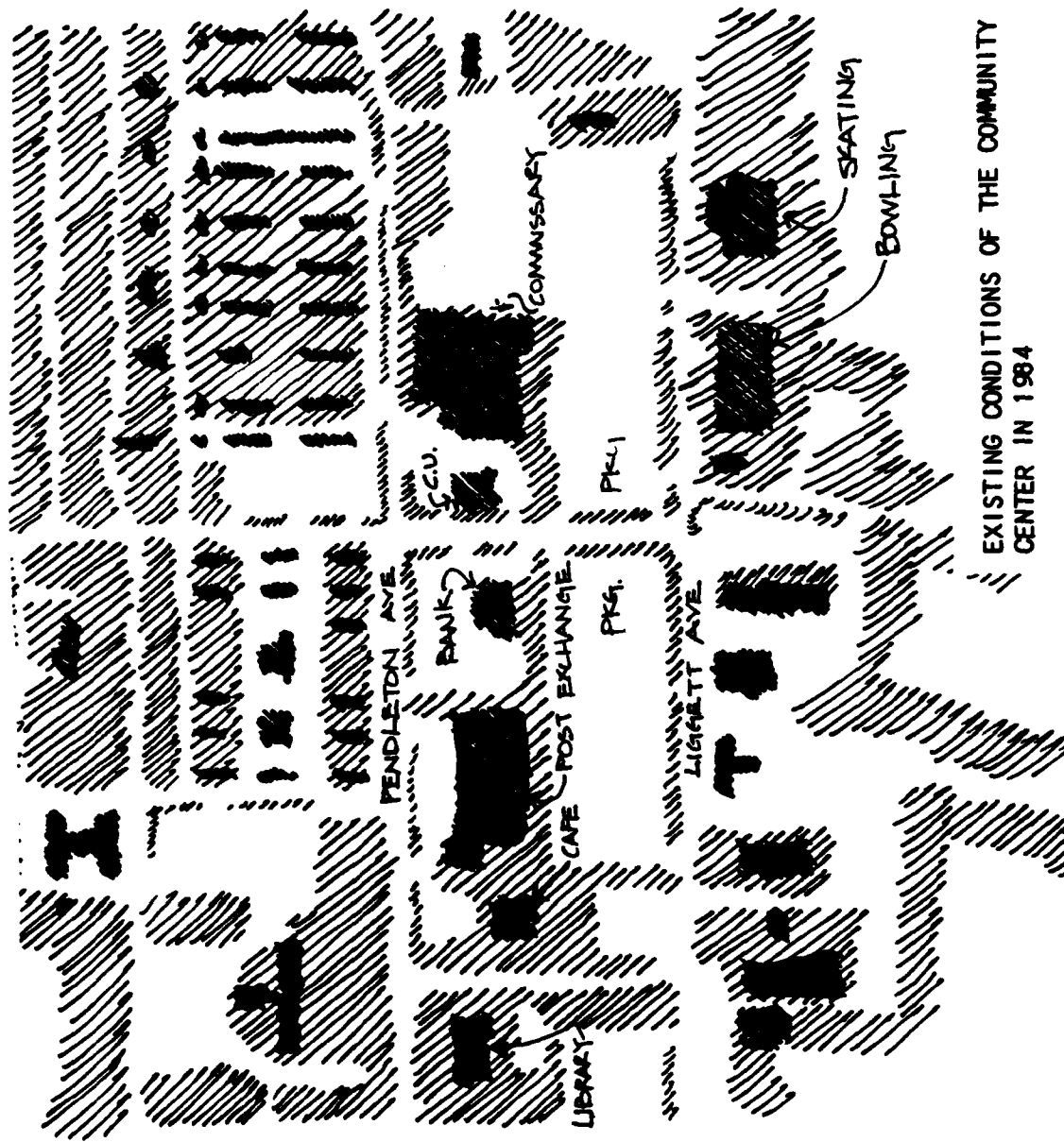
COMMUNITY CENTER FACILITIES

Introduction

The Community Center Facility is a collection of recreational, commercial and service activities near the Garrison Area. It is an important area for off-duty use and provides basic services, entertainment, retail outlets, and is a mixing area for personnel and their families. The recreational activities are in buildings south of Liggett Avenue. The commercial and service uses are arranged along the south side of Pendleton Avenue.

From west to east they include the library, exchange cafeteria, the PX, a branch bank, a credit union, the commissary, a telephone store and a fast food facility. On the north side of Pendleton Avenue are various operations including furniture rental, bicycle shop, a beverage store and a travel agent and services.

The mixture of uses at the Community Center facility brings together the active and retired personnel and their dependents associated with Fort Lewis. It is a very active center. Children kick soccer balls against buildings and race around on bicycles; toddlers play at the day care, and on-duty personnel take breaks at the PX doughnut shop and cafeteria. Couples stroll along the sidewalk and mothers load bags of groceries into their cars. It is



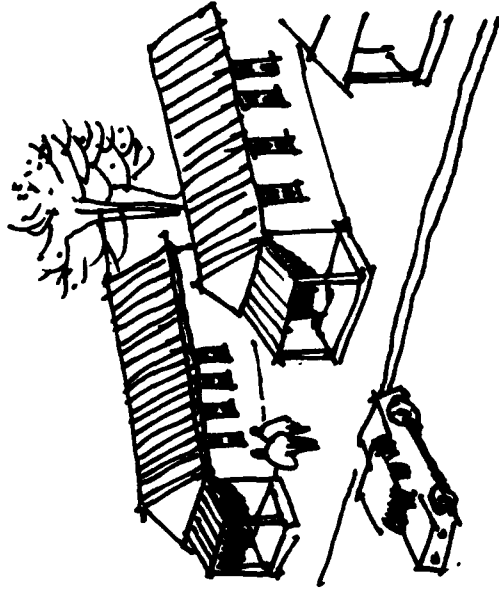
the center for all diverse social activities on the fort.

The Ideal Community Center for Fort Lewis would be one that encouraged and provided for the social interaction needs of the personnel and their families, that had the image of a central business district on the fort, and that expressed the possibilities of a more dignified life in the Army through building and outdoor space design. In ideal terms, the center should have a semi-formal space where automobile traffic is controlled and pedestrians can socialize, buy goods and seek services in an enjoyable outdoor environment.

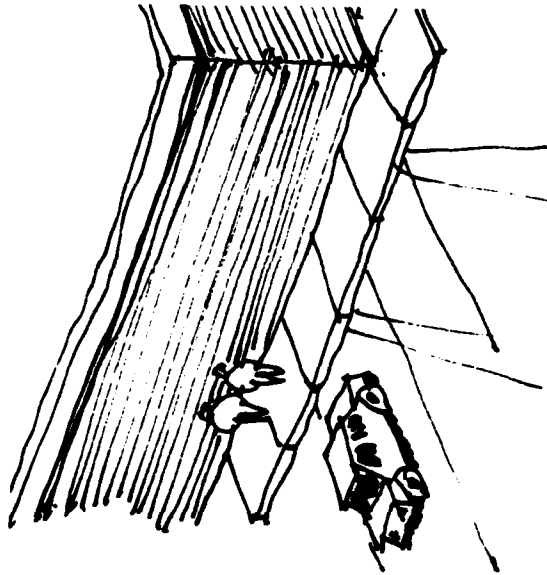
Existing Conditions

Currently, the Community Center occupies the area between North 8th Street to the west, 41st Street and Division Drive to the east, Nevada Avenue to the north and Blitar Avenue to the south. The terrain in the Community Center is flat. It is bounded by the open parade field extension to the south and Davis Hill to the north. Most of the land in the Community Center is used for parking, and roads. The review field extension south of Liggett Avenue is mostly grass and playgrounds.

There are three distinct building scales and layouts in the Community Center, each associated with its own period of development. The buildings constructed in 1938 through 1945 were oriented perpendicular to and spaced evenly along Pendleton Avenue. Here the scale of development is small and personal. The front porches, natural tree cover and intimate spaces between the buildings make this area enjoyable. The buildings built along Liggett Avenue after World War II are larger and usually two stories in height. They are also oriented perpendicular to the street with front porches and small parking lots along the sides. They are set back from the road approximately 40 feet and form an edge to the street. These buildings are pleasant to walk along and, because of their two story height, help form an outdoor space on the sidewalk. The newer buildings in the Community Center are mostly brick, one story and flat roofed. Except for the skating rink and bowling alley, they are on Pendleton Avenue and face into a large parking lot that is accessed from Liggett Avenue. The PX and Commissary have few windows or entrances. Their presence from the street is not handsome, especially along Liggett Avenue. Also, they are not pleasant to walk near, because of the blank faces and long unmodulated walls.



Scale of older building development is related to human size



Scale of new development is not well related to human size

The bank, credit union, and cafeteria are more pleasant because of their landscaping and transparent facades. None of the newer buildings have either the charm of the temporary buildings or the rugged handsomeness of the older permanent buildings. The outdoor spaces they form are barren and not conducive to social activity.

The landscaping within the center is relatively sparse. The library and the PX cafeteria are surrounded by the most landscaping. At the cafeteria, bushes and trees were used to screen the parking. Some trees were planted within the major parking areas to visually divide them. Further east, between Liggett and Pendleton, the planting is noticeably reduced. Generally, the area is open and unshaded. Some grass areas around the library and along the south edge of Liggett Avenue accent the buildings.

The area works well for single use commuters who arrive, park, buy and leave. It works poorly for those who come to the center to mix with others, browse, and stroll. These people generally arrive by auto and then leave it behind to walk about. The new PX has an imitation human-scaled street within the building which is heavily used but aesthetically a poor substitute for a real street.

Building Layout

The building layouts at the CCF are detrimental to street and sidewalk life with their associated social activities because they do not form enjoyable outdoor spaces. In addition, they encourage auto usage because of their expansive siting and generous parking.

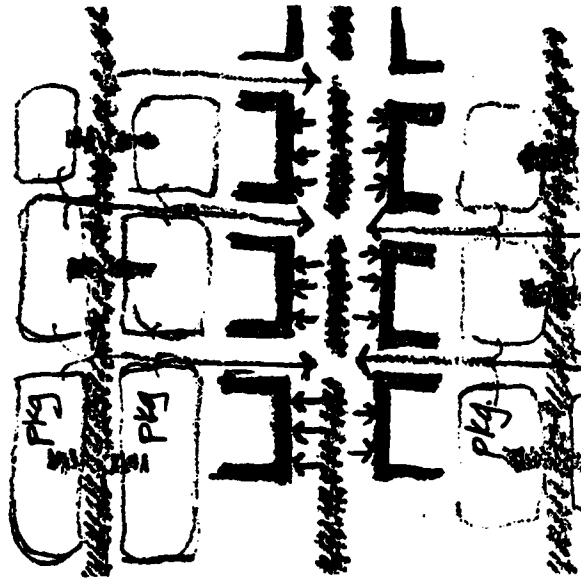
Guidelines

Maintain uniform setbacks from streets. This will help to form edges to outdoor spaces which are pleasant for pedestrian use.

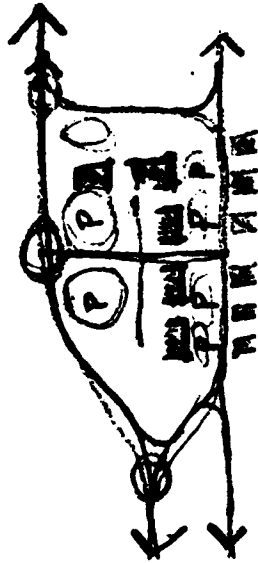
Whenever feasible cluster the buildings tightly together. Use party wall construction. This eliminates unused spaces between buildings and helps to reinforce the form of a shopping street.

Break up building clusters with cross access streets at every 200 to 400 feet. This allows pedestrians to circulate to other streets and provides more street frontage.

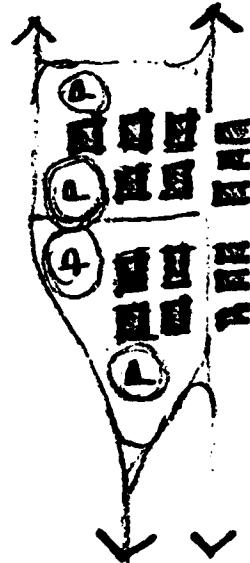
When expanding facilities, avoid using new sites that spread out the center. Locate new facilities next to, in between, or on top of existing buildings to reinforce the street edge, and create a dense and continuous built environment.



To make a main street



First: Move traffic and parking to the north

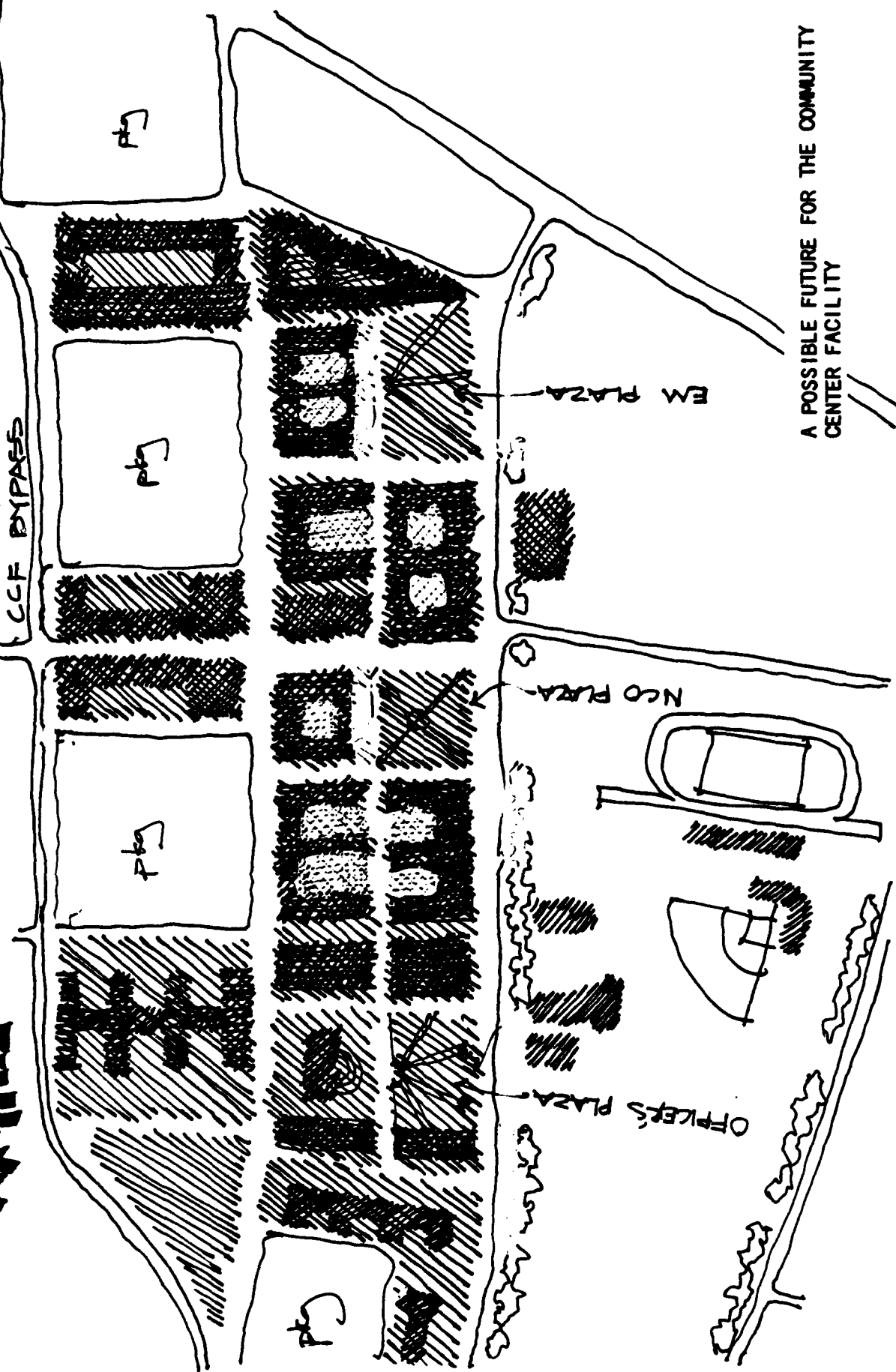


Then: Fill in former parking

מחלקת המחקר והפיתוח

[illegible]

CCF BYPASS



Circulation

The OCF is dominated by automobiles and through traffic divides the area in half, leading to a poorly defined environment for pedestrians.

Guidelines

Locate the majority of the Community Center parking near the bypass road. People can then filter between buildings to Liggett and Pendleton Avenues which should be more pedestrian oriented. Provide easy access for shoppers near the service docks of buildings so they can pick up major purchases with their automobiles when they leave if necessary.

Route through traffic around the Community Center. The fiscal year 1986 plan proposes a Community Center bypass that should be implemented.

Create an extensive pedestrian system throughout the Community Center Facility which emphasizes amenities. Widen sidewalks along building faces. Link sidewalks to the fort-wide pedestrian system and to the parking areas around the Community Center. Provide street furniture, water fountains and landscaping for the sidewalks. The sidewalk surface should be paved in brick at the heavily trafficked areas and should be used to indicate pedestrian crossings.

Building Design

The building design used in the OCF, the PX, Bowling Center and Skating Rink are single story brick structures with no glazing, few doors and little visual interest to enhance the street.

Guidelines

Build two or three story buildings, put in doors to the street, break the scale down with structural openings, and place windows at sidewalk level. Reserve single-story warehouse building types for maintenance areas.

Mix uses within buildings. Place the most visually interesting uses, such as retail shops, cafes, etc., on the lower floors to encourage pedestrian interaction. Place services on the upper floors. Whenever feasible, break up large, single-space, multi-service shops like the PX and Commissary into smaller single-service shops with their own entries to the street and their own identities.

Use masonry and glass building materials. Select a common bay system and use it for most of the buildings within the center to maintain visual unity. Glass should account for the majority of the material on the street faces of the buildings to create an interesting, varied pedestrian environment. Carry cornice lines or accent lines across different building facades to visually link them together.

Provide weather protection (awnings, canopies, etc.) along the sidewalk supported from building facades.

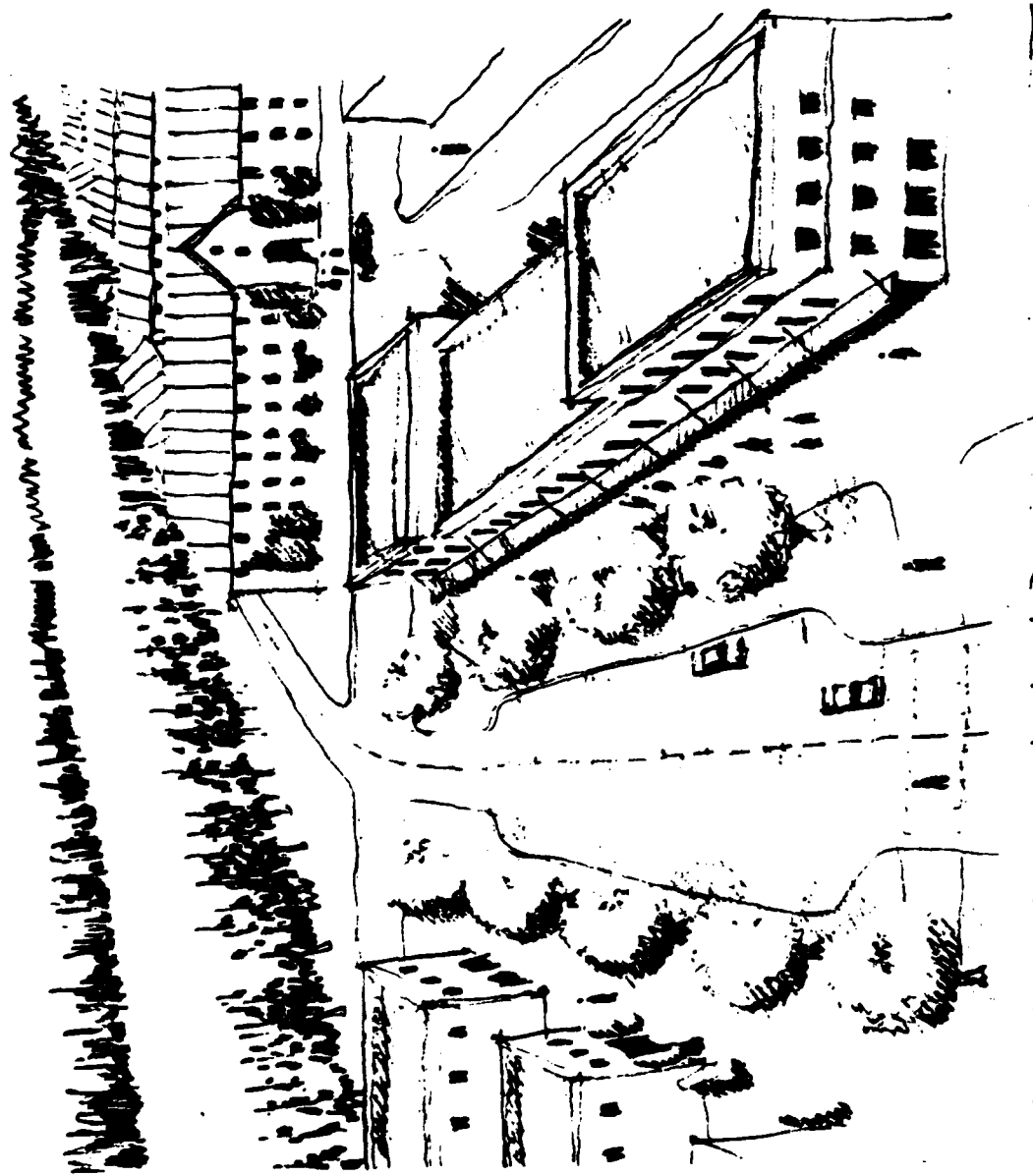
Landscaping

Landscaping within the CCF does not link up well with the fort nor is it used well to enhance the general visual image.

Guidelines

Carry the landscaping of surrounding areas into the Community Center to integrate it with the fabric of the fort. Evergreen trees on Davis Hill should continue down into the northern part of the Community Center. More formal landscaping should be carried from the Review Field onto Liggett Avenue to link it visually with the Garrison Area.

Use landscaping to screen and break up parking areas. The lots should be no more than three aisles wide.



The CCF with parking areas developed

MAINTENANCE/SUPPLY AREAS

The maintenance and supply areas are the workplaces for a large number of the personnel attached to the fort. Pride for the work done at the site should be apparent in the appearance of the area and reflect the Army's sense of readiness.

Visual Image

The Maintenance/Supply Areas are typically open storage areas or lots, which are very sparsely landscaped, creating a visually stark and barren environment. This setting is visible from the major arterials and from the I-5 freeway, conveying a negative image of the fort.

Guidelines

- a. The long sight lines in these areas should be broken up. Areas of native and planted vegetation should be developed to screen and buffer the open storage areas and lots.
- b. Streets should be defined with curbs and sidewalks to help separate them from the parking and the street right-of-way.
- c. Develop a more human environment for the personnel who work in these areas. Amenities should be developed for recreational and relaxation spaces, to encourage personnel to enjoy and identify positively with their work areas.

Land Use

The maintenance facility in the Garrison Area is an inappropriate use of land. The activities which are generated by the maintenance facilities are incompatible with the surrounding areas. The traffic, noise, and pollution caused by these facilities are unacceptable in relation to the surrounding activities.

Guidelines

The maintenance facilities in the Garrison Area should be relocated outside of the area. The brick structures should be renovated to house support services for the administrative sections of the fort. Part of the facilities could be used for community services activities.

Colorado Ave

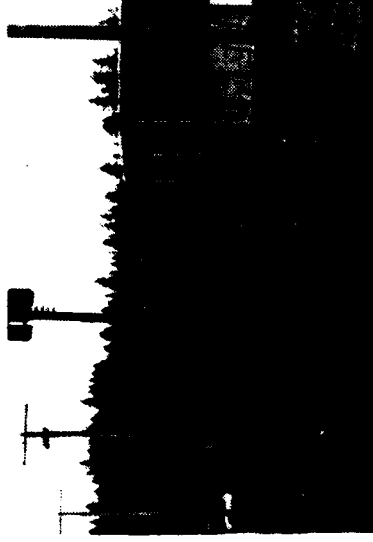
The maintenance facilities north of the airfield between Tacoma Avenue and Colorado Avenue are under utilized areas. Their location on the main entrance to the fort (41st Division Dr) creates a negative visual appearance.

Guidelines

- a. The temporary structures should be replaced by more permanent buildings constructed of concrete or masonry.



Long sight lines to buildings



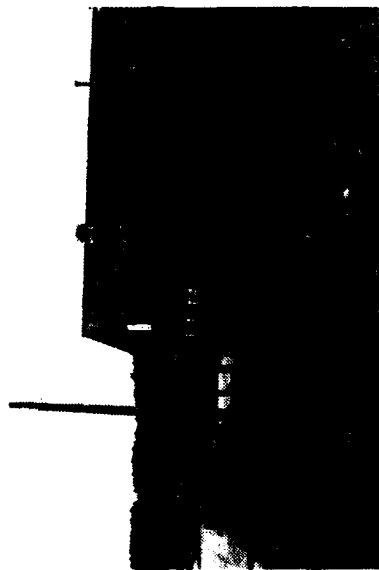
Long sight lines to buildings



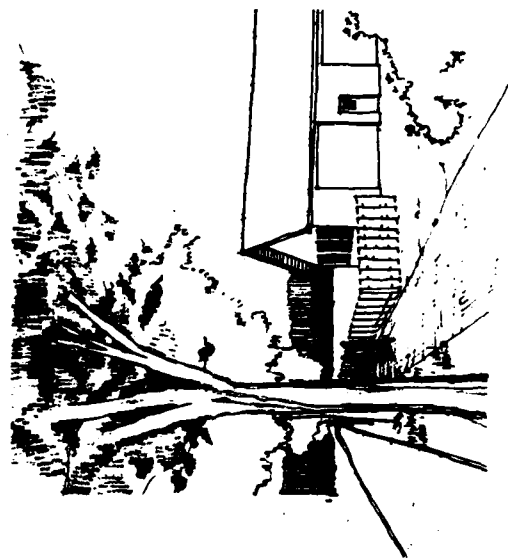
No street definition

b. Existing native vegetation should be preserved and incorporated into the layout of the new facilities.

c. The new facilities should be designed to improve the view of the area. Natural areas should be planted to screen and enhance the image of the facilities. These areas of vegetation should be massed into clusters and allowed to mature into a natural setting.



Existing



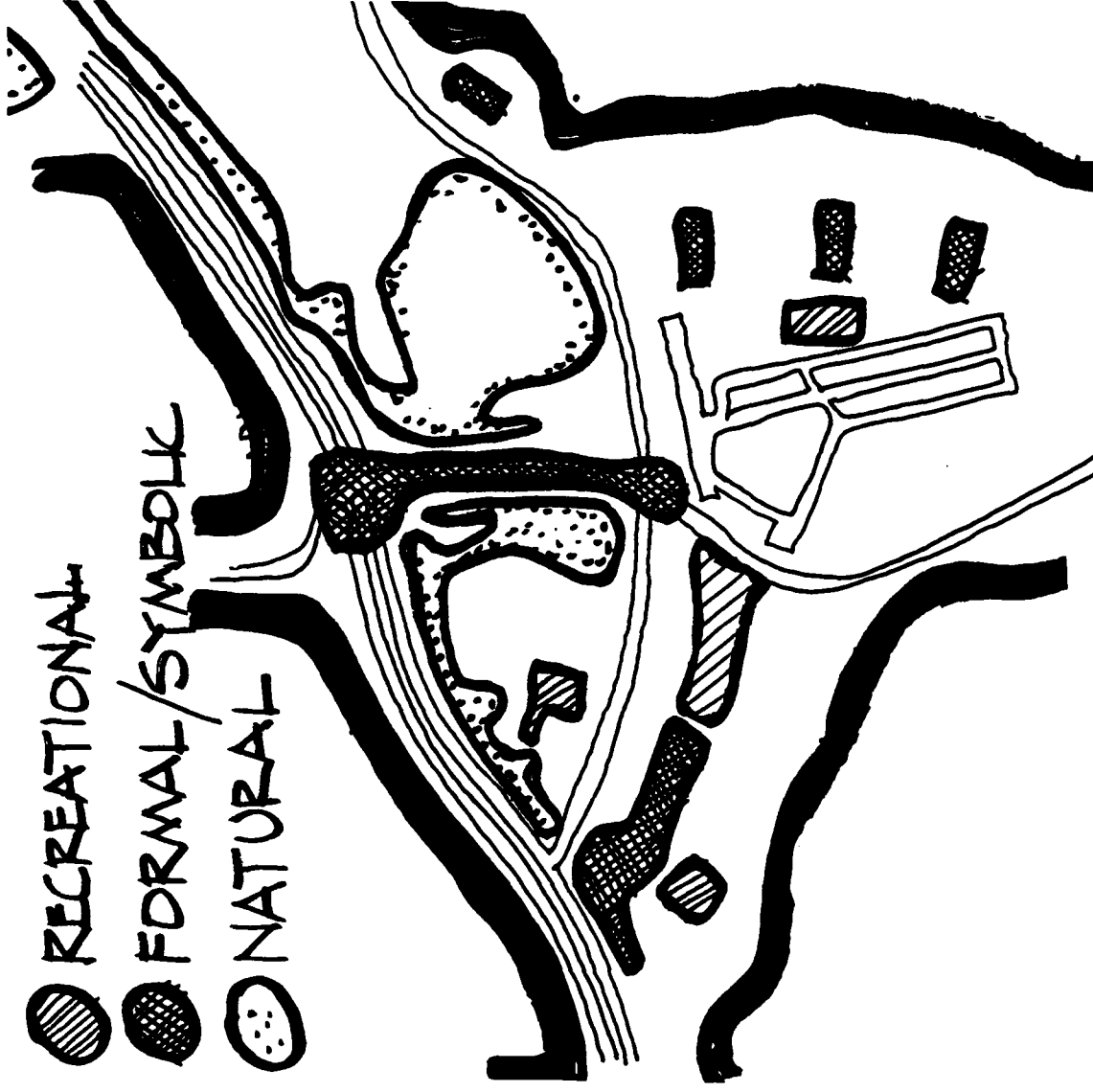
Proposed

PART 2.3 UNBUILT AREAS

The fort, in the process of development, has left a pattern of open spaces between the developed areas. These spaces serve as buffers between the built areas and have significant potential for unifying the fort into a comprehensible whole as elements of the theme.

The existing open spaces can be classified into three general types. Formal areas are the ceremonial open places which display a military setting. The second type is recreational space located throughout the fort. The third type is the areas left in a natural state which tend to be buffer zones between built up areas of activity.

Formal open space areas are typically those reserved for special occasions or are spaces which are designed to be viewed but not actively used. These formal settings become very special places within the fort's overall environment. They are relatively rare but more important their formality conveys a message about order, central focus and discipline. They are powerful clues to military values and thus can be used to reinforce social and functional objectives of the Army.



UNBUILT AREAS ON THE FORT RANKED
ACCORDING TO USE/IMAGE

Recreational areas, as the second type of unbuilt area, are places which create a setting for physical activities and social interaction. An enjoyable atmosphere is produced by the mixture of physical and social factors. This provides a setting for the physically active 'doers' and the passive spectators or 'watchers' to mix together. Analogous to a magnet, the setting attracts people because of the activities taking place.



Formal areas



Recreational areas



Natural areas

break up the visual monotony of some of the open spaces and reinforce the recognizable qualities of different places on the fort.

Maintenance of Open Spaces

Maintenance of open spaces is too uniform resulting in expensive upkeep and an appearance of undifferentiated sameness. A hierarchical category of areas with their own maintenance guidelines should be established. Important areas should receive the most attention. Larger unused spaces should be left to return to a natural state, helping to reduce maintenance costs.

Guidelines

Formal outdoor spaces throughout the fort should be selected for the most groomed landscaping. These spaces should be at building fronts, in review field areas, along the center of arterial roads, and at gates. Other spaces should be more naturally landscaped with native plants and groundcovers that can be easily maintained. Open spaces between projects should be left in a natural state that requires little or no maintenance.

The fort's review fields and entrances should receive special maintenance to enhance their visual qualities. The landscaping in these particular areas should be

The third type is the natural areas. These are the physical organizing features which frame or define edges to settings on the fort. They also provide a sense of enclosure, a backdrop for viewing distinct places. The natural areas can be used on a fort-wide scale to create a series of enclosed spaces, distinct from one another, but linked together.

These three types of open space areas should be used as design tools to create a comprehensive unified visual image. Each unbuilt area can act as a supporting element to the built areas to communicate the structure of the fort and provide people with a clear sense of orientation.

All of these unbuilt areas should be thought of as design resources for linking the different parts of the fort together and reinforcing its overall visual image. Treating these areas in special ways can also

Immaculate to communicate the identity of a military place.

The edges of all formal open spaces should be well defined to concentrate attention on the setting.

Review Field Extension

The Review Field extension south of the OCF is being eroded by development within its boundaries.

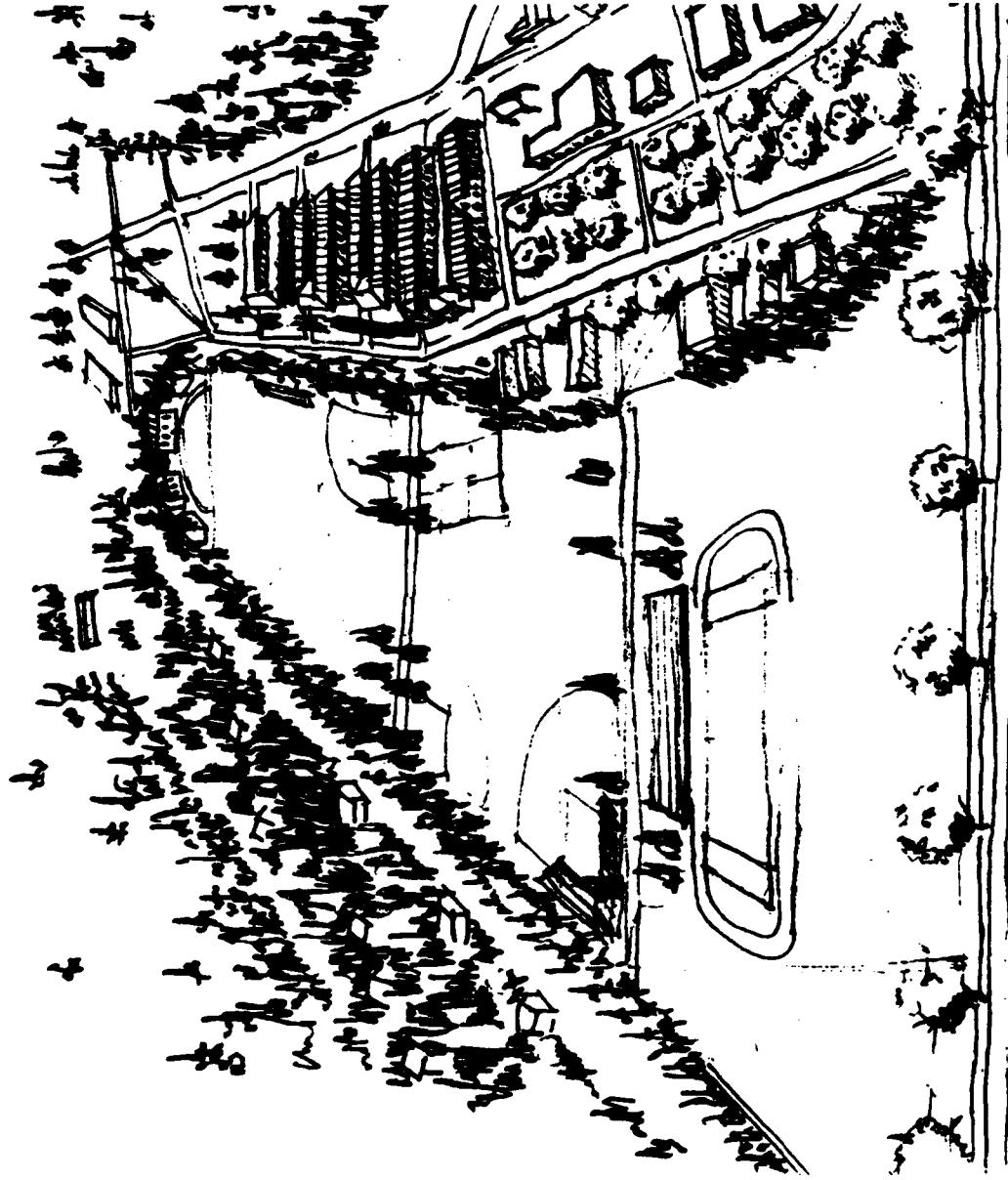
Guidelines

Buildings now terminating the review field extension including Grade School #2, the football field, bleachers, and the baseball stands and the baseball stands should be moved when they reach the end of their service life. The seats should be relocated along the north or south edges of the field. The school should be relocated to another site.

A policy restricting development on the review field extension should be established. If feasible, the planned youth center and daycare facility should be located south of Bitar Avenue to maintain the open space character of this area.

Neighborhood Facilities

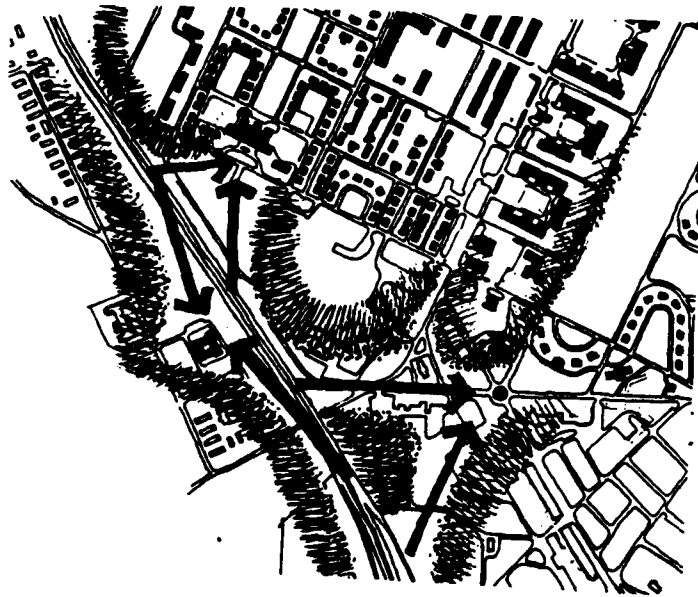
There is a lack of neighborhood recreational facilities within the



different family housing areas. Open spaces within these areas are undefined and unused by residents.

Guidelines

Establish neighborhood recreational areas at sites convenient to the family housing areas.



The view corridors from the freeway to the fort

Facilities at these recreational areas should be appropriate for family-oriented activities. They should have site amenities to support these activities and families should be involved in determining what is appropriate.

These facilities should be linked together with a pedestrian and bike path network to encourage safe and continuous movement around the fort and reduce the tendency to use the automobile for every trip.

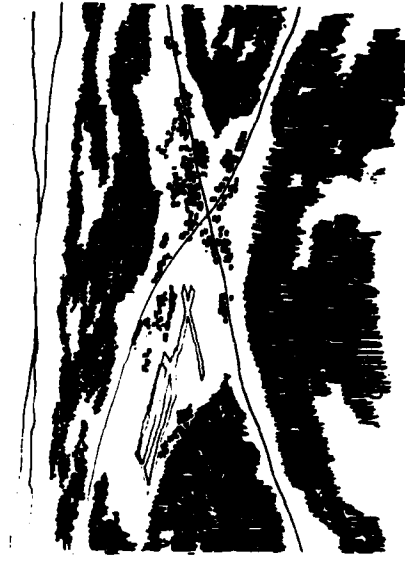
Freeway Views

The fort's visual image from the freeway is not clear. The view to the fort neither establishes its identity as a military place nor is it evident where the fort's territory begins and ends.

Guidelines

Unbuilt areas along the edge of the freeway should be redesigned to create view corridors to the fort. These should be developed with masses of natural landscaping to serve as screens, to focus views on significant settings, and to define the fort's boundaries.

The landscaped areas should use a combination of native vegetation and be allowed to grow in a natural state requiring little maintenance.



The natural topographic edges of the fort

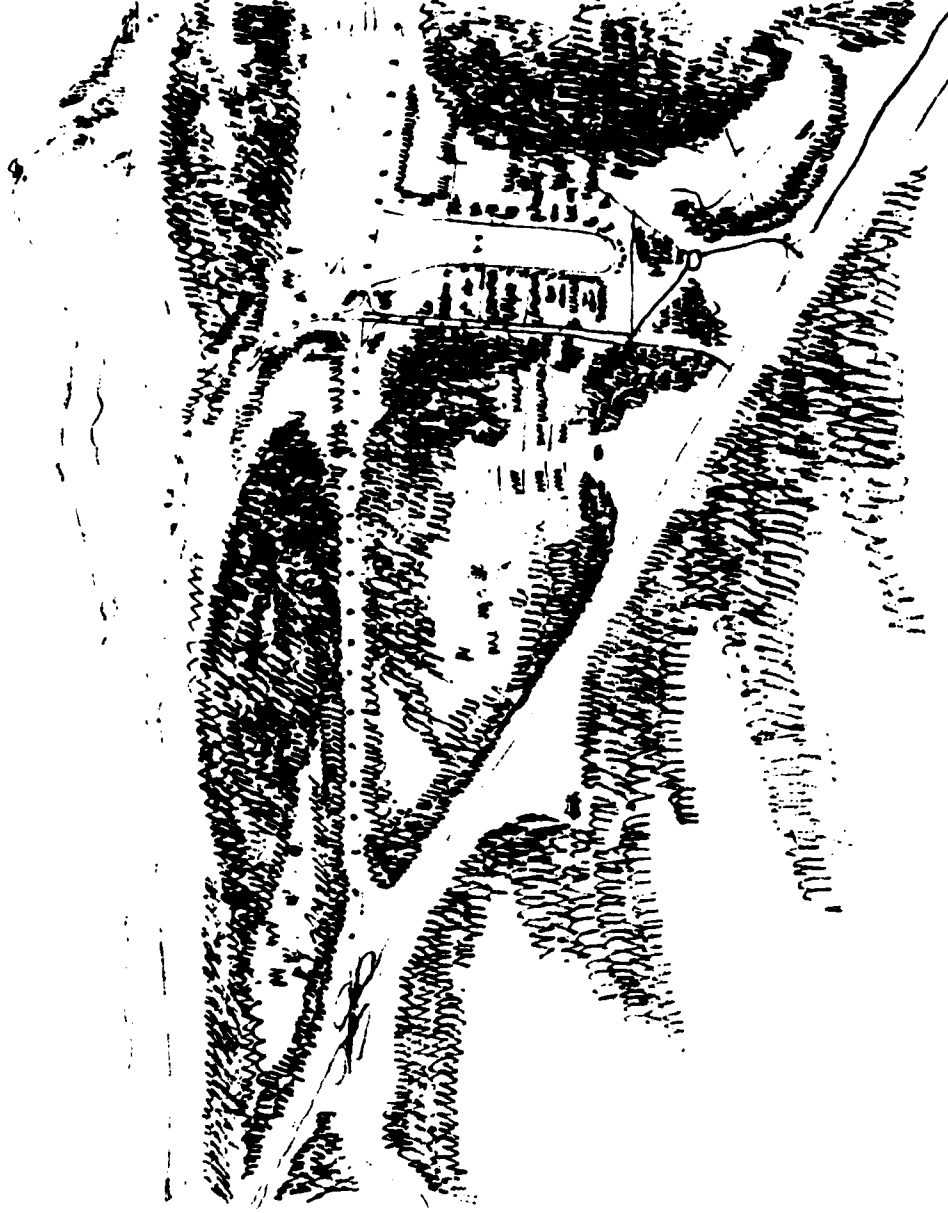
Natural Character

The natural wooded hills forming edges to development on the flat ground in the cantonment area is being eroded. Davis Hill has been developed and most of its tree cover removed. Other hills are being encroached upon by more developments.

Guidelines

Replant as many Douglas Fir trees as possible on Davis Hill to help re-establish the natural structured setting for the fort.

Preserve the 6th Engineers Bluff, Miller Hill, and the ridge formed by Brimer, Bennett, and Harper Hills.



The fort layout between existing hills and orientation to Mt. Rainier

PART 2.4 CIRCULATION

The circulation system of Fort Lewis consists of footpaths, sidewalks, tank trails, streets and railroad spurs designed to move equipment, material and personnel throughout the fort. The system becomes especially important during mobilization for war when large numbers of men and material must move about for training and deployment. The circulation system is important for the theme because it is the most extensively used element on the fort. The system is the key to orienting people and communicating the fort's image, character, and identity as a military installation. As the backbone structure of the fort, the circulation system should help create a sense of unity. There should be an obvious visual hierarchy of elements within this system. Entries into different developments should also be clarified and major points of crossing should be identified.

Street Differentiation

The difference between arterial roads, collector and local streets is not visually apparent.

Guidelines

Reinforce the distinction between arterials, collectors, and local



CIRCULATION ON THE FORT

streets by using landscaping, edge treatments, signage and intersection design to convey the differences in form and function.

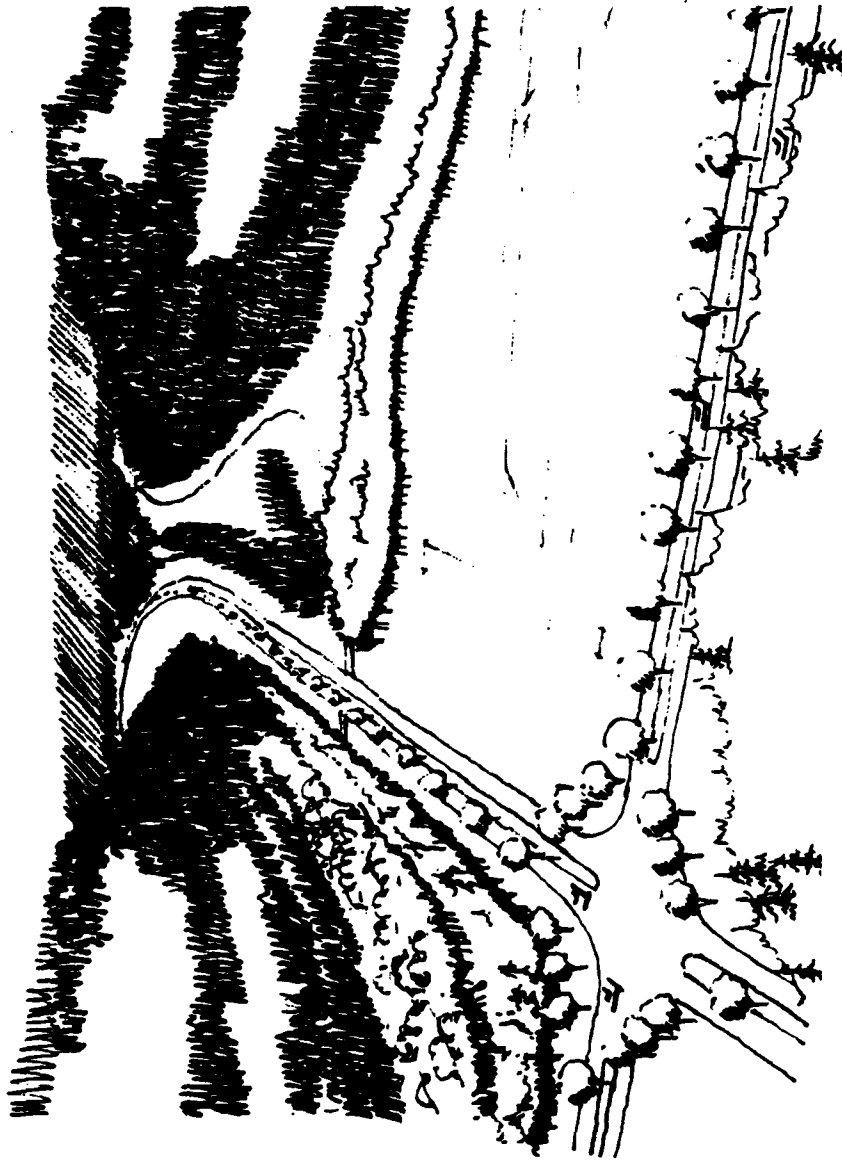
Arterial

The arterials on the fort are 41st Division Drive, Pendleton and Jackson Avenues. These streets are the primary north/south and east/west routes on the fort.

The arterial streets in general should contain a central median separating opposing traffic lanes. This median leaves space for planting, a left turn lane where it intersects with collector roads, and breaks up the wide expanse of asphalt.

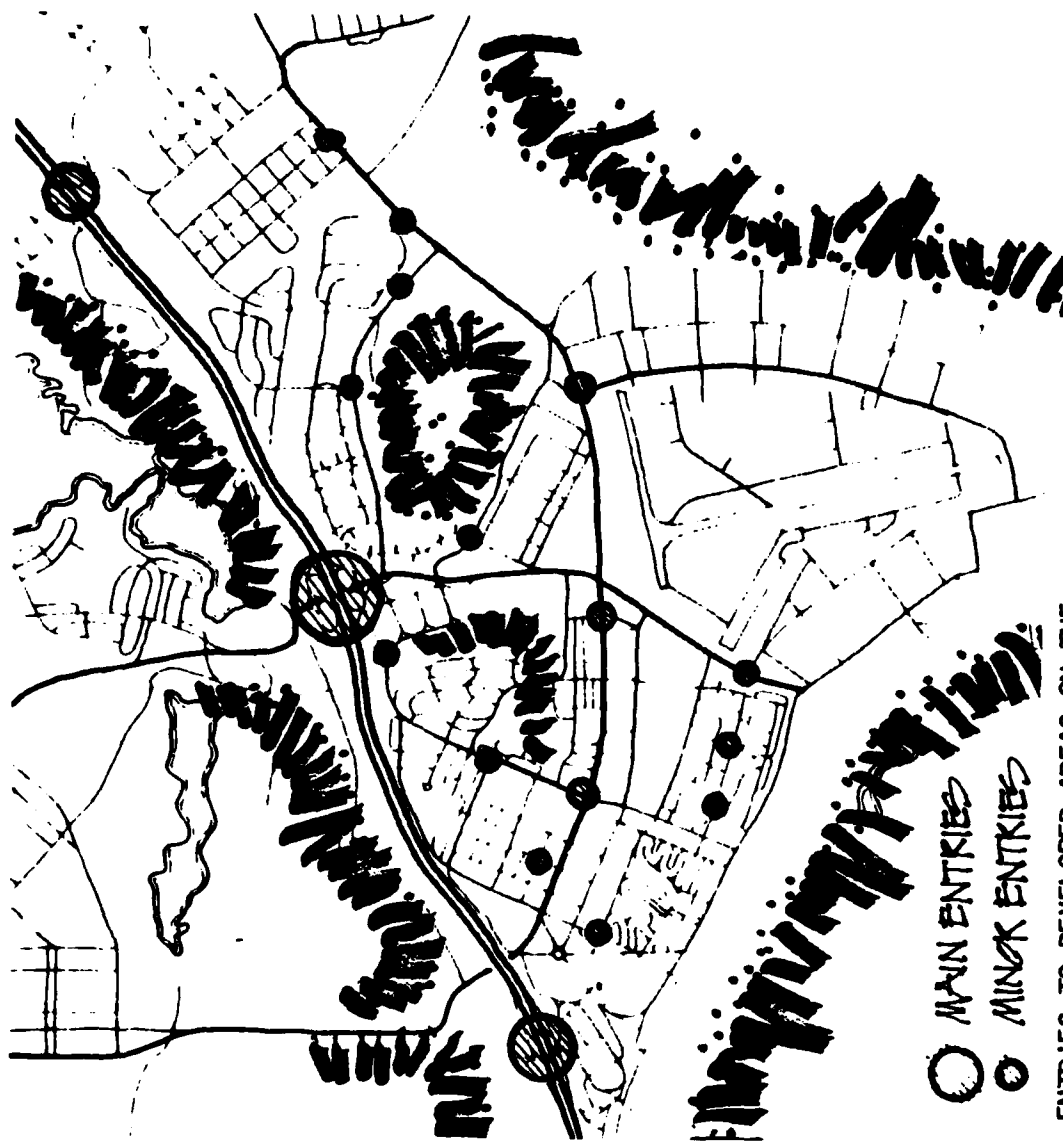
The central median, the road edge and divider islands should be landscaped to improve their visual image and to create a processional road. The selection and placement for planting in the median should visually emphasize formality and regularity. It should be regular, formally treated, and symmetrical. Seasonal color changes for the median trees should be planned to add variety to this central planting strip, and make it a special linear link within the evergreen surroundings of the fort.

Along the road edge, the tree placement should be much more fluid.



Treatment of the Traffic Distribution Point at the Intersection of the two main arterials

Evergreen trees and bushes are recommended. The evergreen trees help to identify the regional context of the fort and provide an important part of its natural context. The evergreen trees along the road should be used to define the road edges, screen minor elements on the fort and focus views to important monuments that express



the hierarchy of command in the Army. In general, the roadside planting should try to re-establish the natural ground cover and the roads should look as if they were sliced out of the natural prairie grass or evergreen ground cover.

Important elements of the fort operation should be framed in the views from the road; unimportant elements should be screened. Equipment such as tanks, trucks, jeeps, and helicopters are good identifiers of Army activity and all of these objects can be visually impressive from the road. The view of the air field should be open but can be adjusted with plantings to emphasize its most active areas.

Collector

The collector streets on the fort are Perimeter Road, Colorado Avenue, Ninth Division Drive, Division Street, Stryker and Main Avenues, East Gate Road, Second, Third and Fourth Division Drives, Hillside Drive, Garcia Boulevard, and Blain Avenue. These streets carry their traffic efficiently on two lanes.

These streets should be treated less elaborately than the arterial streets. No center median is necessary. If in the future a collector street needs to be widened to four lanes, its classification should be upgraded to an arterial.

Planting along the roadsides should be in accordance with the arterial streets. In the developed areas a more refined and varied landscaping with lawns and bushes accenting the buildings as a contrast to the more rugged and natural areas should be developed.

Entries

The circulation system is not broken down into a sequence of spaces. The system doesn't orient users as they travel into and out of project areas.

Project areas such as Hillside, EM Barracks 1-7, and Davis Hill are distinct units. They should have their own edges and "gates" on main collector roads that serve them. These "gates" should be designed to express the local character.

The "gate" itself should frame the road with vertical elements. It should not interfere with traffic flow but should signal the entry into another area. A sign indicating the name of the area should be included in the assemblage.

Trees and bushes should be used to signal entry to a project. They should be located on each side of the road and be common in the project area.

The entry should be at an intersection with another road where possible

Intersection Design

Intersections between roads do not signal the relative hierarchy of streets. Intersections between arterials and collectors and collectors and local streets.

Intersections should be laid out and landscaped to form gateways from major roads to minor ones.

These intersections in 1984 are where 41st Division Drive intersects Hillside Drive, Colorado, Tacoma, Nevada, Liggett, Bitar, and Stryker Avenues. The intersections with Pendleton/Jackson Avenues are Hospital and 9th Division Drives, Hillside Drive, Honeysuckle Lane, 8th, 7th, 6th Streets. A total of 21 intersections of this type are on the fort.

These intersections should be angled at or near 90 degrees to make clear distinctions between them.

The intent of the intersection design is threefold. First, to ease the traffic flow, second to signal the major and minor roads, and third to beautify the intersection. The center median of the arterial should narrow down in size to allow for left turn lanes. Landscaping at the intersection should be set back to allow views of oncoming vehicles. Trees should announce the entrance onto a collector street by forming a gate to it. In the built-up areas, where Ninth Division Drive, Division Street and Colorado Avenue cross Pendleton Avenue the intersection should be signaled with arrangements of bushes near the curb to form a gate to the collector streets.

Intersections with local streets should make a visible distinction between local and collector streets



Minor project entry identified by landscaping

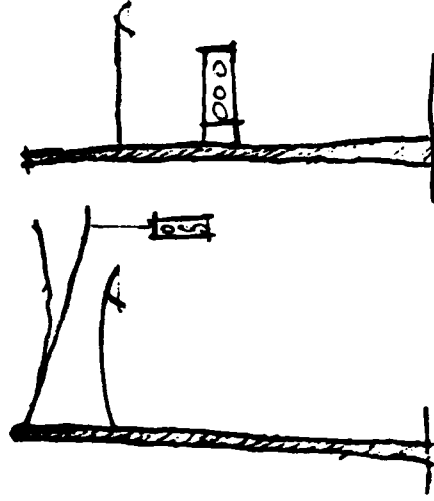


Intersection of a collector and a local street identified by landscaping

by bottlenecking entries to the local streets. These intersections should be about ninety degrees. Curbs or landscaping can be used to make the entries to local streets smaller.

Pedestrian Circulation

The fort lacks a separate and complete pedestrian circulation system to accommodate alternate modes of travel. Pedestrians and bicyclists can save fuel and reduce congestion and noise on the street system. The existence of a continuous system would encourage pedestrian travel, and personnel on the fort could enjoy a closer relationship with its natural setting.



Standards should combine functions to reduce signage.

Sidewalks on collector streets need to be separated from the automobile traffic but only for safety reasons. They need not be visually separated with landscaping. This same recommendation applies to sidewalks for local streets. Sidewalks should be omitted where pedestrian traffic on local streets is not sufficiently high. But sidewalks and paths that are necessary to form a complete and safe pedestrian system should not be excluded.

Street Standards

A variety of signage makes the roadside feel cluttered and informal which is not consistent with the image that the Army wishes to present.

Standards should combine functions to reduce signage. Stoplights and high and low ambient lighting can be combined on a single pole, especially at intersections. The poles should blend with the natural background. Wood or concrete poles have a natural patina that blends well with the natural environment.

Signs

Signage at the fort is similar to civilian examples.

A system of signage should be developed to unify the fort's street

signs. This system should include directional and traffic control signs. A successful and beautiful example of this type of system can be seen in the National Parks. Their system reinforces the special place of the parks and distinguishes them from their non-park surroundings. At Fort Lewis, this signage system becomes important because of its proximity to surrounding civilian towns. One suggestion would be to tint all the signage into a muted earth tone coloration that would blend with the buildings and landscape. Large clusters of signs should be avoided to keep from confusing the drivers.

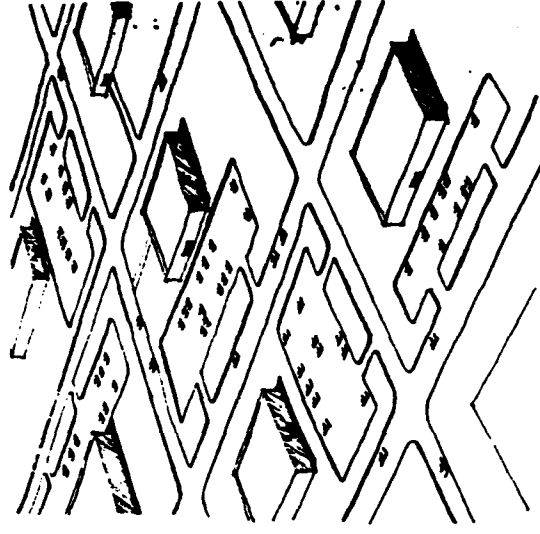
Parking

Parking lots occupy large areas on the fort and generally have a negative visual image.

Where parking demands are light and the lots are small in relation to the surrounding buildings, low scaled landscaping should be used to improve their image. They should mix in with the buildings, breaking the lightly demanded parking into small and inconspicuous lots.

Where parking demands are heavy, the lots can take over the visual scene making a dismal environment, especially where lots are for peak usage but are empty most of the day. In this situation, the lots should be located back and behind the structures. Large expanses of

pavement should be avoided and broken up with bushes, trees, and land forms. Where the demand for parking takes too much surface area, multi-level garages should be used to provide for a large number of cars in a small area. A mass transit promotion program and increased pedestrian awareness of transit alternatives can reduce the number of automobiles used on the fort. The balance between the importance of the automobile and the fort's environment needs to be carefully weighed. The policy of accommodating the automobile has proven to be destructive to both the physical and the psychological environment of the fort. Limiting auto access to the fort might be used to cut down the demand on space and fuel.



Today's planning policies encourage this type of physical environment

SECTION 3 IMPLEMENTATION

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The Seattle District Corps of Engineers	
Installation Planning Board	

PART 3.1 INTRODUCTION

The Implementation section of this report describes a strategy designed to incorporate the Military Park Theme into the Master Planning process at Fort Lewis. In order to accomplish this, it is necessary to understand this process, how the plan is formulated, who are the principle actors involved, how they relate to one another and what actions must be taken to successfully implement the fort-wide theme.

Over the past decade there has been a growing concern at the national level regarding the physical design of military installations. The Department of Defense (D.O.D.) has taken several steps to improve the livability and environmental quality of installations as a means for attracting skilled and motivated personnel.

A first step was the publication and dissemination of the Installation Design Manual, a technical report developed for use on all installations. The manual identifies recurring design problems and makes suggestions, at a general level, as to how they can be treated. Although generic and broad-brushed by necessity, the manual has been successful in raising the awareness of the value of good design and pointing out how

improvements can be achieved in overall planning, design and development activities.

The D.O.D., building upon the objectives and ideas contained in the manual, recently directed each installation to develop its own design theme and guidelines. These are to be incorporated into the Master Plan of the installation.

At Fort Lewis the concept of the Military Park Theme was endorsed during Phase 1 of this study; a theme based upon the fort's unique culture, historical and natural resources. The theme prescribes a set of goals and objectives to enhance the visual quality of the installation and improve the quality of life for the personnel who live and work there.

The D.O.D. established the need for improving the visual quality of military installations. Fort Lewis's response to this need is the Military Park Theme. It sets the design direction and says, in essence, how the fort should develop in the future. What remains to be done is implementation, that is, identifying the steps that must be taken over time and assigning responsibilities in order to accomplish the theme.

PART 3.2 THE THEME AND THE MASTER PLANNING PROCESS

In order for the theme to be a successful tool for improving the design quality of Fort Lewis it must become a workable part of all decisions affecting planning, design and development at the fort.

Because of the hierarchical nature of military decision making and the high level of turnover where personnel shifts preclude individuals from maintaining any long-term commitments,

implementation of the theme will by necessity depend a great deal on the existing, institutional framework of planning. This framework, called the master planning process,

includes the Installation's Master Plan, with its related staff and decision-making responsibilities for new developments. It includes as well, the ongoing maintenance on the fort, the Installation Planning Board, and the Corps of Engineers. Each one of these, working in concert, affords the means for achieving the Military Park Theme at Fort Lewis.

Master Planning has been used by the military since 1950. The process was designed to allow for centralized control and efficient

administration of all military activities. Although the process has been instrumental in keeping track of military resources and government expenditures for military installations it has not been very effective in helping installations to develop their own sense of design unity and overall character. To be certain some fine examples of good architecture have been built during this time on many installations but too often these have occurred as isolated entities.

Unrelated and unconnected to the rest of the environment, these individual pieces of good design contribute little to the achievement of an overall design theme. It will take a much more conscious, concerted effort through the present process of Master Planning to make this coordination in design and development happen.

The D.O.D.'s Installation Design Manual also identifies master planning as the appropriate vehicle for incorporating urban design considerations into a fort's development process.

If the visual quality of military installations is to be improved design procedures as well as guidelines must be incorporated into the Installation Master Planning process. It is at the master planning level that there is an appropriate overview directed at ensuring overall coordination among individual program needs.

Formulation of an Installation design guide as part of the Master Planning process is the proposed mechanism to guide the improvement of the visual quality of a military Installation." (Installation Design Manual, page 5)

For Fort Lewis the design guide referred to in the above recommendation is the Military Park Theme and the proposed policies and guidelines contained in this report. After appropriate review and modification where necessary by fort officials and the Corps of Engineers the theme policies should be formally adopted as part of the Fort Lewis Plan.

Before outlining ways to incorporate the Military Park Theme into the fort's master plan it is useful to review how in general terms how the military planning process works. Following this review is an analysis of why the present system does not automatically lead installations to plan for and develop their own individual design identities. Despite some present problems however there is hope. There are ways through the Master Plan to achieve an Installation design theme and these are outlined at the conclusion of this section.

PART 3.3 FORMULATING AND IMPLEMENTING THE MASTER PLAN

Although Fort Lewis may, in many ways, resemble a local community in one respect -- that of planning -- it is quite different. For at the fort, planning is very much a centralized and a top-down process stemming from objectives and requirements established at the national level by Congress and the Department of Defense. The Department of the Army (D.O.A.), receiving its directives and funds from the top, in turn issues a set of mission statements for its installations, defining the basic role and jobs that each is expected to fulfill. To determine the best fit between existing resources, funds, and the job to be done, the D.O.A. requires each installation to provide information about existing facilities and operations. Because the primary concern at the top is for effective distribution of resources the planning process explained thus far is an accounting-oriented one. Thus for installations like Fort Lewis, the Master Plan serves first and foremost as a quantitative record of material and physical resources on

hand and those anticipated or required in the near future.

The Master Plan for the Installation is developed at the local level through a three phase process under the conditions outlined above. Each phase, that is, inventory, planning, and final submittal, must be approved by the D.O.A. before the next can begin. In the case of Fort Lewis, the plan is prepared under the direction of the fort's Master Planner and the Seattle District of the Army Corps of Engineers. The Corps, as manager of Army planning and construction, contracts with civilian consultants to prepare the plan. Once complete the Master Plan is a series of documents in graphic, narrative and tabular form that shows existing development, land uses and facilities and those planned for the future. Although the plan is intended to guide development for a period of 20 years, it is updated every five years to reflect changes in funding, technology and national military policy. In practice however, changes are also made to the plan on an annual basis as mission requirements are adjusted or as new facilities are funded and built.

In this context of frequent change the Master Plan serves more as a general guide for decisions affecting the fort than as a fixed picture of the ideal future. The Military Park Theme objectives and related policies should be adopted

as part of the Plan to serve as constants in this overall guidance process. With these as part of the stable framework, the installation can continue to accommodate its mission-achieving programs while building a stronger physical unity and identity.

Installation Planning Board

Throughout the development of the Master Plan an Installation Planning Board meets to discuss content and progress. The Board is made up of the commander of the fort, military officers and often officials from surrounding communities. The Board's role in the planning process is influenced by ten general D.O.A. policies that they must take into account in developing the plan:

1. The plan must comply with the spirit and the intent of Federal legislation, including the National Environmental Policy Act (NEPA), and initiatives for energy conservation and wise use of cultural resources.
2. Existing facilities must be utilized before new construction is to be considered.
3. Plans for new development must consider the location, capacities, and economic life of existing facilities.
4. The permanent type construction will only be approved on installations as part of the

long-range requirements of the Army.

5. The use of standard plans for facilities must be used as provided by the D.O.A.

6. The use of efficient means in planning services and utilities for new developments is required.

7. The master plan should include all plans for new construction regardless of amount of funds required, their availability, and their source.

8. The plan must coordinate the general site plan with the requirements for mobilization.

9. The removal of WW I temporary buildings, which are in 'prime locations' will be removed only to allow for the long-term development plans of the installation.

10. WW II temporary buildings are to be retained only to house the mobilization components and only if they can be used to meet this need through a one-time expenditure of money for rehabilitation. (Paraphrased from Army Regulation #210-20 "Master Planning for Army Installations", p. 1-5.)

These policies emphasize considerations of cost and efficiency. They may also be interpreted as a call for a conservative mode of planning, one that seeks to reinforce and build

upon the existing fabric and conditions of an installation. This of course is one of the fundamental objectives of the Military Park Theme.

PART 3.4 THE THEME AND THE MASTER PLAN: AN ANALYSIS

military planning. Nevertheless, within the current master planning process there are opportunities for more design self-determination at the installation level. Fort Lewis should seize upon these.

As outlined above, planning for Fort Lewis is a process wherein many decisions are made about the fort's physical development and operations at a centralized planning office in the D.O.A. It is a process based upon established standards and quantitative material that can be applied equally throughout the United States. The fort is at the receiving end of this process and as a result its environment too often reflects it. The scenario often goes like this: a federal-level decision is made to build a new facility and then carried out at the fort level. The federal officials are concerned with putting the Part facility into operation because of a national objective. They are not -- in fact cannot be -- directly concerned with the qualitative impact such a facility might have upon the overall visual character and livability of the installation. The result of this process too often is counterproductive to achieving a greater degree of design unity and individual identity on our military installations.

Centralized decision-making will remain a necessary fact of life in

PART 3.5 HOW TO IMPLEMENT THE DESIGN THEME

Implementation of the Military Park Theme at Fort Lewis will require the coordinated effort of three major agencies — the Fort Lewis Master Planning Branch, the Seattle District Office of the Corps of Engineers and the Installation Planning Board.

Fort Lewis Master Planning Branch

When the Military Park theme goals, objectives and policies are adopted and incorporated into the Fort Lewis Master Plan, the fort's Master Planner will be, by definition, responsible for carrying them out. Implementation through the Master Planning Branch should take two forms. One has to do with the significant level of urban design influence that can be exerted through the Master Planning review process. The other lies with the Branch's role in initiating special design and environmental improvement projects on the base and its responsibility for overseeing fort-wide maintenance activities.

1. Master Plan Review as a Tool for the Theme

Although some of the decision-making

for large scale projects is done at higher levels, there are several valid ways at the local fort level to see that all development decisions have as positive an impact as possible on the visual theme of the fort. For example, through the Master Plan review process, augmented by the design theme policies, the Branch can influence project location decisions. It should also be the watchdog of design concerns, for reviewing all development projects, large and small, for achieving good site planning, maintaining and improving the landscaping qualities, building upon existing architectural styles, and preserving existing historic and natural features that are an integral part of the Fort Lewis environment. The design theme guidelines contained in this report, in addition to the more general design objectives and policies, provide the Branch with a basis upon which to conduct its reviews. They also set the long range image of the fort and although some of the specific policies and guidelines may be modified over time, the theme represents a vision that needs to be nurtured and championed by the Master Planning Branch in all its work.

2. The Master Plan Branch as Initiator and Overseer of Project Maintenance

The Master Planning Branch (MPB), as mentioned earlier, serves a dual

role: It initiates fortwide design projects and sees to their maintenance in order to preserve the fort's image. Theme implementation as it applies to the everyday maintenance of the fort is one of the most important tools in achieving the design goals. At present, different maintenance groups are in charge of monitoring their own activities. Their decision making power to set priorities for the functional and aesthetic quality of the landscape have a significant impact on the visual image of the fort. The maintenance duties take the form of strict improvements in landscaping, building upkeep, infrastructure works and signage. They are important tools in the manipulation of design elements which lead to improved coherency in the fort's physical appearance.

The MPB should initiate maintenance priorities to eliminate the lack of cohesion in the setting of priorities and allow for a more consistent treatment of both functional and aesthetic considerations.

The Seattle District Corps of Engineers

The primary role served by the Seattle District Corps of Engineers is that of a project manager of all on-fort developments. Crucial to this role is its place as the intermediary between the fort itself

and private contractors. This entails defining the scope of work for such projects and supplying whatever technical information is needed in the preparation and completion of work. Federal government standards for military construction are issued through the Corps's office. Once this information has been disseminated, it's the Corps's further responsibility to ensure compliance with regulations pertaining to the consultant's proposal.

Besides the Corps's responsibility to monitor federal standard compliance, it also makes recommendations for approval of the project by the fort authority. Furthermore, it supervises the project within its fiscal constraints.

Because the Corps's staff is comprised of non-fort personnel, it is necessary that they clearly understand and seek to achieve the fort's theme goals and design objectives. Through this understanding the Corps will be able to ensure that the theme be incorporated into project designs. As a further safeguard of theme integrity, this review process can guarantee compliance with the theme and provide the fort with recommendations concerning the proposed project.

Installation Planning Board

The Installation Planning Board,

made up of the fort's highest ranking military officials, is responsible for evaluating the content of recommendations sent to them for approval necessary before project implementation. The board's participation is important due to their almost all-military composition and for their advocacy role for all personnel assigned to the fort. The board is also the second opportunity, besides through the MPB, for the fort commander to act as a proponent on behalf of the fort's interests. A disadvantage is the infrequency of the board meetings, once every 6 months after the Master Plan has been approved. So few meetings limit the amount of formal input the board can provide in the planning process.

As the final step in the planning process, the responsibility of the board is great, and decisions must be carefully weighed. To assist them in this decision-making process, the board must clearly understand the goals and design objectives. This requires a sensitivity for the environmental implications of such an intangible quality as is a fortwide design theme. Unlike the technical solutions to functional problems, an awareness of the desired visual image that such a theme implies will be critical to the success of creating a more livable environment for future users. It is therefore implicit to such a proposal that the board deliberate carefully before

assuming a position of advocacy regarding the fort's interests in maintaining a character consistent with that of the Pacific Northwest.

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PART 4.1 SPECIAL PROJECTS

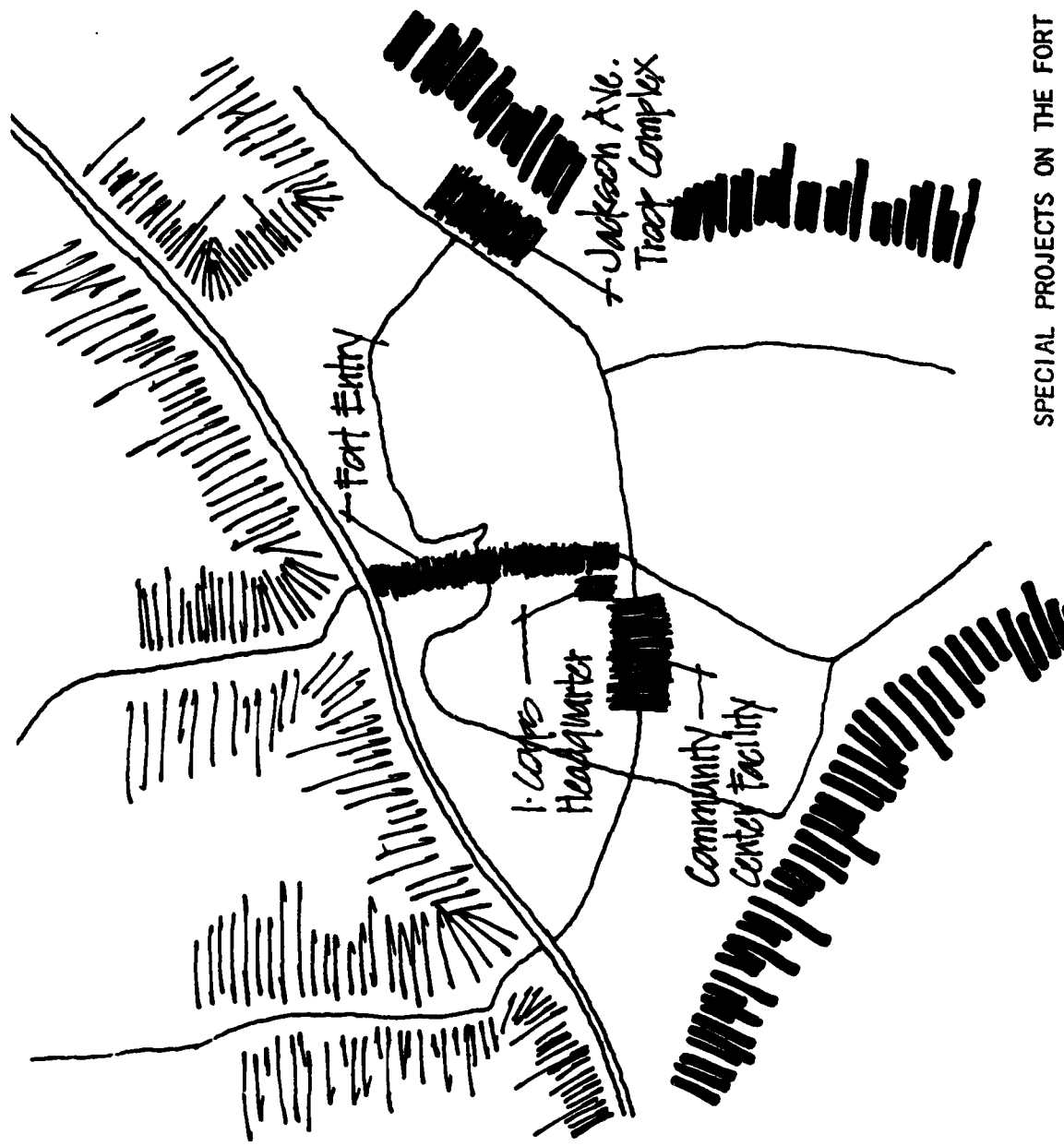
Introduction

This section of the report addresses specific projects which have been programmed by the Army for action in the near future and afford unique opportunities to begin to establish the fort's Military Park Theme right away. These projects are:

1. Jackson Ave. Troop Complex
2. 1 Corps Headquarter Complex
3. Community Facilities Expansion
4. The Main Entrance

Throughout the history of the fort, large scale development has occurred during very brief construction periods. Between these major construction periods, only occasional, isolated structures have been built. In the near future the fort will be experiencing another major construction boom. Because of their size, special projects will have a significant impact on the fort's visual image and the quality of life for the residents. The implementation of the Military Park Theme design guidelines in these projects will be especially important.

The guidelines for Special Projects are more detailed and site specific than the design guidelines. They



SPECIAL PROJECTS ON THE FORT

are intended to provide the rationale and criteria for assisting in design development and evaluation of the project as it relates to the theme.

PART 4.2 JACKSON AVE. TROOP FACILITY COMPLEX (JATFC)

Introduction

The JATFC is a proposed troop complex which will house approximately 15,000 enlisted personnel when completed. It is located in an undeveloped section of the fort on Jackson Ave.

The facility includes barracks, dining facilities, a branch exchange, gymnasium, a recreation center, a chapel, four battalion headquarters with classrooms, a brigade headquarters, and a motorpool with maintenance facilities. The complex also includes numerous volleyball and basketball courts, a field for softball and football and parking facilities for the personnel.

The complex is to be developed over a 20 year time frame. Because of this, it is important to adopt a site plan which will guide the development over the entire time period. This action will ensure that the troop complex will evolve appropriate military character according to the Military Park Theme.

The troop complex gives the fort the opportunity to express traditional

military character for troop housing areas. It is important that the military personnel establish a sense of home in the complex as well as have a feeling of being a part of a unit within the military establishment. By using an approach consistent with many of the existing troop housing areas, the new complex will have a stronger visual and social connection to the rest of the fort, thus helping to unify the fort's military image and purpose.

Design Objectives

- Create a building layout that identifies the facility as a troop complex.
- Utilize traditional hierarchical relationships to site buildings around a symbolic center.
- Arrange buildings on a site to preserve natural vegetation.

Buildings should be located so as to express their role within the whole complex. The site should be designed as a composition where through the use of contrast, rhythm and hierarchy, buildings express relationships, one to another. In addition, the natural features on the site should be incorporated into the overall design.

Building Layout Guidelines

A symbolic open space should be used in the site plan as an element

around which development occurs. In addition this spatial device will help to convey the relationship of the new area with the older Garrison Area design character. The open space should fit with the natural topography and take advantage of opportunities to link with surrounding natural features. It should be large enough for most buildings to front, giving the complex a "front yard".

Semi-private open spaces for troop formation should be created through the arrangement of barracks buildings.

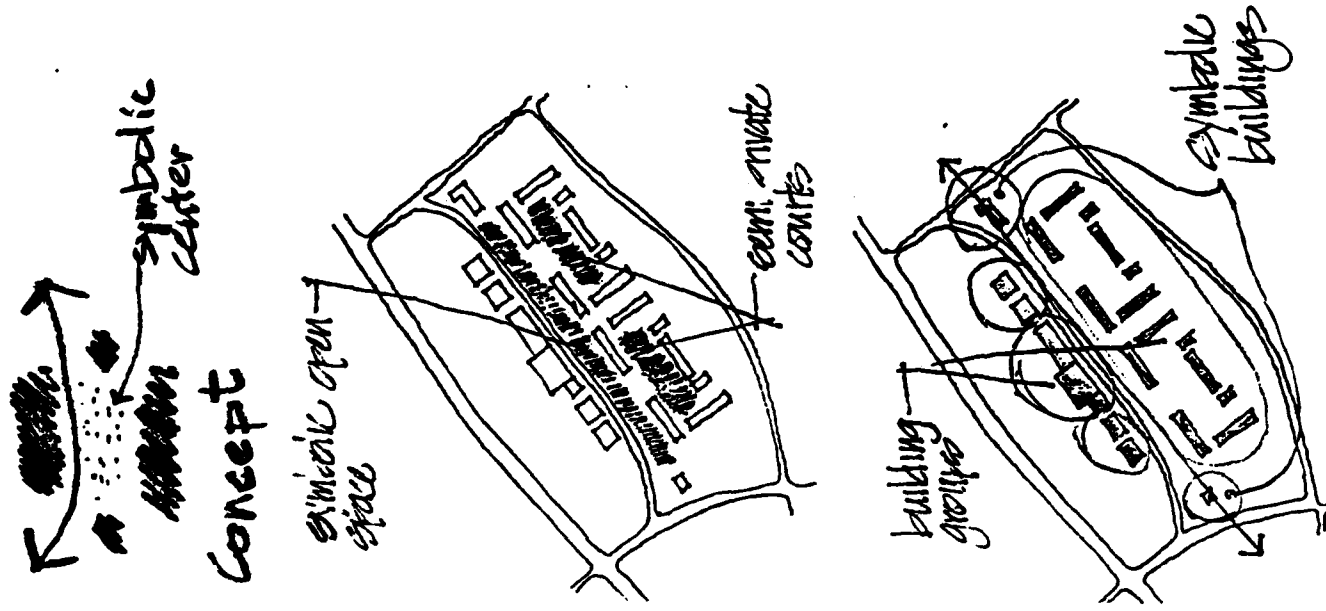
Buildings should be laid out according to the following principles:

Place symbolic buildings, such as brigade and group headquarters and the chapel, on significant or prominent sites in their own setting and distinct from service and barracks buildings.

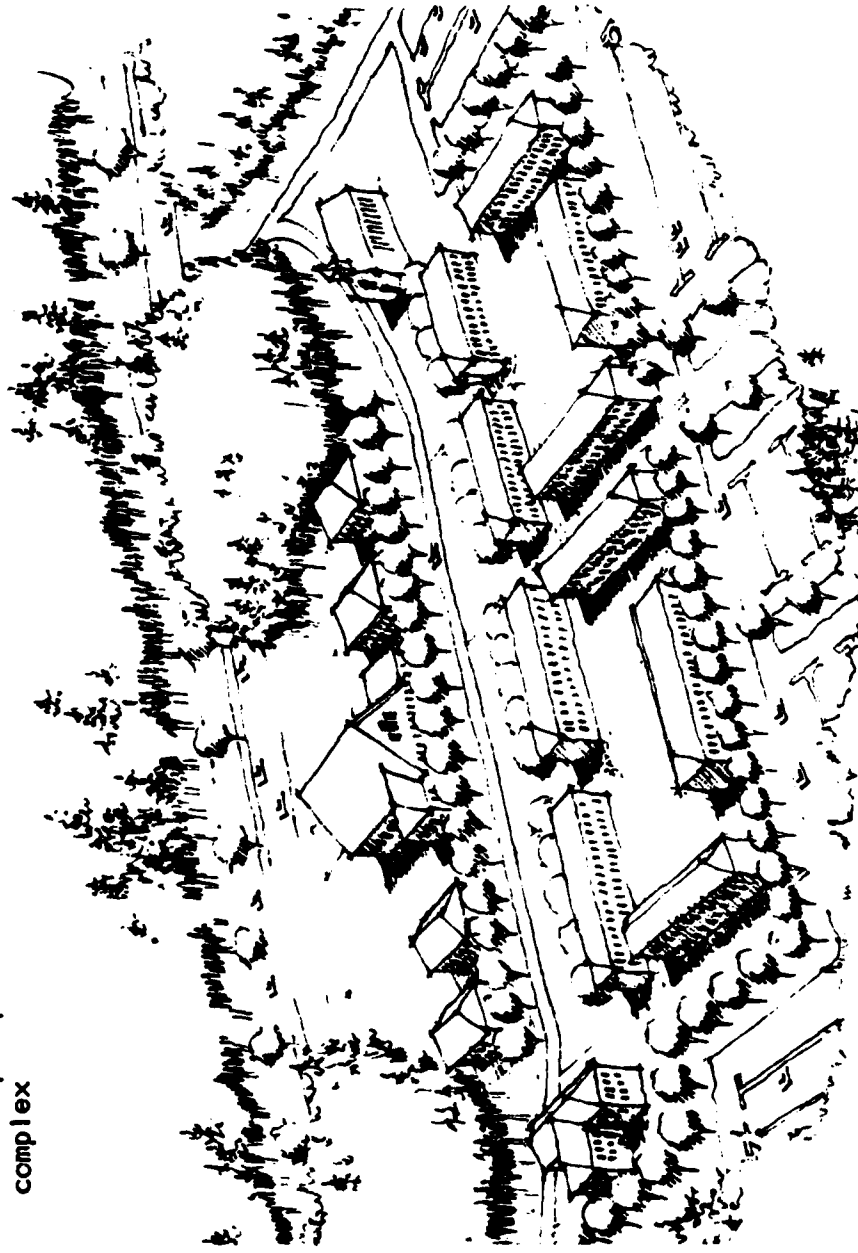
Cluster service buildings (the gym, exchange, group dining and recreation center, and battalion headquarters) together along one edge of the symbolic open space.

Group barracks buildings and arrange them to create formal and informal slides with the formal side facing the symbolic open space.

Condense building layouts to preserve natural pockets of vegetation.



Aerial perspective of proposed troop complex



material and architectural detail.

A common architectural character allows for a range of design responses but has rules governing design easily recognizable in the finished buildings. These architectural design rules tie different building types together by using certain building forms, materials and details combined in various ways. A final style emerges when the limits of variety are exposed. This variation within a narrow range of rules characterizes the Garrison Area and creates a pleasing well-disciplined complex.

Architectural Character Guidelines

Buildings planned for the JATCF are classified according to rank. These classifications are tied to building design requirements which will help to establish a visual relationship between functions.

Building Rank Classifications

Building types are listed according to rank

RANK A..... Brigade and higher ranked headquarters and religious facilities.

RANK B..... Battalion headquarters with classroom buildings.

RANK C..... Barracks

Architectural Character Objectives

Develop an identifiable architectural character for the complex that expresses a relationship to the historic precedent established in the Garrison Area.

Create a visual hierarchy of buildings through the use of form,

RANK D..... Dining facilities, gymnasiums, entertainment, and exchange buildings.

RANK E..... Warehouses and maintenance shops.

Rank A buildings should have their first floor raised above grade or, if topography permits, located on a hill.

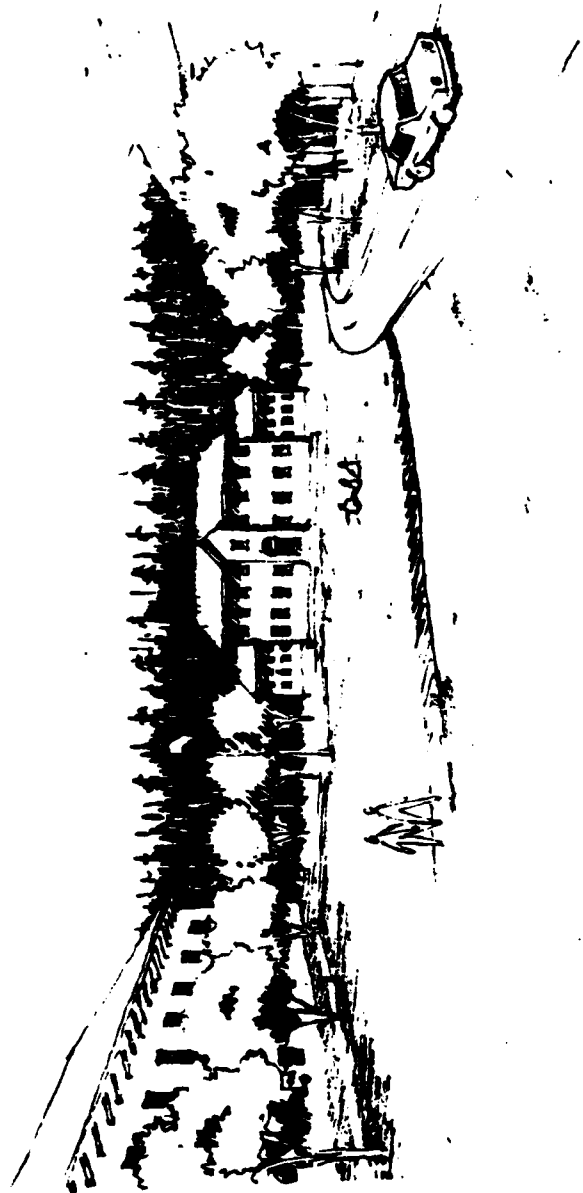
Rank A and B buildings should have a formal facade. It should be either well-balanced or symmetrical and contain a front entry. That entry should be signaled with a covered "porch" of prominent scale that projects from the facade.

Major facade area of Rank A, B, and C buildings should be sheathed in brick.

Major floor plan areas of Rank A, B and C buildings should be covered by a pitched roof of either gable or hip form. Minor transition areas may be any form.

Muted earth tone colors should be used for the facade and the roof materials of Rank B, C and D buildings. White or contrasting values and chromas should be used for accents and decoration.

Rank D buildings should have recessed entries with prominent openings in the facade.



View of the command building for the proposed troop complex

Rank E buildings should have flush entries with flat awnings hung from their facades for weather protection.

Concrete, concrete block, metal or wood should be used in major facade areas for Rank E buildings.

Rank Requirement Schedule
Rank Guideline

A 1. raised building base

A B 2. formal facade and entry

A B C D 3. brick facade material

A B C D 4. pitched roof form

B C D E 5. earth tone colors

C 6. recessed entries

D 7. flush entries with canopies

E 8. other facade materials

Intent/Guideline

distinguish building rank

distinguish building rank

link building character

link building character

link building character

distinguish building rank

distinguish building rank

distinguish building rank

rank A
rank B
rank C

front facade locations

existing 3rd Brigade H.Q.

possible alternative

Landscape Design Objective

Preserve the existing natural landscape to enhance the aesthetic qualities of the development and maintain the fort's locational identity with the Pacific Northwest.

Use existing opportunities within the natural landscape to shape and orient development. The Garrison Area is a good example of using natural features to enhance its setting. It emphasizes the symbolic relationship of natural elements to the structure and order of the military. The use of spectacular views of both Mt. Rainier and the surrounding evergreen forest give the fort its unique and endearing character. This traditional use of natural elements should be continued in the development of new troop complexes.

Landscape Design Guidelines

Preserve large groups of mature trees on the site by clustering development in selected areas.

Preserve mature vegetation on the boundaries of the site creating an edge with the existing vegetation to define the built areas of the complex.

Maintain and enhance the views from the site to the mountains or other important features by preserving and selectively thinning vegetation.

Use the natural topography to determine the location of buildings and open spaces. Significant buildings of the complex should be at a higher elevation, if possible, to create a symbolic hierarchy of order.

Open Spaces Guidelines

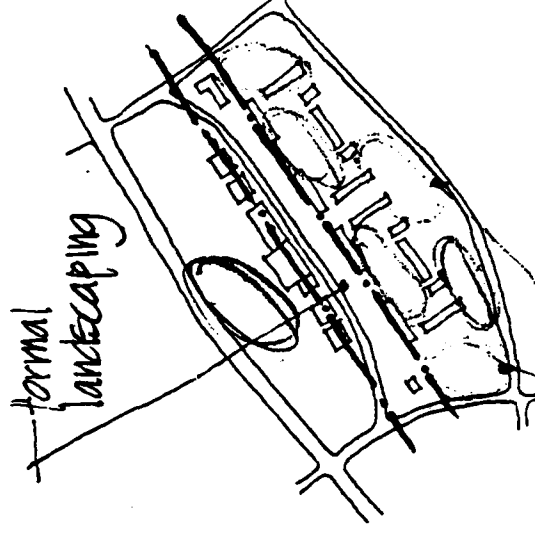
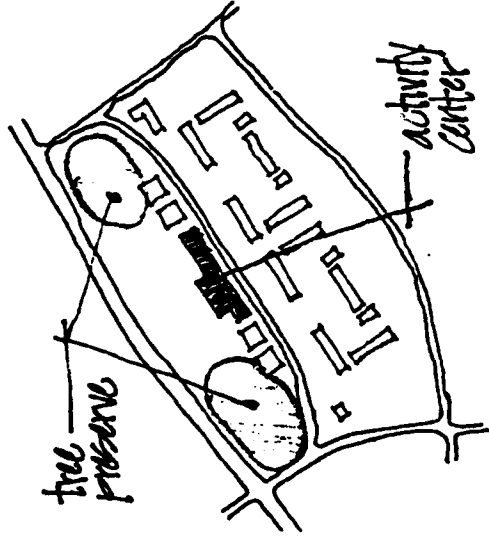
The landscaping of the symbolic open space should be formal and repetitious to achieve a ceremonial character.

The formal open space should have the highest degree of maintenance to convey the symbolic quality of the space. It is important that this is the only space to receive this type of special treatment.

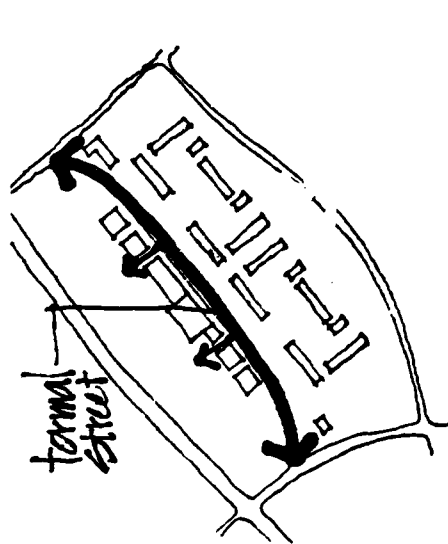
Open Spaces (Informal)
The landscaping in the informal open spaces should provide a casual atmosphere for group gathering or for informal military reviews.

General Landscaping
The landscaping at a complex should link the fort to the region. Selection of new plant material should be consistent with native Pacific Northwest vegetation.

The view from the road should be considered in the landscaping layout. A series of selective views can be developed to showcase elements of the military setting.



informal landscaping



Circulation Design Objective

Provide a clear sense of orientation at the entries and within the complex by developing a hierarchy of roadways.

Improve the visual quality to the complex by the placement of roads and parking lots.

Develop a complete pedestrian circulation system.

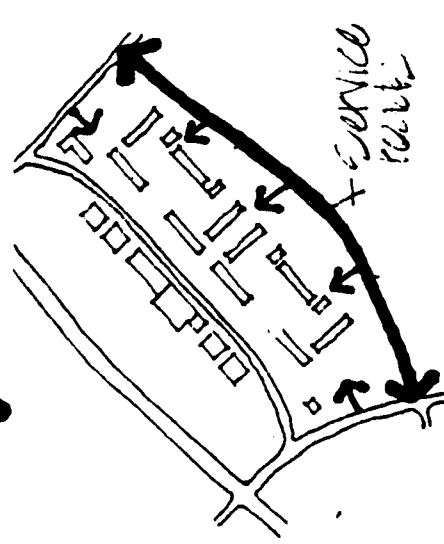
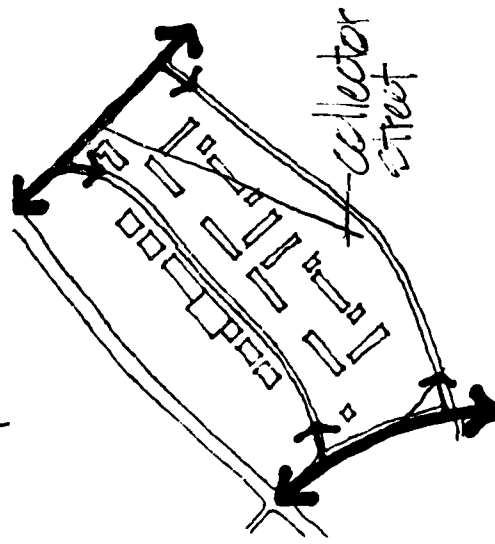
Circulation Design Guidelines

Provide a hierarchy in the street system for the troop complex. This hierarchy of streets will use three categories:

a) The formal street is to communicate the ceremonial character of the complex and should be located next to the symbolic open space with buildings lining one side. It should also have a formal entrance and be lined by trees.

b) The collector street is the primary route to access the complex from the arterial road. The streetscape should be natural and informal.

c) The service roads are to provide access to the parking areas and delivery access to the buildings. The parking and delivery areas should be behind or hidden in the complex.



Parking areas should be located behind the structures and visually screened by vegetation from the formal and the collector streets. Large lots should be avoided. Limited on-street parking should be permitted for short-term stops on the formal and collector streets.

Pedestrian System Guidelines

The complex should be linked by a continuous pedestrian network. This network of paths should also connect with a fort-wide pedestrian network.

Develop a hierarchy of paths to display the different characteristics of the complex. A formal pedestrian pathway should be used in the symbolic area of the complex. The path in this area could be of a special material such as brick or exposed aggregate. Informal pedestrian pathways should link areas around the barracks and the parking areas. They should be carefully laid out and appropriate in scale for the traffic.

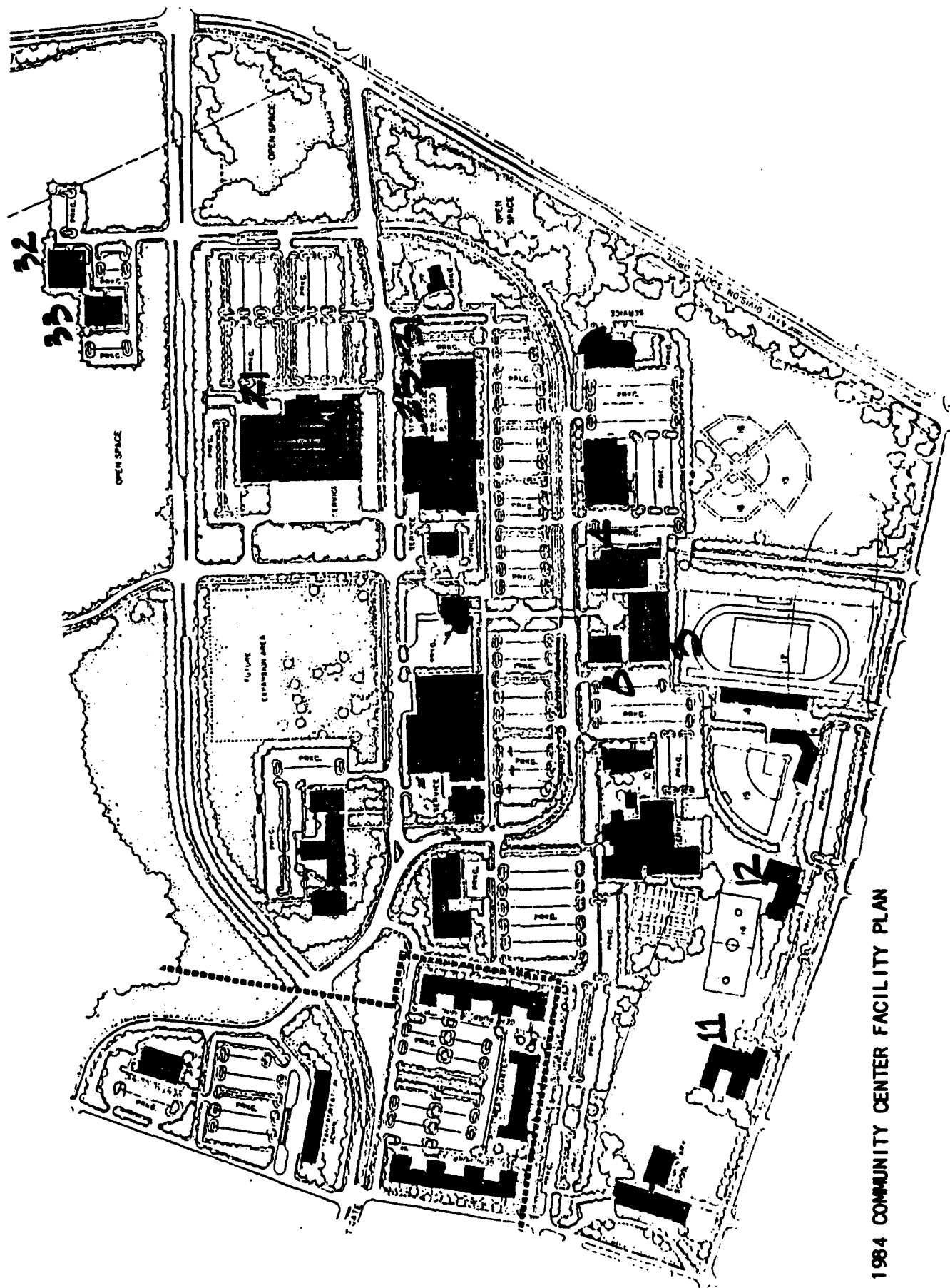
PART 4.3 COMMUNITY CENTER FACILITY

Introduction

The fiscal year 1984 plan for the Community Center Facility will have a major impact on the physical presence of the fort. The plan calls for the construction of a new commissary north of Pendleton Avenue, the rerouting of through traffic, extensive landscaping of the whole area, and the relocation of service east of the old commissary. Because the Community Center Facility is a focal point for the fort and provides social and commercial activities, it should be developed with special attention to pedestrian needs.

The 1984 plan addresses the above issues in positive ways. The bypass road makes the center safer and more pleasant for the pedestrian. Services are clustered and aligned south of Pendleton Avenue which shortens walking distances. But there are some possibilities for enhancing the social use of the CCF that should be addressed in future development.





1984 COMMUNITY CENTER FACILITY PLAN

Building Layout Guidelines

Place buildings to reinforce street edges and continue established patterns.

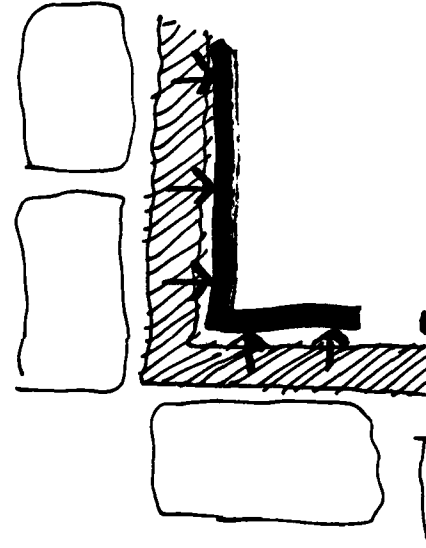
Locate buildings within the CCF rather than open new ground which violates open spaces.

In concurrence with the general open space policy to reconnect the review field with Gray Airfield prairie, buildings 11 and 12 should be located south of Blitar Avenue if at all feasible.

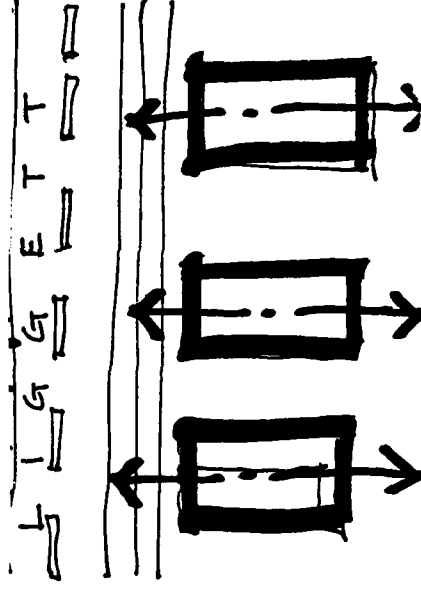
Building 3 should be perpendicular to Liggett Avenue and brought north to the street edge. This will keep the pattern of building mass and voids more consistent along the street's southern boundary.

The east face of buildings 25, 26, 28, 29, 30, and 31 and the new commissary should be moved further east. This alignment will enable a pedestrian connection to be made between them and across Pendleton Avenue.

Buildings 32 and 33 should be located within the complex. Their placement can define a street edge and help complete the fabric of the center. Their present location should be left undeveloped until all open ground within the developed areas is used up.



Pull parking away from building faces to allow for a pedestrian walk



Maintain the established pattern of building footprints oriented perpendicular to Liggett Avenue

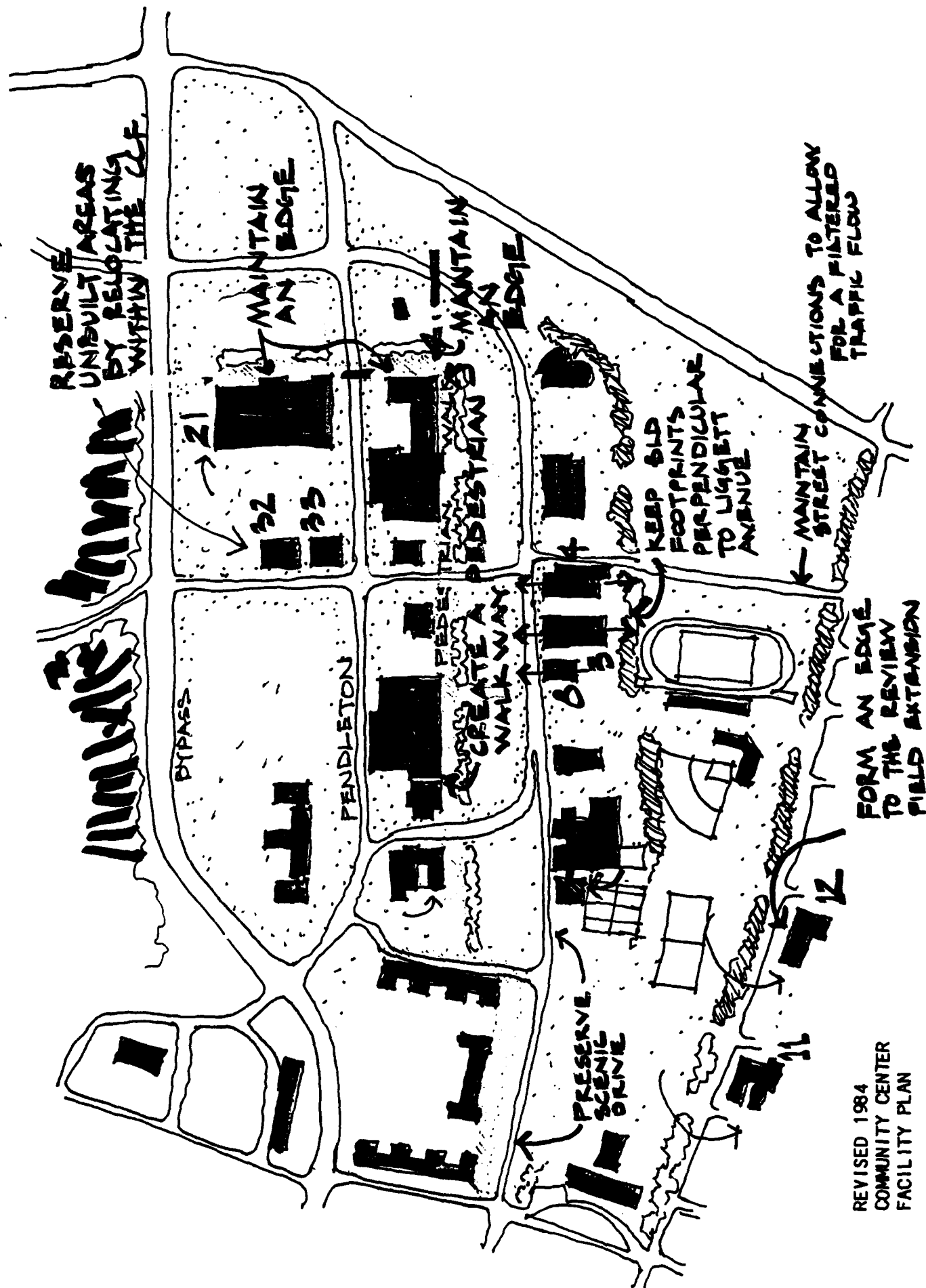
Circulation Design Objective

- Remove through traffic from CCF.
- Maintain important circulation links with the rest of the fort.
- Improve the pedestrian amenities in the CCF.
- Improve the possibilities for social interaction in the CCF.

Circulation Design Guidelines

The Pendleton Avenue bypass will reduce the amount of through traffic in the CCF making it safer and more pedestrian-oriented. The bypass should be treated as an arterial and designed with a median landscaped according to median landscaping guidelines.

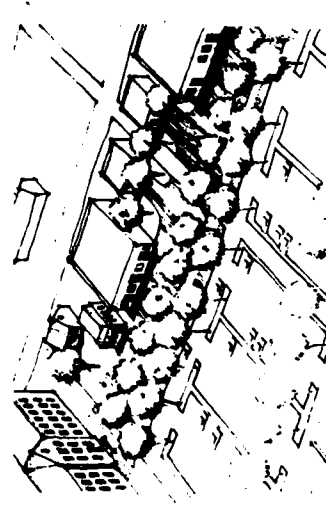
Liggett Avenue is cut off between the CCF and the Garrison Area to reduce through traffic. This road was intended as a scenic drive through the fort. Recently, parking lots have been located on it which detracts from the surrounding beauty. To correct the visual and functional problems, the 1986 plan envisions a loop road from the Pendleton Bypass Road. That will work well, but the connection from the CCF and the Garrison Area should not be severed. Traffic should be restricted but the connection maintained, to show visiting dignitaries and guests the most scenic and historic areas of the fort.



REVISED 1984
COMMUNITY CENTER
FACILITY PLAN

Walks in the CCF should be developed to provide comfortable and convenient pedestrian movement between facilities. At intersections with local roads in the CCF the pedestrian should have the right-of-way. Drivers should be encouraged to park their vehicles to take advantage of the pedestrian amenities.

A wide, tree-shaded walk, screened with hedges from the parking area should be developed. This would greatly enhance the user experience of the CCF and provide a center for off-duty activity. The walk should have places to sit and the building facades should have windows opening onto it. It should connect the new Commissary to the General Purpose Administration Building. The road along its southern edge should be reserved for buses and taxis. Bus service from one end to the other should be free.



Aerial view of proposed pedestrian walk

Landscape Design Objective

To enhance the character of the CCF
To integrate the CCF into the fort's design.

Landscape Design Guidelines

Space trees and bushes every three parking isles to break up the large open lots.

Continue the evergreen edge of the Review Field into the Review Field extension.

Plant evergreen trees north of the CCF.

Plant deciduous trees along the street edge to enhance the streetscape.

Define a pedestrian walk on the south side of the PX, Bank, Credit Union and Commissary with a row of deciduous trees between the parking area and the walk.

Architectural Character Objectives

Open up building facades to the street level.

Provide weather protection for pedestrians.

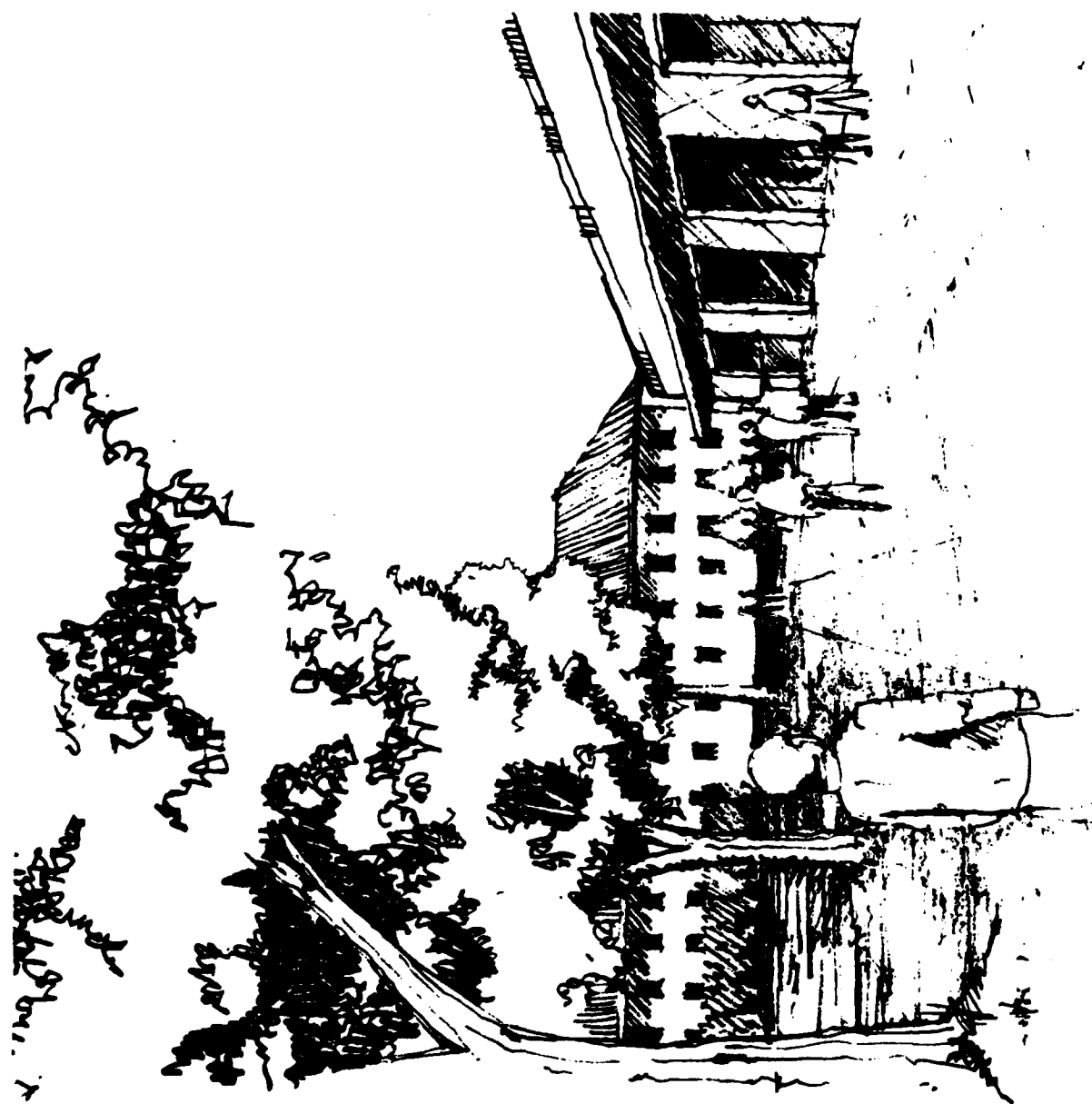
Architectural Character Guidelines

New commercial facilities should promote increased interaction with the street. Glass and doors should make up the major proportion of their street front at ground level. Older buildings should be remodelled.

Awnings should be hung from building facades to provide weather protection for pedestrians and to signal that these buildings are for commercial use.

The buildings, including the new commissary, should have mixed uses at street level. The display windows and entries should face an outdoor sidewalk.

If possible, new buildings should be constructed with columns and foundations sized to carry extra floors to accommodate facility expansion.



The CCF as a pedestrian oriented place

PART 4.4

I. CORPS HEADQUARTERS

Introduction

The Army is currently proposing the development of a new headquarters complex for I-Corps. This development presents the fort with the opportunity to build the complex according to the goals and design objectives of the Military Park Theme.

The I-Corps Headquarters represents a very special and honored place at the fort. It will be the decision-making center for military operations at Fort Lewis and the rest of the I-Corps command authority. This recognized identity as a central place of command will enhance the image, promote group identity, and create a sense of cohesion on the fort.

The complex, because of its image as a center of important activities, can provide a link to the dispersed troop areas, unifying them into a comprehensible military system.

Design Objectives

The I-Corps Headquarters should be a focal point to display the military traditions of hierarchy, formality and command. This focal point should be at the symbolic center of the fort. The Headquarters complex



I-CORPS

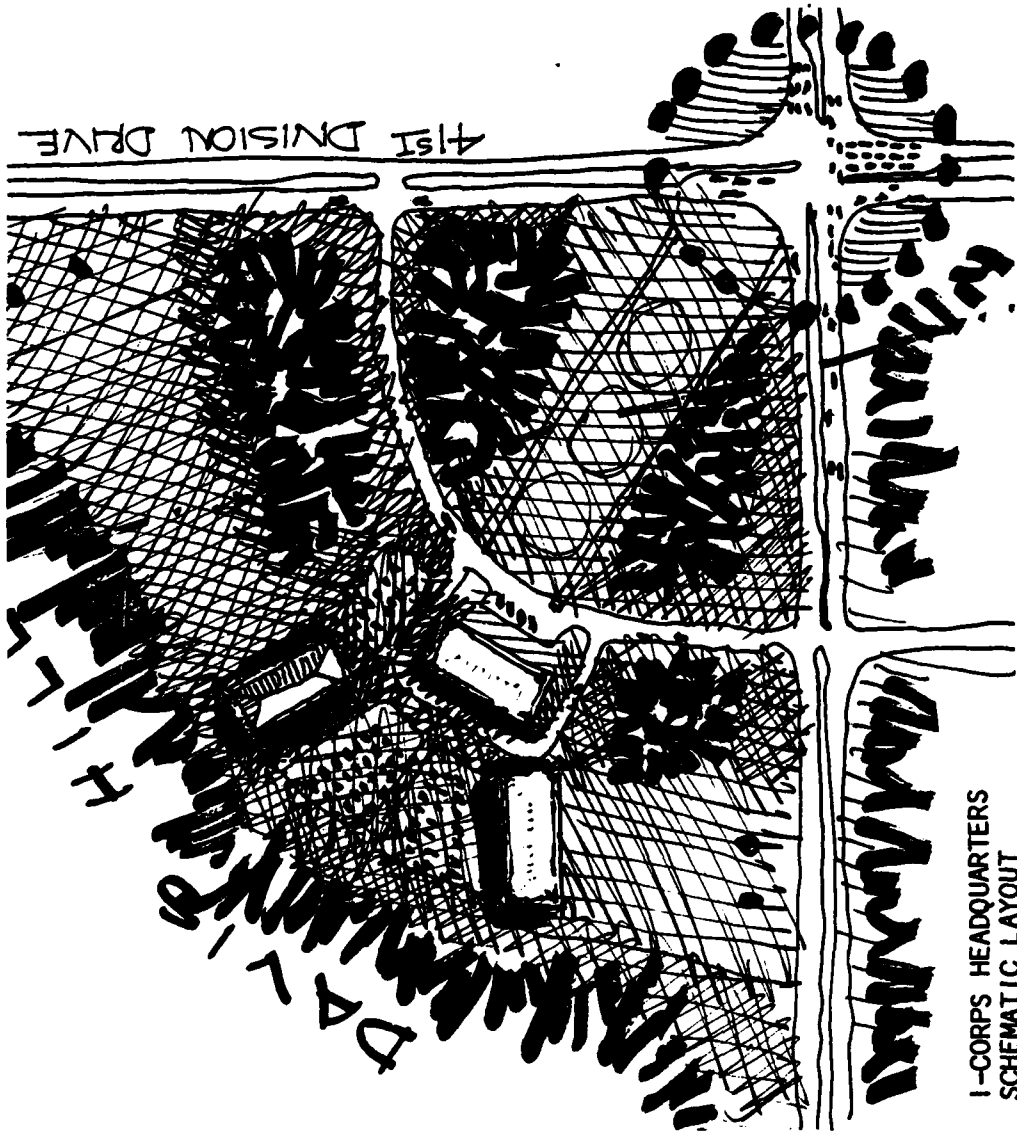
Visible

Prominent

A symbol of order & tradition

I-CORPS HEADQUARTERS
LOCATION DETERMINATES

has always been a symbol of command and a center for the decision-makers. This prominence should be reflected in the location and site layout of the complex.



1-CORPS HEADQUARTERS
SCHEMATIC LAYOUT

Building Layout Guidelines

The 1-Corps Headquarters complex should be oriented towards Mt. Rainier with the front facade of the building and its formal entrance facing the mountain to provide a symbolic link between the two.

The building layout should provide three formal facades and one informal service or work entrance side.

In front of the building there should be a formal reception area for ceremonial reviews.

A formal entrance to the building should be provided as the Command Group's entrance.

The main parking lots should not be placed in the front formal entrance to the building. Parking should be placed in the service or work side of the building.

A helicopter pad should be located in close proximity to the formal reception area and the formal main entrance of the building.

Architectural Character Objectives

The architectural character of the 1-Corps Headquarters building should convey a strong visual image that reflects its significance as an important building.

The complex should provide a visual link between the different architectural styles on the fort.

Architectural Character Guidelines

The building should be a multi-story building of significant height. A

single story building should be avoided.

The building's first floor should be raised above grade on a definite base.

The primary material for the facades of the building should be brick. Three formal brick facades should be visible from the street.

The building's front facade should be well balanced or symmetrical and contain a formal entry. The formal entry should have a prominently recessed "entry".

The two other formal facades should serve as the entry for the Command Group and visiting personnel. The entry should be covered at a less formal character than the main formal entry.

The service facade of the building should be of a lesser detail to help emphasize the formal facades of the building.

The major floor plan areas of the building should be covered by a pitched roof (either gable or hip form). Minor transition areas may be any form.

Landscape Design Objective

Preserve the existing natural landscape to enhance the symbolic relationship of the natural elements

The landscaping at the I-Corps Headquarters should help to communicate the significance of the complex.

An environment characterized by order, discipline and hierarchy of the landscaped elements should be emphasized by the treatment of the strategic placement of plantings.

The landscaping should communicate the hierarchical order of formal behavior expected within the different spaces of the complex.

Landscape Design Guidelines

Preserve large groups of mature trees on the site.

Orient the site to maintain and enhance the views from the site to Mt. Rainier and other significant features of the fort.

Use the natural topography to determine the location of the building and open spaces.

Create a formal open space to enhance the formal entrance to the building. This space is to be used for ceremonial receptions and should emphasize the traditional military spirit of structure and order.

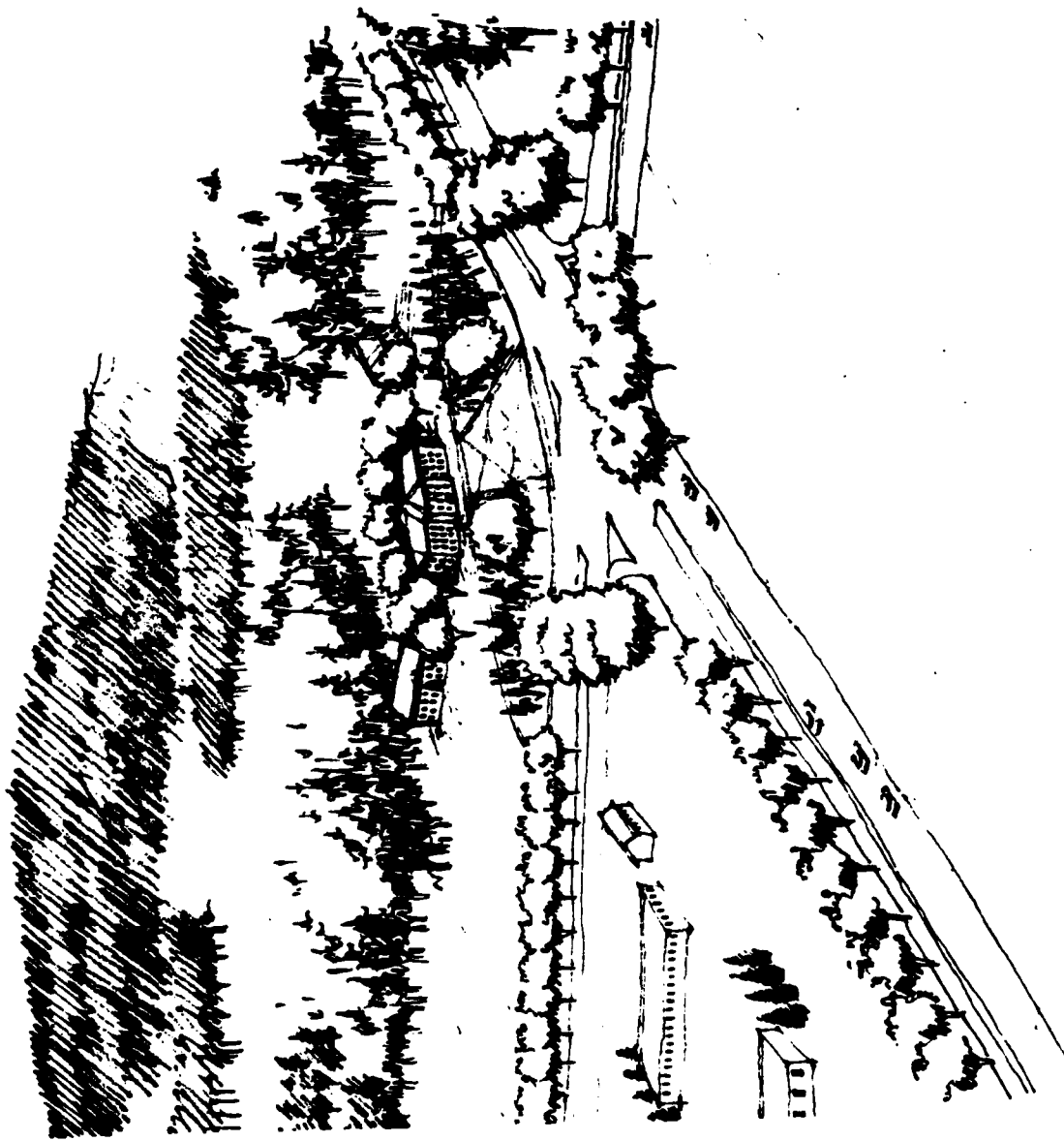
The formal open space should have the highest degree of maintenance to convey the symbolic quality of the space.

Selection of new plant material should be consistent with native Pacific Northwest vegetation.

The plant selection for the Headquarters Complex should perform four general functions:

- a. provide visual quality to the complex;
- b. become a view framing element;
- c. define the behavioral quality;
- d. visually link the complex to the rest of the fort.

The landscaping in formal areas should be symmetrical or formally balanced in the number, size and type of trees which are placed on each side of the formal pathway to the entrance of the building.



Aerial view of proposed 1-Corps
Headquarters

The landscaping of the informal areas should be a natural arrangement of materials. The planting should be of a natural set which will require low maintenance.

Circulation Design Objective

Enhance the visibility of the I-Corps Headquarters and create a sense of orientation of the complex to the fort.

Develop a hierarchy of entries in the complex to provide a sense of arrival at this important place on the fort.

Develop a pedestrian circulation system to insure safe access for pedestrians.

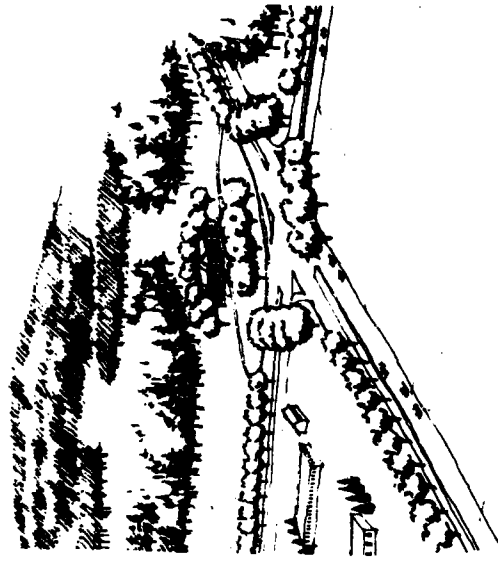
Parking areas should be distinguished according to rank and purpose. General parking areas should be located behind the structure and visually screened by vegetation from formal open spaces.

Pedestrian System Guidelines

The I-Corps Headquarters should be linked to a continuous fort-wide pedestrian system.

Develop a hierarchy of pedestrian paths to display the different formal characteristics of the complex.

a. A formal path should be from the drop off point on the street to the



formal entrance of the building. It should be of special material such as brick or exposed aggregate.

b. An informal pathway system should link the different parking areas to the building. The material should be permanent and provide a contrast with the formal pathway.

PART 4.5 FORT ENTRY

Introduction

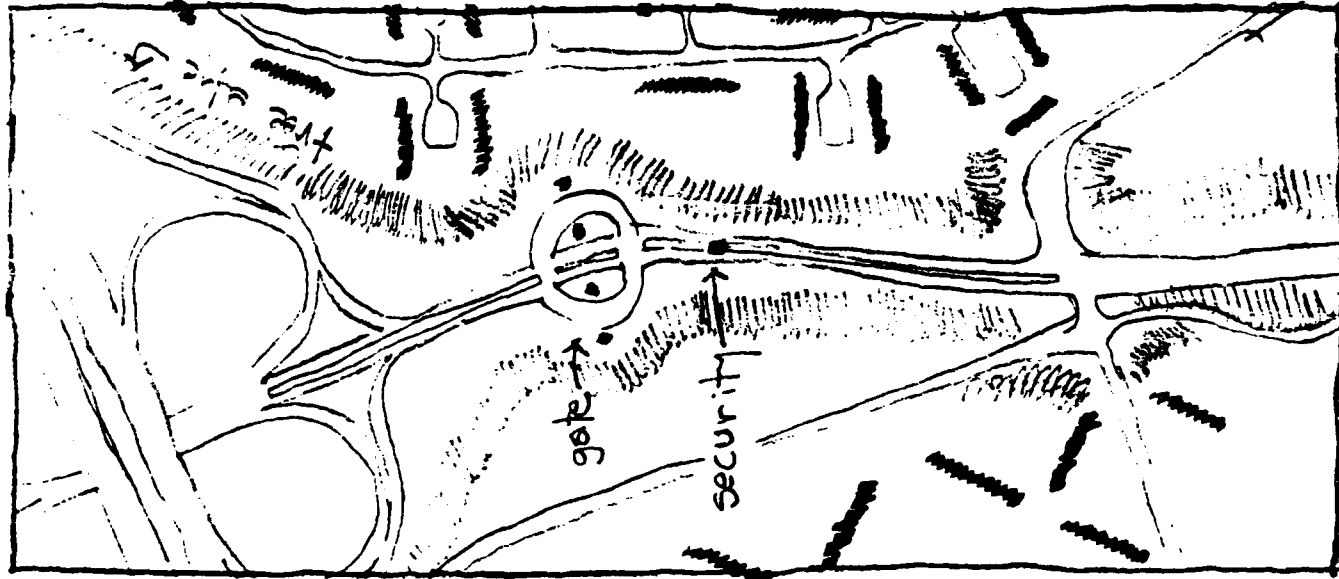
The main post entry is the most visible and well-used element on the fort, much like a front door. This is where the scheme of formal planting, signage and lighting combined with symbolic elements of the gate can most effectively enhance the fort's image. The main gate should communicate a sense of entry by emphasizing the transition from outside the fort to inside. This can be accomplished by ordering the elements of the entry gate into a sequence. This sequence can be thought of as a path and should have a beginning and an end, with a formal and dignified appearance.

The main entry, as it exists today, has an informal character. Automobiles and trucks travel quickly by the insignificant guard post and can only get a glimpse of the old gate on the right. Once past these symbols of entry the road itself is informal, simply a strip of asphalt with no pattern or edge definition. The gas station on one side further detracts from a desirable first impression.

To make the main gate project a military presence and create a sense of entry, the following guidelines should be followed.



AERIAL VIEW OF PROPOSED FORT MAIN
GATE



MAIN GATE PLAN

Layout Guidelines

Arrange the entry elements to form a strong first impression and which will function smoothly, presenting a formal military character.

Balance the old gate with a vertical element on the left. This vertical element should be an existing prominent military monument. The 91st Infantry Division monument could be relocated to this location at the fort's entry. The person entering the fort should see a gate made of some vertical elements within an enclosed space. Then they should be in an exemplary military environment that is formal, well trimmed, and polished.

Maintain the visitor information center, parking and a turnaround at the historic gate for those who want to stop, take a picture and leave. Repeat this arrangement on the opposite side of the entry boulevard.

Move the guardhouse behind these elements and make it a more substantial masonry structure. It should have a canopy that covers the entryway and landscaping that compliments its importance.

Circulation Design Guidelines

Make the entry road into a formal boulevard.

Develop a landscaped median between traffic lanes.

Move the intersections of 41st Division Drive with Hillside Drive and Quincy Avenue south to where Colorado intersects with 41st Division Drive. This rerouting will remove competing visual elements and will clarify the entry experience

Landscape Design Guidelines

Enclose the entry area and boulevard within a defined space.

Plant evergreen trees along the road edge to provide a strong outdoor space.

Plant evergreen trees at the entry from the freeway to focus views on the entry elements, the old gate, the vertical view element and the guardhouse.

Plant a single or double row of deciduous trees at even distances along the median starting behind the guardhouse and extending to the intersection with Pendleton boulevard.

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FORT LEWIS DESIGN THEME STUDY(U) WASHINGTON UNIV
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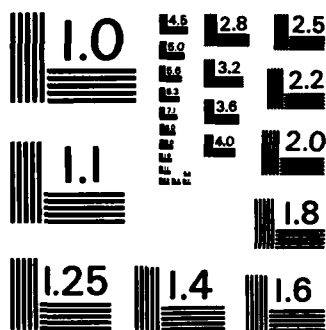
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APPENDIX

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SUMMARY OF BACKGROUND ANALYSIS (PHASE I)

military has grown, training has become more complex, and the use of technology in military operations has increased.

The growth and change in the military has been accompanied by a change in the planning of military bases. Rather than creating a military place distinct from civilian life, there has been a conscious effort to provide both civilian and military amenities.

The resulting "theme" or image has led to a loss of clarity that the Garrison Area once manifested.

EVOLUTION OF FORM AND CHARACTER

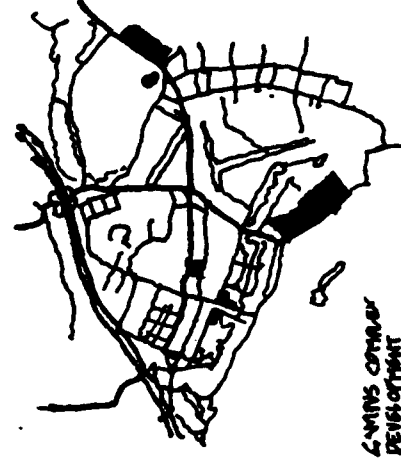
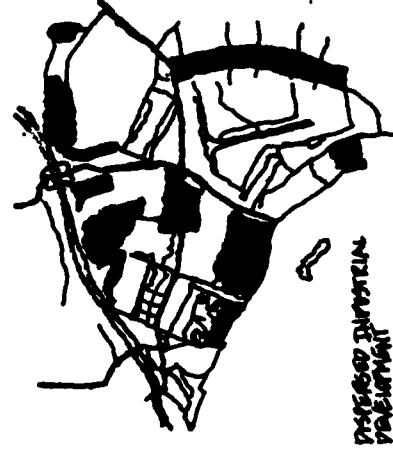
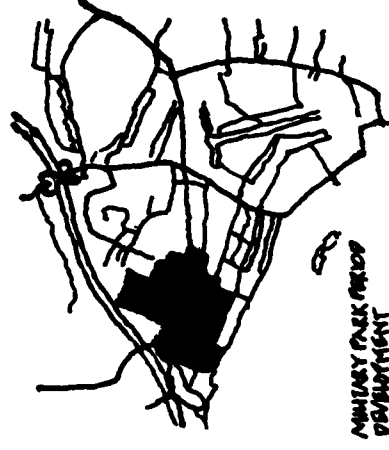
The Military Park Theme is based on the traditions and formal military image expressed in the fort's historic Garrison Area. The area serves as a model for the theme for several reasons. Most important of these is that the Garrison Area is already recognized by military personnel and visitors as the heart of the fort. This formal image, conveyed by the arrangement of buildings and landscaping, is considered to be an attractive and appropriate setting for military activity and display. Finally, the design of the Garrison Area expresses the shared values of discipline and order as effectively now as when it was built fifty years ago.

Since the planning and construction of the Garrison Area, a number of trends have affected the design of installations. The size of the

The Fort Lewis Design Theme Study, Preliminary Report, (January, 1984), described three distinct periods of development which are still evident at Fort Lewis. These are:

1. The fort as a Military Park;
2. The fort as a Dispersed Industrial Center;
3. The fort as a Campus Complex;

These three predominant patterns of development have resulted in a series of "character areas". This section describes the design qualities of each of the three character areas. A history of Army planning is included to show how Army procedures and changes in planning philosophy have affected the aesthetic qualities of the environment.



Period I The Fort as a Military Park

History and Planning

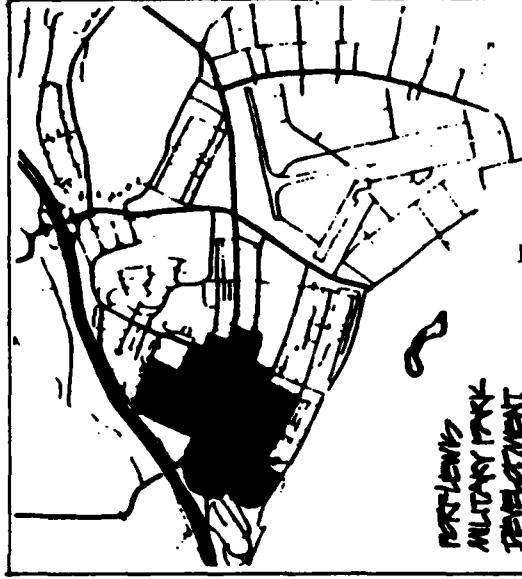
Fort Lewis began as a World War I Army Camp made up of a series of uniform wooden buildings used to train an emergency military force from 1917 to 1919. After World War I the U.S. Government decided to develop a well-trained standing army rather than relying on emergency measures and state troops for national defense. Beginning in the 1920's, the government funded a series of permanent army bases across the country. Camp Lewis was chosen as one of the permanent sites and was redesignated Fort Lewis in 1927. A major bill, the Federal Housing Program of 1926, was passed by Congress to develop the permanent forts. Money was appropriated for the construction of new facilities on all permanent posts.

The Army, concerned with its civic role and public image, employed two prominent landscape architects to guide the development of the permanent forts. Frederick Law Olmsted Jr. and George B. Ford

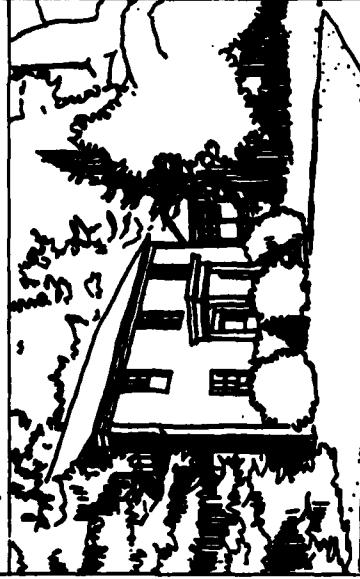
provided their services at a national level and thus had a great influence on how the new bases were developed. Olmsted and Ford were in charge of reviewing all architectural and landscape designs for the new forts. They established a method of design that enhanced the natural features of each site and specified architectural designs that were compatible with the climate, materials and traditional character of each region.

After the initial design criteria was established by Olmsted and Ford, there was little civilian influence on the design of installations. The Officer Army Corps contributed to the design of bases by using its influence and knowledge of army life in conjunction with the pre-established criteria. Requests for construction were made to Congress by commanders from each installation. Commanders used several arguments to justify expenditure of well-crafted buildings in a parklike setting could improve the image of the military to the public and that the use of a parklike setting was most effective in conveying the discipline and honor of military service.

The commanders were assisted by the fact that there were no set designs for military installations and that Congress relied on the Army to do its own financial administration and physical planning.



FORT LEWIS
MILITARY PARK
DEVELOPMENT



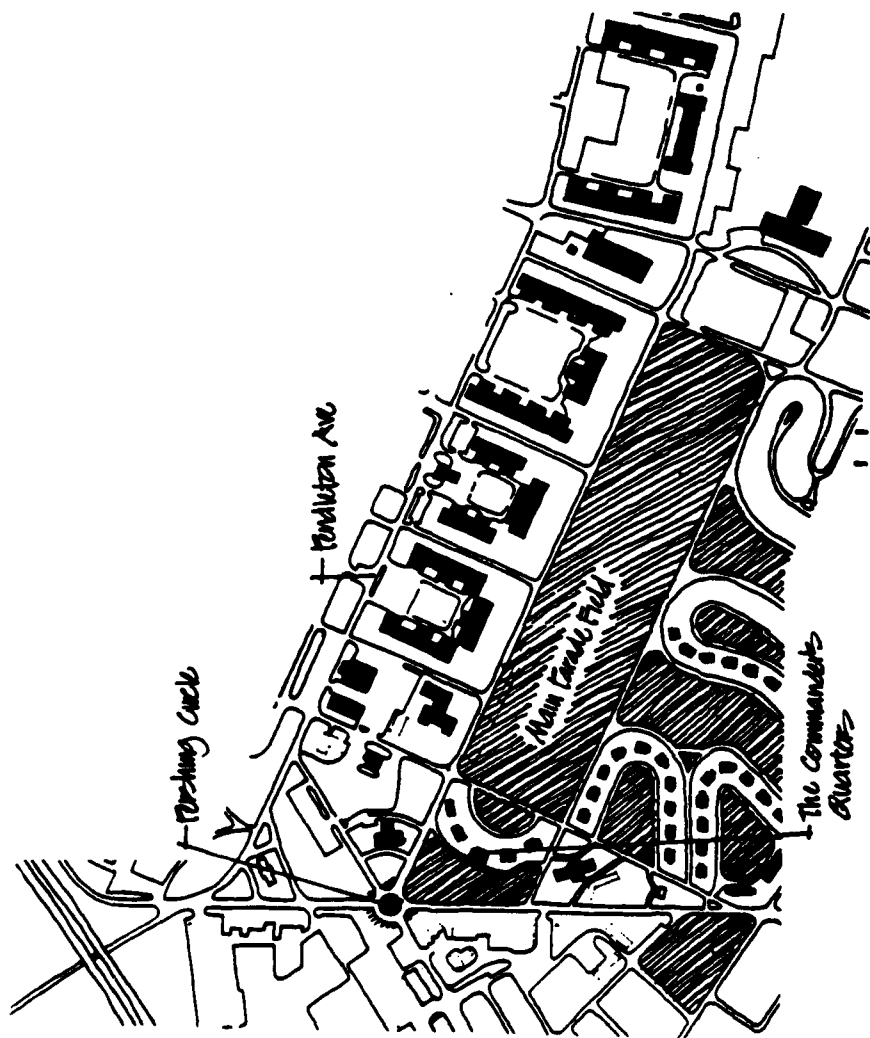
REGIONAL STYLES. F.L. OLMSTED, JR.

Urban Design Character: The Military Park Period at Fort Lewis

The major developments in the fort dating from 1927-1947 include the buildings and roads in the Garrison Area.

Design philosophy in the 1930's required that military bases be a reflection of their respective regions as well as an expression of the military values of discipline, order and regularity. These values stemmed from Army attitudes developed during the late 19th and early 20th centuries. From the Army's standpoint, American civilian life with its commercial and individualistic lifestyle was perceived to be unmilitary and inferior to the order and discipline of Army life. (See Swanberg, 1981; "Development of the Army Planning Process: A Case Study of Fort Lewis", p. 25-27)

As a result, it was decided that bases be separate and distinct from the civilian environment. The layout of the Garrison Area and the design of each of its component parts worked to create a parklike environment for Army personnel and reflect the location of the fort in the Pacific Northwest.



Layout

The layout or site plan of the Garrison Area implies unity through a single geometric composition. The building arrangement creates a sense of identity among groups of barracks, housing, and community buildings. A symbolic open space creates a common area for displays and recreation, but most importantly it serves as a symbolic center for the fort.

Barracks

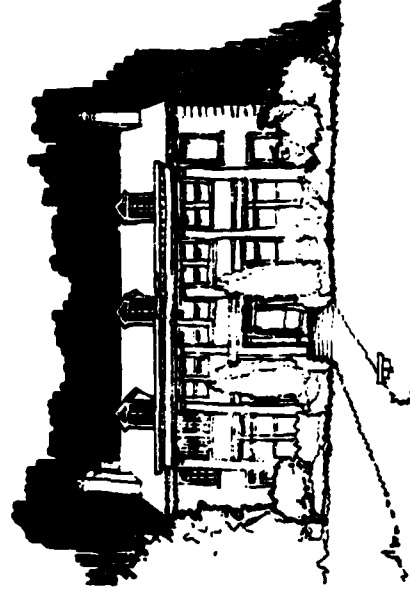
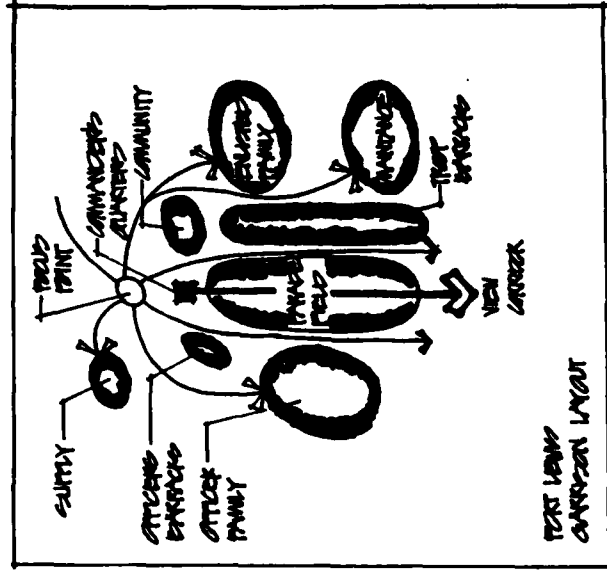
All barracks have formal and informal sides. Their formal sides face the parade field. The enclosure formed by building's informal sides provides a semipublic area for troop formation. Although constructed at different times, the barracks reflect a similar building style in their forms, materials, massing, color, details, and style. The arrangement and size of each barracks building corresponds roughly to the size of each training unit and contribute to unit identity.

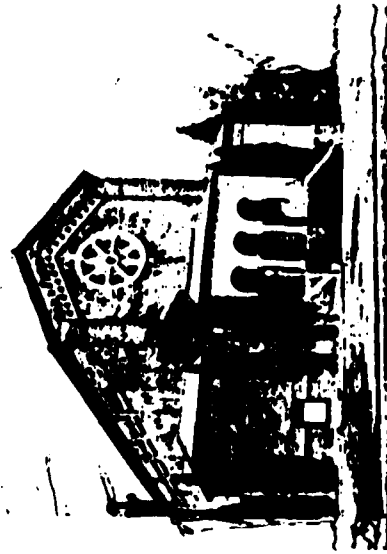
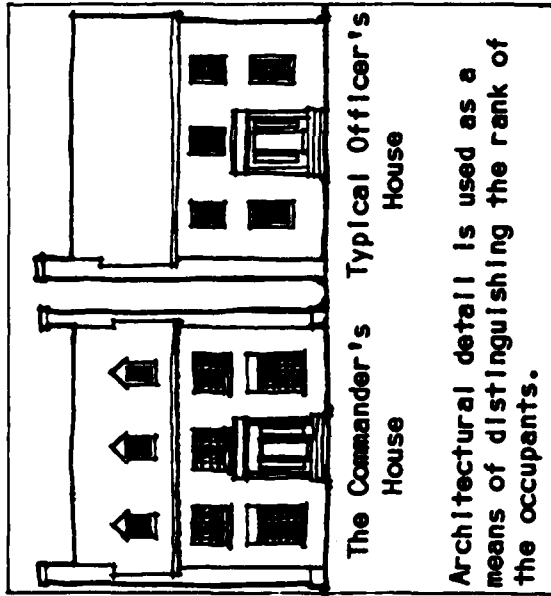
Officer Family Housing

The officers' housing area is adjacent to the parade field and provides a sense of separation and privacy for its residents. The parallel arrangement of barracks and officer's housing on opposite sides of the parade field symbolically states that officers and troops make equal contributions to the military purpose of the fort. Architectural detail and house size was used as a means of distinguishing the rank of officers' housing. The sinuous layout helped enhance a parklike setting and a formal, shared semiprivate yards between the streets.

Community Buildings

The location of the former community buildings between the officers' housing and the barracks area is considered to be common ground to officers and enlisted men. The chapel and the old headquarters building have special significance to the fort in both function and appearance. They are public buildings used by all the fort personnel and represent command from both religious leaders and military leaders.





Historic development of the troop complex

Period 2 The Fort as a Dispersed Industrial Center

History and Planning

Since the 1940's, the Army has viewed planning as a technical and centralized process. In 1947, the War Department was replaced by the Department of Defense (DOD). A master planning process was developed to prioritize the spending of the military budget and to coordinate the development of new Army facilities with the development of other branches of the military. For the first time in the Army's history, decisions on base design were made by civilian planners. Their job was to supervise the efficient expenditure of Army funds. To accomplish this, mission statements were issued to each base, stating the fort's contribution to the national defense. Funding for men and machines was budgeted for each installation, based on these mission statements.

Standard designs for new barracks were developed to utilize inexpensive materials and construction techniques. During the 1950's and 1960's family housing on military bases was constructed using federally funded housing programs.

As a result, the houses were uniform in size and detail and had a civilian look, different from past military housing prototypes.

The centralized master planning process presented the Army with several drawbacks when compared with the earlier method of planning. Without the Officer Corps's involvement in the planning process, the Army's ideals were no longer represented. Instead, each branch of the military was treated in the same fashion, with little regard for its respective identity.

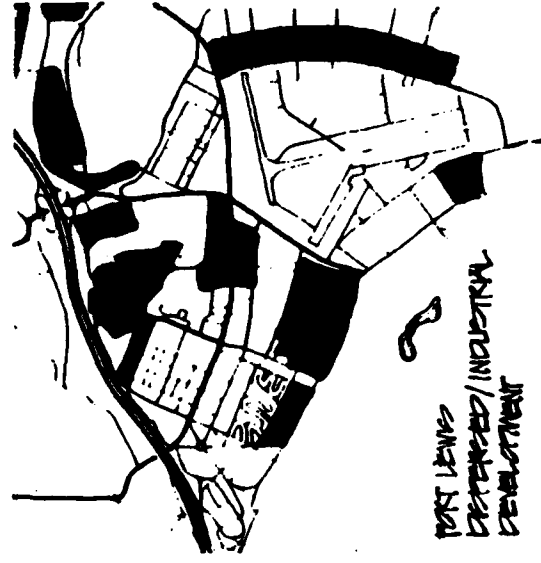
The new developments tended to be incompatible with past developments that had established a strong image at each base. Development was often monotonous, with little emphasis on landscape or layout as design considerations. The planning of facilities was influenced for the most part by federal engineers. They had little exposure to Army life or ideals and did not encourage the development of unique character or architectural style to clarify or enhance the environment of Army installations.

Urban Design: The Dispersed Industrial Period

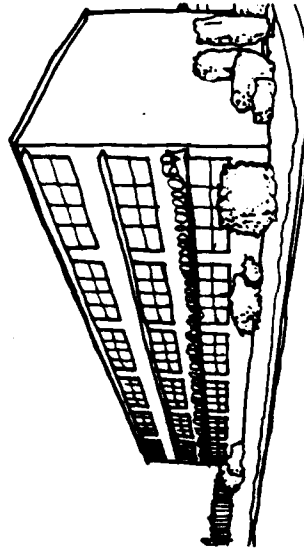
Between 1940 and 1973 Fort Lewis expanded greatly. The major developments during this era included two barracks areas and a series of family housing areas.



Buildings in the troop housing areas built during the industrial period (1950's) tend to look alike regardless of their respective functions as headquarters, barracks, or troop community buildings.

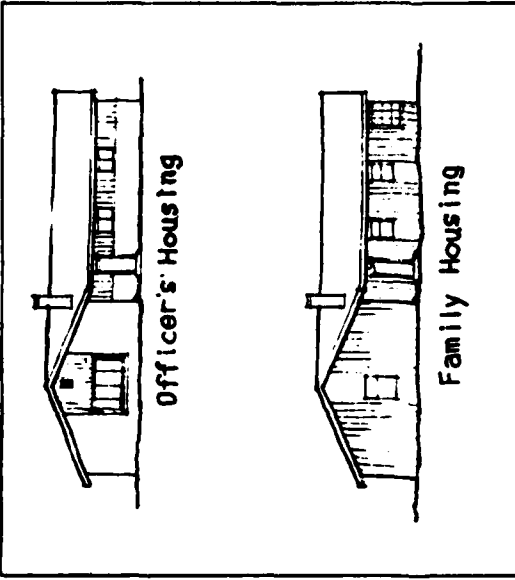


FORT LEWIS
DISPERSED INDUSTRIAL
DEVELOPMENT



The design philosophy during this era is still much in evidence today. In contrast to the military park period, connections to the site and region became less important.

Layout

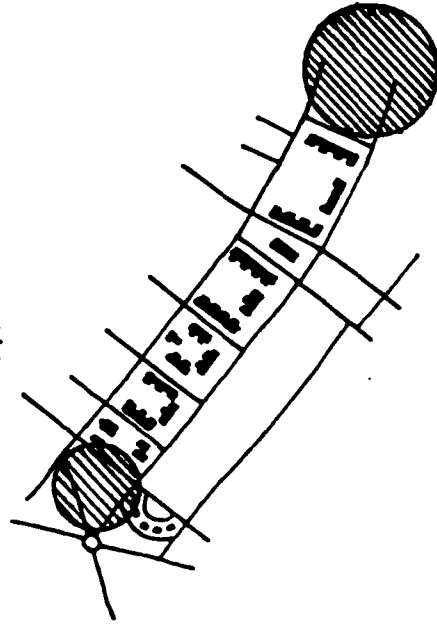


New troop areas were located on undeveloped sites within the fort. They differed from one another in building character and were separate from the main post.

Housing areas for military families were at opposite ends of the fort from the troop housing and work areas. Open space was used as a void or buffer between new developments so that each could be handled administratively as a separate project.

Barracks

OLD COMMUNITY CENTER



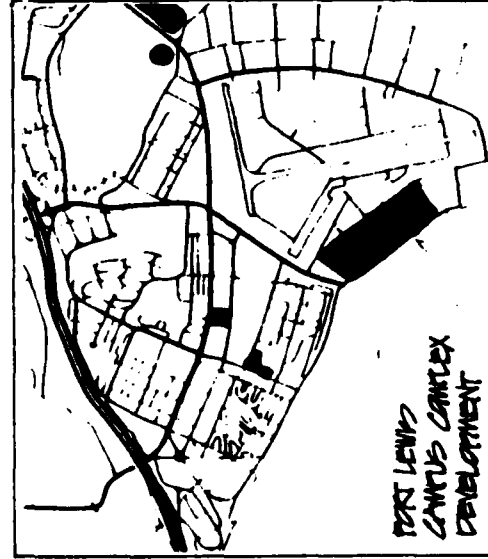
NEW COMMUNITY CENTER

Officer/Family Housing

Standard civilian design and suburban-type layouts were used in the family housing areas. There was little distinction made between rank through the size or detailing of houses. Natural vegetation was removed and replaced by smaller scaled plantings. Less expensive wood construction was substituted for the more permanent brick construction used earlier.

Community Buildings

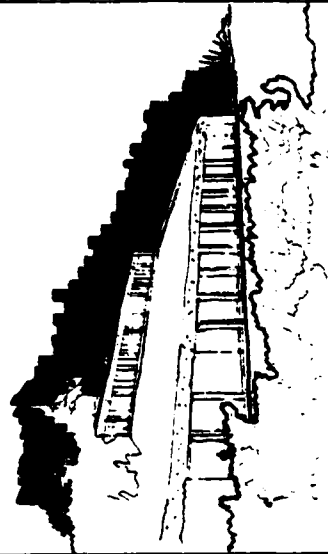
The main community facility area shifted from its location on the east end of the parade field to a site east of the present post headquarters. It was expanded in size and redesigned to copy civilian strip developments. Also, new recreational facilities were added, making the community facility a major center of activity for the personnel on the fort.



FORT LEWIS
CAMPUS DEVELOPMENT



The newest troop housing uses a modular design.



The new main branch of the library in brick.

Period 3 The Fort as a Campus Complex

Most recent fort developments have reflected a concern for maintaining a pleasant environment, resulting in the adoption of a corporate campus image. This planning philosophy is currently popular in the design of civilian corporate headquarters and college campuses.

New developments exemplifying the corporate campus design character include Barracks Area #8, the main library and the officer's club near the Garrison.

Layout

The placement of the library and officers club on sites so as to infill within existing developed areas shows a new attitude on the part of fort planners in their use of open space. In addition, parking around the officer's club is screened from view by the use of berms, indicating a new awareness in design for the view of buildings as seen across an open space and from the road.

Barracks

Unlike earlier industrial barracks, new buildings are asymmetrical and arranged in a cluster. The design of the buildings is modular and de-emphasizes the relationship between the building and the military unit. Open spaces between the buildings create pathways and places for informal gatherings.

Officer/Family Housing

No new family housing areas have been constructed during this latest planning stage.

Community Buildings

The officers club and new library were built with brick to make evident a visual relationship with the Garrison Area. But, in the new barracks' designs, building layout and style were not used to communicate the civic nature of these structures.

Problem and Opportunities for Design

Master Planning and Urban Design: A New Concern

Recently, the Army has recognized that the use of standard plans and a centralized process can detract from the visual attractiveness and livability of Army bases. For example, there has been an effort to preserve the existing cultural resources of Fort Lewis, including the buildings and landscaping in the Garrison Area.

In addition to the current preservation attitude there has been an effort to be more sensitive to the needs of Army personnel and to create a more attractive image for visitors. This concern is stated in a recent publication provided by the DOD:

"Military installations should provide efficient and pleasant physical environments conducive to attracting and retaining skilled and motivated personnel. A military installation conveys an image in terms of its design character and organization that can either be clear, logical, and attractive or cluttered, unfused and disoriented. The design, location and maintenance of individual elements such as buildings, roads, parking lots, signing, and planting affect the

quality of the visual environment. Each of these elements should be functional, attractive, and harmonious with its surroundings to create an environment that enhances the capability of installations to support their missions and foster pride in and commitment to military service." (Installation Design Manual, p. 2)

From an urban design standpoint, each of the three character areas of the fort has an individual identity, with little relationship to an overall design concept. As a result, while some places on the fort have strong identities, the total image is unclear and uncoordinated.

Some conditions hamper the fort's ability to achieve overall design unity. Military functions are becoming increasingly complex and require a wide range of building types and spaces. Maintaining an aesthetic consistency among these ranges is difficult to coordinate.

Planning at the fort is not an autonomous activity. Many decisions affecting the fort's visual form and character are made at the national level. The design objective for creating a military character which was important to the Army in the

past is not evident at present. This deviation from a design ethic was in part a conscious choice to attain a diversity in the fort's environment, causing it to be more similar to the civilian world. More importantly, however, the lack of unity springs from sporadic and uncoordinated growth over time.

There are a number of opportunities and assets on the fort that can be used to achieve a theme.

1. To begin, history need not be thought of in only "old age" terms. The fact that the visual face of the fort presents several identifiable characteristics provides a possible basis for reinforcing the fort's design identity. Finding ways to link areas together so that there is a more obvious sense of relationship between them can lead to a fort-wide theme.

2. New developments may use the design principles of the Garrison, thoughtfully reconsidered to fit today's needs, to repeat a well-known pattern of layout and use.

3. There are a number of monuments and other elements scattered throughout the fort that, if preserved and emphasized, would help reinforce the fort's image.

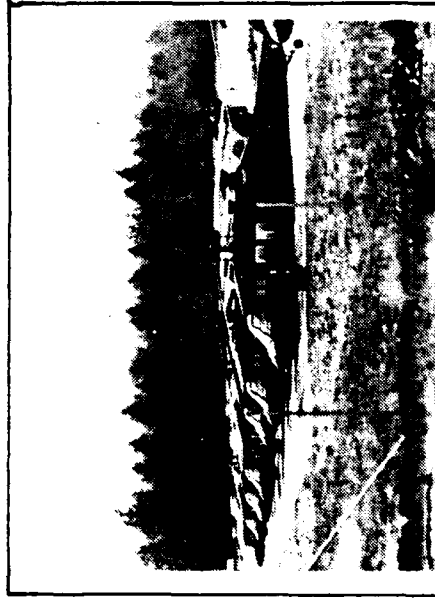
4. Of primary importance is the fort's past tradition in design firmly established in the Garrison Area. A policy of preservation and appropriate re-use will maintain the Garrison as the focal point of the fort.

FORT MISSION

The primary mission of Fort Lewis is to develop and maintain combat readiness of military units assigned to the fort, in keeping with a long tradition of training troops. To achieve this mission, an efficient and formal organization exists, with the command at the top of a hierarchical system and direct lines of communication pyramiding down to lower levels of command.

The assignment of I-Corps Headquarters establish a sense of prominence for Fort Lewis among other military installations. the I-Corps and the 9th Infantry Division Headquarters provide the opportunity for the fort to display its formal and ceremonial traditions in receptions for visiting commanders and government officials. This display of formal military traditions is also done on a daily basis at the unit level to develop a sense of self-esteem and solidarity among the combat units assigned to the fort.

Recent expansion of the fort's mission as a training facility has created a new surge of physical development. Combat troops routinely use the fort's physical terrain for military exercises which must closely approximate actual combat conditions. New troop facilities, a hospital, and expansion of the Community Facilities are planned to meet the future needs of the assigned mission.



This row of Army helicopters communicates the mission of the Fort as a training facility for combat-ready troops.

Problem and Opportunities for Design

The fort's mission provides a strong incentive to establish a formal military theme. Its structure, organization and function set it apart from other military installations which perform fewer combat-oriented missions. This enables the fort to display its prominence as a disciplined and properly-ordered military installation. The fact that it is the home of I-Corps Headquarters and the 9th Infantry Division can be used to establish the fort's special character.

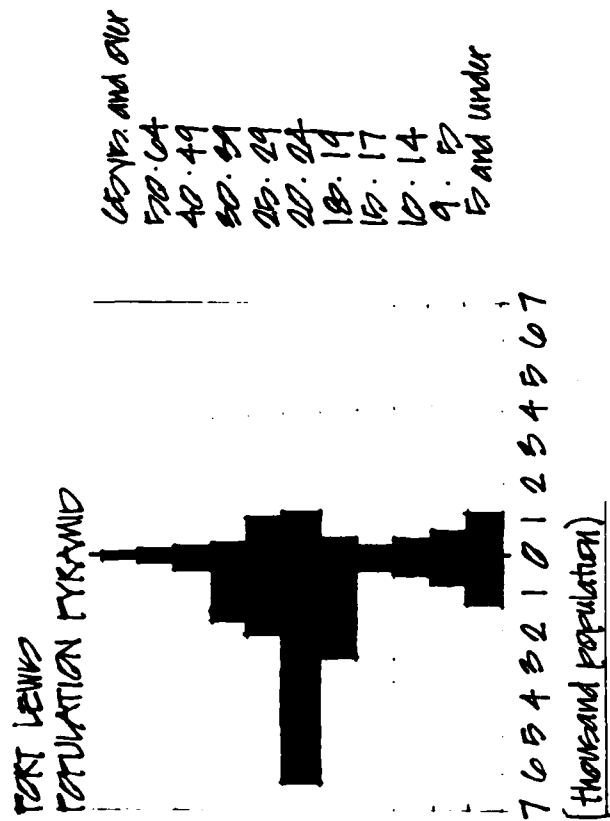
The major problem created by this expansion of its mission as a military training facility is that the fort's physical size has not increased. The increase in activities will take place within the existing physical setting of the fort. The procedures for locating new sites of proposed facilities which are necessary to meet the requirements of an expanding mission should be sensitive to this limit. The fort's physical resources are an important asset in the training of combat troops. These resources are limited, however, and should be managed by the fort and the Army in a manner which will allow for continued growth, without diminishing the fort's quality of life.

CULTURE

Fort Lewis is more than just a military training installation. It is a vibrant community with it's own culture and identity. This culture has developed over time and is reflected in the socio-economic characteristics of the existing fort. Consequently, the military mission has defined the population and social setting of Fort Lewis.

Population characteristics indicate that the fort has a lower median age than the surrounding communities. The majority of the fort's population is young (19-24 years of age). This group of people primarily represents the enlisted personnel who have just joined the military. A high percentage of this group are single males.

The racial composition at the fort has a higher level of minorities than in the surrounding communities. In the 1970 census, racial minorities at the fort comprised approximately 16 percent of the population. By 1980 this had increased to 37 percent. In comparison, the percentage of racial minorities in Pierce County in 1970 and 1980 was about half that of the fort.



FORT LEWIS - MEDIAN AGE COMPARED TO THE STATE AND TWO NEIGHBORING COUNTIES

	Ft. Lewis	Washington	Pierce	Thurston
MALE	21.2	29.0	26.9	28.8
FEMALE	21.3	30.6	29.4	30.3

1980 CENSUS INFORMATION

These facts indicate that the fort must make provisions for a more personnel with a wider background and who have needs which social structures within the surrounding communities cannot accommodate.

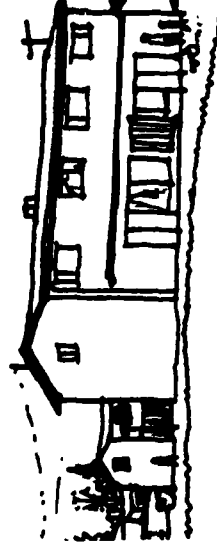
The fort also represents a chosen way of life which is unlike that found in civilian communities. The military has always been a separate society with its own traditions and values. The recent movement from conscription toward an all volunteer force increases the feeling of soldiers being part of a defined social group. To many young enlisted personnel who comprise the majority of the population, the fort and military represent their first exposure to the world. The military provides them with their first job and training outside their family situation. The military and its team concept gives the young person a sense of belonging and of feeling a part of a group or culture.

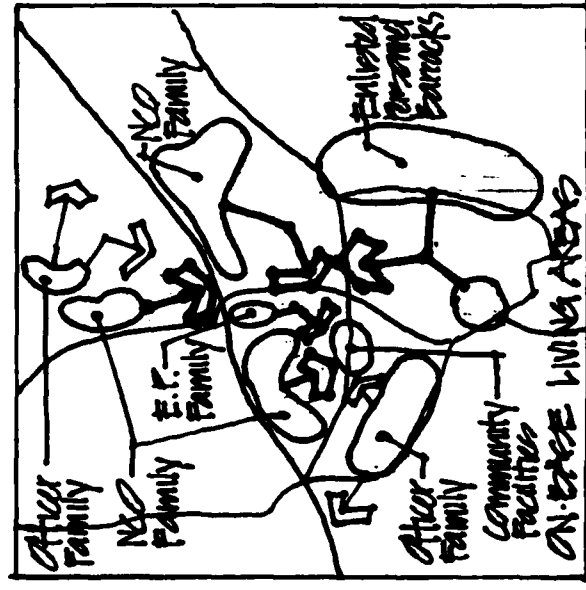
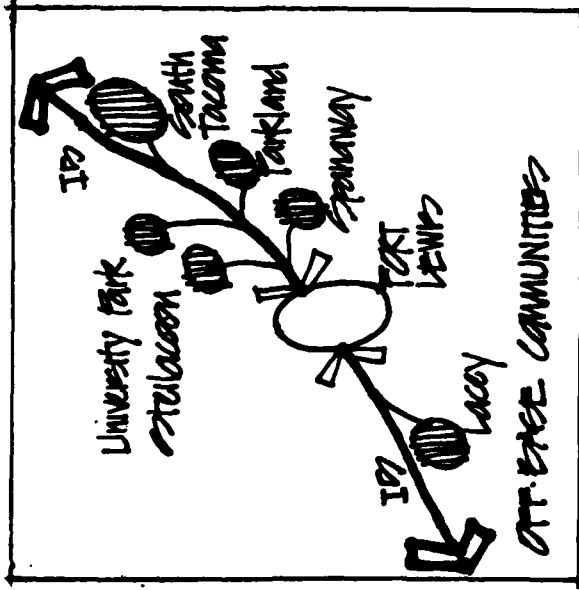
The Army endeavors to provide fair and equal treatment to all its personnel. This situation and tradition has produced a sense of loyalty and pride in the military for minorities, providing them with an opportunity and social setting not always readily available in the civilian world. Married military personnel are of increasing importance to the military establishment. This group represents to the military a stable, career-oriented persons. To

encourage the career soldier, the military has extended more social services to the family, and the family is becoming more and more a part of the military environment. However, the perceived social and cultural difference between a civilian life-style and the military is becoming greater. As the fort assumes more responsibility for their social needs, military families are less compelled to seek out social contact in the civilian community. The fort is moving towards a closed, self-contained community for all of the military personnel living on or off the fort.

The average soldier spends a relatively short time at the fort. For this reason the social cohesion of the environment must facilitate his assimilation into the social structure. This cohesion promotes a social network which establishes a code of conduct for this transient population. The faster individuals learn the social and cultural norms of the fort, the quicker they adjust. The fort can be a more comfortable environment for the individuals and their families than the civilian setting outside the fort. An attraction to the fort extends to the personnel and dependants who must live off-post. The civilian community is not as sensitive to the special needs of the military family. Living on post, the military family develops a strong sense of social solidarity with the military community where

FORT LEWIS RACIAL PERCENTAGE			
	FORT LEWIS	PERU	THURSTON
WHITE	62.8	87.7	94.4
BLACK	23.8	6.1	2.7
SPANISH ORIGIN	9.1	2.7	2.1
1980 CENSUS INFORMATION			





mutual assistance is available to its members.

Problem and Opportunities for Design

A unique problem the fort faces is that there are so few long term residents at the Fort. It is the military institution, not a physical location, which establishes the values and traditions for the personnel assigned to Fort Lewis. Because of this, the physical environment must reinforce social values of the institution for the everchanging residents. To accomplish this the fort should address the following issues:

1. Develop, through the theme, a sense of social cohesion to assist the transient population in adjusting to military life.
2. Recognize the importance of including the family in the social structure of the fort.
3. Accommodate needs of the off-base population in terms of community facilities and family support programs.
4. Design troop housing areas which allow individuals to identify with the fort's mission as well as develop unit identity within their military units.

PHYSICAL SETTING: LAND USE

Administrative Areas include the Post and I-Corps Headquarters, finance, judicial and supporting administrative offices on the fort. These are work places that requires the majority of its workers to commute to the site.

Troop Housing Areas provide living quarters, dining, administrative, supply, shopping and recreational facilities for enlisted personnel. These complexes are grouped in developments dispersed around the fort. Officers who are assigned to the different units must travel to work in this area. Enlisted personnel living on or off-base in family housing areas must commute to their work assignments.

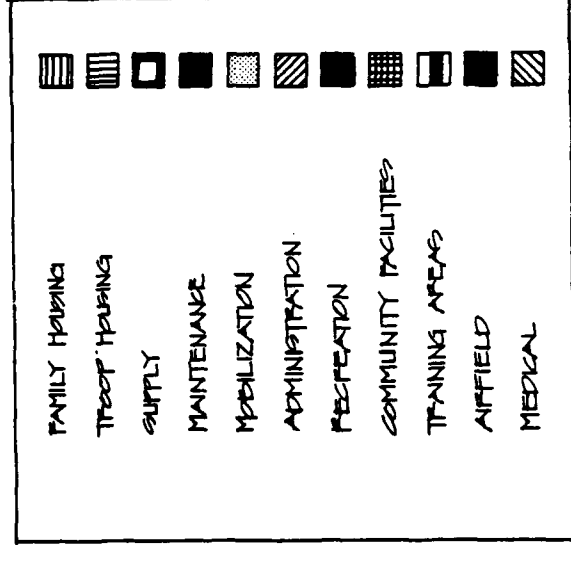
Fort Lewis functions as a self-contained town for the personnel who live and work there. The physical components which provide form and dimension to the environment are created by the land uses, the circulation system, and the natural features of the fort. Land uses include man-made elements and activities and their locational conditions on the fort. The natural features constitute the physical environment in which these activities happen. The circulation system of the fort physically connects the land uses and provides a link to the regional centers of the Pacific Northwest.

Maintenance Areas are generally located close to troop housing areas and are the primary workplaces for military personnel. Heavy pedestrian traffic is created by locating maintenance areas close to troop housing areas. There are some maintenance facilities dispersed on the fort which require workers to drive to the area.

Supply Areas are found at two major locations, the northeast and southwest ends of the fort. The fort needs large areas for receiving and storing supplies. These areas are accessible from I-5 and by railroad, and are located in convenient stopping places for vehicles and men in the training areas.

Community Facilities are concentrated on the fort, east of the Garrison Area. Facilities include the Post Commissary, Post Exchange, the main library, theatre, restaurants and shops. The facilities are areas of focus for on and off-post residents. It is the primary social mixing place on the fort.

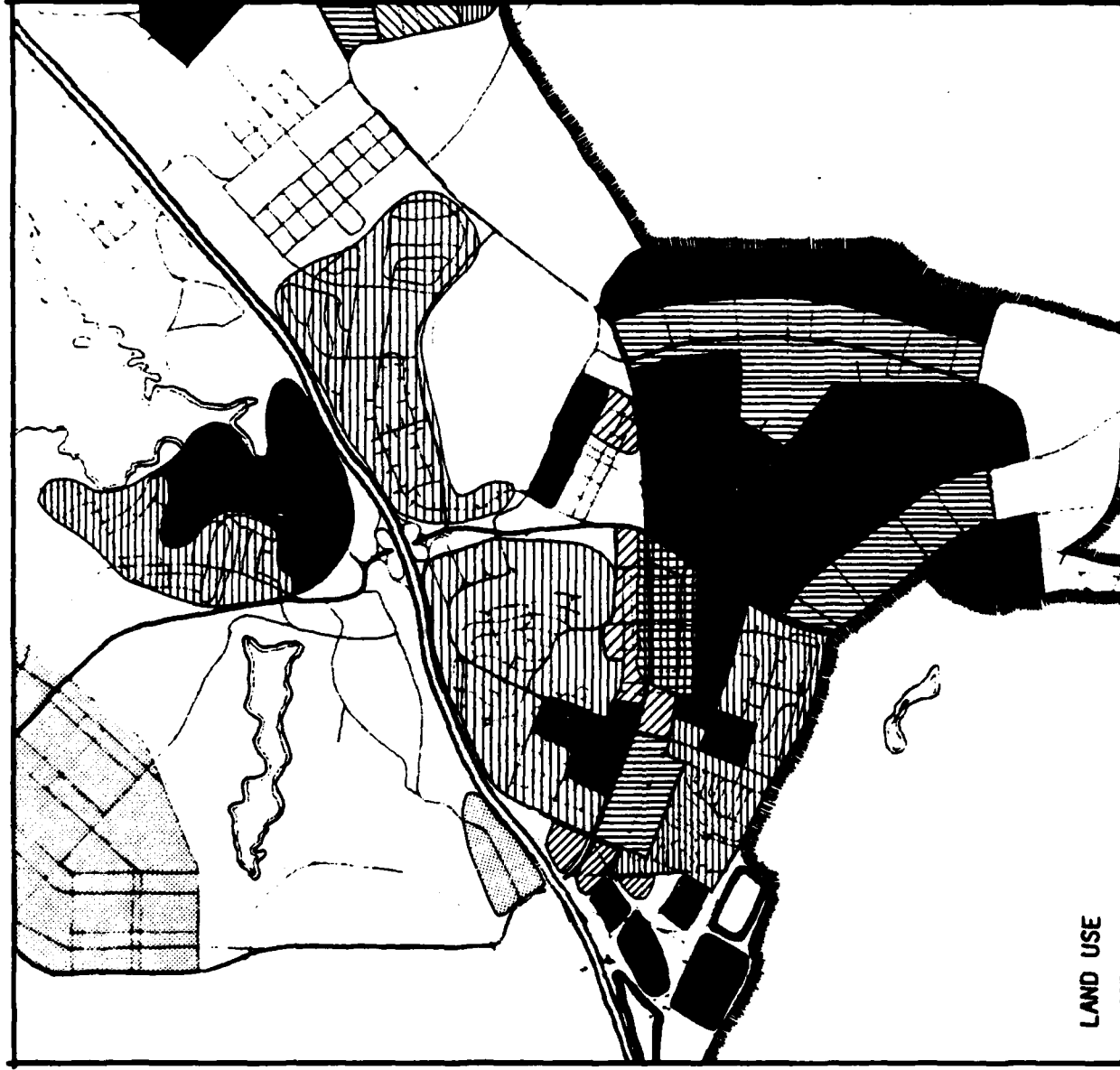
Family Housing Areas are clustered by military rank in isolated locations around the fort. The housing units are grouped into single-family units, attached single-family units, and multi-family units. Each family housing area can be identified by its characteristic building type and layout.

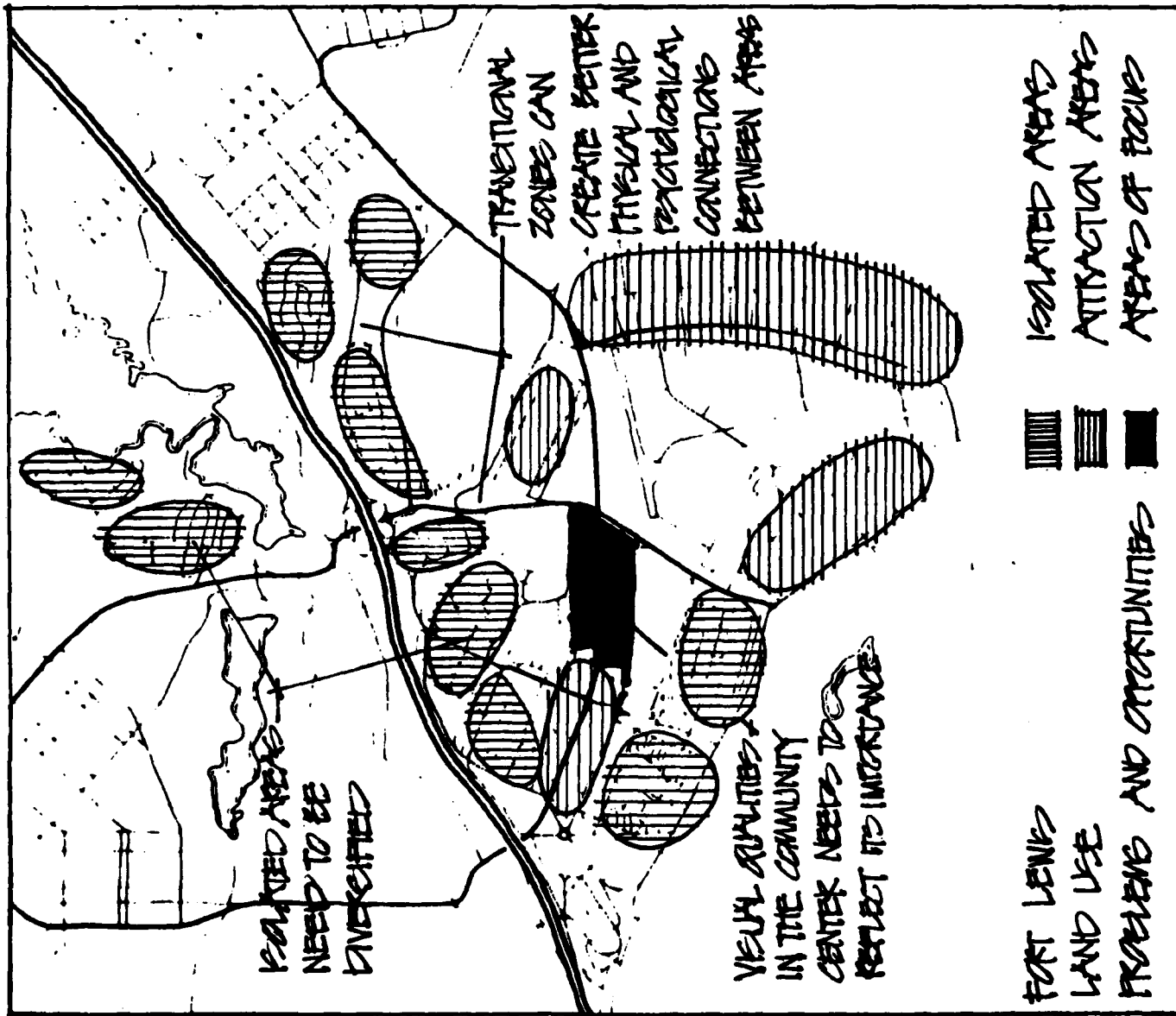


Recreational Areas are located throughout the fort. The major recreation area is located south of the Community Facility, providing a buffer between the Community Facility and the Clarkdale family housing area. Each troop housing area has its own recreation space with both indoor and outdoor facilities. Playgrounds are provided near family housing areas and schools.

Grey Army Field is the main military airfield for the installation. It is located at the center of the fort and includes a runway and heliports.

With the exception of the troop housing areas, the other seven areas are single function places. The troop housing areas are isolated complexes which are self-contained communities. They provide living quarters, dining, shopping and recreation facilities. The other areas - family housing, administration, community facilities, maintenance, supply and recreational facilities and the airfield - are homogeneous in character and purpose. They are separated by open spaces.





Problem and Opportunities for Design

Problems and opportunities for design are present in each of the four types of areas on the fort. In general, the problems are the result of a system of planning and decision-making that is driven by the need for efficient organization of complex military operations. Opportunities for design within this system lie in the equally significant need to achieve a better fit between the use of the fort and its visual qualities.

Residential neighborhoods are isolated and detached from the other areas of the fort and are relatively sterile within. The uniformity within each area creates visual monotony, makes finding one's way difficult, and does not allow residents to identify with a unique place in their neighborhood. In building a theme for the fort, therefore, it is important to try to link these isolated areas to the main part of the fort, while introducing diversity and individuality to each neighborhood.

The attraction areas or primary workplaces on the fort should function well internally and exhibit their roles as they relate to the rest of the base. This is problematic in some cases where these areas serve a dual purpose: (1) they are living areas for enlisted men; and (2) they are primary work areas for both on and off-base personnel. In most of the barracks areas it is difficult to distinguish living areas from work areas. Important buildings for social uses, administration, and command headquarters all tend to look alike. Although it is difficult to provide an environment ideal for both work and living, attention to the use of space for a variety of purposes is needed to improve the functioning of these spaces.

The Community Facility serves more people and provides more services than any other area on the fort. This facility is regarded as a center because of its use. However, the visual qualities and difficult circulation problems weaken it in this role.

Cars and large parking lots dominate; and pedestrian movement is constricted with few walking amenities. Present pedestrian sidewalks and crossings compete unsuccessfully with auto circulation

routes. The spacing and size of buildings is irregular and make the area difficult to understand and use.

As new projects are built in the Community Facility there will be an opportunity to improve the circulation and placement of buildings. With care, the importance of the facility can be expressed in its appearance.

In the isolated areas diversity should be introduced. In activity areas and the Community Facility, the environment should delineate territory for a variety of functions and communicate the relative importance of each area to the fort as a whole. In the transition areas, the circulation routes and infill development should provide a unifying link to strengthen the fort's identity.



The Community Facility

PHYSICAL SETTING: NATURAL FEATURES

The natural features of the fort are used for several different purposes. Originally, the natural features were used to provide the fort with dramatic views and a spectacular

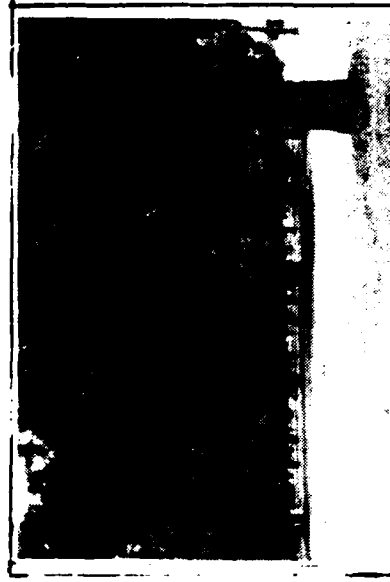
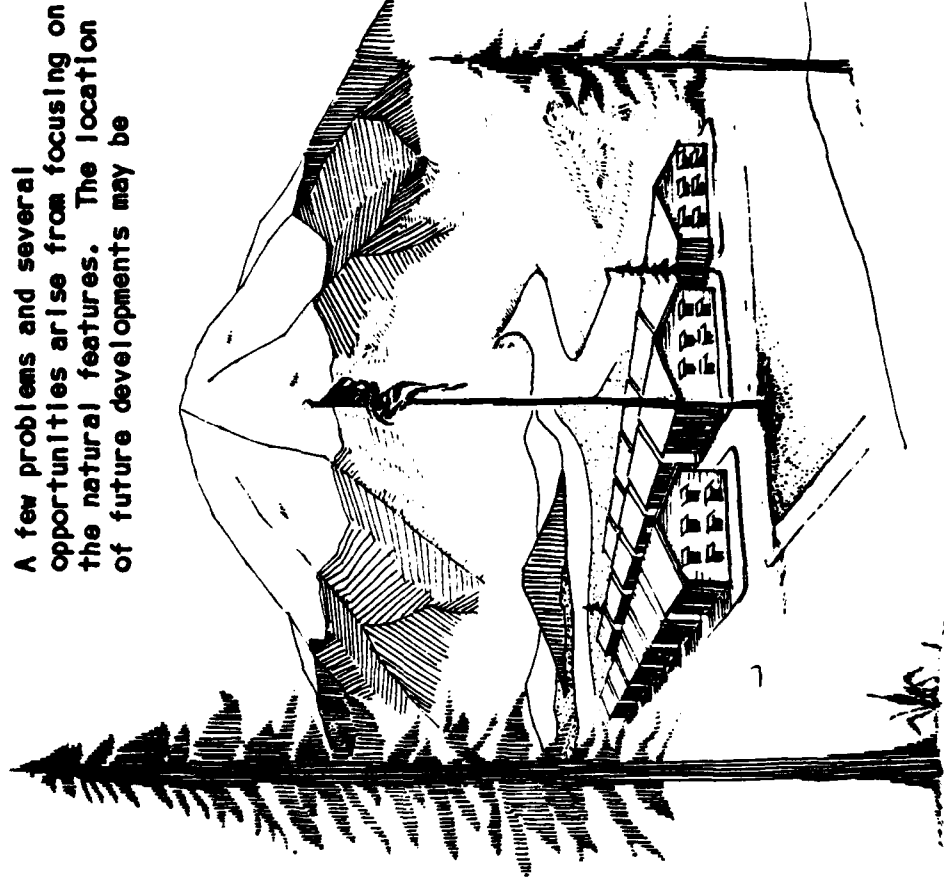
setting within a forested area. As the fort expanded, forest areas were removed and open spaces were left to separate and buffer new developments from the existing built areas. A distinct pattern has left the fort with its current checkerboard development pattern.

Problem and Opportunities for Design

A few problems and several opportunities arise from focusing on the natural features. The location of future developments may be

limited by marshes, hills, and needed training reas. This may be a blessing in that it will force the fort to fill in between existing development.

The natural features and vegetation, such as forests and grasslands, identify the fort as part of the Pacific Northwest and distinguish it from installations in other areas of the country. In addition, the natural areas of the fort have a potential for being linking elements between the built areas. Some of the natural areas tend to separate rather than connect the built areas. But it is possible to treat the natural areas in such a way to help link together built areas so that the fort is perceived as a whole rather than a place with many individual parts.



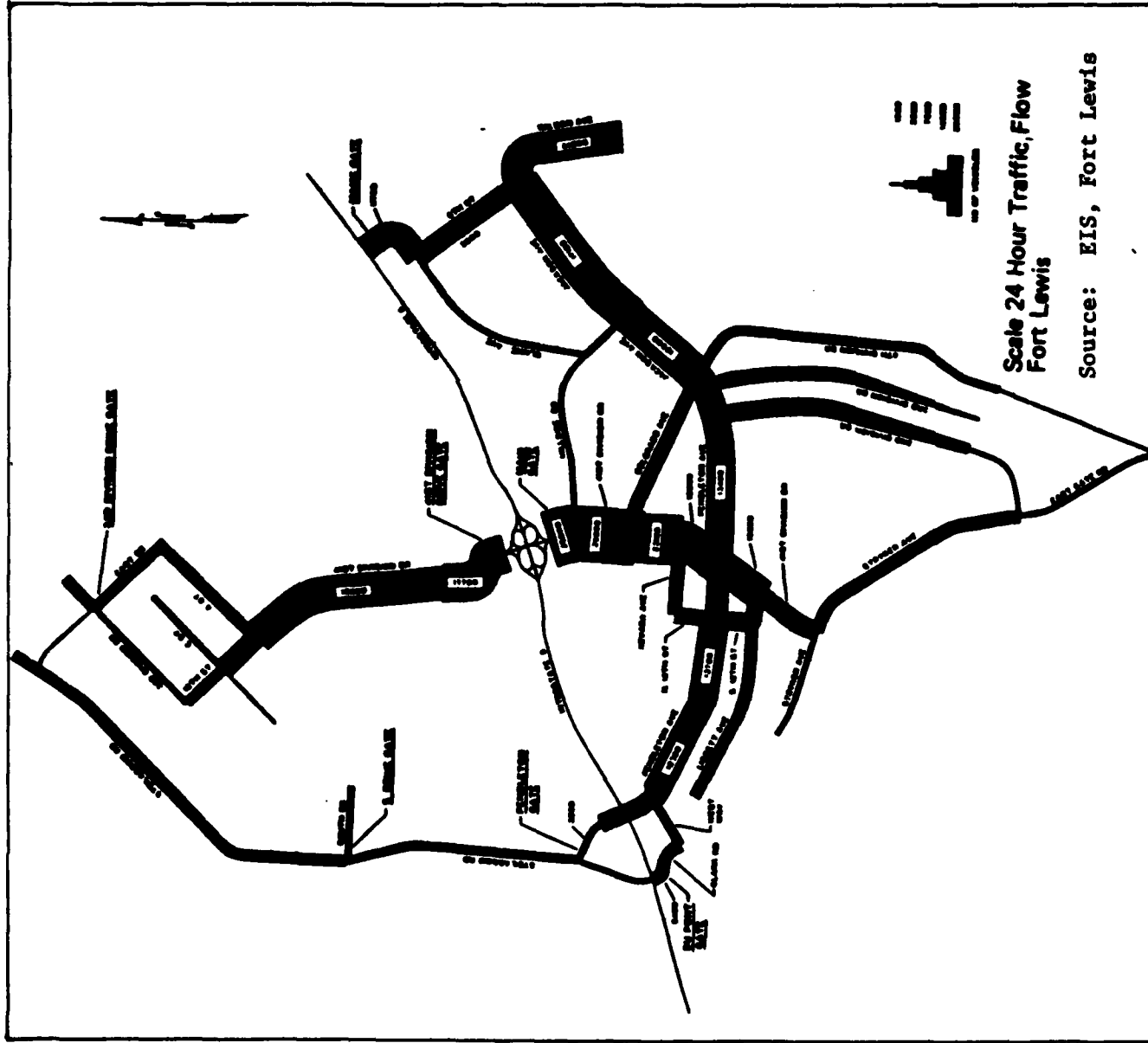
Natural features can be used to create a pleasant setting and regional image for the Fort.

**PHYSICAL SETTING:
CIRCULATION**

The Preliminary Report pointed out that there is an undue reliance on the auto for moving about on the fort. Traffic volume on Fort Lewis shows a heavy concentration on two main streets, 41st Division Drive (the north/south route) and Pendleton and Jackson Avenue (the east/west route). The majority of people who work and live at the fort develop their image of the base from the streets they travel on. The fort circulation system is made of four different types of streets:

The arterial streets are major traffic routes on the fort which provide direct routes to and from the work areas. These streets have heavy traffic volumes and high levels of noise.

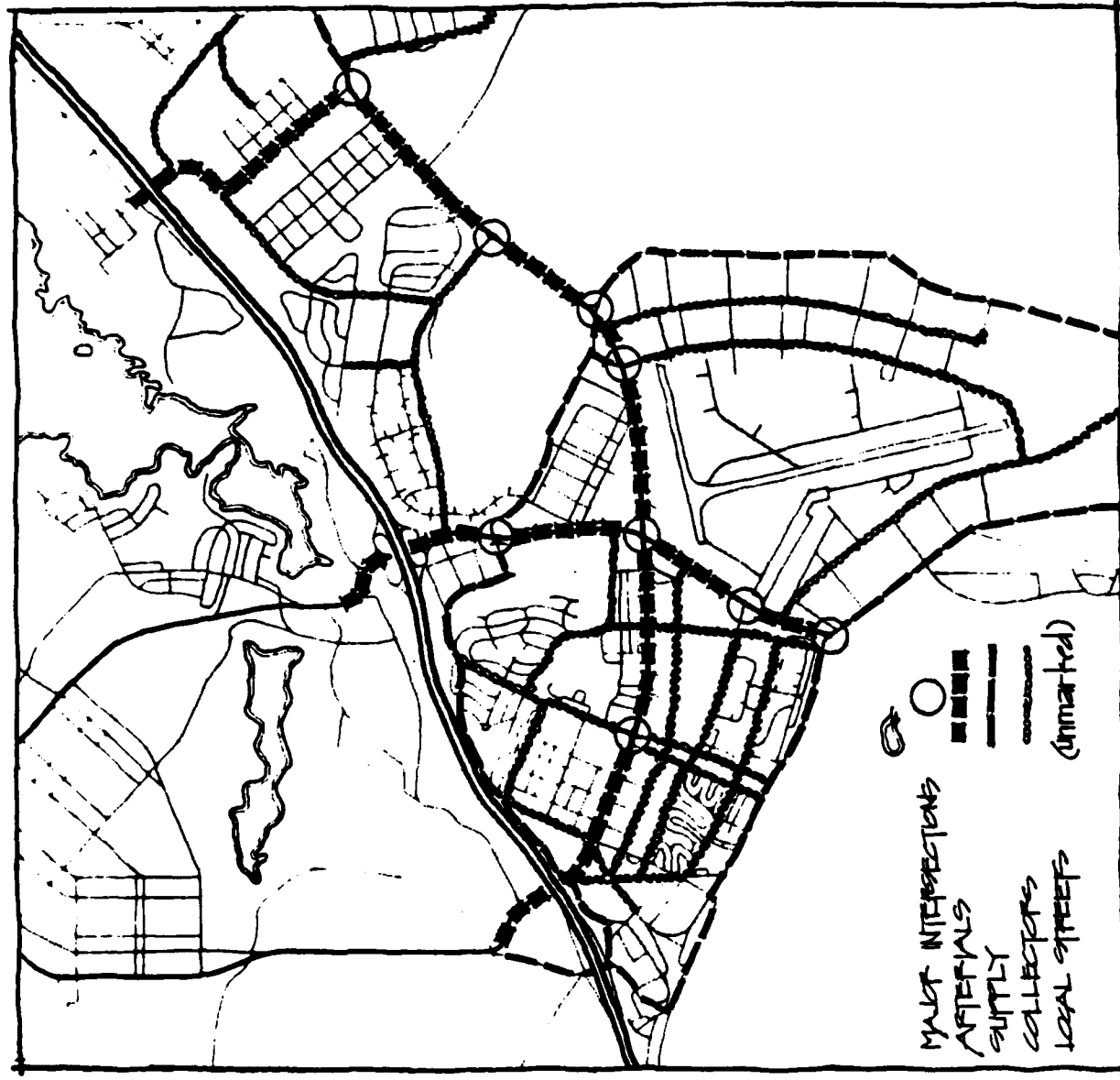
The tactical vehicle roads are used by the military to move tactical equipment from the troop areas to field training areas. The circulation routes for these vehicles are designed to be separate from the street system, but some overlap.



The collector streets provide connections to the arterials from the housing areas. They generally have high traffic volumes and high noise levels during peak periods of the day. The points where they join the arterials create the major intersections on the fort.

The local streets have slower and lighter traffic volumes. The streets are narrow and serve only a small area.

The circulation system on the fort creates a sequence of views and images as the viewer passes through the different built and unbuilt areas. Entries and intersections break up the sequence of events along the streets providing orienting clues to the traveller.



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