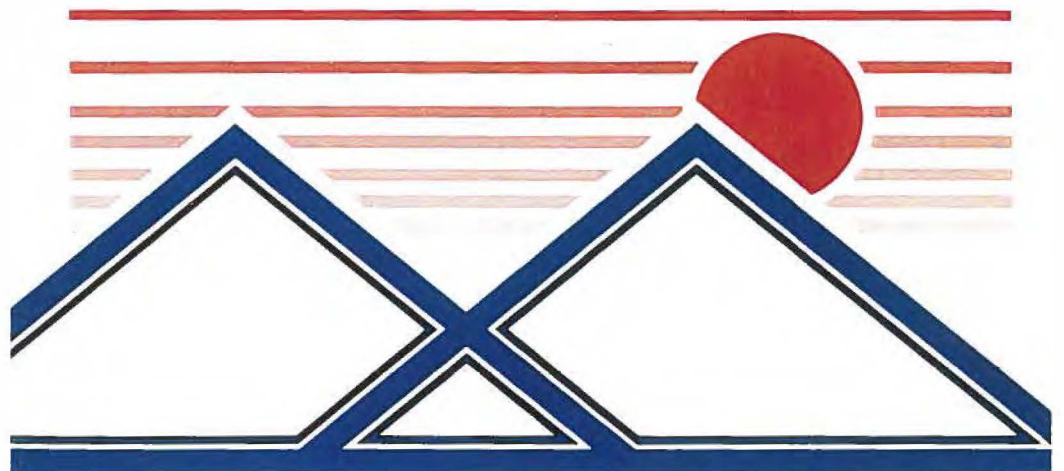


PIESTEWA PEAK PARKWAY

SPECIFIC PLAN



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SECRETARIAL

Lindy F. Grafton, Secretary II

**A RESOLUTION ADOPTING THE
PIESTEWA PEAK PARKWAY SPECIFIC
PLAN.**


WHEREAS, the Phoenix City Council adopted the General Plan for Phoenix 1985/2000 on October 2, 1985 which called for this parkway as a part of the circulation element of the plan; and WHEREAS, the Phoenix Planning Commission initiated the Piestewa Peak Parkway Specific Plan in September 1988 to address problems encountered by, and to maximize compatibility with, adjacent land uses with specific attention directed to adjacent neighborhoods; and

WHEREAS, considerable citizen participation has occurred, with their involvement at many community meetings, public forums and hearings, as well as personal interviews and questionnaire responses, placing emphasis on noise mitigation and preserving neighborhood quality; and

WHEREAS, the Specific Plan is responsive to community input with a format emphasizing a plan elements section and a mitigation section identifying what realistically can be achieved; and

WHEREAS, through action on June 20, 1990, the Phoenix City Council approved the Piestewa Peak Parkway Specific Plan defining actions to be taken to assure additional freeway compatibility with the adjacent area;

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF PHOENIX that the Piestewa Peak Specific Plan, which accompanies and is annexed to this Resolution, is hereby adopted. PASSED by the Council of the City of Phoenix this 03 day of October, 1990.


MAYOR

ATTEST


Acting City Clerk

APPROVED AS TO FORM:


Acting City Attorney

REVIEWED BY:


Acting City Manager

PIESTEWA PEAK PARKWAY SPECIFIC

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PIESTEWA PEAK PARKWAY SPECIFIC PLAN

EXECUTIVE SUMMARY

The Piestewa Peak Parkway Specific Plan was initiated by the Phoenix Planning Commission in September 1988. The plan corridor is approximately one-half mile in width, just over five miles in length, and includes the Piestewa Peak Freeway from Interstate 10 north to Glendale Avenue. The Plan does not contain specific restrictions on land use that differ from existing regulations. As such, and in accordance with the Phoenix City Code definition, this plan is deemed to be non-regulatory. It contains statements of goals, standards and policies as set forth by City Council action. The plan which was prepared by the Phoenix Planning Department has followed the required planning process including Planning Commission and City Council hearing procedure. The incorporated proposals are intended to make the freeway more compatible with the adjacent neighborhoods, while respecting the limitations of available resources and the objective of efficiently moving traffic through the Phoenix community.

The freeway corridor travels through an older portion of Phoenix where most of the urban development occurred between 1950 and 1965. The adjacent land use is approximately 70 percent residential, 20 percent office and commercial, the rest being public use including an elementary school, hospital, and canals. The designated study area has approximately 5,300 dwelling units and part of a regional core which profits from this new freeway access.

Citizen participation, a strong voice in shaping the recommendations identified in the plan, has been comprehensive in its scope. This comes, not from months, but years of community involvement. While a number of residents are not satisfied with the degree of freeway compatibility and plan recommendations, they have, however, shown understanding and respond with reasonableness. There is a desire to further mitigate the freeway impacts, yet there is recognition that there is a limit of what can be achieved. This understanding has allowed mass participation to be manageable, and if not monetarily or physically possible, at least mentally acceptable to most of those involved.

A survey, conducted last year, revealed that 50 to 75 percent of the residents have lived in their homes for over 10 years with some second and third generation residents also living within the neighborhoods. The residents indicate a desire to stay in the area because of its central location. The greatest concern has been property devaluation, increased traffic and keeping the homes well maintained. The residents also have expressed a desire for better screening of the freeway and a reduction of the vehicular noise.

While this Specific Plan follows a more comprehensive report format, including background and community input, the Plan Elements section and the Mitigation section make up the fundamental essence of the report and identify specific recommended action. Each section addresses the following:

- Land Use
- Safety
- Bicycling
- Neighborhood Stabilization and Improvement
- Circulation
- Noise
- Public Art

Specific actions identified within the plan are realistic, can be implemented, and will mitigate freeway impacts. The plan actions do not resolve all the issues identified. The freeway does not disappear like magic, and single-family land use is not being removed where adjacent to the freeway. On the other hand, the plan recommendations are responsive to the neighborhood problems the freeway authors. In synopsis the plan calls for the following:

- A few land use changes where traffic levels or environmental impacts are so great that the location is no longer viable for residential living.

- Circulation within the study area to be modified, ranging from street closures to function and flow restrictions, with intent to lessen the traffic impact on the local community.
- Techniques for stabilizing neighborhood deterioration with three neighborhoods identified for specific attention by the City of Phoenix Neighborhood Improvement and Housing Department.
- Improving neighborhood safety through specific actions to reduce crime, such as robbery, burglary and auto theft, have already been done. Instituting the "Block Watch" program, adding neighborhood lighting, greater patrol of identified areas and assuring safer pedestrian ways are response techniques.
- Traffic noise to be mitigated in many areas through substantial noise attenuation measures ranging from additional walls and barriers to reduction of truck traffic and neighborhood cut-through movements.
- Construction of bicycle and pedestrian paths to assure trail continuity, pedestrian crossings, and a commitment that local amenities are not to be interrupted by the freeway facility.
- Public art as an integral part of the aesthetic amenities for the study area. Art features, enhanced design and a cohesive visual image can build community pride.

Funding limitations are a fact, and were recognized when forming this plan. Of the \$18 million approved in the bond program, almost \$6 million has been identified for improvements along this five-mile long corridor area. In addition, some actions call for policy or current operational changes; costs for these actions are minimal and can be absorbed into the current city functioning process. Following is a summary of the cost distribution:

\$2.0 million	—	purchase of homes
\$2.2 million	—	transportation changes and improvements
\$0.8 million	—	neighborhood amenities, safety and public art
<u>\$0.9 million</u>	—	noise attenuation measures

\$5.9 million Total

Following Planning Commission review, this plan was heard by the City Council on June 20, 1990. The Council voted unanimously in support of the plan with only minor modifications. This enabled the Planning Department to begin administering the programs identified in the plan.

Timing for implementation of the Piestewa Peak Specific Plan will occur in stages. A majority of the transportation measures will be done in conjunction with freeway construction. The purchase of homes is subject to home owner agreement. This process will require hiring an appraiser as well as negotiating with the residents to reach an agreeable price. The noise walls, landscaping and public amenities are targeted for completion within two years of Plan adoption.

In conclusion, the people of Phoenix will be proven responsible when they committed to a bond program for mitigating freeway impacts on adjacent areas. The Piestewa Peak Parkway Specific Plan, the first of its kind, provides a policy-action document dedicated to improving the community.



INTRODUCTION

The Piestewa Peak Parkway Specific Plan was initiated to address problems encountered by neighborhoods adjacent to the freeway and to maximize the compatibility of the freeway with adjacent and nearby land uses. The plan will be a guide for the City Council and the community, encouraging neighborhood cohesion and stability. The Piestewa Peak Parkway is a five mile freeway segment which will link Interstate 10 (Papago Inner-Loop) with State Route 51 (Piestewa Peak Extension). The freeway is located between 18th and 20th Streets from McDowell Road to Glendale Avenue (See Figure 1). The Specific Plan boundaries lie generally between 18th and 22nd Streets from Interstate 10 to Thomas Road, and between 16th and 20th Streets from Thomas Road to Glendale Avenue.

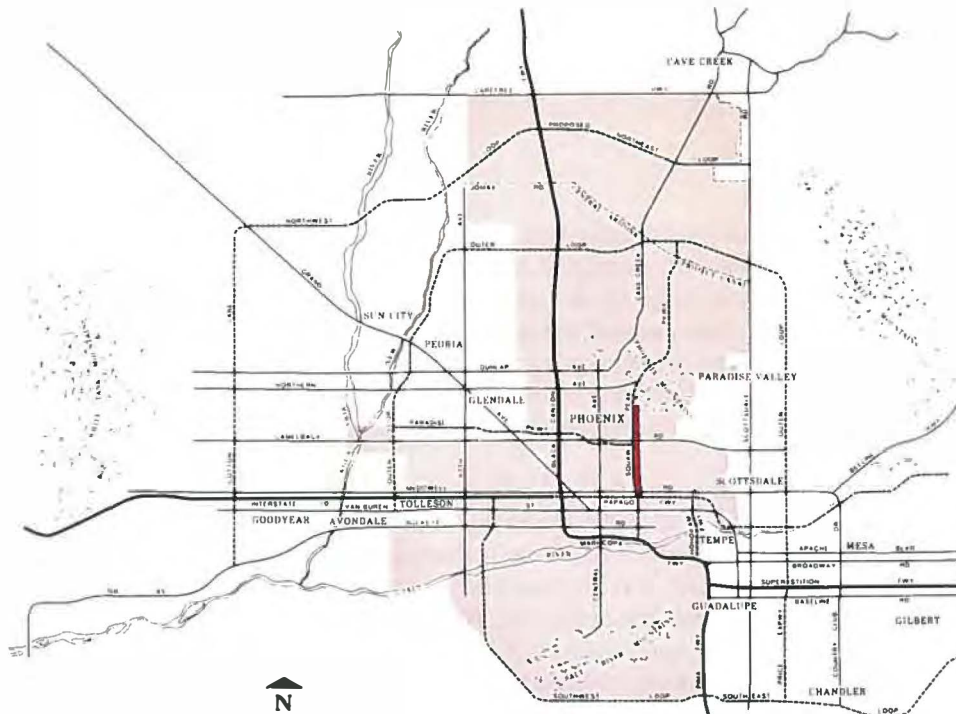


FIGURE 1
VICINITY MAP

The Specific Plan contains two major sections, the Plan Elements and the Mitigation Program. The plan elements are Land Use, Circulation, Neighborhood Stabilization and Improvement, Safety, Noise, Bicycling, and Public Art. Within each element, issues or problems have been identified and remedial actions recommended. The Mitigation Program identifies freeway impacts, presents actions and suggests ways to implement the recommendations. The mitigation measures will be funded by an \$18 million bond, which was approved by voters in April of 1988.

Specific Plans can be defined as more detailed supplements of the General Plan for Phoenix 1985/2000. As such, the Piestewa Peak Specific Plan must comply with the General Plan, and support the draft plans of the Camelback East, Encanto and Central City Villages. This Specific Plan promotes the preservation of neighborhoods, keeps heavy traffic away from residential areas, and establishes guidelines for desirable development along the Piestewa Peak, consistent with the General Plan and Village Plans.

The plan deals with unique aspects of this study area which include noise problems, neighborhood safety, landscaping, neighborhood stability, street lighting and traffic and circulation issues. Implementation of this plan should improve the quality of life for area residents.



A. BACKGROUND

Freeways have an enormous influence on the structure of a city. They offer great potential benefits. They provide quick access to areas difficult to reach due to congestion. They stimulate opportunities for business and economic investment. They can open up new vistas of the city and they can provide quick access to one-of-a-kind special functions across town, as well as provide for a smooth, efficient commute to and from the everyday workplace. However, these benefits come at a price. Freeways can disrupt the fabric of a community, alter local circulation patterns and bring unwanted noise, lead to increased traffic on nearby streets, and can be the cause for speculation on land use.

In 1981, the Arizona State Legislature adopted a significant new transportation financing package. This action resulted in allotting additional funds to the City of Phoenix revenue share, and allowed for partial State financing of the Piestewa Peak Parkway which had been previously deleted by the Arizona Department of Transportation. With this breakthrough, the city assumed responsibility for building this high capacity north-south transportation facility on the east side of the city. After extensive study of alternative alignments, the location for the Piestewa Peak Parkway was selected. In March 1983, City Council approved the parkway as a city project. This funding permitted the city to build the parkway in phases over about ten years. The parkway was fully designed and under construction when Maricopa County voters approved Proposition 300, which provided substantial additional funds for freeway construction. The funds were to finance a network of freeways that would serve the entire valley. It became clear to the city as well as the State Transportation Board and Arizona Department of Transportation (ADOT) that the Piestewa Peak Parkway would be an integral link in this freeway system. The state worked with the city to upgrade the design of the Piestewa Peak Parkway to a limited-access freeway with grade-separated interchanges. The agreement between the city and the state, along with money from Proposition 300, allowed the Piestewa Peak to ultimately become part of the overall state network of freeways.

In April 1988, Phoenix voters approved Proposition 17, the "Freeway Mitigation, Neighborhood Stabilization and Slum and Blight Elimination" Bond. The Freeway Mitigation portion of Proposition 17 allocated \$18 million in funds for ". . . the elimination of present slum and blighted areas and the prevention of the development of such conditions . . . by mitigating the effects of . . . freeway construction on the City's neighborhoods, such projects to include acquiring and clearing land and furnishing parks, recreational, water, sewer, and drainage facilities, streets, sidewalks, ways and other public places and otherwise preparing affected areas for development and redevelopment . . .". This Specific Plan will guide the expenditure of these funds.

The Piestewa Peak Parkway Specific Plan was developed using the work and reports of the Piestewa Peak Corridor Options Study Committee, the Piestewa Peak Design Committee, the Piestewa Peak Hardship Committee, and the Piestewa Peak Land Use Committee. Additional public comments came through a series of meetings with Planning Department staff and from conversations between staff members and the public.



B. PIESTEWA PEAK PARKWAY LAND USE COMMITTEE RECOMMENDATIONS

The Piestewa Peak Land Use Committee report has played an important role in the Specific Plan development. In June 1987, the City Council appointed twenty citizens to that committee. The committee was to examine land uses adjacent to the freeway, assess the effects of the freeway on the community, and make recommendations on their findings to the City Council. Due to limited specific data available at the time, such as noise studies and final parkway designs, some of their recommendations were not intended to be final. In February 1988, the committee presented their findings to the City Council. This community and committee work has been the precursor to this specific plan effort.

The committee report consisted of a series of specific findings and recommendations. The issues described in the committee report have been addressed in this plan. All but three of the committee recommendations have been supported by staff and incorporated into this plan. The following is a summary of the recommendations of the committee and staff comments.



1. SUPPORTED RECOMMENDATIONS

- Two homes on 1 1/4 acres, on the north side of Maryland: east side of the Parkway.

The committee and staff concur that a change to a higher density residential use is appropriate.

- Neighborhood in the vicinity of the elevated freeway at Bethany Home Road.

The committee's principle recommendation was to depress this section of the freeway. If, however, this option was not possible, the committee posed several other recommendations which addressed the anticipated impacts of the elevated freeway. The freeway has been redesigned at Bethany Home Road. The freeway has been depressed in this area and the interchange design will not permit through travel east of the freeway. These design changes will greatly reduce impacts in this area.

- Bethany Home Road, 16th Place to the freeway and neighborhoods immediately north and south, 14 homes: west side of the freeway.

The committee recommended a land use change to residential office in this area based on the projected traffic increases. Staff concurs with this recommendation west of the freeway only. The Bethany Home Road interchange has been modified to prohibit through traffic east of the freeway. This design change should reduce the existing traffic levels on Bethany Home Road, maintaining the viability of the adjoining homes as single family residences.

- Rovey to Berridge, 16th Place to 17th Place, 44 homes.

The committee recommended and staff concurs that additional access to this neighborhood is needed. Staff is recommending that 17th Place be extended to Rose Lane. This would permit residents access into and out of the neighborhood at the signalized intersection of 16th Street and Rose Lane.

- Neighborhoods in the vicinity of Medlock north to Missouri, 17th Street to 18th Place, approximately 161 homes both sides of the freeway.


The committee recommended several design changes to the half diamond interchange at Colter Street to keep freeway-bound traffic out of the neighborhoods. The Colter Street interchange has been redesigned to include a new access road between Camelback Road and Colter Street. A cul-de-sac that permits one way northbound traffic has been constructed on 18th Street south of Pasadena to further limit cut-through traffic in the neighborhoods. These changes to the original design should reduce the impacts of the freeway on area residents.

- Villa Potrero Subdivision, along both sides of 21st Street, Virginia to Thomas Road. Thirty-two homes on nine acres.

The committee recommended, and staff concurs, that no land use change is appropriate for this area. The northern two lots on the west side of 21st Street have been rezoned for commercial office. Further expansion of commercial uses to the south, is not appropriate. A comprehensive noise study was prepared and additional walls have been installed based on the study results. Noise levels in this area will meet the established guidelines.

- Colter to Montebello, east side of freeway to 18th Street: 27 homes standing by one's and two's between the freeway and 18th Street.

The committee recommended that extensive landscaping may "save these homes" otherwise they



suggested that the homes should be bought and the land turned into a “greenbelt”. Staff has supported additional landscaping for this area. Furthermore, traffic levels on 18th Street will be reduced with the redesign of the Colter Street interchange. This should help maintain the integrity of these residences.

- Fairmont to Amelia, east side of the freeway to 19th Street.

The committee recommended and staff concurs that enhanced landscaping would help protect this neighborhood.

- Behind Fry’s Shopping Center to west side of freeway, Indianola to Amelia.

The committee noted that the area may be in transition and that land use changes might be possible in the future. Staff agrees that this area may be in transition and that sometime in the future a land use change might be appropriate. However, this is not the appropriate time for a change in land use. The freeway has not been a destabilizing factor in this neighborhood. Where deterioration exists, it has been a long standing condition preceding even construction of the freeway. Staff recommends that residents of this neighborhood participate in neighborhood stabilization and improvement programs as outlined in this plan.

2. MODIFIED RECOMMENDATIONS

- Claremont Avenue, from 16th Street to the freeway: west side of the freeway.

The committee stopped short of saying that a change in land use is required for this area, but said that if a request for a change is filed, the most that should be approved is apartments or condominiums no higher than 2 to 3 stories.

Staff does not support a change in land use for this area. This single-family enclave has remained stable among more intense uses. Only two of the seventeen lots adjoin the freeway, and the right-of-way there is relatively wide so they should be fairly well buffered. This area can reasonably be expected to remain a stable, pleasant neighborhood still linked to the single-family area bordering it on the south.

- Monterey Way, east side of freeway to 20th Street. Eleven homes on three acres.

The committee recommendation is somewhat ambiguous, saying that redevelopment to multiple-family residential would fit the neighborhood, but also noting that small garden offices may be appropriate.

Staff supports multiple-family residential for this area. If a land use change is considered an expansion to multiple-family residential would be appropriate only if a complete assemblage of the property were achieved and if the density did not exceed that of the multiple-family residential development to the north (27 du/ac.). Offices would not be appropriate here. They could promote an expansion of the office uses already along Osborn between 16th Street and the Canal, contrary to the needs of the Encanto Village, and could have damaging effects on the single-family housing to the east.

- Indian School to Devonshire, east of freeway to 20th Street.

The committee recommended that the high density residential zoning just north of the commercial property along Indian School Road not be expanded. They suggested that “low-density residential” (probably meaning lower density multiple-family residences) and limited “garden style commercial”.

Staff does not believe that the R-3 zoned area on the south side of Devonshire is a threat to the neighborhood to the north. Staff supports the maintenance of existing, predominately single-family residential uses, and maintenance of the existing R-3 zoning.



3. ACKNOWLEDGEMENT OF ADDITIONAL CONCERNS

The committee raised other general concerns about the freeway such as pedestrian and bicycle overpasses and underpasses, bike paths, the intersection with the Paradise Freeway, noise, speed limits, trucks, landscaping, neighborhood accessibility, commercial development and safety. The committee's additional concerns have been addressed, and most are reflected in the Specific Plan.



C. COMMUNITY INPUT

The community input provided throughout the preparation of this plan has contributed substantially to the development of this document. They guided staff with needed insights and alerted us to specific problems. It is only through the public participation process that we were able to develop this plan.

Concerned citizens responded in a number of ways, through numerous committee sessions, public forums and meetings, letters, telephone conversations and in person through one-on-one issue discussions. To solicit comments and opinions, questionnaires were sent to approximately 4,400 households. Approximately 25 percent, or 1,027 were returned. The responses to the questionnaire helped staff to identify some of the most important concerns in neighborhoods. From the information obtained, we were also able to generalize residents' most common characteristics, needs and opinions. The following is a brief synopsis of this information.

The plan area consists of relatively stable neighborhoods with most residents having lived there for at least ten years, and most plan on remaining in their homes for at least five more years. A majority of residents originally chose to live in this area because of its central location, affordable housing, and proximity to employment.

Many residents think that the freeway has brought or will bring property devaluation, neighborhood deterioration, an increase in noise and reduced access to nearby destinations. They want better maintained homes, less cut-through traffic, and improved access to major streets. The residents feel that some problems caused by the freeway can be reduced if higher noise walls are constructed, if the freeway is better screened from the adjoining neighborhoods, and if more trees are planted as buffers.





D. SPECIFIC PLAN GOALS

The Piestewa Peak Parkway Specific Plan responds to explicit impacts of the freeway. The plan supports both the General Plan goals and draft Village plans. By establishing goals for this plan we will be able to respond to the problems at hand.

- GOAL 1: MITIGATE FREEWAY IMPACTS ON NEIGHBORHOODS RESULTING FROM INCREASED TRAFFIC, NOISE, STREET ROUTING CHANGES, AND THE REDUCTION OF PRIVACY.**
- GOAL 2: PROTECT AND MAINTAIN VIABLE NEIGHBORHOODS, HOUSING AND OTHER USES.**
- GOAL 3: REDUCE THE IMPACTS OF THE FREEWAY ON RESIDENCES, PARKS, AND SCHOOLS.**
- GOAL 4: PROMOTE LAND USE STABILITY THROUGH STRATEGIC LAND USE PLANNING.**
- GOAL 5: IMPROVE THE VISUAL COMPATIBILITY OF THE FREEWAY WITH ADJACENT AND NEARBY USES.**
- GOAL 6: IDENTIFY AREAS WHERE EXISTING USES SHOULD BE PRESERVED AND PROTECTED AND WHERE CHANGED CIRCUMSTANCES SUGGEST THAT REDEVELOPMENT WOULD BE BETTER.**
- GOAL 7: MAINTAIN AN ACCEPTABLE QUALITY OF LIFE FOR THOSE ADJACENT TO THE FREEWAY.**





E. SPECIFIC PLAN POLICIES

The issues associated with the Piestewa Peak Parkway are unique. To address these issues we have established specific guiding policies which will ensure implementation of the identified goals.

POLICY 1: Where identified, existing neighborhoods are to be preserved and protected by maintaining acceptable circulation and access, noise levels, safety, aesthetics and community atmosphere.

POLICY 2: Noise levels generated from the freeway should not exceed 67 decibels (dB(A)) leq in residential areas.

POLICY 3: All new developments adjacent to the freeway are to incorporate site design techniques to reduce freeway impacts and assure compatibility. Techniques to be considered include:


- Multiple-family housing units should be separated from the freeway and oriented to reduce the noise from the freeway.
- Screening or buffer area between occupied buildings and the freeway is encouraged, such as with open space or parking.
- Buildings should be designed with sufficient insulation, double-paned windows, and solid core exterior doors to reduce freeway noise.

POLICY 4: Landscaping should enhance the appearance and screen views of the freeway and moving vehicles, as well as soften the visual appearance of noise walls or access control device.

POLICY 5: Public art should be used to improve the appearance of the freeway for surrounding neighbors.



PLAN ELEMENTS



This plan contains seven elements: Land Use, Circulation, Neighborhood Stabilization and Improvement, Safety, Noise, Bicycling and Public Art. The plan elements establish policies, describe problems and conditions and recommend actions to implement the goals of the Specific Plan.

A. LAND USE ELEMENT

The land use element describes existing uses and conditions and recommends actions to achieve the Specific Plan goals and implement its policies. Land use recommendations support the Phoenix General Plan and the underlying Urban Village Concepts. The Piestewa Peak Parkway extends through three of the nine urban villages, Camelback East, Encanto and Central City. Land use recommendations have been reviewed for overall conformance with draft Village Plan goals.

1. Existing Land Use

The Piestewa Peak Parkway extends largely through a fully developed area. The majority of adjacent uses are residential. The Grand Canal and the Arizona Canal traverse the parkway. The area within the study boundary contains approximately 2.70 square miles, with residential property occupying 2.10 square miles and commercial property 0.55 square miles. Approximately .05 square miles of undeveloped (commercial and residential) property exists. A portion of the study area is located within the Camelback East Village Core. In general, commercial uses are concentrated on major streets, specifically along Camelback Road, Indian School Road, Thomas Road, McDowell Road and along 16th Street. The rest of the area is characterized by residential neighborhoods, several of which have been disrupted by the freeway.

For easier description and analysis, the plan area has been divided into six geographic segments (See Figure 2). The following describes existing uses and conditions for each of the segments (See Figures 3-8 For Existing Land Use Maps). Demographic information included in this section was compiled from the Bureau of the Census information.

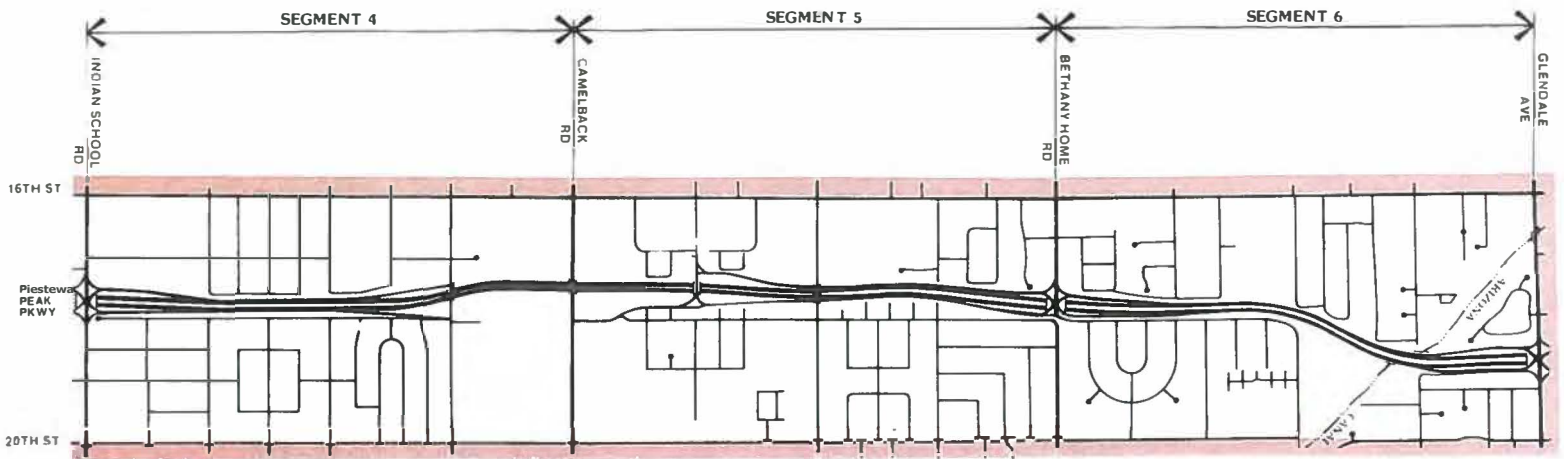
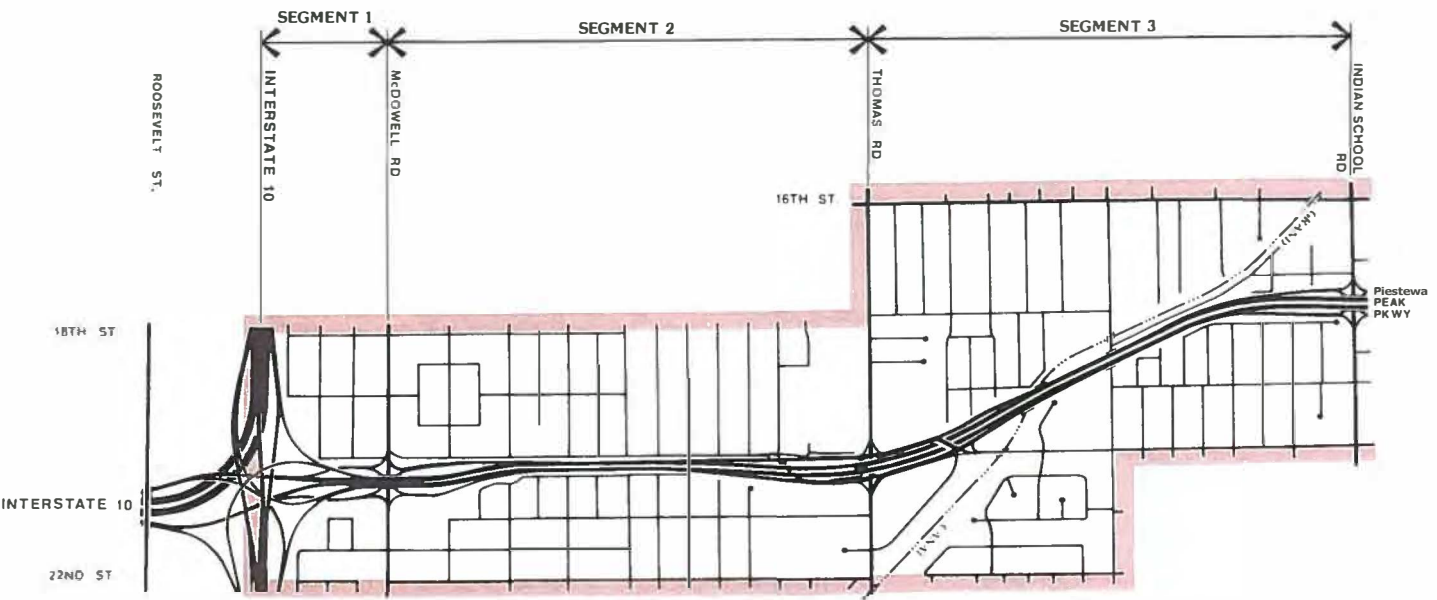


FIGURE 2
SEGMENT MAPS

Segment 1
Papago Freeway to McDowell Road

General Description

This 80 acre segment consists primarily of single-family detached housing, with commercial uses located along McDowell Road. Some multiple family units have been constructed east of the Freeway. As the Freeway has bisected these neighborhoods, the areas east and west of the Freeway will evolve independently of one another.

The population is about 335, living in approximately 130 dwelling units. There are relatively few school children, and more retired persons than the city average.

Segment 2
McDowell Road to Thomas Road

General Description

This segment contains approximately 320 acres of land. The area west of the freeway contains a mixture of single family and multiple-family residences, with primarily single-family units east of the freeway. Humana Hospital is located on the south side of Thomas Road and hospital-related uses have developed immediately south of the hospital. Commercial uses are along McDowell Road.

Several public facilities are located within this segment including Humana Hospital, Fire Station No. 5 at the northeast corner of Cambridge Road and 18th Place, and Machan Elementary School at the northwest corner of 22nd Street and Virginia Avenue.

The resident population is about 2,740, living in approximately 1,240 dwelling units. There are relatively few school children and more retired persons than the city average.

Segment 3
Thomas Road to Indian School Road

General Description


This 400 acre segment contains both single-family and multiple-family residences. Concentrations of multiple-family units are located generally south of Osborn Road, and south of the Grand Canal on the west side of the freeway. Commercial uses line 16th Street and Indian School Road. The Grand Canal crosses this segment from southeast to northwest influencing land use and circulation.

The resident population of about 2,505 live in approximately 1,240 dwelling units. There are relatively few school children and more retired persons than the city average.

Segment 4
Indian School Road to Camelback Road

General Description

This 320 acre segment includes a portion of the Camelback East Village Primary Core. Almost half of this acreage is developed for community-wide services rather than neighborhood serving uses. Most housing is single-family detached, however, multiple-family units have developed near the commercial centers. There are several well established neighborhoods in this segment, including the Highland Estates and Montecito neighborhoods. About 1,360 residents live in approximately 740 dwelling units. There are relatively few school children and significantly more retired persons than the city average.



Segment 5
Camelback Road to Bethany Home Road

General Description

This 320 acre segment is primarily residential. The area contains a mixture of multiple family and single-family residences with the multiple family being concentrated primarily north and west of 20th Street and Camelback Road. There are some isolated pockets of multiple family housing located south of Missouri Avenue and south of Montebello Avenue west of the parkway. Commercial projects are along both Camelback Road and 16th Street. Madison #1 Elementary School is at the Northwest corner of Missouri Avenue and the parkway.

The resident population of about 2,150, live in approximately 1,050 dwelling units. There are relatively few school children and few retired persons in this area.

Segment 6
Bethany Home Road to Glendale Avenue

General Description

This 320 acre segment is primarily residential. The multiple family units are generally located along 16th Street, Maryland Avenue and south of the Arizona Canal on the west side of the freeway. Some neighborhood commercial uses are located along 16th Street.

The population is about 1,990 living in approximately 800 dwelling units. There are relatively few school children in this area. The Arizona Canal and the nearby Granada Park are an influence on land use in the northeast portion of this segment. Bicycling, jogging and walking are positive and strong activities in this area.

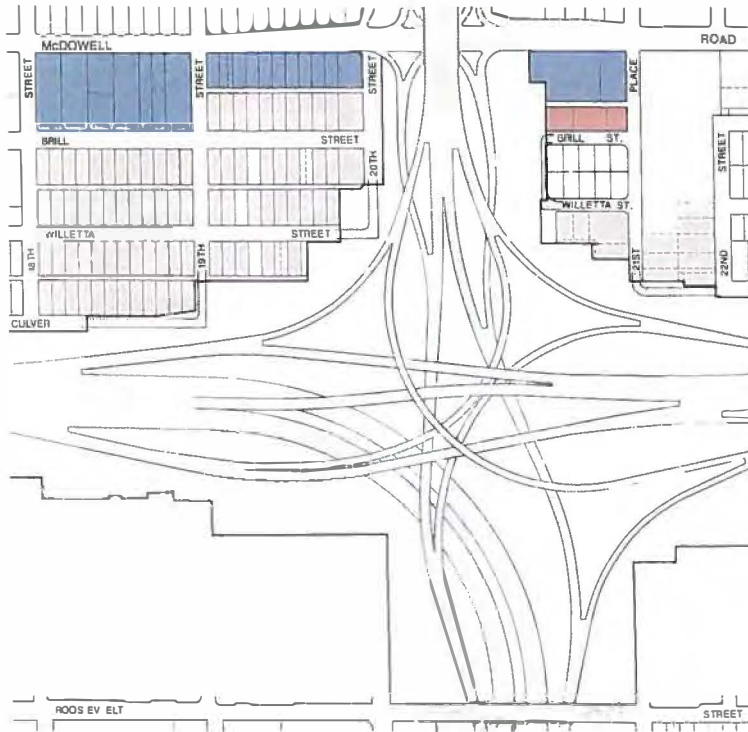



FIGURE 3
EXISTING LAND USE
 SEGMENT 1

LEGEND

 SINGLE FAMILY
 MULTI-FAMILY

 COMMERCIAL
 PUBLIC/QUASI-PUBLIC

 VACANT



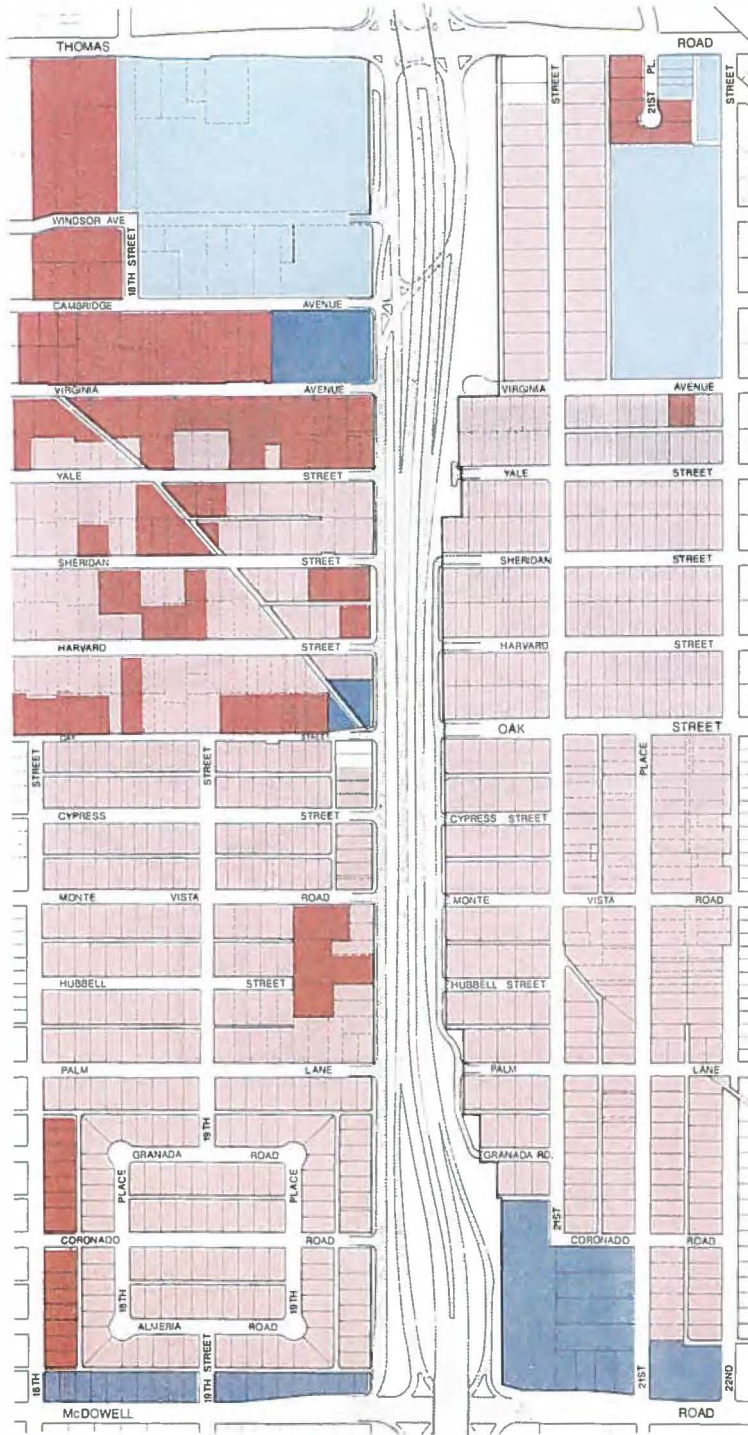


FIGURE 4
 EXISTING LAND USE
 SEGMENT 2

LEGEND

- | | | |
|---|---|--|
|  SINGLE FAMILY |  COMMERCIAL |  VACANT |
|  MULTI-FAMILY |  PUBLIC/QUASI-PUBLIC | |



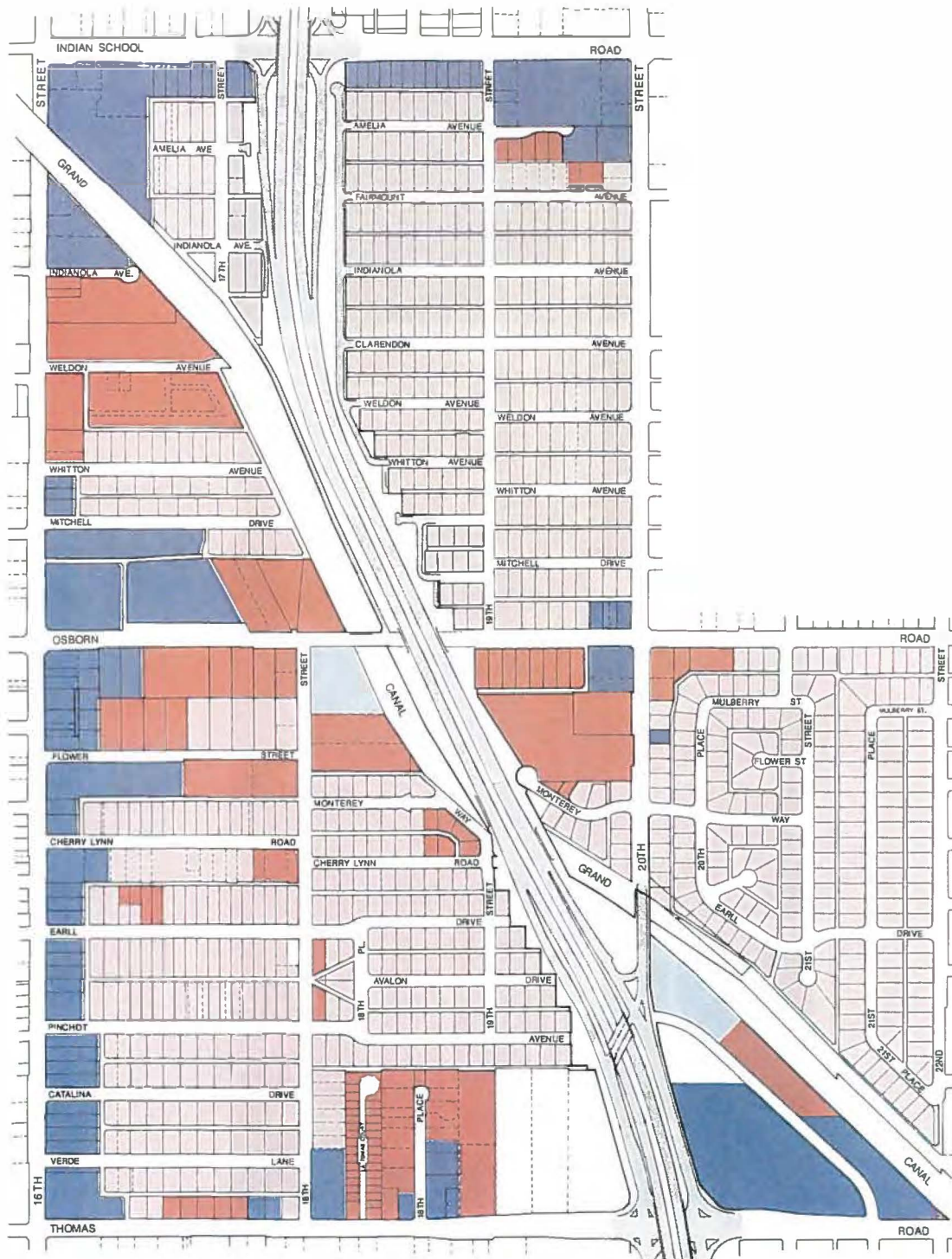


FIGURE 5
EXISTING LAND USE
 SEGMENT 3

LEGEND

 SINGLE FAMILY
 MULTI-FAMILY

 COMMERCIAL
 PUBLIC/QUASI-PUBLIC

 VACANT


 SCALE



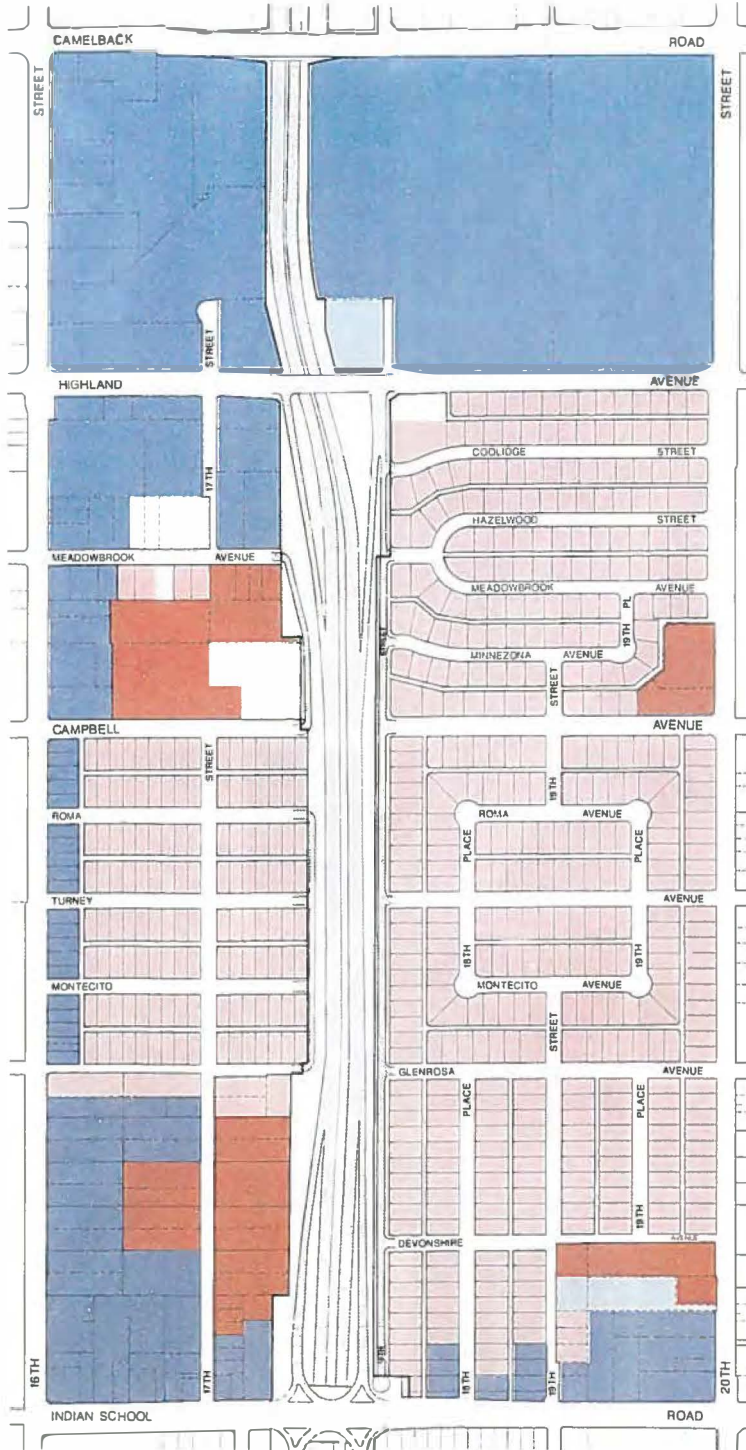


FIGURE 6
 EXISTING LAND USE
 SEGMENT 4

LEGEND

- SINGLE FAMILY
- COMMERCIAL
- VACANT
- MULTI-FAMILY
- PUBLIC, QUASI-PUBLIC



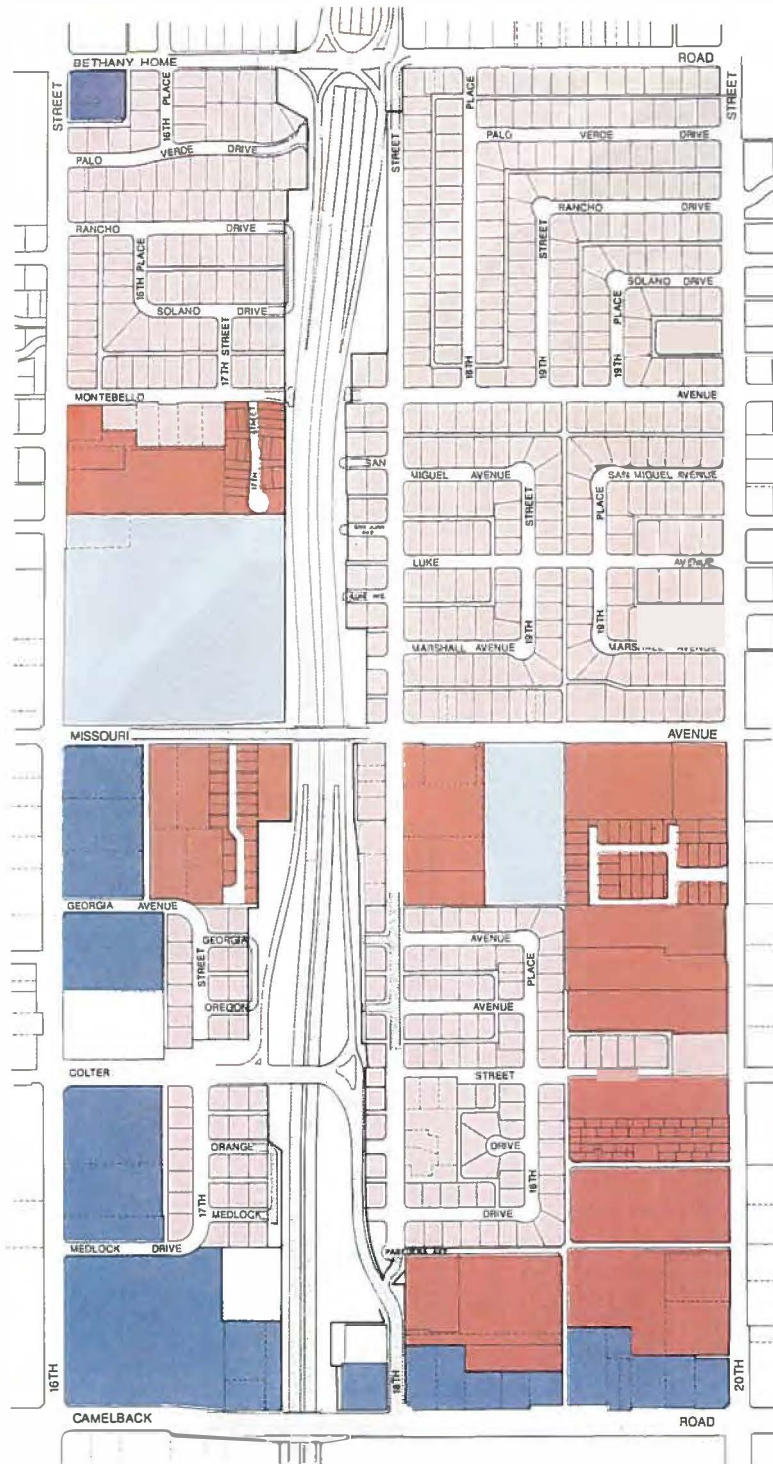


FIGURE 7
EXISTING LAND USE
 SEGMENT 5

LEGEND

- SINGLE FAMILY
- COMMERCIAL
- VACANT
- MULTI-FAMILY
- PUBLIC/QUASI-PUBLIC



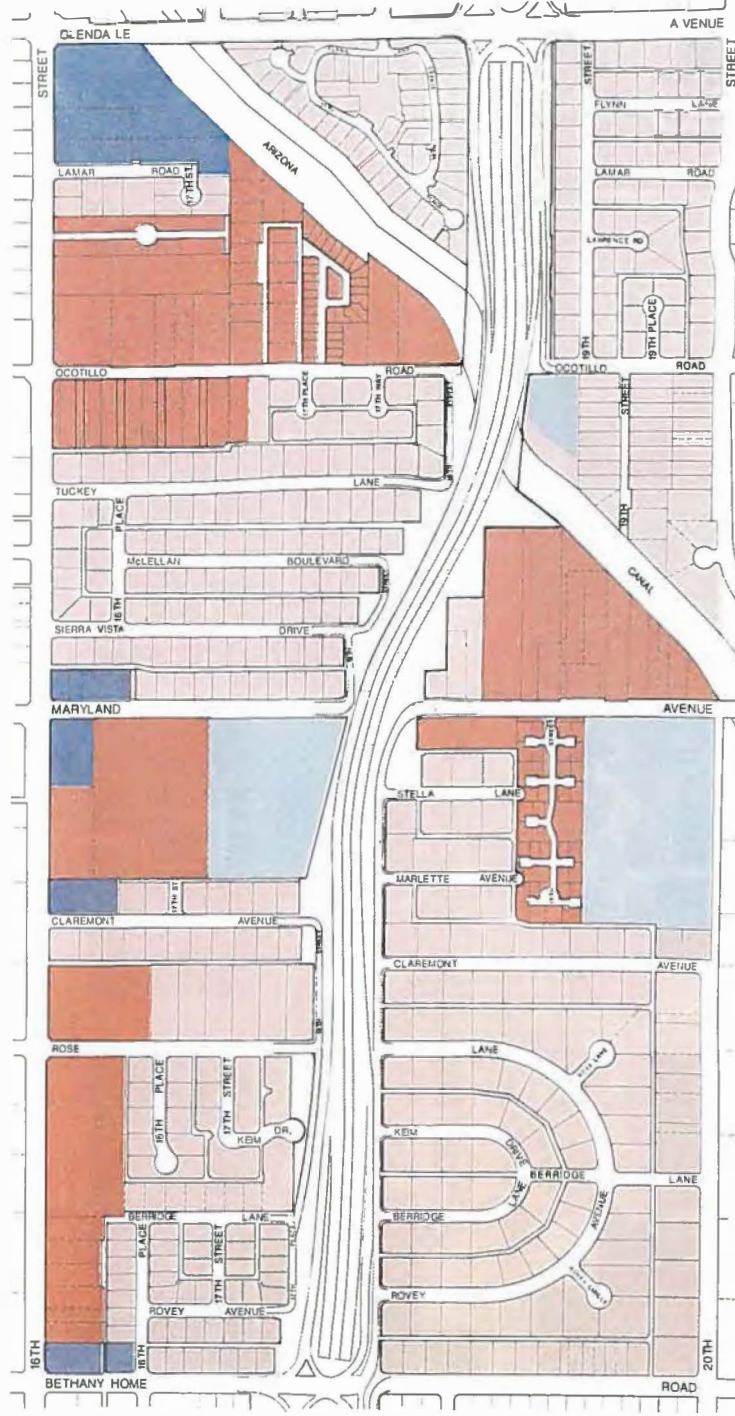


FIGURE 8
EXISTING LAND USE
SEGMENT 6

LEGEND

	 SINGLE FAMILY	 COMMERCIAL	 VACANT	 SCALE
	 MULTI-FAMILY	 PUBLIC/QUASI-PUBLIC		

2. Proposed Land Use Changes

Proposed changes in land use have been made keeping in mind the plan goal of protecting and maintaining stable and viable residential neighborhoods. Changes in land use were recommended only when the impacts of the freeway could not be reduced to make the existing use viable. Following are the proposed land use changes for each segment (See Figures 11-16).

Segment 1

Papago Freeway to McDowell Road

1.0 Location: Between McDowell Road and the Papago Freeway, 18th Street to 22nd Street

Background: This area consists primarily of older housing stock, where the neighborhoods appear stable and well defined.

Recommendation: Preserve the existing single-family housing.

1.1 Location: Between McDowell Road and the Papago Freeway, 22nd Street to the Piestewa Peak Parkway

Issue: The area on the east side of the freeway consists of a mix of uses, including commercial, multifamily residences, single-family residences, and vacant property. The freeway abuts the site on the south and west, and there are strip commercial uses on McDowell Road. Much of the housing is in scattered locations and is deteriorating.

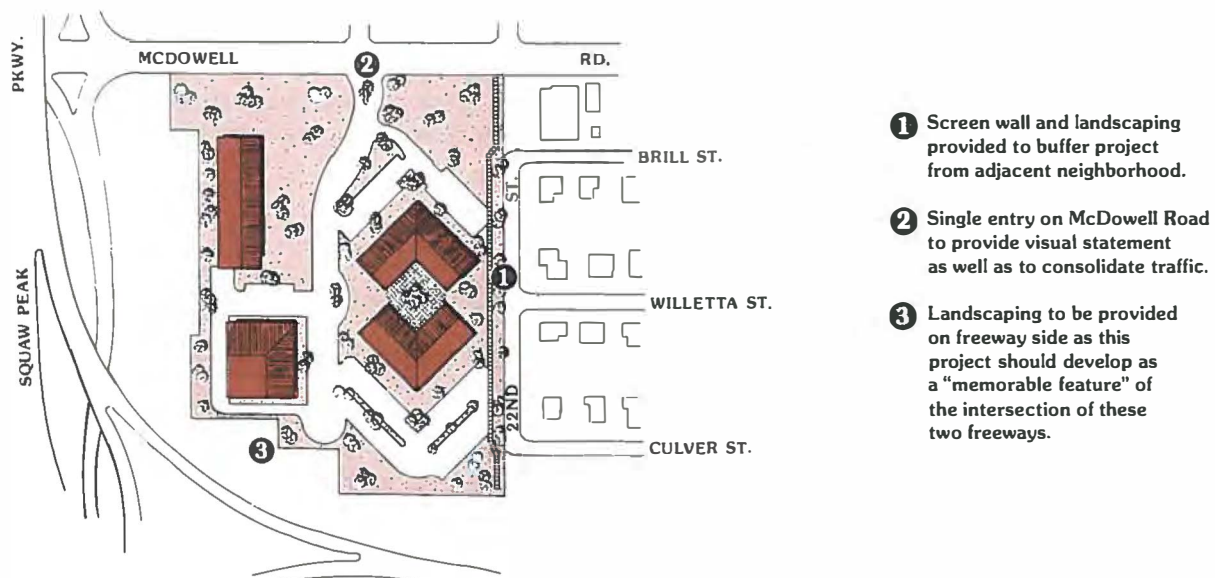


FIGURE 9
MC DOWELL COMMERCE PARK

Recommendation: Transition this area to commerce park uses, with the following Development Guidelines: (See Figure 9 for Concept)

- a. No outdoor storage be permitted.
- b. A minimum 40 foot landscaped setback, or the Zoning Ordinance requirement, whichever is greater, be provided from the north and east perimeter lot lines.
- c. That the facade and roofline treatment, including texture, coloration and building materials shall be consistent around each entire structure.
- d. That the billboard on the southeast corner of 21st Street and McDowell Road be removed. As this site is in excess of 10 acres, a General Plan amendment was processed and approved with this recommendation.

Segment 2

McDowell Road to Thomas Road

2.0 Location: Between Thomas Road and McDowell Road, 18th Street to 22nd Street

Background: In general, the neighborhoods in this area are fairly stable. There are a few areas which are beginning to deteriorate. Some of the neighborhoods, particularly those south of Palm Lane, contain unique looking, well maintained homes of early Twentieth Century revival styles.

Recommendation: Support the existing, predominately single-family residential uses, and introduce neighborhood stabilization programs to eliminate pockets of incipient blight. An increase in density consistent with the General Plan (5-15 du/ac) south of Thomas Road, west of the parkway, would not be inconsistent with this plan.

Segment 3

Thomas Road to Indian School Road

3.0 Location: Between Thomas Road and Indian School Road from 16th to 22nd Streets south of Osborn Road, and from 16th Street to 20th Street north of Osborn Road.

Background: In general, this area is fairly stable. Some of the neighborhoods on the west side of the freeway have begun to transition to multiple-family residential uses. These uses are consistent with the General Plan.

Recommendation: Except as noted below, maintain the existing uses.

3.1 Location: Northwest Corner of the Parkway and Thomas Road.

Issue: This site is currently vacant. Part of it has been rezoned for office and commercial development.

Recommendation: That this area develop within the parameters of the rezoning application already granted, which introduces office and commercial development appropriate in scale and function to this area.

3.2 Location: Between 20th Street and the Parkway, from Monterey Way to the Grand Canal.

Issue: This area contains eleven single-family homes. They are bound by the parkway on the west, the Grand Canal on the south, apartments on the north and single-family residences to the east.

Recommendation: That this area change to multiple-family residential. Multiple-family development is appropriate only if complete assemblage of the lots is achieved and the density does not exceed that of the apartments to the north, which is twenty-seven dwelling units per acre.

3.3 Location: Between Osborn Road and Mitchell Drive, west of the Grand Canal.

Issue: The existing uses include a retail center, offices, multiple-family housing, and six single-family residences. This site was recently rezoned for expanded office and retail uses.

Recommendation: That this area develop within the parameters of the rezoning application already granted.

Segment 4

Indian School Road to Camelback Road

4.0 Location: Between Indian School Road and Camelback Road, From 16th to 20th Streets.

Background: This area consists of stable residential and commercial uses. East of the parkway are single-family homes while commercial uses lie between Highland Avenue and Camelback Road and along Indian School Road. West of the parkway is a mixture of single-family residential, multiple family residential, and commercial uses.

Recommendation: The areas outside the Camelback East Village Core should be preserved.

4.1 Location: Between Campbell and Highland Avenue, from 20th Street to the Piestewa Peak (Highland Estates).

Issue: This is a stable single-family residential area, lying south of the village core. With proper buffers the influence of the freeway has not created impacts which would warrant a change in land use. Along the west side of the neighborhood, 18th Street creates a logical boundary. Noise walls will keep sound levels within the adopted guidelines. The main threat to stability of the neighborhood comes from its proximity to the core, with the attendant problems of land use speculation and high-volume traffic concentrations.

Recommendation: Maintain buffering and transition features. Discourage cut-through traffic.

4.2 Location: South side of Highland Avenue, between 18th and 20th Streets.

Issue: Fourteen single-family homes face Highland Avenue in this area. Increasing traffic on Highland Avenue has been a problem for several years. This problem has been aggravated by the opening of the Piestewa Peak Parkway which temporarily ends at Highland. (Traffic should decrease from 40,000 to 20,000 Average Daily Trips once the freeway is further opened to Northern Avenue in August 1990.) Increasing traffic over time has made it difficult for residents living on Highland Avenue to get into and out of their driveways while noise and other environmental impacts have reduced the livability of these homes.

Recommendation: Recognizing the transition to core commercial uses north of Highland Avenue and the role of Highland Avenue in distributing traffic to these core activities, a change in function for this area should be made. If the neighborhood south of Highland is to remain single family, Highland Avenue should become that boundary for core functions as well as being better designed to fulfill its traffic role. Matching its configuration east of 20th Street, Highland Avenue should be improved to a divided roadway with landscaped median. A landscaped buffer with noise protection should be installed between Highland Avenue and the neighborhood to the south.

This can be best accomplished by purchasing the strip of homes along Highland Avenue for extra right-of-way and a buffering area. This program would be voluntary, and the city would only purchase those residences whose owners express an interest in a city buyout.

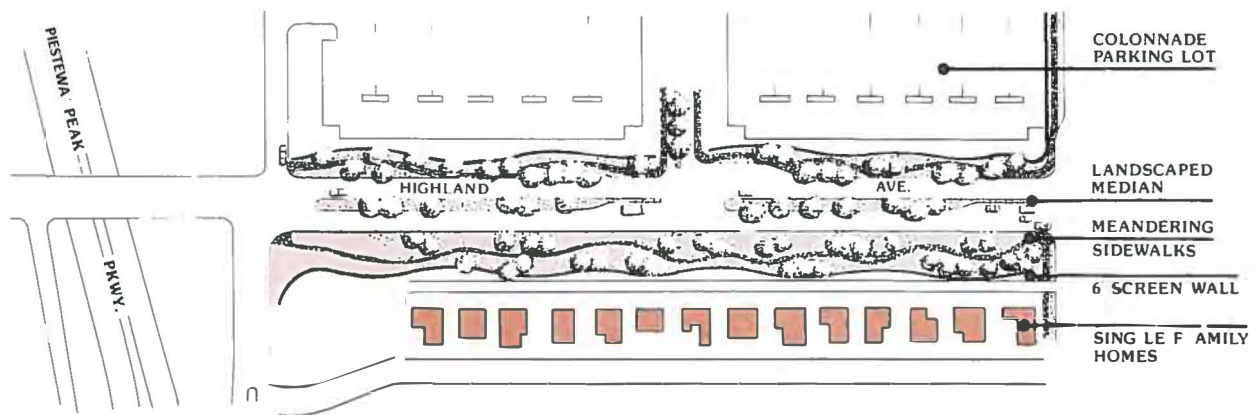
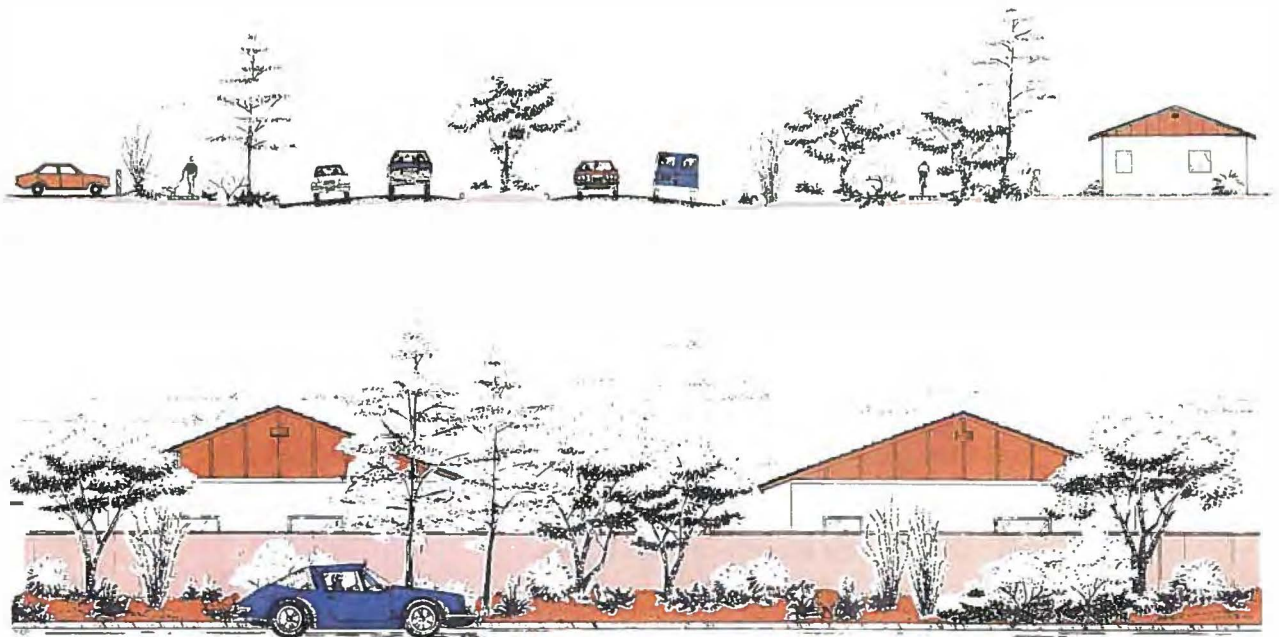


FIGURE 10



Segment 5
Camelback Road to Bethany Home Road

5.0 Location: Between Camelback Road and Bethany Home Road, from 16th to 20th Street.

Background: This segment contains a mix of uses including single-family and multifamily residences, commercial uses and an elementary school. The majority of the neighborhoods in this segment are very stable and should remain viable.

Recommendation: Except as noted below, maintain the existing uses.

5.1 Location: Between Camelback Road and Colter Street, from 16th Street to the Freeway.

Issue: This area consists of approximately twenty-eight acres of land. Twenty-two homes occupy approximately six acres, the remainder of the property is commercial. The area lies within the Camelback East Village Core and Specific Plan Study boundary. A commercial rezoning request was recently approved for this site.

Recommendation: That this area develop within the parameters of the rezoning application already granted. The future development potential for this area will be better defined by the Camelback East Village Core Specific Plan.

5.2 Location: Between Colter and Georgia Avenue, from 16th Street to the Parkway.

Issue: A pocket of fourteen homes is located just west of the freeway. A vacant, residentially-zoned parcel is located on the northeast corner of 16th Street and Colter Street while the remainder of the area contains an office project.

The Engineering Department has determined the need to locate a freeway drainage basin in this area. The area currently occupied by the fourteen homes will be the location for this facility.

Recommendation: That the vacant lot on the northeast corner of 16th Street and Colter Street, and the site of the fourteen homes be designated for multiple-family residential at 30+ dwelling units per acre. Excluding the drainage facility, the remainder of this land should develop according to this recommendation.

5.3 Location: On the South Side of Bethany Home Road, between the Commercial Development at 16th Street and the Parkway.

Issue: Eight homes either front Bethany Home Road or are directly off the road on 16th Place. Commuter traffic between 16th Street and the freeway will substantially limit accessibility to these lots and adversely affect their livability as residences. The lots are too small for on-site buffering or mitigation.

Recommendation: That the eight lots redevelop to residential scale offices. Lots should be consolidated into fewer facilities to minimize traffic entry points onto Bethany Home Road. Also, all new structures must maintain a residential scale and site orientation. Conversion should also recognize the following standards:

- a. Redeveloped properties shall consolidate 3-4 residential lots each.
- b. Conversion of existing homes shall involve removal of one homesite to be used for common parking for each two homes converted to offices.

Segment 6
Bethany Home Road to Glendale Avenue

- 6.0 Location: Between Bethany Home Road and Glendale Avenue, from 16th to 20th Streets.
- Background: The majority of this area contains multifamily and single-family residences. The bulk of the property is well maintained, and the area is stable.
- Recommendation: Maintenance of the existing uses for the remainder of this segment.
- 6.1 Location: On the North Side of Bethany Home Road, from 16th Place to the Parkway.
- Issue: Seven homes face this street. When the interchange is opened at Bethany Home Road, the homes facing Bethany Home will experience increased noise, and the shallow lot depth and increased traffic volumes will make it very difficult for residents to get into or back out of their driveways. These conditions will make it difficult to maintain a reasonable residential atmosphere.
- Recommendation: That the seven lots on the north side of Bethany Home Road (Lots 6, 7, 8, 9, 12, 14, 16, 18 Madison Park Unit One amended) be converted to residential offices with the development restriction that at least two or three lots be assembled for each project and for every three lots redeveloped for residential offices, one of those lots must be utilized solely for parking. To improve the compatibility of the commercial uses, the following development guidelines should also be applied:
- a. That new commercial uses developed on the north side of Bethany Home Road are prohibited from using the adjacent alley to the north.
 - b. That all developments are to be of a residential scale.
 - c. That the developments on the north side of Bethany Home Road be obscured from adjacent residential uses by a six foot screen wall.
 - d. That no development should have access to their site from 16th Place.
- 6.2 Location: Northwest Corner of Claremont Avenue and the Piestewa Peak Parkway.
- Issue: A large vacant remnant parcel will remain after the freeway is constructed.
- Recommendation: This lot be infilled with one single-family home.
- 6.3 Location: Northeast Corner of Maryland Avenue and the Parkway.
- Background: Two single-family residences are located on three large lots in this area. Directly north and west of the property is the freeway, east and south of the site are multifamily residences.
- Recommendation: Designate these properties for multifamily residential at 5-15 dwelling units per acre.

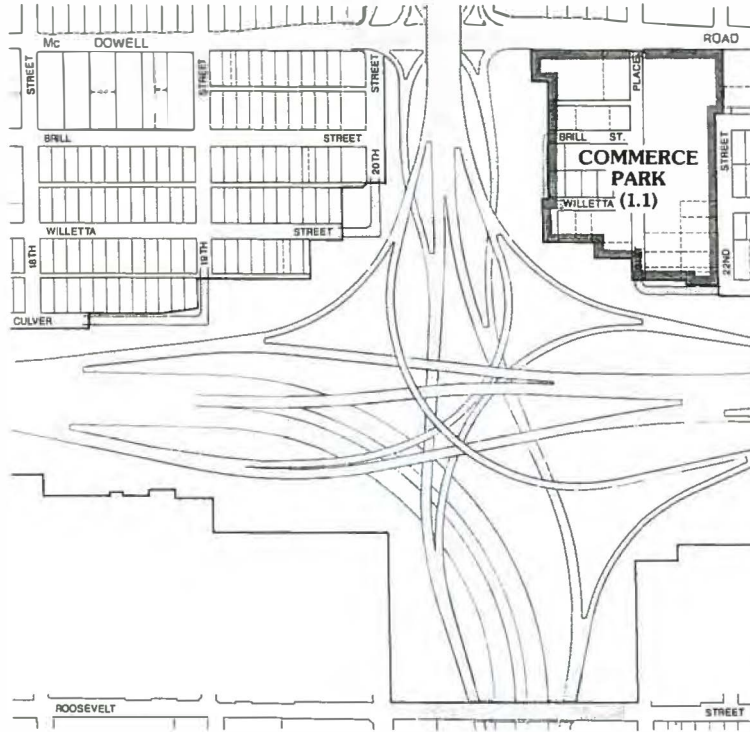


FIGURE 11
PROPOSED LAND USE CHANGES
 SEGMENT 1





FIGURE 12
PROPOSED LAND USE CHANGES
SEGMENT 2



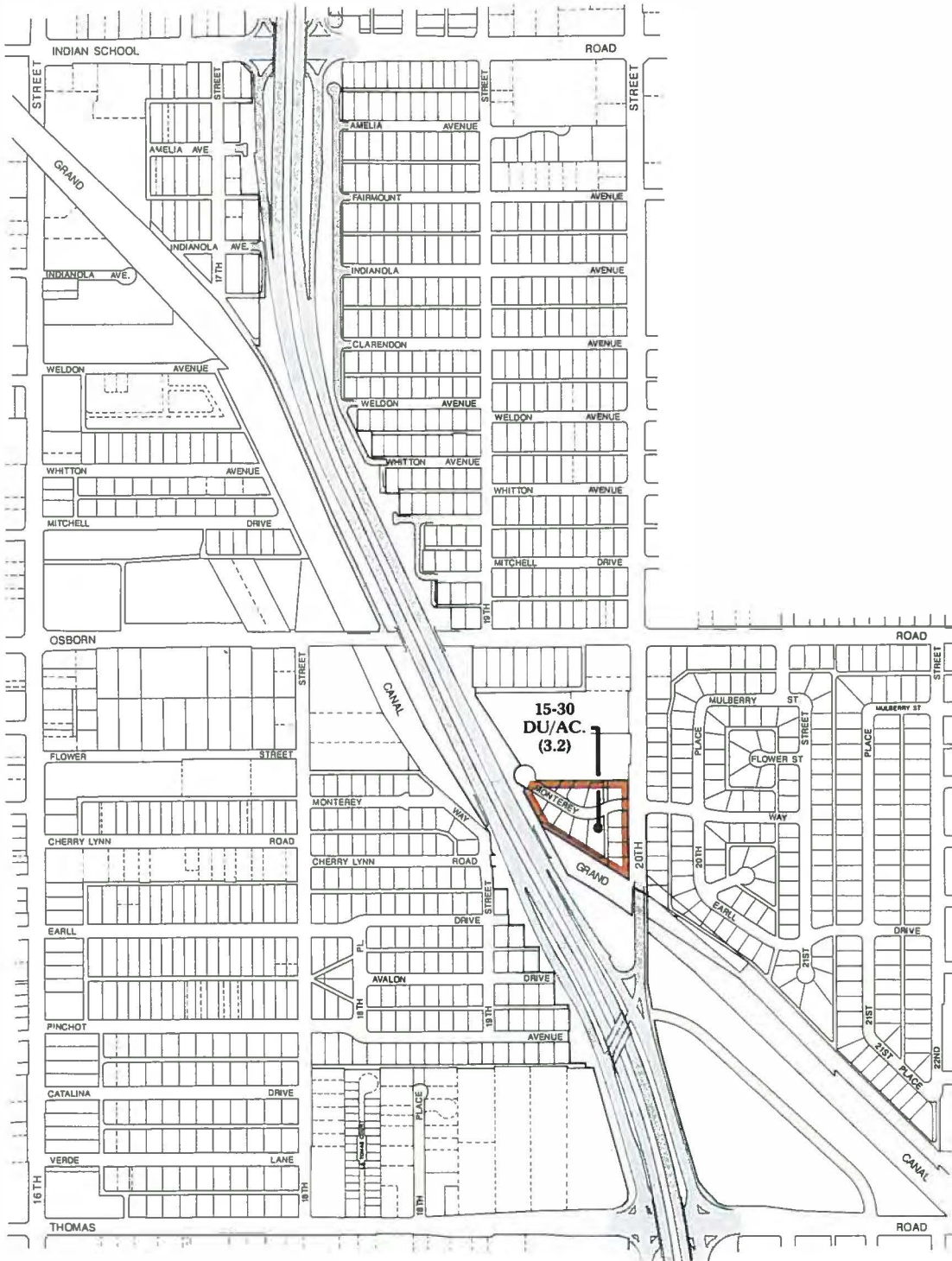


FIGURE 13
PROPOSED LAND USE CHANGES
 SEGMENT 3



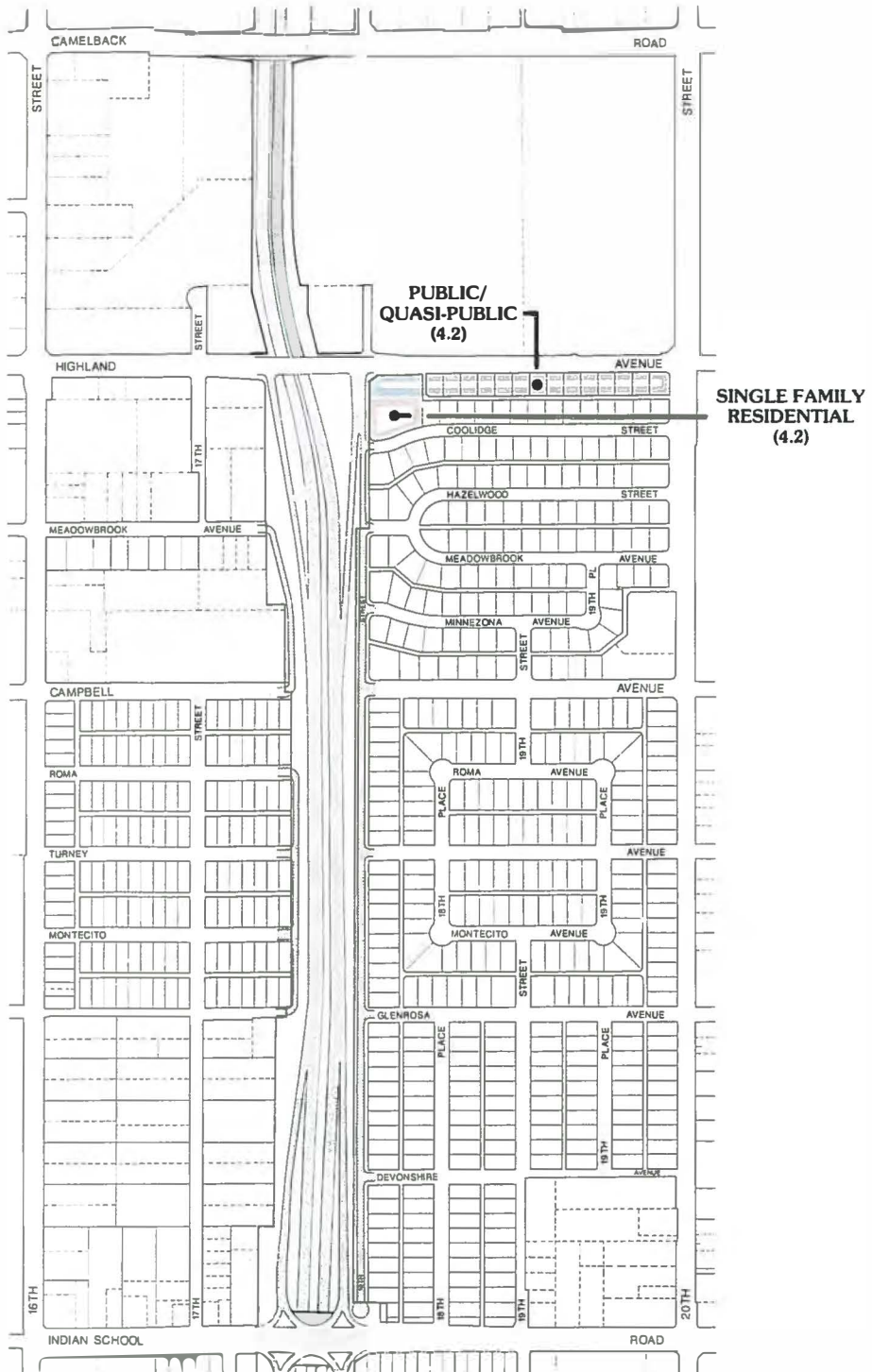


FIGURE 14
PROPOSED LAND USE CHANGES
SEGMENT 4



RESIDENTIAL
OFFICE
(5.3)

30 + DU/AC.
(5.2)

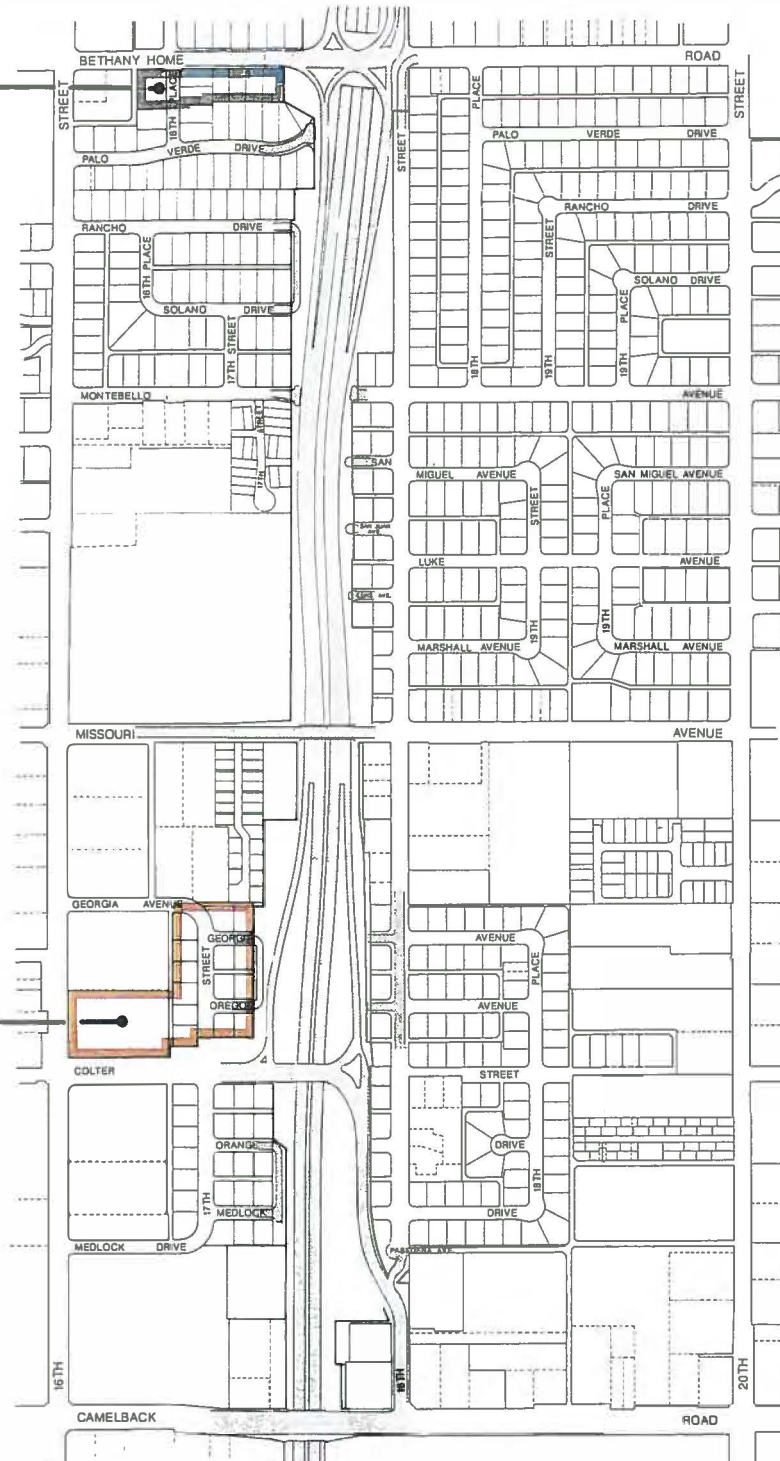


FIGURE 15
PROPOSED LAND USE CHANGES
SEGMENT 5





FIGURE 16
PROPOSED LAND USE CHANGES
 SEGMENT 6





B. CIRCULATION ELEMENT

The Circulation Element describes the existing and planned transportation system for the Specific Plan. First the street and freeway systems are discussed as they are and as they are planned, followed by ways to improve the current or planned transportation system.

1. Existing and Planned Streets and Freeways

All streets are classified based on their role in the circulation system. There are four categories of streets:

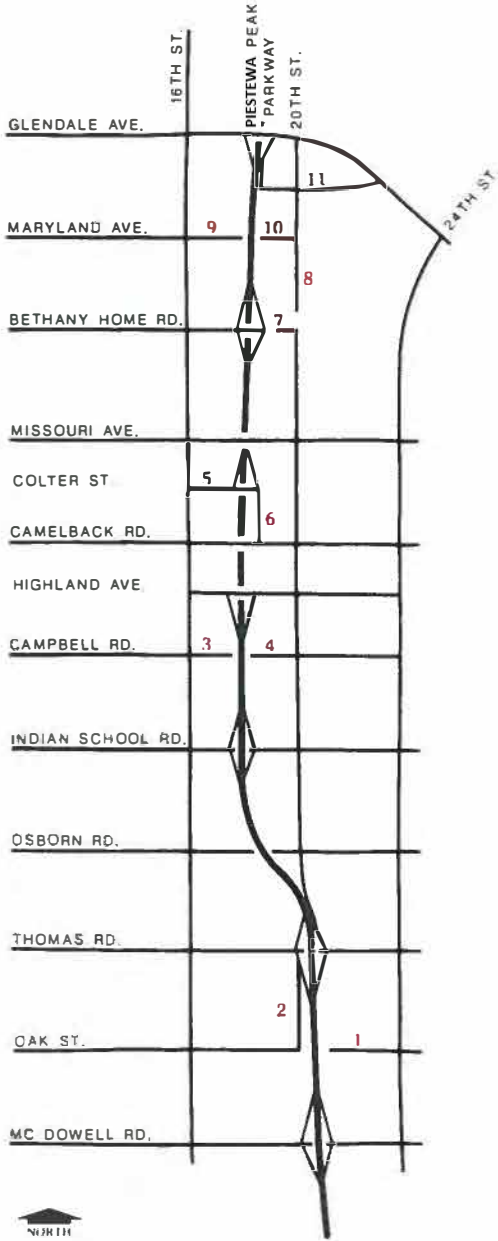
1. Freeways-Expressways and Principal Arterials provide for the expeditious movement of large volumes of through traffic movement between areas and across, around, or through the city or urban area. These are divided arterial highways with full control of access, and are not intended to provide access to abutting land. A freeway will have complete separation of conflicting traffic flows while an expressway or principal arterial may have few or no grade separations and may be a stage of development toward a freeway. In urban areas, they will be a portion of a system or network of freeways.
2. Major Streets and Highways provide for traffic movement between areas and across portions of the city, direct service to principal traffic generators, and connect to the freeway-expressway system. Secondly they provide for direct access to abutting land. Major streets are subject to necessary regulation and control of parking directional controls, turning movements, entrances, exits, and curb use. Major streets are often divided arterial roadways and may have some control of access. The individual major streets combine to make a system for city-wide traffic movement.
3. Collector Streets provide direct service to residential areas from major streets and highways, for traffic within neighborhoods of the city, and for direct access to abutting property; collect local traffic from the neighborhoods and deliver it to the nearest major street or highway.
4. Local Streets provide for direct access to residential, commercial, industrial, or other abutting land, and provide for local traffic movements and connect to collector and major streets.

(Note: A parkway may be any of the above street types which is intensively landscaped to provide an attractive or scenic appearance, or is located in a park or park-like area. The use of the facility may be restricted to non-commercial traffic.)

Each of these street types are found within the boundaries of this Specific Plan (See Figure 17).

The Piestewa Peak Parkway is a north/south freeway, extending from the Papago Freeway (I-10) to Glendale Avenue. Local and some collector streets are terminated at the freeway, limiting internal flow of east/west traffic. The streets that will allow east/west movement across the Freeway are McDowell Road, Thomas Road, Osborn Road, Indian School Road, Highland Avenue, Camelback Road, Missouri Avenue, and Glendale Avenue.

The closure of streets and the opening of the freeway has changed the way the existing circulation system functions. Such changes can increase or decrease the amount of traffic and can impede access east and west of the freeway. The function of certain streets has changed, and is to be reflected by the Minimum Right-of-Way Standards Map and the Existing Street Classifications Map. Figure 17 indicates these changes which were approved as a General Plan Amendment. Other than these designation modifications, the street system for the Specific Plan area has been reviewed and the following improvements are recommended.



LEGEND

	LOCATION	R.O.W.		CLASSIFICATION	
		EXISTING	PROPOSED	EXISTING	PROPOSED
1	OAK ST PIESTEWA PEAK TO 24TH ST	76'	60'	NO CHANGE	
2	20TH ST PIESTEWA PEAK TO OAK ST	66'	60'	LOCAL	COLLECTOR
3	CAMPBELL AVE 16TH ST TO PIESTEWA PEAK	66'	60'	COLLECTOR	LOCAL
4	CAMPBELL AVE PIESTEWA PEAK TO 20TH ST	73'	60'	COLLECTOR	LOCAL
5	COLTER ST 16TH ST TO PIESTEWA PEAK	100'	----	LOCAL	COLLECTOR
6	18TH ST ACCESS COLTER ON RAMP	----	----	LOCAL	COLLECTOR
7	BETHANY HOME 18TH ST TO 20TH ST	80'	80'	MAJOR	LOCAL
8	20TH ST BETHANY HOME TO MARYLAND	70'	60'	COLLECTOR	LOCAL
9	MARYLAND AVE 16TH ST TO PIESTEWA PEAK	70'	60'	COLLECTOR	LOCAL
10	MARYLAND AVE PIESTEWA PEAK TO 20TH ST	60'	60'	COLLECTOR	LOCAL
11	OCOTILLO RD PIESTEWA PEAK TO LINCOLN DR	100'	60'	NO CHANGE	
	PIESTEWA PEAK MCDOWELL TO GLENDALE	VARIES	VARIES	CHANGE TO FREEWAY WHEN ADOT TAKES OVER	

FIGURE 17
GENERAL PLAN AMENDMENT
R.O.W. AND CLASSIFICATION CHANGES

2. Transportation System Improvements

The freeway location interrupted the pre-existing neighborhood circulation pattern in many cases. In summary, the following circumstances were created in various locations:

- In some cases the freeway solidified existing neighborhood edges such as in the areas of the Grand and Arizona Canals.

- In those neighborhoods, with predominantly east-west streets, the freeway bisected neighborhoods, sometimes leaving cohesive areas, sometimes leaving remnant areas.
- Closure of collector streets; Oak, Campbell and Maryland; significantly reduced through traffic and impacts of traffic on properties fronting those streets.
- Entry and exit points to neighborhoods were altered. In some cases only limited access remains, in others cut-through traffic has become a problem.

Based on review of neighborhood circulation patterns, the following is recommended:

Segment 1
Papago Freeway to McDowell Road

1.0 Location: From the Papago Freeway to McDowell Road, between 18th and 22nd Streets.

Background: Along this section of the freeway, local streets have been terminated at the freeway. Twentieth Street now acts as a connecting road linking Culver Street, Willetta Street and Brill Street. No action is necessary, as local traffic functions efficiently in this area.

Segment 2
McDowell Road to Thomas Road

2.0 Location: Between Thomas Road and McDowell Road, 18th Street to 22nd Street:

Background: The freeway has provided a logical boundary for the neighborhoods east and west of 20th Street. Oak Street, which used to be a collector, now will experience less traffic and will ultimately function as a neighborhood street. There are, however, three circulation issues which must be identified. They are listed below.

2.1 Location: 18th Street and McDowell Road.

Issue: The provision of signalized access at 18th Street and McDowell Road.

Recommendation: After reviewing the existing and projected traffic conditions, no signal should be installed at this time. A signal at this location may increase cut-through traffic in the neighborhood and traffic volumes do not warrant a signal. An electrical conduit has been installed so that a signal could be added in the future if needed. Another alternative which was identified is a slip ramp connecting 20th Street to the McDowell off ramp. This option would cost roughly \$250,000 and could not be paid for completely by Freeway Mitigation funds.

2.2 Location: On Cambridge Avenue, between 16th Street and the Freeway.

Issue: Truck traffic on Cambridge Avenue between 16th Street and the Piestewa Peak Parkway.

Recommendation: That signs be posted to prohibit truck traffic on Cambridge Avenue. If the problem continues with the hospital delivery trucks, work with Humana Hospital to inform the staff of acceptable alternative routes.

- 2.3 Location: On 22nd Street, between McDowell and Thomas Roads.
- Issue Cut-through traffic on 22nd Street between McDowell and Thomas Roads.
- Recommendation: “No Thru Trucks” signs have been installed at McDowell Road and at Thomas Road on 22nd Street, and a 15 mph school zone will be established for Machan School on 22nd Street and Virginia Avenue. We will continue to monitor traffic on 22nd Street. If the amount of traffic becomes a problem, additional measures will be taken as necessary to ensure neighborhood access while controlling unwanted traffic.

Segment 3

Thomas Road to Indian School Road

- 3.0 Location: From Thomas Road to Indian School Road, between 16th and 22nd Streets.
- Background: In general, traffic and neighborhood circulation between Thomas and Indian School Roads function adequately. Loop roads and frontage roads have been added to help neighborhood circulation. One issue has been identified within this segment.
- 3.1 Location: On 18th Street south of Indian School Road and on Amelia between 18th and 19th Streets.
- Issue: Commercial cut-through traffic on 18th Street south of Indian School Road, and on Amelia between 18th and 19th Streets.
- Recommendation: By installing a screen wall around the end of the cul-de-sac on 18th Street, the level of noise which comes from Indian School Road and freeway interchange ramps and the amount of traffic cutting through the neighborhood will be reduced. Service vehicles will still exit the commercial alley, however, commercial traffic will not be permitted to use 18th Street.

Segment 4

Indian School Road to Camelback Road

- 4.0 Location: Between Indian School and Camelback Roads, 16th Street to 20th Street.
- Background: The freeway, as in all segments, has terminated local streets. Also, 18th Street has been cul-de-saced north of Indian School. The freeway has also worked to change the importance of Campbell and Highland Avenues. Campbell should decrease in importance as it now terminates at the freeway, and Highland Avenue will receive more attention as an access way as there is a partial interchange located on it. Only one specific circulation issue has been raised. It is presented below.
- 4.1 Location: On 17th Street between Indian School Road and Campbell Avenue.
- Issue: Cut-through traffic on 17th Street between Indian School Road and Campbell Avenue. Eastbound traffic on Campbell east of 16th Street has been discouraged by the posting of a “No Thru Street” sign. Seventeenth Street, a principal north/south street serving the neighborhood between 16th Street and the Freeway, does handle a majority of the local trips and carries neighborhood traffic to Campbell and Indian School Road. Therefore, it is appropriate that the number of trips has increased somewhat.

Recommendation: The Planning Department and Street Transportation Department are working with the residents to develop a plan to reduce cut-through traffic in the neighborhood. By working with the city, the neighborhood will be made aware of the alternatives, so that the best solution can be selected. The plan must have strong support from the neighbors, and it cannot hinder emergency vehicles or other emergency services.

Segment 5

Camelback Road to Bethany Home Road

5.0 Location: From Camelback Road to Bethany Home Road, 16th Street to 20th Street.

Background: The largest changes in local circulation in this segment will be the freeway access from Camelback Road to Colter Street, as well as the traffic diverter placed at Bethany Home Road and 18th Street. Also, Bethany Home Road, east of the freeway, will no longer act as a major street. It will, however, function as a neighborhood collector. Three specific issues have been raised for this area. They are presented below.

5.1 Location: On Montebello and 20th Street.

Issue: Cut-through traffic on Montebello and 20th Street. Most of the traffic on 20th Street north of Missouri Avenue will be local traffic and 20th Street may be terminated just north of Bethany Home Road.

Recommendation: Montebello has been signed for "No Thru Traffic" at 24th Street, to reduce cut-through traffic.

5.2 Location: 18th Street north of Camelback Road.

Issue: Eighteenth Street has been realigned north of Camelback Road. This realignment created a hardship for the five home owners south of Colter Street as this realignment created through-lots for these homes, additionally, these residents had to put up with the construction of the realigned 18th Street. Furthermore, when 18th Street was realigned, a partial cul-de-sac was placed at the southern end of the street. Cut-through traffic on 18th Street is a concern. This cul-de-sac has been fully screened and landscaped to discourage cut-through traffic on this street.

Recommendation: On July 5, 1988, the City Council approved the purchase of the five homes south of Colter on 18th Street. These homes are to be resold to individuals who express an intent to live in them. This will discourage speculation and the promotion of renter-occupied areas.

5.3 Location: Bethany Home Road and the Freeway.

Issue: The Bethany Home Road interchange was originally designed as an overpass. An elevated road would negatively impact adjacent single-family neighborhoods. Concern about the impacts of the freeway on area residents prompted the City Council to approve an underpass at Bethany Home Road.

Recommendation: On June 28, 1988, the City Council Approved the redesign of Bethany Home Road as an underpass. The redesign will reduce the environmental impacts of the roadway on area residents while permitting access to the freeway.



Segment 6

Bethany Home Road to Glendale Avenue

6.0 Location: Between Bethany Home Road and Glendale Avenue, 16th Street to 20th Street

Background: As with segments 2 and 4, the largest circulation changes in this segment will be the result of terminating the half-mile street, Maryland Avenue. As Maryland Avenue will terminate at the freeway, it will be reduced to a local street. Three specific issues have been raised for this area; they are listed below.

6.1 Location: On 20th Street north of Bethany Home Road.

Issue: Possible increased traffic on 20th Street continuing north of Bethany Home Road as a result of closure of Maryland Avenue and Bethany Home Road to through traffic.

Recommendation: That 20th Street north of Bethany Home Road be cul-de-saced immediately as adopted with the Bethany Home Road interchange redesign.

6.2 Location: On 18th Street, between Bethany Home Road and Maryland Avenue.

Issue: Increased traffic on 18th Street between Bethany Home Road and Maryland Avenue. A traffic count for 18th Street at Rose Garden Lane was done on January 5, 1987 and revealed an average daily traffic of 2,295 vehicles. The projected volume in the year 2010 is 1,500 vehicles per day.

Recommendation: Continue to monitor traffic in this area. If volumes are higher than projected, the Street Transportation Department will conduct a study to determine if mitigation measures are warranted. The study can only be made after the parkway is opened to traffic and the new circulation patterns are established. (Fall 1990)

6.3 Location: Between Bethany Home Road and Rose Lane, from 16th Street to the Freeway.

Issue: Neighborhood circulation between Bethany Home Road and Rose Lane, from 16th Street to the parkway. Neighborhood circulation, especially south of Berridge Lane may become difficult when freeway construction is complete due to the neighborhoods' only access being at 16th Place and Bethany Home Road. With no traffic signal at this location and with traffic anticipated to increase on Bethany Home Road, ingress and egress may become difficult for area residents.

Recommendation: A new road to link Berridge Lane with Rose Lane at 17th Place has been constructed. This connection required the removal of the home at the southwest corner of 17th Place and Rose Lane. This connection allows residents of the area to enter and leave their neighborhood at the signalized intersection at 16th Street and Rose Lane (See Figure 18).

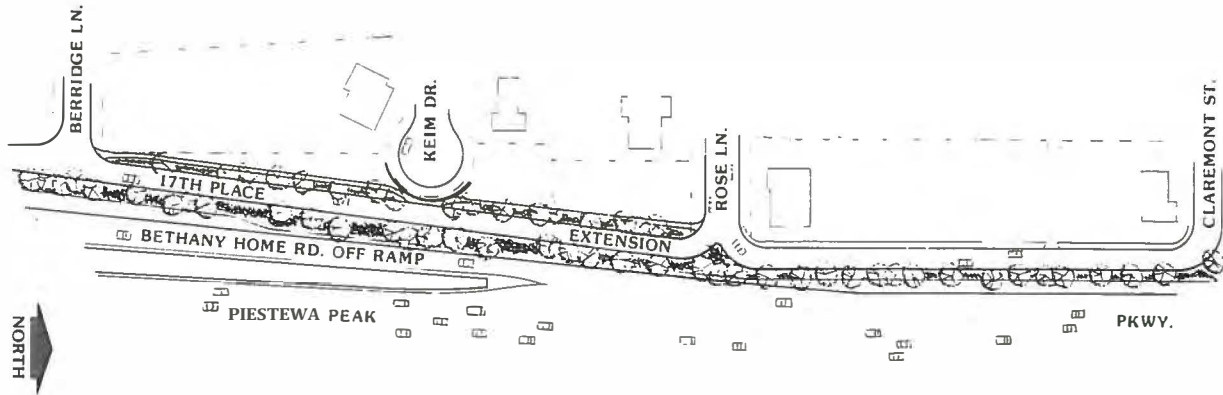


FIGURE 18
17TH PLACE CONNECTION

C. NEIGHBORHOOD STABILIZATION AND IMPROVEMENT ELEMENT

The neighborhood stabilization and improvement element consists of programs and policies which promote the conservation and stabilization of residential neighborhoods. First the neighborhood improvement programs are discussed. Other programs are then presented which will aid in stabilizing area neighborhoods.

1. Neighborhood Improvement Programs

Residents in several areas along the Piestewa Peak corridor have cited neighborhood deterioration as one of the most significant problems they experience. Many of the areas have been inspected and subsequently three neighborhoods have been identified as areas that could benefit from a neighborhood stabilization program. The neighborhoods identified are (See Figure 19):

- (1) Between Oak Street and Virginia Avenue, from 22nd Street to the Piestewa Peak.
- (2) Between Oak Street and Cambridge Avenue, from approximately the 18th Street alignment to the Piestewa Peak.
- (3) Between Indian School Road and the Grand Canal, from 16th Street to the Piestewa Peak.

Although these neighborhoods have been specifically identified as areas that could benefit from a neighborhood stabilization program, other areas may also be improved by active neighborhood participation.

The City of Phoenix Neighborhood Improvement and Housing Department has several programs to assist citizens in stabilizing their neighborhoods. The programs require active participation by residents of the area.

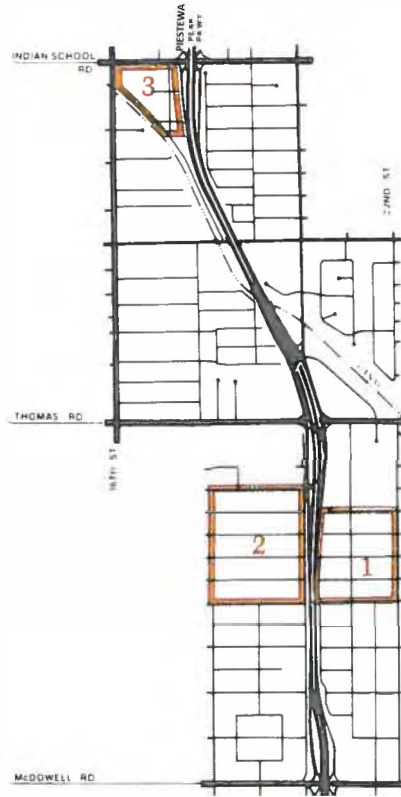


FIGURE 19
NEIGHBORHOOD MAP

After reviewing the available programs, the following were selected as being the most helpful in solving the problems described by residents.

- Community Neighborhood Group Development
City staff will participate in assisting neighborhoods to organize in order to respond to neighborhood issues which may have a destabilizing influence on their neighborhoods. Staff will provide information which explains the various programs of the Neighborhood Improvement and Housing Department and their impact in reducing deteriorating influences.
- Major Home Repair Program*
No interest loans are available for occupant home owners who have an income equal to or less than 50 percent of the Phoenix median income. This program provides a one-time maximum allocation of \$5,000 in the form of a permanent lien to bring selected items up to housing safety standards (minimum code requirements). Participants with income equal to or less than 50 percent of the Phoenix median income have the first \$2,000 allocated as a grant and the remainder is allocated as a 0 percent loan. Repairs/replacements are limited to electrical, plumbing, mechanical, and roofs. All qualified participants are required to complete the City's Home Maintenance Training Program which consists of four 2-hour sessions. A code violation must be in evidence to qualify for assistance. During the first four months of each fiscal year, 75 percent of the allocated funds are earmarked for neighborhood improvement areas and 25 percent is available citywide. If neighborhood improvement area funds are not utilized during the four-month period, then the remaining funds are open for citywide distribution.

• Operation Paint Brush*

A \$250 maximum one-time rebate is provided for the purchase of paint and supplies to restore the exterior of owner-occupied homes. Owners must submit original receipts as proof of purchase of materials. Owner's income must be equal to or less than 80 percent of the Phoenix median income. During the first four months of each fiscal year, 75 percent of the allocated funds are earmarked for neighborhood improvement areas and 25 percent is available citywide. If neighborhood improvement area funds are not utilized during the four-month period, then the remaining funds are open for citywide distribution.

• Rehab Program*

A low interest, one-time loan for owner/occupants up to \$10,000 is available. A lien is attached in the event the property is sold, transferred, or vacated. An eligible owner/occupant must satisfy the qualifying criteria of having equal to or less than 50 percent of the Phoenix median income, the first \$2,000 is allocated as a grant and the remainder is a 0 percent loan. The residence must be brought completely into compliance with current housing safety standards. All qualified participants are required to complete the City's Home Maintenance Training Program which consists of four 2-hour sessions. A code violation must be in evidence to qualify for assistance. During the first four months of each fiscal year, 75 percent of the allocated funds are earmarked for neighborhood improvement areas and 25 percent is available citywide. If neighborhood improvement area funds are not utilized during the four-month period, then the remaining funds are open for citywide distribution.

• Section 312 Loan Program*

An eligible applicant having equal to or less than 80 percent of the Phoenix median income may purchase a home for \$1 and then must qualify for a loan to rehabilitate the structure up to property rehabilitation standards. Section 312 loan funds are utilized for qualified borrowers as funds are available. This program has provided an average of 8-10 units annually. All qualified participants are required to complete the City's Home Maintenance Training Program which consists of four 2-hour sessions and to complete pre-purchase counseling through the Department's Housing Counseling Program. A waiting list of potential homesteaders is established by advertising.

• Hardship Assistance Program*

Assistance is provided to very low-income homeowner/occupied residences which have an income level equal to or less than 50 percent of the Phoenix median income and who have been cited under the Property Maintenance Ordinance. Minor violations of the exterior premises can receive up to \$500 in aid. Violations requiring major repair can receive up to \$2,000 in aid. This is a last resort funding program for those items which cannot be addressed/funded by other Departmental programs. Appropriate referrals will be made.

• Home Improvement Revenue Bond Program(s)*

Owner/occupants will be able to make major renovations to their property by taking advantage of an FHA Title I insured loan not to exceed \$15,000 for a 15-year term. Moderate income applicants not exceeding gross family income of \$38,065 and fulfilling underwriting and bond requirements will be eligible for approximately an 8.5 percent loan. Moderate and low-income applicants having equal to or less than 80 percent of the Phoenix median income and fulfilling underwriting and bond criteria will be eligible for a 5 percent loan. Applicants with a gross family income up to \$42,240 will be eligible for the 8.5 percent loan if the homes requiring improvement are located in the Internal Revenue Service's designated areas. The city will conduct a property evaluation to ensure that properties will comply with the City's Property Maintenance Ordinance. Program's life expectancy is based on availability of loan funds.

Recommendation:

That the three identified neighborhoods and any other neighborhood which feels they could benefit from a neighborhood stabilization program, work with the Neighborhood Improvement and Housing Department through the Community Neighborhood Group Development Program. Through the Group Development Program residents can decide which of the other services and programs would help them to reduce deterioration in their area.

*These are existing City administered programs and are subject to fund availability.

2. Landscape Enhancement Program

Following review of existing landscaped areas and proposed landscape plans, it has been determined that some area residents would benefit from more landscaping along the freeway. Additional landscaping would provide better screening of the freeway. Enhanced landscaping would also soften the appearance of the noise walls and improve the compatibility of the freeway with adjacent neighborhoods.

The following policies have been developed to ensure that all areas would benefit from the Landscape Enhancement Program. The following policies have guided the development of this program:

POLICY 1: Clusters of trees and shrubs shall be planted where streets have been terminated at the freeway.

POLICY 2: Fully landscape remnant parcels with trees, shrubs and ground cover.

POLICY 3: Plant trees approximately 15 feet apart to help soften the effect of the noise walls, and to screen views of the freeway from nearby neighborhoods.

POLICY 4: Liberally plant shrubs and ground cover along the freeway to help provide visual relief from the noise walls and access control devices (See Figure 20 for Concept).

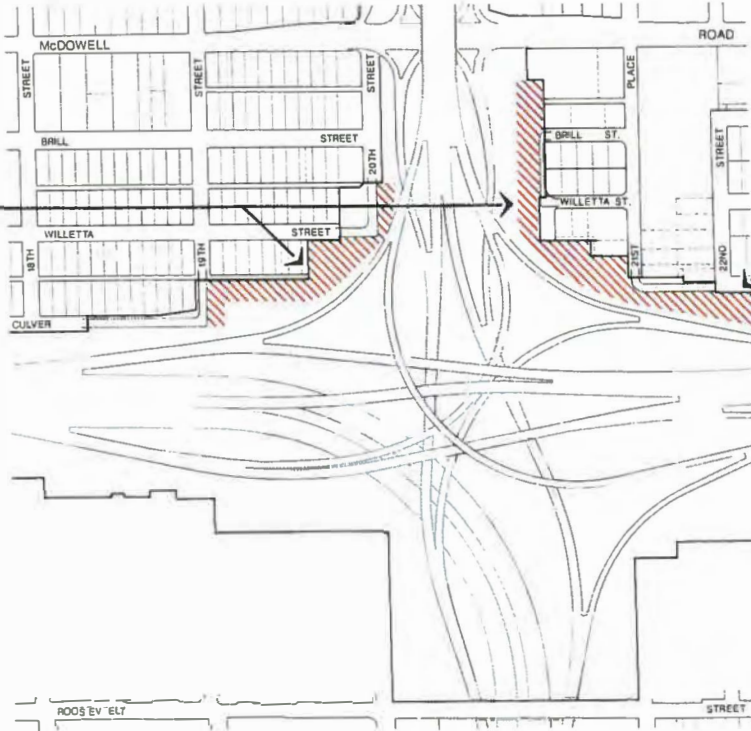
The following areas have been identified as needing additional landscape enhancement. See Figures 21-26 for location and recommended action.



FIGURE 20



Much of this area is almost void of landscaping. Plant trees at least 15' on center along the noise walls or other access control device. Generously plant shrubs and ground cover to help provide visual relief for area residents.

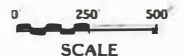


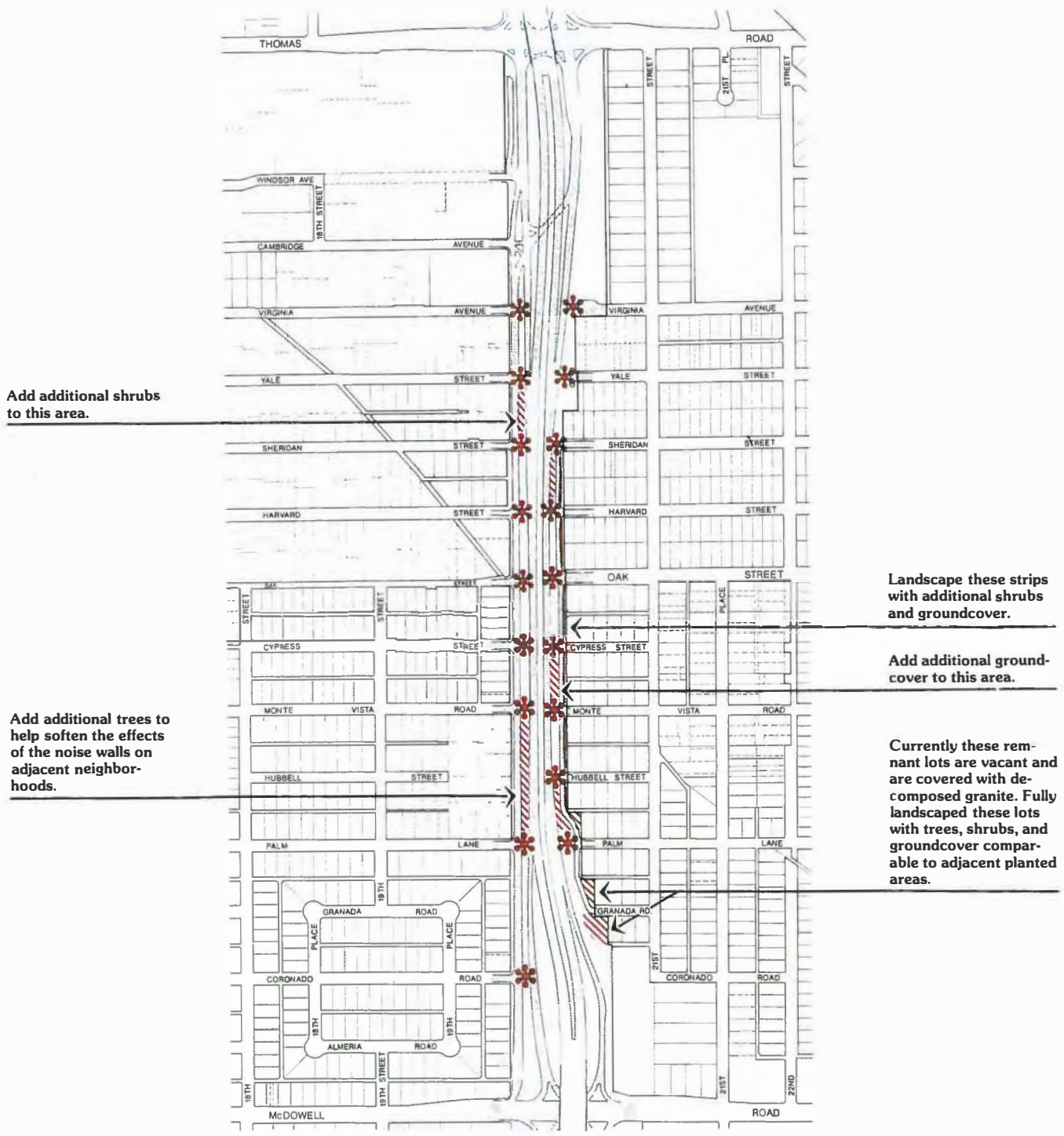
Add trees along Culver approximately 15' apart, to help screen the chain link fence.

FIGURE 21
LANDSCAPE ENHANCEMENT PROGRAM
 SEGMENT 1

LEGEND

-  EXTRA EMPHASIS ON HEAVY USE OF TREES AND SHRUBS AT TERMINATION OF STREETS TO SCREEN NOISE WALLS
-  SPECIFIC LANDSCAPE REQUIREMENTS AS NOTED ON PLAN





Add additional shrubs to this area.

Add additional trees to help soften the effects of the noise walls on adjacent neighborhoods.

Landscape these strips with additional shrubs and groundcover.

Add additional groundcover to this area.

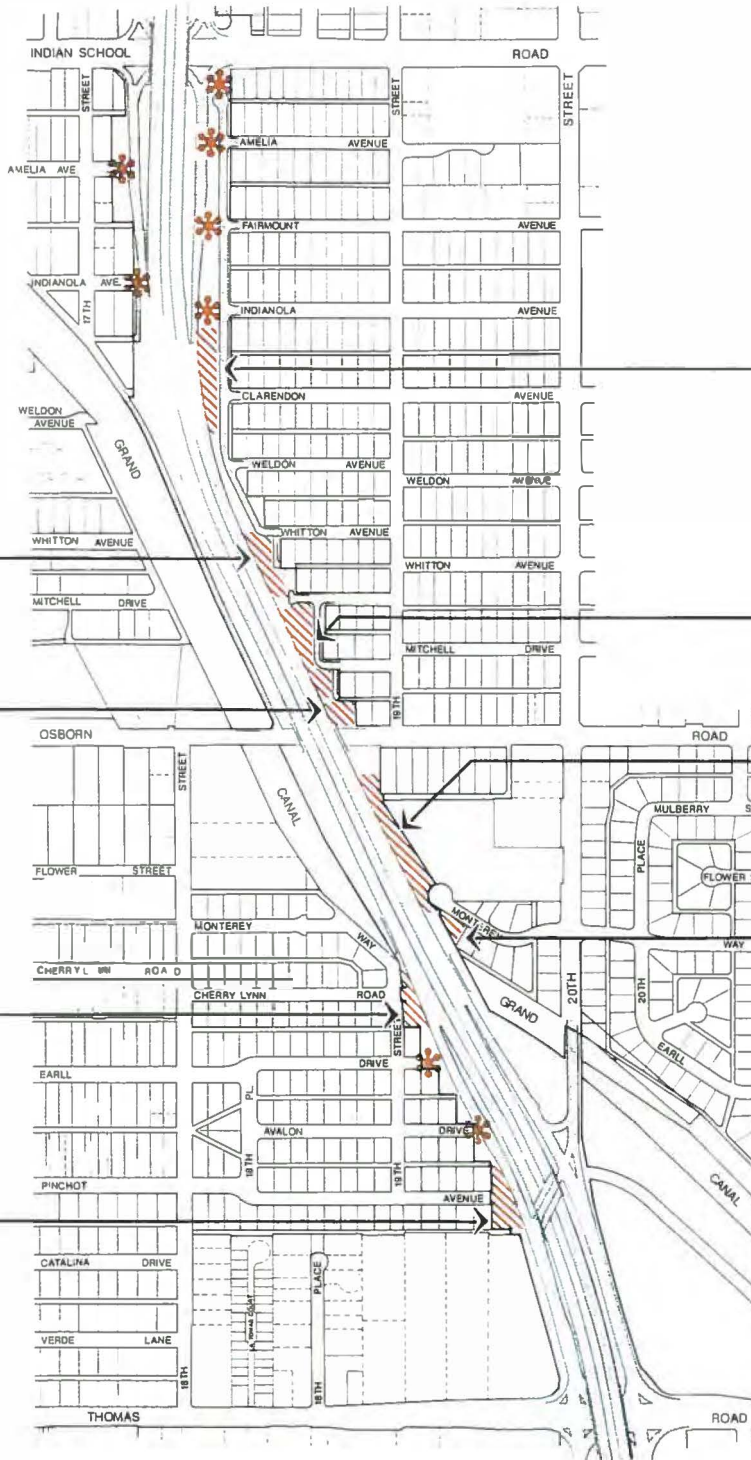
Currently these remnant lots are vacant and are covered with decomposed granite. Fully landscaped these lots with trees, shrubs, and groundcover comparable to adjacent planted areas.

FIGURE 22
LANDSCAPE ENHANCEMENT PROGRAM
 SEGMENT 2

LEGEND

-  EXTRA EMPHASIS ON HEAVY USE OF TREES AND SHRUBS AT TERMINATION OF STREETS TO SCREEN NOISE WALLS
-  SPECIFIC LANDSCAPE REQUIREMENTS AS NOTED ON PLAN





Plant additional trees, at least 15' on center to better screen the freeway.

Add additional shrubs, at least 6-8' on center along this area.

This lot is currently landscaped only with decomposed granite. Fully landscape this lot with trees, shrubs and groundcover.

Plant additional trees to better screen the freeway.

Add additional trees to this area at least 15' on center to better screen the freeway from area residents.



Add additional trees, shrubs and groundcover to this area.

This area has been covered with decomposed granite. Fully landscape this space with trees, shrubs and groundcover.

This lot is currently landscaped only with decomposed granite. Fully landscape this lot with trees, shrubs and groundcover.

FIGURE 23
LANDSCAPE ENHANCEMENT PROGRAM
 SEGMENT 3

LEGEND

-  EXTRA EMPHASIS ON HEAVY USE OF TREES AND SHRUBS AT TERMINATION OF STREETS TO SCREEN NOISE WALLS
-  SPECIFIC LANDSCAPE REQUIREMENTS AS NOTED ON PLAN





Add additional shrubs to this area along the bike path.

Add additional trees and shrubs to better screen the freeway.

This lot is currently proposed to be landscaped only with decomposed granite. Fully landscape this lot with trees, shrubs and groundcover.

FIGURE 24
LANDSCAPE ENHANCEMENT PROGRAM
 SEGMENT 4

LEGEND



EXTRA EMPHASIS ON HEAVY USE OF TREES AND SHRUBS AT TERMINATION OF STREETS TO SCREEN NOISE WALLS



SPECIFIC LANDSCAPE REQUIREMENTS AS NOTED ON PLAN





Add trees and shrubs to this area, between the right-of-way line and the noise wall.

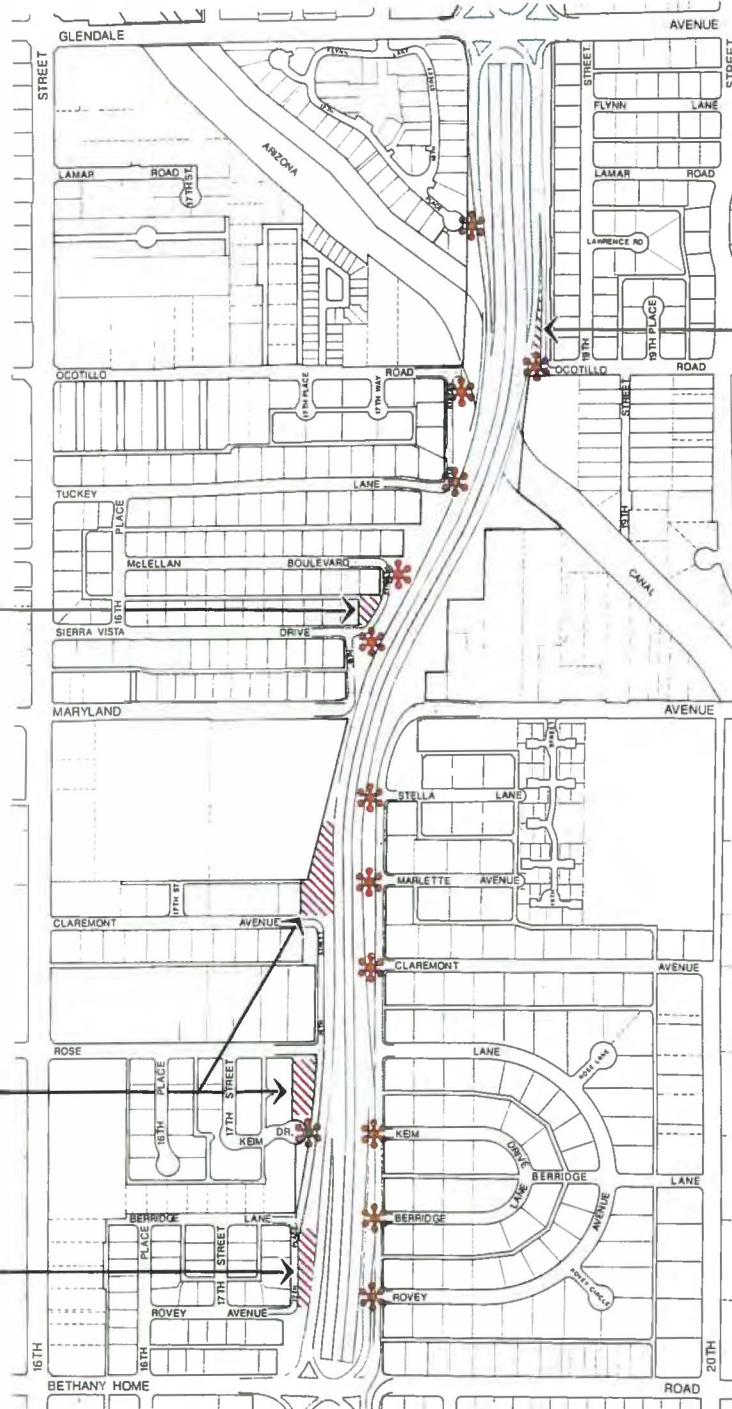
Additional landscaping and screening to be provided.

FIGURE 25
LANDSCAPE ENHANCEMENT PROGRAM
SEGMENT 5

LEGEND

-  EXTRA EMPHASIS ON HEAVY USE OF TREES AND SHRUBS AT TERMINATION OF STREETS TO SCREEN NOISE WALLS
-  SPECIFIC LANDSCAPE REQUIREMENTS AS NOTED ON PLAN





Add additional trees to this area to help screen noise walls in this area.

This lot is currently proposed to be landscaped only with decomposed granite. Fully landscape this lot with trees, shrubs and groundcover.

This lot is currently proposed to be landscaped only with decomposed granite. Fully landscape this lot with trees, shrubs and groundcover.

Add additional shrubs and/or groundcover to this area to help screen the noise wall.

FIGURE 26
LANDSCAPE ENHANCEMENT PROGRAM
 SEGMENT 6

LEGEND

-  EXTRA EMPHASIS ON HEAVY USE OF TREES AND SHRUBS AT TERMINATION OF STREETS TO SCREEN NOISE WALLS
-  SPECIFIC LANDSCAPE REQUIREMENTS AS NOTED ON PLAN





3. 18th Street Neighborhood Infill

One large remnant parcel located just south of Missouri Avenue and one parcel located on the northwest corner of 18th Street and Colter Street lie adjacent to the Piastewa Peak Parkway. These vacant parcels detract from this otherwise cohesive residential area.

Recommendation: The large parcel has been divided into three single-family lots and the lot on 18th Street and Colter has been in-filled with homes that were in the path of the realigned 18th Street. These relocated homes have been fully renovated and sold to individuals who expressed an intent to live in the homes. This is to promote the continued stability of the area.

4. Screening of Freeway Lights

In some neighborhoods, freeway lighting shines into the yards of area residents and has become a nuisance. Citizens have requested relief from this unwanted lighting.

Recommendation: Where desired by residents, lighting along the freeway will be screened, to the best degree possible, from shining into their yards.





D. SAFETY ELEMENT

The safety element provides policies and guidelines for alleviating undesirable conditions. Several safety conditions have been identified within the study boundary, these concerns have been specifically addressed.

1. Neighborhood Safety

Some residents near the Piestewa Peak Parkway have noted an increase of crime in their neighborhoods. Statistics indicate that crime in the City of Phoenix is on the rise. Thus, it is understood that crime within the Specific Plan area will be a problem. Research shows that fear of crime as well as crime itself, is a significant factor in determining the quality of life for people. Specific actions have been recommended to help reduce crime for area residents.

Increased crime has been identified as a concern of residents that live near the freeway. Based on statistics*, it appears that crime along the Piestewa Peak corridor fluctuates just as it does in other areas of the city. In terms of absolute numbers, three types of crimes have increased within the study area between 1987 and 1988. These types include robbery, burglary, and auto theft (see Figure 27).

To better serve residents along the Piestewa Peak Parkway, the Police Department has adjusted the Beat, Squad and District boundaries to respond to the influence the Piestewa Peak Parkway has had on access to area neighborhoods (See Figure 28). The parkway is now the boundary between the beats. This change has helped field officers better serve area residents.

Several programs were considered to help reduce neighborhood crime. The security of neighborhoods is improved by neighborhood social interactions like that promoted by the "Block Watch" program. "Block Watch" is administered by the Police Department and has been recommended to reduce crime in neighborhoods along the Piestewa Peak Parkway.

The program gives residents a hands-on demonstration of techniques they can use to improve home security, provides residents with the knowledge on how to spot potentially dangerous situations, and teaches the proper response to those situations. The "Block Watch" program has been very successful in reducing crime levels in neighborhoods. If any resident wishes to participate in this program, they should contact the Police Department for more information.

*Police Department, Planning Research Bureau Statistics, May 3, 1989.

	16TH ST.		20TH ST.		24TH ST.	
	88	↓	26	↓		LENDALE AVE.
	78		21	↓		MARYLAND AVE.
	112	↑	16	↓		BETHANY HOME RD.
	131		14	↓		MISSOURI AVE.
	84	↑	47	↓		CAMELBACK RD.
	111		28	↓		CAMPBELL RD.
	263	↓	149	↑		INDIAN SCHOOL RD.
	231		177	↓		OSBORN RD.
	290	↑	300	↓		THOMAS RD.
	316		261	↓		DAK ST.
	195	↑	124	-		MC DOWELL RD.
	246		124			ROOSEVELT ST. (I-10)
	241	-	70	↑		
	243		84	↓		
	182	↑	317	↓		
	224		247	↓		
	295	↑	135	-		
	416		136			
	287	↓	244	↓		
	235		200	↓		
	811	↓	128	↓		
	592		110			
TOTAL	2848	-	1556	↓		000 1987
	2843		1402			000 1988

FIGURE 27

PIESTEWA PEAK CORRIDOR PART I CRIME DATA

Part I Crimes are: Murder, rape, aggravated assault, burglary, theft, auto theft and arson.

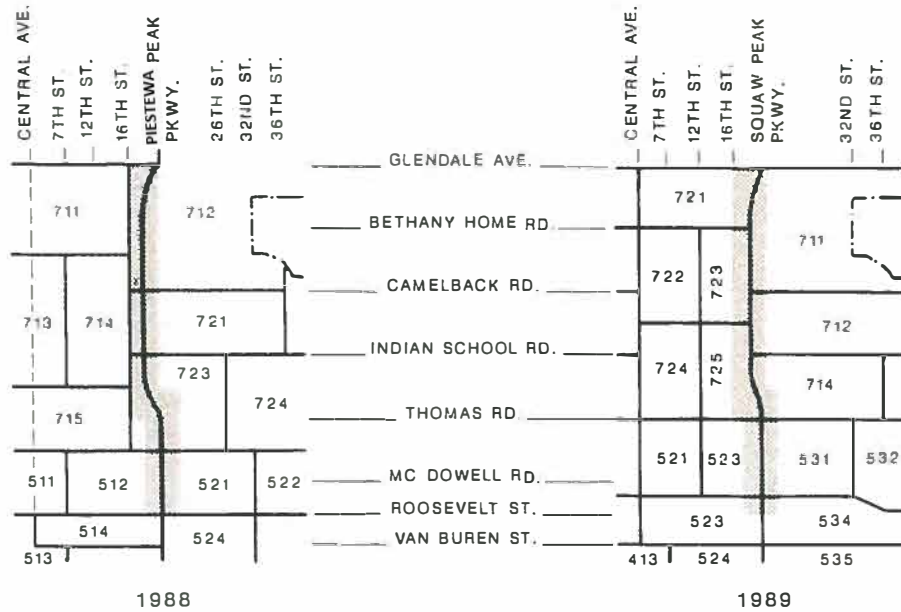


FIGURE 28

CITY OF PHOENIX POLICE DEPARTMENT BEAT BOUNDARIES

2. Campbell Avenue Vacant Lot

The vacant lot is located on the northwest corner of 17th Place and Campbell Avenue. The residents of the Montecito neighborhood have commented on several safety concerns pertaining to this vacant lot. The lot is owned by the city and will likely be held by the city until the Paradise Parkway is built as this land will be required by the future interchange.

Recommendation: That this large parcel be addressed by the Landscape Enhancement, Public Art, and Community Design Program (refer to Public Art).

3. Adequate Street Lighting

Some street lights in Segment 4, which were removed from Freeway right-of-way, were not replaced following freeway construction. Between Roma and Glenrosa, on the west side of the freeway, six street lights are needed. By providing adequate street lighting, some safety problems can be reduced (See Figure 29).

Recommendation: Street lights have been replaced at the following locations:

- 16th Place and Roma
- 17th Place and Montecito
- 17th Place and Meadowbrook
- 17th Place and Roma
- 18th Street and Campbell
- 18th Street and Glenrosa

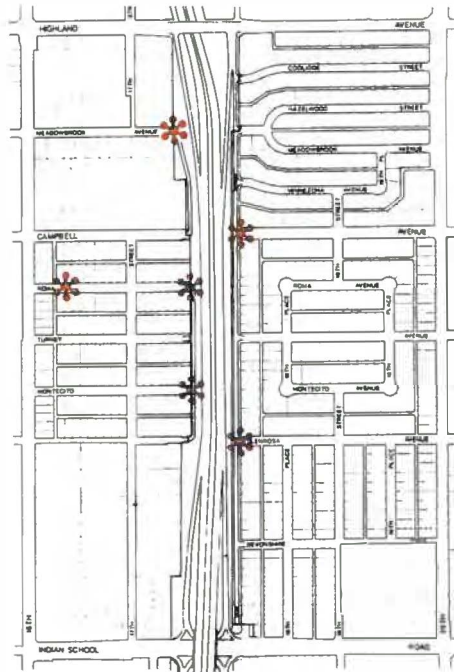


FIGURE 29

STREET LIGHT LOCATIONS



4. Madison #1 Elementary School

Madison #1 Elementary School is located on the northwest corner of Missouri Avenue and the freeway. The school's ballfields will be located next to the freeway.

Recommendation: Trees and landscaping have been planted along a wrought iron fence to screen the freeway from the school grounds as well as to deter balls and other objects from ending up on the freeway. Subsequent to other district concerns, Street Transportation has agreed to install a screen wall in lieu of the wrought iron fence.

5. Design of the Noise Walls and Noise Wall Caps

Children have been gaining access to the top of noise walls from the pedestrian bridges at Campbell Avenue and Oak Street and from locations where the noise walls are low. Concern is for children falling off of the walls and for children getting onto the freeway.

Recommendation: Redesign the pedestrian bridges as necessary to prohibit access to the noise walls. Where noise walls are to be retrofitted with additional height, install a new cap design which prevents children from accessing the top of the wall.

E. NOISE ELEMENT


This element establishes policies and guidelines for limiting noise impacts on area residents. It further recommends preferred actions to achieve the policies.

- POLICY 1: Noise walls and barriers should be retrofitted as appropriate, with reasonable additional height to meet the 67 dB(A) leq standard.
- POLICY 2: Design of the noise wall additions should aesthetically match, as closely as possible, the existing design.
- POLICY 3: Minimize any tunnel effect created by the raising of existing walls and barriers.
- POLICY 4: Drainage holes should be fitted with baffles, and the fire hose holes should be plugged, when possible, to increase the effectiveness of the noise walls.

The level of traffic noise varies with the volume of traffic, the speed of traffic, and the number of trucks in the flow of traffic. Generally, the loudness of the traffic noise is increased by heavier traffic volumes, higher speeds, and a greater number of trucks. Most vehicle noise is a combination of the noises produced by the engine, exhaust, and tires. City Council, in an attempt to reduce noise, prohibited through trucks over 12,000 lbs. and limited traffic speed to 50 mph on the freeway.

Highway traffic is never constant and noise levels change with the number, type, and speed of the vehicles. To measure noise on the Piestewa Peak Parkway, an average was taken, referred to as an "leq". An leq is the constant average sound level which occurs over a period of time.

The city has recognized the Federal Highway Administration's guideline of 67 dB(A) leq for residential land uses close to the Piestewa Peak Parkway. The city has adopted a policy of attempting to mitigate noise where levels are above the 67 dB(A) leq level.



It may not be feasible to design noise attenuation measures to mitigate noise levels to 67 dB(A) leq at all interchange locations of major streets with the freeway. Noise is generated from vehicles on major streets, as well as from vehicles on the freeway and ramps. Noise can also be further elevated when reflected from bridge and overpass structures. This can lead to higher noise levels.

In most cases, interchange areas are not occupied by residential uses. Where so, special efforts have been made to offer the greatest noise mitigation possible.

One of the best ways to prevent noise from reaching residents is through the construction of barriers. To be effective, a sound-mitigating wall or barrier must be high enough to limit the amount of sound that can pass from the source to the receiver. Along the Piestewa Peak, there are two barrier types, standard noise walls and Jersey barriers. The noise walls on the Piestewa Peak Parkway are concrete walls and the primary function of the wall is to serve as a barrier to sound. Jersey barriers are safety walls designed to divert vehicles back onto the road. Jersey barriers also serve as an effective barrier to tire and engine noise. Additions to Jersey barriers will be made to increase their noise screening capabilities.

Noise walls north of Highland Avenue have been designed and constructed to meet the 67 dB(A) leq guideline. Noise walls south of Highland were installed prior to completion of a comprehensive noise study for the freeway. Those noise walls were originally designed for a lower traffic volume than is now projected, and the noise attenuation measures currently in place are not adequate to maintain the 67 dB(A) leq guideline. The walls are to be increased in height where needed. For existing and proposed wall heights and locations see Figures 30-35.



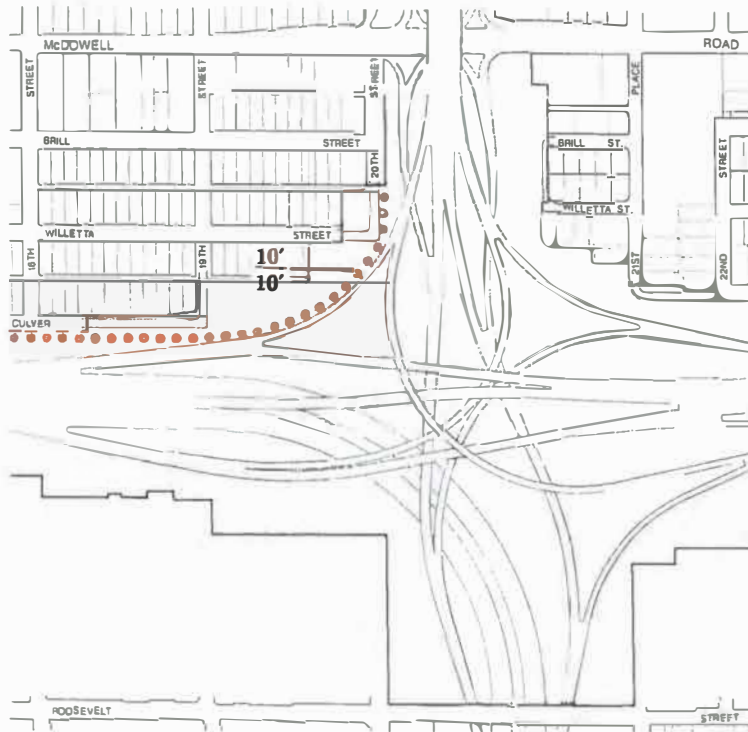
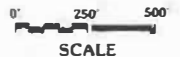


FIGURE 30
PROPOSED NOISE WALL MITIGATION
 SEGMENT 1

LEGEND

- NOISE WALL
- - - JERSEY BARRIER WITH HEIGHT ADDITION

- SCREEN WALL
- $\frac{2' - 8''}{6'}$ Existing Wall Height / Final Wall Height



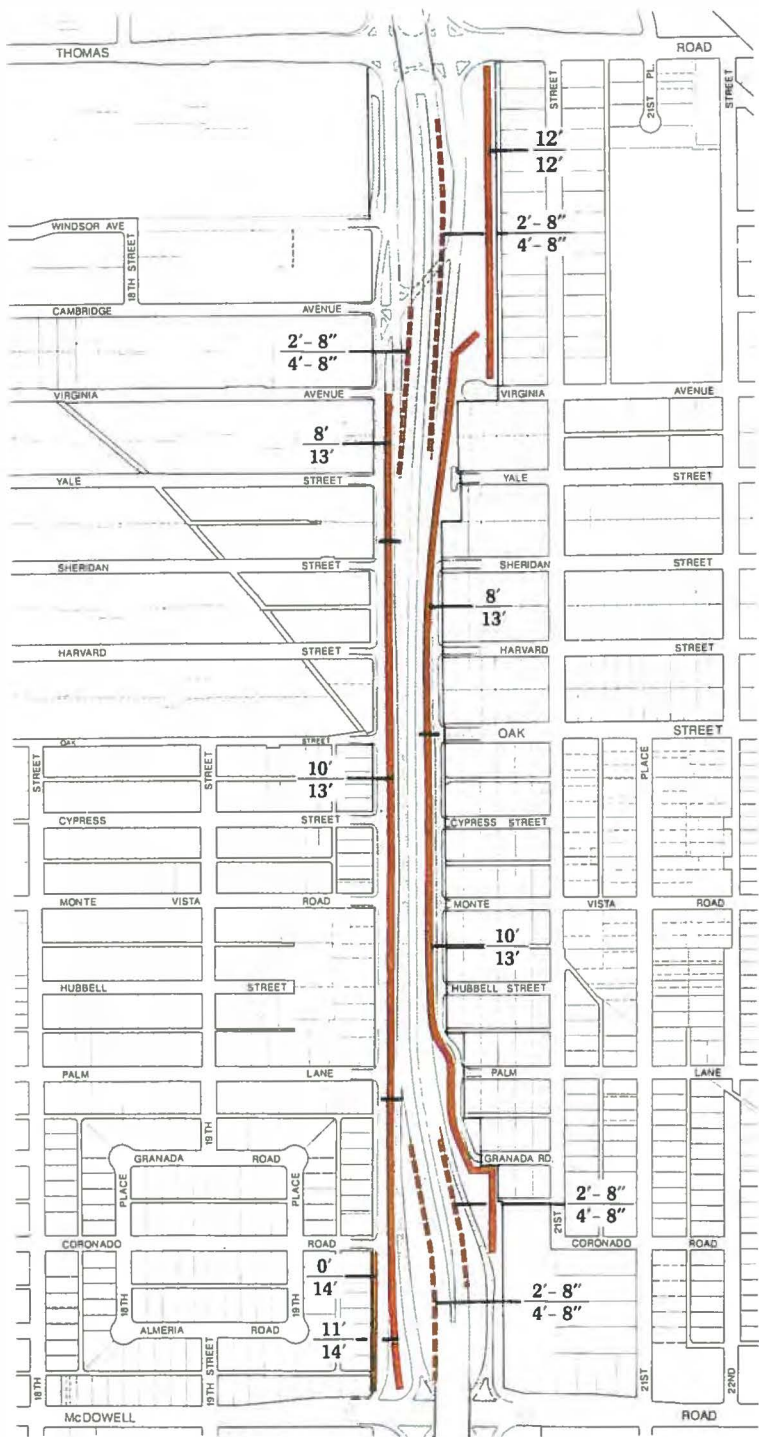


FIGURE 31
PROPOSED NOISE WALL MITIGATION
SEGMENT 2

LEGEND

- NOISE WALL**
- JERSEY BARRIER WITH HEIGHT ADDITION**
- SCREEN WALL**
- 2' - 8"** Existing Wall Height
- 6'** Final Wall Height



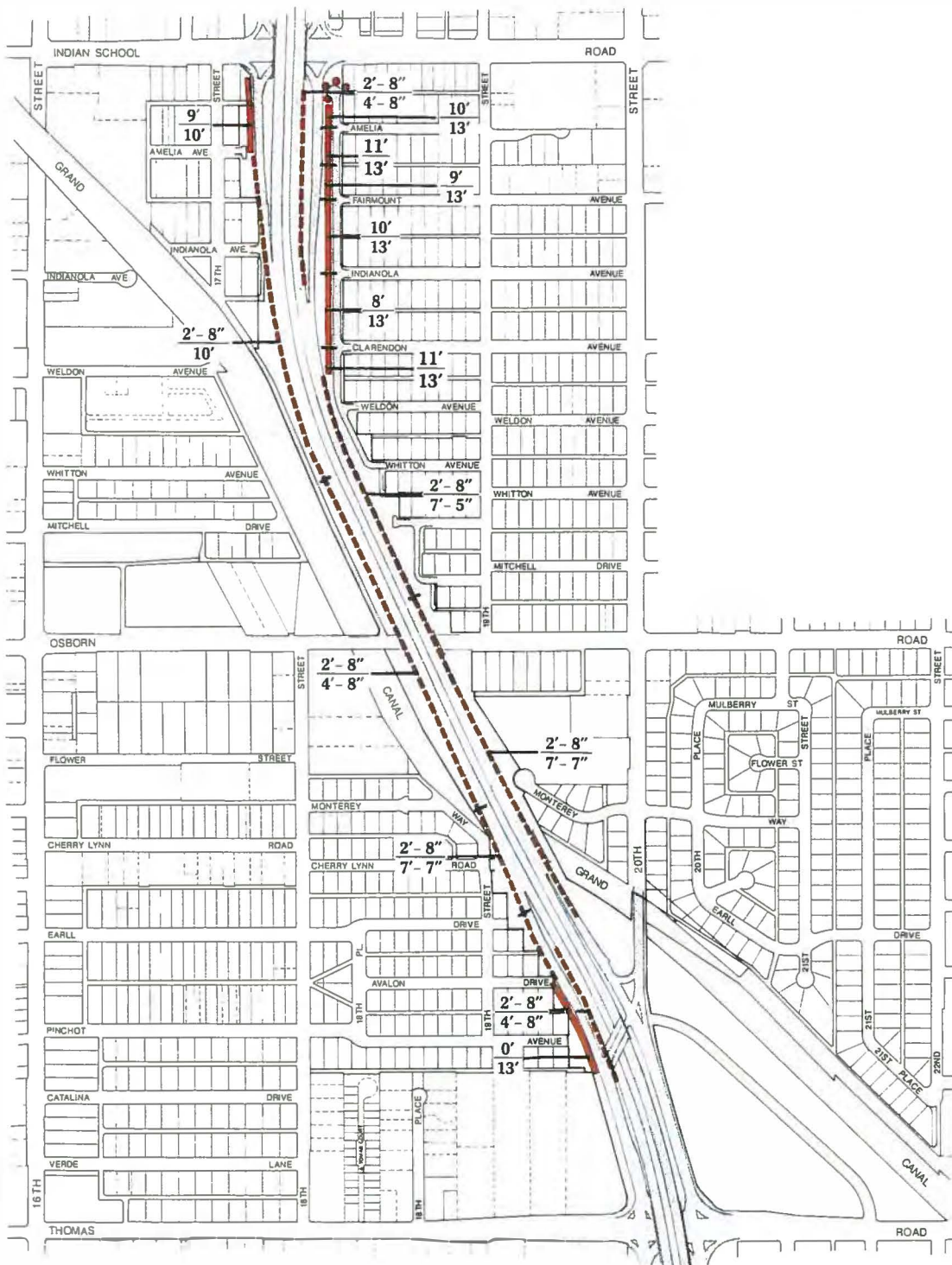


FIGURE 32
PROPOSED NOISE WALL MITIGATION
SEGMENT 3

LEGEND

- NOISE WALL
- - - - JERSEY BARRIER WITH HEIGHT ADDITION

- SCREEN WALL
- $\frac{2' - 8''}{6'}$ Existing Wall Height / Final Wall Height



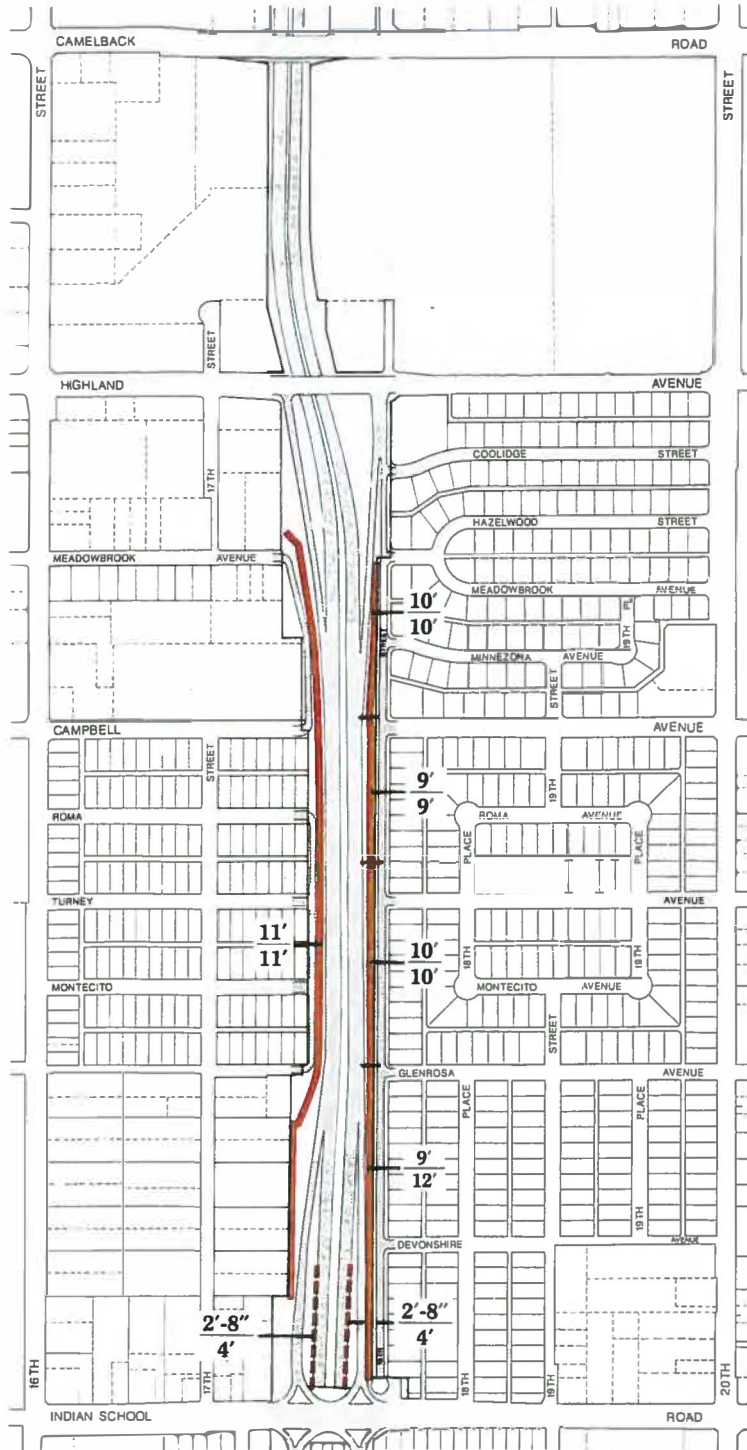


FIGURE 33
PROPOSED NOISE WALL MITIGATION
SEGMENT 4

LEGEND

- NOISE WALL
- - - JERSEY BARRIER WITH HEIGHT ADDITION

- SCREEN WALL
- $\frac{2' - 8''}{6'}$ Existing Wall Height
Final Wall Height



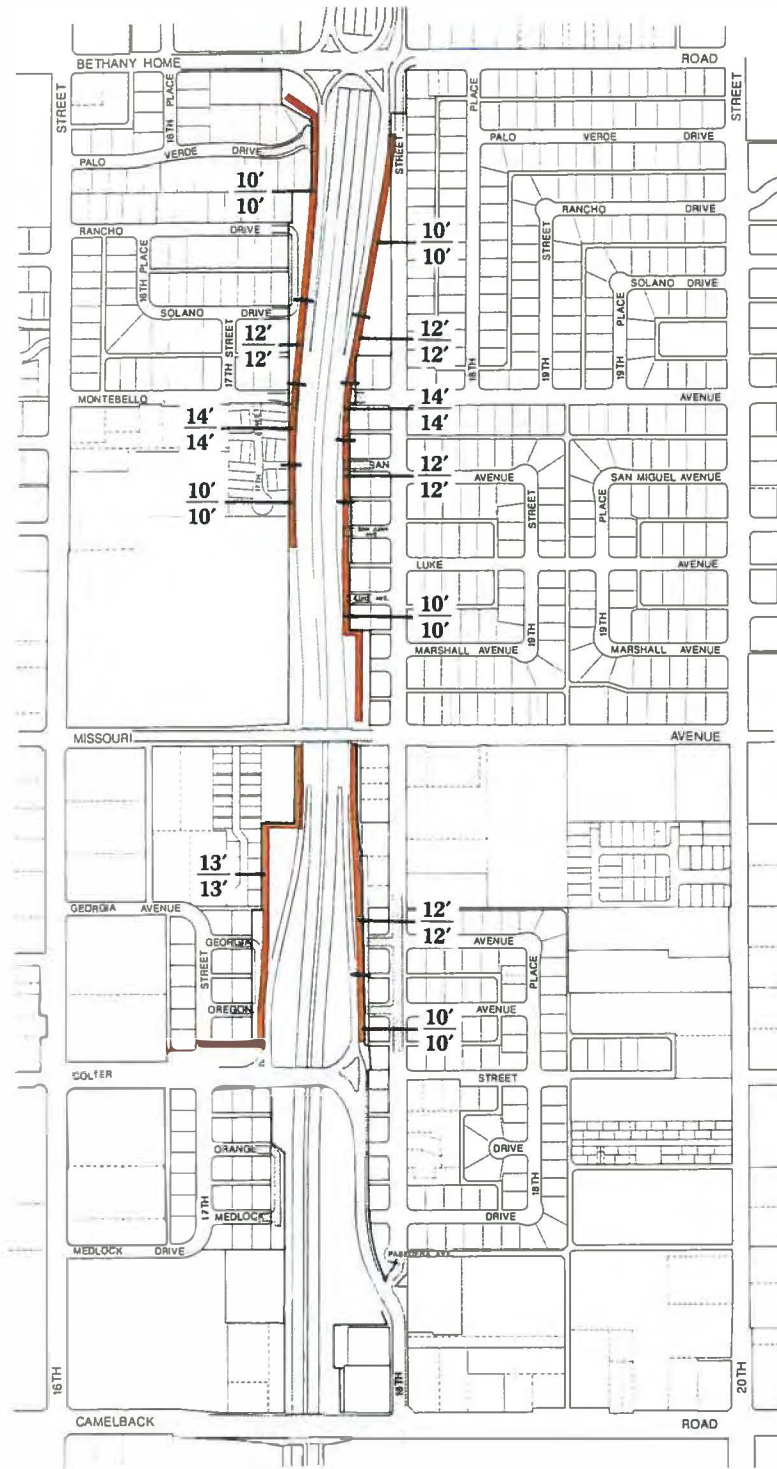



FIGURE 34
PROPOSED NOISE WALL MITIGATION
SEGMENT 5

LEGEND

-  NOISE WALL
-  JERSEY BARRIER WITH HEIGHT ADDITION

-  SCREEN WALL
- $\frac{2' - 8''}{6'}$ Existing Wall Height / Final Wall Height



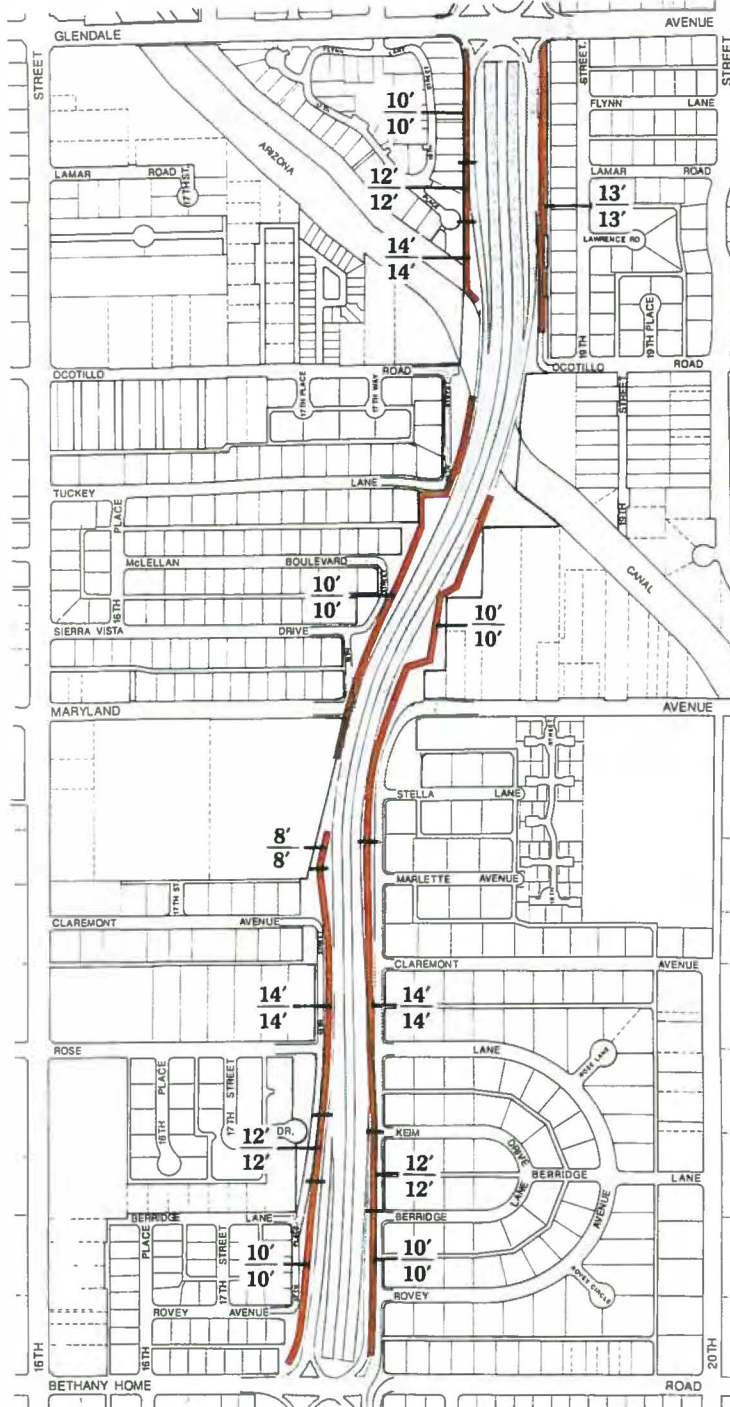


FIGURE 35
PROPOSED NOISE WALL MITIGATION
SEGMENT 6

LEGEND

- NOISE WALL
- - - JERSEY BARRIER WITH HEIGHT ADDITION

- SCREEN WALL
- $\frac{2' - 8''}{6'}$ Existing Wall Height
Final Wall Height





F. BICYCLING ELEMENT

The Bicycling element locates and describes the bicycle trails within the study boundaries. The trails are consistent with the adopted Phoenix Bicycle System and have been included in the design of the Piestewa Peak Parkway.

Bicycling is very popular in the City of Phoenix which encourages a high demand for the bicycle trails. The General Plan supports the provision of a more accessible bicycle system. Consistent with this policy, a bicycle and pedestrian trail was designed into the original plan for the Piestewa Peak Parkway. The trail is a multi-purpose facility which can be used by both bicyclists and pedestrians.

The trail is located along the east side of the freeway, consistent with the adopted Phoenix Bicycle System. Where possible, excess right-of-way has been used for the trail and to enhance the appearance of the facility by adding landscaping and amenities. Where additional right-of-way was not available, local streets have been used for the trail. East/west crossings of the freeway, which link other segments of the bicycle system, have been provided by bicycle and pedestrian overpasses at Oak Street and Campbell Avenue and underpasses at Maryland Avenue and along the Grand and Arizona canals. See Figure 36 for the location of bike trails within the Specific Plan boundaries.

Recommendation: That an accessible bicycling system be an integral part of the freeway design.

Two issues surfaced during the plan preparation process. The following is a summary of those issues.

1. Glendale Avenue Bicycle and Pedestrian Crossing

The interchange at Glendale Avenue, like most interchanges along the Piestewa Peak, will be designed as an “urban interchange”. While an urban interchange is one of the most efficient for moving vehicles, it is not easily crossed by the bicyclist or pedestrian. At Glendale Avenue this crossing becomes critical, as north of Glendale is the mountain preserve and the extension of primary bicycle and hiking trails.

Recommendation: Strong consideration should be given to the need for of a bicycle and pedestrian crossing at Glendale Avenue, linking the Piestewa Peak Parkway trail with the mountain preserve and the Piestewa Peak trail system to the north.

2. Bike Trail on 20th Street, from Claremont Street to Campbell Avenue

Currently 20th Street, ends as a public road north of Claremont Street.

Recommendation: To install a bike trail along the 20th Street alignment from Claremont to Maryland. This path would be available for neighborhood use and would provide easy access to Maryland Avenue and Granada Park.



FIGURE 36
PHOENIX BICYCLE SYSTEM

LEGEND



EXISTING BIKEWAY

COMMITTED BIKEWAY

PROPOSED BIKEWAY



G. PUBLIC ART ELEMENT

The Public Art Element establishes policies and identifies opportunities for the inclusion of public art throughout the Piestewa Peak Parkway. First the basic concepts are discussed. A program for establishing a public art program is then outlined.

The Public Art Plan For Phoenix: Ideas and Visions, prepared by the Phoenix Arts Commission, established the Piestewa Peak Parkway as a priority work area for public art projects. Several sites were outlined in the Plan for initial projects, including at the Arizona Canal, Grand Canal and at the Bethany Home, Indian School, McDowell and Thomas Road Overpasses. Given the size of the freeway and its potential impacts on visual quality in the area, it would be desirable to address aesthetics of the Piestewa Peak Freeway in a comprehensive manner. The objectives of this program are; (1) create features that identify public entry (and exit) points to the freeway; (2) create art features at significant points where the freeway visually interfaces with the community at large; (3) enhance design elements of the freeway itself to improve its visual appearance; and (4) to place works of art at appropriate locations where the public and adjacent residents have access, such as on trails, parks, and landscaped areas along the freeway.

One of the goals of this Specific Plan is to improve the long-term compatibility of the freeway with adjacent and nearby land uses. One element which would improve the freeways compatibility is appearance. The public art program would look not only at the use of landscaping and freeway design, but would provide an opportunity to view the freeway through an artists eyes, to improve the freeways appearance and enhance compatibility. The following objectives should be followed in developing the public art component of this plan:

- Proposals to create identifying elements for neighborhoods like pedestrian zones, as well as other features that identify public entry points to the neighborhoods;
- Proposals to enhance design elements of the freeway itself and improve its visual appearance; instead of simply adding art objects to the freeway;
- Incorporating the use of art at locations where the public and adjacent residents have access (such as trails, parks and landscaped areas along the freeway);
- Proposals to integrate public art projects into area neighborhoods, and create a sense of place or visual identity in neighborhoods along the freeway.

Recommendation: The Art Program has been combined with the Landscape Enhancement Program to become one Community Improvement Project. This consolidation of community improvements has allowed a more efficient use of the mitigation dollars. The program has not been rigidly defined by staff, and therefore, has allowed the consultants bidding on the project to develop their own agendas. A brief outline of this project follows:

PIESTEWA PEAK PARKWAY: Master Plan for Landscaping, Art, and Community Design

1. OBJECTIVE:

The primary objective of this project is to develop a master plan to improve the compatibility of the freeway with adjacent neighborhoods. The plan must present a comprehensive approach to landscaping, art, and community design. The project is funded by the Freeway Mitigation Bond Program and the Phoenix Percent for Arts Program.



2. PROJECT DESCRIPTION:

The Master Plan Program is intended to lessen the impacts of the freeway on adjacent neighborhoods. The entire length of the freeway will be enhanced by additional landscaping and by incorporating public art into the design of the existing facility, thereby returning a sense of place and visual identity to the neighborhoods adjoining the freeway. Colors, textures, and designs for the landscaping and such urban amenities as paving, lighting and seating may be considered, along with special site-specific art projects that would involve area residents.

The project shall be undertaken by a design team to include (1) a certified landscape architect; (2) one or more artists; (3) someone to fill the role of a locally-based facilitator and; (4) may include, but is not limited to, any of the following: social psychologist, community activist, urban historian, engineer, architect, or urban planner.



MITIGATION PROGRAM



The Mitigation Program establishes procedures for implementation of the Specific Plan recommendations and guides the expenditure of the freeway mitigation funds.

Funding for the Freeway Mitigation Program will be provided by the “Freeway Mitigation, Neighborhood Stabilization and Slum and Blight Elimination” bond, which was approved by voters in April 1988. The freeway mitigation portion of this bond allocated \$18 million for mitigating the effects of freeway construction on city neighborhoods. The funding is to pay for city staff and consultant services to develop the Specific Plans for freeways, and the funding is also to pay the cost of capital improvements such as landscaping, pedestrian overpasses, underpasses, walkways, fences, walls, drainage, and the limited acquisition of property solely for public purposes and use.

All segments of the Piestewa Peak Parkway have been analyzed with the existing segments and the parts now under construction. The following improvements are recommended to mitigate the identified freeway impacts on neighborhoods. This mitigation work is beyond that normally required by the City of Phoenix. To assure the plan is carried out, an implementation process has been developed for each of the mitigation programs outlined in this plan.

SUMMARY ACTION OF MITIGATION PROGRAM

ELEMENT	ITEM DESCRIPTION	RECOMMENDED ACTION	ESTIMATED COST
LAND USE	a. Highland Avenue Improvement Program	Purchase 14 homes plus the northern portion of Tract 'A' Highland Estates. Use property to improve Highland Avenue as a Boulevard with a landscaped median and screen wall.	\$2,000,000
CIRCULATION	a. Circulation Improvements	Modify/improve internal traffic circulation in problem areas.	\$ 32,000
	b. Bethany Home Road Underpass	Contribute to the cost of the underpass.	
	c. Realignment of 18th Street	Non-obligatory offer to purchase five homes. Once construction is complete, resell homes	\$ 170,000
NEIGHBORHOOD STABILIZATION & IMPROVEMENT	a. Neighborhood Improvement Program	NIH work with neighborhoods	\$ 0
	b. Landscape Enhancements	Increase existing and proposed landscaping per attached schedule.	\$ 500,000
	c. 18th Street Neighborhood	Move and rehabilitate four homes located in the right-of-way for the realigned 18th Street. Move three of the homes onto the remnant parcel south of Missouri and one home onto the lot on the northwest corner of 18th Street and Colter Street.	\$ 0*
	d. Screening of Freeway Lights	That where desired by residents, lighting along the freeway be screened from shining into their yards.	\$ 10,000
SAFETY	a. Neighborhood Safety Program	Police Department work with neighborhoods through "Block Watch Program"	\$ 0

b. Adequate Street Lighting	Install street lights	\$ 0
c. Madison Elementary School Freeway Screening	Screen the freeway from the school campus.	\$ 26,000

NOISE

a. Noise Attenuation Measures	Increase height of noise walls per attached schedule.	\$ 875,000
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BICYCLING

a. Bicycling	That an accessible bicycling system continue to be an integral part of the freeway design.	\$ 0
b. Glendale Avenue Bicycle & Pedestrian Crossing	Consideration should be given to the provision of a bicycle and pedestrian underpass at Glendale Avenue.	\$ 0

PUBLIC ART

a. Public Art	Incorporate public art throughout the freeway	\$ 358,000
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Total	\$5,971,000
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*Note: The four homes were moved and improved for approximately \$280,000. It is anticipated that all funds spent to move and improve the homes will be returned through the sale of the homes.

1. LAND USE

a. Highland Avenue Improvement Program

Location: South side of Highland Avenue, between 18th and 20th Streets.

Issue: Fourteen single-family homes face Highland Avenue in this area. Increasing traffic on Highland Avenue has been a problem for several years. This problem has been aggravated by the opening of the Piastewa Peak Parkway which temporarily ends at Highland Avenue. The increasing traffic has made it difficult for residents living on Highland Avenue to get into and out of their driveways and to maintain livable residences.

Recommendation: If Highland Estates is to remain a single-family neighborhood, a buffer to the traffic and core uses should be created by the purchase of the fourteen homes on the south side of Highland Avenue (Lots 1-14 Highland Estates). This property would be used as additional right-of-way to turn Highland Avenue into a landscaped boulevard. An attractive noise wall and landscaping should be placed on the south side of Highland Avenue to provide a buffer for the residents to the south. This would buffer the neighborhood to the south and provide for a better transition from the Camelback East Village Core. It must be noted that this is a voluntary purchase program. The city's use of condemnation would not be appropriate.

Cost: Highland Avenue Improvements \$2,000,000

ACTION	ESTIMATED SCHEDULE	MANAGEMENT RESPONSIBILITY
1. Notify Property Owners of Intent to Purchase	June 1990	Planning/Real Estate
2. Negotiate Purchase of Properties	July 1990-Nov. 1990	Real Estate/Planning
3. Coordinate Improvements With Appropriate Departments	Jan. 1991	Planning
4. Design & Construction of Improvements	Jan. 1991-April 1991	Street Transportation

2. CIRCULATION

a. Circulation Improvements

Location: Various

Issue: There are several traffic/circulation issues in areas near the freeway. Please see individual items for details.

Recommendation: That the individual recommendations for each segment be implemented as approved.

<u>Cost:</u>	17th Place Extension to Rose Lane	\$ 25,000*
	18th Street & Amelia	\$ 2,500
	General Circulation Improvements	\$ 5,000
	Total	\$ 32,000

*Note: The funds to purchase the house on Rose Lane and the basic road improvements will be provided by the Street Transportation Department. The \$25,000 will be used to provide screen walls and landscaping along the new roadway.

ACTION	ESTIMATED SCHEDULE	MANAGEMENT RESPONSIBILITY
1. Review recommendations with appropriate departments	April 1990	Planning
2. Coordinate action on all itmes	April-July 1990	Planning
3. Monitor traffic in identified areas	July-February 1991	Planning/Street Transportation
4. Coordinate action on any Traffic/Circ. problems that arise	Ongoing	Planning/Street Transportation

b. Realignment of 18th Street

Location: 18th Street north of Camelback Road.

Issue: Eighteenth Street has been realigned north of Camelback Road. This realignment created a hardship for the five home owners south of Colter Street as this realignment created through-lots for these homes; additionally, these residents must put up with the construction of the realigned 18th Street.

Recommendation: On July 5, 1988, the City Council approved the purchase of the five homes south of Colter Street. Once construction is complete, the homes are to be sold to individuals who express an intent to live in the homes. This will discourage speculation and the promotion of renter-occupied areas.

<u>Cost:</u>	Purchase the five homes	\$ 170,000*
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*Note: The five homes were purchased for approximately \$531,366 including relocation costs. Estimated resale cost of the five homes is \$366,000. The \$170,000 is the approximate net cost to the Mitigation Program.

ACTION	ESTIMATED SCHEDULE	MANAGEMENT RESPONSIBILITY
1. Maintain or lease homes until freeway construction is complete	September 1989	Real Estate
2. Appraise homes, make necessary improvements to homes and prepare contracts for sale of homes	August-September 1989	Real Estate Planning
3. Sell homes	August 1990	Real Estate Planning
4. Review progress of sale of homes and institute programs to encourage their sale if they are not selling in a timely manner	August 1990	Planning

c. Bethany Home Road Underpass

Location: Bethany Home Road at the Freeway.

Issue: The Bethany Home Road interchange was originally designed as an overpass. An elevated Road would negatively impact adjacent single-family neighborhoods. Concern about the impacts of the freeway on area residents prompted the City Council to approve an underpass at Bethany Home Road.

Recommendation: On June 28, 1988, the City Council Approved the redesign of Bethany Home as an underpass. The redesign will reduce the environmental impacts of the roadway on area residents while permitting access to the freeway.

Cost: Bethany Home Road Underpass \$2,000,000

ACTION	ESTIMATED SCHEDULE	MANAGEMENT RESPONSIBILITY
1. Contribute money to help pay for the redesign and construction of the underpass.	Summer, 1989	Planning/Engineering

3. NEIGHBORHOOD STABILIZATION AND IMPROVEMENT

a. Neighborhood Improvement Program

Location: Various

Issue: Residents in several areas along the Piestewa Peak corridor have cited neighborhood deterioration as one of the most significant problems they experience. Many of the areas have been inspected and subsequently three neighborhoods have been identified as areas that could benefit from a neighborhood stabilization program. The neighborhoods identified are:

- (1) Between Oak Street and Virginia Avenue, from 22nd Street to the Piestewa Peak.
- (2) Between Oak Street and Cambridge Avenue, from approximately the 18th Street alignment to the Piestewa Peak.
- (3) Between Indian School Road and the Grand Canal, from 16th Street to the Piestewa Peak.

Recommendation: That the three identified neighborhoods and any other neighborhood which feels that they could benefit from a neighborhood stabilization program, work with the Neighborhood Improvement and Housing Department through the Community Neighborhood Group Development Program. Through the Group Development Program, residents can decide which of the other services and programs would help them to reduce deteriorating influences in their area.

Cost: No mitigation funds are necessary to implement this program.

ACTION	ESTIMATED SCHEDULE	MANAGEMENT RESPONSIBILITY
1. Notify Residents of Community Neighborhood Group Development Program	November 1989	Planning/NIH
2. Contact NIH Regarding Response Rate	June 1990	Planning/NIH
3. Evaluate Response Rate and Contact Residents as Necessary	July 1990	Planning
4. Administration of Community Neighborhood Group Development Program	Ongoing	NIH
5. Monitor Neighborhoods Participating to Determine Program Success	September 1990	Planning/NIH

b. Landscape Enhancement Program

Location: Various

Issue: The adequacy of Landscaping along the Freeway.

Recommendation: That the areas identified as needing additional screening and enhancement be landscaped.

Cost: Landscape Enhancement Program \$ 500,000



ACTION	ESTIMATED SCHEDULE	MANAGEMENT RESPONSIBILITY
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(See Public Art Program for Implementation Information)

c. 18th Street Neighborhood Infill

Location: West side of 18th Street, between Colter Street and Missouri Avenue.

Issue: One large remnant parcel located just south of Missouri Avenue and one parcel located on the northwest corner of 18th Street and Colter Street are located adjacent to the Piestewa Peak Parkway. These vacant parcels detract from this otherwise cohesive residential area.

Recommendation: That the large parcel be divided into three single-family lots and, coupled with the lot on 18th Street and Colter, be in-filled with homes that were in the path of the realigned 18th Street. The relocated homes are to be fully renovated and sold to individuals who express an intent to live in the homes. This is to promote the continued stability of the area.

Cost: 18th Street Neighborhood Infill \$ 0*

*Note: The four homes were moved and improved for approximately \$280,000. It is anticipated that all funds spent to move and improve the homes will be returned through the sale of the homes.

ACTION	ESTIMATED SCHEDULE	MANAGEMENT RESPONSIBILITY
1. Apply for lot splits and rezonings	April-July 1989	Planning
2. Select homes to be moved	April 1989	Planning
3. Negotiate contract for home moving, home upgrades	June-August 1989	Planning/Street Transportation
4. Select colors and materials for upgrades	August 1989	Planning
5. Complete upgrades; Write Sales Contract	July-September 1989	Planning/Real Estate
6. Manage moved homes	Until Sold-1990	Planning/Real Estate
7. Sell homes	August 1990	Planning
8. Review progress of sale of homes and institute programs to encourage their sale if they are not selling in a timely manner.	August 1990	Planning



d. Screening of Freeway Lights

Location: Various

Issue: In some neighborhoods, freeway lighting shines into the yards of area residents and has become a nuisance. Citizens have requested relief from this unwanted lighting.

Recommendation: That where desired by residents, lighting along the freeway be screened from shining into their yards.

Cost: Screening of Freeway Lights \$ 10,000

ACTION	ESTIMATED SCHEDULE	MANAGEMENT RESPONSIBILITY
1. Contact Affected Property owners.	June 1990	Planning
2. Identify Lights to be screened	July 1990	Planning/Street Transportation
3. Coordinate Improvements With Appropriate Departments	July-October 1990	Planning/Street Transportation

4. SAFETY

a. Neighborhood Safety Program

Location: Various

Issue: Crime

Recommendation: That concerned residents participate in the "Block Watch" program administered by the Police Department to help reduce crime in neighborhoods along the Piestewa Peak Parkway.

Cost: No mitigation funds are necessary to implement this program.

ACTION	ESTIMATED SCHEDULE	MANAGEMENT RESPONSIBILITY
1. Notify Residents of "Block Watch" Program By Letters	September 1989	Planning
2. Contact Police Department Regarding Response Rate	October 1989	Planning
3. Evaluate Response Rate and Contact Residents As Necessary	February 1990	Planning

- | | | | |
|----|--|------------|-----------------|
| 4. | Administration of "Block Watch" Program | April 1990 | Police |
| 5. | Monitor Neighborhoods Participating To Determine Program Success | July 1990 | Planning/Police |

b. Street Lighting

Location: Various

Issue: Adequate Street Lighting

Recommendation: Install street lighting at the following locations as soon as possible:

- 17th Place and Montecito
- 17th Place and Meadowbrook
- 17th Place and Roma
- 18th Street and Campbell
- 18th Street and Glenrosa

Cost: No mitigation funds are necessary to implement this program.

ACTION	ESTIMATED SCHEDULE	MANAGEMENT RESPONSIBILITY
1. SRP Confirm Whether or Not Conduits for Lights Installed	September 1989	Street Transportation
2. If Conduits Are Installed, Replace Lights Immediately	January 1990	Street Transportation/SRP/Planning
3. If Conduits Not In Place, Install Conduits and Replace Lights	October-December 1990	Street Transportation/SRP/Planning

c. Madison #1 Elementary School Freeway Screening

Location: Northwest corner of the Freeway and Missouri Avenue.

Issue: Adequate screening of the freeway from the school grounds.

Recommendation: That landscaping be planted along the wrought iron fence to screen the freeway from the school grounds.

Cost: Madison #1 Elementary School Improvements \$ 26,000

ACTION	ESTIMATED SCHEDULE	MANAGEMENT RESPONSIBILITY
1. Prepare Landscape & Irrigation Plan	August 1989	Planning/Landscape Architecture
2. Remove Existing Chain Link Fence & Extend Wrought Iron Fence to North End of School Property	September 1989	Planning/Street Transportation
3. Install Irrigation System & Plant Landscaping	September-December 1989	Planning/Street Transportation
4. Review Progress of Work to Ensure Schedule Maintained	December 1989	Planning

5. NOISE

a. Noise Attenuation Measures

Location: Various

Issue: Adequate protection from noise.

Recommendation: The height of walls should be raised where needed to meet the 67 dB(A) standard. Also, extend the wall to Glendale along the slip ramp, and construct a screen wall on 18th Street, south of Indian School.

<u>Cost:</u>	Consultant To Design & Engineer Walls	\$ 45,000
	Construction of walls	\$ 830,000
	Total	\$ 875,000

ACTION	ESTIMATED SCHEDULE	MANAGEMENT RESPONSIBILITY
1. Hire Consultant to engineer and design attenuation measures	November 1989	Planning/Street Transportation
2. Direct consultant on specific design elements	August-October 1990	Planning/Street Transportation
3. Monitor construction schedules	October-December 1990	Planning/Street Transportation
4. Complete construction of the additional noise attenuation measures	December 1990	Planning/Street Transportation
5. Monitor noise periodically along freeway to determine adequacy of attenuation measures.	Ongoing	Planning

6. BICYCLING

a. Bicycling

Location: Various

Issue: The provision of bike trails along the freeway.

Recommendation: That an accessible bicycling system continue to be an integral part of the freeway design.

Cost: No mitigation funds are necessary to implement this program.

ACTION	ESTIMATED SCHEDULE	MANAGEMENT RESPONSIBILITY
1. Coordinate the development of the trail system with other City departments.	Ongoing	Planning/Parks/Trans. Team
2. Monitor the progress of trail development	Ongoing	Planning
3. Check possibility of 20th Street path	June 1990	Planning/Trans. Team
4. Build path	September 1990	Street Transportation

b. Glendale Avenue Bicycle and Pedestrian Crossing

Location: Glendale Avenue at the Piestewa Peak Parkway

Issue: The provision of Bicycle and Pedestrian Crossing at Glendale Avenue.

Recommendation: Consideration should be given to the provision of a bicycle and pedestrian underpass at Glendale Avenue which would link the Piestewa Peak Parkway facility with the mountain preserve and the Piestewa Peak extension facilities to the north.

Cost: No mitigation funds will be necessary for this item.

ACTION	ESTIMATED SCHEDULE	MANAGEMENT RESPONSIBILITY
1. Coordinate the design of the crossing	April-December 1990	Planning/Parks/Street Trans./ Art Commission
2. Coordinate the development	December-June 1991	Planning/Parks/Street Trans./ Art Commission

7. PUBLIC ART

a. Public Art

Location: Various

Issue: Improving the visual appearance of the freeway.

Recommendation: Incorporate public art throughout the freeway.

<u>Cost:</u>	1% For The Arts Contribution (Design)	\$ 58,000
	Public Art Development	\$ 300,000
	Total	\$ 358,000

The following addresses the Landscape/Art Master Plan:

ACTION	ESTIMATED SCHEDULE	MANAGEMENT RESPONSIBILITY
1. Select aesthetic team to develop and implement the plan	July 1990	Planning/Arts Commission/ Street Transportation
2. Develop a conceptual master plan defining issues and needs	January 1990	Planning/Arts Commission
3. Provide opportunity for public input	Ongoing	Planning/Arts Commission
4. Select preferred design alternatives	March 1991	Planning/Arts Commission
5. Implement master plan	August 1991	Planning/Arts Commission/ Street Transportation



APPENDICES



APPENDIX A

SPECIFIC PLAN AMENDMENT PROCEDURES

Within 60 days of the acceptance of an application or of Planning Commission initiation of an amendment to the Specific Plan, a meeting shall be conducted by the Planning Department in or near the subject area. The purpose of the meeting shall be to inform interested persons of the proposed amendment to the Specific Plan, and to inform them of the procedures that will occur during the amendment process. Notice of the meeting shall be published once in a newspaper of general circulation and posted in the area affected by the Amendment to the Specific Plan, at least 15 days before the meeting. If it is determined that a General Plan Amendment is required, then no further meetings, nor any further review of the requested amendment shall take place until the General Plan is amended so that it is in conformance with it, or the proposed amendment to the Specific Plan is modified so it is in conformance with the General Plan.

The Planning Department shall hold a second meeting in or near the subject area. The purpose of the second meeting shall be to distribute the amended plan, present it to interested persons, and record all comments made or received about the plan. Upon completion of the second meeting, the Planning Department shall submit the amended plan and all comments received to the Planning Commission for their review and recommendations. The Planning Commission shall conduct a public hearing in regard to the amended plan. A copy of any proposed Specific Plan Amendments with the recommendations of the Planning Commission shall be submitted to the City Council accompanied by a statement of the Planning Commission's reasons for such recommendations.

Phoenix Zoning Ordinance
Chapter X, Specific Plan



APPENDIX B

NOISE

According to the Federal Highway Administration Summary on Noise, sound is created when an object moves. The movements cause vibrations of the molecules in air like ripples on water. When the vibrations reach our ears, we hear what we call sound.

Sound is measured in units called decibels (dB). For highway traffic noise, an adjustment, or weighing, of the high and low-pitched sounds is made to approximate the way that an average person hears sounds. The adjusted sounds are called “A-weighted levels” (dB(A)).

The A-weighted decibel scale begins at zero. This represents the faintest sound that can be heard by humans with very good hearing. The loudness of sounds (that is, how loud they seem to humans) varies from person to person, so there is no precise definition of loudness. However, based on many tests of large numbers of people, a sound level of 70 is twice as loud to the listener as a level of 60.


Causes of Traffic Noise

The level of highway traffic noise depends on three things: (1) the volume of the traffic, (2) the speed of the traffic, and (3) the number of trucks in the flow of the traffic. Generally, the loudness of traffic noise is increased by heavier traffic volumes, higher speeds, and greater numbers of trucks.

Vehicle noise is a combination of the noises produced by the engine, exhaust, and tires. The loudness of traffic noise can also be increased by defective mufflers or other faulty equipment on vehicles. Any condition (such as a steep incline) that causes heavy laboring of motor vehicle engines will also increase traffic noise. In addition, there are other more complicated factors that affect the loudness of traffic noise. For example, as a person moves away from a highway, traffic noise levels are reduced by distance, terrain, vegetation, and natural and manmade obstacles.

Determining Noise Impact

Highway traffic noise is never constant. The noise level is always changing with the number, type, and speed of the vehicles which produce the noise. Traffic noise variations can be plotted, however, it is usually inconvenient and cumbersome to use such a graph to represent traffic noise in this manner. A more practical method is to convert the noise data to a single representative number or descriptor.



Statistical descriptors are almost always used as a single number to describe varying traffic noise levels. The statistical descriptor used for the Piestewa Peak Parkway noise studies is the Leq. Leq is the constant, average sound level, which, over a period of time, contains the same amount of sound energy as the varying levels of the traffic noise.

The City has established a noise criteria level of 67 dB(A) Leq for residential land uses close to the Piestewa Peak Parkway. This is the established noise impact criteria level established by the Federal Highway Administration (FHA). In all cases the city has attempted to mitigate noise levels below the 67 decibel range.

General Considerations for Mitigation

In general, there are three approaches for mitigating noise exposures. The first is to locate noise sensitive uses out of the high-noise area. The second is to prevent noise from reaching the noise-sensitive user through some sort of barrier. And the third, is to provide attenuation for the interiors of buildings located in the high noise areas.

Relocating Noise Sensitive Uses

Probably the most desirable mitigation approach is to relocate noise sensitive uses. When sites are small, very dense, or when the source affects the entire site, it becomes difficult to mitigate noise by changing a site plan. The second option then, must be considered: erect some type of barrier between the source and the receiver.

Barriers

Barriers can be actual walls, earthen mounds (called berms), or even other buildings. The key to the effectiveness of a barrier is whether or not it breaks the line of sight between the source and the receiver. If a barrier does not completely break the line of sight either because it is not high enough, or not long enough then its effectiveness is reduced.

Incorporating Noise Attenuation Measures into the Building

Noise attenuation construction measures generally fall into four categories; (1) reducing the total area of windows or other acoustically weaker building elements; (2) sealing off “leaks” around windows, doors and vents; (3) improving the actual sound attenuating properties of small building elements such as windows, doors, etc.; or (4) improving the actual sound attenuating properties of major building elements such as roof and wall construction.

APPENDIX C

SUMMARY OF QUESTIONNAIRES

The Planning Department distributed questionnaires to residents living within the Piestewa Peak Specific Plan Study area. Of the 4,400 questionnaires mailed, 1,027 were returned. The answers helped to identify the most important neighborhood issues. A general summary of residents' most common characteristics, needs, and opinions is as follows.

The Specific Plan area consists of relatively stable neighborhoods with the majority of residents having lived there for a minimum of ten years. Most residents planned on remaining in their homes for at least five more years. Most residents chose to live in the Specific Plan area because of its central location, affordable housing, and proximity to employment.

As a result of the freeway, residents feel they have experienced or will experience property devaluation, neighborhood deterioration, and an increase in noise. They want improvements such as better maintained homes, less traffic, and better access to major streets. The residents feel that problems caused by the freeway can be overcome if noise walls are constructed, if the freeway are better screened from the adjoining neighborhoods, and if more trees are planted as buffers.

(1) LENGTH OF TIME LIVED IN NEIGHBORHOOD

SEGMENT	0-3 YRS (%)	3-5 YRS (%)	5-10 YRS (%)	10+ YRS (%)	NO REPLY (%)	TOTAL * REPLIES
1	0	5	5	87	3	39
2	7	7	10	73	3	148
3	4	11	12	70	3	206
4	3	10	11	75	1	171
5	7	8	9	66	10	202
6	4	7	14	54	1	261
Average For Specific Plan Study Area	5	8	12	67	3	Total 1,027

*Including No Answer

*Total Replies Are Typical
Of All Six Tables

(2) LARGEST CHANGES FACED BY NEIGHBORHOOD

SEGMENT	PROPERTY DEVALUATION (%)	INCREASED TRAFFIC (%)	NOISE (%)	NEIGHBORHOOD CIRCULATION (%)	NEIGHBORHOOD DETERIORATION (%)	BETTER NEIGHBORHOOD DEFINITION (%)	DUST (%)	INCREASED CRIME (%)	FUMES (%)	INCREASED PROPERTY VALUE (%)	BETTER NEIGHBORHOOD ACCESS (%)	OTHER (%)
1	36	36	59	8	34	5	64	18	16	13	11	26
2	32	42	28	10	31	9	16	22	13	7	9	10
3	49	31	52	14	32	11	30	18	33	10	16	2
4	53	36	49	6	47	7	35	23	24	10	12	7
5	62	22	45	8	44	14	36	14	33	7	11	7
6	72	34	61	14	36	6	63	13	37	5	6	4
Average for Specific Plan Study Area	55	34	49	11	38	9	40	17	29	8	11	6

(3) TYPES OF IMPROVEMENTS DESIRED BY AREA RESIDENTS

SEGMENT	LESS TRAFFIC (%)	MORE SCHOOLS (%)	MORE PARKS (%)	BETTER MAINTAINED HOMES (%)	BETTER ACCESS TO MAJOR STREETS (%)	BETTER MAINTAINED COMMERCIAL BLDGS (%)	BETTER CIRCULATION WITHIN NEIGHBORHOOD (%)	MORE NEIGHBORHOOD SHOPPING (%)	NONE (%)
1	26	3	36	64	8	49	23	21	29
2	34	0	24	73	8	45	21	10	22
3	38	2	32	55	8	29	13	8	14
4	38	3	21	58	9	30	12	19	12
5	56	1	35	36	5	25	3	11	6
6	65	2	25	30	10	43	4	23	5
Average For Specific Plan Study Area	47	2	28	48	8	35	10	15	12

(4) RESIDENTS REASONS FOR LIVING IN AREA

SEGMENT	AFFORDABLE HOUSING (%)	CLOSENESS TO WORK (%)	CENTRAL LOCATION (%)	PROXIMITY TO AMENITIES (%)	REDUCED TRAVEL TIME TO WORK (%)	SCHOOLS (%)	WAS ON THE OUTSKIRTS OF TOWN (%)
1	36	30	59	18	23	10	13
2	48	31	60	15	27	12	15
3	56	41	63	22	30	19	21
4	50	25	55	18	17	30	27
5	31	23	60	36	17	40	21
6	28	45	62	32	20	41	23
Average for Specific Plan Study Area	41	34	60	26	22	29	21

(5) LENGTH OF TIME RESIDENTS PLAN ON LIVING IN THE AREA

SEGMENT	0-1 YR (%)	1-3 YRS (%)	3-5 YRS (%)	5+ YRS (%)
1	10	16	10	41
2	5	5	17	65
3	5	6	9	68
4	5	7	14	56
5	8	8	9	67
6	5	9	13	61
Average For Specific Plan Study Area	6	7	12	63

(6) DESIRED FEATURES TO REDUCE FREEWAY IMPACTS

SEGMENT	More Trees (%)	More Bike Trails (%)	Noise Walls (%)	Better Screening of the Freeway (%)	Mini-Parks (%)	Other (%)
1	36	29	39	41	52	16
2	38	24	35	37	32	28
3	41	19	42	37	15	5
4	30	18	30	27	20	12
5	51	29	42	39	36	15
6	53	27	61	62	23	9



GLOSSARY



GLOSSARY OF TERMS

Acre A measurement of land, equal to 43,560 square feet.

ADOT Arizona Department of Transportation. The organization responsible for the planning and construction of the State's highway system.

General Plan for Phoenix - 1985/2000 An adopted guide including goals and policies for future growth, and a mechanism to review major changes in land use. Significant changes use must be approved in a process involving review by the village planning committee and public hearing before the Planning Commission and City Council.

Cut-Through Traffic Vehicles that use local neighborhood streets to bypass the congestion of major streets or to shorten trip length and driving time.

Decibel (dB) A numerical expression of the relative loudness of sound. The unit of measure for noise.

Density A ratio of population, residential units or floor area of development to a unit of land area, such as a square mile or acre.

Drainage Basin Land adjacent to the freeway that is needed to store runoff water in times of heavy rains.

DU/AC Dwelling units per acre. A measure of density.


Federal Highway Administration (FHWA) The agency responsible for administering the federal aid highway program. Under this program, federal funds are allotted by Congress to individual states. However, before these monies can be used for highway projects, the projects must be approved by the FHWA, which can only grant its approval for projects that are developed in accordance with federal statutes and regulations.

Freeway A multiple lane divided highway with fully controlled access.

Freeway Mitigation To reduce the harmful effects of the freeway on the surrounding community.

General Obligation Bond A government bond backed by the "full faith and credit" (primarily the taxing power) of the jurisdiction issuing it; essentially an unlimited claim on a community's tax base.

Infill Development that occurs on vacant sites surrounded by developed land.



Leq The constant, average sound level, which, over a period of time, contains the same amount of sound energy as the varying levels of the traffic noise.

Neighborhood An area that shares one common aspect. A neighborhood is created by residents' perceptions of landmarks, boundaries, institutions and each other.

Neighborhood Stabilization The process by which a neighborhood retains its vitality by strengthening its communal bonds.

Any loud or disagreeable sound.

Attenuation To lessen in severity the impacts of noise on the surrounding community.

A piece of land, usually a specific part of a large acreage or estate.

Facilities Those land uses reserved to serve the public and to benefit the public.

Peak Parkway The name give to the proposed limited access freeway.