B-2

BOOTH STREET BRIDGE
WASHOE COUNTY, NEVADA

ENVIRONMENTAL ASSESSMENT

FHWA-NV-EA 92.04
FEBRUARY 1993

Federal Highway Administration
and
Nevada Department of Transportation

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION
1263 S. Stewart Street
Carson City, Nevada 89712

BOB MILLER, *Governor*

GARTH F. DULL, *Director*

February 9, 1993

In Reply Refer to:

CPM - File

Clay Holstine
City Manager
P. O. Box 1900
Reno, Nevada 89505

Booth Street Bridge
EA 71540

Enclosed please find a copy or copies of the approved Environmental Assessment for the Booth Street Bridge in Reno. This assessment was approved by the Federal Highway Administration on February 5, 1993. Also enclosed is a copy of the Location/Design Public Hearing Notice.

If you should have any questions please call me or Ted P. Bendure, Environmental Studies Manager, at (702) 687-5680.

Sincerely,

Daryl N. James, P.E., Supervisor
Environmental Services Division

DNJ:MDN:hn
Enc.: Copy or Copies of Environmental Assessment
Location/Design Public Hearing Notice

TRANSPORTATION NOTICE
LOCATION/DESIGN HEARING

PURPOSE OF HEARING:

The Nevada Department of Transportation (NDOT) in cooperation with the Federal Highway Administration (FHWA) has prepared an Environmental Assessment (EA) addressing the probable environmental impacts of replacing the Booth Street Bridge located west of the downtown area within the urban city limits of Reno, Nevada. We will brief interested individuals, groups, and agencies concerning the proposal and receive input on their perception of the scope of issues addressed in the study. Copies of the EA have been distributed to, and should be available for public review and copying at the following locations:

Washoe County Library, 301 South Center Street, Reno.
Regional Transportation Commission, 2050 Villanova Drive, Reno.
NDOT District II, 310 Galletti Way, Sparks.
NDOT Headquarters, Environmental Services Division, 1263 South Stewart Street, Carson City.

WHEN AND WHERE:

The hearing will be held Wednesday, March 3, 1993 from 4 to 7 p.m. in the library at Reno High School, 395 Booth Street, Reno, Nevada.

WHY:

The Booth Street Bridge is an integral part of the City of Reno's transportation and park system. Average Daily Traffic is 8400 vehicles. It is also utilized for pedestrian and bicycle traffic. The Federal Emergency Management Agency (FEMA) and NDOT have determined the structure is a constriction to flow of the Truckee River causing a rise in the backwater elevation of four feet during a 100-year event flood. The bridge is structurally deficient and the roadway width and hydraulic opening are functionally obsolete.

WHERE YOU COME IN:

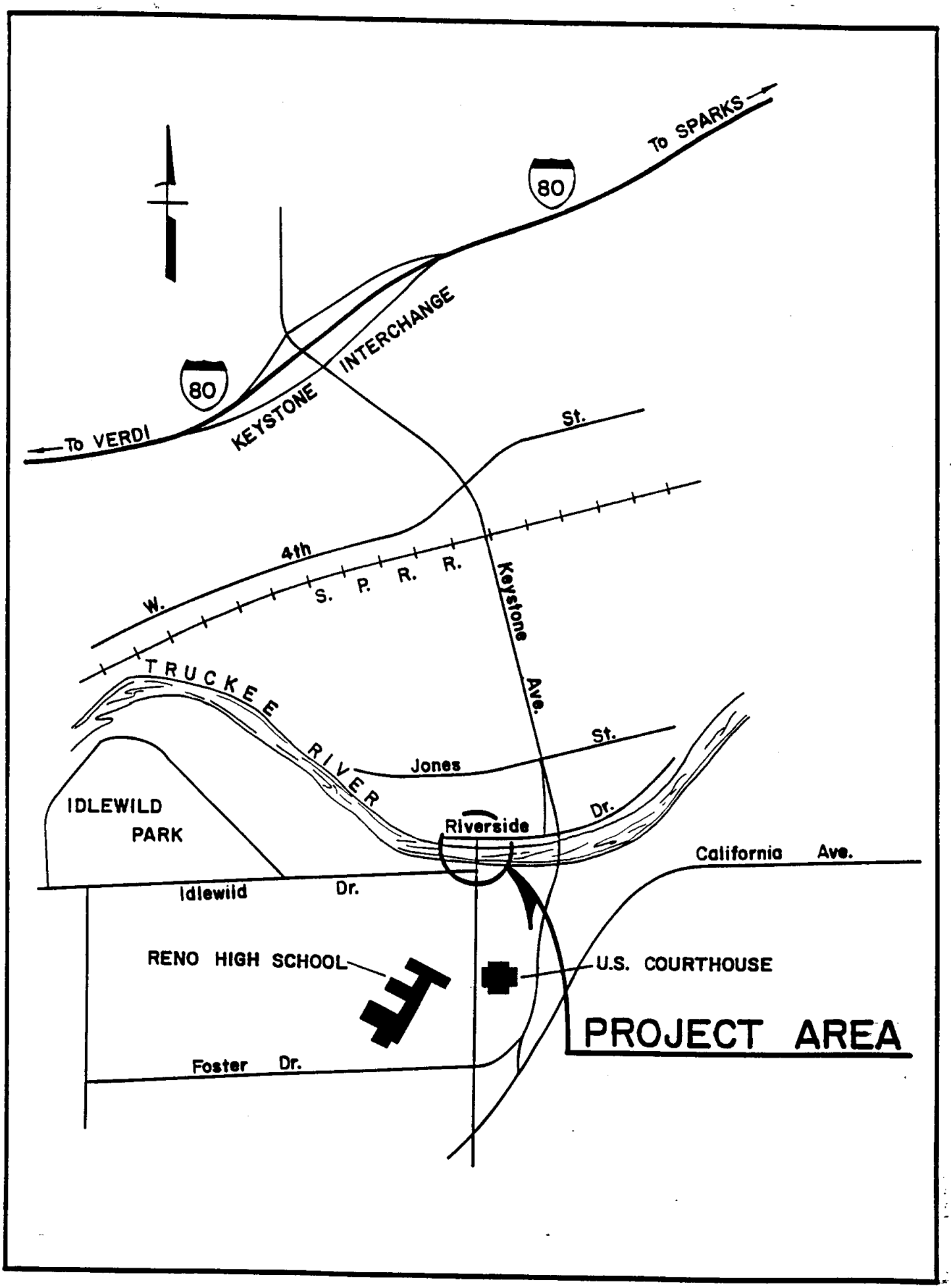
Members of the public are invited to attend the hearing at their convenience anytime during the meeting hours (4 to 7 p.m.) and submit their comments in writing on a comment sheet provided at the meeting or in person to a public stenographer who will be available throughout the meeting. This meeting format increases the opportunity for public comment and provides for one-on-one discussion with staff involved with the project.

In addition to any comments received at the Location/Design Hearing, written comments also will be accepted until 5 p.m. Friday, March 19, 1993. Please submit your comments to:

Daryl N. James, P.E., Supervisor
Environmental Services Division
Nevada Department of Transportation
1263 South Stewart Street
Carson City, Nevada 89712

IF RIGHT-OF-WAY IS NEEDED: The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 will govern the acquisition of any right-of-way necessary for this project. More detailed information on right-of-way acquisition and relocation assistance can be obtained by calling or visiting the Nevada Department of Transportation, Right-of-Way Office, 1263 South Stewart Street, Room 313, Carson City (687-5480) or 310 Galletti Way, Sparks (688-1250).

General information about the Location/Design Hearing can be obtained from the NDOT District Office, P. O. Box 930, 310 Galletti Way, Sparks, Nevada 89431, telephone (702) 688-1250 or from Ted P. Bendure, Environmental Studies Manager, 1263 South Stewart Street, Carson City, Nevada 89712, telephone (702) 687-5680.


To SPARKS
80
INTERCHANGE
80
KEYSTONE
To VERDI
St.
4th
W.
S. P. R. R.
Keystone Ave.
TRUCKEE RIVER
Jones
St.
IDLEWILD
PARK
Riverside
Dr.
California Ave.
Idlewild Dr.
RENO HIGH SCHOOL
U.S. COURTHOUSE
PROJECT AREA
Foster Dr.

FHWA-NV-EA-92.04

BOOTH STREET BRIDGE
RENO, NEVADA

ENVIRONMENTAL ASSESSMENT
February, 1993

Submitted Pursuant to 42 USC 4332(2)(c) by the
U.S. Department of Transportation
and
Nevada Department of Transportation

Feb. 5, 1993
Approval Date

Michael A. Cook
Federal Highway Administration
for Division Administrator

The following persons may be contacted for additional information concerning this document:

Frederick G. Wright, Jr.
Division Administrator
U.S. Department of Transportation
Federal Highway Administration
1535 Hot Springs Road, Suite 100
Carson City, Nevada 89706
(702) 687-5320

Garth Dull, Director
Nevada Dept. of Transportation
1263 South Stewart Street
Carson City, Nevada 89712
(702) 687-5440

TABLE OF CONTENTS

Page

List of Figures..... i

List of Tables..... i

I. Proposed Action..... 1
   A. Description..... 1
   B. Need..... 1
   C. Alternatives..... 4

II. Environmental Impacts and Mitigation..... 10
   A. Areas of No Impact..... 10
   B. Water Quality..... 11
   C. Floodplain and Hydrologic Assessment..... 13
   D. Biological Resources..... 14
   E. Cultural Resources..... 16

III. Agency Coordination and Public Involvement..... 18
   A. Intent-to-Study Letter..... 18
   B. Informational Meeting..... 18

IV. Appendices
   A. Truckee River Water Quality Standards.....A-1
   B. Intent-to-Study Letter and Distribution List.....B-1
   C. Responses to Intent-to-Study Letter.....C-1
   D. Correspondence.....D-1
   E. Programmatic 4(f) Analysis (Park Land).....E-1
   F. Programmatic 4(f) Analysis (Bridge).....F-1

I. Proposed Action

A. Description

The Booth Street Bridge is located, in Washoe County, west of the downtown area within the city limits of Reno, Nevada (Figure 1). It carries local vehicle and pedestrian traffic across the Truckee River on a north-south alignment. On the north side of the structure, Booth Street makes a 90° turn and changes into Riverside Drive (see Figure 2). Idlewild Drive terminates on the west side of Booth Street at a signal system located at the south end of the bridge. Booth Street continues south from the signal system.

Riverside Drive, to the east, provides access to the downtown area. Idlewild Drive, to the west, provides access to Idlewild Park and residential areas. Booth Street, to the south, provides access to the Federal Building, Reno High School, business and residential areas. The Average Daily Traffic is 8400 vehicles. The project Design Hourly Volume is 1200 vehicles, of which two percent are trucks.

The Booth Street Bridge is the only access across the Truckee River in the immediate area for students at Reno High School. A jogging-bicycle path runs along the Truckee River, going from Riverside Drive to the east, and to Idlewild Drive on the west. The Keystone river crossing does not provide access for pedestrians.

The cost of the project is approximately 1.9 million dollars. Construction will be done in one phase with a scheduled beginning date of May 1993 and a completion date of July 1994. This schedule is contingent on available funding.

There will be right-of-way acquisition involved, some of which will take 4(f) property. See Appendices E and F for the Programmatic 4(f) Analysis.

B. Need

The Booth Street Bridge is an integral part of the City of Reno's transportation and park system. Average Daily Traffic on the bridge is 8400 vehicles (see Table 1). Pedestrian and bicycle traffic is not known but is considered heavy.

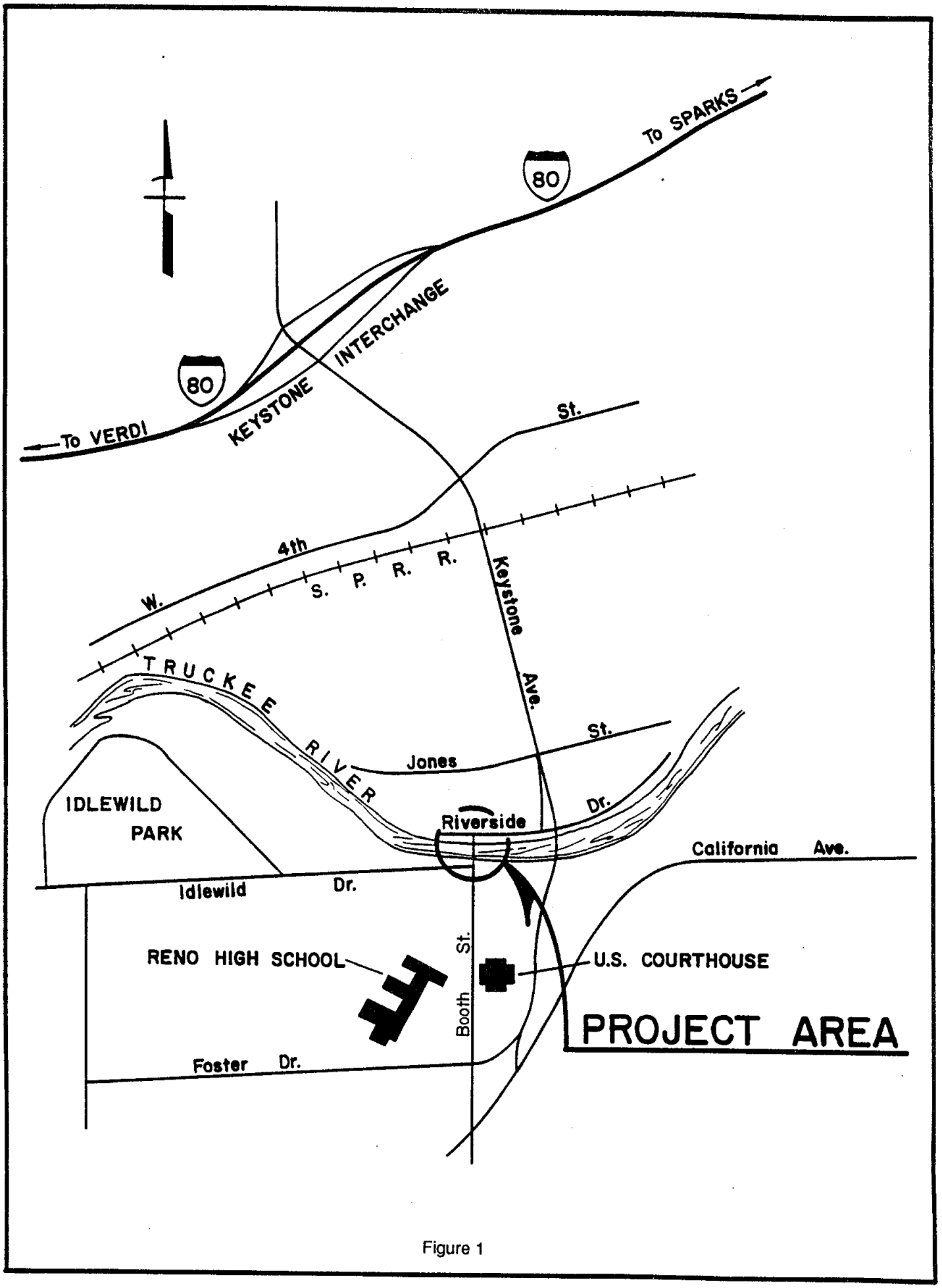

To SPARKS
80
INTERCHANGE
80
KEYSTONE
To VERDI
St.
4th
W.
S. P. R. R.
Keystone Ave.
TRUCKEE RIVER
Jones
St.
IDLEWILD PARK
Riverside
Dr.
California Ave.
Idlewild Dr.
RENO HIGH SCHOOL
St.
Booth
U.S. COURTHOUSE
PROJECT AREA
Foster Dr.

Figure 1

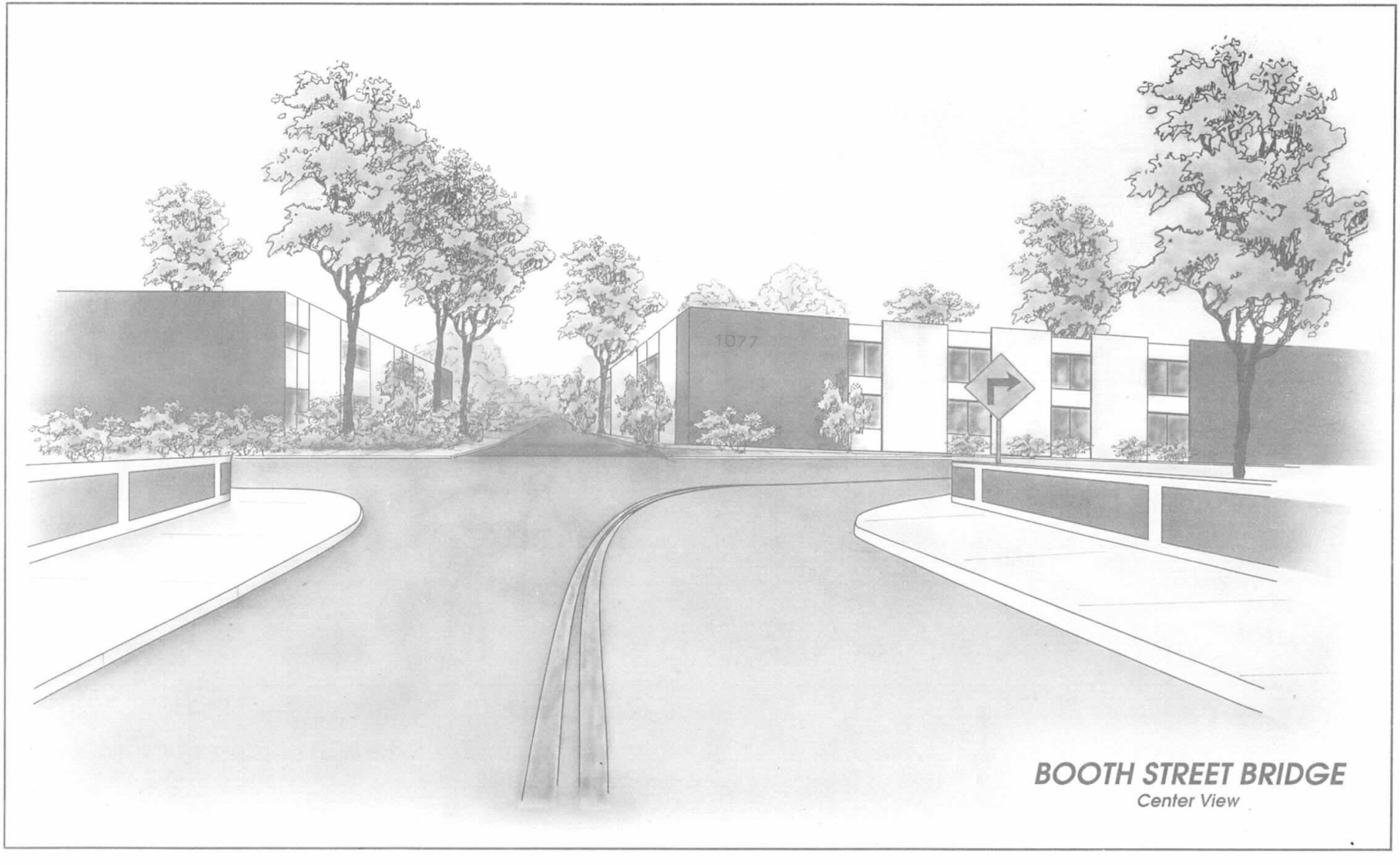


Figure 2

Table 1

Traffic Data--Booth Street

	Project Average
Current ADT 1993	8,400
Mean Year ADT 2003	10,300
Future ADT 2013	12,000
DHV	1,200

ADT = Average Daily Traffic
DHV = Daily Hourly Volume

The existing bridge is a single span earth filled concrete arch having a span length of 120 feet. The travelway width of the structure is 24 feet. Booth Street to the south is 38 feet in width. The substandard roadway width on the bridge is and will continue to be a safety hazard.

The Nevada Department of Transportation (NDOT) and the Army Corps of Engineers have determined that the structure constricts the flow of the Truckee River, causing water to back-up during flood conditions.

The existing bridge is eligible for replacement under the Federal Highway Bridge Replacement and Rehabilitation Program. The bridge itself is structurally deficient due to severely cracked and broken concrete sections, along with exposed and rusted reinforcing steel. The roadway width and waterway opening make the bridge functionally obsolete. These factors give the bridge a Sufficiency Rating of 4.6 based on a scale of 0 to 100. A bridge is eligible for replacement when it's Sufficiency Rating is less than 50.

A new bridge must meet the following hydraulic requirements:

1. Federal Emergency Management Administration (FEMA) requires that the backwater elevation, caused by the new bridge, be not more than the backwater elevation of the existing bridge for the one hundred year flood event.

2. NDOT policy is to design all new bridges with enough of an opening to pass a fifty year flood.

There is a need to improve the waterway opening at this location to reduce the effects of flooding on the properties adjacent to the Truckee River.

C. Alternatives [All build alternatives assume a two-lane bridge--one lane in each direction.]

No-Build:

The no-build option is the do nothing alternative. The bridge on Booth Street would remain as is with no changes to correct existing deficiencies. This option is not considered a prudent and feasible alternative by NDOT due to the deteriorating structural problems on the existing bridge, and its inability to adequately pass the fifty year flood.

Option A: (**The Preferred Alternative**) See Figures 3 and 5.

This option provides for a two span bridge across the river and leaves the curb line on the north side of Riverside Drive at about the existing elevation.

Advantages:

1. Provides for a fifty year flood with a minimum of one foot of freeboard clearance.

2. Backwater effect is reduced by approximately four feet, decreasing flooding potential to adjacent properties.

3. Does not affect property owners on the north side of Riverside Drive because the grade remains the same. Therefore, the roadway will not place vehicles above or level with their windows.

Disadvantages:

1. Center pier of bridge will collect debris during high flows.

2. Center pier of bridge complicates environmental concerns (because of streambed alteration and resultant permits required) and construction timing. (Agreement between NDOT, NDOW and the USFWS allows NDOT to work in the river itself only from July 1 to September 30.)

3. A two span bridge is not as aesthetically pleasing as a clear span bridge.

4. The existing cross slope on Riverside Drive, at the Booth Street intersection, will be increased slightly, creating potentially hazardous driving conditions on snow and ice.

Option B: See Figures 3 and 5.

This option provides for a two span bridge across the river and places the new curb line on the north side of Riverside Drive at about two feet above the existing curb line.

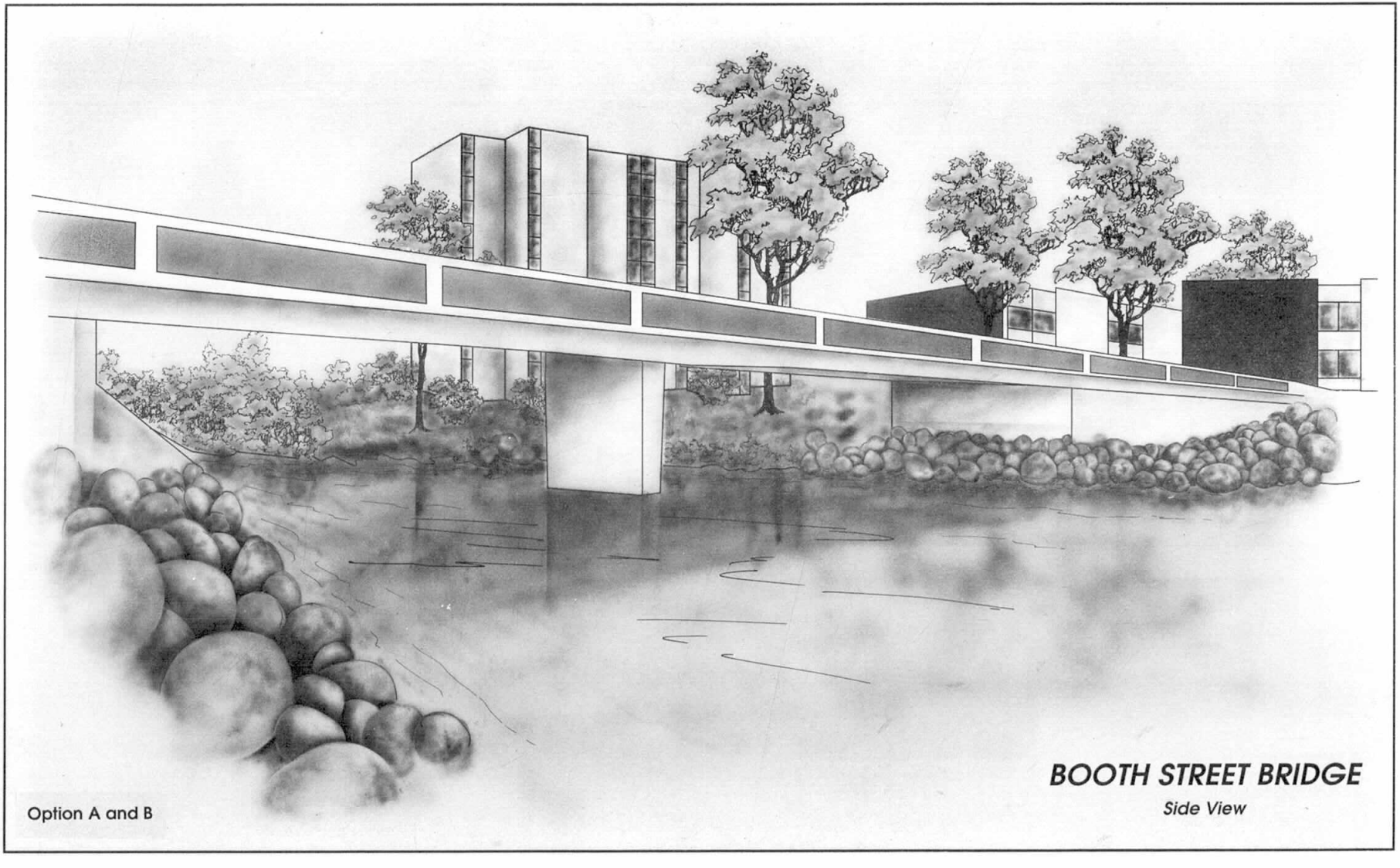


Figure 3

Advantages:

1. Provides for a fifty year flood with a minimum of one foot of freeboard clearance.

2. Backwater effect is reduced by approximately four feet, decreasing flooding potential to adjacent properties.

3. Raising the curb line two feet decreases the cross slope on Riverside Drive to two percent, improving driving conditions on snow and ice.

Disadvantages:

1. Requires reconstruction of Riverside Drive for approximately four hundred feet.

2. Affects private property on the north side of Riverside Drive, requiring reconstruction of approaches and modification to property which will entail more right-of-way acquisition. May require retaining walls and storm drain.

3. Center pier of bridge will collect debris during high flows.

4. Center pier of bridge complicates environmental concerns and construction timing.

5. A two span bridge is not as aesthetically pleasing as a clear span bridge.

Option C: See Figures 4 and 5.

This option provides for a single span bridge across the river and places the new curb line on the north side of Riverside Drive at about two feet above the existing curb line.

Advantages:

1. Provides for a fifty year flood. But does not provide for a minimum freeboard.

2. Backwater effect is reduced by approximately 3.5 feet, decreasing flooding potential to adjacent properties.

3. No center pier; this eliminates debris collection on the pier, reduces complexity of project, and provides a more aesthetic bridge.

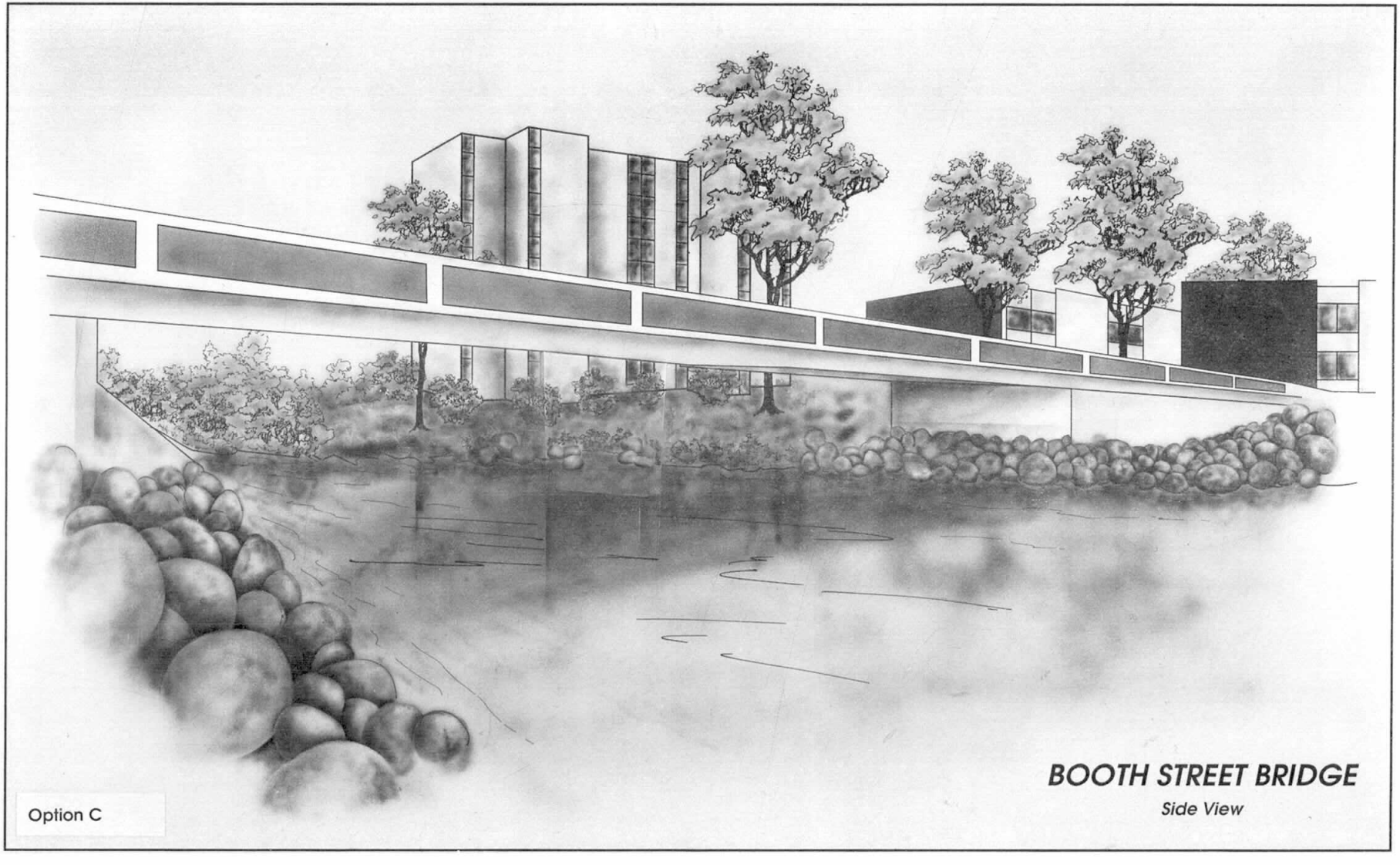
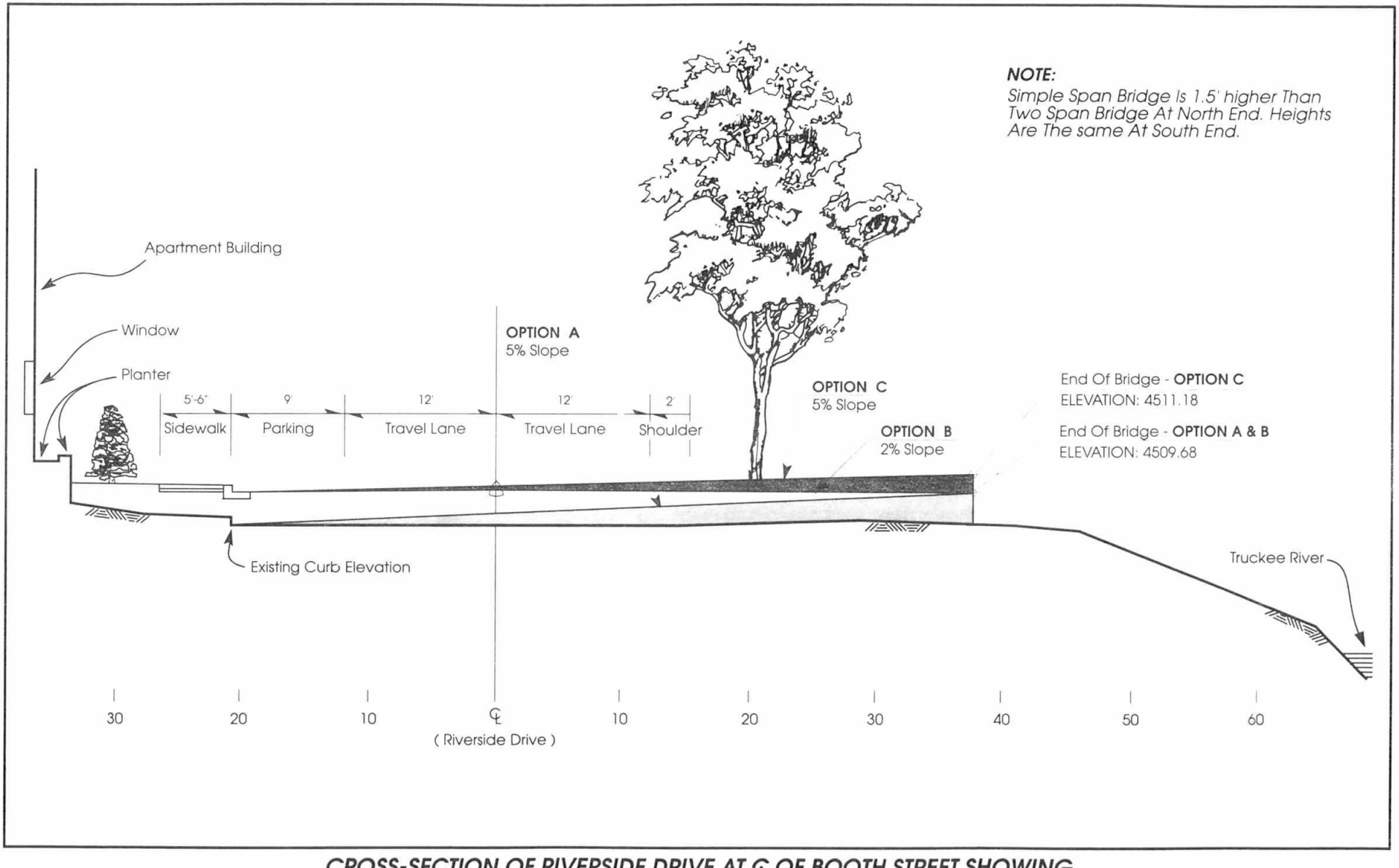


Figure 4

Figure 5



CROSS-SECTION OF RIVERSIDE DRIVE AT ℄ OF BOOTH STREET SHOWING "RAMP" UP TO BRIDGE FOR OPTIONS A, B & C

Disadvantages:

1. Backwater effects are not reduced as much as in Options A and B (two span bridge options) because the bottom of the bridge deck is about 1.5 feet lower.

2. Because the bridge is lower, debris may collect more easily on the bottom compared to Options A and B. There is 1.7 feet less clearance than on the two span bridge.

3. Requires reconstruction of Riverside Drive for approximately four hundred feet.

4. Affects private property on north side of Riverside Drive requiring reconstruction of approaches and modification to property.

5. Cross slope on Riverside Drive, at Booth Street intersection, is approximately five percent creating potential hazardous driving conditions on snow and ice.

II. Environmental Impacts and Mitigation

A. Areas of No Impact

1. Air Quality

This bridge replacement project is located in Washoe County, which has been designated by the US EPA as a non-attainment area for carbon monoxide. This project will not result in any change in roadway capacity, roadway speed or level of service. Therefore, no air quality impacts will occur as a result of this project.

In the short run, dust emissions will probably occur from the demolition of the existing structure and the construction of the new facility. The contractor will be required to implement a dust control plan that complies with Federal, state and local air quality regulations.

2. Noise

The physical alteration of the existing roadway does not radically change either the horizontal or vertical alignment, increase the number of through-traffic lanes or increase capacity, therefore, a noise study is not required for this project. No long term noise impacts are anticipated. In the short run, construction noise will create a temporary impact, however, no one area will be exposed to construction noise for a long duration, therefore, extended disruption of normal activities is not anticipated. The pier and abutments, on the proposed structure, do not require any pile driving, therefore, no noise will be generated by that activity. Specific mitigation, such as limitation of working hours, proper

maintenance of equipment, etc., will be incorporated in the contract special provisions.

3. Hazardous Waste

The project area has been reviewed and cleared by the hazardous waste section of the NDOT Environmental Division. No impacts were found, therefore, mitigation will not be required.

4. Farmlands

There are no farmlands within the project.

5. Social

No residential or business relocations will be required as a result of the proposed project. There will be some short term impacts from construction noise and possibly from airborne particulate matter (dust) during the demolition of the bridge. However, stipulations in the contract special provisions along with contractor compliance with existing laws and regulations will do much to mitigate these impacts. Some short term disruption to vehicle, bicycle and pedestrian travel will occur but alternative routes, in close proximity, are available. A temporary bridge, called a Bailey Bridge, will be constructed immediately west of the Keystone structure. The Bailey Bridge will be constructed exclusively for pedestrians and bicyclists.

No long term social impacts are anticipated as a result of the proposed project.

Therefore, this project as described will have no impacts on the following areas: air quality, noise, hazardous waste, social, and farmlands.

B. Water Quality

1. Existing Conditions

In 1973, the Nevada Environmental Commission adopted Water Pollution Control Regulations that defined water quality standards throughout the state. Truckee River water quality standards, from Idlewild Park to East McCarran Boulevard, including the Booth Street Bridge reach of the Truckee River, can be found in Appendix A of this report.

The Truckee River is monitored monthly by the Desert Research Institute (DRI). DRI has a water quality monitoring station upstream of the Booth Street Bridge project at Idlewild Park and another at East McCarran Bridge which is downstream of the project. Primarily due to residential, municipal, agricultural, and

industrial uses, the water quality in the Truckee River diminishes as one moves downstream.

Minor temporary degradation of water quality is expected during the demolition and reconstruction of the bridge. The project contractor will be required to have Water Pollution Control Plans approved by the Nevada Division of Environmental Protection (NDEP), Bureau of Water Quality Planning, before construction--below the ordinary high water of the Truckee River--can begin. Along with the Water Pollution Control Plans, the contractor must also obtain a temporary dewatering and rolling stock (equipment in the river) permit from NDEP, Bureau of Water Pollution Control.

The river bed at the construction site is silted cobble. The cobble will be removed and stored within the construction area. Upon completion of construction, the washed cobble will be placed back into the river bed construction site. Since the new structure will have a pier, a temporary construction pad in the river is needed. The contractor will construct the pad according to his NDEP approved Water Pollution Control Plans. Straw bales or silt fences will be placed at the toe of slope where construction has exposed the soil. Approximately nineteen riparian trees, which cool the water during the summer months, will be cut down to construct the bridge, therefore, a minor water temperature rise is expected in the construction site area due to the loss of these shade trees. The short and long-term temperature rise is estimated to be no greater than 2°C, which is within the water quality standards for the Truckee River.

2. Mitigation

The Water Pollution Control Plans, approved by NDEP, will define the contractor's Best Management Practices which will control sediment release and turbidity. The contractor will follow these plans at all times to ensure environmental compliance.

The loss of trees and a revegetation plan is addressed in the Biological Section of this EA.

NDOT has applied for a Clean Water Act, Section 404 permit, which will allow dredge and fill within the waters of the United States. NDOT has received water quality certification from the Nevada Division of Environmental Protection for this project, which is conditional upon receipt of a final water pollution control plan prior to any construction. NDOT has also applied for a State Lands permit, which will allow for construction on state lands.

3. Impacts

Minor temporary sediment release is expected pursuant to the construction of the Booth Street Bridge, as is a minor temperature rise in the Truckee River adjacent to the construction site.

No long term adverse impacts are anticipated as a result of the proposed project.

C. Floodplain and Hydrologic Assessment

1. Existing Conditions

The Federal Emergency Management Agency (FEMA) has delineated existing one hundred year and five hundred year floodplain limits along the Truckee River in the vicinity of the Booth Street Bridge. These floodplain limits are shown on the FEMA Flood Insurance Rate Map panel number 320019 1432C dated April 16, 1990. This map delineates the present floodplain limits upstream of Booth Street to extend well beyond the main river channel banks and into the surrounding property. These floodplain limits result in part from the backwater effects caused by the constriction imposed on the river's main channel flow by the existing arch structure at Booth Street. The entire floodplain in this area has been fully developed by residential and commercial building.

2. Impacts

Both alternatives; the two-span and the single-span structure, considered for this site, have larger and more efficient hydraulic openings than the existing arch structure. The proposed two-span structure has the largest opening. The increased capacity of the new bridge will enable greater flows to be conveyed within the river before the channel banks are overtopped upstream of Booth Street. This will result in a narrowing of the floodplain limits and a decrease in the flood-flow water surface elevations upstream of the structure for large flooding events. Consequently, flooding problems will be diminished in this area. No adverse floodplain impacts from either alternative are anticipated.

In the present condition, large flows impacting the Booth Street Bridge will be split with a portion of the flow passing under the bridge and the remainder backing up behind the structure and flowing out of the main channel banks. The water leaving the channel flows around the north end of the structure and rejoins the main channel downstream of Booth Street. With the proposed Booth Street Bridge, a similar flow pattern will exist, although the portion of the total flow passing under the structure will be increased. In both cases, the total river flow will be recombined a short distance downstream from Booth Street. As a result, the floodplain limits will contract upstream and a short distance downstream of the new structure before returning to their present limits near the Keystone Avenue structure about six hundred feet downstream of Booth Street. Therefore, downstream flows, during a flood, will not be noticeably altered by the construction of the proposed structure.

3. Mitigation

Construction of either alternative will, to some extent, alleviate upstream flooding due to the present constriction of water flow at the existing Booth Street Bridge.

No long term adverse impacts are anticipated as a result of the proposed project.

D. Biological Resources

1. Existing Conditions

The proposed action is located at the Truckee River in the city of Reno, Nevada. The elevation at the project site is approximately 4500 feet.

a. Vegetation

The project area crosses the Truckee River within the urbanized portion of west Reno. Within this urbanized setting there is an intact riparian zone contiguous to the river. This riparian zone is part of the City of Reno's park system which is used for recreation. The predominant vegetation in the project area is willow (Salix spp.) with a scattering of cottonwood (Populus fremontii) and some elm (Ulmus spp.) trees along the banks. There is some limited perennial bunchgrass in a few places along the river. The upper banks are planted with lawn and irrigated on a regular basis.

No plants listed as Federally Threatened or Endangered are known to exist in the project area.

1) Impacts

The removal and reconstruction of the bridge will impact vegetation by removal. Approximately twelve cottonwood trees, six elm trees, and one pin oak tree will be removed during construction. Some scattered willows will also be removed.

2) Mitigation

To minimize construction impacts the contractor will be required to keep all construction activities within the construction limits. The clearing of all vegetation will be limited to only what is necessary for construction and maintenance. The cottonwood, pin oak, and elm trees removed during construction will all be replaced along the river on or near the project site with native cottonwood pole plantings. These pole plantings will be in the 4-6 inch diameter class and will be approximately six feet tall. All trees planted will be protected from beavers and supplemental irrigation will be installed if necessary. The majority, if not all, will be

planted on the south side of the river to increase the amount of shade on the water surface. Any areas that had willows prior to construction will be planted with willow cuttings taken in the vicinity of the project.

b. Wildlife and Fisheries

The riparian zone along the Truckee River through Reno is home to an abundant variety of species for both year-long habitat as well as seasonal use. Some of the more common avian species are domestic pigeon (Columba livia), American robin (Turdus migratorius), yellow-headed blackbird (Xanthocephalus xanthocephalus), house sparrow (Passer domesticus), black-billed magpie (Pica pica), song sparrow (Melospiza melodia), cliff swallow (Hirundo pyrrhonota), american dipper (Cinclus mexicanus), belted kingfisher (Ceryle alcyon), plus a host of waterfowl with the ever present mallard (Anas platyrhychos) and Canada Goose (Branta canadensis) being the most visible species. Some of the more common mammals are muskrat (Ondatra zibethicus), beaver (Castor canadensis), raccoon (Procyon lotor), striped skunk (Mephitis mephitis), and domestic cats. Some of the more common fish species inhabiting this stretch of river include rainbow trout (Oncorhynchus gairdneri), German brown trout (Salmo trutta), mountain whitefish (Prosopium williamsoni), speckled dace (Rhinichthys osculus), redside shiner (Richardsonius balteatus), tahoe sucker (Catostomus tahoensis), and mountain sucker (Catostomus platyrhynchus). Aquatic species include an abundance of invertebrates including crawfish (Pacifastacus leniusculus).

No Federally listed Threatened or Endangered species of wildlife are known to exist in the project area. The Lahontan Cutthroat Trout (Oncorhynchus clarki henshawi) and the Cui-ui (Chasmistes cujus) inhabit Pyramid Lake and the lower reaches of the Truckee River. Neither of these species any longer inhabit this reach of the Truckee due to downstream diversions. The northwestern pond turtle (Clemmys marmorata marmorata) is listed as a category two candidate species by the USFWS and may possibly live in the Truckee River system.

1) Impacts

The project will not involve critical habitat for threatened or endangered fish or wildlife.

Impacts to wildlife will occur primarily as a direct result of vegetation removal (habitat) during construction. Species that use the adjacent riparian or aquatic zones will also be displaced during the construction of the project. The removal of trees will eliminate roosting and/or nesting sites until they are replaced by new trees after the project is completed.

A small amount of aquatic habitats in the river will be disturbed during construction. The temporary loss of fish habitat will include the disturbance of bottom features. Some resident crawfish may be killed during construction.

Noise and vibration caused by construction activities will also negatively affect species inhabiting adjacent areas.

2) Mitigation

Any riparian vegetation that will be removed, including trees, will be removed during the period August 15 - March 1 to minimize or eliminate disturbance to any nesting or brooding birds. No construction activities will take place in the river itself outside of the period July 1 - September 30 to reduce impacts to fisheries reproduction. As stated in the water quality section of this Environmental Assessment best management practices will be taken to maintain water quality in the river. It is not anticipated that water quality will be negatively impacted at a level that will affect fisheries.

E. Cultural Resources

1. Background

During the cultural resource compliance process for this project, an area of project effect was agreed upon. This agreement was reached during a meeting between staff from the Nevada Department of Transportation and the State Historic Preservation Office. Within the area of project effect three areas of concern were identified: (1) the bridge itself, (2) the surrounding built environment and (3) potential prehistoric or historic sites. Each of these potential cultural resources have been addressed in separate documents.

a. Booth Street Bridge

The Booth Street Bridge (B-1621) was built in 1920 and is one of three surviving concrete arch deck bridges in Nevada. The bridge was determined eligible to the National Register of Historic Preservation through "An Inventory of Nevada's Historic Bridges" (Knight 1988: 319). This determination was accepted by the Nevada Division of the Federal Highway Administration (Letter: April 10, 1987, Appendix D) and the Nevada State Historic Preservation Officer (Letter: April 22, 1987, Appendix D).

In March of 1990, a Historic American Engineering Record was completed for the bridge. The recording was subsequently accepted by the National Park Service (Letter: May 10, 1990, Appendix D).

b. Surrounding Built Environment

The project's area of potential effect was surveyed for historic architectural sites by Rainshadow Associates, under contract to the Nevada Department of Transportation. After consultation with staff from the State Historic Preservation Office, it was determined that various buildings in and/or near the area of project effect were eligible and/or on the National Register of Historic Places. Additionally, the City of Reno and the State Historic Preservation Office are working on a historic district that would include part of the area of project effect.

The recommendations contained within this report were accepted by the State Historic Preservation Office (Letter: February 3, 1993, Appendix D).

c. Prehistoric and Historic Archaeological Sites

A cultural resource survey was conducted for the open ground within the project's construction impact area. The survey was done by staff from the Cultural Resource Section of the Nevada Department of Transportation. No prehistoric or historic cultural resource sites of any type were located during the survey. These findings, documented in the Department's cultural resource report, were accepted by the Nevada State Historic Preservation Officer (Letter: March 6, 1992, Appendix D).

2. Project Effect

In "Applying the Criteria of Effect" (36 CFR 800.5 (a)) the Nevada Department of Transportation and the Federal Highway Administration have determined that an overall Finding of Adverse Effect is appropriate for the project.

a. Booth Street Bridge

The Booth Street Bridge is eligible to the National Register of Historic Places. The demolition of the bridge will constitute an Adverse Effect under 800.9(a)(1).

b. Surrounding Built Environment

Although there are eligible buildings within the area of project effect, it has been determined that the project will have No Effect to the characteristics which contribute to these buildings eligibility. This is due to the fact that the road height of the new bridge, at both the north and south ends, will be maintained at the height of the existing historic bridge. This will minimize visual impacts to the overall neighborhood including its historic elements. Additionally, as detailed in the "Proposed Mitigation" section, the design of the bridge will cause it to appear similar to the historic bridge it is replacing.

c. Prehistoric and Historic Archaeological Sites

No cultural resource sites were located in the open areas of the project's construction impact area. Therefore the project will have "No Effect" with regard to those types of sites.

III. Agency Coordination and Public Involvement

A. Intent-to-Study Letter

The letter reproduced in Appendix B was sent to the agencies and individuals on the list following the letter. This letter informed the recipients of the Department's intention to study the proposed project, requested comments, and notified them of the scheduled Informational Meeting. Responses to the Intent-to-Study letter were received from the following:

1. City of Reno
2. Hawkins, Folsom & Muir--Attorneys at Law
3. Public Resource Associates
4. Ms. Beryl E. Billings
5. Mrs. Mary A. Picard
6. Ms. Velda J. Britton
7. Public Resource Associates

Copies of these letters and NDOT's responses can be found in Appendix C.

B. Informational Meeting

An Informational Meeting was held on September 16, 1992 from 4 to 7 p.m., at Reno High School in Reno, Nevada. Representatives from NDOT explained the proposed project and invited comments from interested persons.

Excluding personnel from NDOT, fourteen people were in attendance. Three people elected to comment on the proposed project. Their comments and/or concerns along with NDOT's response are summarized as follows. Additionally, their concerns were taken into account and when possible have been addressed in the body of this EA.

Comment 1. Prince Hawkins felt that the new bridge is unnecessary and will have no significant affect on floods.

Response 1. As the need section of this document illustrates, the deterioration of the existing structure clearly dictates the necessity for a replacement structure. The Sufficiency Rating of 4.6, based on a scale of 0 to 100, is considerably less than the 50 required to make the bridge eligible for replacement.

Comment 2. Dianna Swingholm spoke in favor of the proposed structure but expressed concern about noise, extra traffic, homeless who stay by the bridge, and whose responsibility it will be to clear and maintain the sidewalk in front of the apartments they manage.

Response 2. No long-term noise impacts are anticipated since the proposed project will not change vertical or horizontal alignment, increase the number of through lanes, or increase capacity. No one area will be exposed to construction noise for a long duration. Construction noise will be mitigated as necessary, by stipulations in the Contract Special Provisions. The homeless situation will, in all likelihood, depend on factors beyond NDOT's jurisdiction. Responsibility for maintenance is also beyond NDOT's control, however, it is unlikely that the proposed construction will change existing areas of responsibility.

Comment 3. Toni deSalvo liked the presentation.

Response 3. Thank you.

APPENDIX A

TRUCKEE RIVER WATER QUALITY STANDARDS

445.13466 Truckee River at East McCarran.

STANDARDS OF WATER QUALITY
Truckee River

Control Point at East McCarran Boulevard Bridge. The limits in this table apply from the East McCarran control point to the Idlewild control point.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C - Maximum		Nov.-May: ≤13°C June: ≤17°C July: ≤21°C Aug.: ≤22°C Sep.-Oct.: ≤23°C	Aquatic life[b] and water contact recreation.
ΔT[a]	ΔT = 0°C	ΔT ≤2°C	
pH Units	--	S.V.: 7.0 - 8.3 ΔpH: ±0.5 Max.	Water contact recreation[b], wildlife propagation[b], aquatic life, irrigation, stock watering, municipal or domestic supply and industrial supply.
Dissolved Oxygen - mg/l	--	S.V.: Nov.-Mar.: ≥6.0 Apr.-Oct.: ≥5.0	Aquatic life[b], water contact recreation, wildlife propagation, stock watering, municipal or domestic supply and noncontact recreation.
Chlorides - mg/l	A-Avg.: ≤7.0 S.V.: ≤10.0	S.V.: ≤250	Municipal or domestic supply[b], wildlife propagation, irrigation and stock watering.
Total Phosphates (as P) - mg/l	A-Avg.: ≤0.05	A-Avg.: ≤0.10	Aquatic life[b], water contact recreation[b], municipal or domestic supply and noncontact recreation.
Ortho Phosphate (P) - mg/l	S.V.: ≤0.02	S.V.: ≤0.05	Aquatic life[b], water contact recreation[b], municipal or domestic supply and noncontact recreation.
Nitrogen Species (N) - mg/l	Total Nitrogen A-Avg.: ≤0.3 S.V.: ≤0.43	Nitrate S.V.: ≤2.0 Nitrite S.V.: ≤.04 Ammonia S.V.: ≤.02 (un-ionized)	Aquatic life[b], water contact recreation[b], municipal or domestic supply and noncontact recreation.
Total Dissolved Solids - mg/l	A-Avg.: ≤90.0 S.V.: ≤120.0	A-Avg.: ≤500	Municipal or domestic supply[b], irrigation and stock watering.
Turbidity - NTU	A-Avg.: ≤6.0	S.V.: ≤10	Aquatic life[b] and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply.
Alkalinity (as $CaCO_3$) - mg/l	--	less than 25% change from natural conditions	Aquatic life[b] and wildlife propagation.
Fecal Coliform - No./100 ml	A.G.M.: ≤75.0 S.V.: ≤350.0	≤200/400[c]	Water contact recreation[b], noncontact recreation, municipal or domestic supply, irrigation, wildlife propagation and stock watering.
Suspended Solids - mg/l	A-Avg.: ≤15.0	S.V.: ≤25	Aquatic life[b].
Sulfate - mg/l	A-Avg.: ≤7.0 S.V.: ≤8.0	S.V.: ≤250	Municipal or domestic supply[b].
Sodium - SAR	A-Avg.: ≤0.5 S.V.: ≤0.6	A-Avg.: ≤8	Irrigation[b] and municipal or domestic supply.
BOD - mg/l	--	A-Avg.: ≤3.0 S.V.: ≤5.0	Municipal or domestic supply.

a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
b. The most restrictive beneficial use.
c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
d. Increase in color must not be more than 10 PCU above natural conditions.

[Environmental Comm'n, Water Pollution Control Reg. part § 4.2.5, Table 41, eff. 5-2-78; A 1-25-79; 8-28-79; 1-25-80; 12-3-80]--(NAC A 10-25-84)

APPENDIX B

INTENT-TO-STUDY LETTER AND DISTRIBUTION LIST

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION
1263 S. Stewart Street
Carson City, Nevada 89712

BOB MILLER, *Governor*

GARTH F. DULL, *Director*

August 27, 1992

In Reply Refer to:

See Attached List

Intent-to-Study
Booth Street Bridge
EA 71540

The Nevada Department of Transportation (NDOT) in cooperation with the Federal Highway Administration (FHWA) is considering replacement of the Booth Street Bridge over the Truckee River in Reno, Nevada.

The proposed replacement is in response to The Federal Emergency Management Agency (FEMA) and Nevada Department of Transportation (NDOT) analysis which concluded that the structure is a constriction to flow of the Truckee River causing a rise in the backwater elevation of four feet during a 100-year event flood. Also, the bridge deck is structurally deficient and the roadway width and hydraulic opening are functionally obsolete. Attached is a map of the proposed project.

In compliance with the National Environmental Policy Act of 1969 (NEPA), NDOT is conducting an Environmental Assessment of the proposed project's impacts. This letter is intended to inform you of the current study and solicit your comments concerning the project. Areas of potential impact could include, but are not limited to, the following:

1. Access
2. Aesthetics
3. Air Quality
4. Archaeological
5. Geology
6. Historic Buildings
7. Land Use
8. Noise Levels
9. Property Values
10. Public Parks & Recreation Areas
11. Safety
12. Social Considerations
13. Vegetation
14. Water Quality and Hydrology
15. Wildlife and Wildlife Refuges
16. Hazardous Waste

We would appreciate receiving any response you may have by 5 p.m., Friday, September 18, 1992. If no response is received, the Department will assume you foresee no significant impacts in your particular area of responsibility or interest.

An Informational Hearing to brief interested individuals, groups, and agencies on the project and to receive comments and suggestions from them will be held on Wednesday September 16, 1992 from 4 to 7 p.m. in the library at Reno High School. A copy of the hearing notice is attached.

Comments or questions regarding the proposed project may be addressed to Richard J. Nelson, NDOT District Engineer at 310 Galletti Way, Sparks, Nevada 89431, phone (702) 688-1250 or Daryl N. James, P.E. Supervisor, Environmental Services Division, 1263 South Stewart Street, Carson City, Nevada 89712, phone (702) 687-5680.

Sincerely,

Daryl N. James, P.E. Supervisor
Environmental Services Division

DJ:TPB
Attachment

TRANSPORTATION NOTICE
INFORMATIONAL MEETING

PURPOSE OF MEETING:

The Nevada Department of Transportation (NDOT) in cooperation with the Federal Highway Administration (FHWA) is undertaking an environmental study to determine the impacts of replacing the Booth Street Bridge over the Truckee River within the urban city limits of Reno, Nevada. We will brief interested individuals, groups, and agencies concerning the proposal and alternatives and receive input on their perception of the scope of issues to be addressed in the study.

WHEN AND WHERE:

The meeting will be held Wednesday, September 16, 1992 from 4 to 7 p.m. in the library at Reno High School, 395 Booth Street, Reno, Nevada.

WHY:

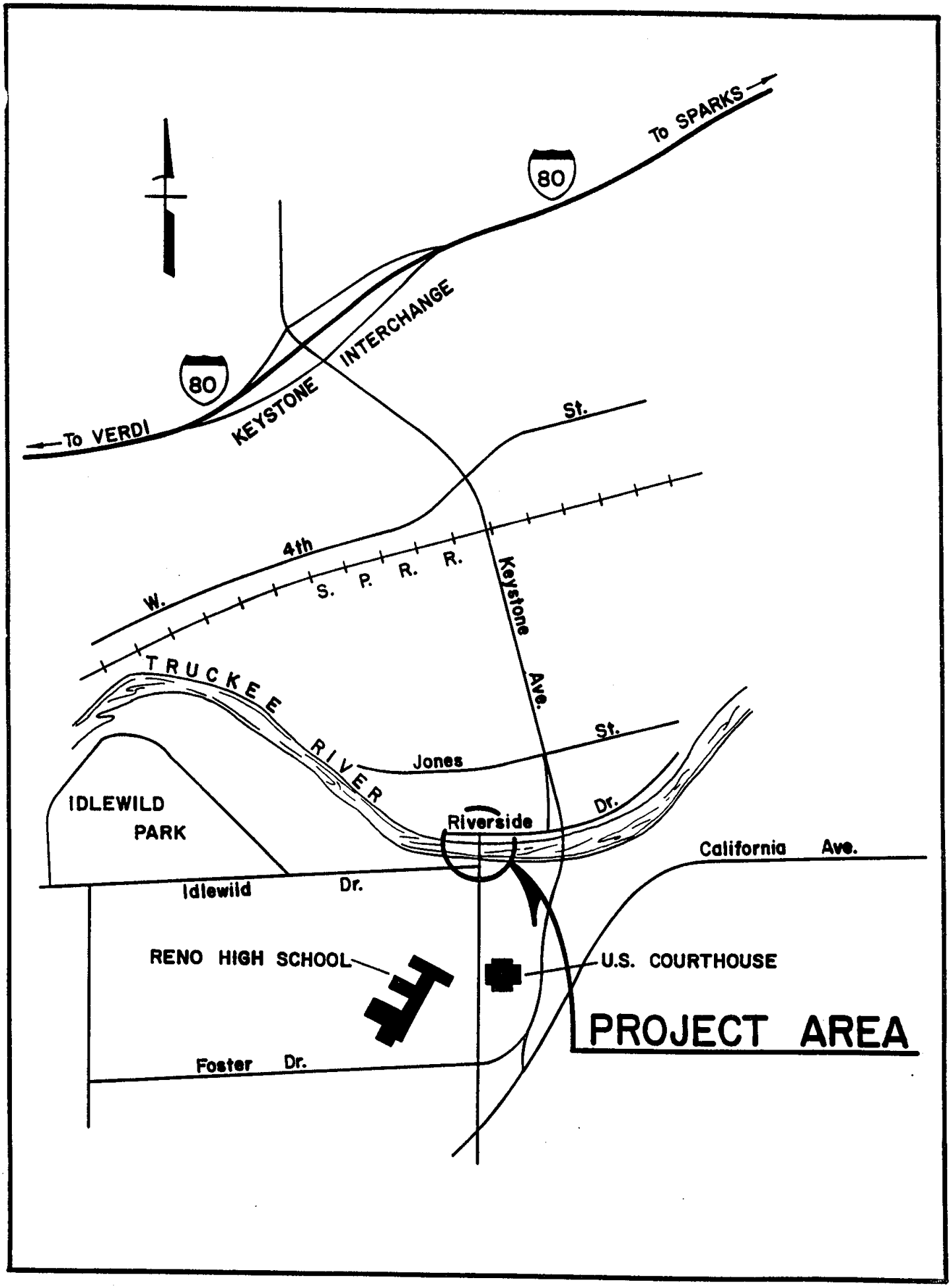
The Federal Emergency Management Agency (FEMA) and NDOT have determined the structure is a constriction to flow of the Truckee River causing a rise in the backwater elevation of four feet during a 100-year event flood. The bridge deck is structurally deficient and the roadway width and hydraulic opening are functionally obsolete.

WHERE YOU COME IN:

Members of the public are invited to attend the meeting at their convenience anytime during the meeting hours (4 to 7 p.m.) and submit their comments in writing on a comment sheet provided at the meeting or in person to a public stenographer who will be available throughout the meeting. This meeting format increases the opportunity for public comment and provides for one-on-one discussion with staff involved with the project.

In addition to any comments received at the Informational Meeting, written comments also will be accepted until 5 p.m. Friday, October 2, 1992. Please submit your comments to:

Daryl N. James, P.E., Supervisor
Environmental Services Division
Nevada Department of Transportation
1263 South Stewart Street
Carson City, Nevada 89712


To SPARKS
80
INTERCHANGE
80
KEYSTONE
To VERDI
St.
4th
W.
S. P. R. R.
Keystone Ave.
TRUCKEE RIVER
Jones
St.
IDLEWILD PARK
Riverside
Dr.
California Ave.
Idlewild Dr.
RENO HIGH SCHOOL
U.S. COURTHOUSE
PROJECT AREA
Foster Dr.

Booth Street Bridge

U.S. Department of Agriculture
Soil Conservation Service
1281 Terminal Way #204
Reno, Nevada 89502

U.S. Department of Agriculture
Regional Forester
Forest Service, Region 4
324 25th Street
Ogden, Utah 84401

U.S. Department of Agriculture
Forest Service
1200 Franklin Way
Sparks, Nevada 89431

U.S. Department of the Interior
Bureau of Indian Affairs
P. O. Box 10
Phoenix, Arizona 85001

Bureau of Indian Affairs
1677 Hot Springs Road
Carson City, Nevada 89706-0646

U.S. Department of the Interior
U.S. Geological Survey
Water Resource Division
Room 227, Federal Building
705 North Plaza Street
Carson City, Nevada 89701

U.S. Department of the Interior
Chief, Environmental Impact
Assessment Program
U.S. Geological Survey, MS-760
Reston, Virginia 22092

U.S. Department of the Interior
Bureau of Land Management
1535 Hot Springs Road, Suite 300
Carson City, Nevada 89706

U.S. Army Corps of Engineers
District Engineer
1325 J Street
Sacramento, CA 95814-2922

U.S. Department of the Interior
Chief, Western Field Operation Center
Bureau of Mines
East 315 Montgomery
Spokane, Washington 99207

U.S. Department of the Interior
National Park Service
P. O. Box 36063
San Francisco, California 94102

U.S. Department of the Interior
Regional Director, Pacific SW Region
Heritage Conservation and Recreation Service
P. O. Box 36062
San Francisco, California 94102

U.S. Department of the Interior
Bureau of Reclamation
705 North Plaza
Carson City, Nevada 89701

U.S. Department of the Interior
Regional Environmental Officer
Pacific Southwest Region
P. O. Box 36098
San Francisco, California 94102

U.S. Department of the Interior
Regional Director, Region 1
Fish and Wildlife Service
911 N.E. 11th Avenue
Portland, Oregon 97232-4181

Rick Hoffman (Mail Code: E3)
Environmental Review Coordinator
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, California 94105

Director
Division of NEPA Affairs
Department of Energy
Mail Station E-201, GTN
Washington, D.C. 20545

U.S. Department of Health & Human Services
Federal Office Building
50 Fulton Street
San Francisco, California 94102

U.S. Department of the Interior
Fish and Wildlife Service
4600 Kietzke Lane, Suite 120
Reno, Nevada 89502

Joyce M. Wood, Director
Office of Ecology & Conservation
National Oceanic & Atmospheric Administration
U.S. Department of Commerce, Room 5813 (PP/EC)
14th and Constitution Avenue, N.W.
Washington, D.C. 20230

U.S. Department of Transportation
Chief, Airport District Office SSO-600
Federal Aviation Administration
831 Mitten Road
Burlingame, California 94010

Regional Director
Federal Emergency Management Agency
Region IX, Bldg. 105
Presidio of San Francisco, CA 94129

A-95 Clearinghouse
Ron Sparks
209 E. Musser #204
Carson City, Nevada 89710

Pete Sferrazza, Mayor
P. O. Box 1900
Reno, Nevada 89505

Florence Lehners, Councilwoman
P. O. Box 1900
Reno, Nevada 89505

Karen Bryan, Councilwoman
P. O. Box 1900
Reno, Nevada 89505

Gus Nunez, Councilman
P. O. Box 1900
Reno, Nevada 89505

Bernice Mathews, Councilwoman
P. O. Box 1900
Reno, Nevada 89505

Kathryn Wishart, Councilwoman
P. O. Box 1900
Reno, Nevada 89505

Grant Sims, Councilman
P. O. Box 1900
Reno, Nevada 89505

Millard Reed, Public Works Director
P. O. Box 1900
Reno, Nevada 89505

Steve Varela, City Engineer
P. O. Box 1900
Reno, Nevada 89505

Marty Richard, Fire Chief
P. O. Box 1900
Reno, Nevada 89505

Police Chief
P. O. Box 1900
Reno, Nevada 89505

Washoe County Health Department
Division of Environmental Health
1001 E. 9th Street
Reno, Nevada 89512

Reno Planning Director
P. O. Box 1900
Reno, Nevada 89505

Clay Holstine
Reno City Manager
P. O. Box 1900
Reno, Nevada 89505

Washoe County Dept. of
Comprehensive Planning
P. O. Box 11130
Reno, Nevada 89520

Regional Transportation Commission
2050 Villanova Drive
Reno, Nevada 89502

Foresta Institute for Ocean
and Mountain Studies
6205 Franktown Road
Carson City, Nevada 89701

Sierra Club
P. O. Box 8096
Reno, Nevada 89507

Nevada Bell
P. O. Box 11010
Reno, Nevada 89509

Mr. Frank Luchetti
Sierra Pacific Power Company
P. O. Box 10100
Reno, Nevada 89510

Chism Properties
P. O. Box 931
Reno, Nevada 89504

Millard H. Duxbury Tr
1 Booth Street
Reno, Nevada 89509

Liane McCombs
P. O. Box 6106
Reno, Nevada 89513

Sierra Pacific Power Company
c/o Land Department
P. O. Box 10100
Reno, Nevada 89520

Washoe County School District
Board of Trustees
c/o Plant Facilities Adm.
425 East 9th Street
Reno, Nevada 89520

B and T Associates
200 Moore Lane
Reno, Nevada 89509

One Ninety-Five Booth Street
c/o David R. Belding
P. O. Box 50128
Reno, Nevada 89513

Corp of Pres Bishop of
Church LDS
c/o Tax Manager (518-0597)
50 East North Temple
Salt Lake City, Utah 84150

Mark & Fianna Combs Tr
10860 Shay Lane
Reno, Nevada 89509

Humboldt Properties
c/o Gary Sabatini
350 W. 6th Street, Suite 2D
Reno, Nevada 89503

Daan Eggenberger
P. O. Box 1392
Crystal Bay, Nevada 89402

Richmond H. Breen
75 Boyd Place
Reno, Nevada 89503

F. R. Breen
1101 Jones Street
Reno, Nevada 89503

E. Cleveland Canepa
53 Snider Way
Sparks, Nevada 89431

Edna L. Adams et al
320 Mellen Way
Sparks, Nevada 89431

Doris Thompson DeSalvo etal
1640 Davidson Way
Reno, Nevada 89509

Alice C. Myhre
745 Stoker Avenue
Reno, Nevada 89503

Leroy & Ellen Arrascada
1170 Sharon Way
Reno, Nevada 89509

Brunson Investments Limited et al
1459 Greg Street
Sparks, Nevada 89431

Donald R. Clark
10700 Plata Mesa Drive
Reno, Nevada 89506

James & Lynn Conley
c/o 7-Eleven
690 Booth Street
Reno, Nevada 89509

Monroe Gorham Partnership
495 West Street
Reno, Nevada 89503

Joseph Paddock Tr
7630 Palos Verdes Circle
Reno, Nevada 89502

John & Madonna Beal
7242 Avenida Altisima
Rancho Palos Verdes, CA 90274

Martha W. Coon U/C
KO H P et al
1718 N. Carson Street
Carson City, Nevada 89701

Elden & Virginia Bertrand
1800 Idlewild Drive
Reno, Nevada 89509

Margaret Pendleton
1327 Jones Street
Reno, Nevada 89503

Revis & Marguerite Edwards
1325 Jones Street
Reno, Nevada 89503

Marlene Casci
2300 Solari Drive
Reno, Nevada 89509

Francesca Barbagelata
1321 Jones Street
Reno, Nevada 89503

Joel & Mari Bickett
1319 Jones Street
Reno, Nevada 89503

Roger E. Hildahl Tr U/C
Hy Kashenberg
1317 Jones Street
Reno, Nevada 89503

Ray & Mary Corlett
1315 Jones Street
Reno, Nevada 89503

Lolita Fuller et al Tr
570 California Avenue
Reno, Nevada 89509

J. & E. Starratt Tr et al
c/o Pioneer Citizens Bank
P. O. Box 2351
Reno, Nevada 89505

Lois M. Young
1304 Jones Street
Reno, Nevada 89503

Joseph B. Key U/C
E. & Peggy Carwin
1306 Jones Street
Reno, Nevada 89503

Joie & Eldeen Scolari
1308 Jones Street
Reno, Nevada 89503

Lawrence Devincenzi Tr
1310 Jones Street
Reno, Nevada 89503

William & Shirley Stevens
1312 Jones Street
Reno, Nevada 89503

Steven Nightingale
P. O. Box 2071
Reno, Nevada 89505

Theodore P. Tintor
11007 Explorer Road
La Mesa, California 91941

Shirley Janikula
1318 Jones Street
Reno, Nevada 89503

Emerson & Louise Wilson
1320 Jones Street
Reno, Nevada 89503

Fern Moore Tr
1322 Jones Street
Reno, Nevada 89503

Stephen Dow U/C
W. & M. Teipner Trs
350 W. 6th Street, D-2
Reno, Nevada 89503

Charlene Wells
1326 Jones Street
Reno, Nevada 89503

Jeanne Hansen
1328 Jones Street
Reno, Nevada 89503

Barbara Bender
1330 Jones Street
Reno, Nevada 89503

Helene Johnson
c/o John Iliescu
260 Island Avenue
Reno, Nevada 89501

Geneve Delauer
2111 Crystal Plaza #1114M
Arlington, VA 22202

Robert Solso
1336 Jones Street
Reno, Nevada 89503

Raymond Poncia Jr et al
7090 Aspen Glen Road
Reno, Nevada 89509

Joe & Natalie Gardner
P. O. Box 1129
Verdi, Nevada 89439

James & Mary Bahan Tr
P. O. Box 3017
Reno, Nevada 89505

John Iliescu
260 Island Avenue
Reno, Nevada 89501

Sidney & Laura Gilbert Tr
1348 Jones Street
Reno, Nevada 89503

Velda Britton
1350 Jones Street
Reno, Nevada 89503

L. Garn & Ivie Tuckett Tr
1200 Riverside Drive #1276
Reno, Nevada 89503

Dimitrios & Maria Apostolidis
P. O. Box 5372
Reno, Nevada 89513

Mary Picard
1251 Riverside Drive
Reno, Nevada 89503

Marguerite Lucini
1200 Riverside Drive #1250
Reno, Nevada 89503

Gwendolyn Ukkerd
1200 Riverside Drive #1226
Reno, Nevada 89503

Mildred Knezevich
1200 Riverside Drive #1225
Reno, Nevada 89503

Albert & Molly Rakestraw
1150 W. Plumb Lane
Reno, Nevada 89509

James & Nancy June
1200 Riverside Drive #1200
Reno, Nevada 89503

Pepi Cladianos
1200 Riverside Drive #1279
Reno, Nevada 89503

William Andrews et al UC
Saint Mary's Foundation
235 W. Sixth Street
Reno, Nevada 89520

Serafino & Lidia Gentile
55 Santa Rosa Avenue
San Francisco, CA 94112

Jack Solomon
1200 Riverside Drive #1254
Reno, Nevada 89503

Gregory Nelson
c/o Cal-Neva
P. O. Box 2071
Reno, Nevada 89505

Vito & Margaret Bash
1200 Riverside Drive #1252
Reno, Nevada 89503

Peter Jouflas
1111 - 118th SE, Suite 1
Bellevue, WA 98005

Helen Mack Tr
1200 Riverside Drive #1228
Reno, Nevada 89503

George & Irma Robinson
1200 Riverside Drive #1227
Reno, Nevada 89503

Henry & Raemona Schaefer
1200 Riverside Drive #1204
Reno, Nevada 89503

Donald & Nelda Freiburger
12 W. Wistaria Avenue
Arcadia, CA 91007

Harold & Gayle Schnack
1200 Riverside Drive #1282
Reno, Nevada 89503

John D. Burgess
1200 Riverside Drive #1281
Reno, Nevada 89503

Clorinda Delich
1200 Riverside Drive #1280
Reno, Nevada 89503

Franco & Beatrice Fariselli
1200 Riverside Drive #1257
Reno, Nevada 89503

James & Marion Keller
888 West Second Street, Suite 310
Reno, Nevada 89503

Sondra Eisberg
1200 Riverside Drive #1255
Reno, Nevada 89503

H. F. Cronin Fam Tr
1200 Riverside Drive #1232
Reno, Nevada 89503

Frank Cullen U/C
J.P. Higgins & A. Byron
1200 Riverside Drive #1231
Reno, Nevada 89503

Daniel & Sherry Marona
555 Estates Drive
Yuba City, California 95993

Charles Knight
P. O. Box 1687
Hawthorne, Nevada 89415

Aidia Casazza
1206 Riverside Drive
Reno, Nevada 89503

Berger Family Trust
1200 Riverside Drive #1205
Reno, Nevada 89503

Nick & Avis Badami
1200 Riverside Drive #1285
Reno, Nevada 89503

Sandra Hughes
1111 - 118th Avenue SE #1
Bellevue, WA 98005

Pierre & Frances Clemens Tr
1200 Riverside Drive #1283
Reno, Nevada 89503

Miles Shaw & Mary Niarchos
c/o BHP Utah Intern'l
550 California Street
San Francisco, CA 94104

Lloyd Fox
1200 Riverside Drive #1259
Reno, Nevada 89503

Grant & Helen Roberts
1585 Palisade Drive
Reno, Nevada 89509

Elmer & Sojana Hanson Tr
1200 Riverside Drive #1235
Reno, Nevada 89503

James & Helen Mumby
1200 Riverside Drive #1234
Reno, Nevada 89503

Frederick Erickson et al
1200 Riverside Drive #1233
Reno, Nevada 89503

Robert Chatfield
1200 Riverside Drive #1209
Reno, Nevada 89503

Edie-Wig-BB
Stonewood Shopping Center
P. O. Box 879
Seal Beach, CA 90740

Shingo & Kiyoko Wada
1200 Riverside Drive #1288
Reno, Nevada 89503

Charles & Miriam Clurman U/C
c/o Shingo & Kiyoko Wada
1200 Riverside Drive #1288
Reno, Nevada 89503

Donald & Kayo Takizawa
2546-3 Sunny Slope Drive
Sparks, Nevada 89431

Mary Ferguson et al
P. O. Box 188
Crystal Bay, Nevada 89402

Charles Bartl
1200 Riverside Drive #1262
Reno, Nevada 89503

E. O. & Alice M. Bergdahl Tr
1200 Riverside Drive #1261
Reno, Nevada 89503

Donald & Mildred Roth Tr
P. O. Box 5340
Reno, Nevada 89513

Roy & Margaret Rosenthal
13650 Del Monte Drive #26-B
Seal Beach, CA 90740

E.T. & Jane D. Hermann Tr
1200 Riverside Drive #1236
Reno, Nevada 89503

Alice Davis Tr
1200 Riverside Drive #1299
Reno, Nevada 89503

Realty Company
c/o Mr. & Mrs. Hawkins
P. O. Box 750
Reno, Nevada 89504

James Kelley
1200 Riverside Drive #1223
Reno, Nevada 89503

George & Ethel Carne Tr
1200 Riverside Drive #1291
Reno, Nevada 89503

Stephen Hawkes
1200 Riverside Drive #1290
Reno, Nevada 89503

First Interstate Bank of Nevada Tr
P. O. Box 30100
Reno, Nevada 89520

Shiela Scharbach Tr
P. O. Box 10837
Reno, Nevada 89510

Irwin & Lois Burke Tr
1200 Riverside Drive #1264
Reno, Nevada 89503

Felix Turrillas
1200 Riverside Drive #1241
Reno, Nevada 89503

David Pantell Tr
1240 Riverside Drive
Reno, Nevada 89503

Jane Armstrong et al
1200 Riverside Drive #1239
Reno, Nevada 89503

Margaret Cellucci
1301 Quarry Ct Villa No. 110
Point Richmond, CA 94801

J W McClenahan Company
1610 Marietta Way
Sparks, Nevada 89431

Atef & Dee Gamal-Eldin
1200 Riverside Drive #1214
Reno, Nevada 89503

Margaret Horrer et al
1200 Riverside Drive #1294
Reno, Nevada 89503

William & Sally Clements
275 Country Club
Reno, Nevada 89509

Marietta Petricciani Tr
1200 Riverside Drive #1292
Reno, Nevada 89503

William & Zena Mitchener
1777 Ala Moana Blvd, Suite 1606
Honolulu, HI 96815

Mildred Smith Tr
1200 Riverside Drive #1267
Reno, Nevada 89503

Harold & Nancy Fulghum
1200 Riverside Drive #1244
Reno, Nevada 89503

Steven & Alison Fiamengo
12156 SW Tryon Hill Road
Portland, Oregon 97219

Jacob Lindenbaum
1200 Riverside Drive #1242
Reno, Nevada 89503

David Hendry Fam Tr
c/o Pioneer Citizens Bank
Trust Department
P. O. Box 2351
Reno, Nevada 89505

John & Mary Prinvale Tr
2483 Sharon Oaks Drive
Menlo Park, CA 94025

Eldon & Dorothy Larson Liv Tr
1200 Riverside Drive #1217
Reno, Nevada 89503

Lucian & Marjorie Harris Tr
P. O. Box 570
Reno, Nevada 89504

Willard & Joan Elder Tr
1384 Coachman Drive
Sparks, Nevada 89431

John & Marjorie Harris
1200 Riverside Drive #1295
Reno, Nevada 89509

Wallace Baker
P. O. Box 3505
Redding, CA 96049

Warren Gold
1200 Riverside Drive #1271
Reno, Nevada 89501

Robert & Sylvia West
1200 Riverside Drive #1270
Reno, Nevada 89503

Nathaniel & Victoria Pedrini
1200 Riverside Drive #1247
Reno, Nevada 89503

Paul Burdick et al
1200 Riverside Drive #1246
Reno, Nevada 89503

Howard & Marianne Keller
1200 Riverside Drive #1245
Reno, Nevada 89503

Edith Healy Tr
1200 Riverside Drive #1222
Reno, Nevada 89503

Ralph Williams Tr et al
1200 Riverside Drive #1221
Reno, Nevada 89503

George & Hannah Relf
1200 Riverside Drive #1220
Reno, Nevada 89503

A.H. & Ora B. Johnston Tr
1200 Riverside Drive #1298
Reno, Nevada 89503

Robert & Barbara Thimot Tr
1200 Riverside Drive #1274
Reno, Nevada 89503

Leland Stanford Jr Tr
499 Hamilton Avenue, Suite 200
Palo Alto, CA 94301

Orlando Cellucci
100 Washington Street, Suite 300
Reno, Nevada 89503

N. E. Bibow Tr
1200 Riverside Drive #1248
Reno, Nevada 89503

G.W. & Lillian W. Bay Jr.
P. O. Box 99
Verdi, Nevada 89439

City of Reno
c/o Property Management
P. O. Box 1900
Reno, Nevada 89505

Patrick & Cherlyn Colletti
1001 Jones Street
Reno, Nevada 89503

Nancy Azevedo
1025 Jones Street
Reno, Nevada 89503

Stanley Vogel
P. O. Box 50005
Reno, Nevada 89513

Raymond Dohr
P. O. Box 5952
Reno, Nevada 89509

James Fergoda
15 Denmar Circle
Carson City, Nevada 89703

Laura Glickman
76 Boyd Place
Reno, Nevada 89503

Joseph Kruth
c/o Kristie Cory
63 Keystone Avenue #301
Reno, Nevada 89503

Billie Andrews
13380 Danbury #130-C
Seal Beach, CA 90740

Louis & Mary Llop Tr et al
2975 Juliann Way
Reno, Nevada 89509

Thomas Swan et al
3055 Solari Drive
Reno, Nevada 89509

Riverside Drive Ltd Partnership
P. O. Box 1470
Reno, Nevada 89505

Susan Smith
c/o Pat Campbell & Assoc.
P. O. Box 41027
Reno, Nevada 89504

Carroll Peetz
1865 Berkeley Drive
Reno, Nevada 89509

David & Mary Leahy
1130 Jones Street
Reno, Nevada 89503

Beryl Evelyn Billings
Charlotte Vanoni
1120 Jones Street
Reno, Nevada 89503

Tacchino Properties
3290 Dutch Creek Court
Reno, Nevada 89509

James Richardson et al Tr
57 Boyd Place
Reno, Nevada 89503

Susan F. Smith
c/o Warren Rlty Prop Mgmnt
145 Brinkby Avenue
Reno, Nevada 89509

Moana Airport Plaza Ltd
295 Gentry, Suite 3
Reno, Nevada 89502

Janice Hergert
1675 Mahani Loop
Honolulu, HI 96819

Joseph & Dawn Johnson
P. O. Box 8858
Reno, Nevada 89507

Therisia Peterson Tr
959 Nixon Avenue
Reno, Nevada 89509

Gilbert Gilbert & Gilbert
P. O. Box 4304
Incline Village, Nevada 89450

Ralph & Leila Slayton
9872 Theresa Avenue
Anaheim, CA 92804

Wilburton Smith
1140 Jones Street #200
Reno, Nevada 89503

Larry & Elsie Newman et al
2305 Sagittarius Drive
Reno, Nevada 89509

Kairos Outreach Inc.
P. O. Box 50301
Reno, Nevada 89513

Perry & Leath Hayden
2805 Scholl Drive
Reno, Nevada 89503

Stephen & Martha Dow
2880 Lakeridge Shores East
Reno, Nevada 89509

Joan Wait et al
937 Jones Street
Reno, Nevada 89503

Jerome Mayer et al
185 Edgewater Parkway
Reno, Nevada 89509

Richard Miolini et al
3720 El Cerro View Circle
Reno, Nevada 89509

Margaret E. Brault
33 Winter
Reno, Nevada 89503

Emery & Marion Salgo
420 West 6th Street
Reno, Nevada 89503

Tong & Yuen Leung
58 Vine Street #9
Reno, Nevada 89503

Richard & Marie Rice
29 Winter Street
Reno, Nevada 89503

Anna Clark et al
25 Winter Street
Reno, Nevada 89503

Robert & Patricia Stitser
7360 West 4th Street #2
Reno, Nevada 89523

W. J. Hughes et al
980 Pinebrook Road
Reno, Nevada 89509

Shu & Tisa Lan
P. O. Box 3553
Reno, Nevada 89505

Douglas Martin et al
2344 E. Speedway Blvd.
Tucson, AZ 85719-4729

Murray & Iona Jacobs
P. O. Box 2305
Reno, Nevada 89505

Jerome & Joan Schneider
357 S. Robertson Blvd.
Beverly Hills, CA 90211

Michael Hansen
1095 W. Plumb Lane
Reno, Nevada 89509

Robert & Darlene Osborne
6435 Meadow Valley Lane
Reno, Nevada 89509

Robert & Catherine Ewers Tr
32 Vine Street
Reno, Nevada 89503

Tonie Woodman
316 California Avenue #961
Reno, Nevada 89509

J. Clark & Patricia T. Gribben
2115 Parkridge Circle
Reno, Nevada 89509

Alex & Bonnie Sobrio
67 Washington Street
Reno, Nevada 89503

William Belli
701 Jones Street
Reno, Nevada 89503

William Hammersmith
4174 Plateau Court
Reno, Nevada 89509

Bruce Jorgensen
715 Jones Street
Reno, Nevada 89503

David Berry
26 Winter Street
Reno, Nevada 89503

Esteban & Felie Ferrer
32 Winter Street
Reno, Nevada 89503

Jerome & Candace Bastasini
945 Juniper Hill Road
Reno, Nevada 89509

Joan Florian et al
145 Mt. Rose
Reno, Nevada 89509

Susan English et al
c/o Adeline Obester
727 Riverside Drive
Reno, Nevada 89503

Delia Crepeau
Edwin & Virginia Giannotti
1275 Gordon Avenue
Reno, Nevada 89509

Anna Kutsenda et al
18 Winter Street
Reno, Nevada 89503

E C S Trust
P. O. Box 5009
Reno, Nevada 89513

Dario Dibitonto
714 Jones Street
Reno, Nevada 89503

William & Janet Farr
7607 Curtis Street
Chevy Chase, MD 20815

Waters Edge
c/o Puget Sound Mtg
P. O. Box 58490
Seattle, WA 98138

Southland Corporation
c/o Store 25962
2711 North Haskell Avenue
Dallas, TX 75204

John & Carol Douglass
725 California Avenue
Reno, Nevada 89509

William R. Ford Jr.
2345 Prater Way, Suite 303
Sparks, Nevada 89431

Edward & Helen Parsons Tr
761 California Avenue
Reno, Nevada 89509

Robert Kimball et al
1265 Sharon Way
Reno, Nevada 89509

Patrick & Gwenyth O'Bryan
825 California Avenue
Reno, Nevada 89509

John & Karen Williams
657 Ridge Street
Reno, Nevada 89501

Dan & Melinda Gustin
7 Elm Court
Reno, Nevada 89509

APPENDIX C

RESPONSES TO INTENT-TO-STUDY LETTER

City of Reno

POST OFFICE BOX 1900 • RENO, NEVADA 89505

October 14, 1992

Mr. Bill Crawford
Assistant Chief Bridge Engineer
Nevada Department of Transportation
1263 S. Stewart Street
Carson City, NV 89712

Re: Booth Street Bridge Design Recommendations (EA 71540)

Dear Mr. Crawford:

Thank you for the opportunity to make final comment on the above-referenced project. The City concurs with Option A as the preferred design option. In addition, due to discussions with representatives of the Riverside Apartments, it is my belief that they would prefer the design option which would least impact the north side of Riverside Drive. This would translate to Option A and no change in cross grade of Riverside Drive. The City would concur with this design.

If you have any questions, please call.

Sincerely,

Steve Varela, P.E.
City Engineer

cc: Keith Lockard
Brent Boyer

RESPONSE TO CITY OF RENO

No response necessary.

HAWKINS, FOLSOM & MUIR
ATTORNEYS AT LAW
VALLEY BANK CENTER - SUITE 416
ONE EAST LIBERTY STREET
P. O. BOX 750
RENO, NEVADA 89504

ROBERT Z. HAWKINS
1903-1979

PRINCE A. HAWKINS, LTD.
GEORGE K. FOLSOM, LTD.
GORDON R. MUIR, LTD.
BRIAN C. KELLY, LTD.

BRYCE RHODES
COUNSEL

TELEPHONE
(702) 786-4646

FAX TELECOPIER
(702) 786-7334

September 9, 1992

Richard J. Nelson
NDOT District Engineer
310 Galletti Way
Sparks, Nevada 89431

Daryl N. James, P.E. Supervisor
Environmental Services Division
Nevada Department of Transportation
1263 South Stewart Street
Carson City, Nevada 89712

Gentlemen:

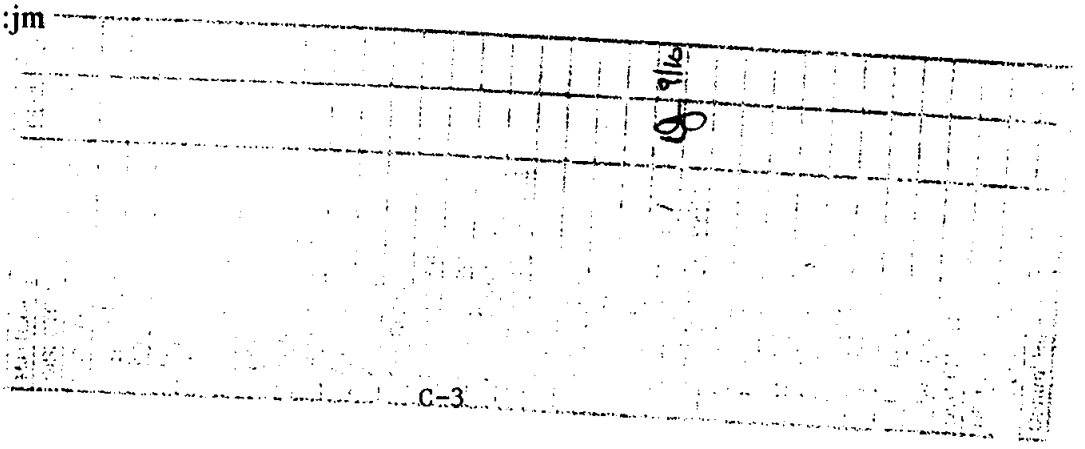
Having lived around the Truckee River since 1918, there is no need to replace the Booth Street Bridge, and its removal would destroy a beautiful corner of Reno, to replace it with another one of the awful structures promulgated by the highway department, the west side freeway, the bridge to nowhere, Wells Avenue Overpass, and the Keystone interchange.

Instead, pave the highways and the streets. You might even follow Jim Spoo's example and resign to save money rather than spend time on a project like this.

Sincerely,

Prince A. Hawkins

PAH:jm



RESPONSE TO HAWKINS, FOLSOM AND MUIR

The Need Section of this EA clearly demonstrates the necessity for replacing the deficient Booth Street Bridge with a structurally sound and safe replacement. In addition to being a safer bridge, the proposed structure will be more efficient by allowing additional water to pass beneath it, thereby reducing the risk of upstream flooding. Please refer to the Need Section of this EA and the Floodplain and Hydrologic Assessment for further information.

1120 Jones Street
Reno, Nv. 89503
Sept. 15, 1992

STATE OF NEVADA
92 SEP 17 AM 11:05
DEPARTMENT OF TRANSPORTATION
SEND COPY TO OFFICE

Gentlemen;

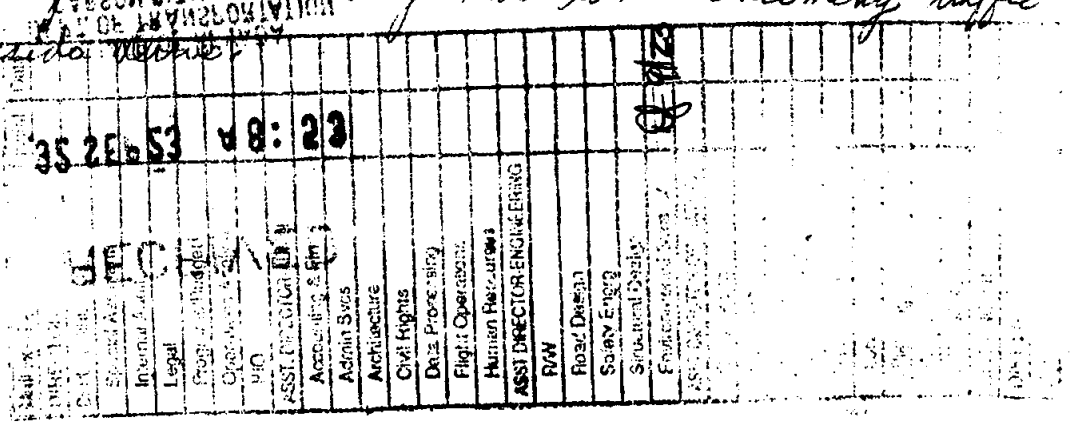
Reguing to your letter of August 17 regarding replacing the Booth Street bridge -

1. The present access is O K - it deters people from driving too fast to make the turn.
2. Noise levels are O K. - its the apartment complex at 1077 Riverside Drive that causes noise.
3. The entrance to Idlewild Park / Recreation area is sufficient.
4. Vegetation along the river is native to this area and should remain.
5. Leave the bridge as two lanes - NOT four lanes.
6. I have lived at this address since 1925 and this bridge has withstood all of our floods.

Thank you for listening!

Miss Beryl E. Billing

P. S. The railings prevent ~~very~~ very hard to see oncoming traffic on Riverside Drive.



RESPONSE TO BERYL E. BILLING

Vegetation will be disturbed only to the extent necessary to construct the proposed project and only within specified construction limits. Trees, which require removal, will be replaced (refer to the Biological Resources Section).

The proposed bridge will consist of two travel lanes so that it will match the existing roadway leading up to the bridge.

The proposed bridge is designed to allow more water to pass under the structure in the event of a flood. It is not just a matter of whether or not the bridge will withstand a flood but by allowing more water to flow beneath the structure it will do much to alleviate upstream flooding.

September 10,1992
1200 Riverside Dr. #1251
Reno, Nevada, 89509

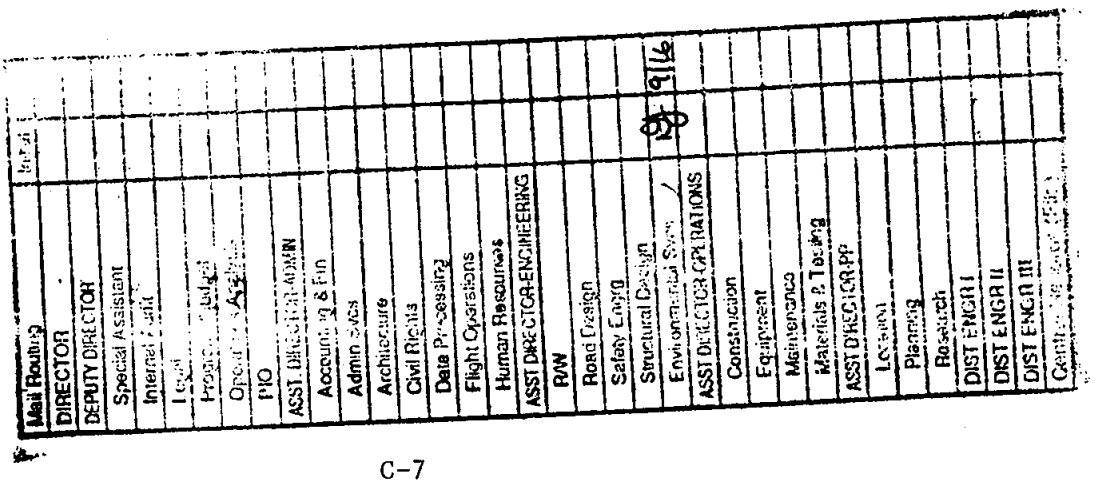
Dear Sir:
I for one , do not believe in changing the Booth Street Bridge. Many of the people in this section use the bridge every day to get to the Doctors and the Villge Shopping Center.

I know we can use the Keystone bridge, but is most inconvenient. It would take months to undertake this projectand I can't see how one could widen the bridge, when there two lane streets leading in and out of same.

I think this project should be voted on,if it has anything to do with raising taxes.We are being taxed to death with some of these inane projects which the city does not need. I think this was voted down once before if my memory serves me right.
I would vote against it.

Yours truly
Mrs. Mary Alice Picard

Mrs. Mary Alice Picard



RESPONSE TO MARY ALICE PICARD

There will be some inconvenience while construction is ongoing, however, the benefits of the proposed bridge will outweigh any inconveniences that will be experienced by pedestrians, bicyclists and motorists. Refer to the Need and Alternative Sections of this EA for a discussion of the benefits the proposed bridge will have.

Funding will come from sources other than a direct tax. There is no need to raise any specific tax to construct the proposed bridge.

VELDA J. BRITTON
1350 Jones Street
Reno, Nv 89503

702/348-9669

September 17, 1992

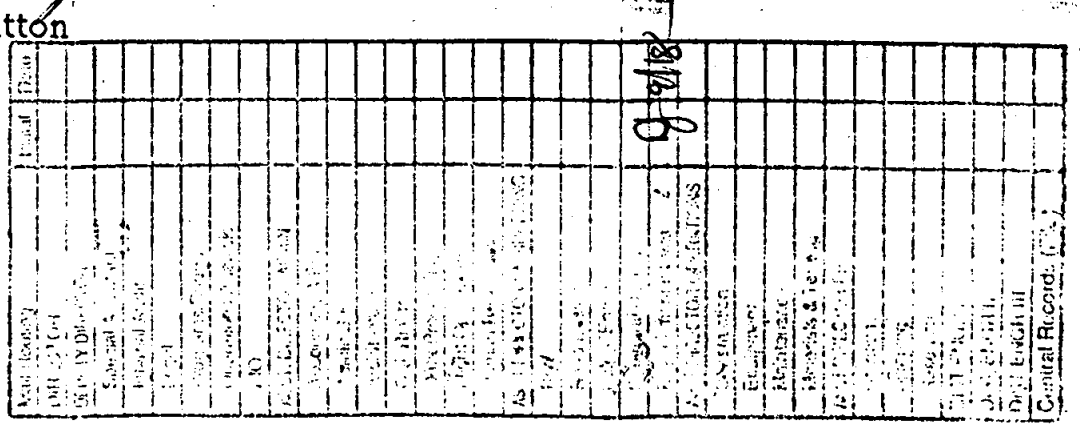
DEPARTMENT OF TRANSPORTATION
1263 S. Stewart Street
Carson City, Nevada 89712

Re: Intent to study Booth Street Bridge EA 71540

I am opposed to removal of the Booth Street Bridge. I note your letter says replacement, not removal of this bridge and I was unable to attend your meeting last night so I don't know what the proposed replacement bridge would look like, location, etc.

Sincerely,

Velda J. Britton



RESPONSE TO VELDA J. BRITTON

Your comment is noted. Please refer to Figures 2, 3 and 4 for the various design options which were studied.

Daryl N. James, P.E., Supervisor
Environmental Services Division
Nevada Department of Transportation
1263 South Stewart St.
Carson City, Nevada 89712

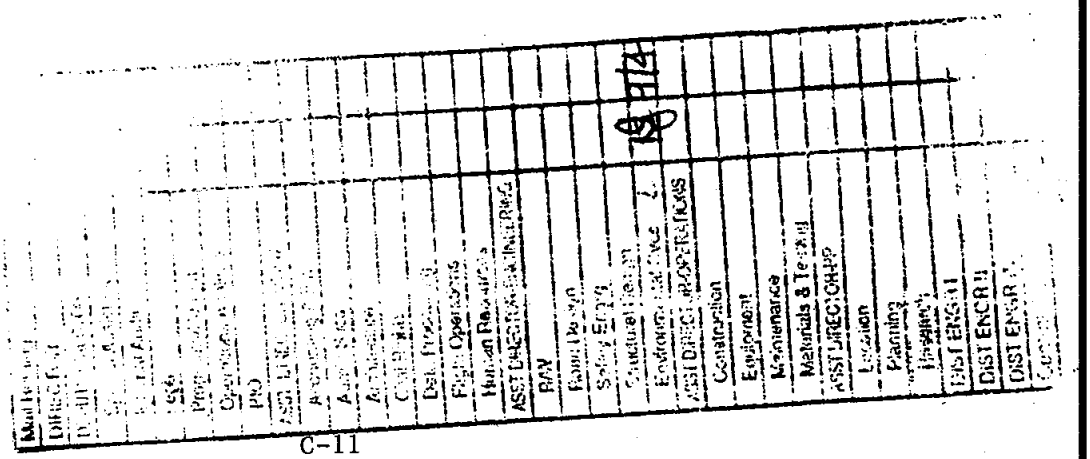
Dear Mr. James:

I am the owner of Brookside Villas, a 113 unit apartment complex located at 1850 Idlewild Drive, and am responding to your Department's "Intent-to-Study Booth Street Bridge, EA 71540".

Our major concern is having access from the North, for our tenants, during the construction period. If you provide this access,e.g. doing the bridge in halves, allowing for some traffic flow, we believe that the project will provide positive benefits for our tenants and apartment complex.

Thankyou,

John E. Beal
7242 Avenida Altisima
Rancho Palos Verdes, CA. 90274



RESPONSE TO JOHN E. BEAL

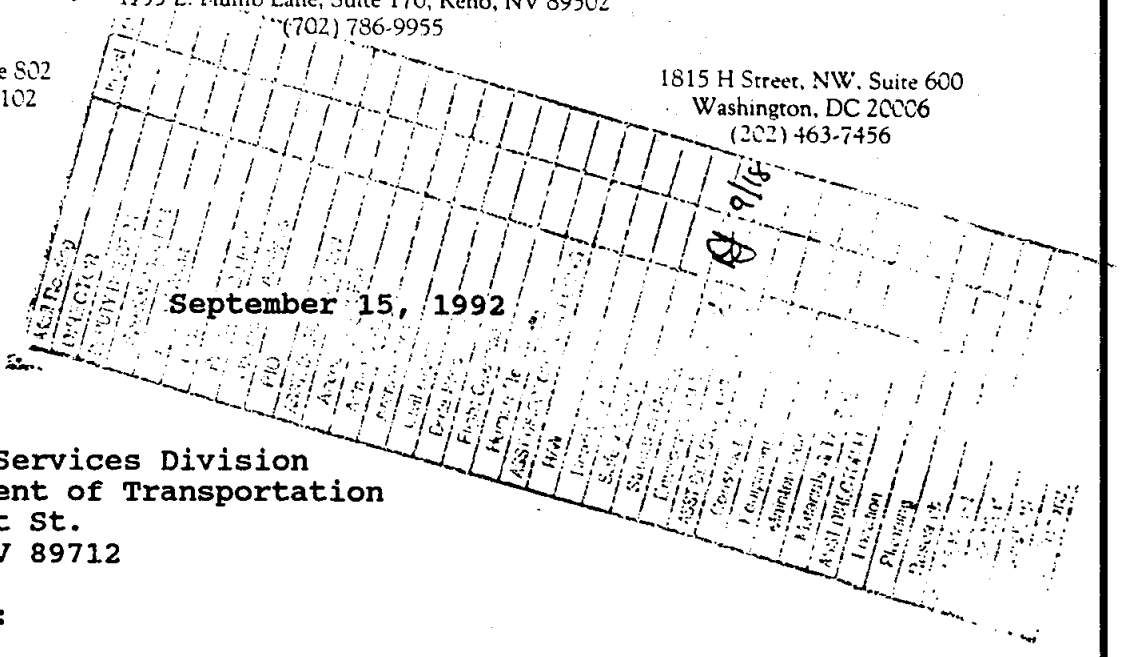
Access to Brookside Villas (Apartments) will be limited during construction because Booth Street and Idlewild will be closed, at the river crossings. Booth will be closed when the existing structure is demolished and while the new bridge is being constructed. Idlewild will have to be closed because of the excavation necessary for the new abutment on the new structure. Access to Brookside Villas Apartments will be from Keystone via Foster and Hunter Lake.

PUBLIC RESOURCE ASSOCIATES

1755 E. Plumb Lane, Suite 170, Reno, NV 89502
(702) 786-9955

414 Mason Street, Suite 802
San Francisco, CA 94102
(415) 392-2818

1815 H Street, NW, Suite 600
Washington, DC 20006
(202) 463-7456



September 15, 1992

Daryl James
Environmental Services Division
Nevada Department of Transportation
1263 S. Stewart St.
Carson City, NV 89712

Dear Mr. James:

I am writing in response to your solicitation for concerns and comments about the Booth St. Bridge, EA 71540.

At first glance, the Truckee River Yacht Club generally supports the replacement of the bridge for several reasons:

1. The new bridge could safely accommodate both pedestrian and bike access from the north side to the south side for recreation purposes. The current crossing is cumbersome, unsafe and requires police assistance during the many recreational races along that portion of the river path.

2. A more modern bridge would alleviate some of the flooding potential.

3. A new bridge might be more aesthetically pleasing.

Our concerns are as follows:

1. That we retain as much of the current green way as possible.

2. If there's a way to remove the abrupt 90 degree turns from Riverside to Booth to Idlewild without compromising the current landscaping or nice old neighborhoods, it might reduce noise, air pollution, and congestion at certain times of the day.

3. It will be a tight squeeze to raise or elongate the bridge because of numerous apartments, water treatment and electrical facilities.

4. We'd like to see disruptions to bank habitat mitigated and in-stream fisheries enhanced as part of the project.

We thank you for the opportunity to comment. As plans develop, we'd like to comment further and participate in the process.

Sincerely,

Susan Lynn

Susan Lynn
Commodore
Truckee River Yacht Club

SL:ak

RESPONSE TO PUBLIC RESOURCE ASSOCIATES

1. The contractor will be required to stay within pre-determined construction limits to minimize loss or disruption of vegetation.

2. The present alignment and grade elevations as well as the established residential area forces us to retain the same alignment.

3. There are definitely constraints which must be taken into account, however, the various designs proposed within this EA will take all constraints into account.

4. Refer to response number one. Additionally, mitigation measures to minimize harm to water quality will be implemented and in effect during the contract period.

A design hearing, to inform the public about a final design, will provide interested individuals with another opportunity to review and comment on the proposed project.

APPENDIX D

CORRESPONDENCE

BOB MILLER
Governor

STATE OF NEVADA

PETER G. MORROS
Director

RONALD M. JAMES
State Historic Preservation Officer

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF HISTORIC PRESERVATION AND ARCHEOLOGY
123 W. Nye Lane, Room 208
Capitol Complex
Carson City, Nevada 89710
(702) 687-5138

February 3, 1993

Frederick G. Wright, Jr.
Division Administrator
Federal Highway Administration
1535 Hot Springs Road, Suite 100
Carson City, NV 89706-0602

Dear Mr. Wright:

We have reviewed the determinations of eligibility and effect for the Booth Street Bridge replacement in Reno, Nevada. The Booth Street bridge is eligible for the National Register of Historic Places. The Division concurs with the Federal Highway Administration's (FHWA) determination that the following properties are eligible for the National Register of Historic Places:

		NR criteria
Frandsen & Lusty Rentals	1009 Riverside Drive	C
Frandsen & Lusty Rentals	1019 Riverside Drive	C
Loomis Manor Apartments	1045 Riverside Drive	C
Kanters House	1055 Riverside Drive	C
Thompson House	1101 Riverside Drive	B & C
Adams House	1107 Riverside Drive	B & C
Reno Electric Light & Power	1230 Idlewild Drive	A

The Division also concurs with the FHWA's determination that this undertaking will have an adverse effect on historic properties.

We will review the proposed Memorandum of Agreement and our comments will be forthcoming.

Sincerely,

Alice M. Baldrica
Deputy State Historic Preservation Officer

BOB MILLER
Governor

STATE OF NEVADA

PETER G. MORROS
Director

RONALD M. JAMES
State Historic Preservation Officer

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF HISTORIC PRESERVATION AND ARCHEOLOGY
123 W. Nye Lane, Room 208
Capitol Complex
Carson City, Nevada 89710
(702) 687-5138

March 6, 1992

Mr. T. Hal Turner
Cultural Resource Section
Environmental Services Division
Department of Transportation
1263 S. Stewart Street
Carson City, NV 89712

Dear Hal,

The Division of Historic Preservation and Archeology has reviewed the following NDOT report:

Booth Street Bridge replacement, NDOT-WA91-055S, EA 71540.

The Division acknowledges that the pedestrian, archaeological survey failed to reveal any historic or prehistoric archaeological sites. We are deferring our concurrence with your determination of effect pending receipt of further documentation concerning treatment of the existing Booth Street Bridge.

Please contact me if you have any questions concerning this correspondence.

Sincerely,

Eugene M. Hattori

Eugene M. Hattori
Archaeologist

United States Department of the Interior

NATIONAL PARK SERVICE
WESTERN REGION
450 GOLDEN GATE AVENUE, BOX 36063
SAN FRANCISCO, CALIFORNIA 94102

IN REPLY REFER TO:

H40 (WR-RRP)

May 10, 1990

Walt Wagner
Supervisor
Environmental Services Division
Department of Transportation
1263 South Stewart
Carson City, NV 89712

Re: HAER documentation of Riverside Bridge (Booth Street Bridge), Booth Street spanning the Truckee River, Reno (Washoe) Nevada

Dear Mr. Wagner:

The Division of National Register Programs, National Park Service, Western Region, acknowledges the receipt of and accepts the documentation for the above mentioned project. This documentation meets the Historic American Engineering standards and complies with the Memorandum of Agreement.

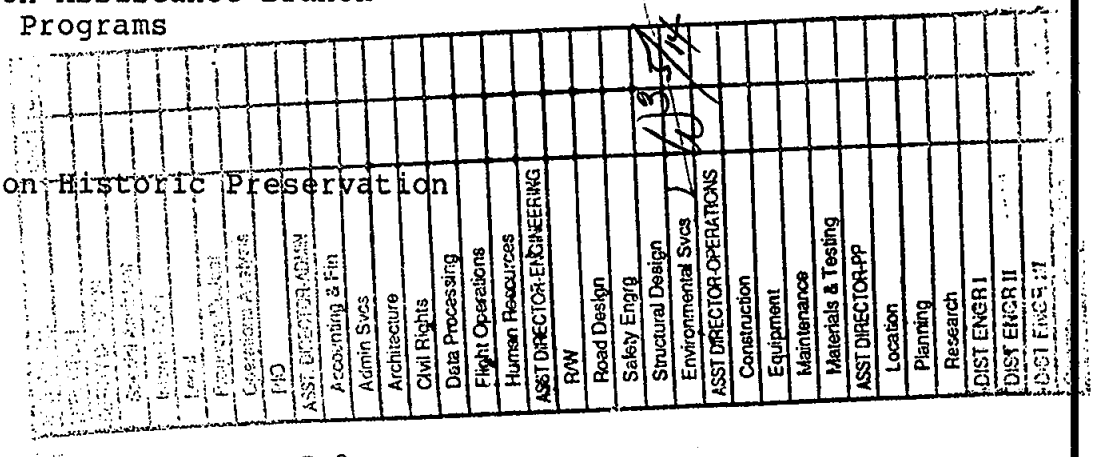
After editorial review and preparation of support material, the completed documentation will be transmitted to the Prints and Photographs Division of the Library of Congress. The records are in the public domain and will be accessible through the Library of Congress.

Sincerely,

Anne E. Weston

David W. Look, AIA
Chief, Preservation Assistance Branch
National Register Programs

cc:
SHPO - NV
HABS/HAER, WASO
Advisory Council on Historic Preservation



RICHARD H. BRYAN
Governor

STATE OF NEVADA

ROLAND D. WESTERGARD
State Historic Preservation Officer

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

DIVISION OF HISTORIC PRESERVATION AND ARCHEOLOGY
201 S. Fall Street
Capitol Complex
Carson City, Nevada 89710
(702) 885-5138

April 22, 1987

T. Hal Turner, Manager
Cultural Resource Section
Nevada Department of Transportation
Carson City, Nevada 89712

Dear ~~Mr. Turner~~ Hal:

The Division is in receipt of the draft report, "An Inventory of Nevada's Historic Bridges." This study provides the first comprehensive inventory and analysis of the state's bridges. The document is intended to provide a data base for the planning and management of Nevada's historic bridges.

Based on the Division's review of the draft we concur with the report's findings pending final review of inventory photographs.

Congratulations on the completion of a well executed study.

Sincerely,

Kathryn M. Kuranda
Architectural Historian

KMK:emt

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION NINE

ARIZONA
CALIFORNIA
NEVADA
HAWAII
GUAM
AMERICAN SAMOA

Nevada Division
1535 Hot Springs Road, Suite 100
Carson City, Nevada 89701-0602

April 10, 1987

IN REPLY REFER TO
HFO-NV
(430.8 x
407.13)

Subject: Historic Bridge Inventory

Mr. Garth Dull
Director of Transportation
Carson City, Nevada

Dear Mr. Dull:

Reference is made to the Draft copy of the Historic Bridge Inventory which was recently prepared by your Environmental Services Division. We have completed our review of the Inventory and we consider it to be well done and it identified a reasonable number of bridges which are eligible for the National Register of Historic places. We are hereby granting approval to proceed with obtaining the State's Historic Preservation Officer's concurrence in the Inventory.

Sincerely yours,

A. J. Horner
Division Administrator

By:
James E. Rud
Field Operations Engineer

APPENDIX E

PROGRAMMATIC 4(f) ANALYSIS (PARK LAND)

PROGRAMMATIC SECTION 4(f) EVALUATION
BOOTH STREET BRIDGE/RIVERSIDE DRIVE
INTERSECTION IMPROVEMENT (PARK LAND)
RENO, NEVADA

The Booth Street Bridge/Riverside Drive intersection improvement is a bridge replacement project. The new bridge will be wider than the present bridge to remove the safety hazard represented by the present constriction of traffic imposed by the existing bridge. As a result of this widening and the additional need to improve for safety reasons the turning radius at the Booth Street/Riverside Drive intersection, some land owned by the City of Reno and used for public recreation purposes will be acquired.

APPLICABILITY

The following information demonstrates that this project meets the applicability criteria for use of the Programmatic Section 4(f) Evaluation issued December 23, 1986. A sketch of the project vicinity which shows the areas of impact is attached.

1. The proposed project is designed to improve, by replacing a deficient bridge, widening its replacement and flattening a turning radius at one structure terminus, the operational characteristics, safety and physical condition of an existing highway facility on essentially the same alignment.

2. The Section 4(f) lands are owned by the City of Reno, used for public recreation and are located adjacent to the existing highway. (See attached sketch.)

3. The taking of the Section 4(f) land described above will not impair the use of the remaining Section 4(f) land, in whole or in part, for its intended purpose. These parks are used primarily for pedestrian and bicycling activities that utilize the bridge crossing of the Truckee River. In the new condition these functions will continue unimpaired.

The Section 4(f) lands of concern in this project lie between Booth Street and Keystone Avenue on the north and south ends of the Booth Street Bridge. This total area is 0.83 acres. The total amount of permanent disturbance is 0.01 acres on the north and 0.05 acres on the south, for a total of 0.06 acres of permanent disturbance. This will result in a permanent 7 percent reduction of the park area. Construction activities will temporarily disrupt 0.18 acres, or 22 percent of the total park area, however, following construction of the proposed bridge, the disturbed areas will be returned to their natural state.

4. The proximity impacts of the project on the remaining Section 4(f) lands will not impair the use of those lands for their intended purpose. These parks are both used primarily for pedestrian and bicycling activities that utilize the bridge

crossing of the Truckee River. Impacts of the project with respect to noise, air and water pollution, wildlife and habitat effects, aesthetic values and the like will be essentially the same as for the existing situation.

5. The Reno official having jurisdiction over these Section 4(f) lands has agreed with this assessment of the impacts of this proposed project. No substantial impacts have been identified and no mitigation is proposed.

6. Neither of the parks involved in this Section 4(f) evaluation were purchased or improved with funds under the Land and Water Conservation Fund Act, the Federal Aid in Fish Restoration Act (Dingell-Johnson Act), the Federal Aid in Wildlife Act (Pittman-Robertson Act), or similar laws nor are the lands otherwise encumbered with any Federal interest.

ALTERNATIVES

1. DO NOTHING. There are three major areas of concern involved in this bridge replacement project: the existing bridge is structurally deficient; its two narrow traffic lanes pose a constriction to traffic using the roadways coming onto the bridge; and it has an insufficient hydraulic opening for flood conditions.

a. The bridge's concrete is severely cracked with exposed, broken and rusted reinforcing steel. In addition, the concrete is contaminated with salt. The bridge will continue to deteriorate until it will have to be closed to vehicular and pedestrian traffic.

b. The substandard roadway width on the bridge will continue to be a constriction, becoming an increasingly greater safety hazard as traffic volumes grow along with the City of Reno.

c. The insufficient hydraulic opening will continue to cause flooding of the surrounding area. The U.S. Department of the Army, Corps of Engineers has determined that the structure is in need of replacement in order to improve flows in the Truckee River during flood occurrences.

Additionally, it is necessary to improve the safety of the Booth Street/Riverside Drive intersection by improving the turning radius.

2. IMPROVE WITHOUT USING ADJACENT PARK. The travelway width of the present structure is 24 feet. Booth Street south of the structure is 38 feet in width. All of the bridge width deficiency is on the east side (see sketch). There is no prudent or feasible way to make the improvements on the existing alignment without using park land.

3. BUILD ON NEW ALIGNMENT. The Booth Street Bridge is an integral part of the City of Reno transportation and park system. This structure is the only access across the river in this area. A jogging/bicycle path runs along the Truckee River, paralleling Riverside Drive to the east and Idlewild Drive to the west. To replace the bridge on a new alignment that would continue to serve the same needs as the present bridge would mean using park land not just for the improvement, but for the entire structure. In addition, it would be virtually impossible, because of the nature and density of development along Booth Street itself.

FINDINGS

1. DO NOTHING. This alternative is not feasible and prudent because it would not correct existing and projected safety hazards nor would it correct existing deteriorated conditions and maintenance problems. Not providing such correction could result in interruption or loss of access across the River and/or loss of life and property due to flooding, either or both of which, when compared to the proposed use of the Section 4(f) land, would constitute a cost or community impact of extraordinarily adverse magnitude.

2. IMPROVE WITHOUT USING ADJACENT PARK. It is not feasible and prudent to avoid these Section 4(f) lands by roadway design or transportation system management techniques because no such options exist that would permit accomplishing the project objectives. Primary goals of the project are to replace and widen the bridge. Any widening will impact Section 4(f) lands.

3. IMPROVEMENT ON NEW LOCATION. It is not feasible and prudent to avoid these Section 4(f) lands by constructing on a new alignment because any new alignment that met the present need for auto, pedestrian and bicycle crossing of the river would result in substantial adverse social impacts (displacement of a substantial number of families and businesses on Booth Street), greater impacts to these same Section 4(f) lands and these impacts would of extraordinary magnitude when compared with the proposed use of the Section 4(f) lands.

MEASURES TO MINIMIZE HARM

The project development process for this project included consideration of all possible measures to minimize harm. These measures are as follows:

In cooperation and coordination with the City of Reno, NDOT has, to the extent practicable, designed the roadway to: (a) impact the least amount of land, (b) enhance water flow thereby reducing the risk of upstream flooding, (c) mitigate the removal of trees in the project area, and disrupt the surrounding environment as minimally as possible, without compromising the safety of the travelling public.

In addition to mitigation measures listed here, refer to Appendix F, the Booth Street Bridge 4(f) and to the mitigation sections contained within the body of the EA.

4 (f) INVOLVEMENT

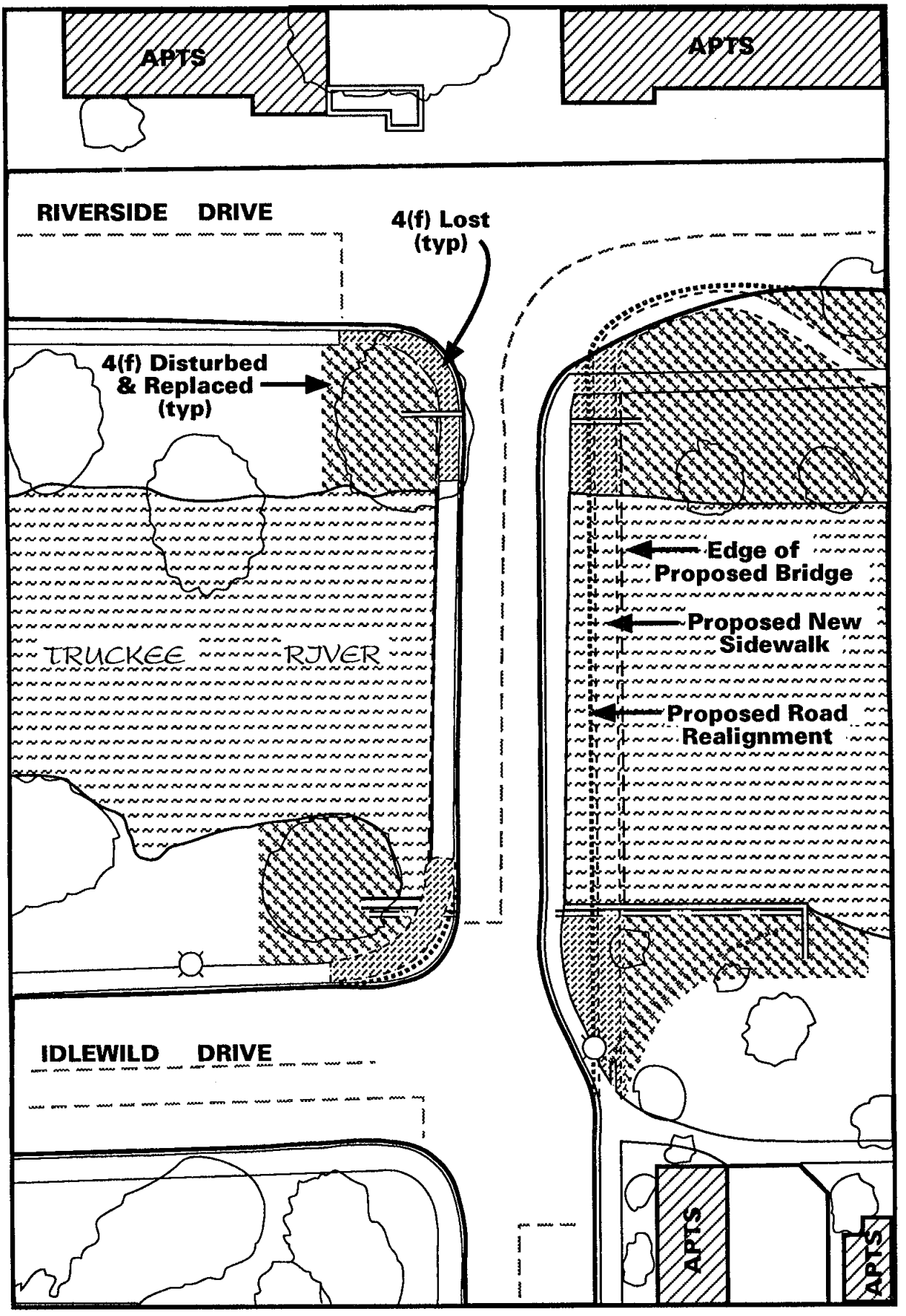


Figure E-1

APPENDIX F

PROGRAMMATIC 4(f) ANALYSIS (BRIDGE)

PROGRAMMATIC SECTION 4(f) EVALUATION
BOOTH STREET BRIDGE/RIVERSIDE DRIVE
INTERSECTION IMPROVEMENT (BRIDGE)
RENO, NEVADA

The Booth Street Bridge/Riverside Drive intersection improvement is a bridge replacement project. The new bridge (although still two lanes) will be wider than the present bridge to alleviate safety hazards created by (a) the constriction of traffic caused by the existing structure and, (b) the physical deterioration caused by the age of the present bridge. Consequently this bridge, which is eligible for the National Register of Historic Places, will be demolished and a similar replacement structure built in its place.

APPLICABILITY

The following information demonstrates that this project meets the applicability criteria for use of the Programmatic Section 4(f) Evaluation issued December 23, 1986. A sketch of the proposed bridge is attached.

1. The proposed project is designed to improve the operational characteristics, safety and physical condition of an existing roadway facility on essentially the same alignment by replacing a deficient bridge, widening its replacement and flattening a turning radius at one structure terminus.

2. The proposed project requires demolishing a Section 4(f) structure which is eligible to the National Register but is not a National Historic Landmark.

3. The demolition of the existing structure and construction of its replacement will not impair the use of remaining Section 4(f) land or structures, in whole or in part, for their intended purpose (See Appendix E).

4. In compliance with Section 106, an agreement has been reached, between the Nevada Department of Transportation (NDOT) and the Nevada State Historic Preservation Officer, that the bridge is eligible to the National Register of Historic Places. And it has been further determined that the project will have an "adverse effect" (See Attached Letter).

ALTERNATIVES

1. DO NOTHING. There are three major areas of concern involved in this bridge replacement project: (1) the existing bridge is structurally deficient; (2) it poses a constriction to traffic using the roadways coming onto the bridge; and (3) it has an insufficient hydraulic opening for flood conditions.

a. The bridge's concrete is severely cracked with exposed, broken and rusted reinforcing steel. In addition, the concrete is contaminated with salt. The bridge will continue to deteriorate until it will have to be closed to vehicular and pedestrian traffic.

b. The substandard roadway width on the bridge will continue to be a constriction, becoming an increasingly greater safety hazard as traffic volumes grow along with the City of Reno.

c. The insufficient hydraulic opening will continue to cause flooding of the surrounding area. The U.S. Department of the Army, Corps of Engineers has determined that the structure is in need of replacement in order to improve flows in the Truckee River during flood occurrences.

Additionally, it is necessary to improve the safety of the Booth Street/Riverside Drive intersection turning radius.

2. BUILD AT A DIFFERENT LOCATION. The urban nature and existing street alignments prohibit constructing a new bridge in a different location. The existing structure is immediately surrounded by apartment complexes on both sides of the river, residential housing units and some businesses. There is no practical way to construct a new bridge at a different location and connect it to the existing street system or to reconstruct the street system. If this was possible it would still involve taking 4(f) park land which runs parallel to the river.

3. REHABILITATE THE EXISTING BRIDGE. The NDOT Bridge Division has determined that it would not be possible to reconstruct the existing structure and maintain its historical integrity. In order for the rehabilitated bridge to be able to accommodate the increased hydraulic flows and wider lane widths, a complete structural modification would have to be undertaken which would effectively negate the original design. In short, rehabilitation is not a feasible alternative because of the massive reconstruction which is required to bring the bridge up to standards.

FINDINGS

1. DO NOTHING. This alternative is not feasible and prudent since it would not correct existing and projected safety hazards nor would it correct existing deteriorated conditions and maintenance problems. Not providing such correction could result in interruption, or loss, of access across the river and/or loss of life or property due to flooding, or further deterioration of the bridge either or both of which, when compared to the proposed demolition of the Section 4(f) bridge would constitute a cost or community impact of extraordinarily adverse magnitude.

2. BUILD AT A DIFFERENT LOCATION. It is not feasible and prudent to build a new structure in a different location due to the congested nature of the surrounding area. Existing street

configurations would necessitate the removal of housing and apartment complexes, and subsequent relocation of the residents. The social costs, not to mention the financial burdens, would be extremely excessive for a project of this relatively small scope. In addition to demolishing apartment complexes and residential dwelling units, streets would have to be rebuilt to accommodate the new structure location, which would then change street patterns which have been in existence for decades. No 4(f) park land could be avoided, therefore, a Section 4(f) involvement, relative to park lands, would still occur.

3. REHABILITATE THE EXISTING BRIDGE. It is not feasible and prudent to avoid a Section 4(f) involvement by rehabilitating this structure. In order to bring the bridge up to current safety standards, provide the necessary clearance to meet flood and Corps of Engineer requirements, and widen the structure to alleviate the traffic constriction, a complete demolition and reconstruction will be necessary. In turn the demolition and reconstruction will negate the historical integrity of the Booth Street Bridge.

MEASURES TO MINIMIZE HARM

The project development process for this project included consideration of all possible measures to minimize harm. These measures are as follows:

In cooperation and coordination with the City of Reno, NDOT has, to the extent practicable, designed the roadway to: (a) impact the least amount of land by replacing the bridge in the same location and at the same elevation, (b) enhance water flow thereby reducing the risk of upstream flooding, (c) mitigate the removal of trees in the project area, (d) return areas disturbed by construction to its natural state upon completion of the project, and (e) disrupt the surrounding environment as minimally as possible during construction, without compromising the safety of the travelling public. Additionally, in consultation with the Nevada State Historic Preservation Office and City of Reno's Historic Advisory Committee, the Nevada Department of Transportation and the Federal Highway Administration are proposing the following measures to mitigate the project's effects.

Bridge Railing

A new bridge rail that closely resembles the original "beam and post" railing constructed in 1920, and removed in the 1940's, will be constructed on the new bridge. The new rail will be cast-in-place concrete, giving the appearance of a beam and post railing. A formliner will be used to produce a fractured fin texture on the beam portion of the rail. End posts will project above the beam and post railing at each abutment and at the end of the bridge.

Lighting

Four new lighting standards will be placed on the new bridge; one at each corner end post next to the abutment. The lights and post were selected by the City of Reno's Historic Advisory Committee; they are the "Lumi-Lux" Series by Lumec. Three lights in a triangular pattern and one light in the center will sit on a crossarm at the top of the post.

Plaques

Two historic plaques, which are currently on the existing bridge, will be removed, stored and incorporated into the new bridge railing. These plaques, and any new plaques the city may want, will be placed on the inside face of the end posts facing traffic.

Concrete Finish

All exposed concrete will receive a hand rubbed finish. This gives the appearance of an older structure and removes formlines that occur with cast-in-place concrete. No color additives to the concrete will be used.

BOOTH STREET BRIDGE

SIDE VIEW

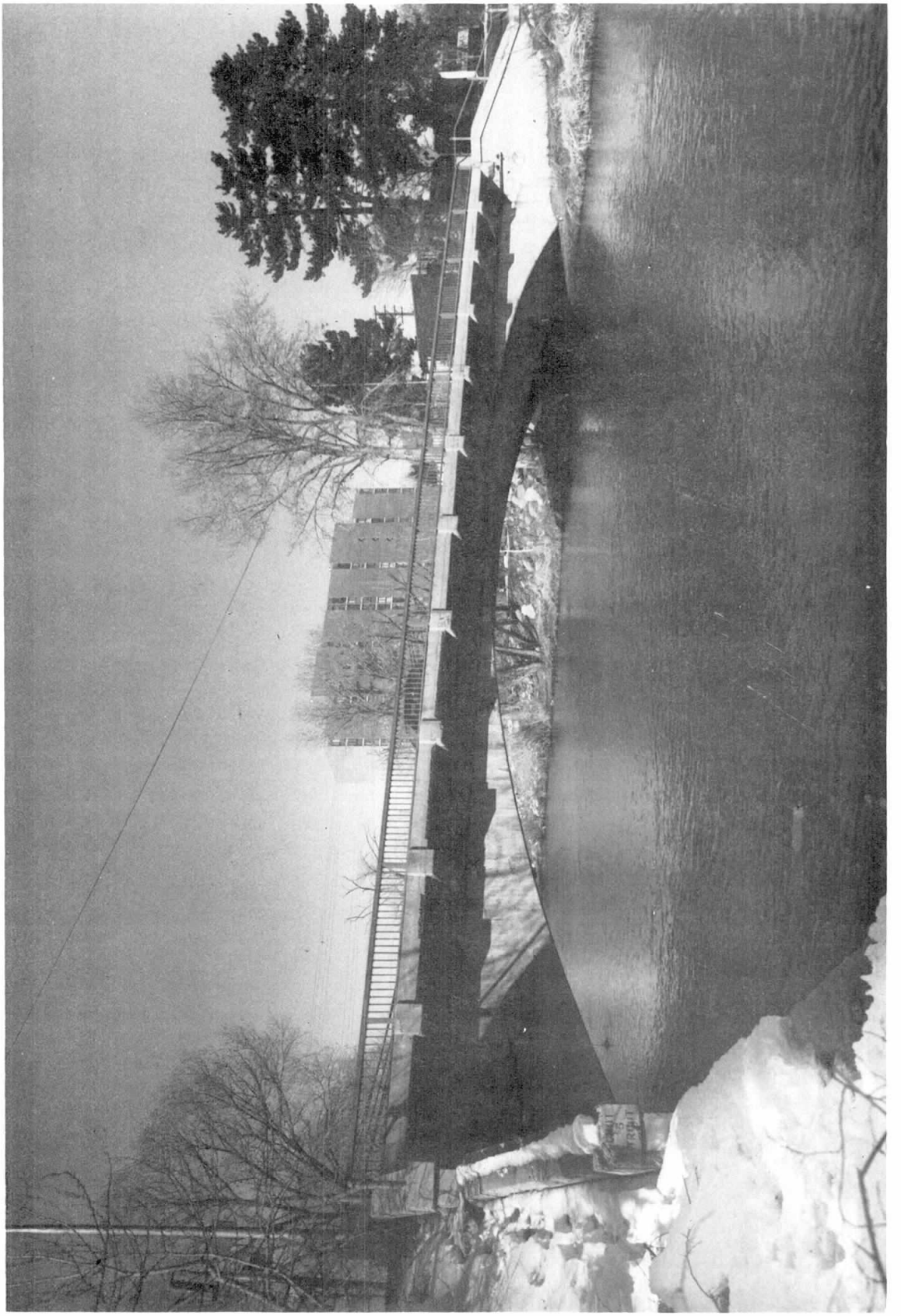


Figure F-1

BOOTH STREET BRIDGE

SURFACE VIEW

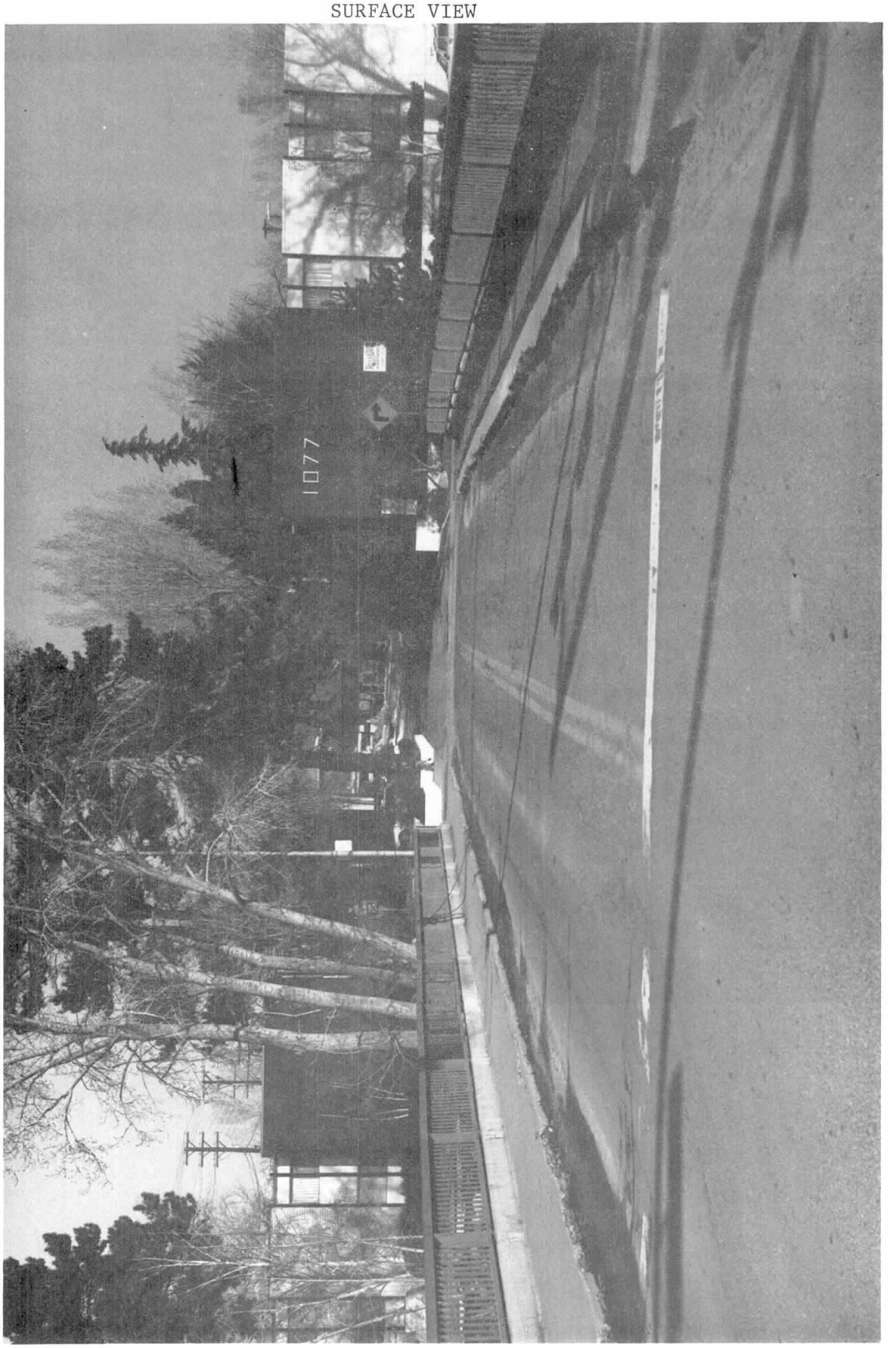


Figure F-2