

BENJAMIN J. CAYETANO
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

November 24, 1997 '97 NOV 25 P2:58

Hawaii Belt Road Replacement
of Bridges

KAZU HAYASHIDA
DIRECTOR

DEPUTY DIRECTORS
BRIAN K. MINAAI
GLENN M. OKIMOTO

IN REPLY REFER TO:

HWY-DD
2.6795

OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

Mr. Gary Gill, Director
Office of Environmental Quality Control
State Office Tower
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

Attention: Mr. Leslie Segundo

Dear Mr. Gill:

Subject: Environmental Assessment for Hawaii Belt Road,
Replacement of Auwaiakeakua and Popoo Bridges,
Federal-Aid Project No. BR-0190(13)

The State Department of Transportation has reviewed the comments dated September 8, 1997, from the Office of Environmental Quality Control, and offers the following responses to the numbered questions.

1. *Indicate on a map the names and locations of endangered plant populations along with proposed buffer zones.*

There are three (3) federally endangered plants known to exist in the area. As stated in the comments received from the United States Department of the Interior Fish and Wildlife Service, the project will not have an impact on these species unless a brush fire occurs due to construction. Measures will be implemented by the Contractor, to prevent brush fires instead of mapping individual plants within the buffer zones. The letter referenced above is included as an attachment in the Final EA.

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Mr. Gary Gill
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HWY-DD
2.6795

2. *Discuss non-concrete materials for protecting stream bank as an alternative to channelization (see attachment).*

This project does not involve channelization of the stream. The Draft EA states, "In the stream bed, the embankment material will consist of suitable material such as crushed rock or gravel wrapped in geotextile fabric." This refers to the temporary construction of an embankment for the detour road. After the new bridge is built, all materials from the embankment will be removed. The language within the Final EA has been revised to clarify this intention.

3. *In light of seismic considerations, please discuss whether there is a bridge retrofit project masterplan for the Island of Hawaii, and whether such a plan has been subjected to environmental review.*

There is a bridge retrofit project masterplan; however, the State DOT does not feel a programmatic assessment for retrofitting a collection of bridges would be beneficial. This environmental assessment covers all aspects of the anticipated impact from the subject project.


4. *Please provide photographs of existing bridges.*

Photographs of the existing bridges have been included as an attachment within the Final EA.

The State Department of Transportation has determined that the project will not have a significant effect on the environment and has issued a Finding of No Significant Impact (FONSI). Please publish a Finding of No Significant Impact for this project in the December 8, 1997 Office of Environmental Quality Control (OEQC) Bulletin.

Enclosed is a completed OEQC Bulletin Publication Form and four (4) copies of the Final EA. Please contact Ms. Karen Chun, Highways Division, Design Section at 587-2244 if you have any questions.

Very truly yours,


for HUGH Y. ONO
Administrator
Highways Division

Enc.

1997-12-08 - HI- FEA - Hawaii Belt
Road Replacement of Bridges

DEC 8 1997

FILE COPY

**FINAL
ENVIRONMENTAL ASSESSMENT**

**HAWAII BELT ROAD REPLACEMENT OF
AUWAIKEAKUA AND POPOO BRIDGES**

Prepared for:

State of Hawaii
Department of Transportation
Highway Division

November 1997

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**CHAPTER 1
PERTINENT DATA**

APPLICANT: Department of Transportation
State of Hawaii
869 Punchbowl Street
Honolulu, Hawaii 96813
Contact: Ms. Karen Chun (587-2244)

PROJECT TITLE: Hawaii Belt Road, Replacement of
Auwaiakeakua and Popoo Bridges
Federal Aid Project No: BR-0190(13)

PROPOSED ACTION: Replacement of two existing timber bridges
with new concrete structures on Hawaii Belt Road.

LOCATION: South Kohala, Hawaii
TMK: 6-7-01

AGENCIES CONSULTED IN THE ASSESSMENT PROCESS:

Federal Government: U.S. Department of Agriculture
U.S. Army Corps of Engineers
U.S. Department of the Interior
Fish and Wildlife Services
U.S. Department of Transportation

State of Hawaii: Department of Agriculture
Department of Business, Economic Development
and Tourism
Department of Land and Natural Resources
Historic Preservation Division
Land Division
Aquatic Division
Department of Health
Office of Environmental Quality Control
Office of State Planning

County of Hawaii: Planning Department
Department of Public Works
Department of Research and Development
Department of Water Supply

Other: Nature Conservancy of Hawaii
Sierra Club

CHAPTER 2 DESCRIPTION OF THE PROPOSED PROJECT

PROJECT LOCATION

Auwaiakeakua and Popoo Bridges are located on Hawaii Belt Road (Route 190), in the South Kohala district, at M.P. 11.03 and M.P. 11.70 respectively (See Figure 1). The bridges span Auwaiakeakua and Popoo Streams and are situated approximately 11 miles southwest of Waimea and 28 miles northeast of Kailua-Kona. Auwaiakeakua Bridge is located approximately 600 feet southwest of Waikoloa Road.

PROPOSED ACTION

The State of Hawaii, Department of Transportation proposes to replace Auwaiakeakua and Popoo Bridges which are multi-span timber bridges with two new single span prestressed concrete bridges. The proposed structures will be approximately 30 feet longer and 20 feet wider and consist of two 12 foot lanes with 8 foot shoulders on both sides. Other work consists of upgrading the existing guardrails at the bridges, reconstructing approaches to the bridges, relocating an electric pole, removing and replacing wire fencing, and installing signs and pavement markings.

The proposed project also involves the construction of two temporary detour roads on the upstream sides of the bridges. The detour roads will consist of two 11 foot lanes with 2 foot shoulders on both sides (See Figures 2 - 4).

The project also requires roadway excavation. The excavated material will be used as embankment for construction of the detour roads. In the stream bed, the detour road embankment will consist of suitable material such as crushed rock or gravel wrapped in geotextile fabric. These materials will be removed from the stream bed once the new bridges have been constructed. Drainage under the detour roads will be handled by installation of a 60-inch and two 90-inch culverts for Auwaiakeakua and Popoo Bridges respectively.

The construction of the detour roads will require the obtainment of two construction parcels. The Department of Transportation (DOT) will acquire authorization from adjacent land owner "Richard Smart" (TMK: 6-7-01:3) for the rental of these two parcels prior to the start of construction (See Figures 5 & 6). These two parcels will total an approximate area of 2.7 acres and will be needed for approximately one year.

PROJECT SCHEDULE AND CONSTRUCTION COST

Construction for the proposed project is estimated to begin in September 1998. The estimated construction cost is \$8,068,000 and right-of-way cost is \$150,000 with funding provided by the State Department of Transportation and the Federal Highway Administration. The project has been included in the Statewide Transportation Improvement Program (STIP) for 1996.

STATEMENT OF OBJECTIVES

Auwaiakeakua and Popoo Bridges were constructed more than 50 years ago and do not meet current design standards. Both bridges are at the minimum tolerable widths and do not meet current live load or seismic requirements. The bridges do not meet bicycle route requirements due to the narrow shoulders and inadequate bridge railings.

The increased growth of traffic through the project site from Waikoloa and Waimea to Kailua-Kona will call for safer and more efficient structures for the motoring public. There is also a high and increasing annual operating and maintenance cost incurred by the bridges.

**CHAPTER 3
ALTERNATIVES CONSIDERED**

NO ACTION

The "No Action" alternative was determined unacceptable because the benefits of providing the motoring public with a safer and more efficient facility far outweigh the minor adverse impacts while constructing this project and the potential impacts to public safety due to a substandard structure.

CHAPTER 4 SUMMARY DESCRIPTION OF THE AFFECTED ENVIRONMENT

PROJECT SITE

The project site is located along Hawaii Belt Road, a two lane undivided arterial highway. The roadway consists of a 11 foot travelway with 3 foot paved shoulders. The posted speed limit is 55 miles per hour. This portion of Hawaii Belt road provides the primary transportation link between Waimea and Waikoloa to Kailua-Kona, a major resort and tourist destination area.

Auwaiakeakua and Popoo Bridges are multi-span timber bridges, approximately 100 feet in length. Both bridges are approximately 24 feet wide and provide approximately a 1 foot paved shoulder. Auwaiakeakua and Popoo Streams are classified as intermittent streams by the United States Geological Survey Maps and recent visits to the site have shown no signs of flowing water.

The project site lies within lands designated as Agricultural (A) by the State Land Use Commission and Agricultural - 40 acres (A-40a) by the County Zoning Code. The project does not fall within the Conservation District or a wetland area and is not located within the County's Special Management Area (SMA). There are no commercial or residential establishments in the immediate vicinity of the project site (see Figures 7 & 8).

TOPOGRAPHY AND SOIL CHARACTERISTICS

The land surface of the proposed site is relatively flat to gently rolling. The surface soils for this project consists of Waikoloa very fine sandy loam (WLC) and Puu Pa extremely stony, very fine loam (PVD). Approximately 2 to 6 feet under these surface soils, there is bedrock and fragmental Aa lava. This soil description was extracted from the USDA Soil Conservation Service Report of 1973.

CLIMATE

Characteristic of Hawaii's climate, South Kohala has fairly uniform temperatures and moderate humidity year round. The average annual rainfall is approximately 15 inches. The stream beds are generally dry year round due to the small amount of rainfall.

ARCHAEOLOGICAL/HISTORICAL SITES

Early consultation with the State Historic Preservation Division (SHPD) was conducted as part of this project. The SHPD noted that Auwaiakeakua Bridge meets the criteria for a Category I bridge in the State Historic Bridge Inventory, which means it has a high preservation value and the most claim to historical significance and that the demolition of the bridge will have an adverse effect on historic properties.

Popoo Bridge is not categorized as a Category I bridge. Bridge alterations over the years exempt it as a historic site.

No archaeological sites are known to exist at the project sites.

NOISE CHARACTERISTICS

Traffic is the primary source of noise in this area due its rural location. Noise does not pose a problem since there are no residential or commercial establishments nearby.

AIR QUALITY

Due to the rural, undeveloped nature of the project site, the air quality remains relatively high. The area's constant exposure to winds quickly disperse the emissions from automobiles.

FLORA/FAUNA

Recent visits to the site have shown that the vegetation primarily consists of various grasses and weedy herbaceous species at both bridges and an abundance of Eucalyptus trees at Popoo Bridge. The construction of the detour road will require the removal of some of the Eucalyptus trees.

The United States Department of the Interior Fish and Wildlife Service has determined that one federally endangered species, the Hawaiian Hawk (*Buteo solitarius*), has been observed at the location of the proposed project. In addition, three federally endangered plants, the Uhiuhi, Kea or Kalamona (*Caesalpinia kawaiensis*), the Kauila (*Colubrina oppositifolia*), and the Hau-hele'ula, Koki'o or Hawaiian Tree Cotton (*Kokia dryariodes*) are known to exist in the general area of the project. The service does not believe the proposed project will affect these species. Accidental fires will be a primary threat to these species and fire prevention measures will be incorporated into the contract.

Due to the agricultural nature of the project site, it is assumed that insects and feral mammals such as cats, rats, mice and mongoose inhabit the area and are not considered rare or endangered species. At Popoo Bridge, ranchers have created a system of wire fences to move domestic cattle under the bridge. These cattle will be temporary relocated during construction.

TRAFFIC

There should be no appreciable change in traffic volume due to the proposed project. Any increase in traffic would be due to population growth on the island. The DOT has indicated average daily traffic (ADT) to be 2,540 vehicles in 1996, and estimated the design year (2016) ADT to be 3,030 vehicles.

CHAPTER 5
IDENTIFICATION AND SUMMARY OF MAJOR IMPACTS
AND PROPOSED MITIGATION MEASURES

This chapter identifies the major impacts attributable to the proposed project. Major impacts are categorized into short-term impacts (normally of short duration and confined to the length of the construction period) and long-term impacts (resulting from operational activities).

The proposed project is not expected to have any significant adverse social or economical impacts. Furthermore, it is not anticipated that the project will induce growth in the area. The proposed project merely replaces two structurally deficient bridges. The number of traffic lanes and, hence, its carrying capacity, will not increase.

SHORT-TERM IMPACTS

Short-term impacts during the construction period will include dust, air pollutant emissions, noise, and traffic disruptions from construction activities. Flora in the area of the detour roads will be removed. A HELCO electric pole will be relocated for the construction of the detour road at Auwaiakeakua Bridge (Utility Agreement # 1394).

Two construction parcels will have to be rented from adjacent land owner "Richard Smart" for the construction of the detour roads. Coordination will be done with the adjacent land owners with regards to the temporary relocation of their cattle.

A short-term gain would be the creation of jobs in construction and related fields, including suppliers of construction materials, and concrete and asphalt concrete plant staff.

LONG-TERM IMPACTS

Long term impacts will be a safer, more efficient travelway for motorists, pedestrians and bicyclists due to the upgraded bridge structure. The existing bridges do not meet current design standards and have exhibited signs of structural wear.

MITIGATION MEASURES

Adverse construction-related impacts will be governed by federal, state, and county laws and the contract documents.

Air Pollution

Air quality degradation can be expected in the immediate vicinity of construction activity and is primarily attributable to fugitive dust and exhaust emissions from construction equipment and vehicles. Site work such as clearing, grubbing and excavation will also contribute to the airborne dust. To minimize air quality degradation, the Contractor will be required, as necessary, to implement measures such as inspecting construction vehicles for exhaust emissions, watering to retard airborne dust and erecting dust screens.

Noise

The ambient noise conditions at the project site will be temporarily impacted by construction activities. Proper measures will be taken to reduce noise as much as possible. The Contractor will be required to use properly muffled construction equipment and construction activities will be limited to normal working hours. No work will occur between the peak traffic hours, of 6:30 A.M. to 8:30 A.M. and 3:30 P.M. to 6:00 P.M., on weekdays and no work will be allowed on weekends and holidays. Noise conditions will also be governed by applicable State Department of Health regulations.

Traffic

During construction of the proposed project, motorists using Hawaii Belt Road will experience slight traffic inconveniences due to the reduced speed limit through the project site. A speed limit of 30 miles per hour will be posted on the detour roads.

Access in and out of Waikoloa Road will be maintained at all times but traffic around that intersection may be slowed due to the reduced speed through the project site.

No major disruptions of traffic is anticipated due to the construction of the two lane detour roads. Also, to facilitate motorists around the project site, there will be adequate traffic control devices such as barricades, signs, pavement markings, etc.

Water Quality and Erosion

Since Auwaiakeakua and Popoo Streams are classified as intermittent and usually dry year round, the construction activities will have little or no impact on existing water quality. The installation of drainage culverts under the detour roads will adequately handle storm runoff if necessary. Suitable fill material consisting of crushed rock or gravel wrapped in geotextile material will be required in the stream beds, as this will serve as a cleaner and non-erodible material and will be easier to remove when the project is done.

Appropriate erosion control measures will be incorporated during the construction phase to prevent silt and construction debris from entering the stream beds. The Contractor will comply with the requirements of Section 639, "Water Pollution Control" of the Standard Specifications.

Consultation with the Department of the Army, CORPS of Engineers, has determined that the two streams are not jurisdictional waters of the United States, thus a Department of the Army (DA) permit is not necessary (See Attachment 1). Consequently, a Water Quality Certification (401 permit) from the Department of Health is not required.

Consultation with the Department of Land and Natural Resources, Commission on Water Resource Management, has determined that the replacement of the two bridges is not subject to the requirements for a Stream Channel Alteration Permit (SCAP) (See Attachment 2).

Archeological/Historical Sites

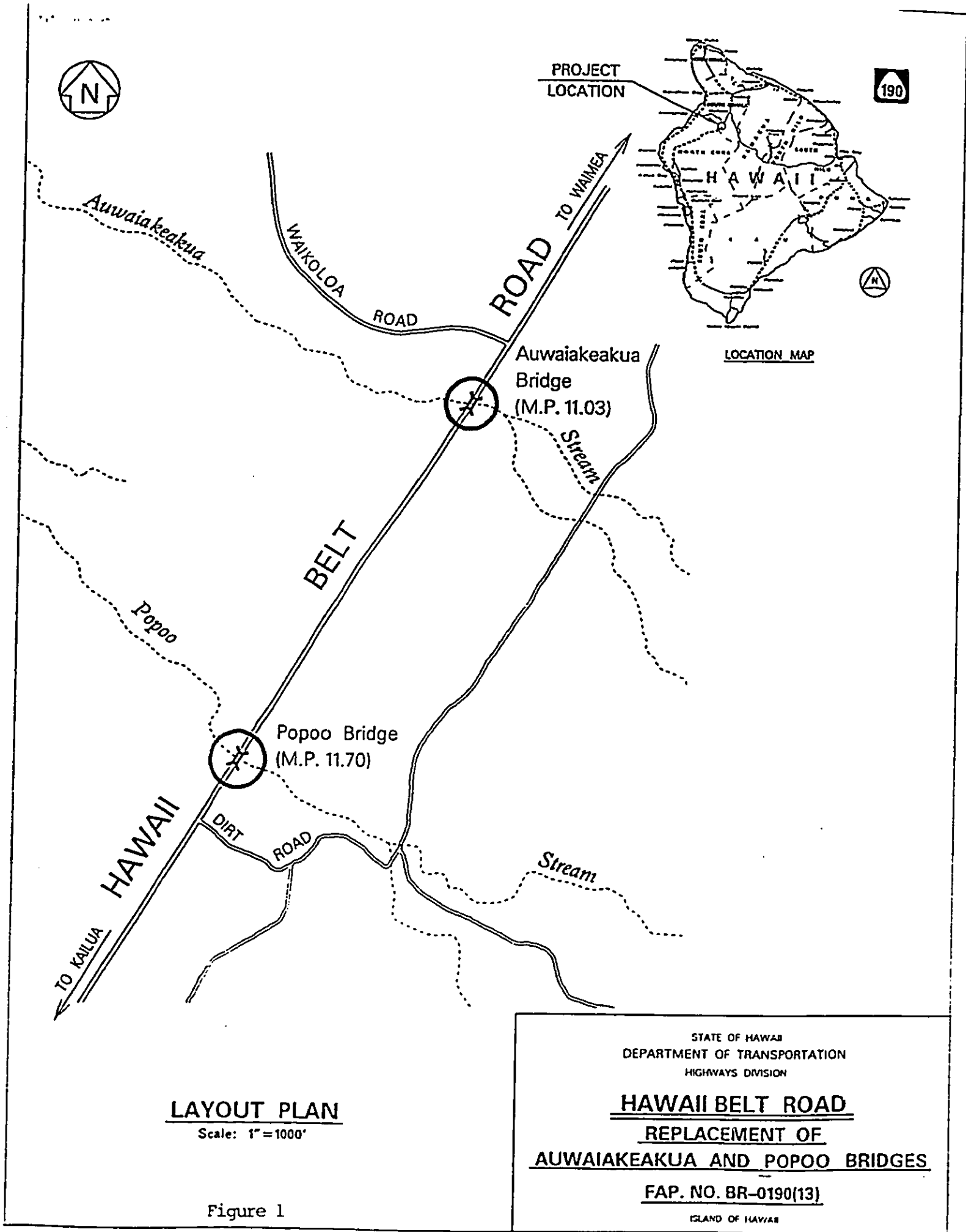
As stated earlier, the State Historic Preservation Division (SHPD) noted that Auwaiakeakua Bridge meets the criteria for a Category I bridge in the State Historic Bridge Inventory, which means it has high preservation value and the most claim to historical significance.

Due to its historic significance, a Section 106 of the National Historic Preservation Act process was initiated as required by SHPD. This process has resulted in a Memorandum Of Agreement between the Advisory Council on Historic Preservation, the Federal Highway Administration (FHWA), the SHPD, and the State DOT. The agreement states that the demolition of Auwaiakeakua Bridge will have an adverse effect on historic properties and alternatives have been considered and found to be not feasible. Therefore, it was agreed that the following stipulations shall be implemented to mitigate the effects of the demolition: 1) Prior to the demolition of Auwaiakeakua Bridge, the DOT will submit photo and written documentation of the structure using Historic American Building Survey (HABS) standards to SHPD, HABS, Advisory Council on Historic Preservation in Washington D.C., and Hamilton Library and 2) Xerox vellums of the original construction plans of the structure will be submitted to the SHPD (See Attachment 3).

Flora/Fauna

Construction activities such as roadway excavation and grading will require the removal of existing plants and trees in the area and nonetheless some wildlife will be destroyed. However, most of these types of flora or fauna are not considered rare or endangered species. Also, due to the rural location of the project, removal of these plants will not cause a detrimental effect to the aesthetics of the area.

As stated earlier, the United States Department of the Interior Fish and Wildlife Service has determined that three federally endangered plants and one federally endangered animal are known to exist in the general area of the project and feel that accidental fire prevention measures should be incorporated into the contract. However, the service has determined that the proposed project is not likely to adversely affect federally endangered species thus satisfying the requirements of Section 7 of the Endangered Species Act. The Contractor shall exercise caution to prevent any accidental fires and shall be required to follow Section 107 of the Special Provisions which address fire prevention measures. (See Attachments 4-6)



LAYOUT PLAN
Scale: 1" = 1000'

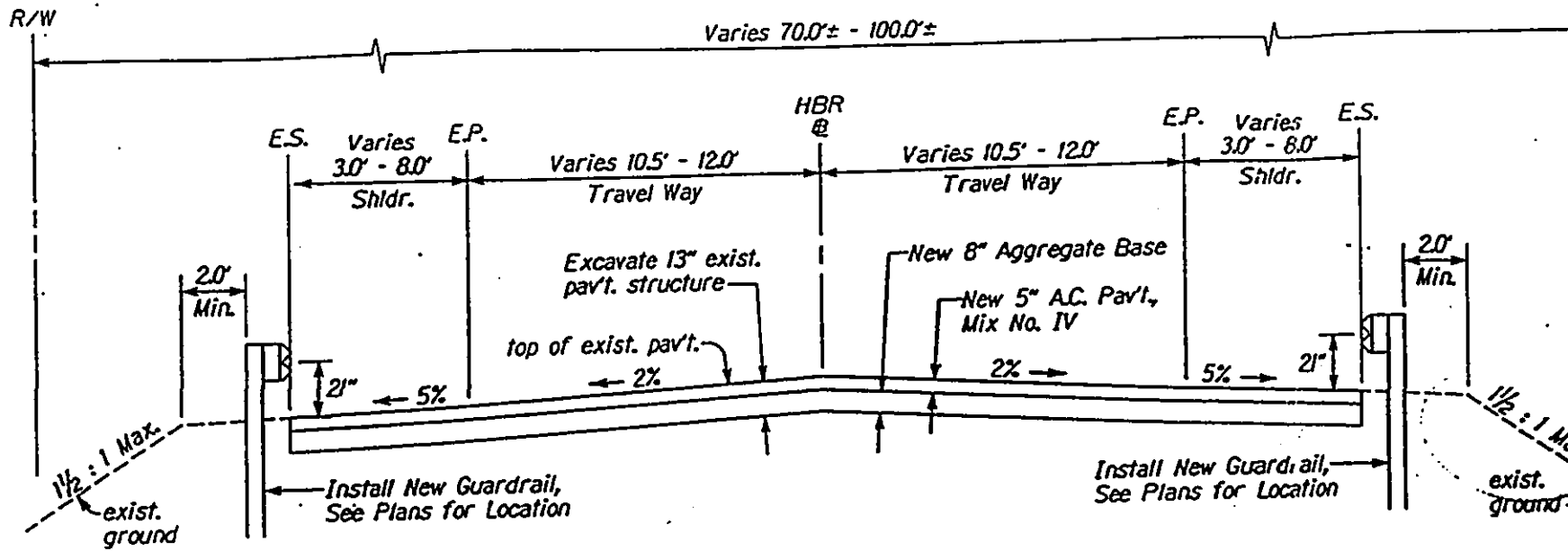
Figure 1

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

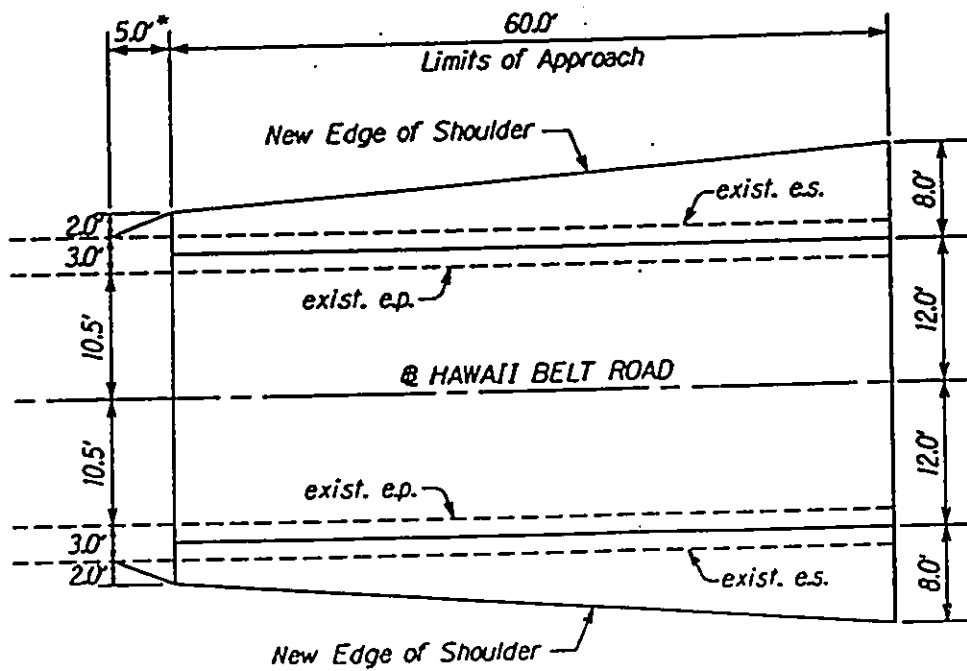
HAWAII BELT ROAD
REPLACEMENT OF
AUWAIAKEAKUA AND POPOO BRIDGES

FAP. NO. BR-0190(13)

ISLAND OF HAWAII

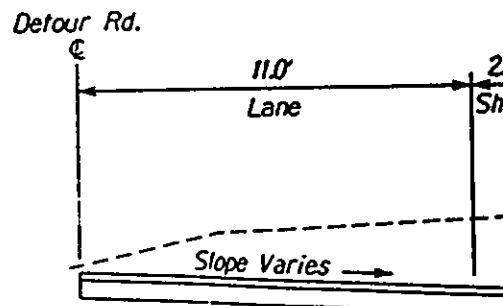


TYPICAL SECTION - APPROACHES TO BRIDGES
Scale: $\frac{3}{8}$ "=1'-0"



• Taper to exist. edge of paved shoulder

APPROACH TRANSITION DETAIL
Scale: $\frac{1}{8}$ "=1'-0"



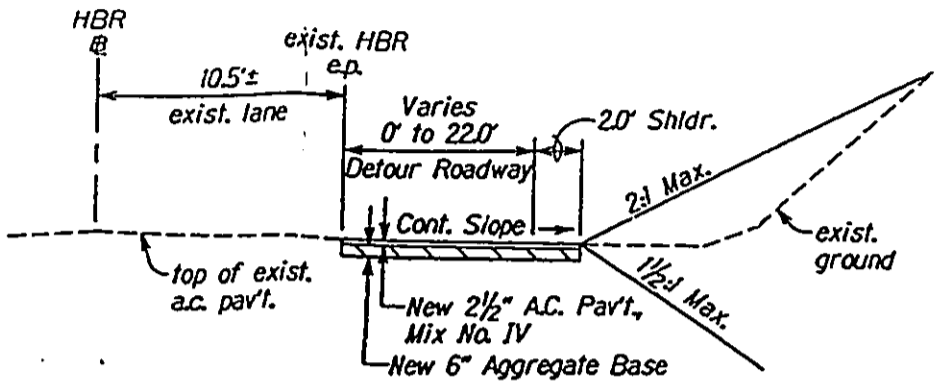
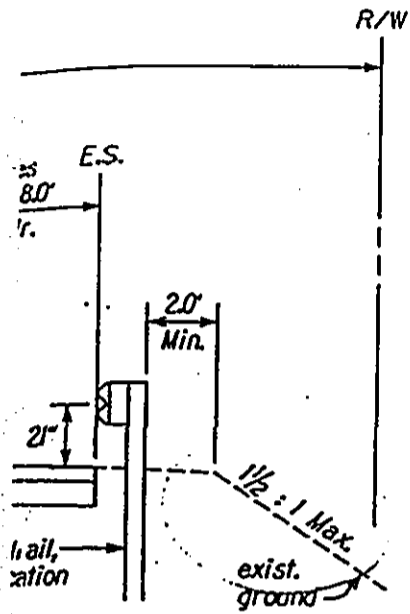
TYPICAL EARTH

Auwaiakekua
 @ Sta. 0+75± to @ Sta. 2+50± Rt.,
 @ Sta. 1+50± to @ Sta. 2+50± Lt.,
 Popoo De.
 @ Sta. 0+50± to @ Sta. 3+25± Rt.,
 @ Sta. 2+00± to @ Sta. 3+50± Lt.,
 Not To

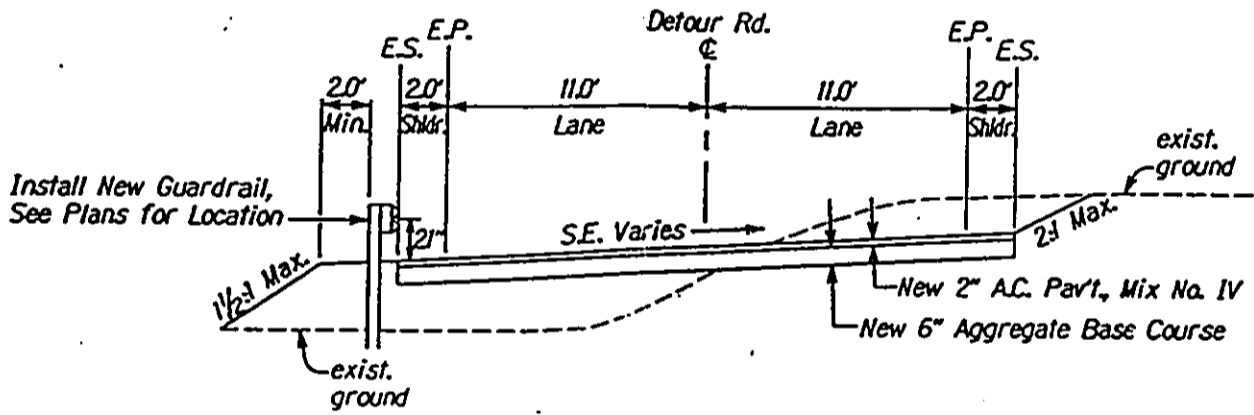
Figure 2

DESIGNED BY	DATE
CHECKED BY	
APPROVED BY	
PROJECT NO.	
DATE	
BY	
FOR	

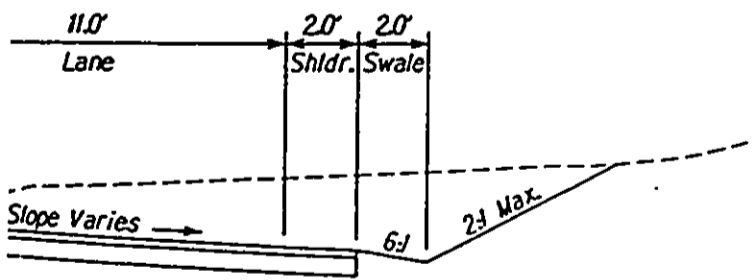
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-0190(13)	1997	4	0



**TYPICAL SECTION
DETOUR RD. CONNECTION TO HAWAII BELT RD.**
Scale: 1/4"=1'-0"



TYPICAL SECTION - DETOUR ROADS
Not To Scale



TYPICAL EARTH SWALE DETAIL

Auwaiakeakua Detour Road
 to @ Sta. 2+50± Rt., @ Sta. 7+50± to @ Sta. 8+50± Rt.,
 to @ Sta. 2+50± Lt., @ Sta. 7+50± to @ Sta. 8+00± Lt.
Popoo Detour Road
 to @ Sta. 3+25± Rt., @ Sta. 6+00± to @ Sta. 8+75± Rt.,
 to @ Sta. 3+50± Lt., @ Sta. 5+50± to @ Sta. 8+00± Lt.
 Not To Scale

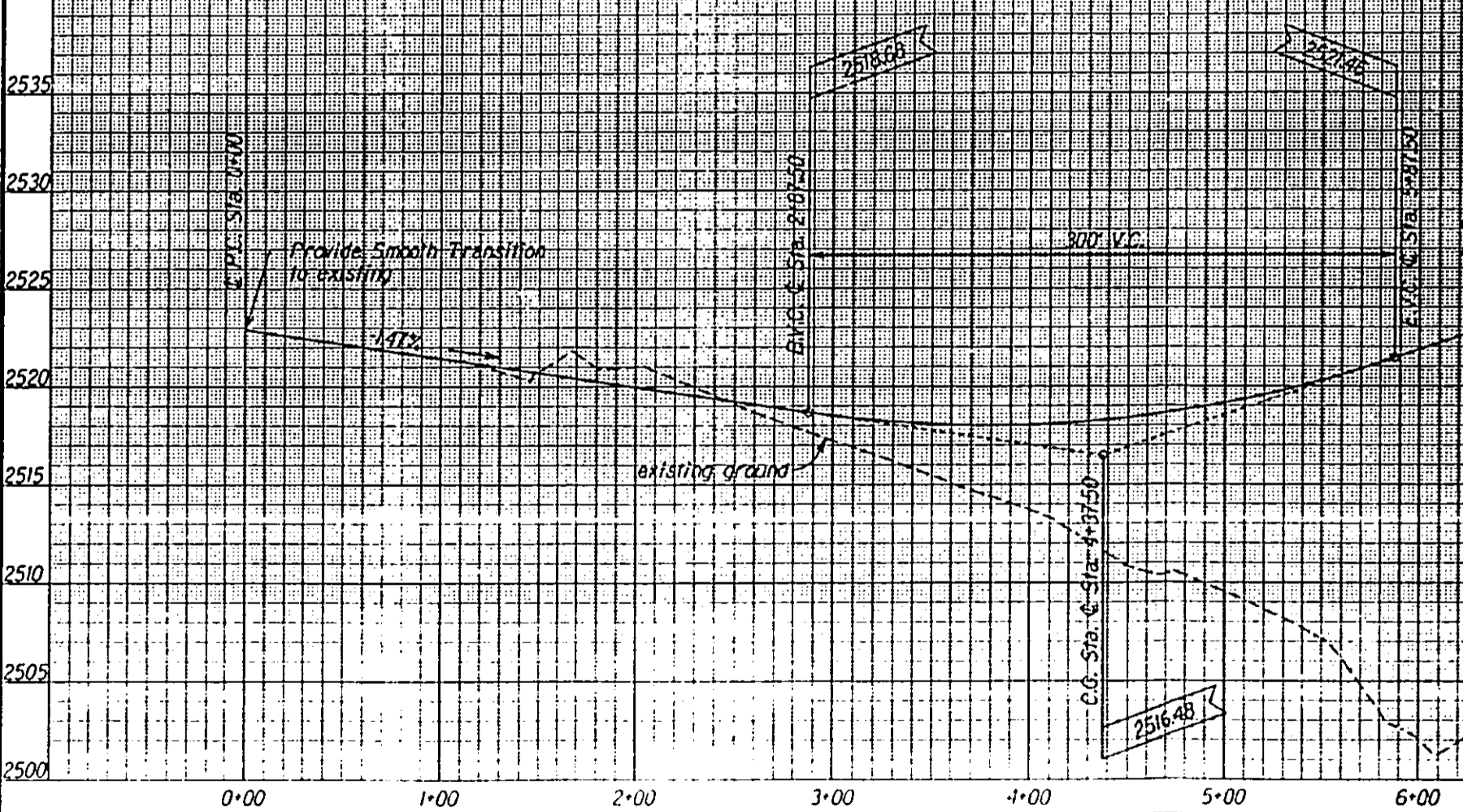
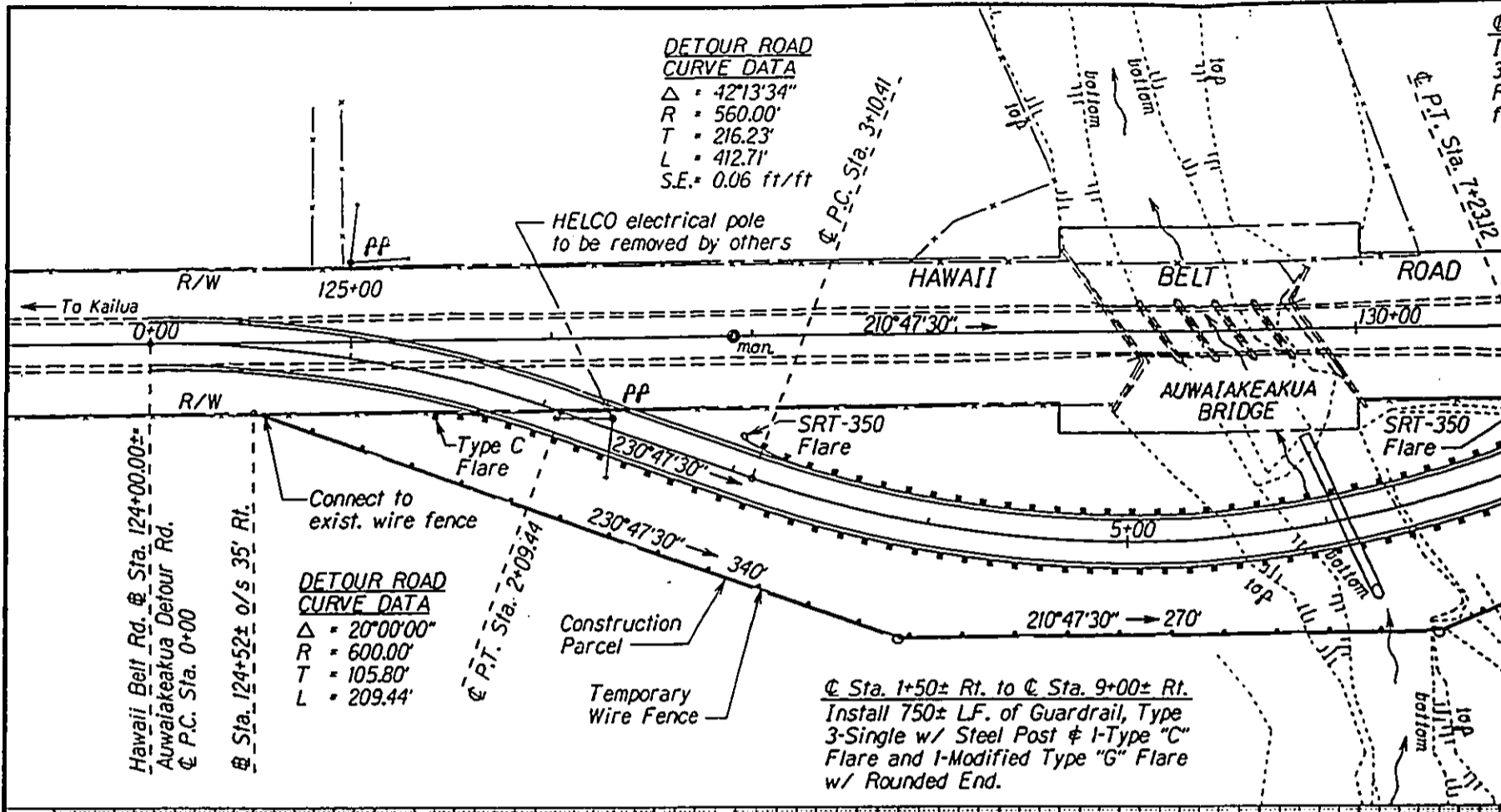
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL SECTIONS & DETAILS

HAWAII BELT ROAD
Replacement of Auwaiakeakua
and Popoo Bridges
 Federal Aid Proj. No. BR-0190(13)

Scale: As Shown Date: Sept. 1996

SHEET No. 1 OF 1 SHEETS

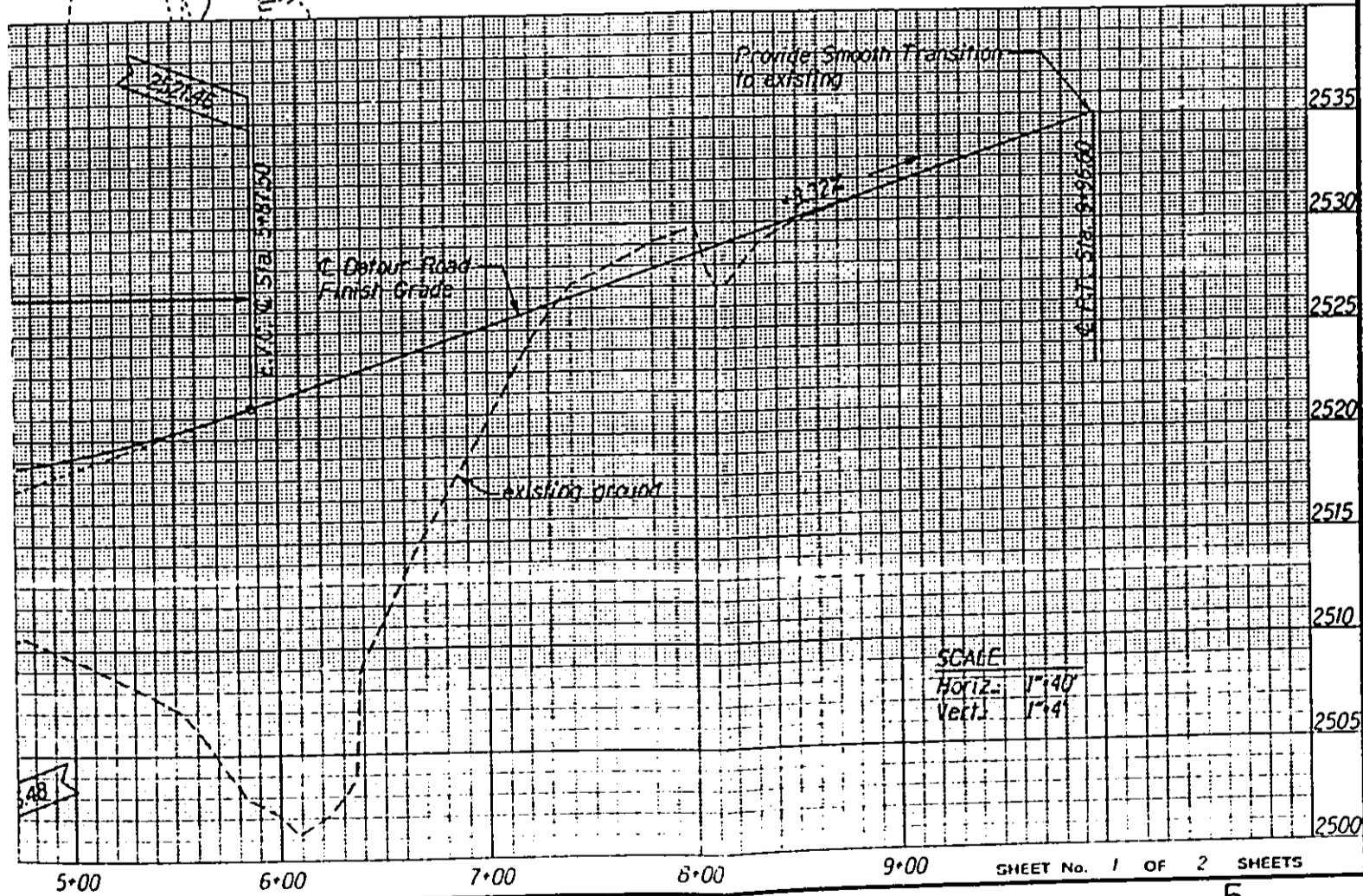
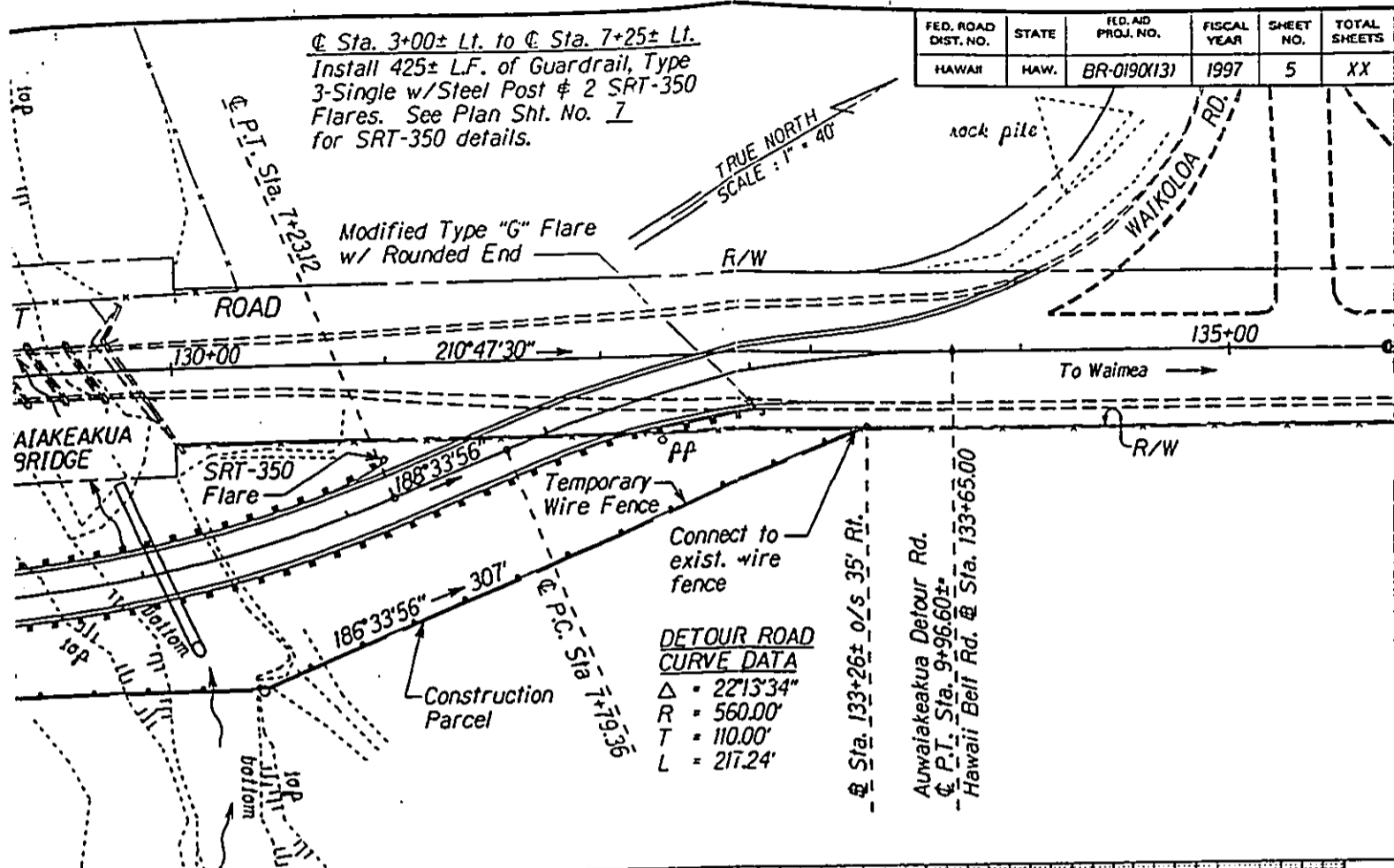


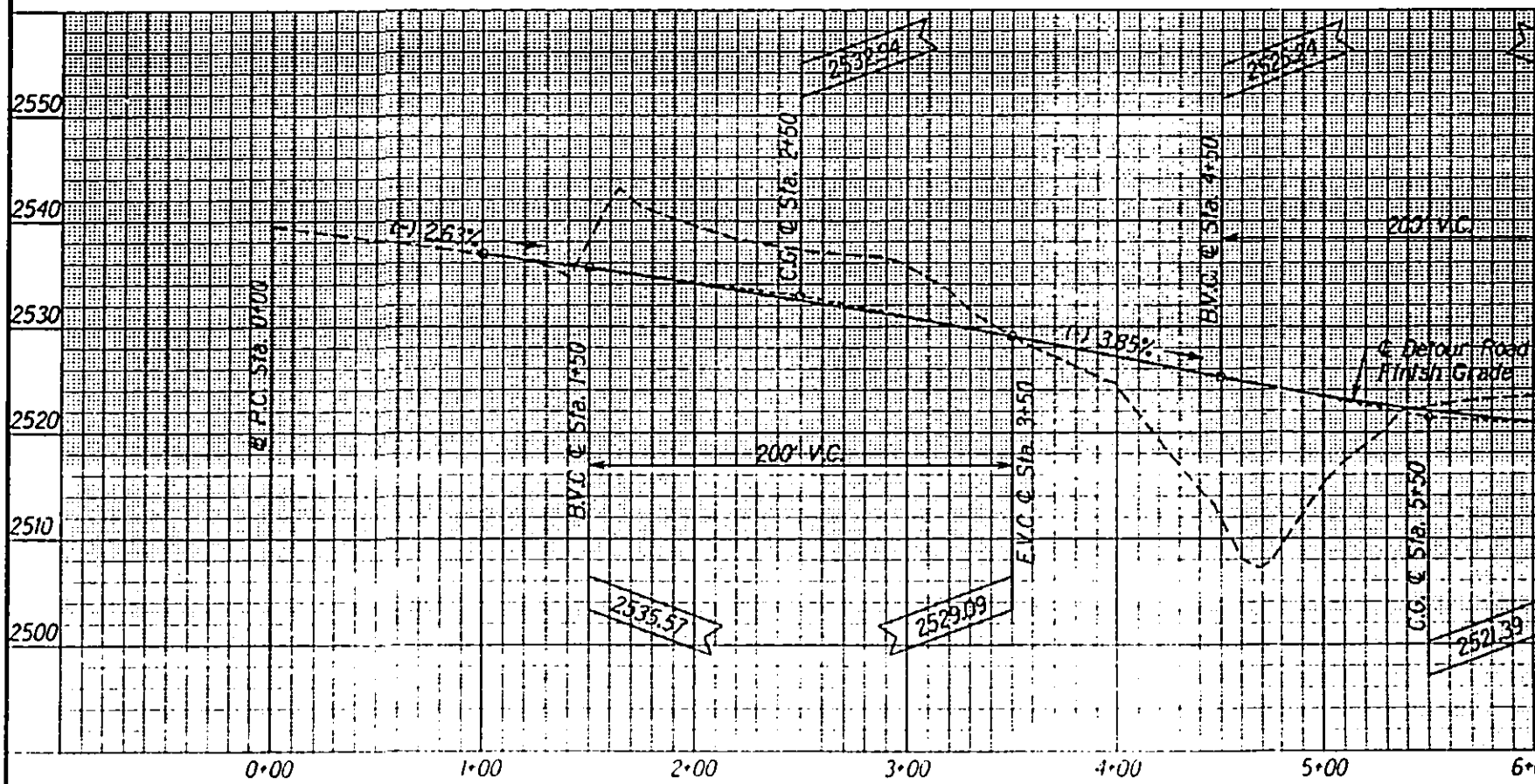
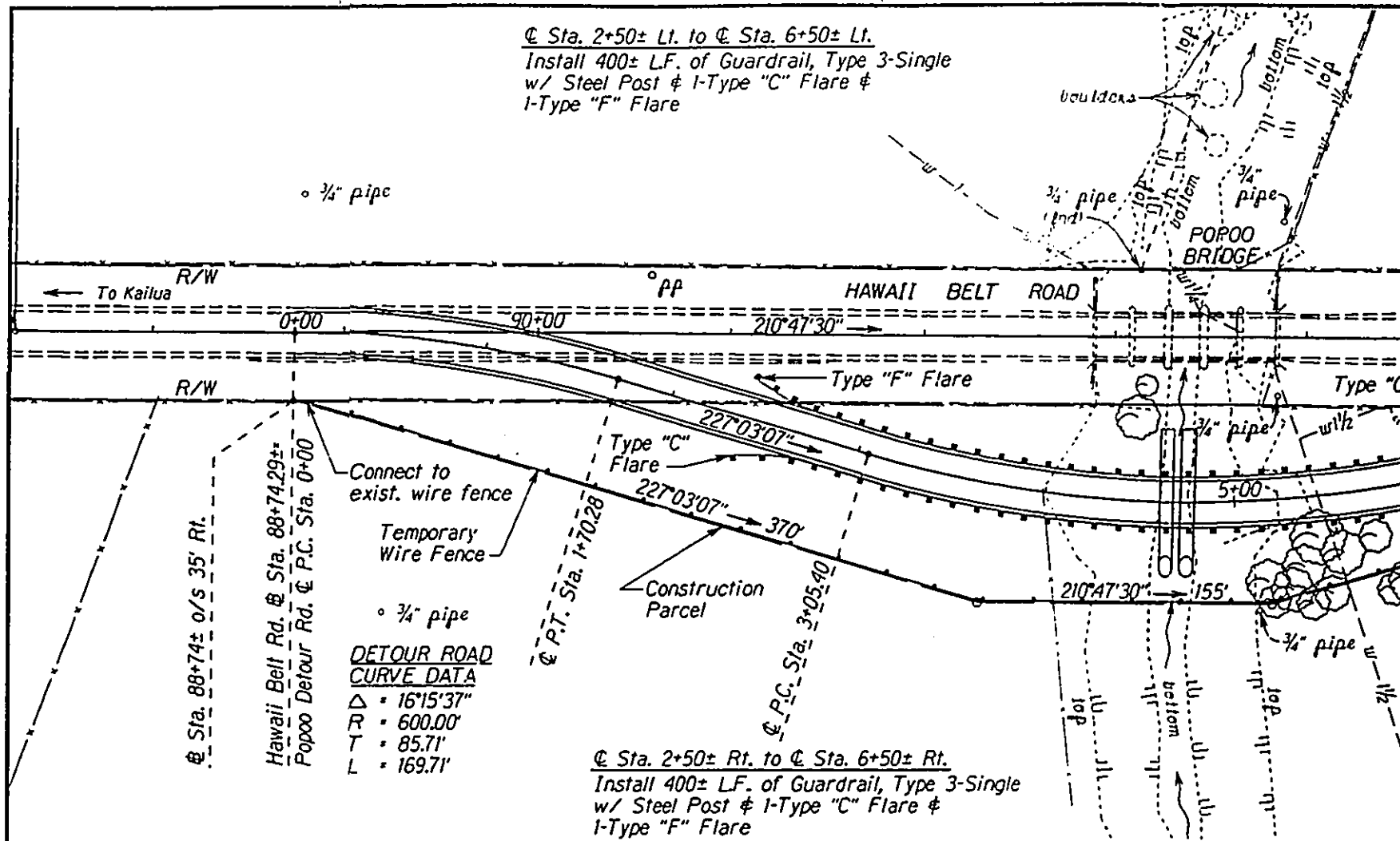
DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
APPROVED BY	
SCALE	
TITLE	

Figure 3

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-0190(13)	1997	5	XX

@ Sta. 3+00± Lt. to @ Sta. 7+25± Lt.
 Install 425± L.F. of Guardrail, Type
 3-Single w/Steel Post & 2 SRT-350
 Flares. See Plan Sht. No. 7
 for SRT-350 details.





DESIGNED BY	DATE
DRAWN BY	2/28/57
CHECKED BY	
APPROVED BY	
PROJECT NO.	
SCALE	

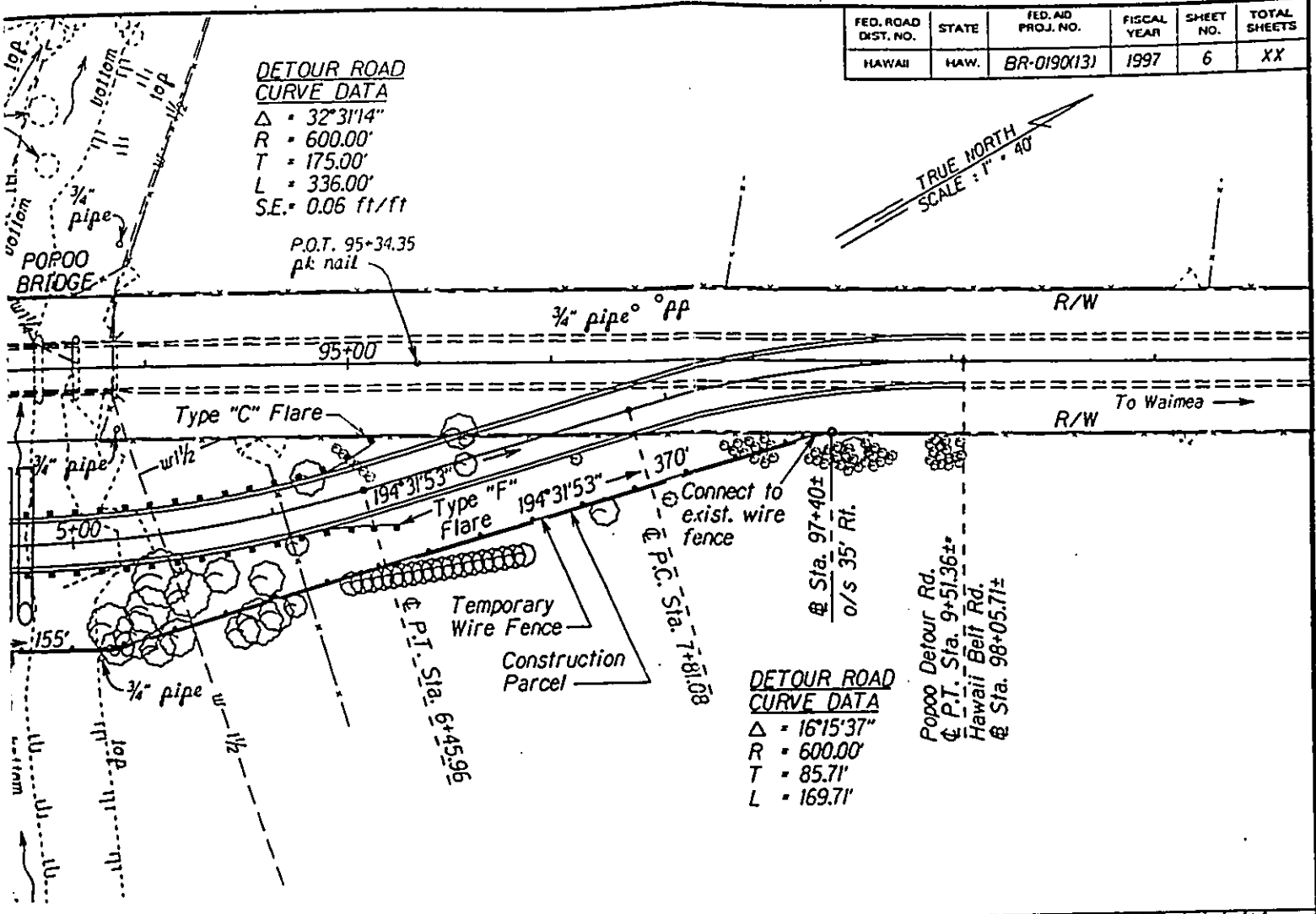
Figure 4

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-0190(13)	1997	6	XX

DETOUR ROAD
CURVE DATA
 $\Delta = 32^{\circ}31'14''$
 $R = 600.00'$
 $T = 175.00'$
 $L = 336.00'$
 $S.E. = 0.06 \text{ ft/ft}$

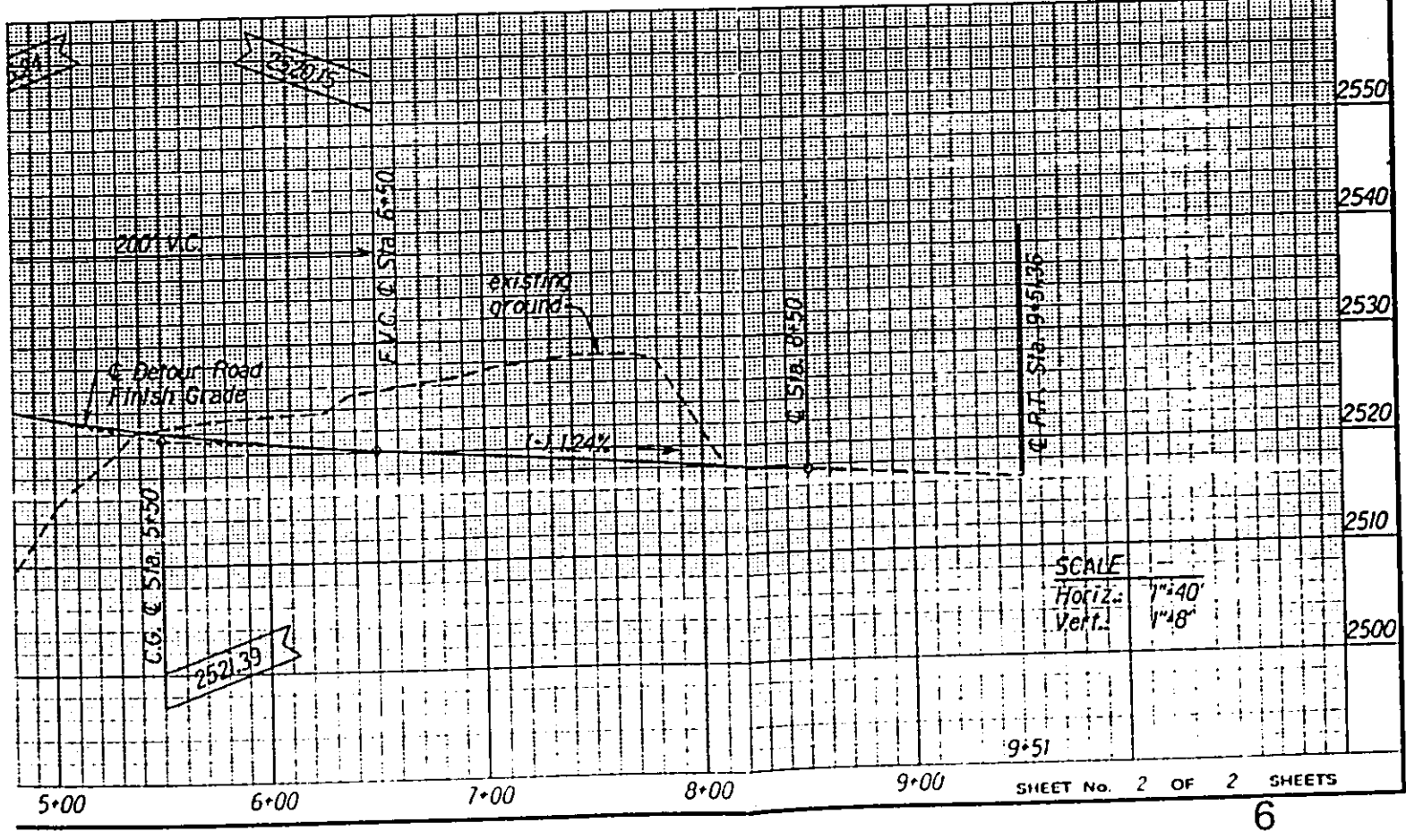
P.O.T. 95+34.35
pk nail

TRUE NORTH
SCALE: 1" = 40'



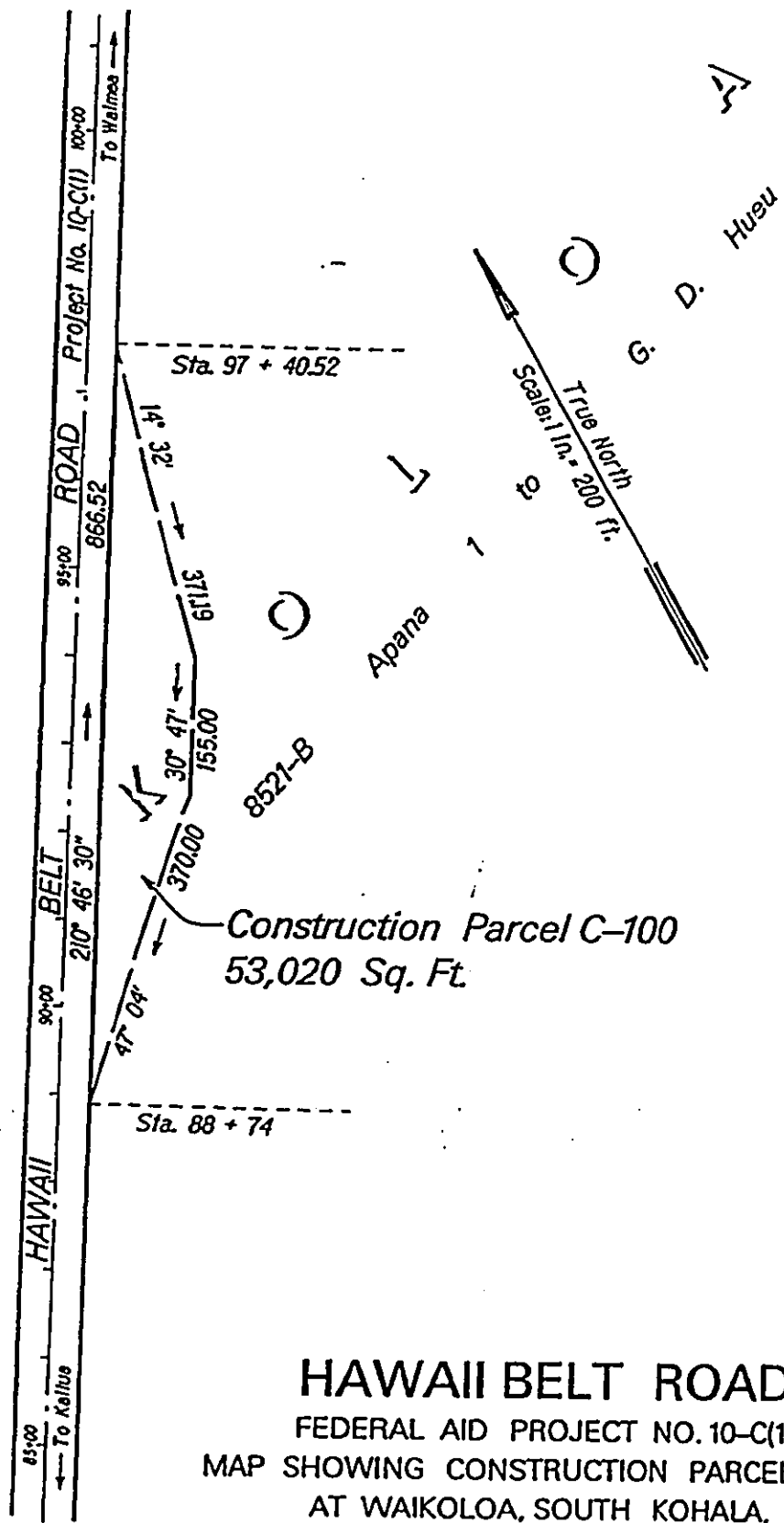
DETOUR ROAD
CURVE DATA
 $\Delta = 16^{\circ}15'37''$
 $R = 600.00'$
 $T = 85.71'$
 $L = 169.71'$

Popoo Detour Rd.
 P.T. Sta. 9+51.36±
 Hawaii Belf Rd.
 Sta. 98+05.71±



SCALE
 Horiz.: 1" = 40'
 Vert.: 1" = 8'

R. P. 5671
C. Aw.



HAWAII BELT ROAD

FEDERAL AID PROJECT NO. 10-C(1)
MAP SHOWING CONSTRUCTION PARCEL C-100
AT WAIKOLOA, SOUTH KOHALA,
ISLAND OF HAWAII, HAWAII

Scale: 1 in. = 200 ft. October 29, 1996

Figure 5

Tax Map Key: 6-7-01
Calc. Folder: 62

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

Traced by: S. T.
Checked by: G. G.

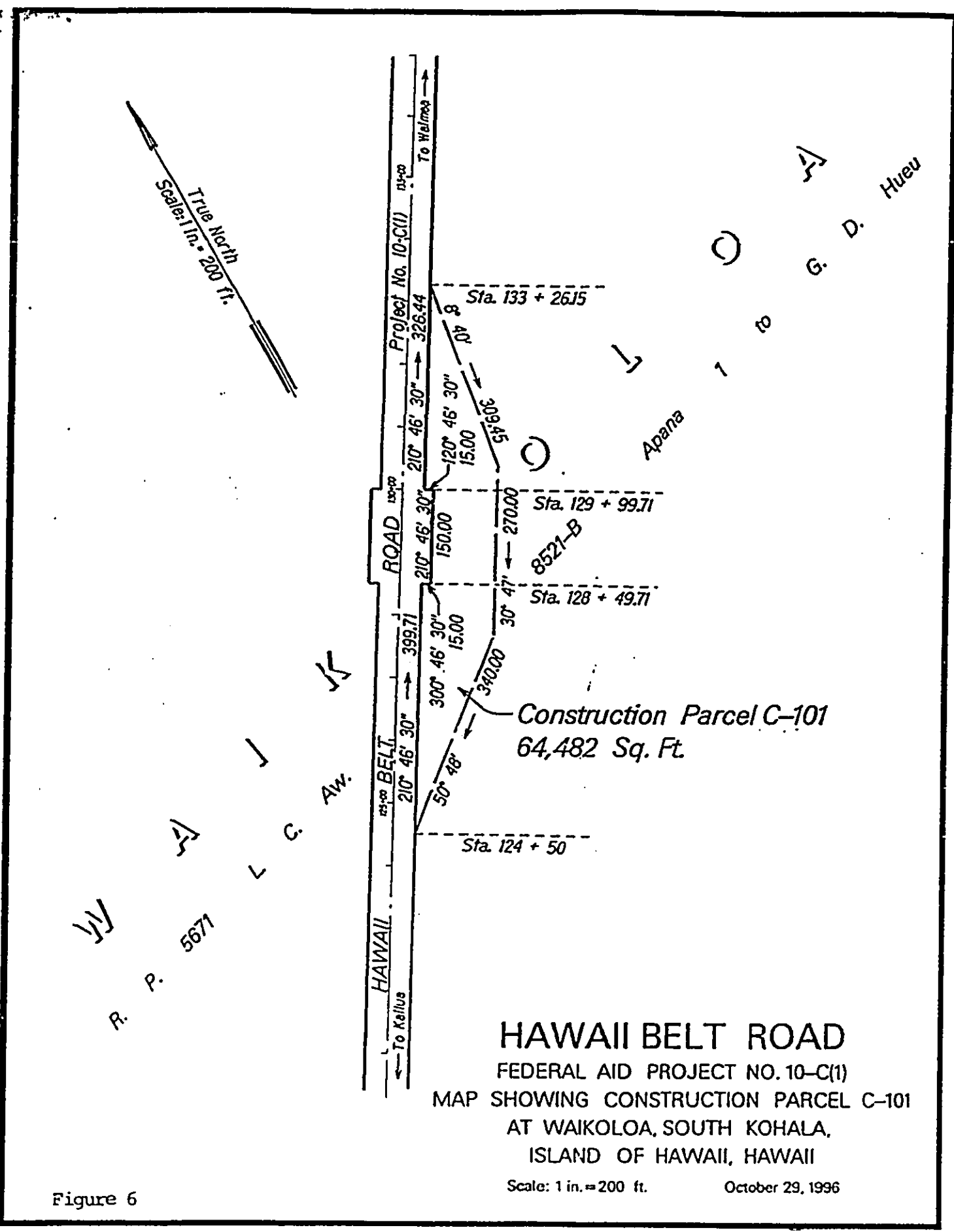
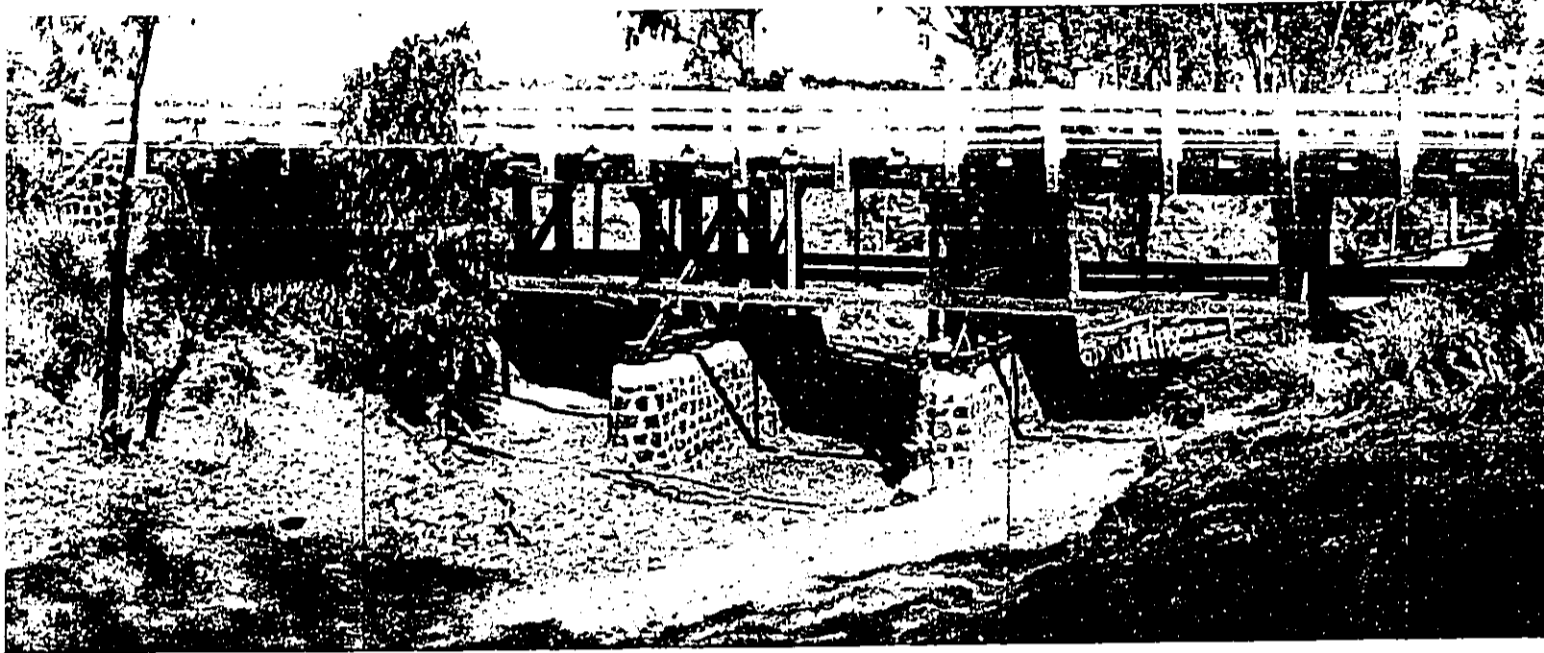


Figure 6

Tax Map Key: 6-7-01
Calc. Folder: 62

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

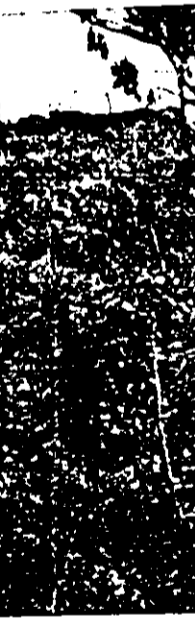
Traced by: S. I.
Checked by: G. G.



Popoo Bridge, Looking Downstream From the Upstream Side of the Bridge



Popoo Bridge, Looking Upstream From the Bridge





of the Bridge



Popoo Bridge, Looking North Along Hawaii Belt Road

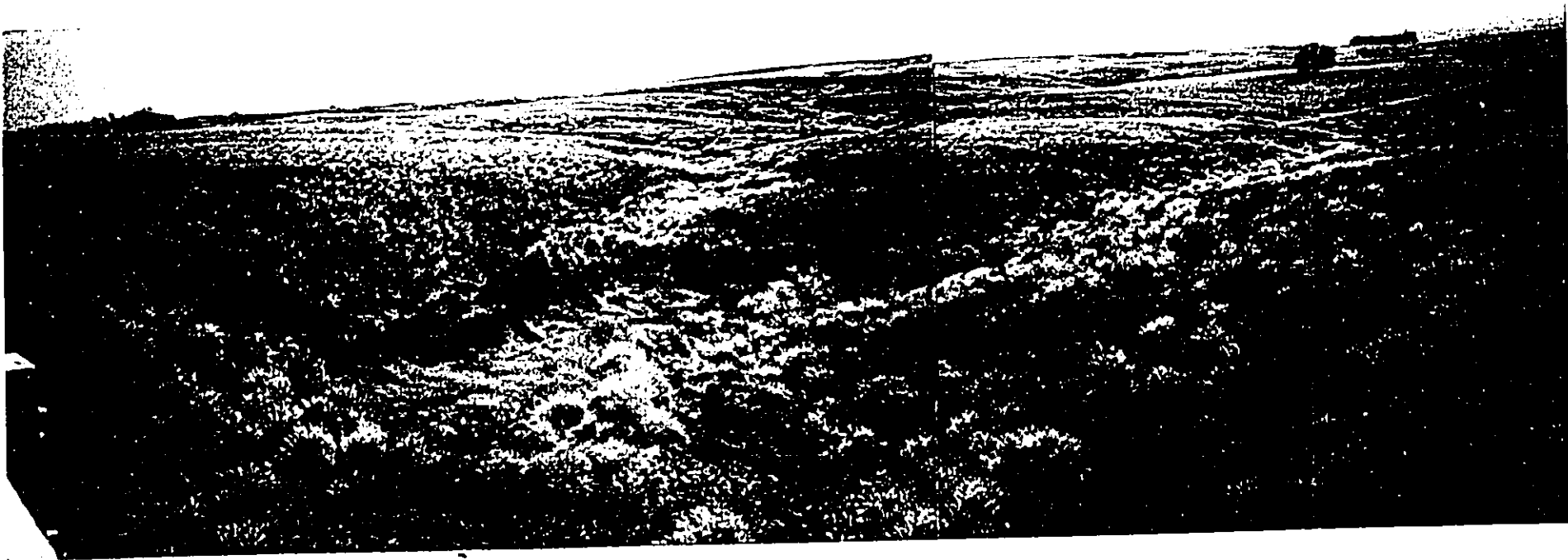


Popoo Bridge, Looking Downstream From the Bridge

Hawaii Belt Road, Replacement of Auwaiakeakua and Popoo Bridges, Federal-Aid Project No. BR-0190(13)



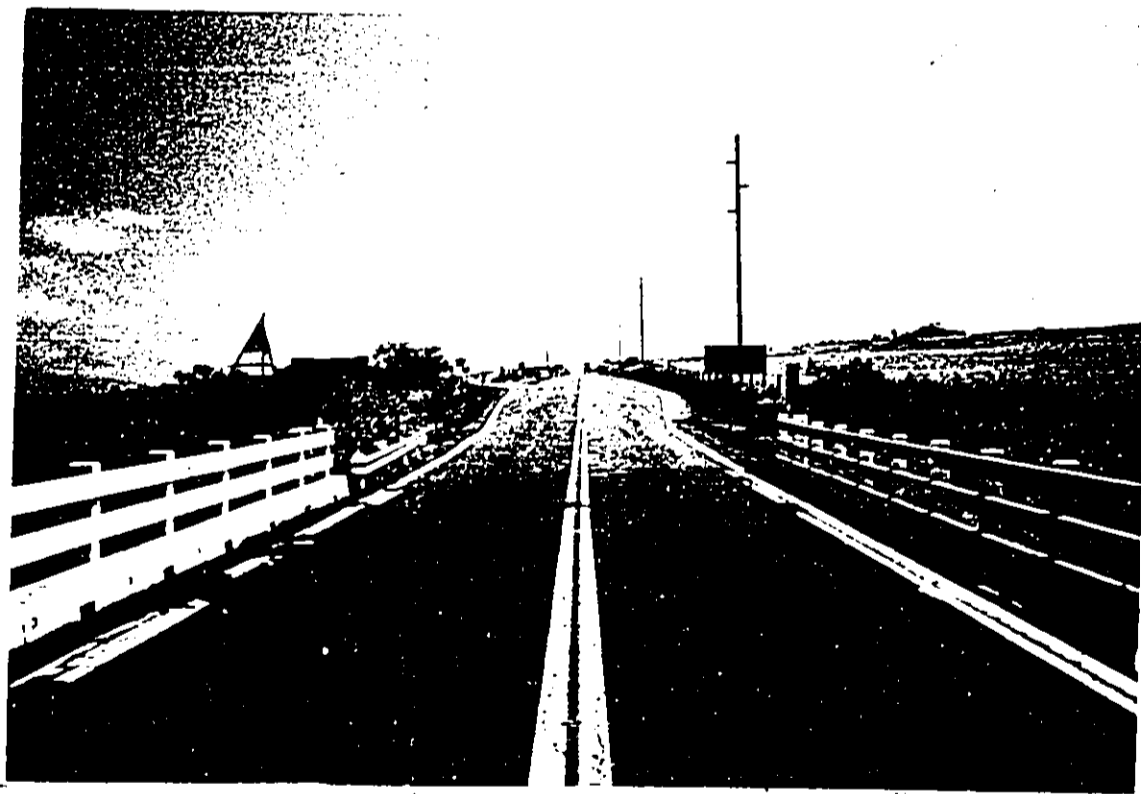
Auwaiakeakua Bridge - Looking Downstream



Auwaiakeakua Bridge - Looking Upstream From the Bridge



Looking Downstream From the Bridge



Auwaiakeakua Bridge - Looking North along Hawaii Belt Road

ii Belt Road, Replacement of Auwaiakeakua and Popoo Bridges, Federal-Aid Project No. BR-0190(13)



DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, HONOLULU
FORT SHAFTER, HAWAII 96858-5440

REPLY TO
ATTENTION OF

December 4 1006

Operations Branch

Mr. Hugh Ono
Administrator
Highways Division
Department of Transportation
869 Punchbowl Street
Honolulu, HI 96813-5097

OPTIONAL FORM 93 (7-90)

FAX TRANSMITTAL

of pages 2

To	Caute Chang	From	Kathy Dadey
Dept/Agency		Phone #	
Fax #	587-2343	Fax #	
NSN 7540-01-317-7268		5073-101 GENERAL SERVICES ADMINISTRATION	

Dear Mr. Ono:

This letter is to clarify information exchanged between members of our respective staffs on December 3, 1996. The meeting was arranged to determine if any Department of the Army (DA) permits would be required for the DOT Highways Division's proposed Hawaii Belt Road replacement of Auwaiakeakua and Popoo Bridges, South Kohala County and State of Hawaii.

Based on the information provided by your staff, particularly color photographs of the two bridge crossings, the Corps has determined that the two areas are not jurisdictional waters of the United States. Corps regulations at 33 CFR 328.4(e) state that the limit of waters of the U.S. extends to the ordinary high water mark. "Ordinary high water mark" is defined at 33 CFR 328.3(e) as the line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means. The photographs of the two crossings indicated a clear absence of any identifiable ordinary high water mark in either of the two crossings. Consequently, the proposed project areas are not jurisdictional waters of the U.S. and a DA permit is not necessary for the proposed work.

Although the Corps does not have jurisdiction over the project areas, and a DA permit is not required for the proposed project, the Corps nevertheless recommends that you undertake the following Best Management Practices to minimize the potential for adverse environmental impacts associated with the bridge replacement projects:

- You should install and maintain appropriate and effective silt containment devices for erosion control.
- You should use clean, coarse-grained material to construct the temporary bridge crossings.
- You should remove the temporary crossings as soon as practicable following completion of construction.

Attachment 1 (1 of 2)

P. 01

FAX NO. 995411335

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- You should make every effort to conduct construction activities during periods of low rainfall.
- You should revegetated all exposed banks as soon as practicable.
- You should prepare a response plan detailing procedures to be undertaken in the event that a severe flash flood occurs during construction.

File Number 960000111 has been assigned to this project. Please refer to this number in any future correspondence. If you have further questions regarding this matter, please call Kathleen A. Dadey at 438-9258, extension 15.

Sincerely,



Linda Hihara-Endo, Ph.D., P.E.
Acting Chief, Operations Branch

Copy Furnished:

U.S. Fish and Wildlife Service, Honolulu, HI
Clean Water Branch, Department of Health, Honolulu, HI
Coastal Zone Management Program Office, DBEDT, Honolulu, HI
State Department of Land and Natural Resources, Honolulu, HI
County of Hawaii Department of Public Works, Hilo, HI
Department of Planning, County of Hawaii, Hilo, HI

Attachment 1 (2 of 2)

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BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



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MICHAEL D. WILSON
CHAIRPERSON
ROBERT G. GIRALD
DAVID A. NODRICA
LAWRENCE H. MIKE
RICHARD H. COX
HERBERT M. RICHARDS, JR.
RAE M. LOUI, P.E.
DEPUTY

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P. O. BOX 621
HONOLULU, HAWAII 96809
DESIGN BRANCH
HIGHWAYS DIVISION
DEPT. OF TRANSPORTATION

FEB 25 1997

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DEPT. OF TRANSPORTATION
HIGHWAYS DIVISION

Mr. Kazu Hayashida, Director
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813-5097

Dear Mr. Hayashida:

Reference: HWY-DD 2.3489 Hawaii Belt Road
Replacement of Auwaiakeakua and Popoo Bridges
Federal Aid Project No. BR-0190 (13)

Thank you for your inquiry requesting a determination as to whether a Stream Channel Alteration Permit Application is required for this project.

Based on the maps, plans, and photographs submitted with your letter and discussion with a member of DLNR's Division of Aquatic Resources staff located in Hilo and who is familiar with the project location, we believe that the replacement of these bridges is not subject to the requirement for a stream channel alteration permit pursuant to Hawaii Administrative Rules §13-169-50. These drainageways are usually dry, carry runoff water during storms, and do not support instream uses. Therefore, the watercourses are not considered to be a "streams" as defined in HAR §13-169-2, and a stream channel alteration permit will not be required.

Thank you for your inquiry. If you have any questions regarding this letter, please call David Higa at 587-0249.

Sincerely,

RAE M. LOUI
Deputy Director

DIRECTOR'S OFFICE
DEPT. OF
TRANSPORTATION
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Attachment 2

MEMORANDUM OF AGREEMENT
Among the
ADVISORY COUNCIL ON HISTORIC PRESERVATION,
FEDERAL HIGHWAY ADMINISTRATION,
HAWAII STATE HISTORIC PRESERVATION OFFICE and the
DEPARTMENT OF TRANSPORTATION, HIGHWAYS DIVISION
Regarding the demolition of Auwaiakeakua Bridge
Project No. BR-0190(13)
South Kohala, Hawaii

WHEREAS; the Federal Highway Administration (FHWA) has determined with the consensus agreement of the Hawaii State Historic Preservation Officer (SHPO) that the Auwaiakeakua Bridge, located along Hawaii Belt Road, route 190, in the South Kohala District on the island of Hawaii appears to meet the criteria for listing in the National Register of Historic Places (NRHP) and that the demolition of the subject bridge will have an adverse effect and FHWA has consulted with SHPO in accordance with Section 106 of the National Historic Preservation Act, 16 U.S.C. 470, and its implementing regulations (36 CFR Part 800.); and

WHEREAS, The SHPO has agreed that alternatives to the demolition of Auwaiakeakua Bridge have been considered and found to be not feasible.

NOW, THEREFORE, FHWA, the Department of Transportation, Highways Division (DOT), and the SHPO agree that the demolition shall be implemented in accordance with the following stipulations in order to take into account its effect on historic properties:

STIPULATIONS

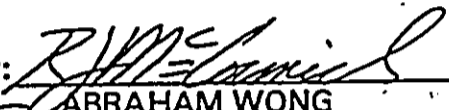
1. Prior to the demolition of Auwaiakeakua Bridge, the DOT will submit photo-documentation of the structure using Historic American Building Survey (HABS) standards to the following agencies: (1) SHPO, (2) HABS, Washington D.C., (3) Hamilton Library, Hawaiian Collection. Photographs shall be on 8" x 10" fiber-based paper prints from 4" x 5" Tri-X negatives. Both negatives and prints shall be processed with archival quality control methods. Photographic documentation shall include the following:

Upstream and downstream profile shots, roadway shots in both directions, and a detail shot of connections
2. Xerox on vellums of the original construction plans of Auwaiakeakua Bridge will also be submitted to SHPO prior to demolition.
3. The new bridge will overspan the existing foundation structure and the DOT will retain the existing CRM pier and abutments to the greatest extent possible.

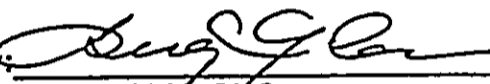
4. Should the SHPO object within 30 days to any of the above submittals, the Agency Official shall consult with the SHPO to resolve the objection. If the Agency Official determines that the objection cannot be resolved, the Agency Official shall request the further comments of the Council pursuant to 36 CFR Section 800.6(b).

Execution of this Memorandum Of Agreement and implementation of its terms, evidence that FHWA has afforded the Council an opportunity to comment on the Auwaiakeakua Bridge replacement project and its effects on historic properties, and that FHWA has taken into account the effects of the demolition on historic properties.

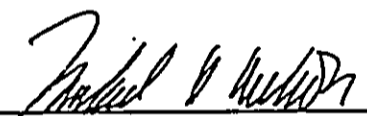
FEDERAL HIGHWAY ADMINISTRATION

By:  Date: 8/2/96
ABRAHAM WONG
Division Administrator


DEPARTMENT OF TRANSPORTATION, HIGHWAYS DIVISION

By:  Date: 9-14-96
HUGH Y. ONO
Administrator

HAWAII STATE HISTORIC PRESERVATION OFFICER

By:  Date: 11/13/96
MICHAEL D. WILSON
State Historic Preservation Officer

ADVISORY COUNCIL ON HISTORIC PRESERVATION

By:  Date: 12/20/96
JOHN M. SOUTH
Secretary



United States Department of the Interior

FISH AND WILDLIFE SERVICE

PACIFIC ISLANDS ECOREGION
300 ALA MOANA BOULEVARD, ROOM 3108
BOX 50088
HONOLULU, HAWAII 96850
PHONE: (808) 541-3441 FAX: (808) 541-3470

IN REPLY REFER TO:

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DEPT. OF TRANSPORTATION
HIGHWAYS DIVISION

In Reply Refer To: AA

MAY 2 3 1996

Hugh Y. Ono
Administrator, Hawaii Divisions
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813-5097

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MAY 22 8 33 AM '96
DESIGN, HONOLULU
HAWAIIAN DIVISION
DEPT. OF TRANSPORTATION

Re: March 1996, Preliminary Draft Environmental Assessment, Hawaii Belt Road Replacement of Auwaiakeakua and Popoo Bridges, Project No. BR-0190(13) South Kohala District, Island of Hawaii, Hawaii.

Dear Mr. Ono:

The U.S. Fish and Wildlife Service (Service) has reviewed the March 1996, Preliminary Draft Environmental Assessment (EA), Hawaii Belt Road Replacement of Auwaiakeakua and Popoo Bridges, Project No. BR-0190(13) South Kohala District, Island of Hawaii, Hawaii. The State of Hawaii Department of Transportation, Highways Division, is proposing to replace existing timber bridges, Auwaiakeakua and Popoo on Hawaii Belt Road with new concrete structures. The Service offers the following comments for your consideration.

One federally endangered species, the Hawaiian Hawk (*Buteo solitarius*), has been observed at the location of the proposed project. In addition, the following federally endangered plants are known to occur in the general area of the proposed project, *Caesalpinia kawaiensis*, *Colubrina oppositifolia*, and *Kokia drynariodes*. However, the Service does not believe that the proposed project will affect these species. Nonetheless, fire is a primary threat to endangered plant species and native plant communities in the area of the proposed project, and we strongly recommend that accidental fire prevention measures be incorporated into the draft EA for the proposed project.

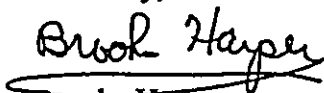
In view of this, we will concur with a determination that the proposed action is not likely to adversely affect federally endangered and threatened species. Based upon this determination, we

Mr. Hugh Ono, cont.

believe that the requirements of Section 7 of the Endangered Species Act (Act) have been satisfied. However, obligations under Section 7 of the Act must be reconsidered if (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner not previously considered in this assessment, or (3) a new species is listed or critical habitat determined that may be affected by the identified action.

We appreciate the opportunity to comment. If you have questions regarding these comments, please contact Fish and Wildlife Biologist Adam Asquith at 808/541-3441.

Sincerely,



Brooks Harper
Field Supervisor
Ecological Services

BENJAMIN J. CAYETANO
GOVERNOR



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DEPT. OF TRANSPORTATION
HIGHWAYS DIVISION
STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

GARY GILL
DIRECTOR

235 SOUTH BERETANIA STREET
SUITE 702
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4186
FACSIMILE (808) 586-4186

September 8, 1997

9/12/97

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HIGHWAYS DIVISION
DEPT. OF TRANSPORTATION

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Mr. Hugh Y. Ono, Administrator, Highways Division
State of Hawaii Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813-5097

Dear Mr. Ono:

We submit for your response the following comments on a July 1997, draft environmental assessment for the *Hawai'i Belt Road, Replacement of Auwaiakeakua and Popo'o Bridges, Federal Aid Project No. BR-0190(13)*, South Kohala, Hawai'i, TMK: 6-7-01. The document was submitted to our office by your July 24, 1997, letter (HWY-DD, 2.5439). Initial notice of availability of the draft environmental assessment was published in the August 8, 1997, edition of the *Environmental Notice*.

1. Indicate on a map the names and locations of endangered plant populations along with proposed buffer zones.
2. Discuss non-concrete materials for protecting stream bank as an alternative to channelization (see attachment).
3. In light of seismic considerations, please discuss whether there is a bridge retrofit project masterplan for the island of Hawai'i, and whether such a plan has been subjected to environmental review.
4. Please provide photographs of existing bridges.

Please include your response to this letter in the final environmental assessment and notice of determination for this project. If there are any questions, please call Mr. Leslie Segundo at 586-4185. Thank you for the opportunity to comment.

Sincerely,

GARY GILL
Director

Attachment

c: Mr. Kevin Ito, DOT, Highways Division, Design Section

Attachment 5

HWY-DD
Letter No.

October 20, 1997

Mr. Gary Gill, Director
Office of Environmental Quality Control
State Office Tower
235 South Beretania Street, Suite #702
Honolulu, Hawaii 96813

Attention: Mr. Leslie Segundo

Dear Mr. Gill:

Subject: Environmental Assessment for Hawaii Belt Road, Replacement of Auwaiakeakua and Popoo Bridges, Federal-Aid Project No. BR-0190(13)

The State Department of Transportation has reviewed the comments dated September 8, 1997, from the Office of Environmental Quality Control, and offers the following responses to the numbered questions.

1. *Indicate on a map the names and locations of endangered plant populations along with proposed buffer zones.*

There are three federally endangered plants known to exist in the area. As stated in the comments received from the United States Department of the Interior Fish and Wildlife Service, the project will not have an impact on these species unless a brush fire occurs due to construction. Measures will be implemented to prevent brush fires instead of mapping individual plants within the buffer zones. The letter referenced above is included as an attachment in the final EA.

2. *Discuss non-concrete materials for protecting stream bank as an alternative to channelization (see attachment).*

This project does not involve channelization of the stream. The Draft EA states: "In the stream bed, the embankment material will consist of suitable material such as crushed rock or gravel wrapped in geotextile fabric." This refers to the temporary construction of an embankment for the detour road. After the new bridge is built, all materials from the embankment will be removed. The language within the final EA has been revised to clarify this intention.

Attachment 6 (1 of 2)

3. *In light of seismic considerations, please discuss whether there is a bridge retrofit project masterplan for the island of Hawaii, and whether such a plan has been subjected to environmental review.*

There is a bridge retrofit project masterplan; however, the State DOT does not feel a programmatic environmental assessment for retrofitting a collection of bridges would be beneficial. This environmental assessment covers all aspects of the anticipated impact from the subject project.

4. *Please provide photographs of existing bridges.*

Photographs of the existing bridges have been included as an attachment within the final EA.

The State Department of Transportation has determined that the project will not have a significant effect on the environment. Please publish a Finding of No Significant Impact for this project in the November 8, 1997 Office of Environmental Quality Control (OEQC) Bulletin.

Enclosed is a completed OEQC Bulletin Publication Form and four(4) copies of the Final EA. Please contact Ms. Karen Chun, Highways Division, Design Section at 587-2244 if you have any questions.

Very truly yours,

HUGH Y. ONO
Administrator
Highways Division

Enc.

bc: HWY-DD(KC)
HWY-H