

Confluence FB @ SCR

Sheet pile @ confluence,
rt bank has large boulder
revetment.
ups of boulders, stems high
vertical walls stabilized by
sheet pile.

~ 12' ^{vertical} drop structure

concrete med channel ups of drop w/
rectangular geometry

levee on right bank extending ups.

could begin model @ d/s and assume
critical depth @ drop structure as long
as SCR stage is below drop structure.

STRUCTURE SURVEY TEMPLATE


ROAD NAME	<i>RR x-ing d/s of darling</i>	DATE	
STREAM NAME		COUNTY	
STRUCTURE #	<i>FB 95 → 1</i>	PHOTO ID #	
TYPE	LENGTH	SIZE (W X H) & SHAPE	X,Y COORDINATE

TYPE	LENGTH	SIZE (W X H) & SHAPE	MATERIAL	Road to Bed	INLET/OUTLET TYPE
Railroad Bridge			<i>concrete</i>	Top of Road EL	

SPECIAL NOTE (Conditions, Blockage, etc)					
HIGH WATER MARK (Description, Witness, and Date)					
TYPE		CULVERT TYPE	MATERIAL	Road to Bed	INLET/OUTLET TYPE
Bridge <u>Span Bridge</u> Pier Shape Culvert Dam Spillway Riser Barrel Outlet		Number of Barrels 1) Circular 2) Rectangle (Span X Rise) 3) Elliptical 4) Con/Span 5) Elevated Arch 6) Pipe Arch 7) Other	RCP (Reinforced Concrete Pipe) CMP (Corrugated Metal Pipe) Bitmus Coated Steel Timber Ductile Clay Masonry Rock	Height from Top of Road to Invert Top of Road EL From Topo Map (FT.NGVD) or (FT.NAVD)	Headwall Wingwalls Type 0°, 45°, 90° Projecting Flush with Slope MES (Mitered End Section) FES (Flared End Section)

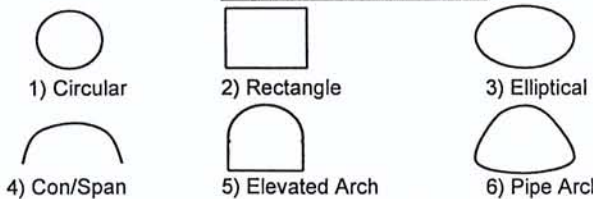
Pier Shape

- 1) Circular pier
- 2) Twin-Cylinder piers
- 3) Elongated pier
- 4) Triangular nose
- 5) Square nose



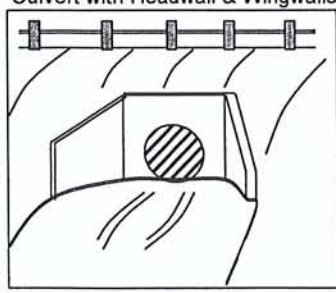
Types (Shape) of Culvert

- 1) Circular
- 2) Rectangle
- 3) Elliptical
- 4) Con/Span
- 5) Elevated Arch
- 6) Pipe Arch
- 7) Other

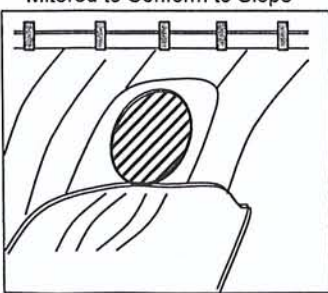


Inlet/Outlet Type *in-channel*

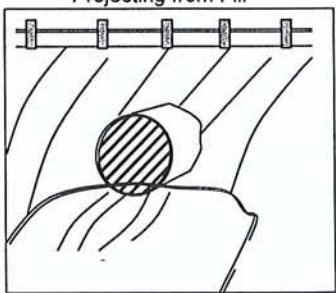
Culvert with Headwall & Wingwalls



Mitered to Conform to Slope



Projecting from Fill

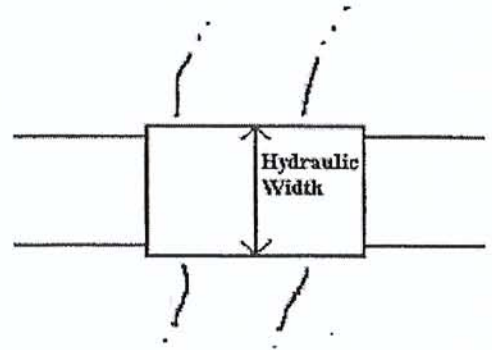
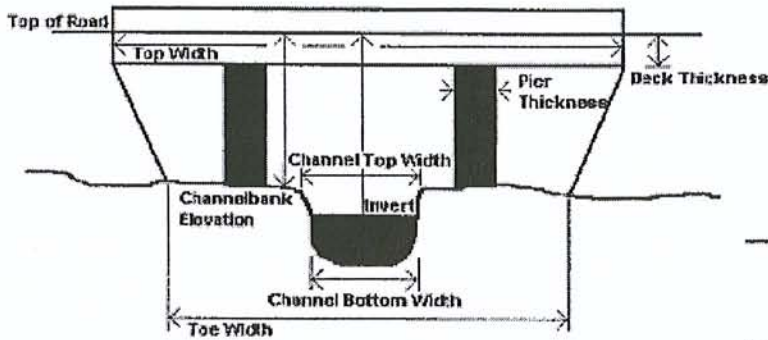


CHANNEL INFORMATION

ROAD TO BANK	CHANNEL TOP WIDTH	CHANNEL BOTTOM WIDTH

BRIDGE INFORMATION

DECK THICKNESS	TOP WIDTH	TOE WIDTH
3' 10"		
HYDRAULIC WIDTH	NUMBER OF PIERS	PIER THICKNESS
	1	



Name	Description	PHOTOS
	<p>5' chain link fence</p>	

ADDITIONAL CHANNEL INFORMATION

Ag / trailer residence

Land Use

Vegetative Cover

concrete lined

Bed Material

U/S channel transitions from trapezoidal to rectangular

General Channel Condition

vertical / trapezoidal concrete

Banks

Agriculture (strawberry fields) on left, trailer homes / some industrial on right

Overbanks

STRUCTURE SURVEY TEMPLATE

					DATE		
ROAD NAME				Darling Rd Bridge		COUNTY	
STREAM NAME						PHOTO ID #	
STRUCTURE #			FB 96 → 2		X,Y COORDINATE		
TYPE		LENGTH	SIZE (W X H) & SHAPE		MATERIAL	Road to Bed	INLET/OUTLET TYPE
road Railroad Bridge			25'x5'			Top of Road EL	
SPECIAL NOTE (Conditions, Blockage, etc)			under bridge the channel is rectangular w/s + d/s of bridge. channel is trapezoidal.				
HIGH WATER MARK (Description, Witness, and Date)							
TYPE		CULVERT TYPE	MATERIAL		Road to Bed	INLET/OUTLET TYPE	
Bridge		Number of Barrels	RCP (Reinforced Concrete Pipe)		Height from Top of Road to Invert	Headwall	
Span Bridge			CMP (Corrugated Metal Pipe)			Wingwalls Type 0°, 45°, 90°	
Pier Shape		1) Circular	Bitmus Coated			Projecting	
Culvert		2) Rectangle (Span X Rise)	Steel		Top of Road EL	Flush with Slope	
Dam		3) Elliptical	Timber		From Topo Map (FT.NGVD) or (FT.NAVD)	MES (Mitered End Section)	
Spillway		4) Con/Span	Ductile			FES (Flared End Section)	
Riser Barrel		5) Elevated Arch	Clay				
Outlet		6) Pipe Arch	Masonry Rock				
		7) Other					

Pier Shape

- 1) Circular pier
- 2) Twin-Cylinder piers
- 3) Elongated pier
- 4) Triangular nose
- 5) Square nose



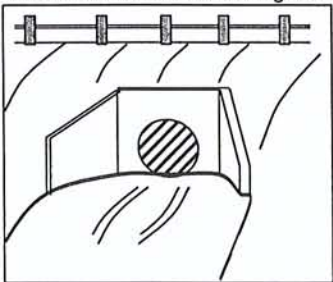
Types (Shape) of Culvert

- | | | | |
|-------------|------------------|---------------|----------|
| 1) Circular | 2) Rectangle | 3) Elliptical | |
| 4) Con/Span | 5) Elevated Arch | 6) Pipe Arch | 7) Other |

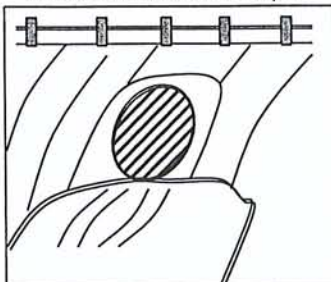
Inlet/Outlet Type

no wingwalls, channel is narrower than bridge connection

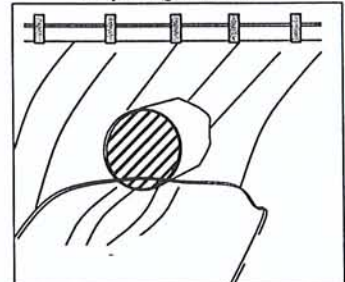
Culvert with Headwall & Wingwalls



Mitered to Conform to Slope



Projecting from Fill

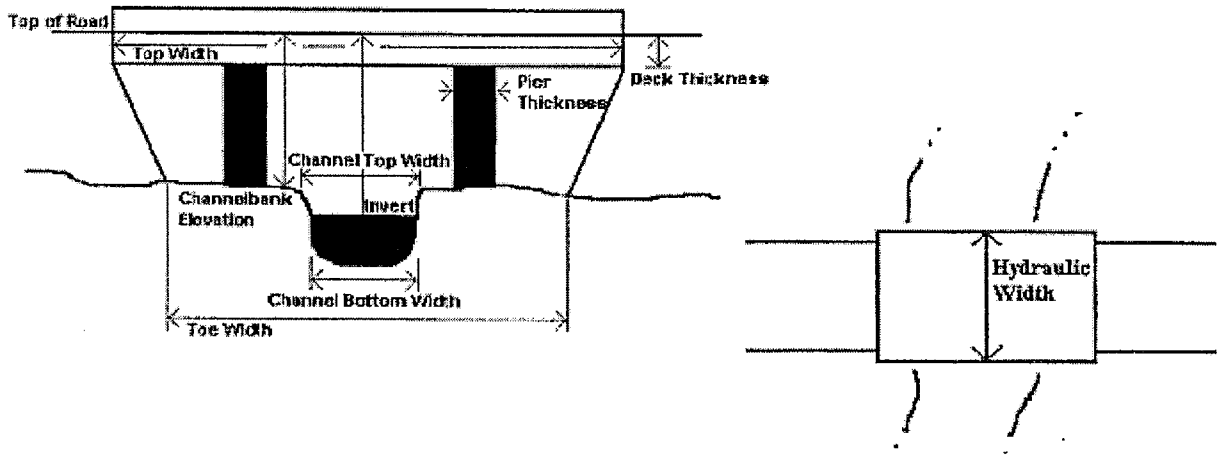


CHANNEL INFORMATION

ROAD TO BANK	CHANNEL TOP WIDTH	CHANNEL BOTTOM WIDTH

BRIDGE INFORMATION

DECK THICKNESS	TOP WIDTH	TOE WIDTH
HYDRAULIC WIDTH	NUMBER OF PIERS	PIER THICKNESS



		PHOTOS
Name	Description	

ADDITIONAL CHANNEL INFORMATION

Trailer, park on rt side @ d/s end
w/ ~ 5' flood wall (stair stepped).

Land Use

Vegetative Cover

some silt in bottom of channel
@ d/s end.

Bed Material

Concrete lined

General Channel Condition

Banks

Overbanks

STRUCTURE SURVEY TEMPLATE

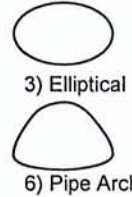
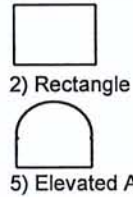
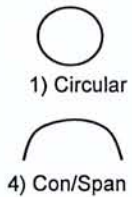
				DATE	11/14/07
ROAD NAME			under Hwy 126		
STREAM NAME			COUNTY		
			Ventura		
STRUCTURE #			PHOTO ID #		
FB 97 → 3					
TYPE		LENGTH	SIZE (W X H) & SHAPE	MATERIAL	Road to Bed
load Railroad Bridge			2 - 8' x 10'		
					INLET/OUTLET TYPE
					Top of Road/EL
SPECIAL NOTE (Conditions, Blockage, etc)		debris none on v/s end angled toward left barrel. Culvert is slightly misaligned from channel			
HIGH WATER MARK (Description, Witness, and Date)					
TYPE		CULVERT TYPE	MATERIAL	Road to Bed	INLET/OUTLET TYPE
Bridge Span Bridge Pier Shape <u>Culvert</u> Dam Spillway Riser Barrel Outlet		Number of Barrels 2 1) Circular <u>2) Rectangle (Span X Rise)</u> 3) Elliptical 4) Con/Span 5) Elevated Arch 6) Pipe Arch 7) Other	RCP (Reinforced Concrete Pipe) CMP (Corrugated Metal Pipe) Bitumus Coated Steel Timber Ductile Clay Masonry Rock	Height from Top of Road to Invert Top of Road/EL From Topo Map (FT.NGVD) or (FT.NAVD)	Headwall Wingwalls Type 0°, 45°, 90° Projecting Flush with Slope MES (Mitered End Section) FES (Flared End Section)

Pier Shape

- 1) Circular pier
- 2) Twin-Cylinder piers
- 3) Elongated pier
- 4) Triangular nose
- 5) Square nose



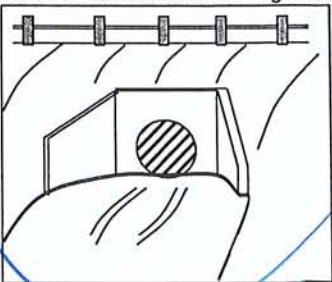
Types (Shape) of Culvert



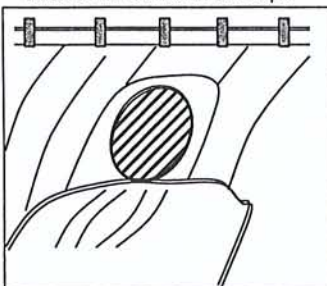
7) Other

Inlet/Outlet Type

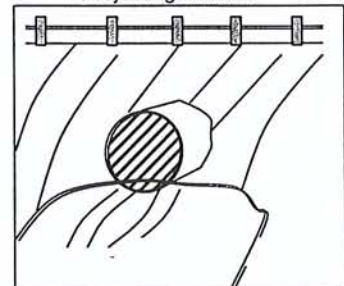
Culvert with Headwall & Wingwalls



Mitered to Conform to Slope



Projecting from Fill

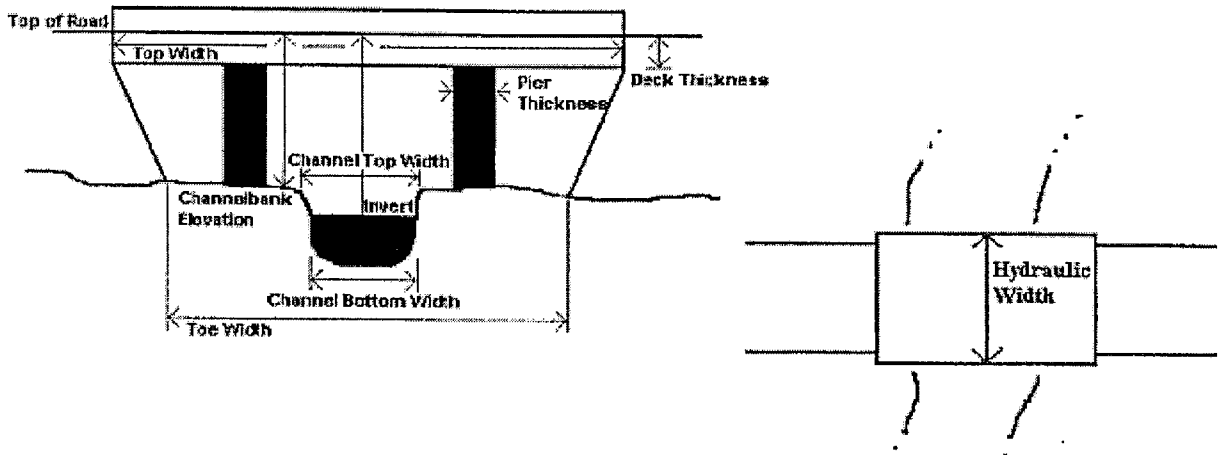


CHANNEL INFORMATION

ROAD TO BANK	CHANNEL TOP WIDTH	CHANNEL BOTTOM WIDTH

BRIDGE INFORMATION

DECK THICKNESS	TOP WIDTH	TOE WIDTH
HYDRAULIC WIDTH	NUMBER OF PIERS	PIER THICKNESS



PHOTOS

Name	Description	

ADDITIONAL CHANNEL INFORMATION

Agriculture

Land Use

see photos

Vegetative Cover

bottom of culvert covered w/ sand + gravel
gravel $d_{50} \approx 2"$. U/S of culvert natural erosive
soil, d/s of culvert concrete lined channel.

Bed Material

Culvert is misaligned

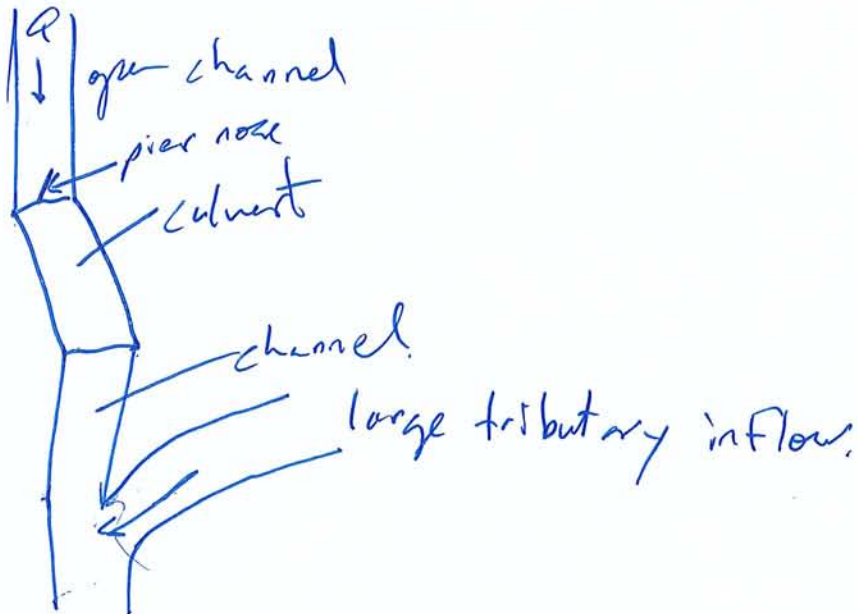
General Channel Condition

concrete lined d/s

Banks

trailer park on right overbank - 50 yds
d/s of culvert. concrete bags on it bank
adding ~ 2' of freeboard to trailer park area.

Overbanks



STRUCTURE SURVEY TEMPLATE

				DATE	11/13/07
ROAD NAME			Telegraph Rd		
STREAM NAME			Franklin Barranca		
STRUCTURE #			FB 98 → 4		
X,Y COORDINATE					
TYPE	LENGTH	SIZE (W X H) & SHAPE	MATERIAL	Road to Bed	INLET/OUTLET TYPE
Railroad Bridge		12' x 7' @ entrance 12' x 6' @ exit		Top of Road EL	
SPECIAL NOTE (Conditions, Blockage, etc)					
HIGH WATER MARK (Description, Witness, and Date)					
TYPE	LENGTH	CULVERT TYPE	MATERIAL	Road to Bed	INLET/OUTLET TYPE
Bridge Span Bridge Pier Shape <u>Culvert</u> Dam Spillway Riser Barrel Outlet		Number of Barrels 1) Circular 2) Rectangle (Span X Rise) 3) Elliptical 4) Con/Span 5) Elevated Arch 6) Pipe Arch 7) Other	RCP (Reinforced Concrete Pipe) CMP (Corrugated Metal Pipe) Bitmus Coated Steel Timber Ductile Clay Masonry Rock	Height from Top of Road to Invert <u>Top of Road EL</u> From Topo Map (FT.NGVD) or (FT.NAVD)	Headwall Wingwalls Type 0°, 45°, 90° Projecting Flush with Slope MES (Mitered End Section) FES (Flared End Section)

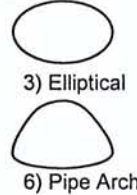
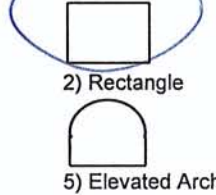
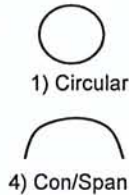
Pier Shape

- 1) Circular pier
- 2) Twin-Cylinder piers
- 3) Elongated pier
- 4) Triangular nose
- 5) Square nose



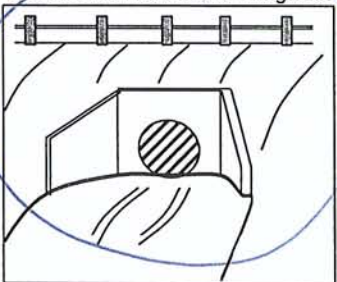
Types (Shape) of Culvert

- 1) Circular
- 2) Rectangle
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- 4) Con/Span
- 5) Elevated Arch
- 6) Pipe Arch
- 7) Other

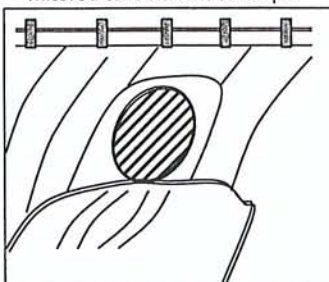


Inlet/Outlet Type

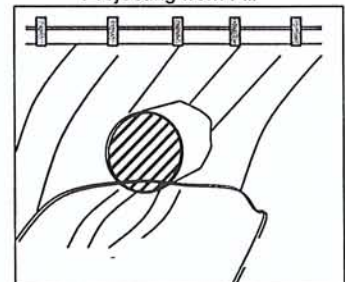
Culvert with Headwall & Wingwalls



Mitered to Conform to Slope



Projecting from Fill

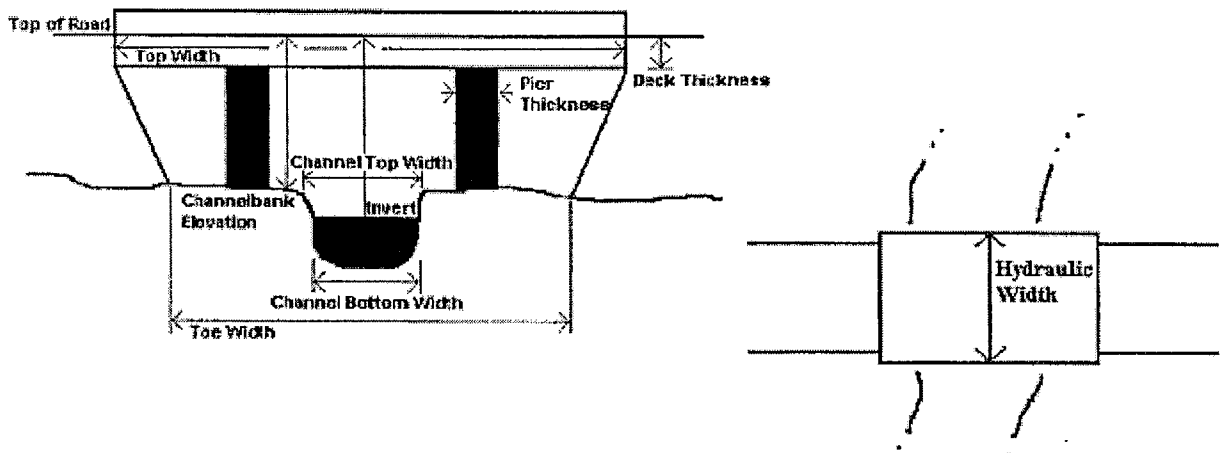


CHANNEL INFORMATION

ROAD TO BANK	CHANNEL TOP WIDTH	CHANNEL BOTTOM WIDTH

BRIDGE INFORMATION

DECK THICKNESS	TOP WIDTH	TOE WIDTH
HYDRAULIC WIDTH	NUMBER OF PIERS	PIER THICKNESS
	0	



PHOTOS

Name

Description

Name	Description	PHOTOS

ADDITIONAL CHANNEL INFORMATION

some residential on right overbank @ d/s end

Land Use

Vegetative Cover

Bed Material

Rectangular concrete channel d/s

General Channel Condition

grouted riprap ups along right bank,
nearly vertical. left bank very steep.
sandy erodible soil

ups

Banks

Overbanks

large tributary (culvert) flows in @ downstream
end on right side of channel

2 drop structures between FB 98 and
FB 98.5

STRUCTURE SURVEY TEMPLATE







				DATE	11/13/07
ROAD NAME				COUNTY	Ventura
STREAM NAME				PHOTO ID #	
STRUCTURE #		X,Y COORDINATE			
TYPE	LENGTH	SIZE (W X H) & SHAPE	MATERIAL	Road to Bed	INLET/OUTLET TYPE
weir Railroad Bridge		10.5' x 3.5'	concrete	Top of Road EL	
SPECIAL NOTE (Conditions, Blockage, etc)					
HIGH WATER MARK (Description, Witness, and Date)					
TYPE		CULVERT TYPE	MATERIAL	Road to Bed	INLET/OUTLET TYPE
Bridge Span Bridge Pier Shape Culvert Dam Spillway Riser Barrel Outlet		Number of Barrels 1) Circular 2) Rectangle (Span X Rise) 3) Elliptical 4) Con/Span 5) Elevated Arch 6) Pipe Arch 7) Other	RCP (Reinforced Concrete Pipe) CMP (Corrugated Metal Pipe) Bitmus Coated Steel Timber Ductile Clay Masonry Rock	Height from Top of Road to Invert Top of Road EL From Topo Map (FT.NGVD) or (FT.NAVD)	Headwall Wingwalls Type 0°, 45°, 90° Projecting Flush with Slope MES (Mitered End Section) FES (Flared End Section)

Pier Shape

- 1) Circular pier
- 2) Twin-Cylinder piers
- 3) Elongated pier
- 4) Triangular nose
- 5) Square nose

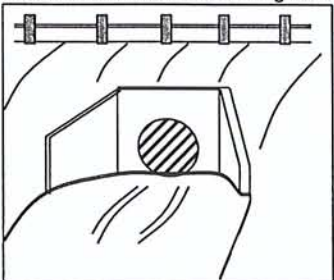


Types (Shape) of Culvert

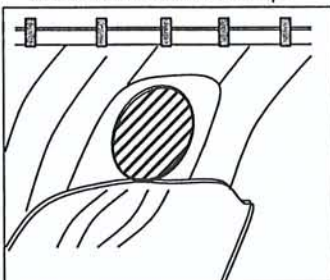
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|---|---|---|
|  |  |  |
| 1) Circular | 2) Rectangle | 3) Elliptical |
|  |  |  |
| 4) Con/Span | 5) Elevated Arch | 6) Pipe Arch |
| 7) Other | | |

Inlet/Outlet Type

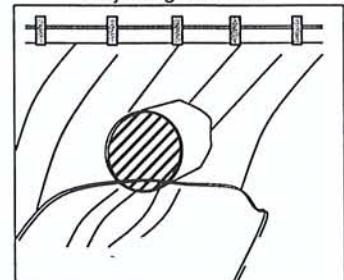
Culvert with Headwall & Wingwalls



Mitered to Conform to Slope



Projecting from Fill

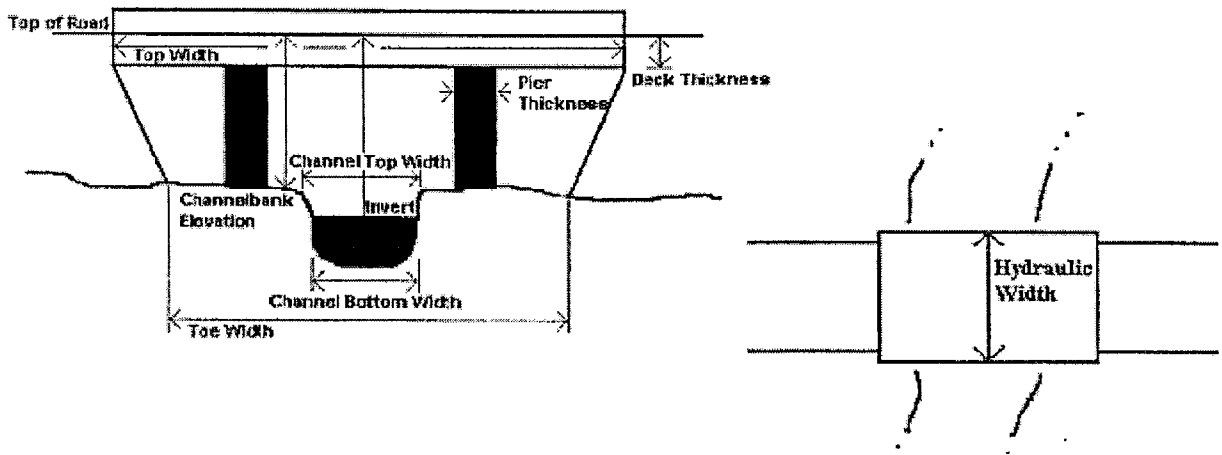


CHANNEL INFORMATION

ROAD TO BANK	CHANNEL TOP WIDTH	CHANNEL BOTTOM WIDTH

BRIDGE INFORMATION

DECK THICKNESS	TOP WIDTH	TOE WIDTH
HYDRAULIC WIDTH	NUMBER OF PIERS	PIER THICKNESS



PHOTOS

Name

Description

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ADDITIONAL CHANNEL INFORMATION

Land Use

Vegetative Cover

Sandy bottom material

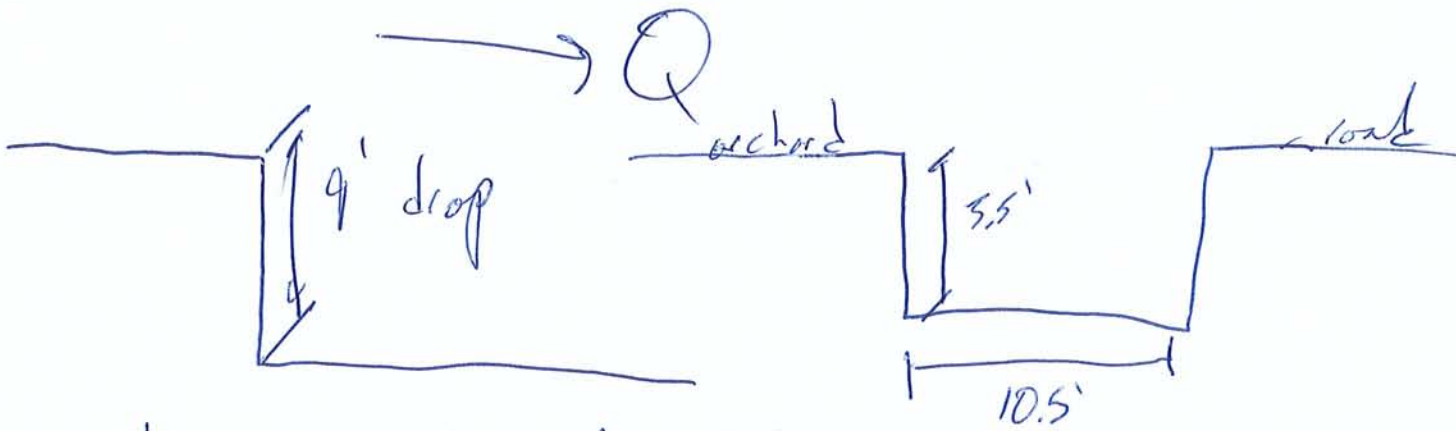
Bed Material

channel is lined w/ gravel from weir to 100' d/s of weir

General Channel Condition

Banks

Overbanks



Note 2 additional similar weirs upstream of this

STRUCTURE SURVEY TEMPLATE

				DATE	11/13/07
ROAD NAME				COUNTY	Ventura
STREAM NAME				PHOTO ID #	
STRUCTURE #		X,Y COORDINATE			
TYPE	LENGTH	SIZE (W X H) & SHAPE	MATERIAL	Road to Bed	INLET/OUTLET TYPE
<i>road</i> Railroad Bridge		8' x 7'		Top of Road EL	
SPECIAL NOTE (Conditions, Blockage, etc)		3' drop structure @ upstream entrance to culvert. about 4' drop downstream of culvert.			
HIGH WATER MARK (Description, Witness, and Date)					
TYPE		CULVERT TYPE	MATERIAL	Road to Bed	INLET/OUTLET TYPE
Bridge Span Bridge Pier Shape <u>Culvert</u> Dam Spillway Riser Barrel Outlet		Number of Barrels 1) Circular <u>2) Rectangle (Span X Rise)</u> 3) Elliptical 4) Con/Span 5) Elevated Arch 6) Pipe Arch 7) Other	RCP (Reinforced Concrete Pipe) CMP (Corrugated Metal Pipe) Bitmus Coated Steel Timber Ductile Clay Masonry Rock	Height from Top of Road to Invert <u>Top of Road EL</u> From Topo Map (FT.NGVD) or (FT.NAVD)	Headwall Wingwalls Type 0°, 45°, 90° Projecting Flush with Slope MES (Mitered End Section) FES (Flared End Section)

Pier Shape

- 1) Circular pier
- 2) Twin-Cylinder piers
- 3) Elongated pier
- 4) Triangular nose
- 5) Square nose

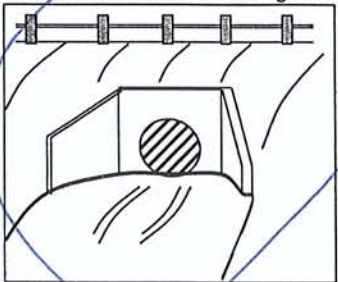


Types (Shape) of Culvert

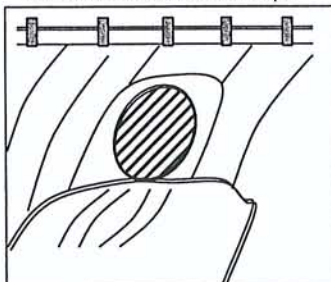
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|-------------|------------------|---------------|
| | | |
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| | | |
| 4) Con/Span | 5) Elevated Arch | 6) Pipe Arch |
| 7) Other | | |

Inlet/Outlet Type

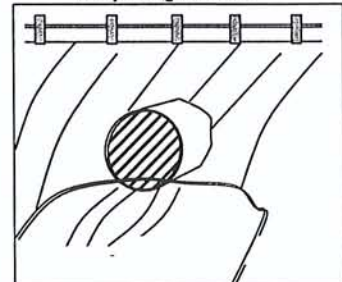
Culvert with Headwall & Wingwalls



Mitered to Conform to Slope



Projecting from Fill

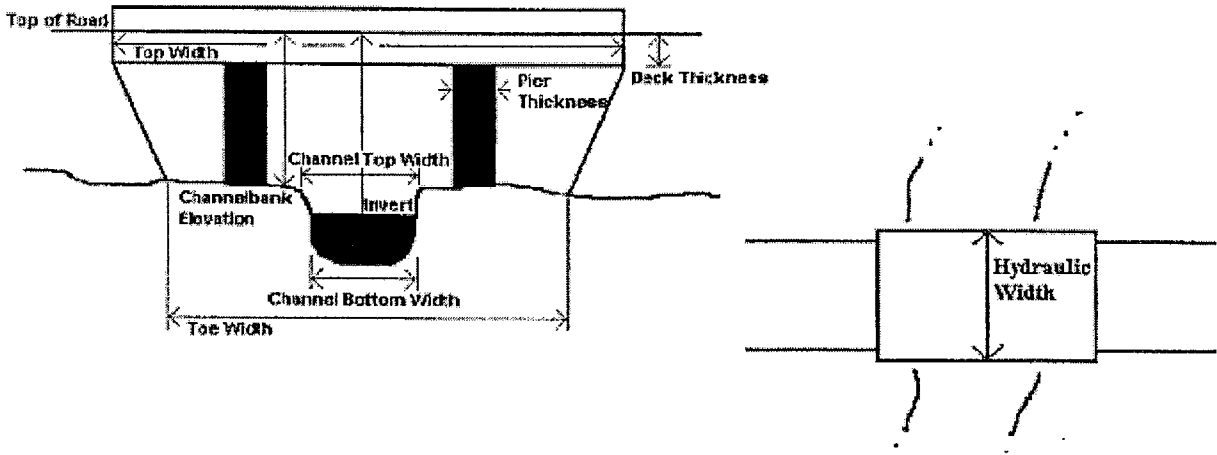


CHANNEL INFORMATION

ROAD TO BANK	CHANNEL TOP WIDTH	CHANNEL BOTTOM WIDTH

BRIDGE INFORMATION

DECK THICKNESS	TOP WIDTH	TOE WIDTH
HYDRAULIC WIDTH	NUMBER OF PIERS	PIER THICKNESS
	2	



PHOTOS

Name	Description	PHOTOS

ADDITIONAL CHANNEL INFORMATION

Land Use

agriculture

Vegetative Cover

Bed Material

flashed road channel

General Channel Condition

u/s | vertical rt bank concrete wall u/s of culvert
left bank is sandy erodable soil @ u/s channel

Banks

d/s sand bag (or concrete sac) retaining walls on both sides of channel.

A few buildings on both sides of the channel @ the d/s end.

Overbanks

STRUCTURE SURVEY TEMPLATE

				DATE	
ROAD NAME	Parallel to Featherhills 11265 Featherhills			COUNTY	
STREAM NAME				PHOTO ID #	
STRUCTURE #	FB 99.5 → 7		X,Y COORDINATE		
TYPE	LENGTH	SIZE (W X H) & SHAPE	MATERIAL	Road to Bed	INLET/OUTLET TYPE
Railroad Bridge		7' x 5'	concrete	Top of Road EL	
SPECIAL NOTE (Conditions, Blockage, etc)					
HIGH WATER MARK (Description, Witness, and Date)					
TYPE		CULVERT TYPE	MATERIAL	Road to Bed	INLET/OUTLET TYPE
Bridge		Number of Barrels	RCP (Reinforced Concrete Pipe)	Height from Top of Road to Invert	Headwall
Span Bridge			CMP (Corrugated Metal Pipe)	Top of Road EL	Wingwalls Type 0°, 45°, 90°
Pier Shape		1) Circular	Bitum Coated	From Topo Map (FT.NGVD) or (FT.NAVD)	Projecting
Culvert		2) Rectangle (Span X Rise)	Steel		Flush with Slope
Dam		3) Elliptical	Timber		MES (Mitered End Section)
Spillway		4) Con/Span	Ductile		FES (Flared End Section)
Riser Barrel		5) Elevated Arch	Clay		
Outlet		6) Pipe Arch	Masonry Rock		
		7) Other			

Pier Shape

- 1) Circular pier
- 2) Twin-Cylinder piers
- 3) Elongated pier
- 4) Triangular nose
- 5) Square nose

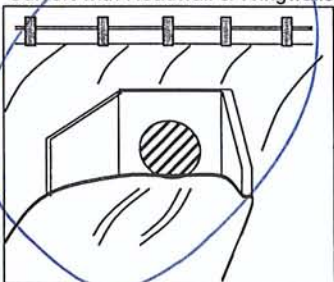


Types (Shape) of Culvert

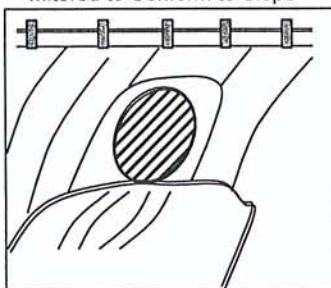
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|-------------|------------------|---------------|
| | | |
| 1) Circular | 2) Rectangle | 3) Elliptical |
| | | |
| 4) Con/Span | 5) Elevated Arch | 6) Pipe Arch |
| | | 7) Other |

Inlet/Outlet Type

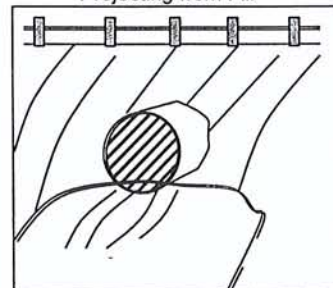
Culvert with Headwall & Wingwalls



Mitered to Conform to Slope



Projecting from Fill

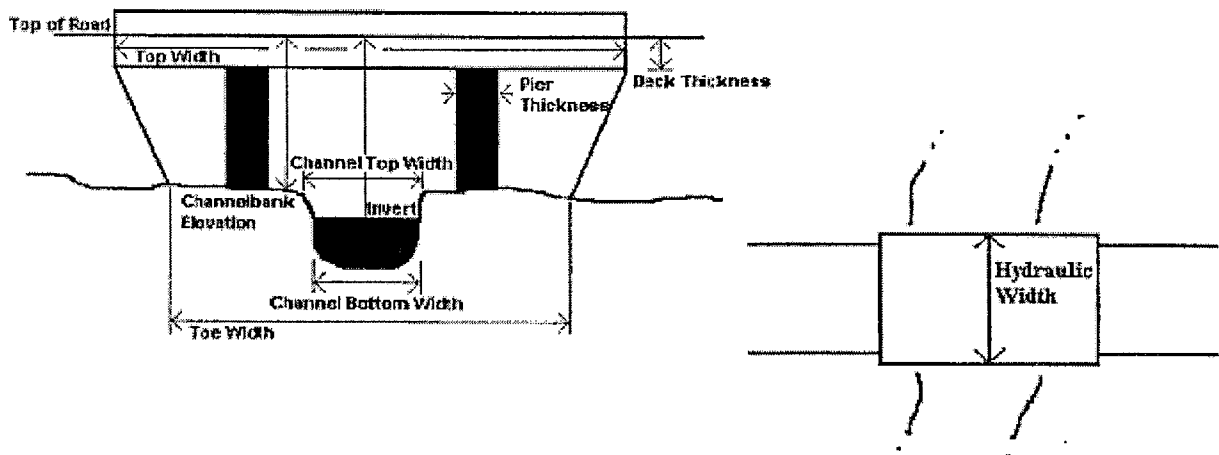


CHANNEL INFORMATION

ROAD TO BANK	CHANNEL TOP WIDTH	CHANNEL BOTTOM WIDTH

BRIDGE INFORMATION

DECK THICKNESS	TOP WIDTH	TOE WIDTH
HYDRAULIC WIDTH	NUMBER OF PIERS	PIER THICKNESS
	0	



PHOTOS

Name	Description	PHOTOS

ADDITIONAL CHANNEL INFORMATION

right culture.

Land Use

Vegetative Cover

dumped concrete along portions of bank,
sandy bed material

Bed Material

General Channel Condition

left bank erodible soil right bank retaining
wall d/s of culvert
u/s of culvert ~~the~~ both banks are sandy erodible soil.

Banks

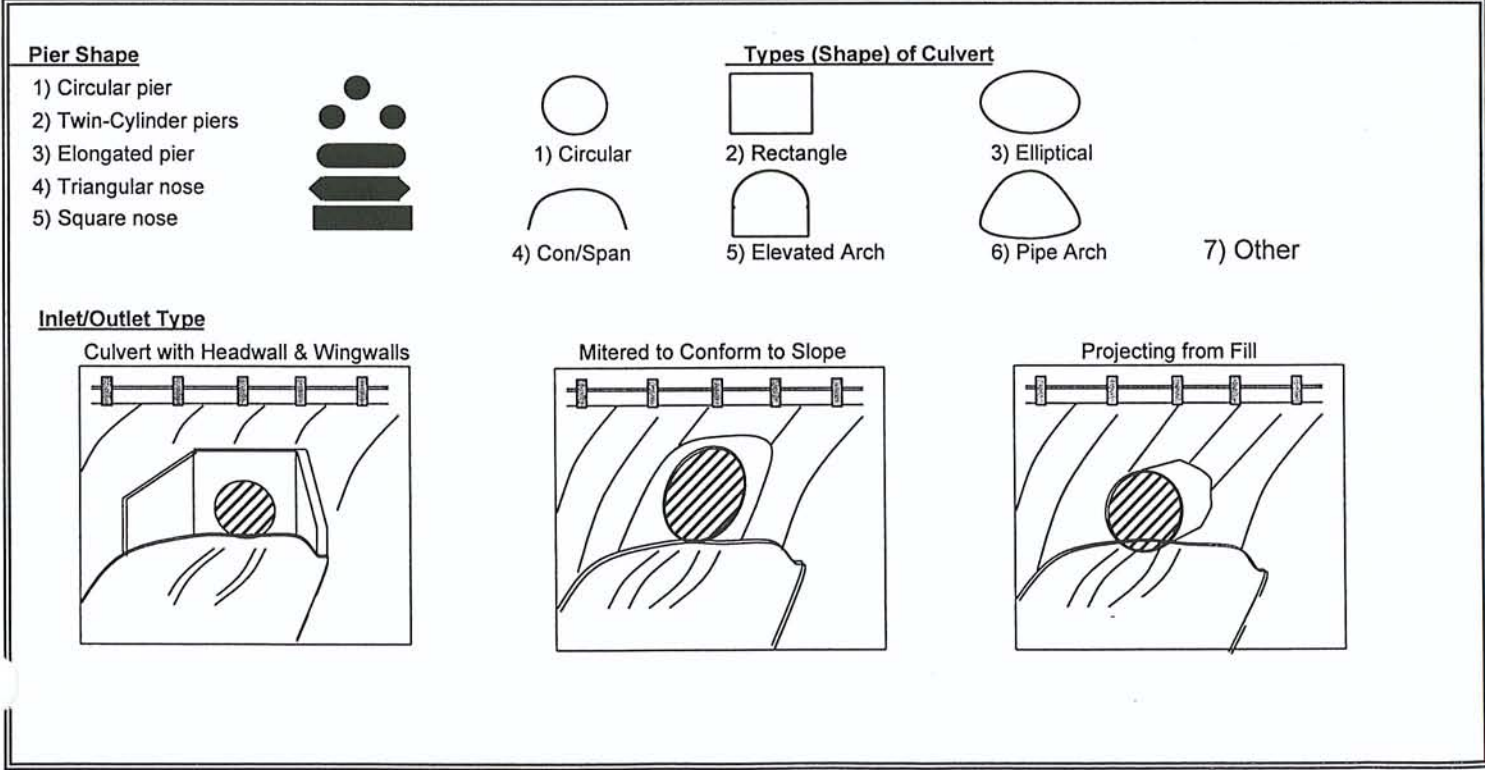
road parallel to it overbank - left overbank
lennon. field when FB 99.5 and FB 99

Overbanks

multiple weirs (~~4~~⁵ concrete weirs) between
FB 99.5 - FB 99 -

STRUCTURE SURVEY TEMPLATE

				DATE	11/13/07
ROAD NAME				COUNTY	Ventura
STREAM NAME				PHOTO ID #	
STRUCTURE #		X,Y COORDINATE			
TYPE	LENGTH	SIZE (W X H) & SHAPE	MATERIAL	Road to Bed	INLET/OUTLET TYPE
road Railroad Bridge crossing		2 culverts: 1 drop inlet + culvert (5'φ) 1 overflow culvert (4'φ)		Top of Road EL	
SPECIAL NOTE (Conditions, Blockage, etc)		drop inlet @ o/s end - stop additional culvert for overflow			
HIGH WATER MARK (Description, Witness, and Date)					
TYPE		CULVERT TYPE	MATERIAL	Road to Bed	INLET/OUTLET TYPE
Bridge Span Bridge Pier Shape Culvert Dam Spillway Riser Barrel Outlet		Number of Barrels 1) Circular 2) Rectangle (Span X Rise) 3) Elliptical 4) Con/Span 5) Elevated Arch 6) Pipe Arch 7) Other	RCP (Reinforced Concrete Pipe) CMP (Corrugated Metal Pipe) Bitmus Coated Steel Timber Ductile Clay Masonry Rock	Height from Top of Road to Invert Top of Road EL From Topo Map (FT.NGVD) or (FT.NAVD)	Headwall Wingwalls Type 0°, 45°, 90° Projecting Flush with Slope MES (Mitered End Section) FES (Flared End Section)

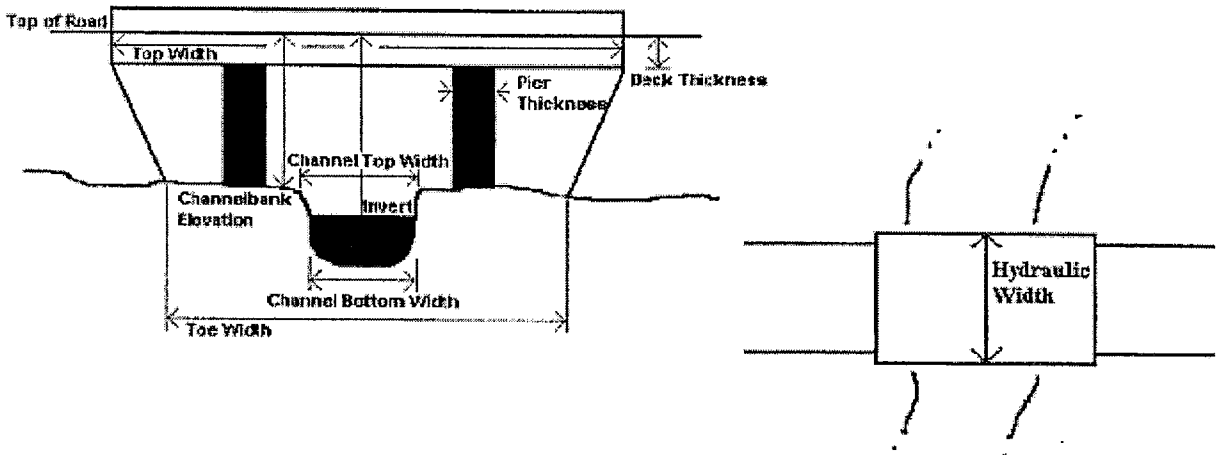


CHANNEL INFORMATION

ROAD TO BANK	CHANNEL TOP WIDTH	CHANNEL BOTTOM WIDTH

BRIDGE INFORMATION

DECK THICKNESS	TOP WIDTH	TOE WIDTH
HYDRAULIC WIDTH	NUMBER OF PIERS	PIER THICKNESS



PHOTOS

Name	Description	PHOTOS

ADDITIONAL CHANNEL INFORMATION

Agriculture
Avocado trees on rt bank @ ups end

Land Use

dense vegetation upstream and downstream.

Vegetative Cover

upstream end sandy bed material.

Bed Material

upstream end drop inlet constructed to stabilize ~~bank~~ channel.

General Channel Condition


vegetated banks

Banks

Overbanks

~~This crossing is near~~
There is a water tank on the right bank near this crossing.

Our study reach extends ups of this crossing.

 We need plans + analysis from Ventura Flood Control for this structure (near reservoir (storage tank) along Williams Canyon Rd).