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UNIVERSIDAD ...ICA PARTICULAR DE LOJA
BIBLIOTECA

627
Levantamiento de planos
Riajo
Rio Malacatos
LOJA

627.52
627

627 x81
C-CH

Universidad Técnica Particular de Loja

Diseño del Sifón Sobre el Río Malacatos

ALUMNO

Víctor Manuel Ruiz Maita

Director: Ing. Eduardo García

Loja - Ecuador

1984

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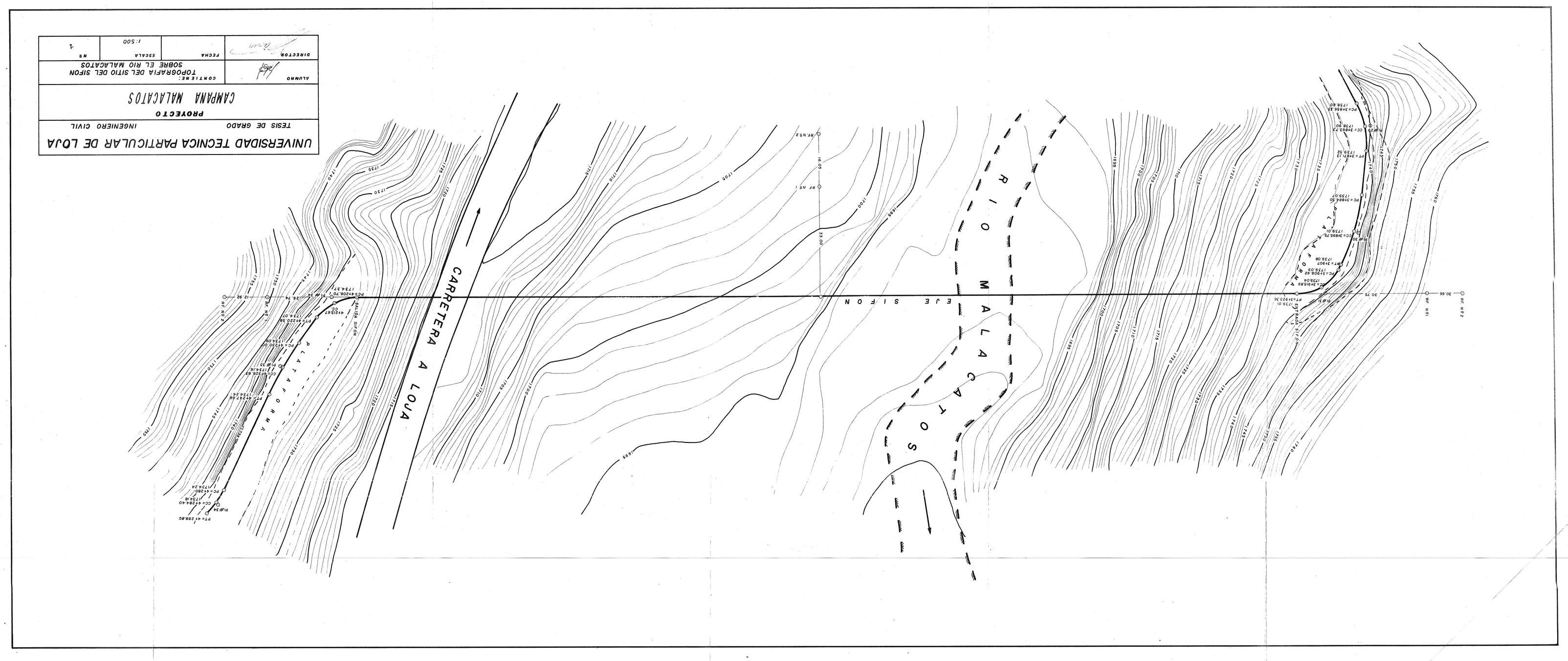
Septiembre, 2017


CARRETERA A LOJA
RIO MALACATOS
EJE SIFON
PLATAFORMA
PLATAFORMA
ALCANTARILLA
RF N.S.1
RF N.S.2
KM 19
KM 20
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2120

UNIVERSIDAD TECNICA PARTICULAR DE LOJA			
TESIS DE GRADO	INGENIERO CIVIL		
PROYECTO			
CAMPAÑA MALACATOS			
ALUMNO	CONTIENE: PERFIL LONGITUDINAL DEL SIFON SOBRE EL RIO MALACATOS		
DIRECTOR	FECHA	ESCALA 1:500	NR 2

C O T A S	SUCESIVAS	
1726.8	3+825.00	
1726.80	3+826.44	
1726.82	3+826.41	
1726.51	3+826.14	
1726.0	3+825.61	
1725.0	3+824.61	
1723.0	3+822.61	
1721.0	3+820.61	
1720.0	3+819.61	
1719.8	3+819.41	
1719.5	3+819.11	
1719.3	3+818.91	
1719.2	3+818.81	
1719.1	3+818.71	
1719.0	3+818.61	
1718.9	3+818.51	
1718.8	3+818.41	
1718.6	3+818.21	
1718.5	3+818.11	
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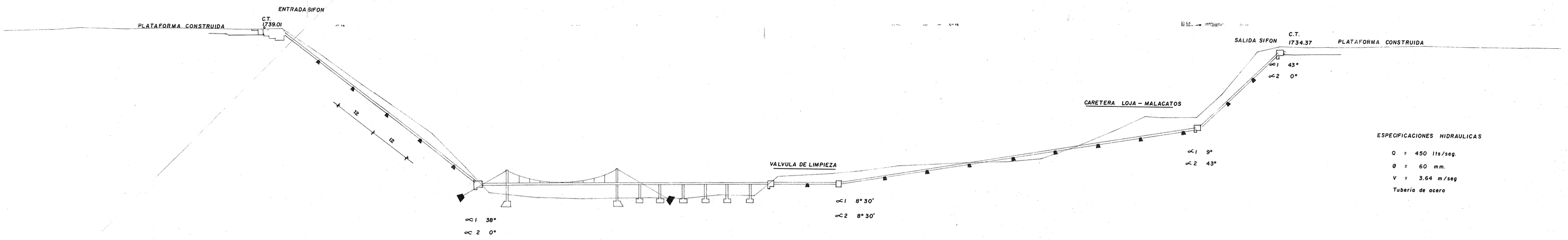
PERFIL LONGITUDINAL



ESPECIFICACIONES HIDRAULICAS

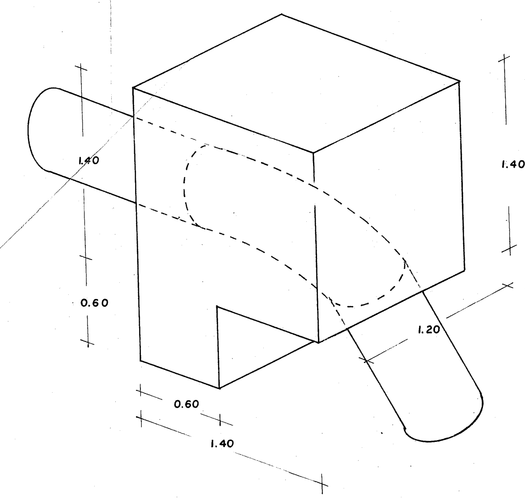
Q = 450 lts/seg.

Ø = 60 mm.

V = 3.64 m/seg

Tubería de acero

| | | |



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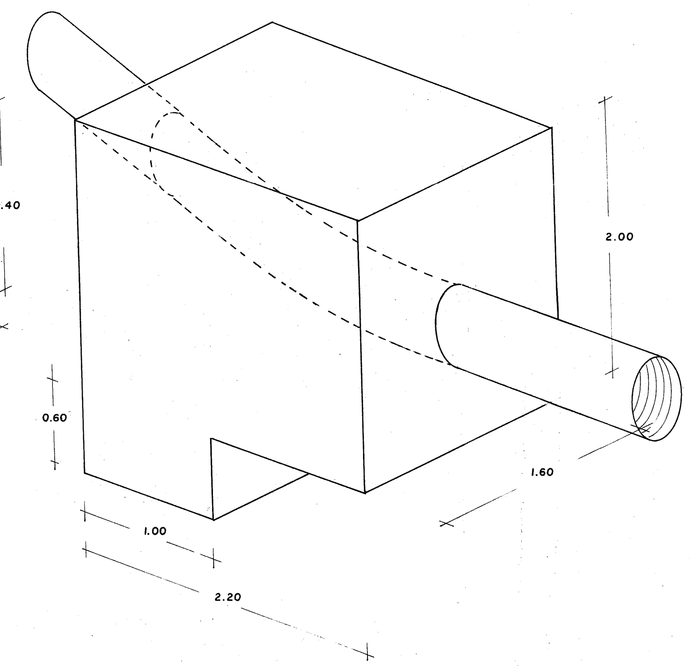

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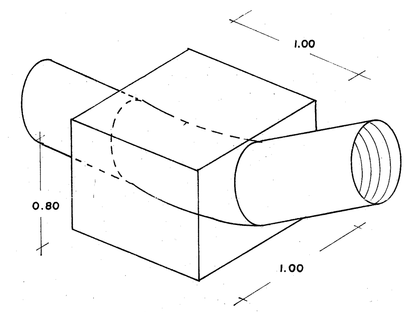

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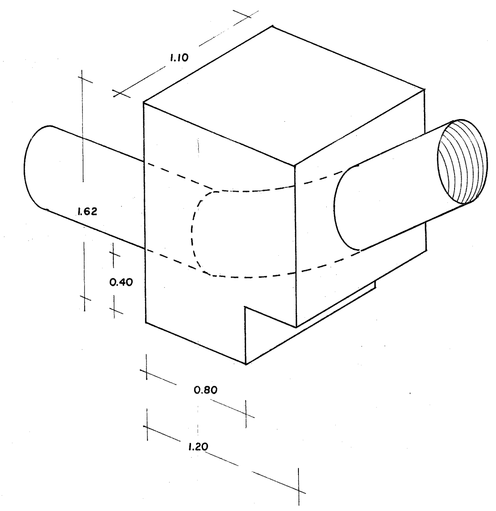

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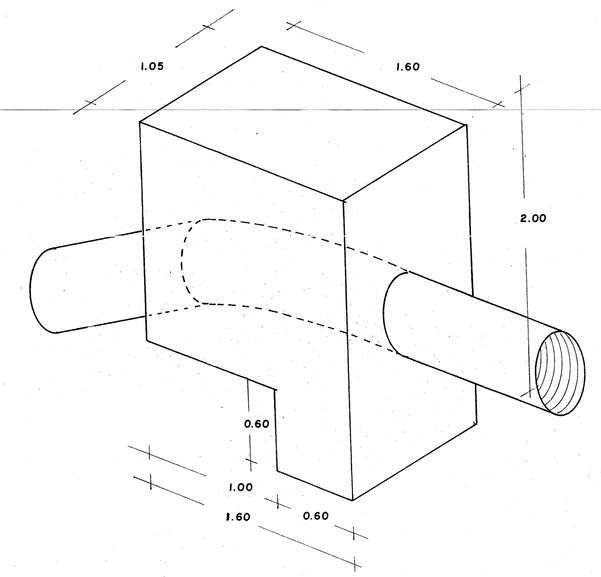

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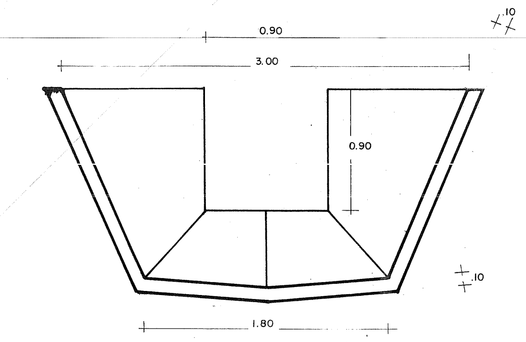

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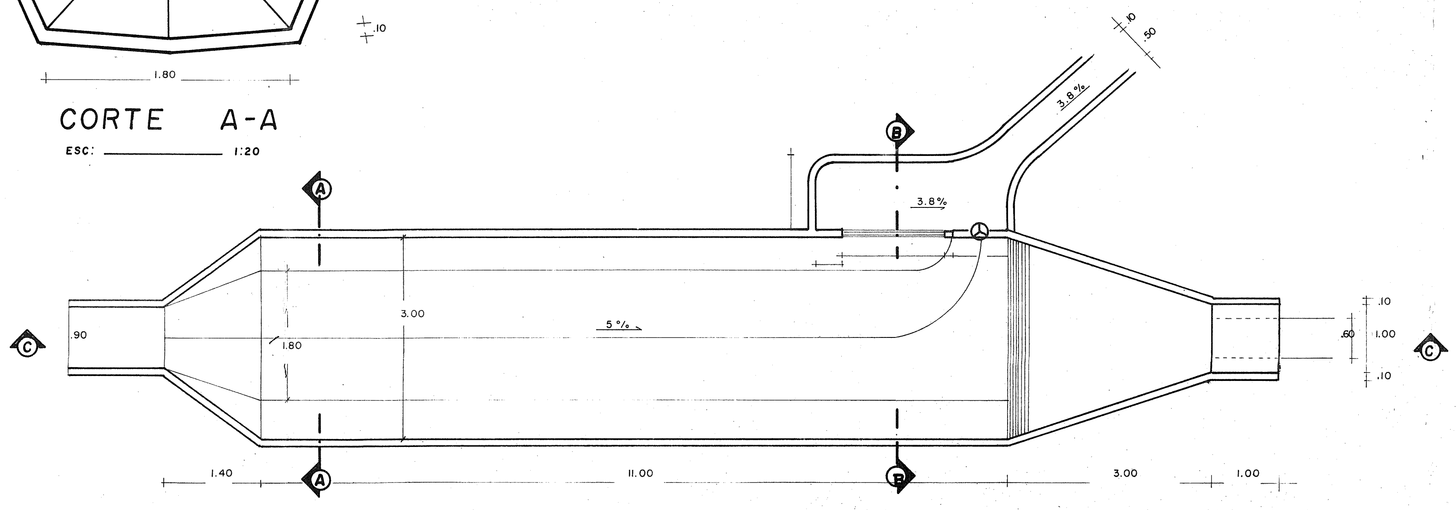
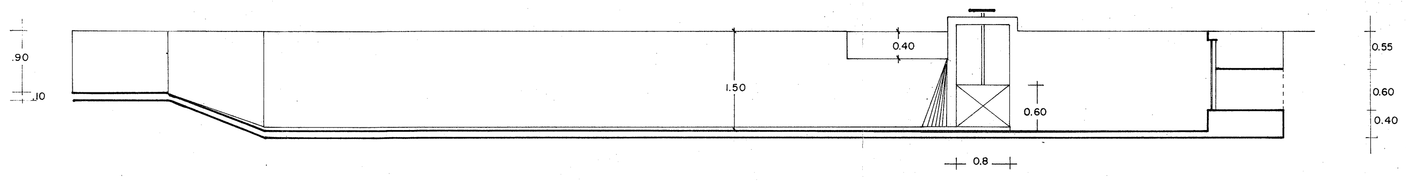
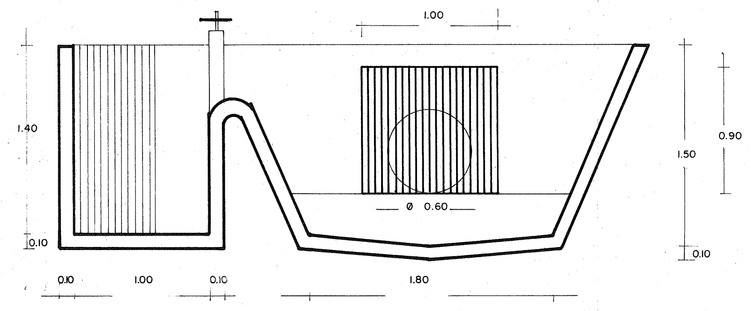


PLANTA
ESC: 1:50



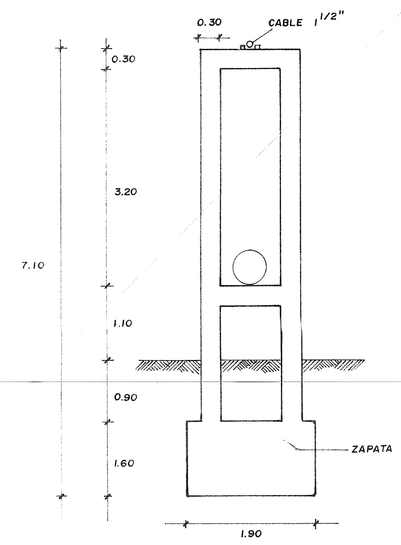
CORTE C-C



CORTE B-B
ESC: 1:20

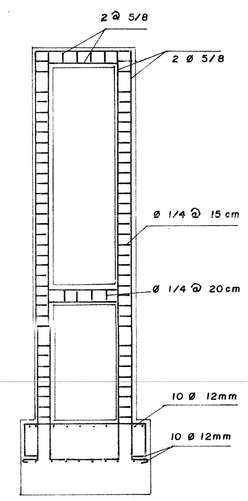
UNIVERSIDAD TECNICA PARTICULAR DE LOJA			
TESIS DE GRADO		INGENIERO CIVIL	
PROYECTO CAMPAÑA MALACATOS			
ALUMNO	CONTIENE: DESARENADOR Y ANCLAJES		
DIRECTOR	FECHA	ESCALA indicada	N.º 4

TORRE



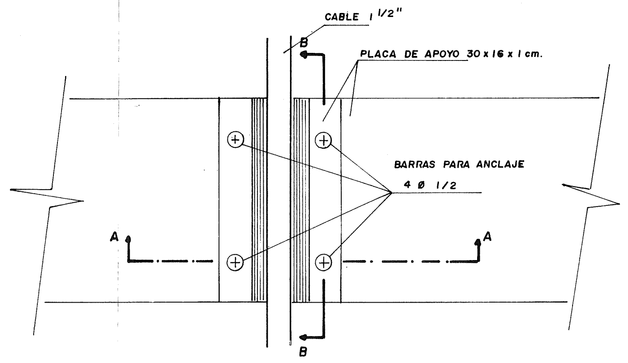
ESC: 1:50

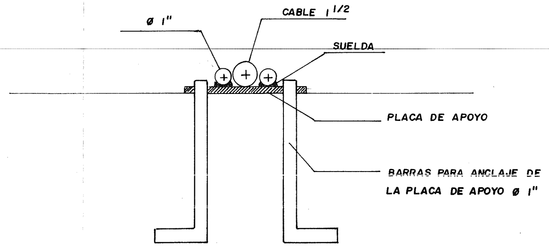
ARMADO DE TORRE DE APOYO



VISTA FRONTAL

DETALLE DE APOYO





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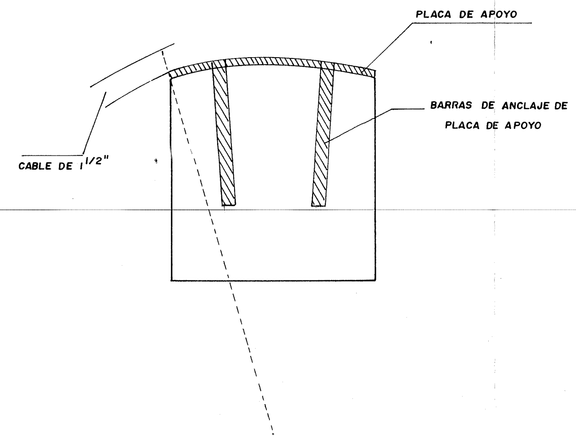
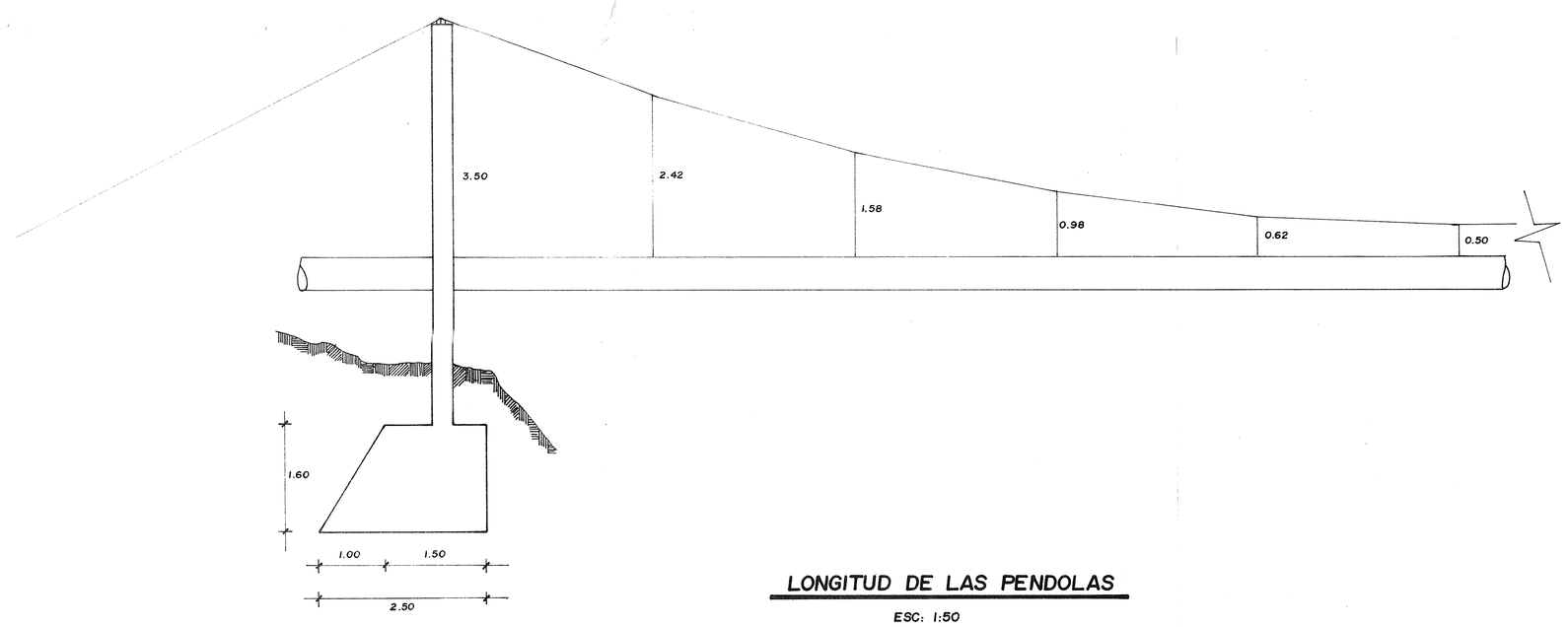
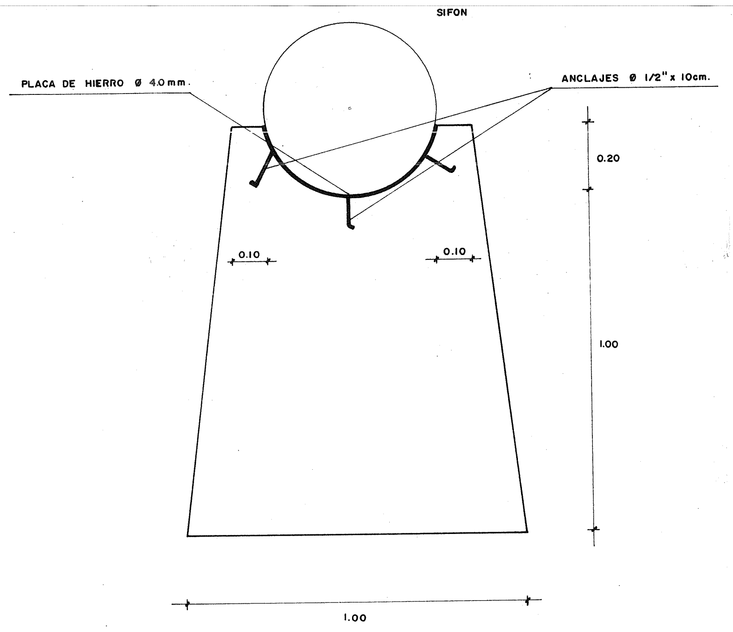




LONGITUD DE LAS PENDOLAS

ESC: 1:50

UNIVERSIDAD TECNICA PARTICULAR DE LOJA			
TESIS DE GRADO		INGENIERO CIVIL	
PROYECTO CAMPANA MALACATOS			
ALUMNO	CONTIENE TORRES DE APOYO		
DIRECTOR	FECHA	ESCALA	Nº 5



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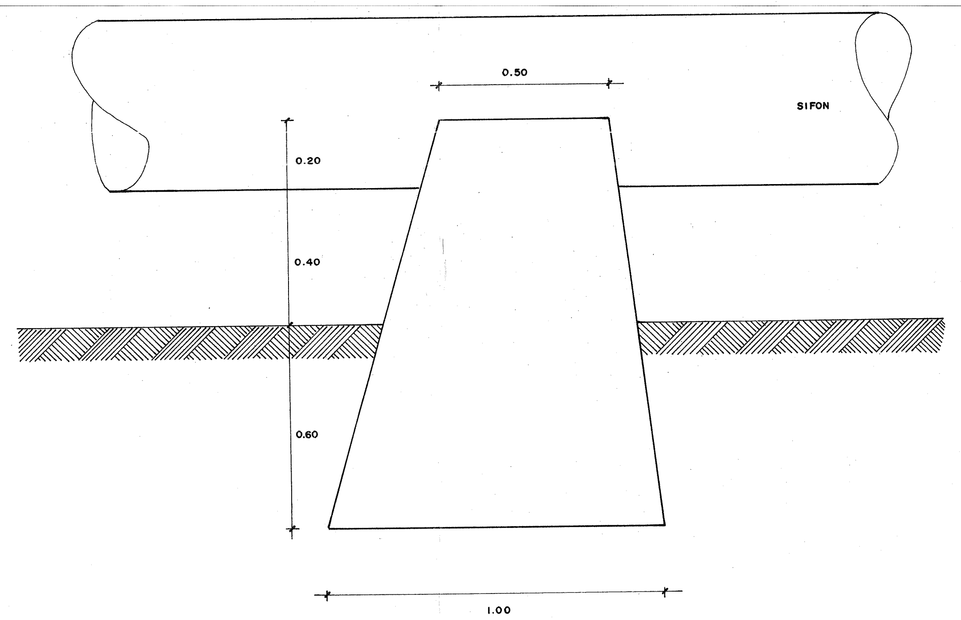

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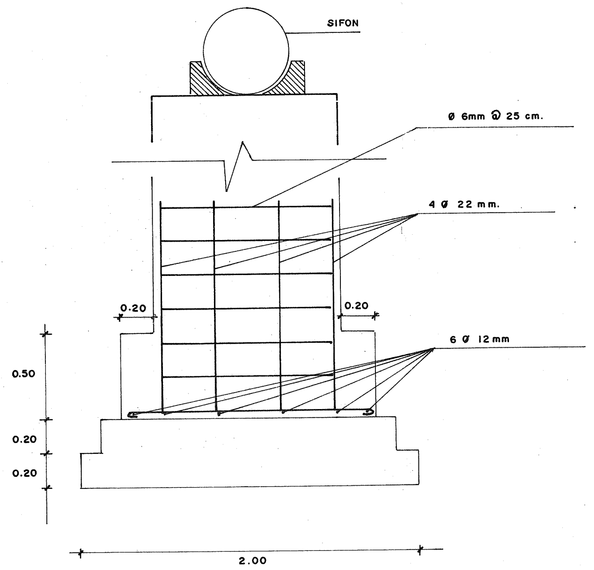

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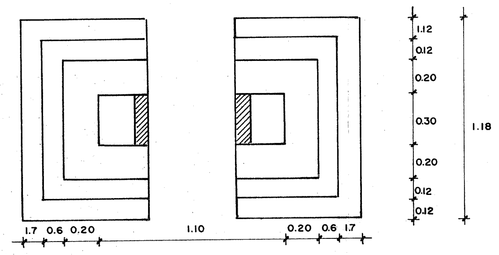
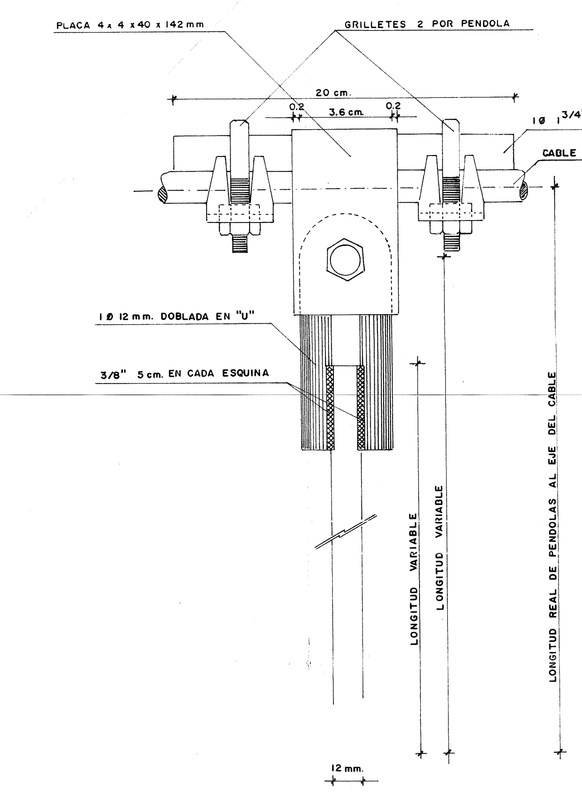


PLANTA APOYO ESPECIAL

UNIVERSIDAD TECNICA PARTICULAR DE LOJA			
TESIS DE GRADO		INGENIERO CIVIL	
PROYECTO CAMPANA MALACATOS			
ALUMNO	CONTIENE: APOYOS SIMPLES Y ESPECIALES		
DIRECTOR	FECHA	ESCALA	Nº G



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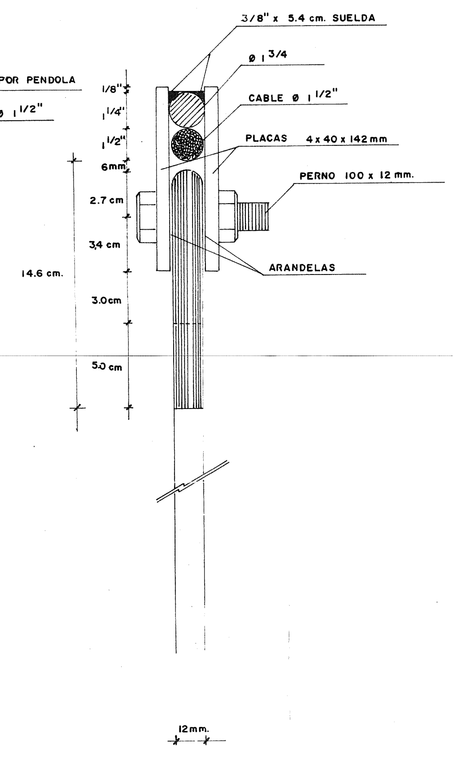

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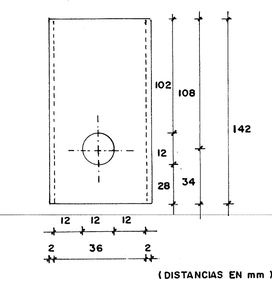
DETALLE DE PENDOLA



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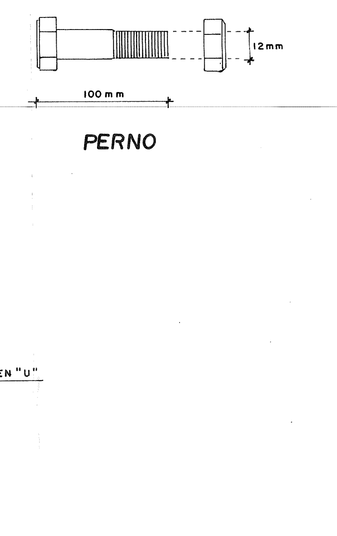

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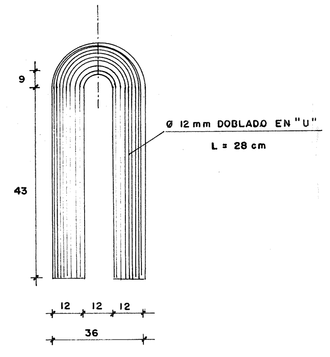

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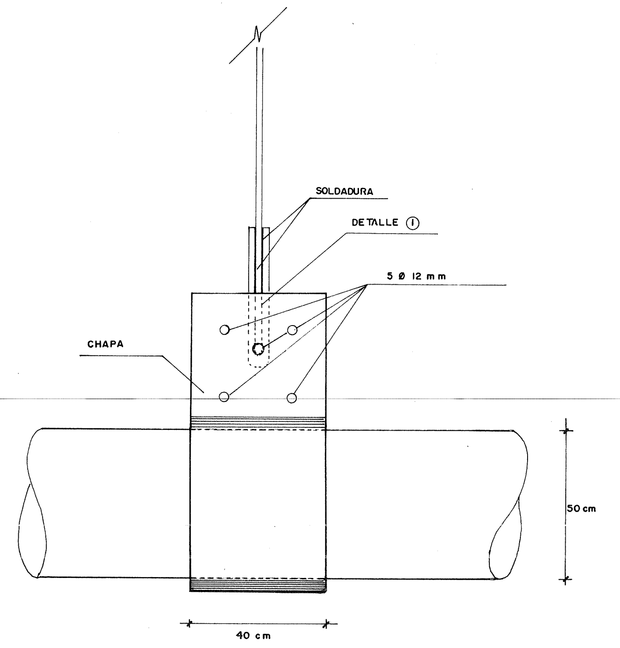

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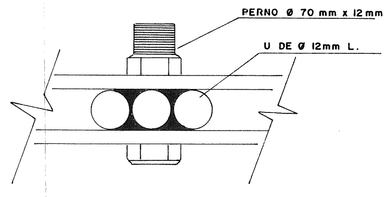
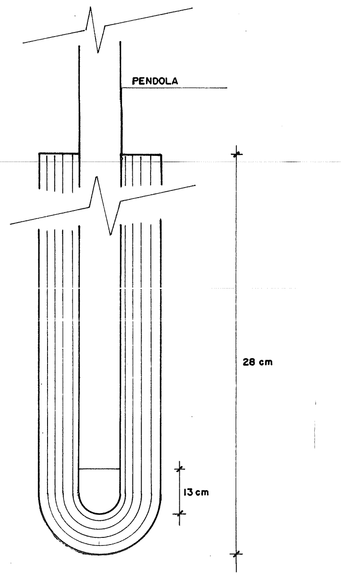
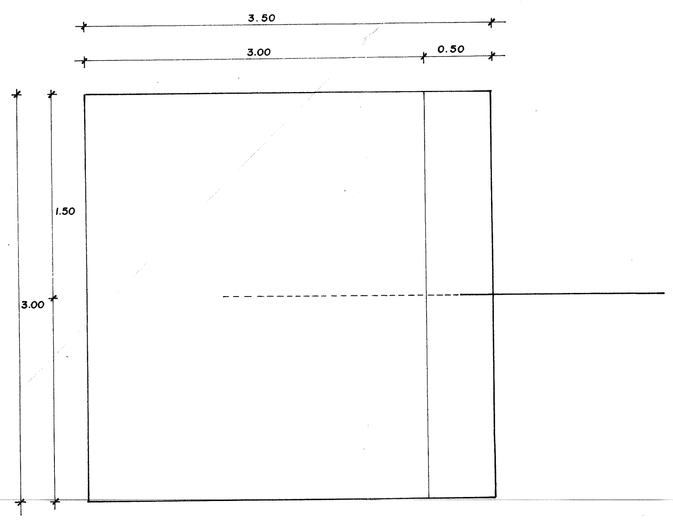


DETALLE I



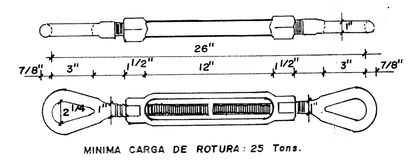
UNION PENDOLA Y VARIABLE U

UNIVERSIDAD TECNICA PARTICULAR DE LOJA			
TESIS DE GRADO		INGENIERO CIVIL	
PROYECTO CAMPANA MALACATOS			
ALUMNO	CONTIENE PENDOLAS Y CHAPAS DE UNIONES		
DIRECTOR	FECHA	ESCALA	Nº 7



PLANTA

DETALLE TEMPLADOR



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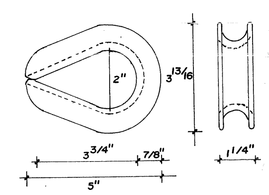
DEL TEMPLADOR



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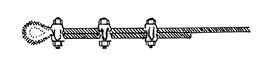

USO CORRECTO
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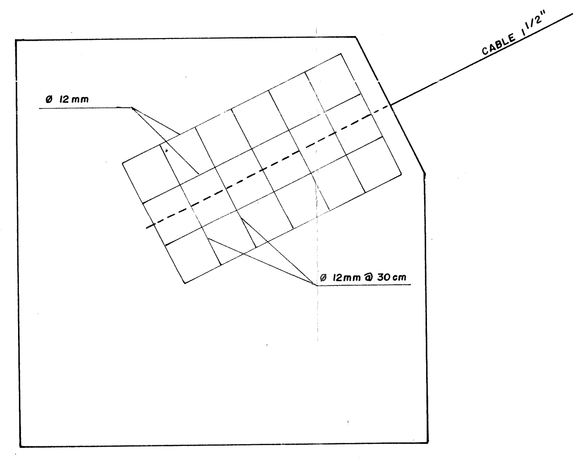

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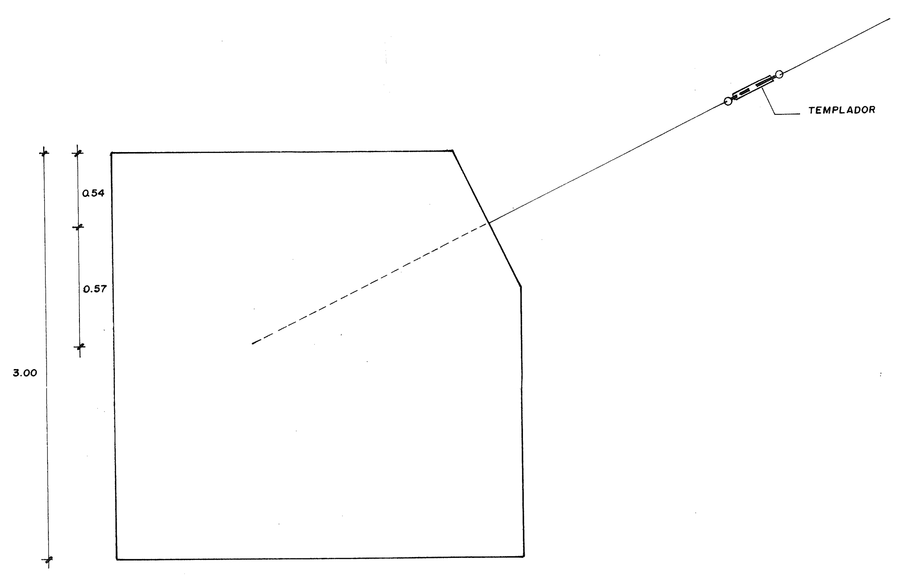

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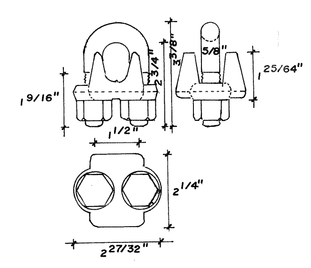

GRILLETES PARA
EL TEMPLADOR

UNIVERSIDAD TECNICA PARTICULAR DE LOJA			
TESIS DE GRADO		INGENIERO CIVIL	
PROYECTO CAMPANA MALACATOS			
ALUMNO	CONTIENE ANCLAJE DEL CABLE		
DIRECTOR	FECHA	ESCALA	Nº 8