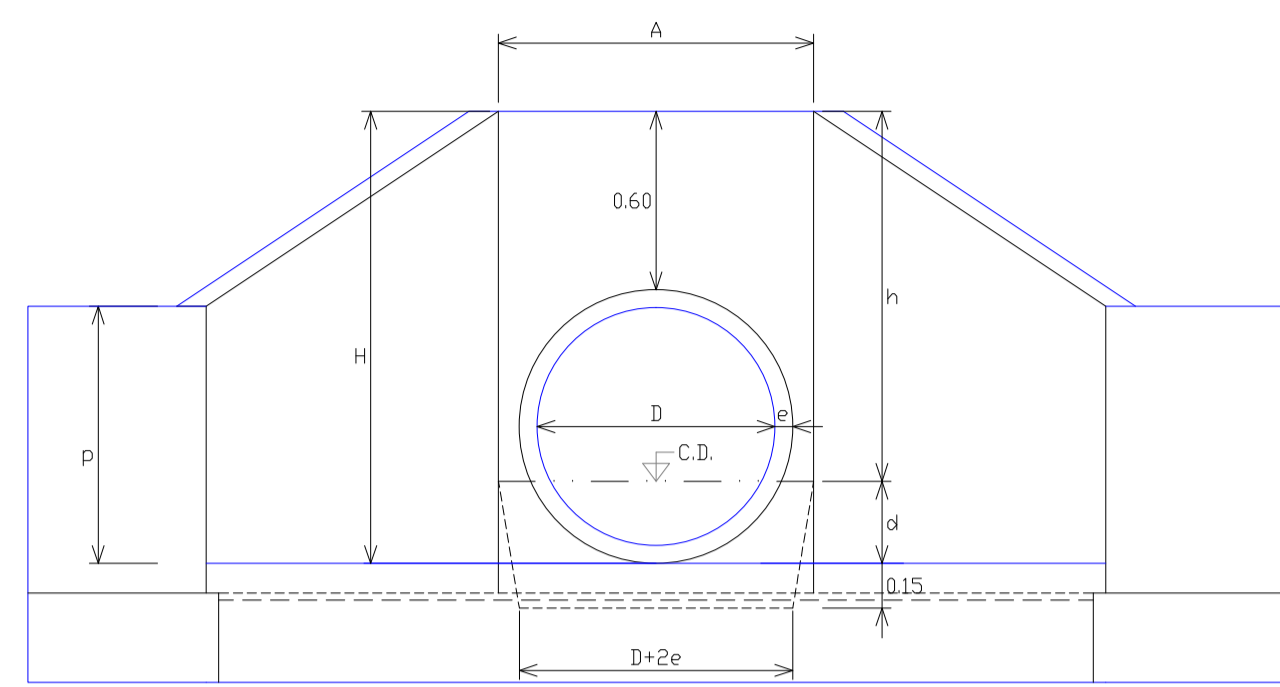
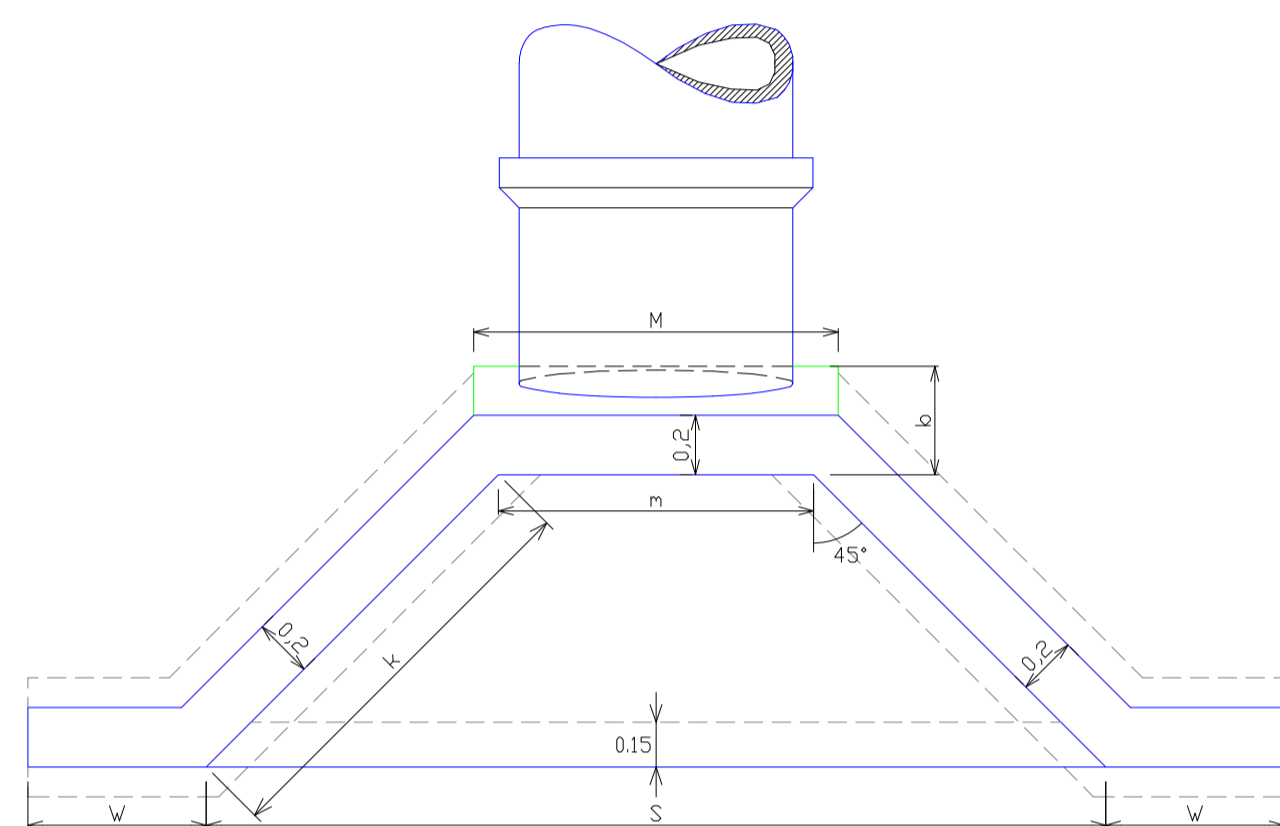


ALCANTARILLA DE CAÑOS SEGUN PLANO H-2993

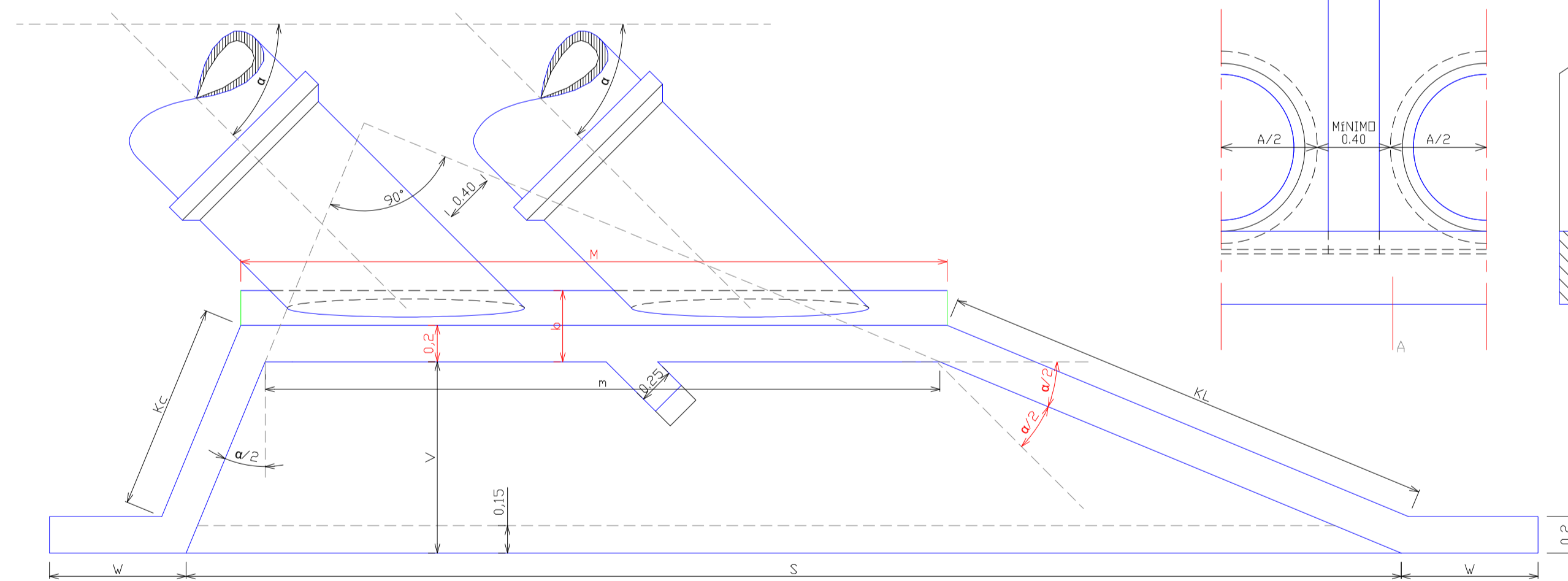
VISTA EMBOCADURA



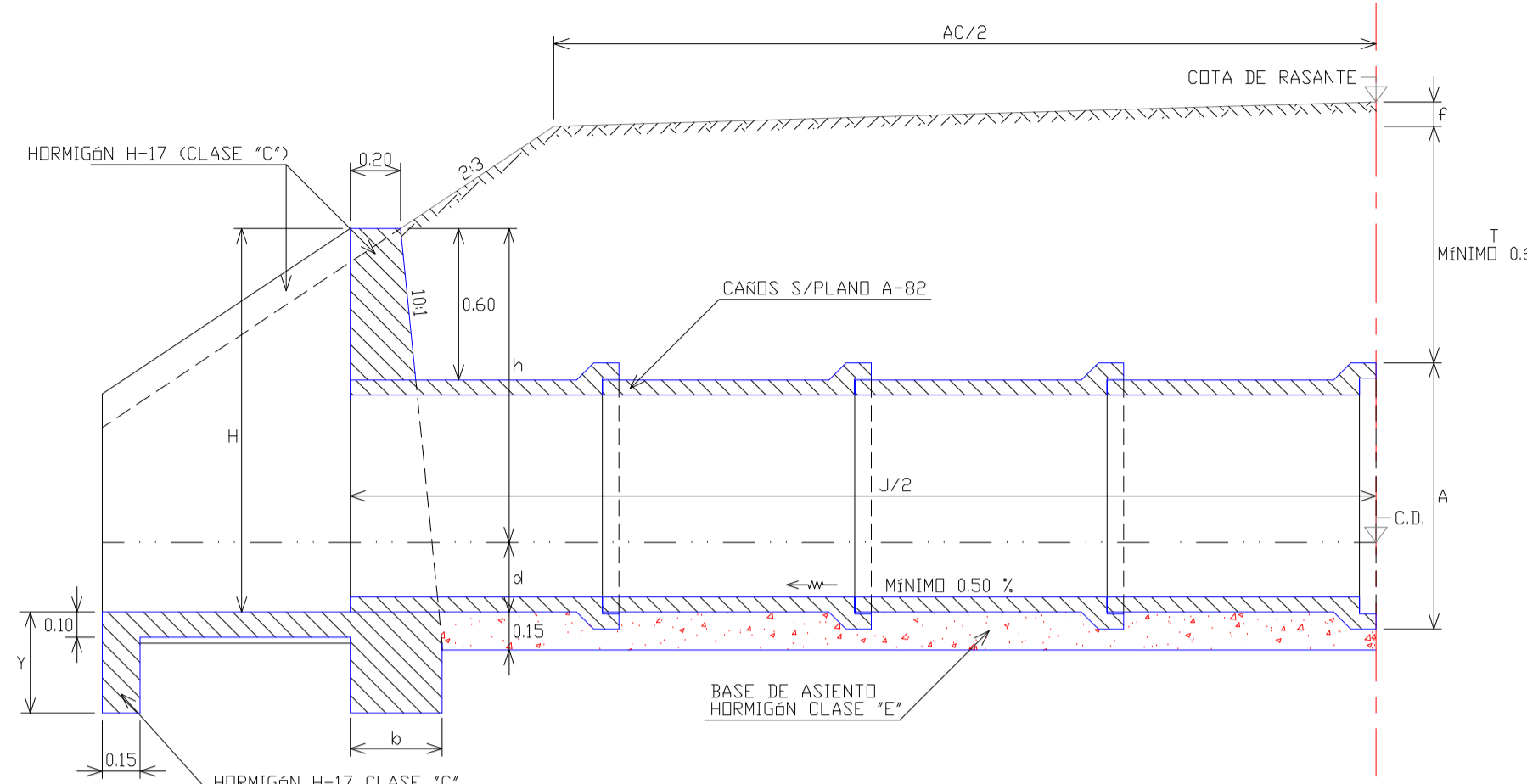
PLANTA EMBOCADURA



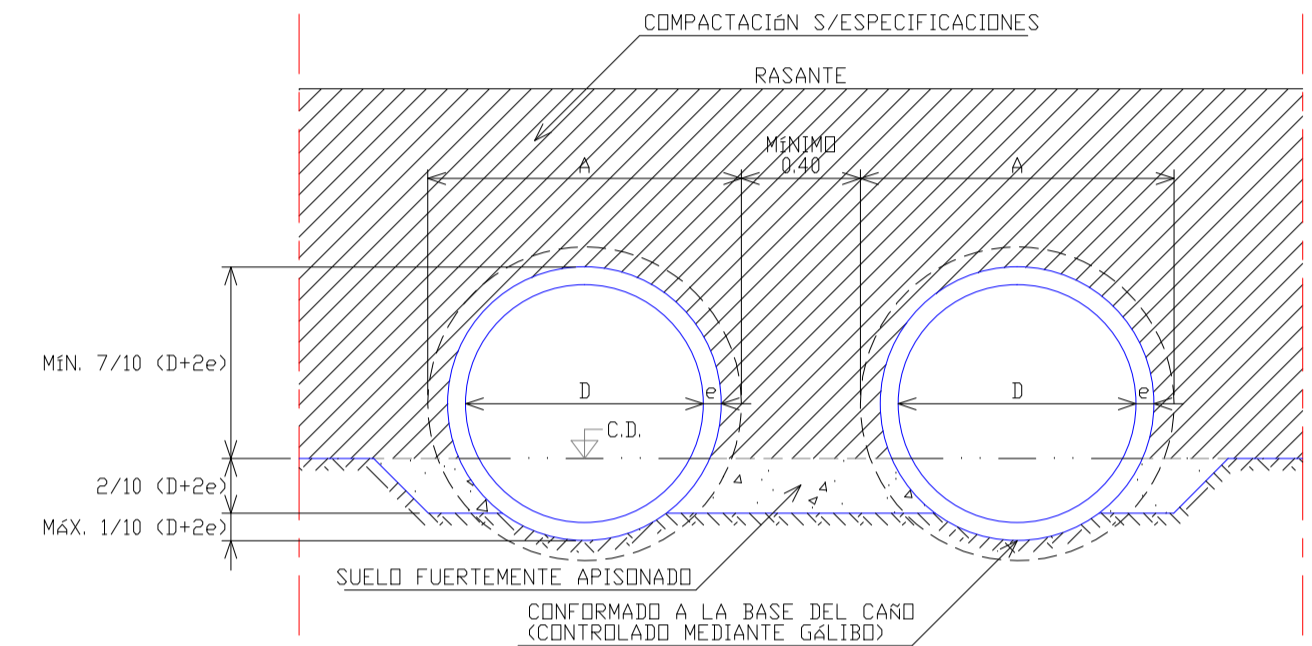
PLANTA EMBOCADURA P/ALCANTARRILLAS ESVIADAS



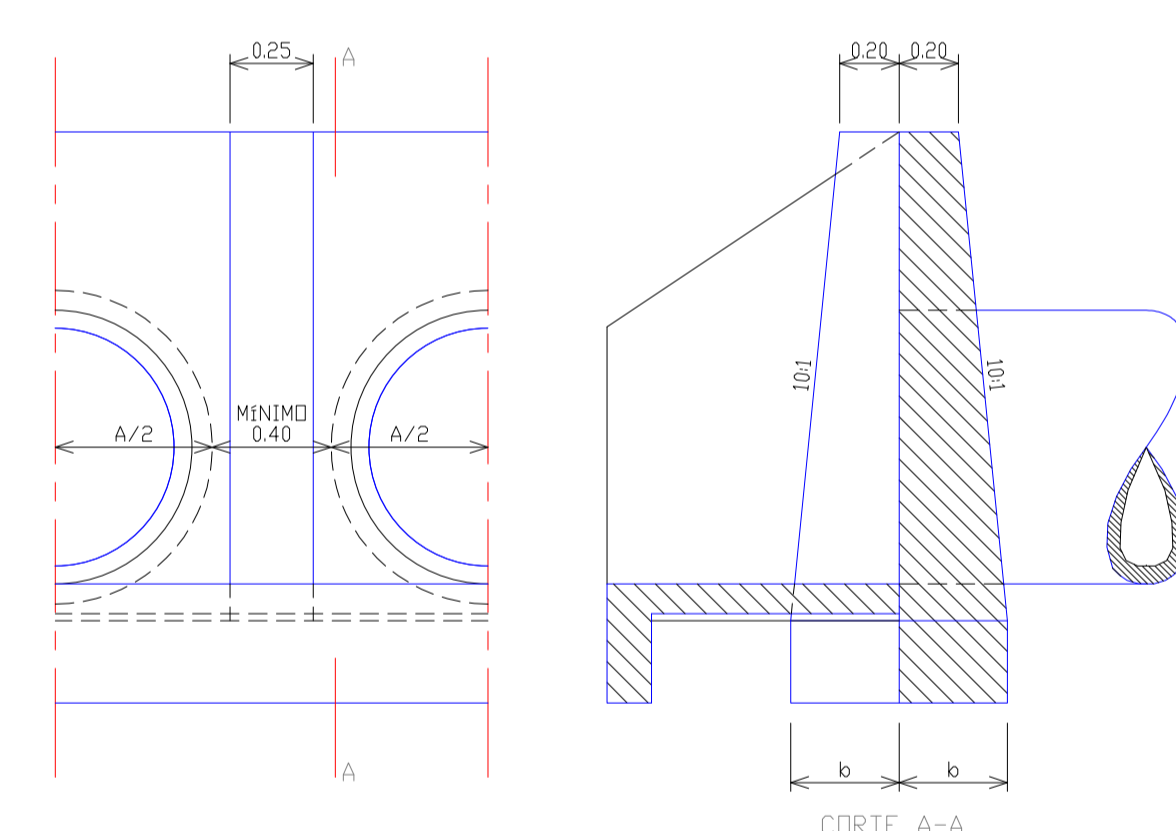
SEMI-CORTE LONGITUDINAL



COLOCACIÓN DE CAÑOS SIN ASIENTO DE HORMIGÓN

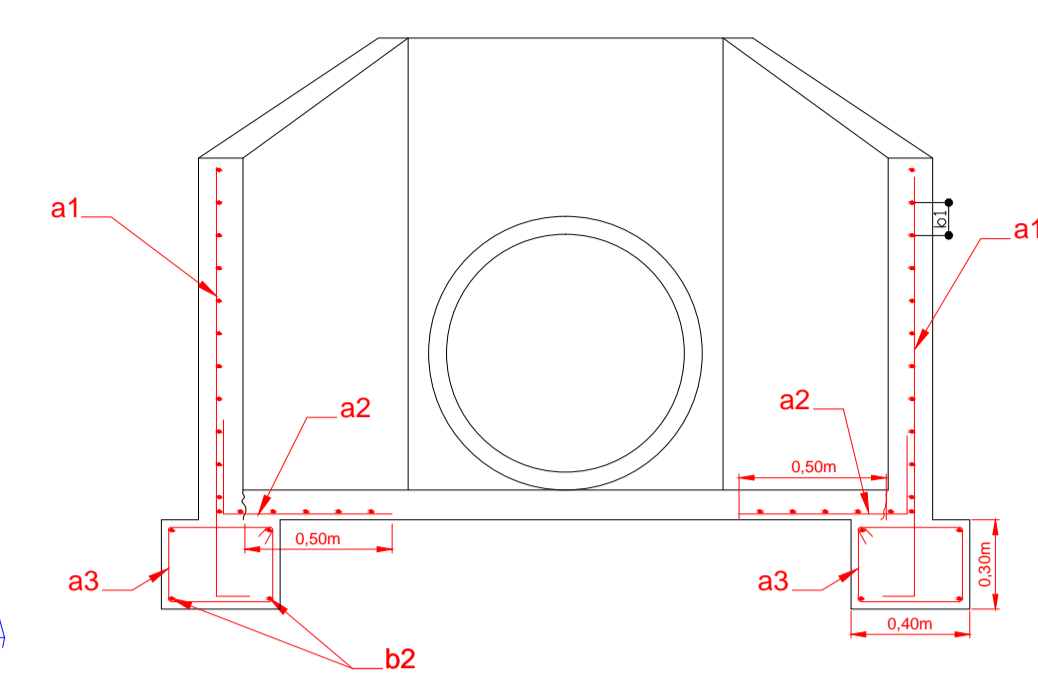


CONTRAFUERTE PARA LUCES MÚLTIPLES

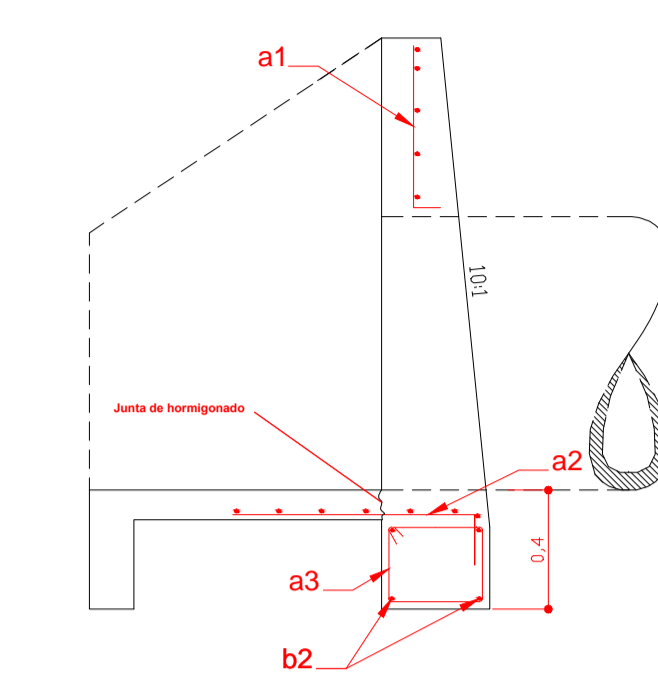


DETALLES DE ARMADO

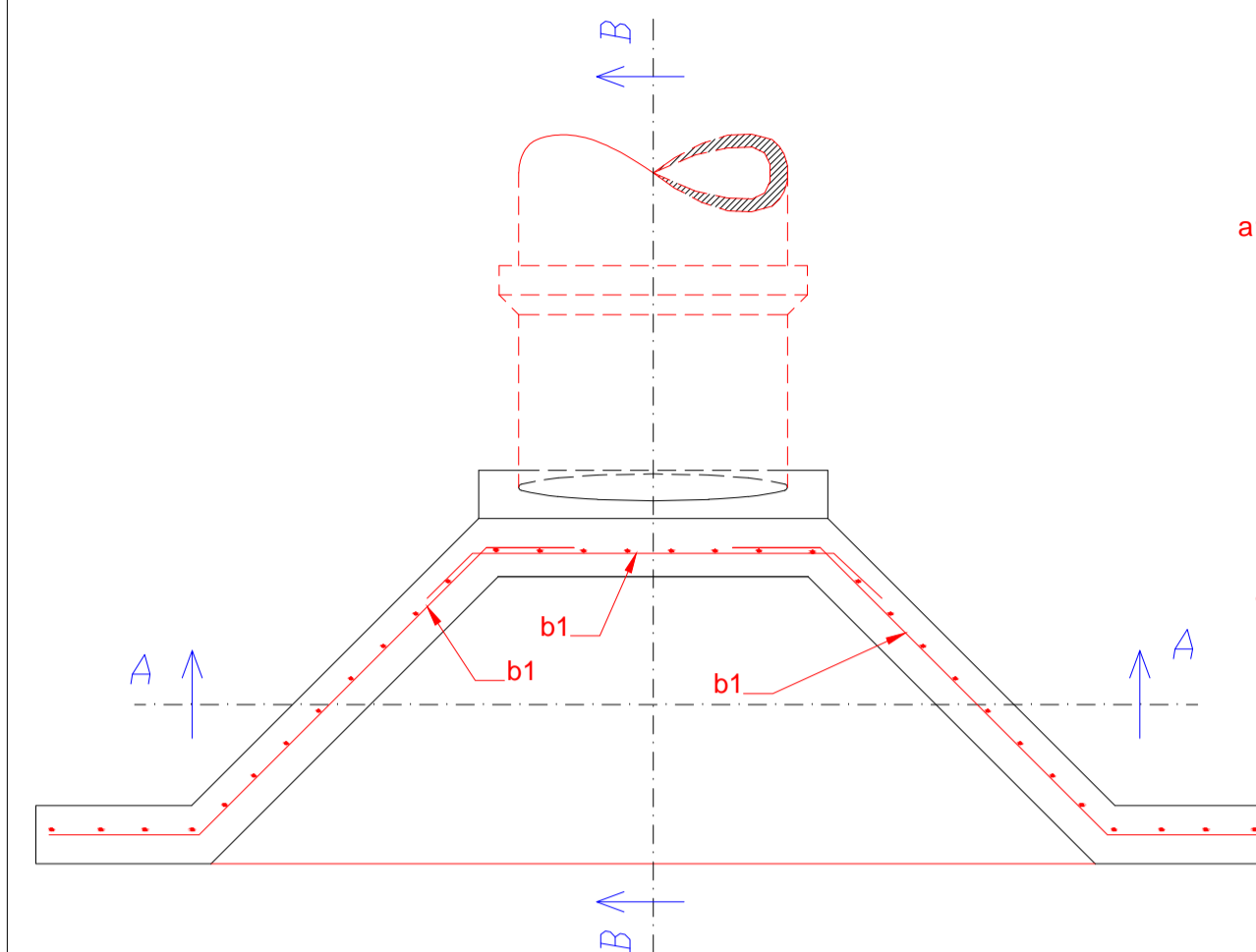
DETALLE DE ARMADURA EN PLATEA Y ALAS



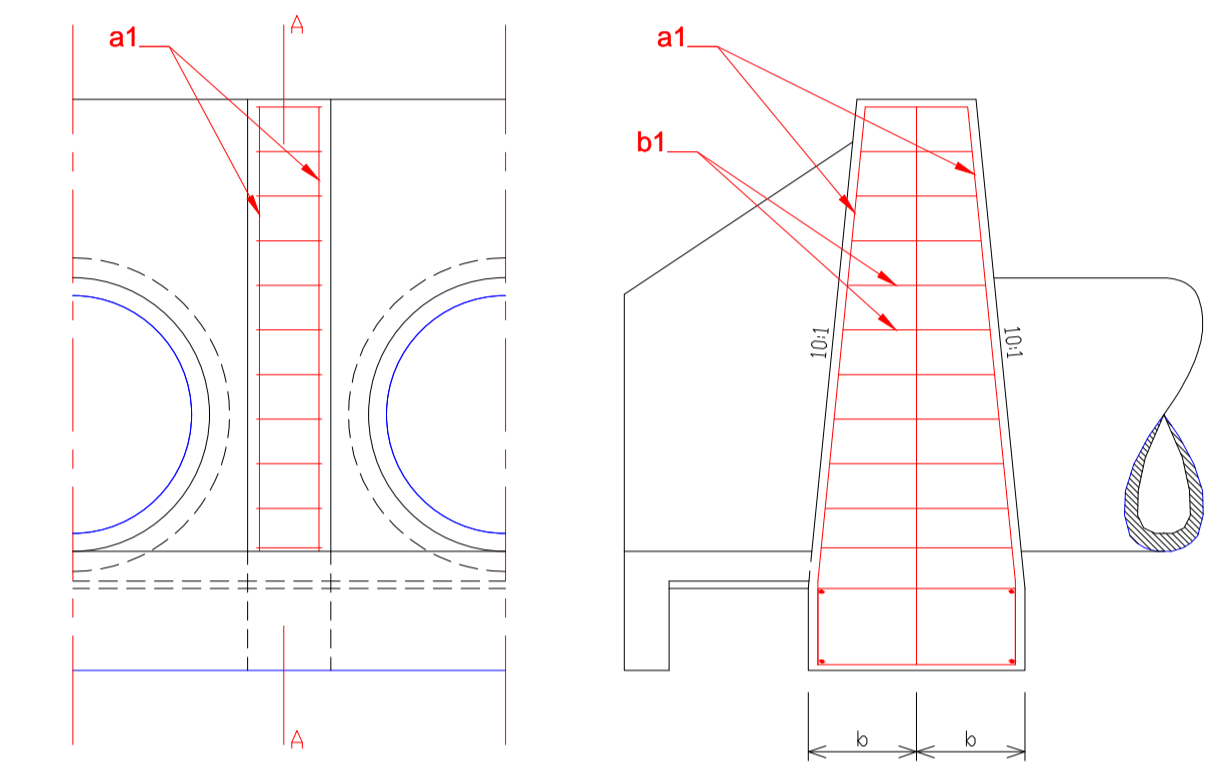
CORTE B-B Zona central



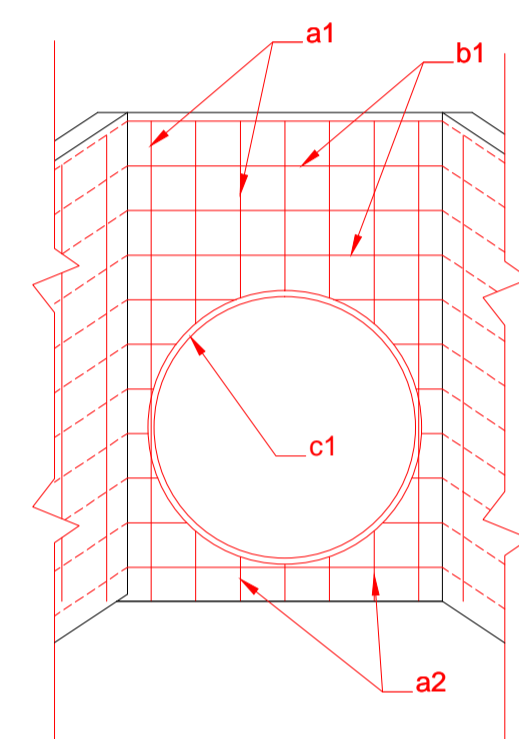
PLANTA EMBOCADURA



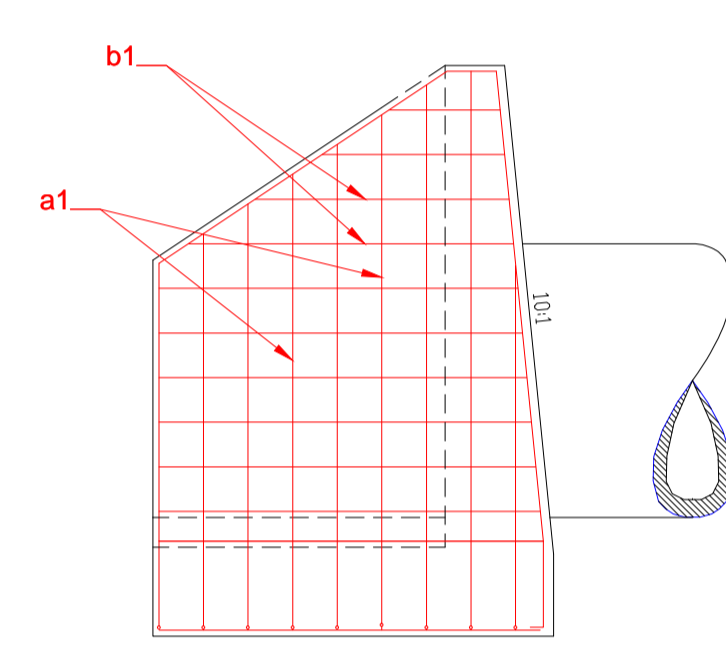
ARMADO CONTRAFUERTE PARA LUCES MÚLTIPLES



DETALLE DE ARMADURA EN MURO DE BOCA



DETALLE DE ARMADURA EN ALAS



PLANILLA DE ARMADO CABECERA

Posicion	Forma	X [cm]	Y [cm]	φ [mm]	sep. [cm]	Cantidad	Longitud total [cm]	Peso [kg]
MURO DE BOCA	a1	20	variable	6	15	m/sep.+1	(X+Y)*Cant.	Long.T.*Dens.
	a2	b+50	30	6	15	m/sep.+1	(X+Y)*Cant.	
	a3	b-5	25	6	25	m/sep.+1	(X+Y)*2*Cant.	
	b1	m+20	30	6	15	60/sep.+1	(X+2*Y)*Cant.	
	b3	m	30	10	---	4	(X+2*Y)*Cant.	
	c1	π*φ	---	12	---	2*n	X*Cant.	
Muro de ala larga	a1	15	variable	6	15	(KL+W)/sep.+1	(2*X+Y)*Cant.	Long.T.*Dens.
	a2	70	30	10	15	KL/sep.+1	(X+Y)*Cant.	
	a3	30	25	6	25	(KL+W)/sep.+1	(X+Y)*2*Cant.	
	b1	variable	30	6	15	H/sep.+1	(X+2*Y)*Cant.	
	b2	KL	30	10	---	4	(X+2*Y)*Cant.	
	Muro de ala corta	a1	15	variable	6	15	(KC+W)/sep.+1	
a2		15	variable	6	15	(KC+W)/sep.+1	(2*X+Y)*Cant.	
a3		70	30	6	15	KC/sep.+1	(X+Y)*Cant.	
a4		30	25	6	25	(KC+W)/sep.+1	(X+Y)*2*Cant.	
b1		variable	30	6	15	H/sep.+1	(X+2*Y)*Cant.	
b2		KC	30	10	---	4	(X+2*Y)*Cant.	
Contrafuerzas	b1	20	variable	6	15	(H/sep.+1)*(n-1)	(X+Y)*2*Cant.	Long.T.*Dens.
	a1	10	H-40	10	---	6*(n-1)	(X+Y)*Cant.	

DATOS A FIJAR EN EL PROYECTO
φ, j y n

DIMENSIONES

ALAS

$H = \phi + 2 \times e + \text{Trinimo}$ ALA LARGA
 $P = H/2 + 4/30$ KL = $V / \text{sen}^2/2$
 $V = 3/2 \times (H-P)$ ALA CORTA
 $W = 0.75 \times \phi$ KC = $V / \text{cos}^2/2$

MURO DE FRENTE

$n = (nx+A+(n-1)x0,4)/\text{sen}^2$
 $M = n + 0.20 \times \text{tg}^2/4$

PLATEA

$S = n + KL \times \text{cos}^2/2 + KC \times \text{sen}^2/2$

DIENTE

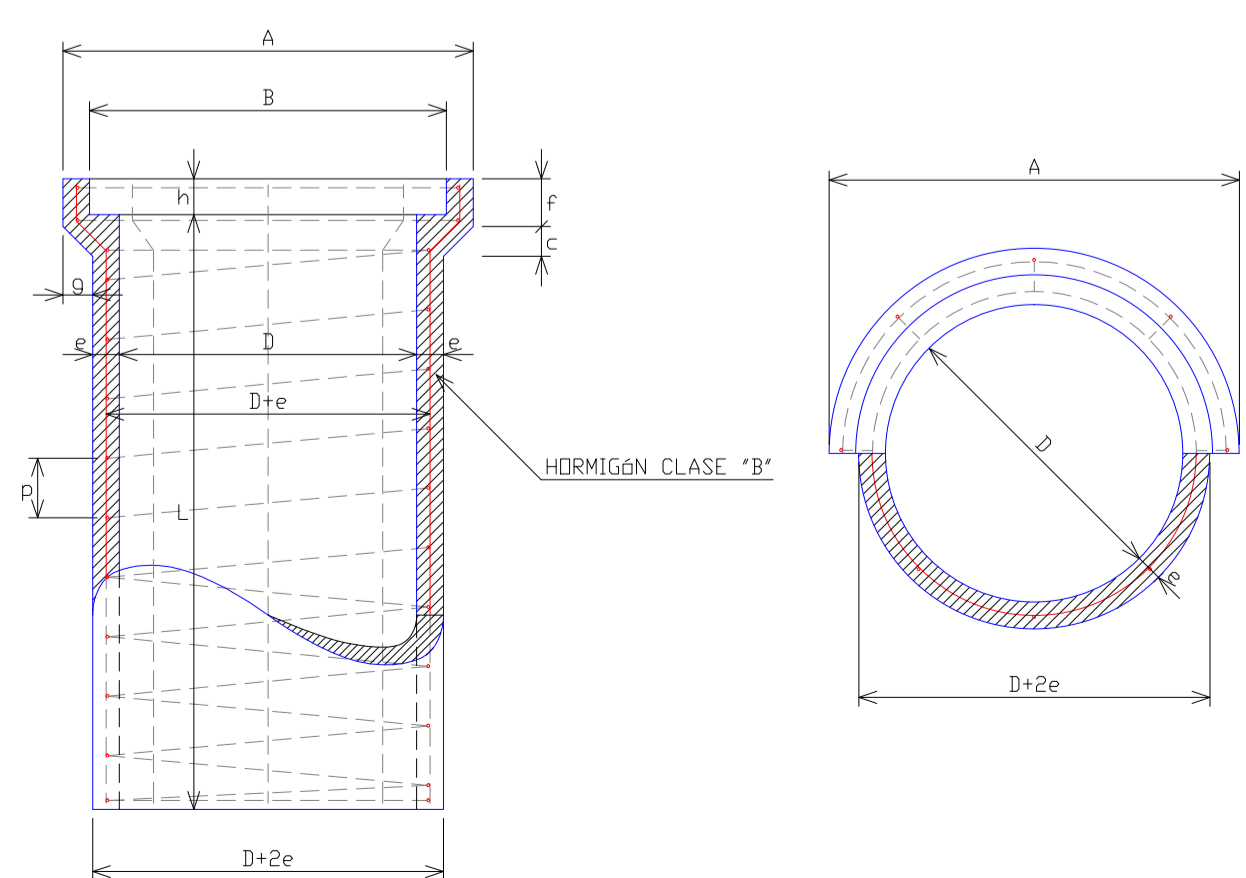
AGUAS ARRIBA Y=0,50m
 AGUAS ABAJO Y=1,00m (en suelo rocoso se podra reducir a 0,50m)

NOTA

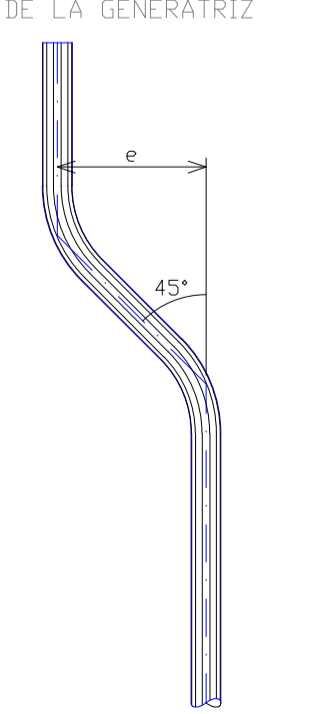
LOS MURDS, ALAS Y PLATEAS SERÁN EJECUTADOS CON HORMIGÓN ARMADO CLASE C.

CAÑOS DE HORMIGÓN SEGUN PLANO A-82

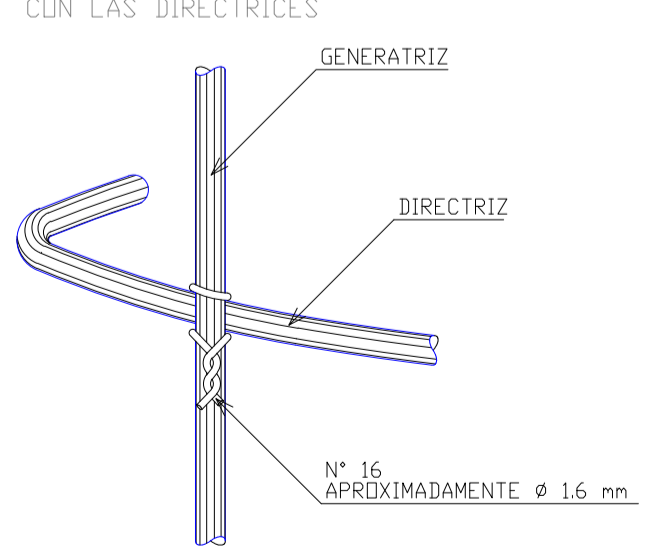
ESCALA 1:10



EXTREMIDAD SUPERIOR DE LA GENERATRIZ



ARMADURA DE LAS GENERATRICES CON LAS DIRECTRICES



DIAMETRO	ESPESES PARED	LARGO OTIL	LONG.	ARMADURAS	PESO TOTAL ARMAD.	DIMENSIONES								VOLUMEN DE HORM.
D (m)	e (m)	L (m)	φ (mm)	φ (mm)	P (m)	DIAM. EXTER. (φg)	A (m)	B (m)	C (m)	F (m)	G (m)	H (m)	h (m)	(m³)
0.40	0.040	1.00	7x8	6	0.10	0.452	7.580	0.570	0.490	0.045	0.080	0.045	0.060	0.0608
0.50	0.045	1.00	8x8	6	0.10	0.557	8.590	0.690	0.600	0.050	0.080	0.050	0.060	0.0847
0.60	0.050	1.00	9x8	8	0.11	0.668	14.820	0.810	0.710	0.055	0.085	0.055	0.060	0.1123
0.80	0.060	1.00	12x8	10	0.11	0.875	27.763	1.055	0.935	0.068	0.100	0.068	0.065	0.1780
1.00	0.075	1.00	14x8	12	0.11	1.092	46.722	1.320	1.170	0.080	0.115	0.085	0.075	0.2780

CARACTERISTICAS DEL HORMIGÓN
 HORMIGÓN 14.5:3 POR VOLUMEN, CON UN MINIMO DE 400 kg DE CEMENTO PORTLAND POR m³.
 DE 5 A 15 mm PARA CAÑOS DE 0.40 A 0.60 m DE DIAMETRO.
 DE 5 A 20 mm PARA CAÑOS DE 0.80 A 1.00 m DE DIAMETRO.
 ES COPIA DEL PLANO A-82 DE LA D.N.V. ADAPTADO EN TAMARCO