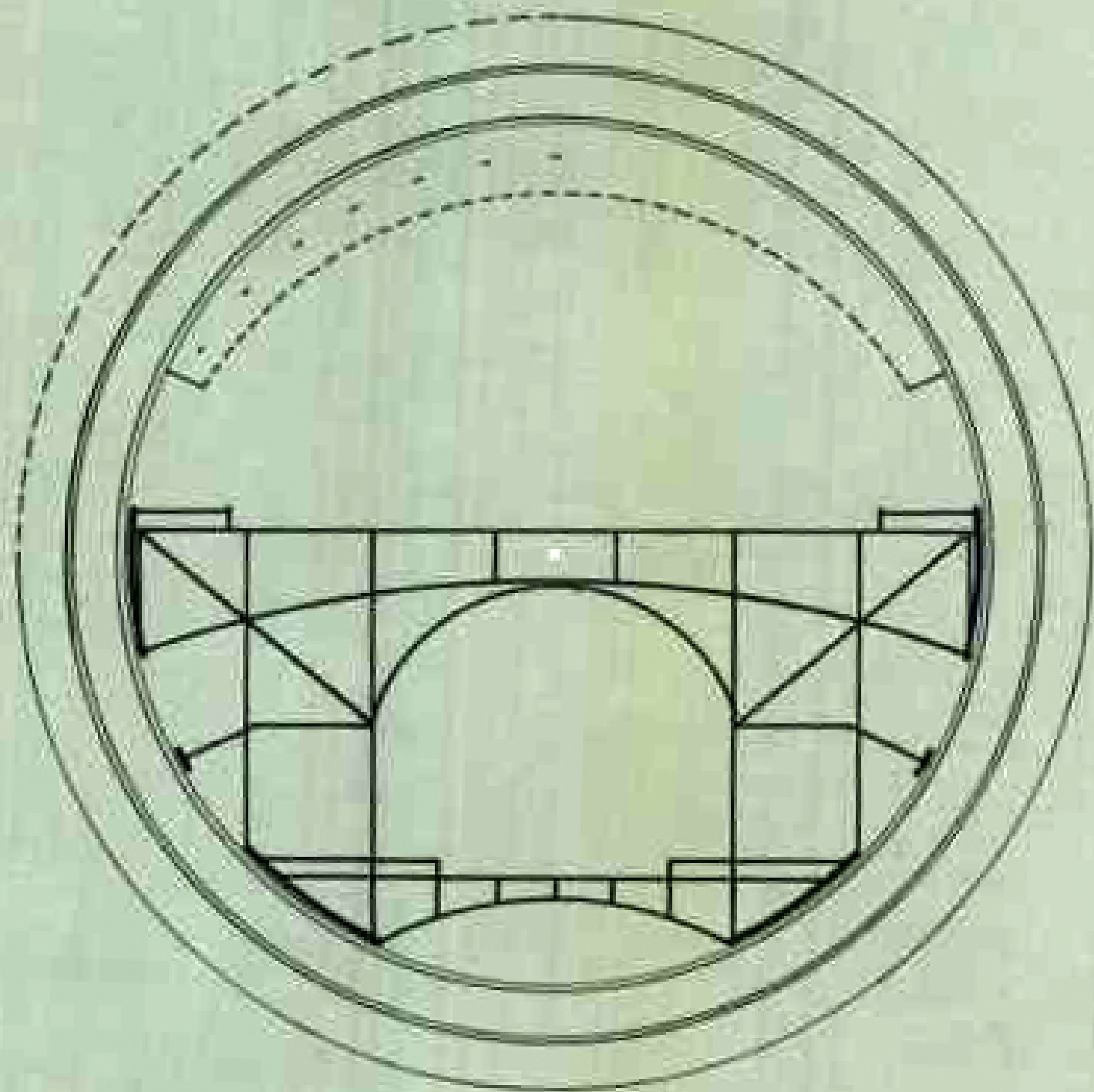
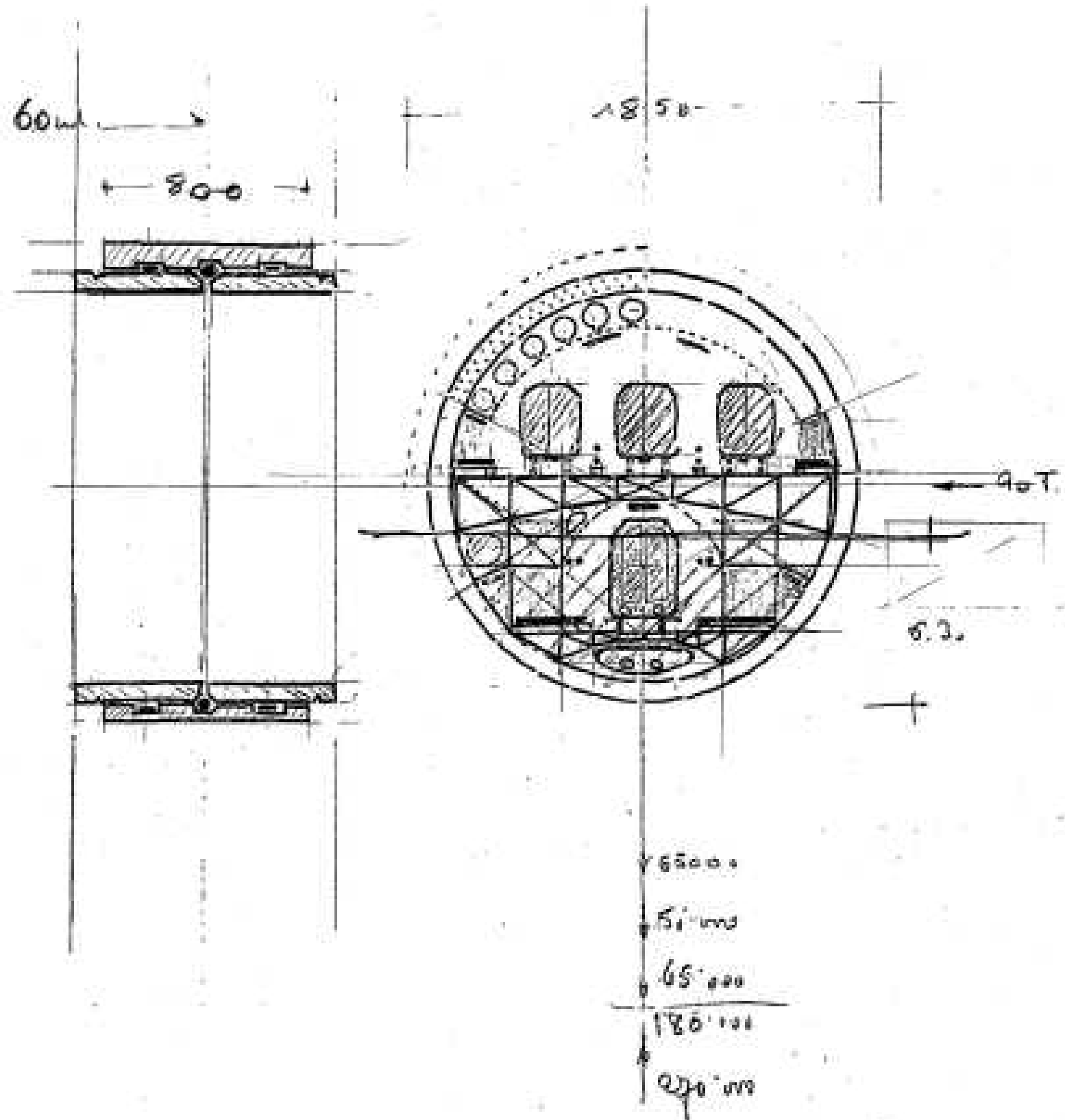
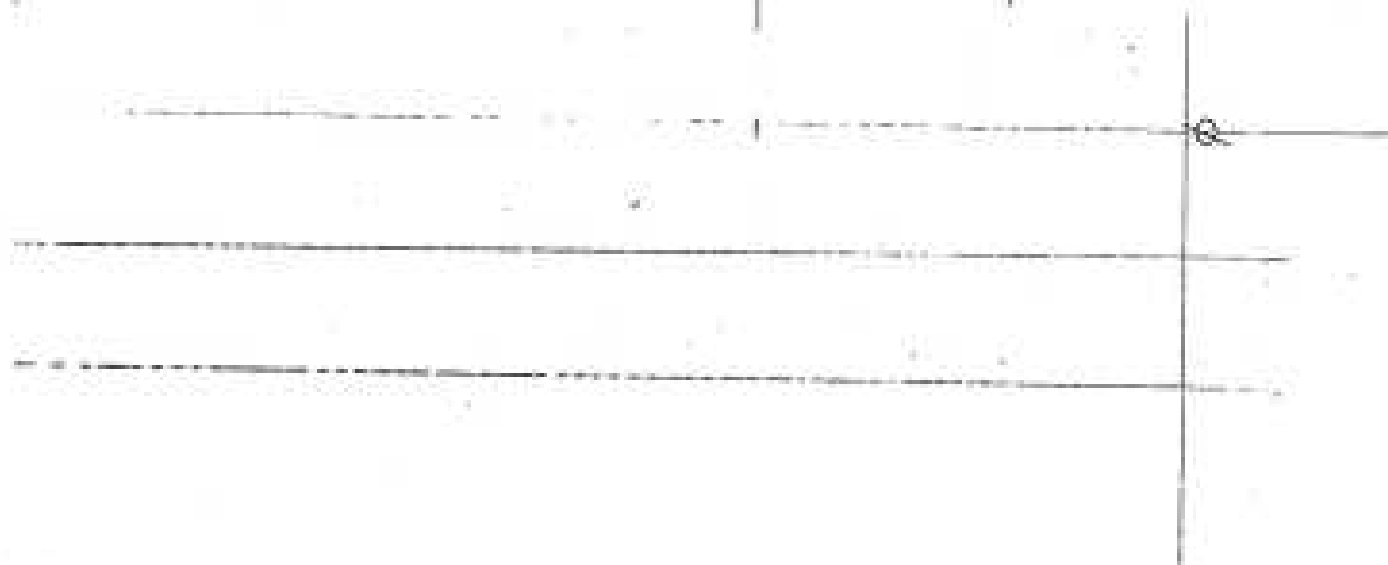
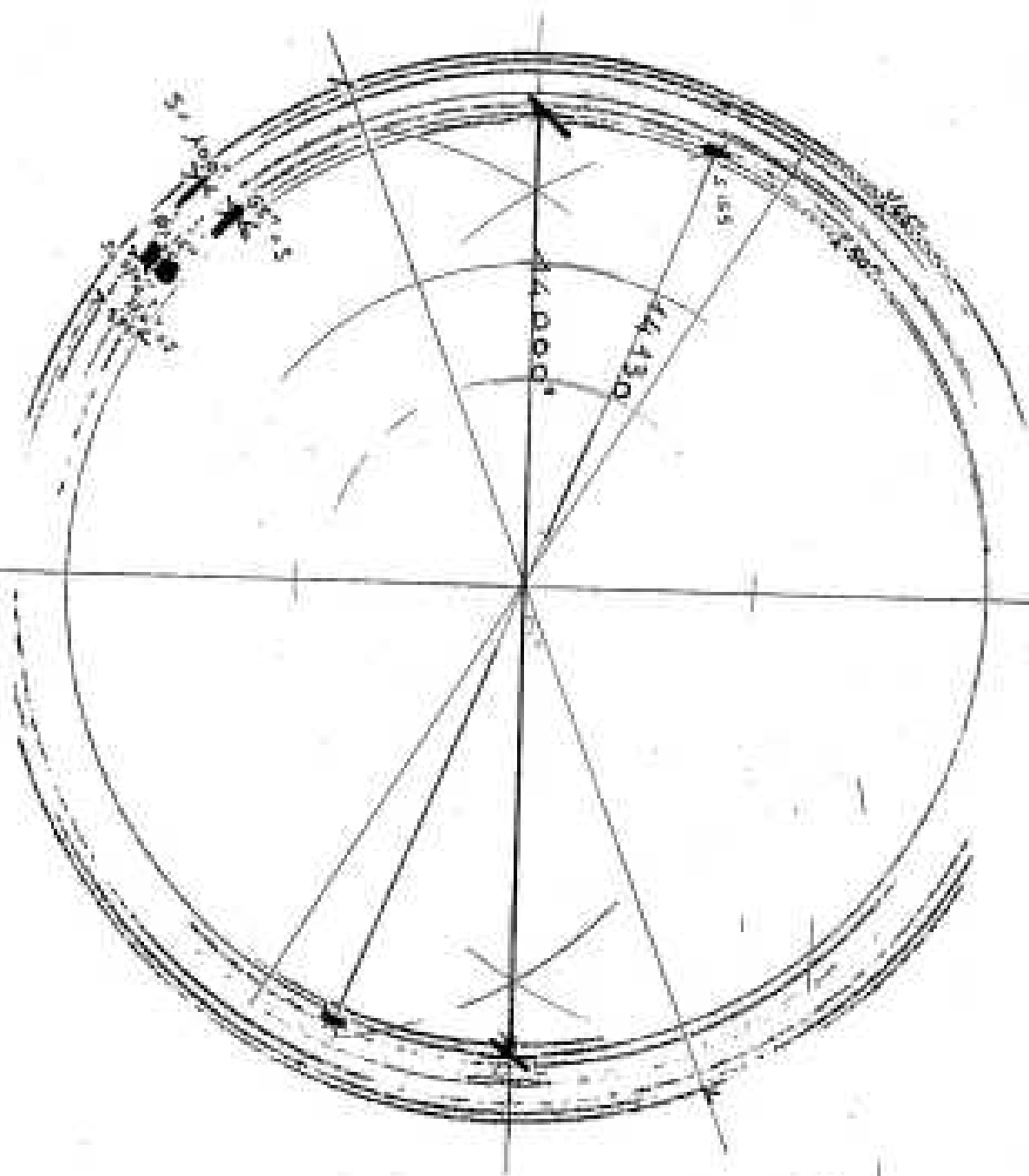




C C

1/200





Nov

11

⑤

10 m/2

10 4 m
Cable is single
head for all

Φ 14,00

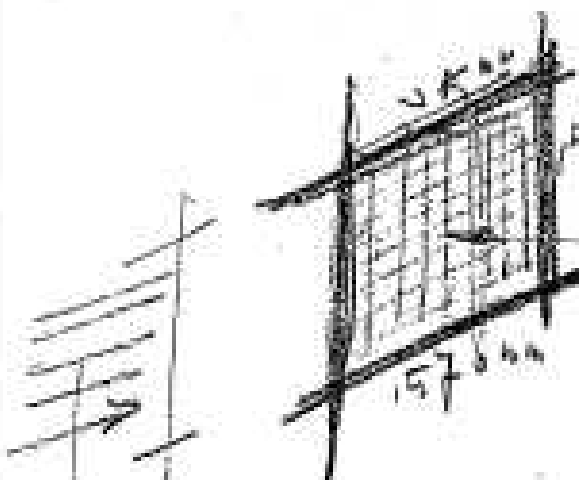


420 m/2
50000 m/2

~ 53000 m/2

from 1323000 m

120 coordinates not



0.0004 m/2

1454900 mm? = 1207.80

1207.80 = 1 m/2000 0.19 5190 m/2



10 m/2
from 15

1.28 x 1207.80 = 155818.40

1/2 7535
1/2 20000
1/2 90000

3767.60
20 000.00
65 000.00
92586.60

27535

① (14,00 + 157) x 227 m + 4000 m

② (14,80 x 157) x 227 m + 15000 m + 7.20 x 157 x 143 + 4 m x 12000 m

③ (14,00 x 157 m) x 467 m + 80000 m + 1400 x 157 x 43 + 4 m x 12000 m

spun concrete column is minimum when

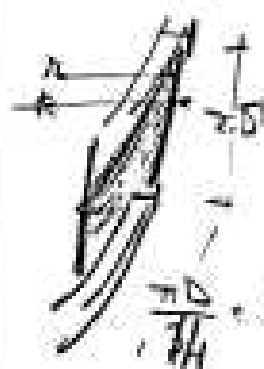
Eq. pg. 168

$$S = \frac{A_{st}(15+25) \times D_{min}}{2 \times 55} \left[1 + \sqrt{1 + \frac{55 \times 15 \times (15+25)}{5.175}} \right]$$

$$= \frac{30 \times 14 \times 5.175}{28000} \left[1 + \sqrt{1 + \frac{(1+2750) \times 15 \times 5.175}{5.175}} \right]$$

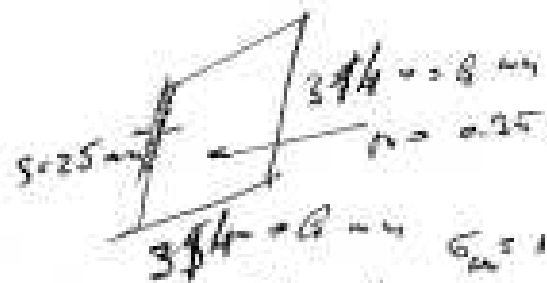
$$= \frac{42000 \times 5.175}{22000} (1 + 426000000)$$

$$= \frac{2171100 \times 426000000}{220000} = 5194$$



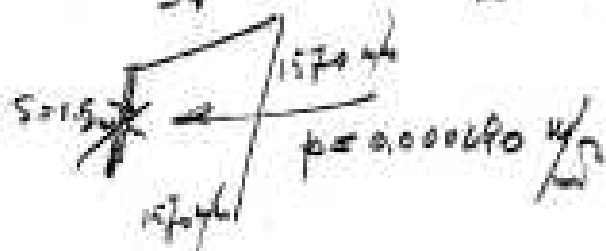
$$\frac{14000}{13985} = 1$$

$$\sigma_{st} \geq \frac{0.184 (2100 \times 14 \times 2.5)}{13985 \times 15} = 206 \text{ } \frac{\text{N}}{\text{mm}^2}$$



$$\sigma_{st} \geq \frac{0.15 \times 0.25 \times 1140}{25} = 1.878, 10$$

$$\sigma_{st} \geq 1.878, 10 \text{ } \frac{\text{N}}{\text{mm}^2}$$



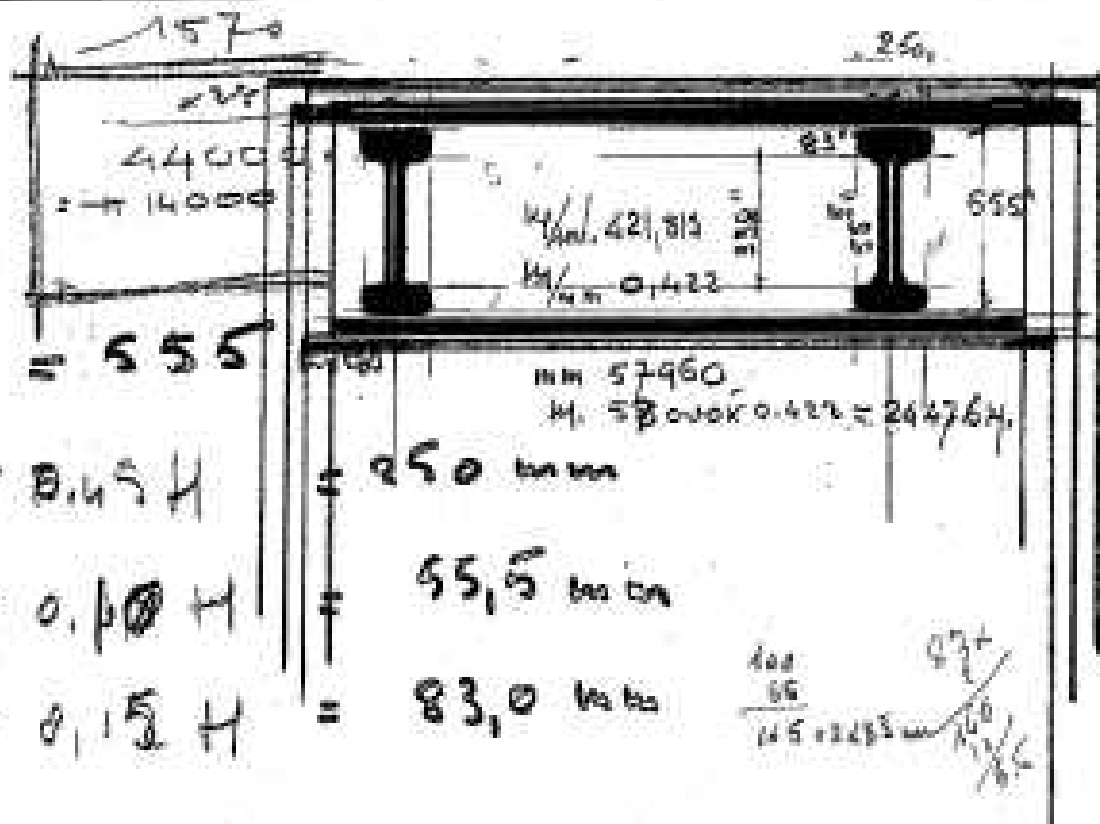
$$\sigma_{st} \geq \frac{0.15 \times 0.35 \times 1570}{35} = 105, 23$$

$$\sigma_{st} \geq \frac{0.15 \times 0.00001570}{15} = 0.80$$

$$\frac{181.17}{12}$$

$$\sigma_{st} \geq 15$$

W



$$H = 555$$

$$B = 0.45 H = 250 \text{ mm}$$

$$d = 0.10 H = 55.5 \text{ mm}$$

$$t = 0.15 H = 83.0 \text{ mm}$$

$$\frac{100}{65} = 1.538$$

$$a = B - d = 0.45 H - 0.10 H = 0.35 H = 194 \text{ mm}$$

$$h = H - 2t = H - 0.30 H = 0.70 H = 388 \text{ mm}$$

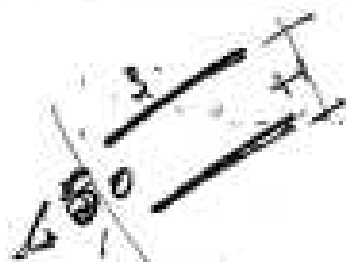
$$W = \frac{0.45 H^4 - 0.35 H \times (0.70 H)^3}{6 H}$$

$$= 0.075 H^3 - 0.058 H \times 0.343 H^3 =$$

$$= 0.068 H^3$$

$$H = \sqrt[3]{\frac{81550000}{0.068}} = \sqrt[3]{17650000} = 555$$

$$W = \sqrt{\frac{140 \dots \dots}{12 \text{ kN/m}^2}} = \sqrt{1165 \dots \dots}$$



$$\frac{1,000}{0,108}$$

$$W = 817,500 \text{ mm}^3 + \frac{1}{3} (0,35 - 0,322 \times 0,88) \times 0,842$$

$$H = \sqrt[3]{\frac{817,500}{0,05}} = \sqrt[3]{1265000} = 10,814$$



$$J = 0,358 H^4 - 0,322 H (0,842 H)^3$$

$$B = 0,358 H$$

$$d = 0,036 H$$

$$t = 0,054 H$$

$$W = 0,358 H^4 - 0,322 H (0,842 H)^3$$

$$= 0,05 H^3 - 0,05 \times 0,74 H^2 = 0,05 H^3 - 0,0355 H^2$$

$$b = B - d = 0,358 H - 0,036 H = 0,322 H$$

$$h = H - 2t = H - 2 \times 0,054 H = 0,892 H$$

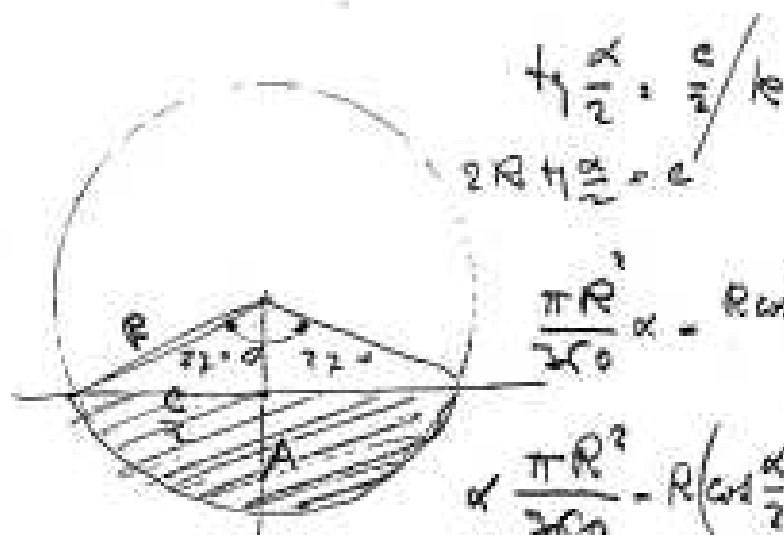
$$H = \sqrt[3]{\frac{817,500}{0,0355}} = \sqrt[3]{2299999} = 13,100 \text{ mm}$$

$$H = \sqrt[3]{\frac{817,500}{0,025}} = \sqrt[3]{3270000} = 14,840 \text{ mm}$$

$$0,03 H^3 - 0,05 H + 817,500 \text{ mm} = 0$$

$$H = \frac{0,05}{0,10} \sqrt[3]{\frac{0,0075 - 163,500 \text{ mm}}{0,10}} = 0,005 - 12786$$

$$\frac{1 + \cos \alpha}{2} = \cos^2 \frac{\alpha}{2}$$



$$\frac{1}{2} \pi R^2 = \frac{\pi}{2} R^2$$

$$2R + \frac{A}{2} = c$$

$$\frac{\pi R^2}{2} \alpha = R \cos \frac{\alpha}{2} \times \frac{c}{4} = A$$

$$\alpha \frac{\pi R^2}{2} = R \left(\cos \frac{\alpha}{2} + \frac{1}{2} \frac{\alpha}{2} \right) = A$$

$$\frac{1}{2} \frac{\alpha}{2} = \frac{R \alpha}{1 + \cos \alpha}$$

$$\frac{\alpha}{2} \pi R^2 = R \left(\cos \frac{\alpha}{2} + \frac{1}{2} \frac{\alpha}{2} \frac{R \alpha}{1 + \cos \alpha} \right) = A$$

$$\frac{\alpha}{2} \pi R^2 = R \left(\frac{\cos \frac{\alpha}{2} (1 + \cos \alpha) + \frac{1}{2} \alpha}{1 + \cos \alpha} \right) = A$$

$$0,009925 = 18 \left(\cos \frac{\alpha}{2} + \frac{1}{2} \frac{\alpha}{2} \right) = 270' \text{ mm}$$

$$= (20 \frac{\alpha}{2} + 1 \frac{\alpha^2}{4} + \frac{1}{2} \alpha)$$

$$\frac{270' \text{ mm}}{18} = 15$$

$$18,00 \times A = 270' \text{ mm} \quad 0,0 \quad 665$$

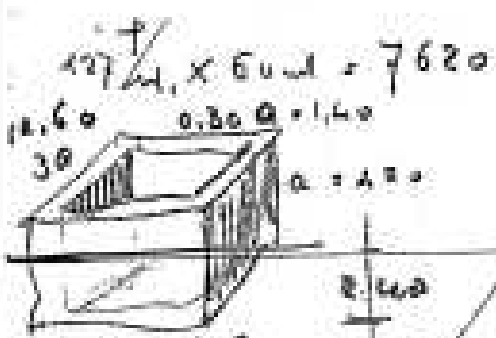
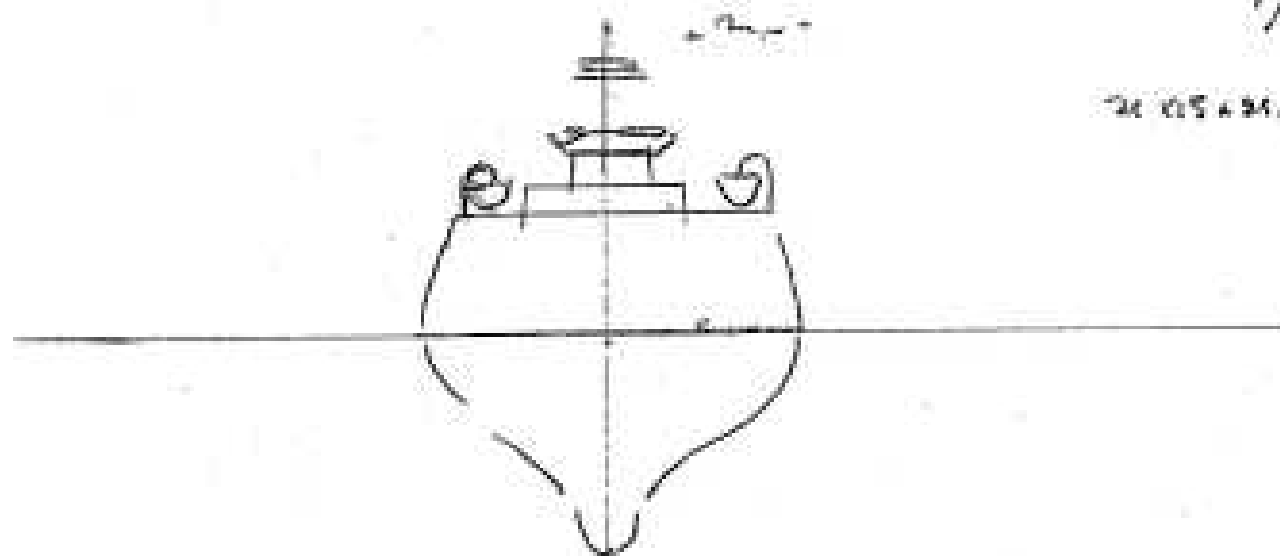
$$A = 15 \text{ mm}$$

$$\alpha = 54^\circ$$

$$c = 16,30$$

$$0,9080 \times 18$$

1/200

$$24 \times 15 = 34, 54, 7, 1$$


$127 \frac{1}{2} \times 60 \text{ ml} = 7620$
 $1.60 \times 0.30 \text{ g} = 1.40$

Diagram of a rectangular box with dimensions 12.60, 30, 0.30, and 0.20. The top surface is labeled $0.30 \times 0.20 = 0.06$. The front face is labeled $12.60 \times 30 = 378$. The side face is labeled $30 \times 0.20 = 6$. The total surface area is labeled $378 + 0.06 + 6 = 384.06$.

~~$$2a = 8.6$$

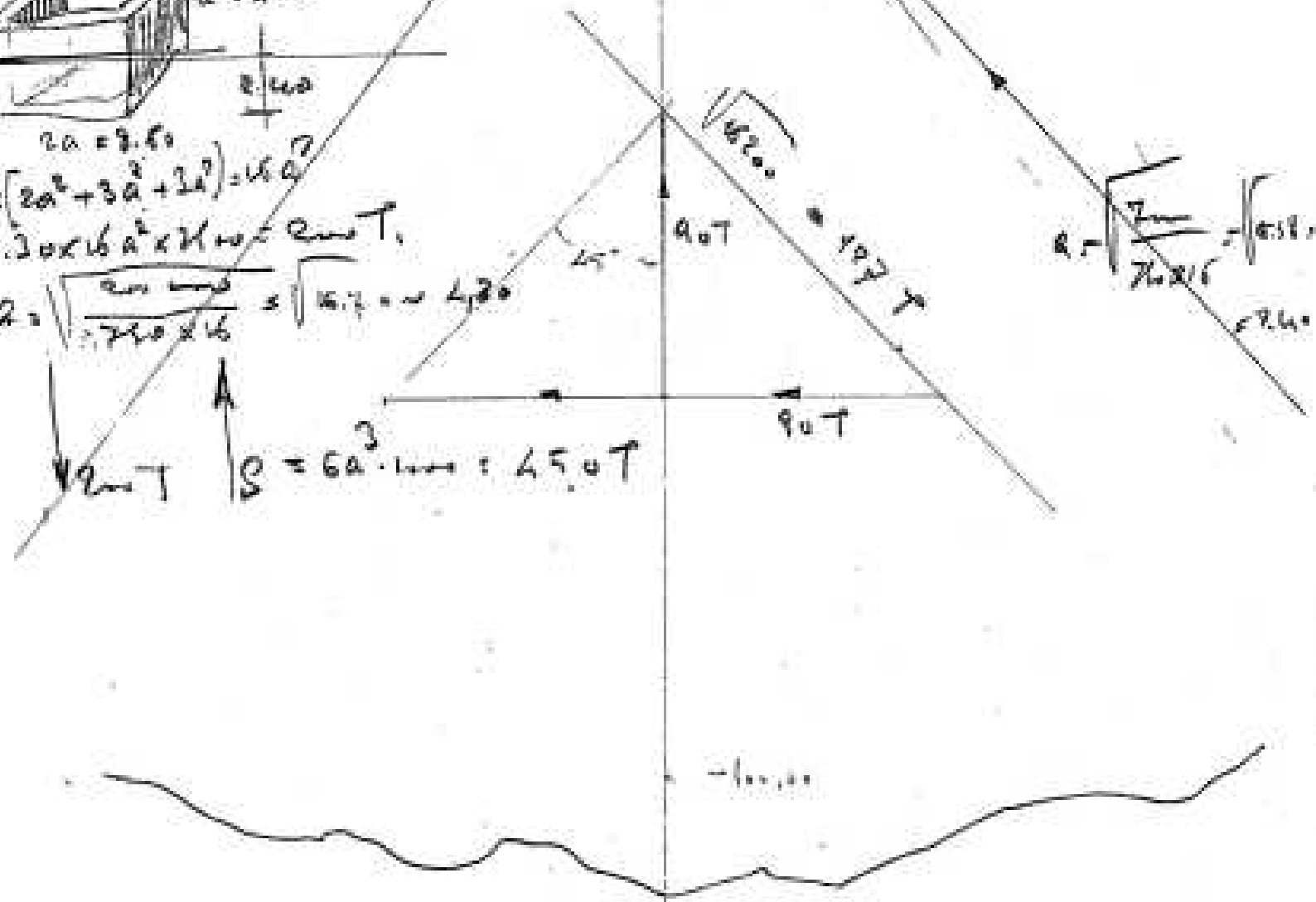
$$2(2a^2 + 3a^2 + 3a^2) = 16a^2$$

$$0.30 \times 16a^2 \times 2400 = 2mT$$~~

$$2 \sqrt{2a^2 + 3a^2 + 3a^2} = 16a^2$$

$$0.20 \times 10^{-6} \text{ A}^2 \times 10 \text{ m} / \text{Coulomb T}$$

$$Q = \sqrt{\frac{200000}{2 \times 200 \times 16}} = \sqrt{15.6} \approx 4,20$$



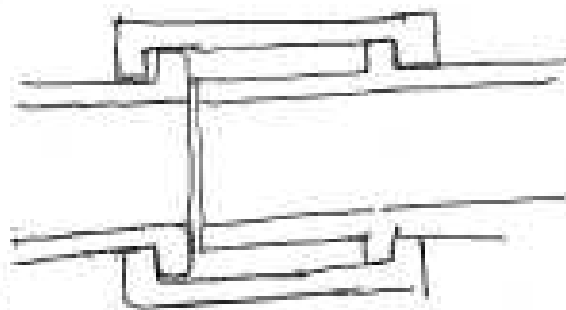
Qo I
Country made

Country music

~~$$R = \sqrt{\frac{Z_{in}}{R_0 \times 16}} = \sqrt{6.51} = 2.55 \Omega$$~~

$$B = 62.3 \text{ mT} = 6.23 \times 10^{-2} \text{ T}$$

1/500

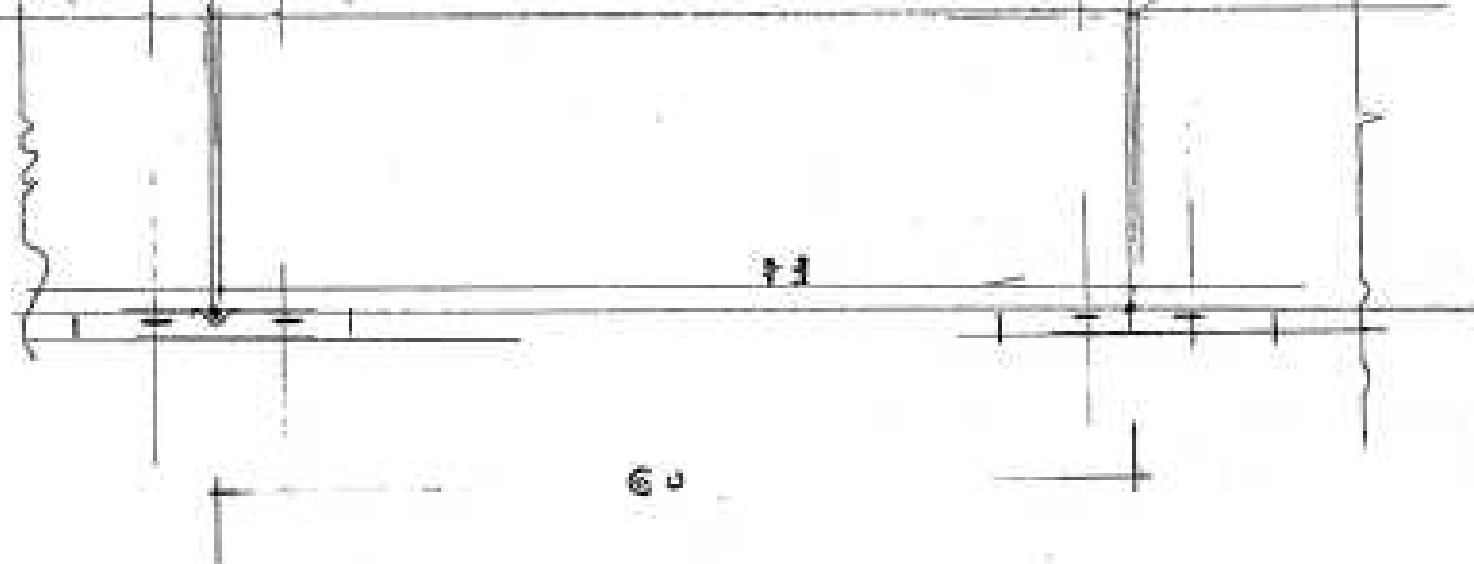


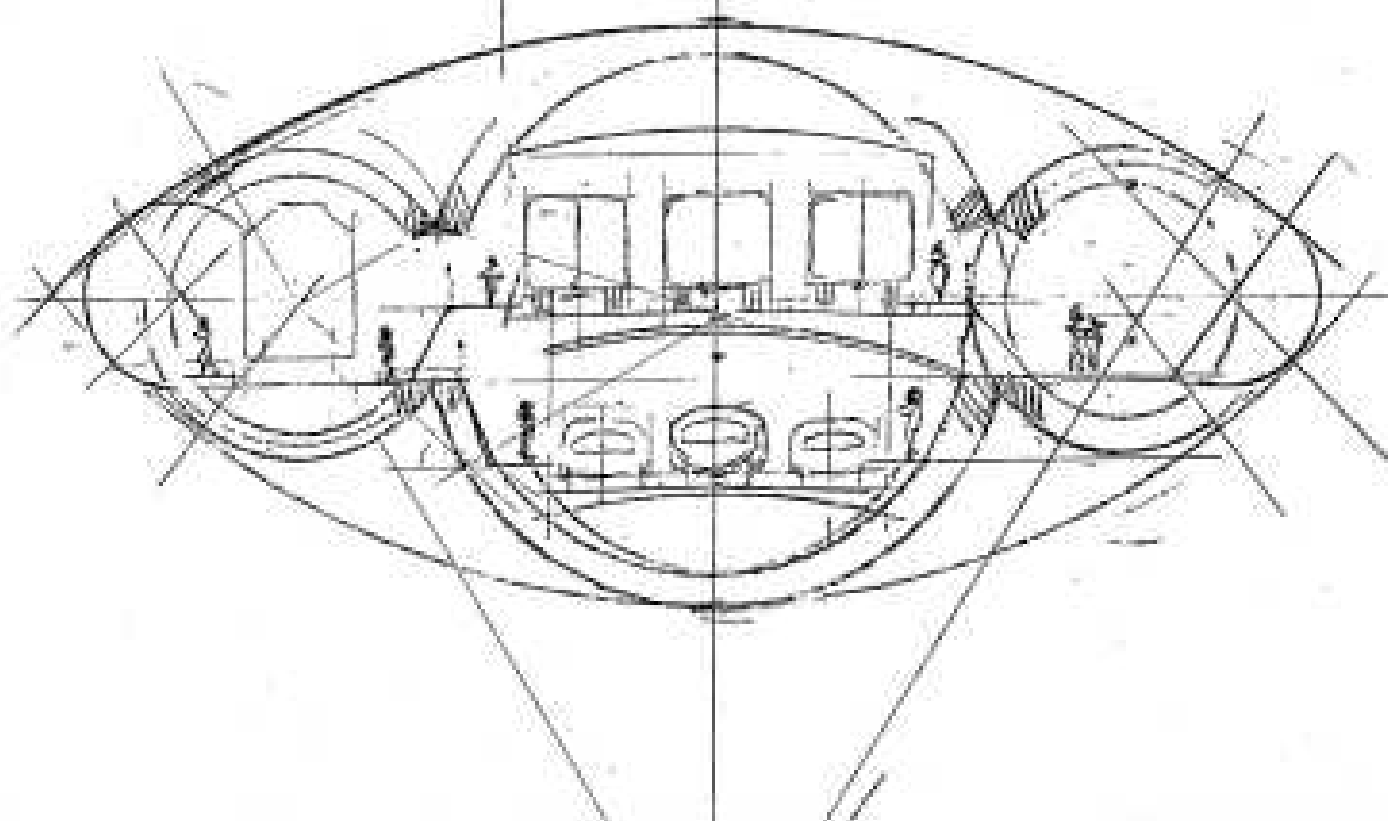
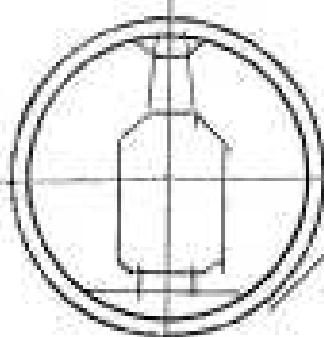
$$Z = \frac{15 \times 10^3}{4400} = 3.41$$

$$Z = \frac{15 \times 10^3}{4400} = 3.41$$



$45 \times 2.5 = 112.5$
 $45 \times 1.8 = 81$
 $112.5 + 81 = 193.5$
 $193.5 \div 1.5 = 129$
 $129 \times 1.5 = 193.5$





the EPR.

res. temp. $400/260$
 film $275/210$
 " m.c.c. $500/550$
 p. spec $400/3$ 2600

coeff. of T. Term.
 mod. elast.

α

88×10^{-7}

$150,000 \text{ kg/cm}^2$
 $170,000$

Expansion

$D = 1.0 \times 10^{-4}$

10 A.

$\epsilon = 66 \frac{\text{kg}}{\text{cm}^2}$

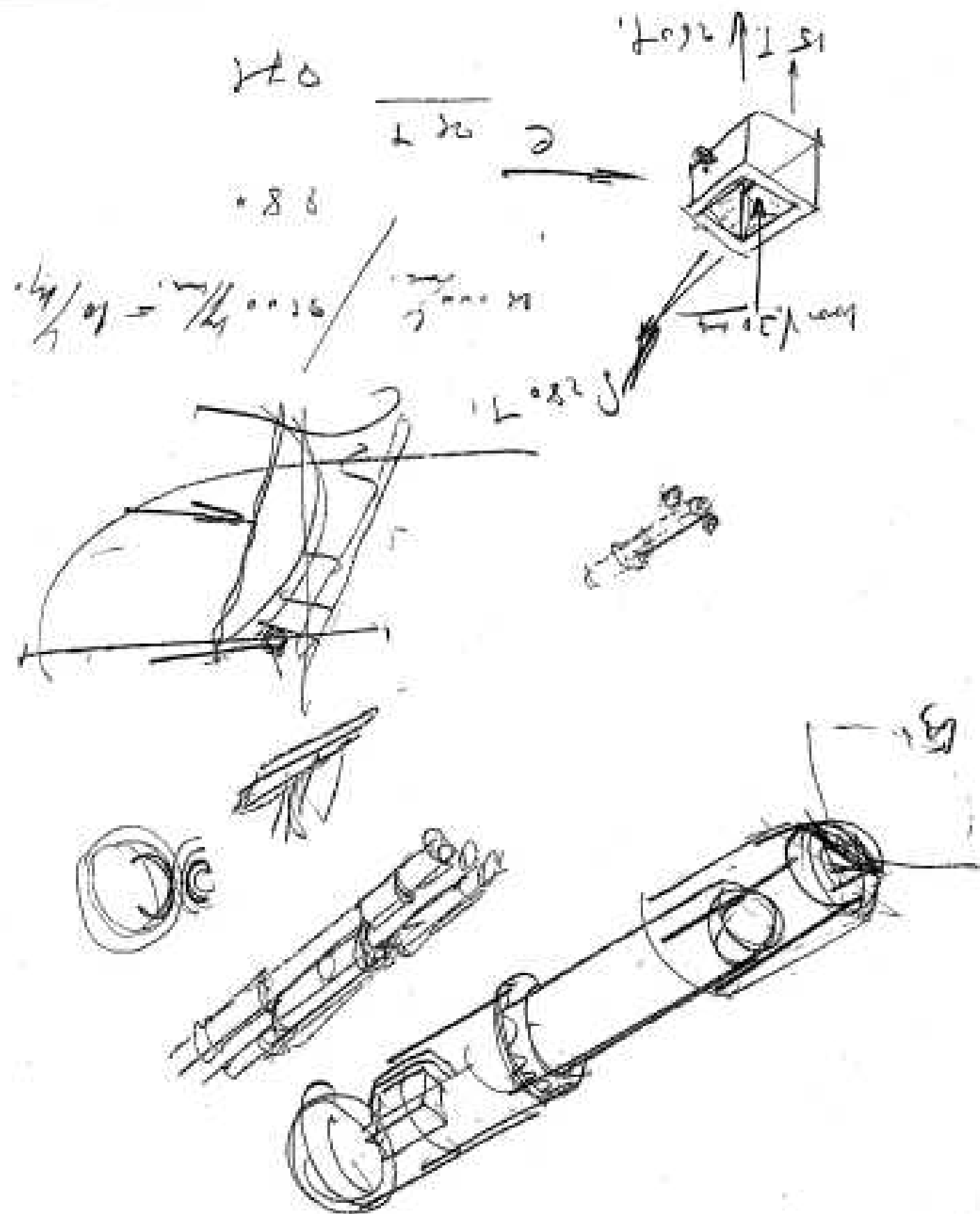
487 kg/ml.

8-10 cm high
 polypropylene

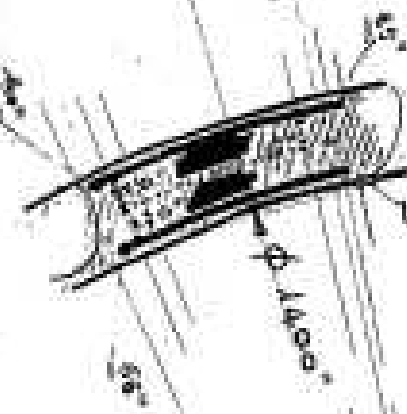
- main cut 5
 - 2 pieces from 2 V
 - combined 5

$L = 0.75 \phi$
 $D = 1.38 \phi$
 $F = 1.407 \phi$
 $S = 0.075 \phi$
 $Q = (\phi/2) \text{ kg}$



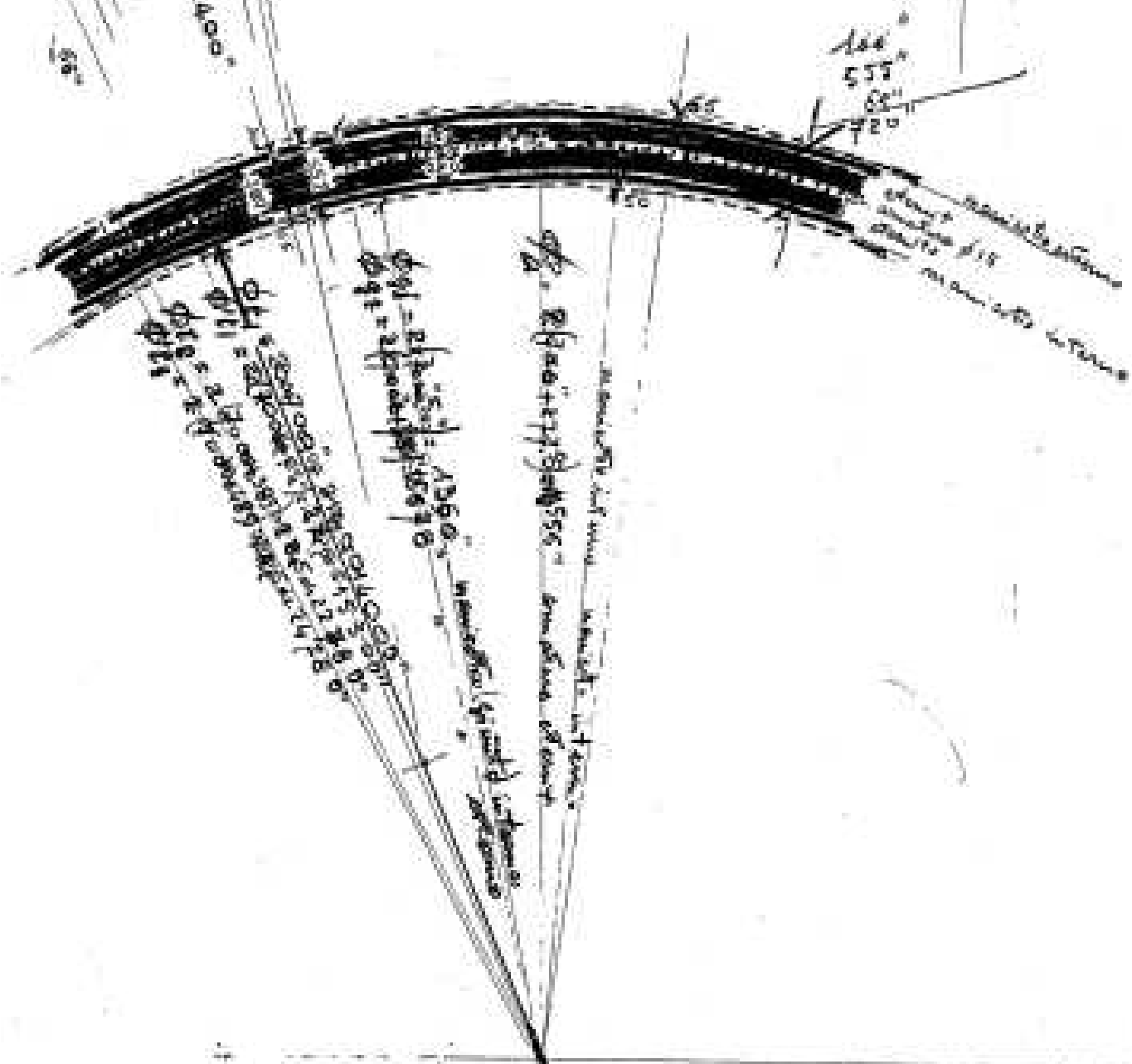


Handwritten title or label at the top left.

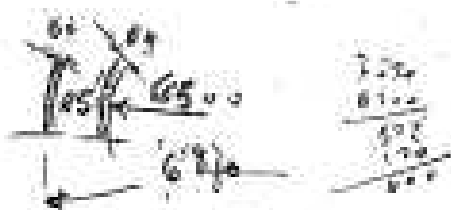
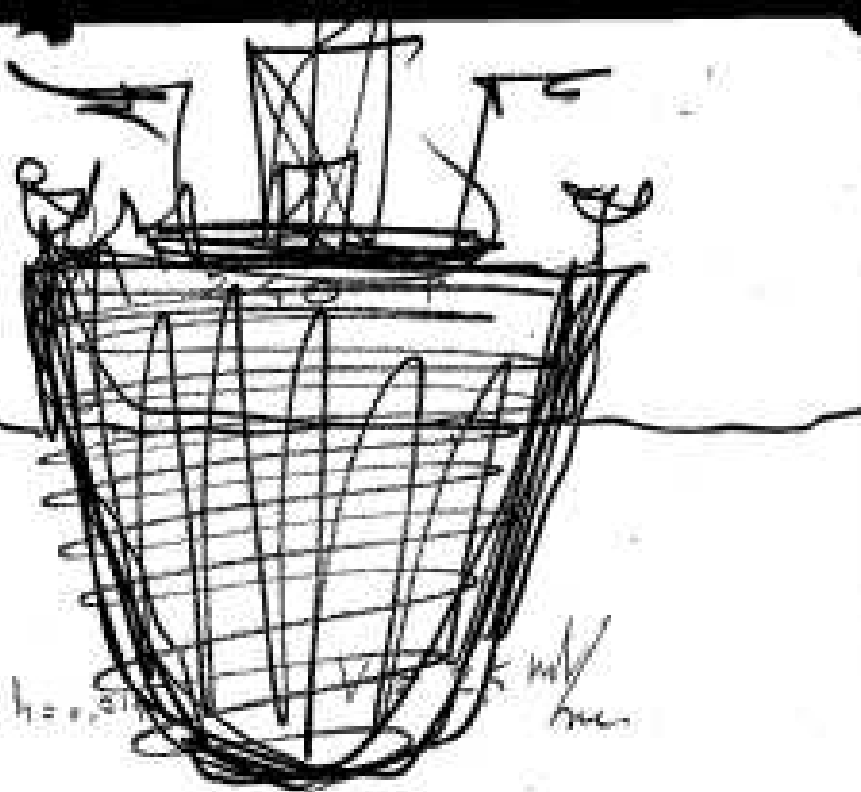
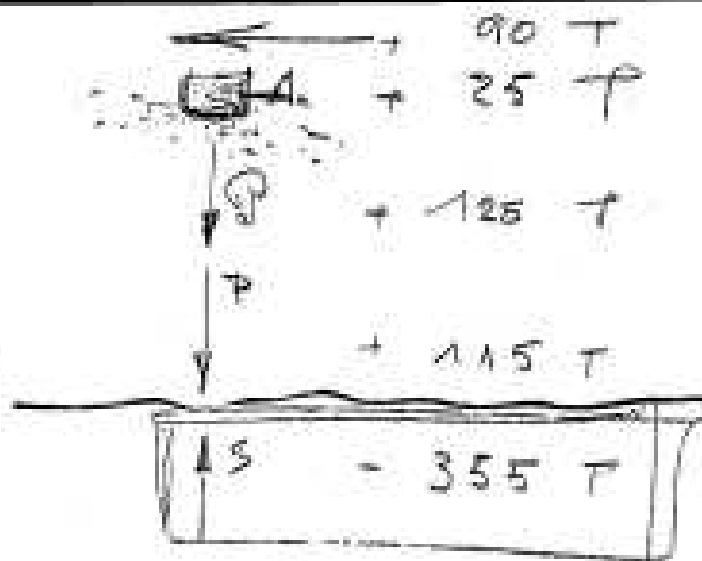


Синх. расстояние	835	85"	80"
Внутренний диаметр	273"	100"	80"
Внешний диаметр	670"	270"	210"
Арматура (толщина)	400"	15"	15"
Средний диаметр	385"	150"	140"
Внутренний диаметр	115"	65"	60"
Внутренний диаметр	-	50"	50"

$$\begin{aligned}
 &2(\pi \cdot 85^2 + 85^2 \cdot 65^2) \cdot 15 \cdot 50 \\
 &2(\pi \cdot 165^2 + 165^2 \cdot 95^2) \cdot 15 \cdot 40 \\
 &2(\pi \cdot 265^2 + 265^2 \cdot 15^2) \cdot 15 \cdot 100 \\
 &2(\pi \cdot 385^2 + 385^2 \cdot 15^2) \cdot 15 \cdot 100 \\
 &2(\pi \cdot 7000 + 65^2 + 270^2) \cdot 15 \cdot 100 \\
 &2(\pi \cdot 7000 + 65^2) \cdot 15 \cdot 100 \\
 &\phi \text{ внутреннего шва} = 14000 \\
 &2(\pi \cdot 7000 + 65^2) \cdot 15 \cdot 100
 \end{aligned}$$

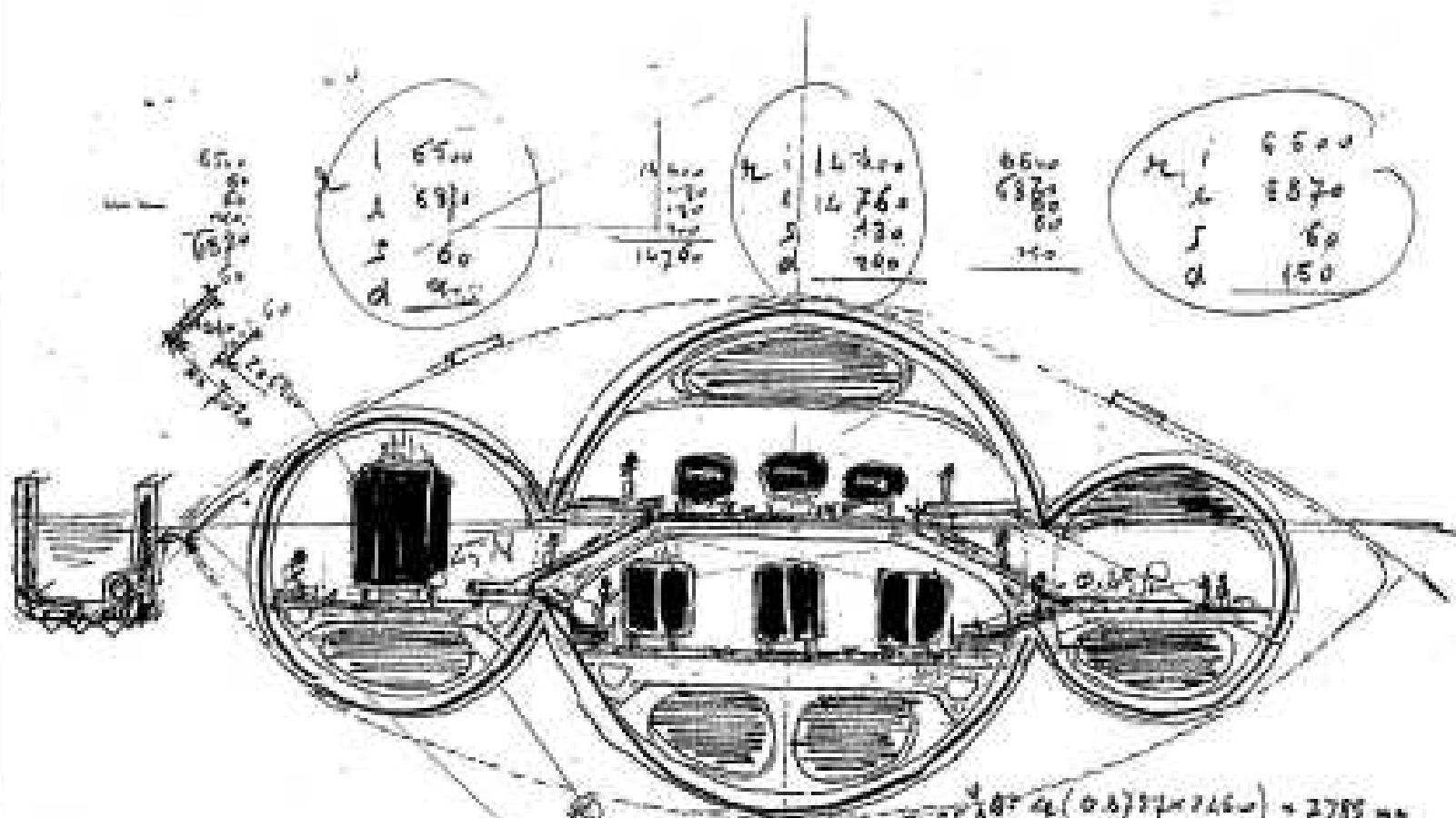


$$\begin{aligned}
 \phi 1 &= 2(\pi \cdot 85^2 + 85^2 \cdot 65^2) \cdot 15 \cdot 50 \\
 \phi 2 &= 2(\pi \cdot 165^2 + 165^2 \cdot 95^2) \cdot 15 \cdot 40 \\
 \phi 3 &= 2(\pi \cdot 265^2 + 265^2 \cdot 15^2) \cdot 15 \cdot 100 \\
 \phi 4 &= 2(\pi \cdot 385^2 + 385^2 \cdot 15^2) \cdot 15 \cdot 100 \\
 \phi 5 &= 2(\pi \cdot 7000 + 65^2 + 270^2) \cdot 15 \cdot 100 \\
 \phi 6 &= 2(\pi \cdot 7000 + 65^2) \cdot 15 \cdot 100
 \end{aligned}$$



$h = 0.51$

$h = 0.51$



$$0.05 \times 100 \times 4(0.8737 \times 1660) = 7785 \text{ mm}$$

$$\frac{2.14}{4} \left(\frac{1}{1.90 \times 16.40} \right) + 1.90 \times h = 155 \text{ T}$$

$$h = \frac{155 \text{ mm}}{1.665 \times 0.74} = \frac{111.0}{1.231} = 90.1 \text{ mm}$$

$$155 \text{ T} \times 3.80 \times 14 \text{ P} \times 0.50 \times 1.700 = 155000$$

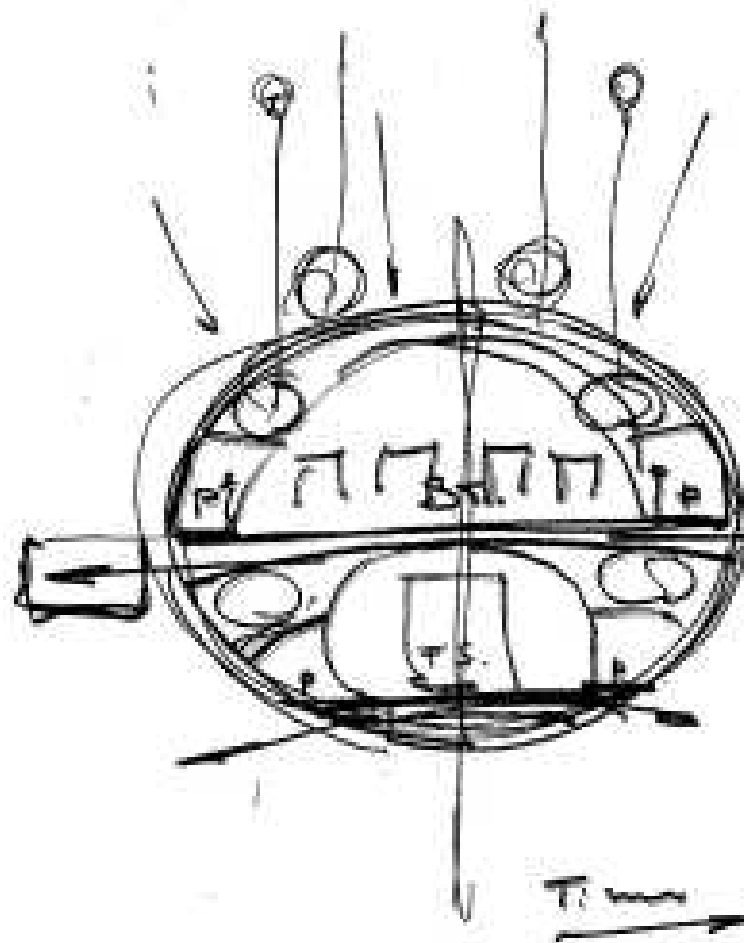
Y. Institut des Canons

- Téléphonie Dir. 70

- L'Art de l'écriture

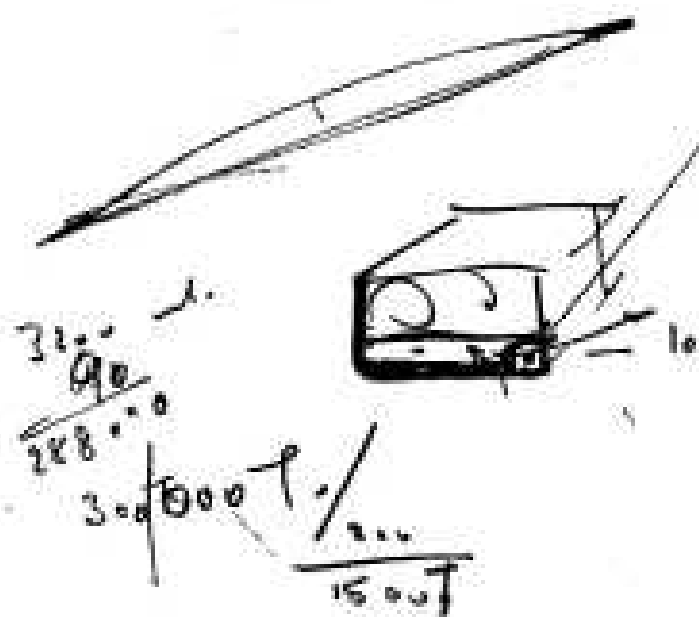
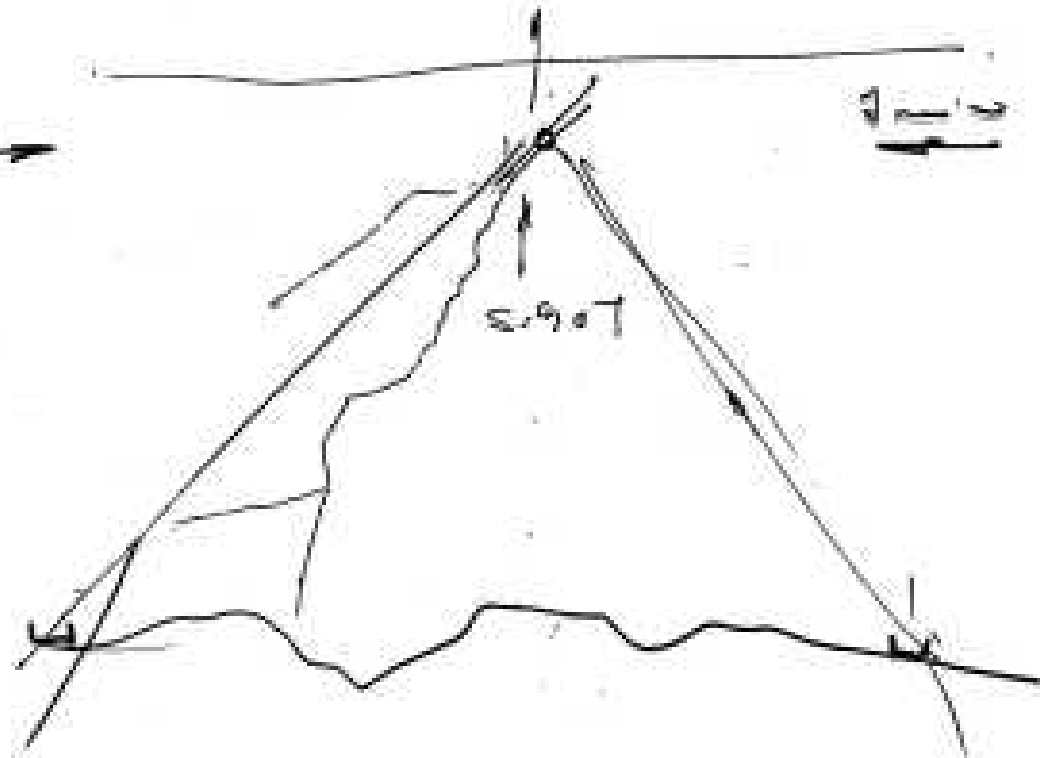
- Exercices

- Récit de l'histoire



$10 \text{ h}/2$

3.5 m.



Amie's Term Paper

$\sigma = 55 \text{ kg/mm}^2$
 $E = 21000 \text{ kg/mm}^2$
 $\phi = 7800 \text{ kg/m}^3$

$$120 \text{ kg/m} \quad 24 \text{ kg/m} \times 1 \text{ m} = 24 \text{ kg}$$

$$\left((1 \dots \times 1 \dots \times 0.03) \times 7800 \right) \frac{\text{kg}}{\text{m}} = 390 \text{ kg}$$



$\phi = 12 \dots$

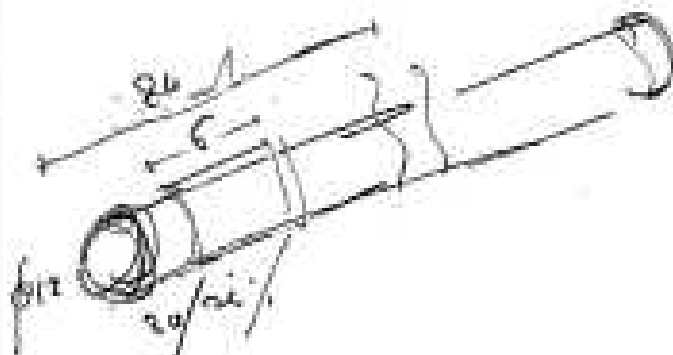
$$C = 12 \times 37.68 \text{ m}$$

$$A = 1 \times 37.68 \times 37.68 \text{ m}^2$$

$$37.68 \times 95.40 = 3600 \text{ kg/m}$$

$$\left(1.00 \times 1.00 \times 0.0125 \times 7800 \right) \frac{\text{kg}}{\text{m}} = 95.40 \text{ kg/m}$$

$$1.7 \times 7800 = 13260 \text{ kg/m}$$



$$\frac{\text{kg}}{\text{m}} \text{ for } \text{L} \text{ and } \text{W} = 18'3'' \dots \dots \dots \text{kg}$$

1) $18'3'' \dots \dots \dots \text{kg}$ $A_1 \text{ } 20' \dots \dots \dots \times 7800 \frac{\text{kg}}{\text{m}} = 40' \dots \dots \dots \text{kg}$

pp. $\text{Total weight (in kg)}$ $L = 12$

$$40 + 32 \times 11 + 2028 \times 12 + 1 \dots \frac{\text{kg}}{\text{m}} = 212.36$$

pp. $\text{from } \text{L} \text{ and } \text{W}$ $L = 6$

$$1.70(900 + 3600) = 1739.04$$

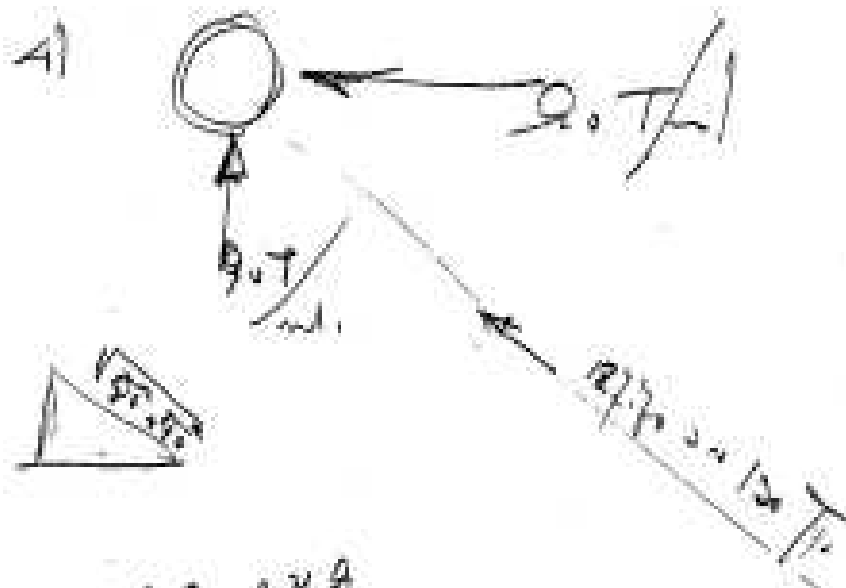
$$\frac{\text{kg}}{\text{m}} 1.65, 50 \times 4000 \text{ m} = 6,606,000,00$$

2) $17 \dots \dots \times 15.00 \frac{\text{kg}}{\text{m}} = 10' \dots \dots \dots \text{kg}$

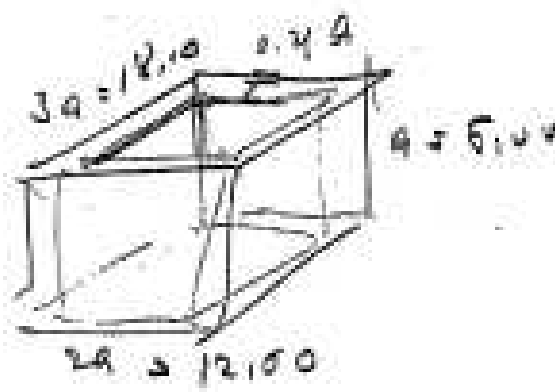
Case: weight

$$\frac{90 \text{ m } \frac{\text{kg}}{\text{m}} \times 24 \text{ m}}{2 \times 17000000} = \phi \text{ m } 0.09 \text{ m (for } 21000 \frac{\text{kg}}{\text{m}^2})$$

3) $120 \times 1.5 \times 113 \times 2000 \frac{\text{kg}}{\text{m}} = 452'0000 \frac{\text{kg}}{\text{m}}$ $80 \times 2000 \frac{\text{kg}}{\text{m}} = 900'0000 \text{ kg}$



51' 404' 000' m



$$\frac{13.0 \text{ mm}^4}{24} \cdot 24 = 85.0 \times 0.075 \times (2 \times 3a^2 + 2a^2 + 6a^2) =$$

$$4 \times \frac{1560.000}{12 \times 12.00} = 21.0 \times 0.075 \times 72 a^2$$

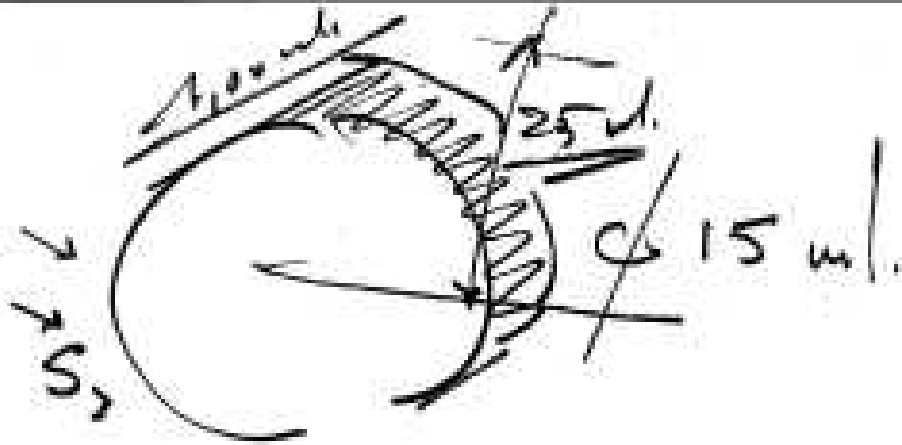
$$a = \sqrt{\frac{1560.000}{45.00}} = 5.88$$

$$\frac{3200}{24} \times 674 \text{ m} = 82.700 \text{ m} \times \frac{1.0 \text{ m}}{1.0} = 3.278' 000' \text{ m}$$

56' 733' 000' m

up Sh:

5) cut wire	4.000 x 112 = 452' 116 m x 550 / 2 =	24.5' 000' 000'
6) electric	4.000 x (17+5) = 78' 000 m x 2.000 =	24.5' 000' 000'
7) sample	452' 116 m x 2.000 =	4.521' 280' 000'
		60' 000' 000' 000'



1471 ①

$$S_1 = 660 \text{ k}$$

$$S_2 = 186000 \text{ k}$$

$$S_1 = \frac{2.5 \text{ m}^2 \times 1.00 \text{ m} \times 1.35 \text{ k/m}^2}{9.81 \text{ k/m}^2} \times 2.50 \text{ m} = 660 \text{ k}$$

$$S_2 = \frac{3.14 \times 15^2}{4} \times 1.35 \text{ k/m}^2 = 176500 \text{ k}$$

$$\alpha = \frac{660}{186000} = 0.00355$$

$$W = 10 + 10 \frac{0.00355 - 0.0029}{0.0029} = 10.231$$

$$S_2 = 15 \times 3.14 \times 1.54 \times 25 \text{ m} \times 1.35 = 72127.750 \text{ k}$$

$$15 \times 3.14 \times 1.54 \times 100 \text{ m} \times 1.35 = 7500000 \text{ k}$$

S_2
max
min

1971/2

1.3 $\frac{50,000}{1.5\% \times 12.0\%} = 4 = \underline{\underline{25}}$

$$1.3 \frac{50000}{1.57 \times 1700} \cdot h = \underline{\underline{35}}$$

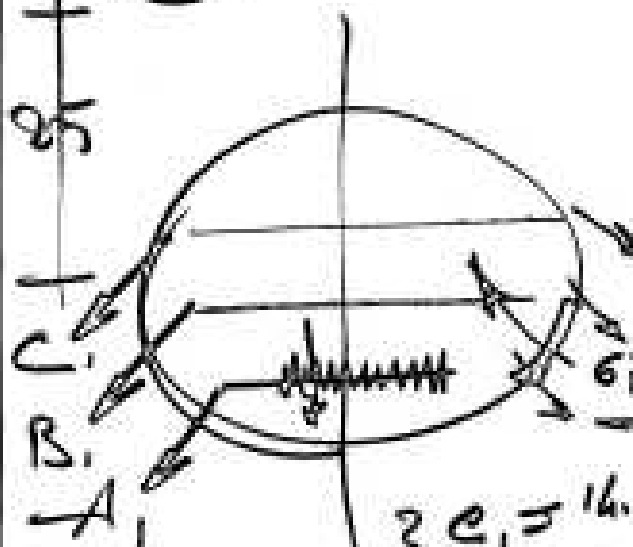
$$1.3 \frac{200 \dots}{1.57 \times 100} = L = \underline{\underline{140}}$$

And in Case

1921/2



$$\frac{\pi D^2}{4} \times 1.57 \times 280$$



$$\sim 2 \dots \dots \dots \text{kg}$$

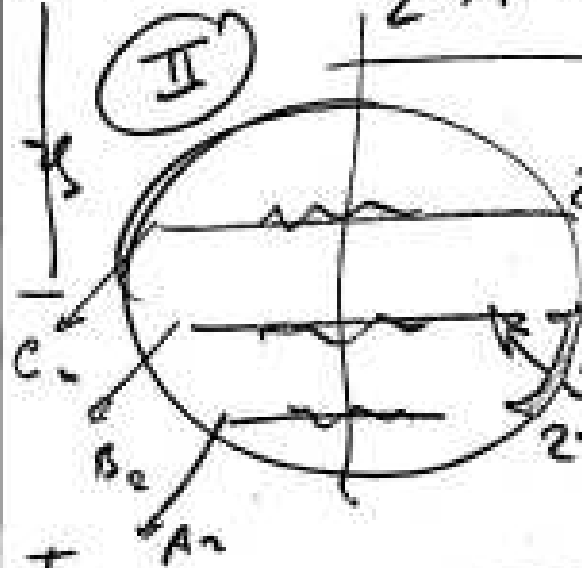
$$R_s \quad 1890 \dots \text{kg}$$

$$2C_1 = 14 \times 1.57 \times (175 \text{ kg} + 400 \text{ kg}) = 11540 \text{ kg}$$

$$2B_1 = 11 \times 1.57 \times 227 \text{ kg} + 15000 \text{ kg} = 18990 \text{ kg}$$

$$2A_1 = 4 \times 1.57 \times 467 \text{ kg} + 80000 \text{ kg} = 83000 \text{ kg}$$

$$113460$$



$$2C_2 = 14 \times 1.57 \times 175 \text{ kg}$$

$$1990 \dots \text{kg}$$

$$2B_2 = 11 \times 1.57 \times 227 \text{ kg}$$

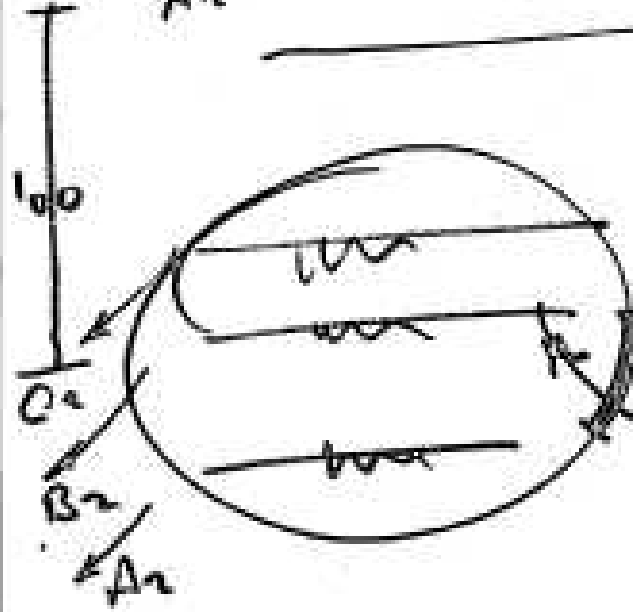
$$17107 \text{ kg} \times 1.57 \times 280 = 120000 \text{ kg}$$

$$2A_2 = 4 \times 1.57 \times 467 \text{ kg}$$

$$4000 \text{ kg}$$

$$5000 \text{ kg}$$

$$9750 \text{ kg}$$



$$\sim 75 \dots \dots \text{kg}$$

$$7500 \dots \text{kg}$$

$$(2680 \text{ kg})$$

$$2680 \text{ kg} \times 1.57 \times 280 = 20200 \text{ kg}$$

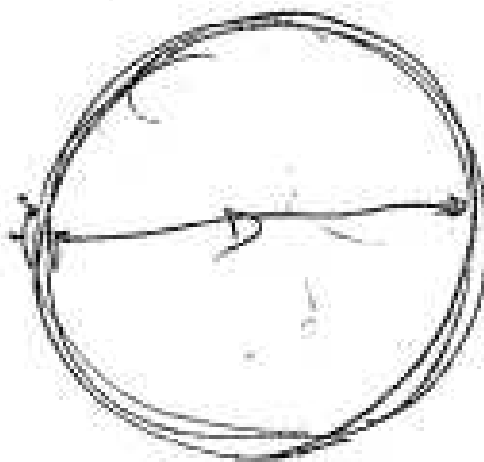
$$9750$$

m/4. 10



AE 1964 $\frac{7-E}{FID}$

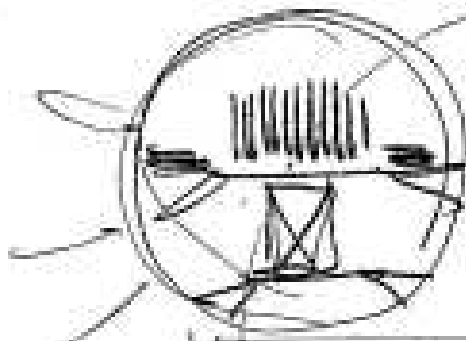
p=21... m/2



Summary					
P.	S	M	L	D	H.
mm	mm	mm	mm	mm	mm
1000	66	485	220	1780	132
18...	1190	8780	3480	13...	2330
48...	950	7650	3460	19900	1185
16,00	730	5600	2620	19660	900

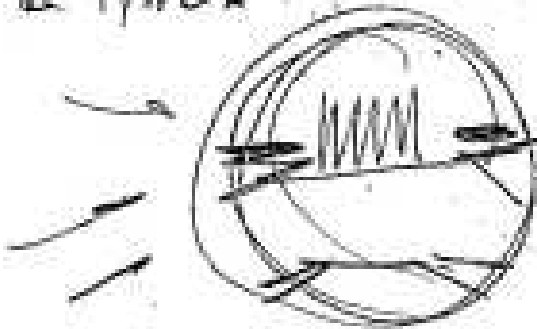
12...

I p/2

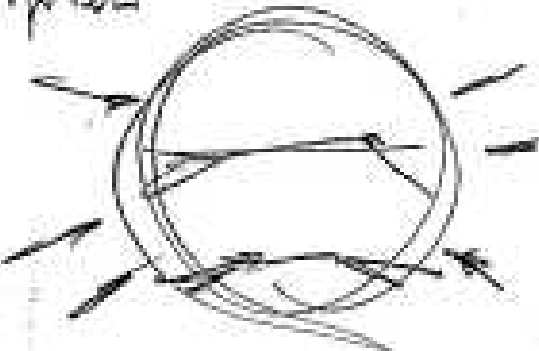


$$\frac{0.95}{1.10} = \frac{0.45}{9.70}$$

II p/2



III p/2

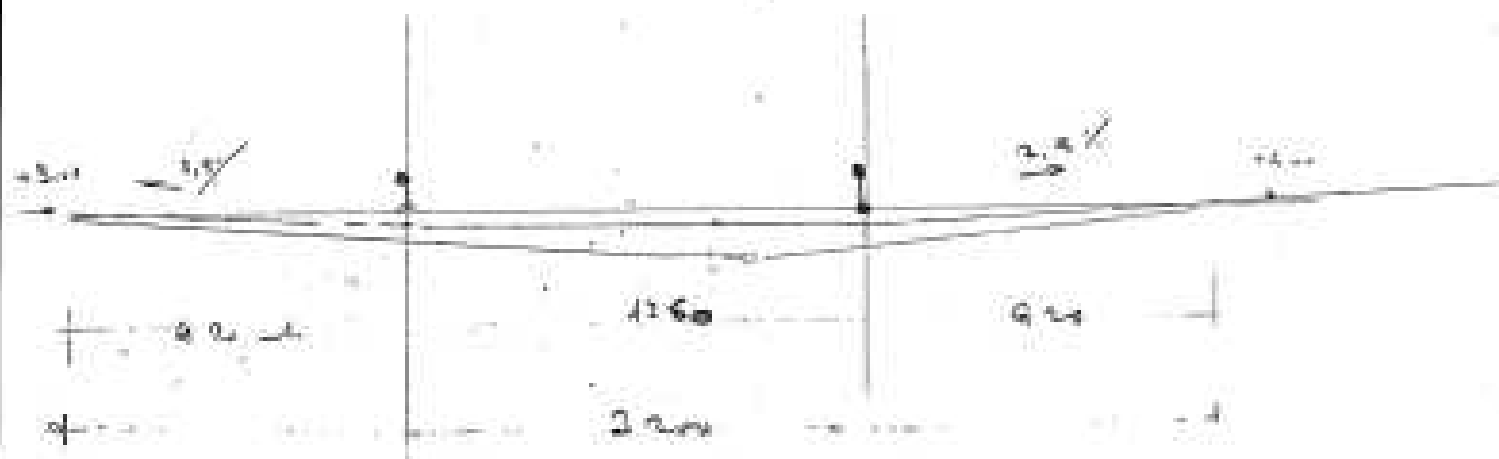


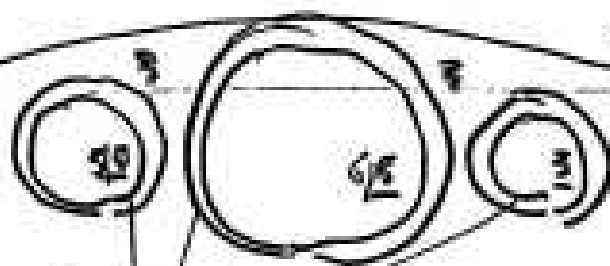
$\neq 5 \leq 6$ 5.5% 15/12% 20/25%

1.2. ...

$\sim 23 \text{ m} \times 0.5\%$ $\sim 0.2 \text{ m}$

$$\begin{array}{r}
 32.00 \\
 184.0 \\
 \hline
 136.0
 \end{array}$$



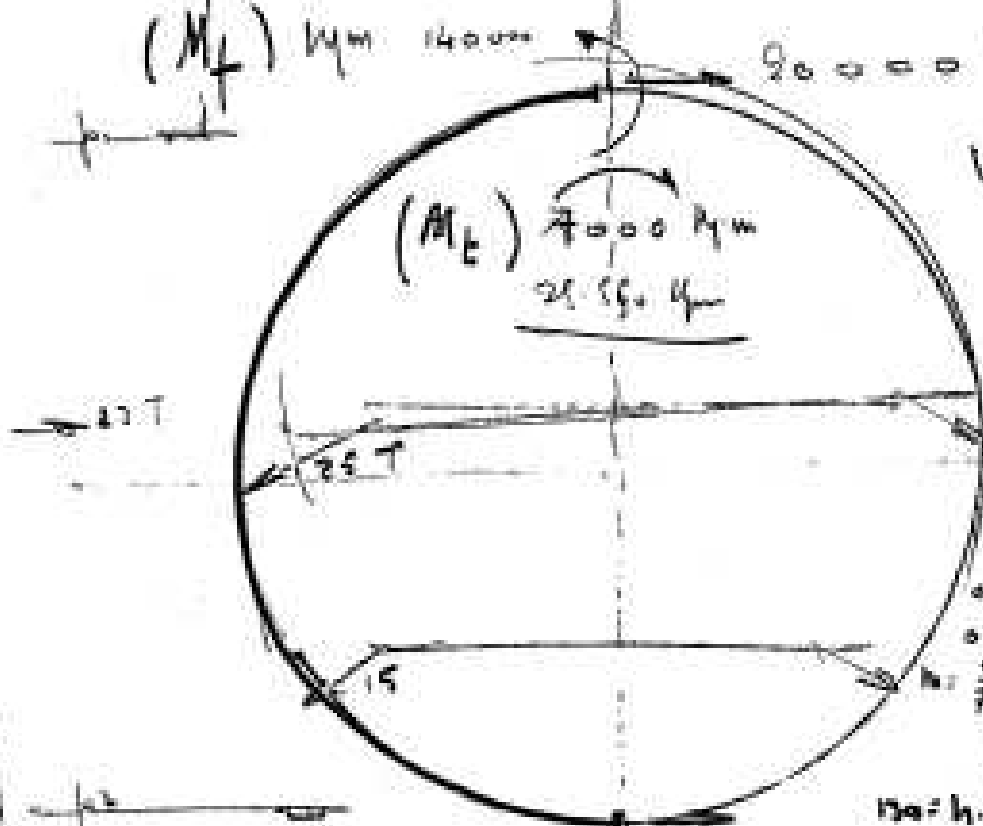


250

Adm. Dgn / ml.

$\frac{c}{r} =$

$(M_f) \text{ Nm } 140000$ $0.65 \times 18000 \text{ N } T = 5655416$



$$W = \frac{1}{12} \left(\frac{b^3}{c} + \frac{b^3}{c} + \frac{b^3}{c} \right)$$

$$W = \frac{1}{12} \left(\frac{b^3}{c} + \frac{b^3}{c} + \frac{b^3}{c} \right)$$

14,40

$$M_i = 911 \dots \text{ Nm}$$

$$0.35 \times M_{20} + 0.65 \sqrt{M_{20}^2 + M_{20}^2} \dots$$

$$0.35 M_{20} + 0.65 M \sqrt{25 + 1} \dots$$

$$h = \frac{21 \dots}{2 + 13} \dots \sqrt{\frac{b h^3}{12}} = 113 \dots$$

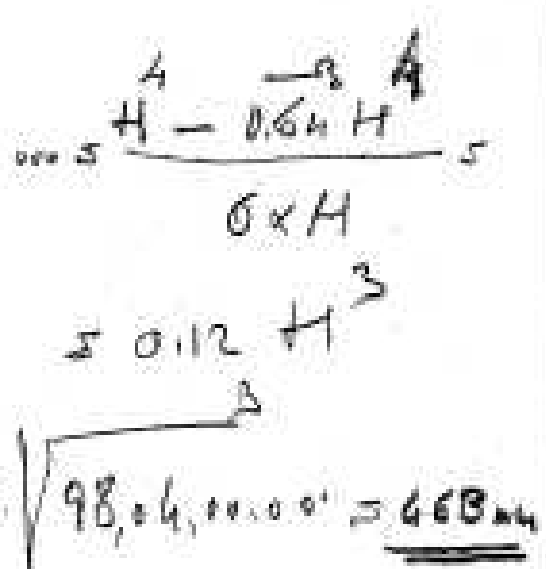
$$130 = h \dots \frac{b h^2}{12} = 161 \dots$$

$$M_i = 0.35 \times 140000000 + 0.65 \sqrt{140000000^2 + 70000000^2} = 140113679$$

$$\frac{M_i}{W} = 70 \text{ N/mm}^2 = \frac{140113679}{141 \dots} = 99.37 \frac{M_i}{W} = \frac{58 \dots}{5.635416}$$

$$\frac{M_i}{70} = 2 \dots \dots \dots h = \sqrt{\frac{2 \dots \dots \times 12}{1 \dots}} = 155$$

$$\frac{M_i}{70} = \frac{8555 \dots}{70} = 122 \dots h = \sqrt{\frac{361 \dots \times 12}{1 \dots}} = 1066$$



$$\text{Ans: } -0.35 \times 490000000 + 1$$

$$\rightarrow 0.65 \sqrt{490000000 + 245000000}$$

$$\frac{\lambda_{\text{mi}}}{0,50 \text{ nm}} \leq W = 817,330000 \text{ nm}$$



1 Atm = 10000

53 mm

$$\frac{22,33 \text{ T}}{\text{mm}} = \frac{2233000 \text{ N}}{94 \times 1600 \times 1.54} = 29,36,60 \text{ N/mm}^2$$

$p/\text{Atm} = 0,244 \text{ N/mm}^2$

$S/\text{mm} = \text{mm}$

$4 \text{ mm} \rightarrow 16000 \text{ mm}$

$h = 4,5$

$a = 80$

$L = 1540 \text{ mm}$

$R = 55 \text{ mm}$

$$\sigma = \frac{0.244 \times 16000 \times 4.5}{400 \times 55} \left[1 + \frac{1 + 80 \times 1540}{0.244 (1540 + 16000)} \right] = 5.71 \text{ mm}$$

$$\begin{array}{llll} R_T = 4.30 & R_A = 7.20 & R_P = 1.30 & R_C = 25.75 \\ r_T = 2.75 & r_A = 6.70 & r_P = 3.80 & r_C = 8.75 \\ s_T = 0.55 & s_A = 0.50 & s_P = 0.50 & \end{array}$$

$$C_T = 27.00 \quad C_A = 45.75 \quad C_P = 27.00 \quad Q_{A_C} = 2.00 \times 51.50 = 103.00$$

$$C_T = 25.75 \quad C_A = 42.15 \quad C_P = 23.85 \quad 2.00 \times 1.07 \times 51.50 = 10.00$$

$$S = \left(\frac{4.30}{2} + \frac{7.20}{2} + \frac{1.30}{2} \right) \times 100 = 273.00 \quad 2(A_{1,0}) = 113.85$$

Quanto (km/h)

$$\begin{array}{ll} L = 0.75 \times 7.50 = 5.60 & L = 0.75 \times 13.40 = 10.05 \\ D_T = 1.30 \times 7.50 = 9.75 & D_A = 1.30 \times 13.40 = 17.42 \\ D_P = 1.30 \times 13.40 = 17.42 & \end{array}$$

$$J_T = 0.05(8.60 - 7.50) = 0.05(1.10) = 0.055 \quad J_A = 0.05(13.40 - 10.05) = 0.05(3.35) = 0.1675 \quad J_P = 0.05(8.60 - 7.50) = 0.05(1.10) = 0.055$$

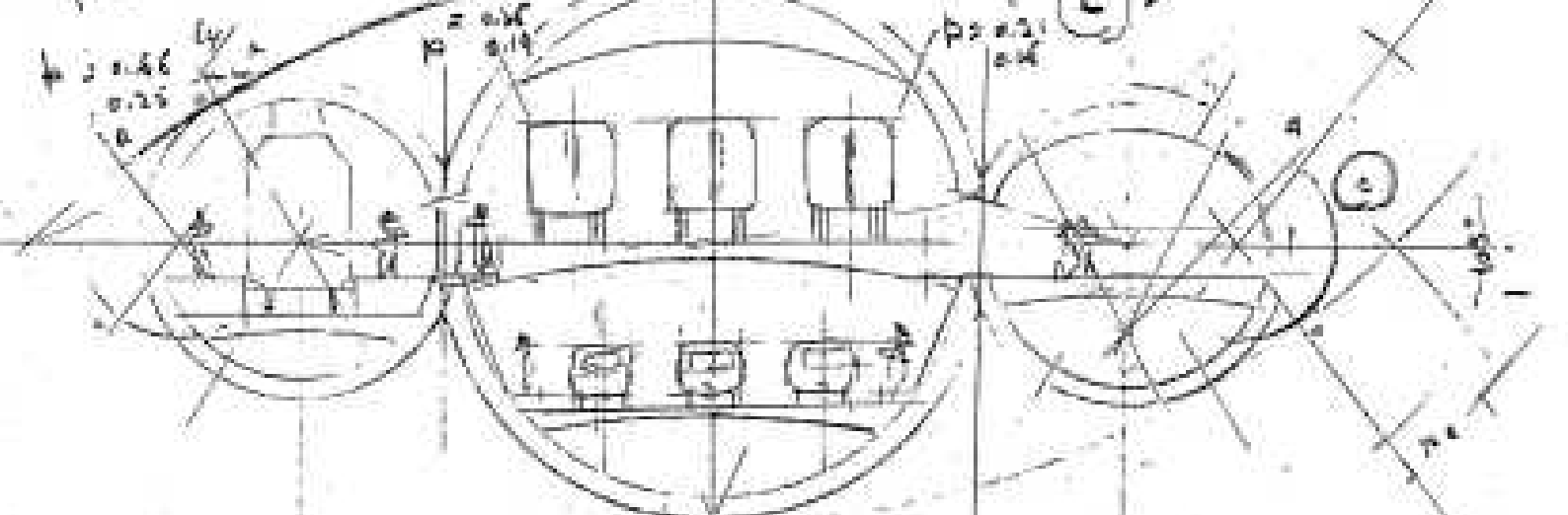
$$W_T = 0.2 \times 16.10 = 3.22 \quad W_A = 0.2 \times 16.70 = 3.34 \quad W_P = 0.2 \times 16.70 = 3.34$$

$$F_T = 0.785(8.60^2 - 7.50^2) = 13.90 \quad F_A = 0.785(13.40^2 - 10.05^2) = 17.12 \quad F_P = 0.785(8.60^2 - 7.50^2) = 13.90$$

$$P = 1.00 \times (F_T + F_A + F_P) \times 1.00 = 44.33200 \text{ kg/m}^2 \quad P_{C1} = 1.50 \times 141.500 \text{ kg/m}^2$$

$$\eta_T = \frac{7.50}{8.60} = 0.87 \quad \eta_A = \frac{10.05}{13.40} = 0.75 \quad \eta_P = \frac{7.50}{8.60} = 0.87$$

$$1 - \eta_T = 0.13 \quad 1 - \eta_A = 0.25 \quad 1 - \eta_P = 0.13$$



$$\begin{array}{ll} \sigma_T = \frac{0.9 \times 0.10}{1 - \eta_T} = 0.10 \text{ kg/cm}^2 & \sigma_A = \frac{0.9 \times 0.10}{1 - \eta_A} = 0.10 \text{ kg/cm}^2 \\ \sigma_T = \frac{1.7 \times 0.10}{1 - \eta_T} = 0.10 \text{ kg/cm}^2 & \sigma_A = \frac{1.7 \times 0.10}{1 - \eta_A} = 0.10 \text{ kg/cm}^2 \end{array}$$

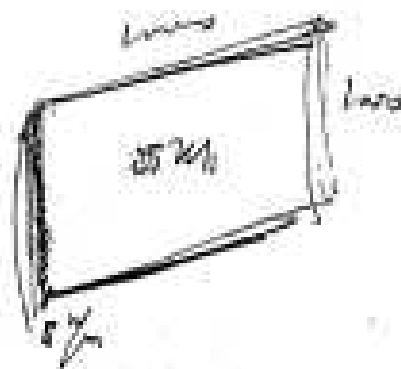
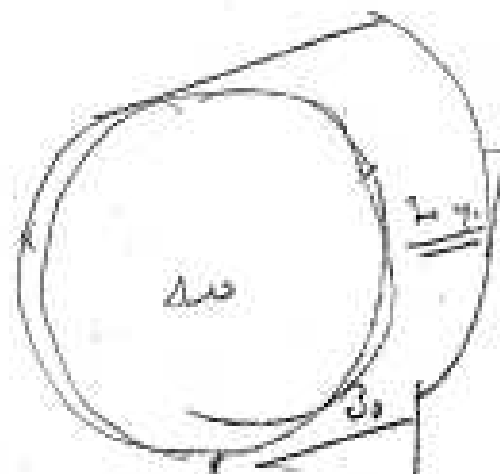
$$G = 55 \text{ kg/mm}^2$$

$$E_s = 21,000 \text{ kg/mm}^2$$

$$\delta = 3,000,000 \text{ kg/mm}^2$$

$$J = \frac{\pi}{4} (R^4 - r^4)$$

$$V = \frac{\pi R^2}{R}$$



$$\frac{3,000,000 \times 1.5}{21,000} = 214.3$$

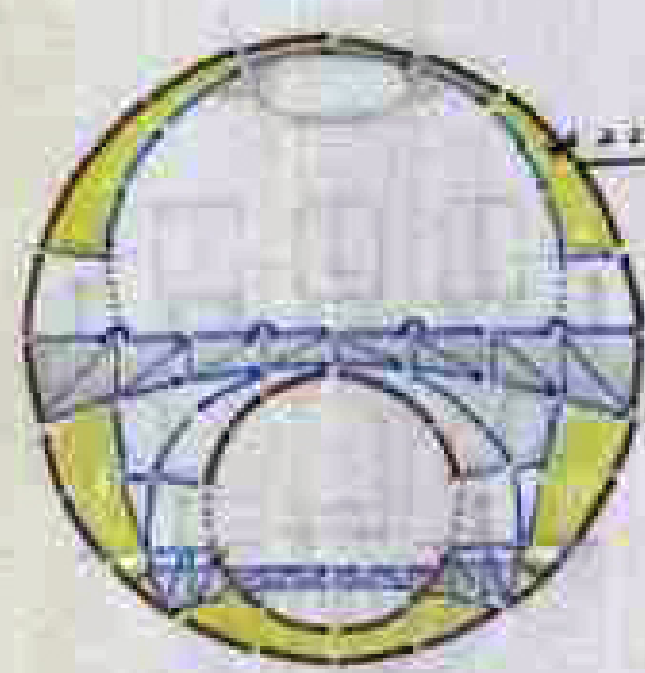
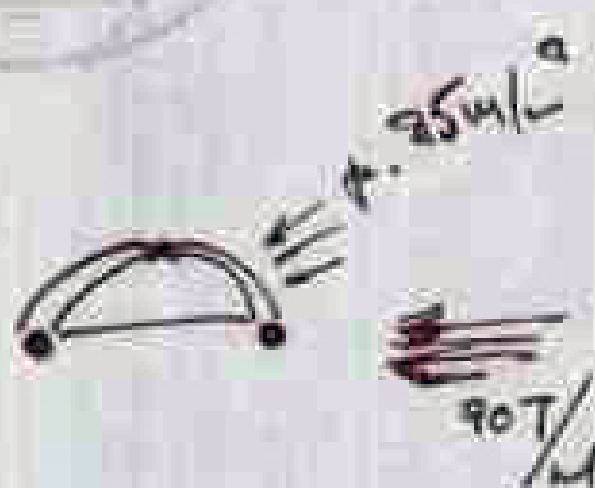
$$\frac{214.3 \times 1.0}{1.5} = 142.9$$

$$\frac{142.9 \times 1.0}{1.5} = 95.3$$

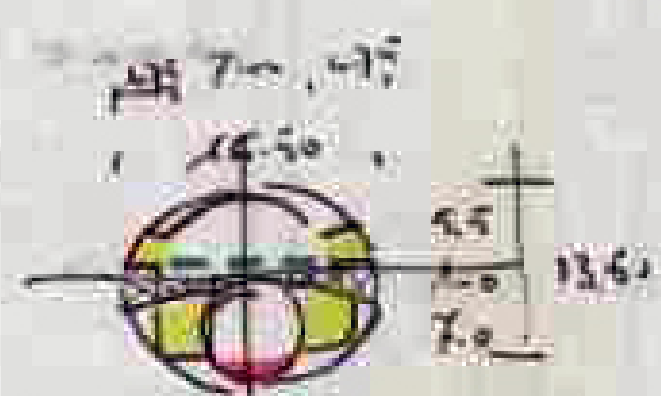
$$x = \frac{1}{R}$$



Handwritten notes in pencil, possibly describing the geometry or properties of the objects shown.



Handwritten text next to the large sphere diagram, possibly indicating a scale or a specific value.



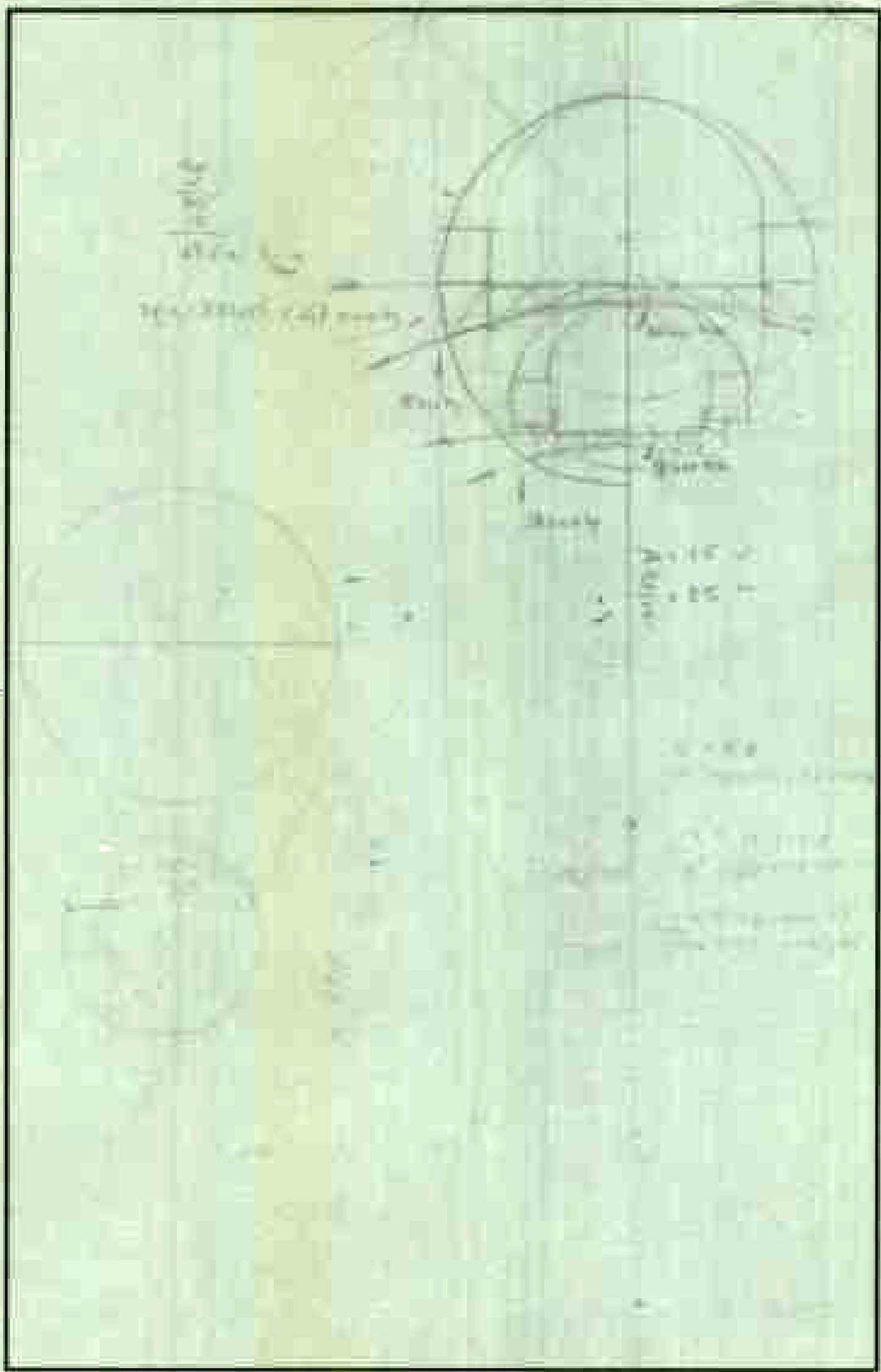


Grady, Arthur
700-40

[illegible]

1/50







1000
1000
1000
1000
1000

80' 616.25
25' 245.45
15' 204.53
5' 961.70

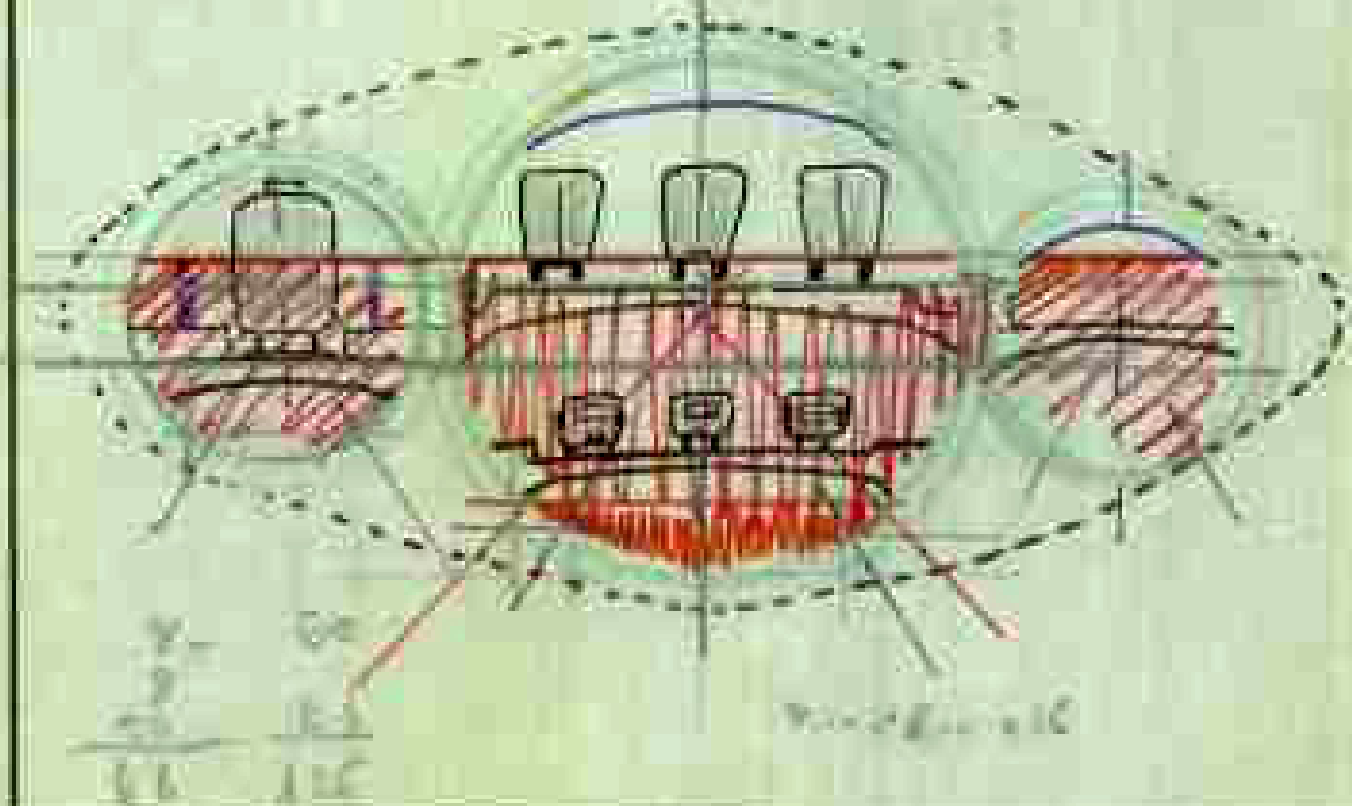
CONFIDENTIAL

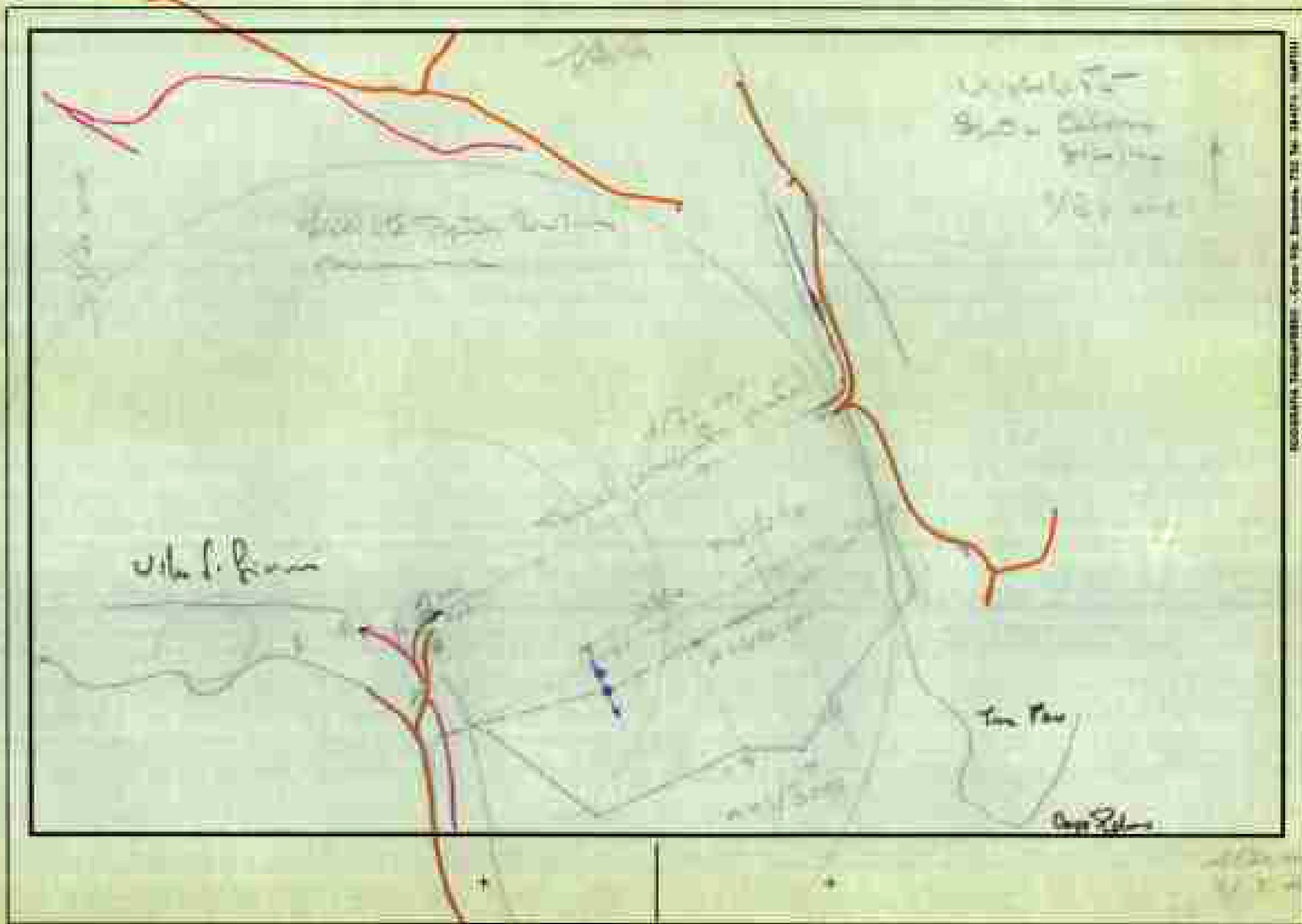


$\Delta = 0.1 \text{ m}$



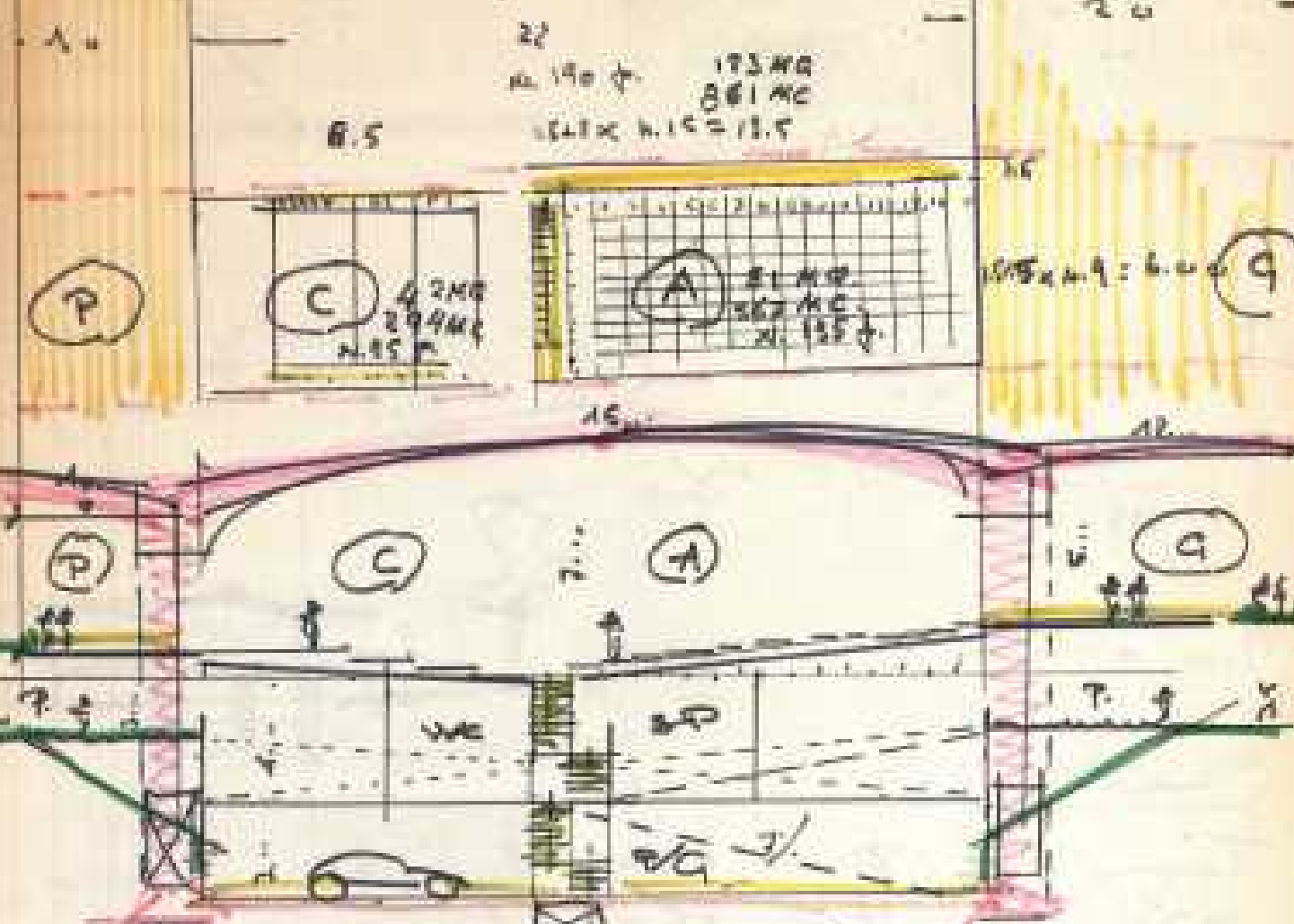
$$\frac{14x^2 - 28x + 14}{14x^2 - 28x + 14} = 1$$





52

2x. exp. (4x6). L10 = 350 MA



A
C
P
Q
P/A
P+P

P.	MO	P	MC	MC/P	MC/MSO
135	91	0.6	807	7.1	7.1
55	42	0.78	294	7.1	7.1
	60		260		
	120		600		
	123	100	492		
	123		369		
	(600) 180		600 (13.1) 230		5.50
200 ft	729	360	3162	15.80	2.40