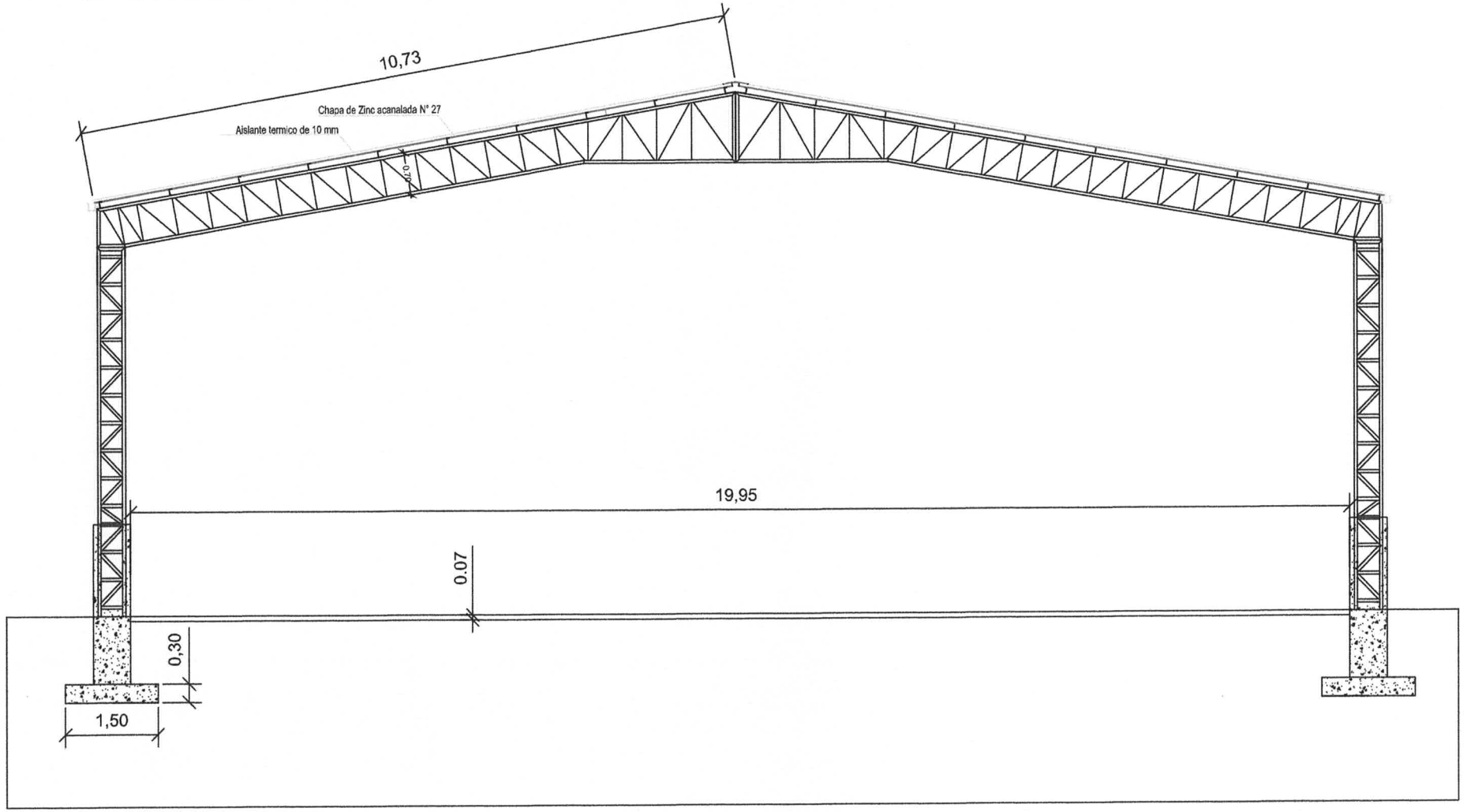


MUNICIPALIDAD DE NARANJAL

Lamina:01

OBRA: Construcción de Tinglado

UBICACIÓN: Colegio Nacional de Naranjal

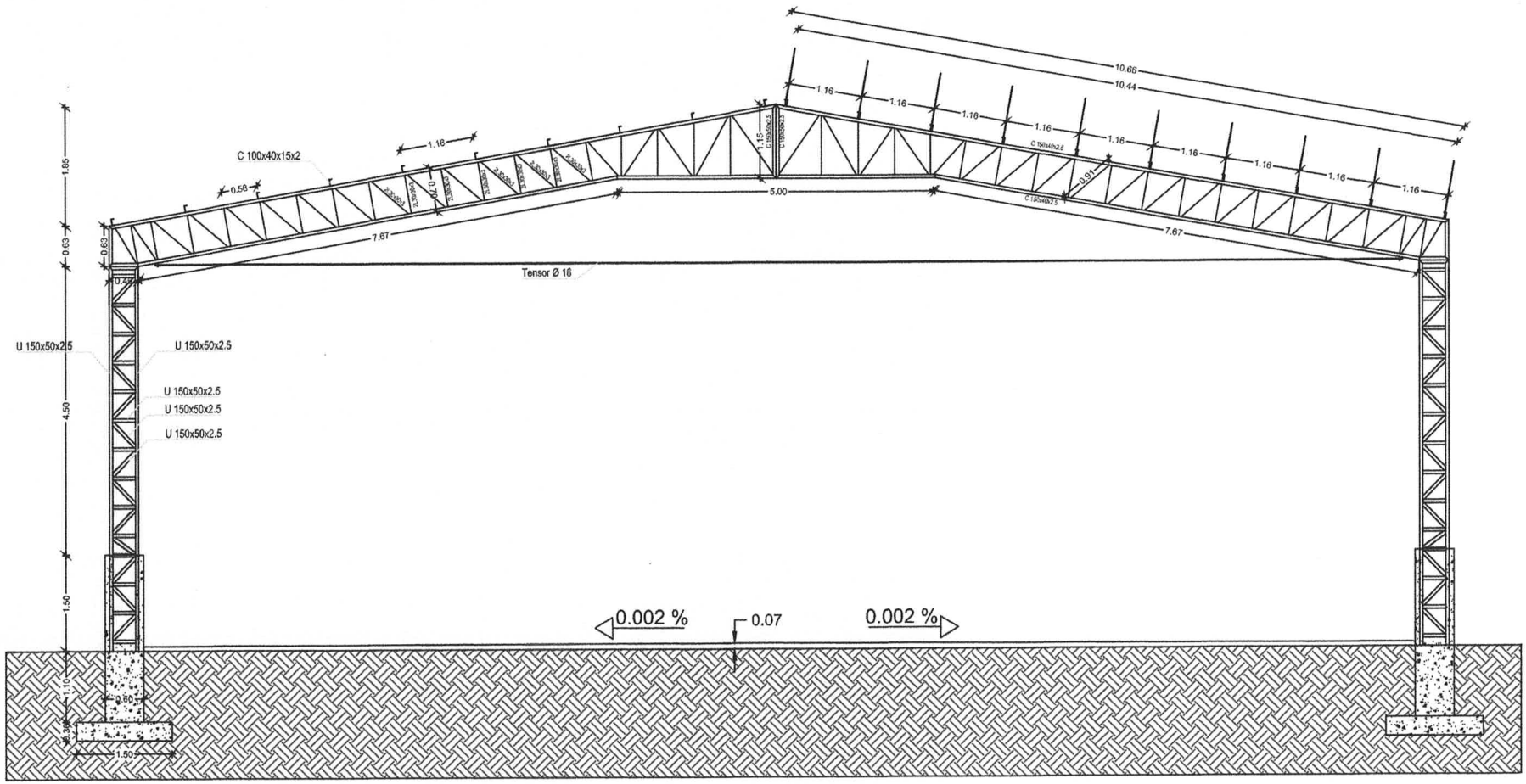
DIRECCIÓN: Naranjal

PROYECTO: Ing. Alder Rios

Reg. M.O.P.C. N°:

PROFESIONAL

Alder Rios
Ing. Civil
1988



MUNICIPALIDAD DE NARANJAL

Lamina:02

OBRA: Construcción de Tinglado

UBICACIÓN: Colegio Nacional de Naranjal

DIRECCIÓN: Naranjal

PROYECTO: Ing. Alder Rios

Reg. M.O.P.C. N°:

PROFESIONAL

Alder Rios
Ing. Civil

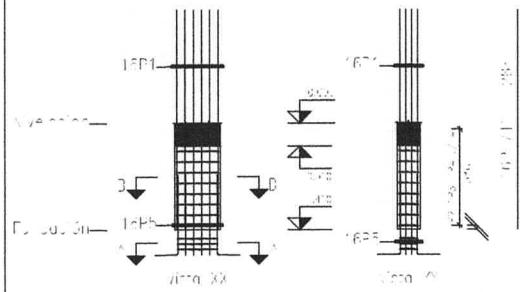
Reg. N° 1958

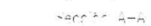
Elemento	Pos.	Diám.	Nro.	Esquema (cm)	Long. (cm)	Total (cm)	ADN 420 (kg)
[illegible]	1	ø12	8	300	288	2304	20.5
	2	ø8	16	80 / 120	172	1720	6.8
	3	ø8	20	35 / 35	78	1560	6.2
	4	ø8	20	58 / 58	82	1640	6.5
	5	ø12	8	100	88	2160	19.2
	6	ø8	4	60 / 120	172	688	2.7
	7	ø8	8	35 / 35	78	624	2.5
	8	ø8	8	58 / 58	82	656	2.6
						ø12:	47.6
						ø8:	20.3
						ø8:	22.7
						ø12:	19.2
						Total:	42.8

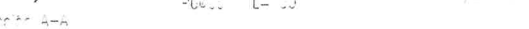
Planta: Nivelación
Hormigón: H-20
Acero en barras: ADN 420 S
Acero en estribos: ADN 420 S

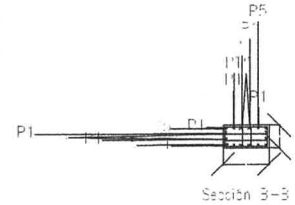
[illegible]

Pos.	Diám.	Cant.	Long. (cm)	Total (cm)	Kg (kg)
1	ø12	16	288	4608	40.9
2	ø8	16	172	2752	10.9
3	ø8	20	78	1560	6.2
4	ø8	20	82	1640	6.5
5	ø12	16	108	1728	15.3
6	ø8	8	172	1376	5.5
7	ø8	8	78	624	2.5
8	ø8	8	82	656	2.6









Acero: ADN 420 S (5.0 kg). Cuantía: 19.99 kg/m3	Planta: Nivelación
Hormigón: H-20 (0.29 m3) armado máximo de agregados 20 mm	Escala 1:100
Encofrados: 2.52 m2 Fraccionamiento geométrico: 2 cm	

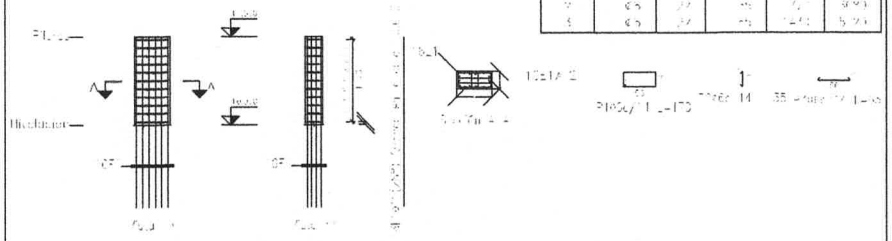
Alder Rios
Ing. Civil
Reg. N° 1458

Elemento	Pos.	Dim.	No.	Esquema (cm)	Long. (cm)	Total (cm)	ADN 420 (kg)
[illegible]		[illegible]			[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
						[illegible]	[illegible]
[illegible]		[illegible]			[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
						[illegible]	[illegible]
						[illegible]	[illegible]

Resumen Acero Columnas	Long. total (m)	Peso 10% (kg)
ADN 420 S Ø6	732.6	179

[illegible]

Pos.	Diam.	No.	Long. (cm)	Total (cm)	[illegible]
	Ø5		[illegible]	[illegible]	[illegible]
[illegible]	Ø5	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Ø5	[illegible]	[illegible]	[illegible]	[illegible]

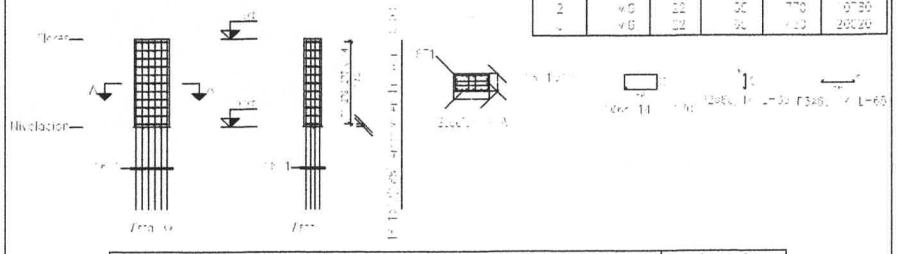


Acero: ADN 420 S (0.3 kg), Cuantía: 33.10 kg/m3		Planta: Pilares
Hormigón: H-20 (0.27 m3)	Tamaño máximo de agregado: 20 mm	Escala 1:100
Encofrado: 2.70 m2	Recubrimiento geométrico: 2 cm	

Planta: Pilares
Hormigón: H-20
Acero en estribos: ADN 420 S

[illegible]

Pos.	Diam.	No.	Long. (cm)	Total (cm)	[illegible]
	Ø6	1	[illegible]	[illegible]	[illegible]
2	Ø6	22	[illegible]	[illegible]	[illegible]
[illegible]	Ø6	22	[illegible]	[illegible]	[illegible]



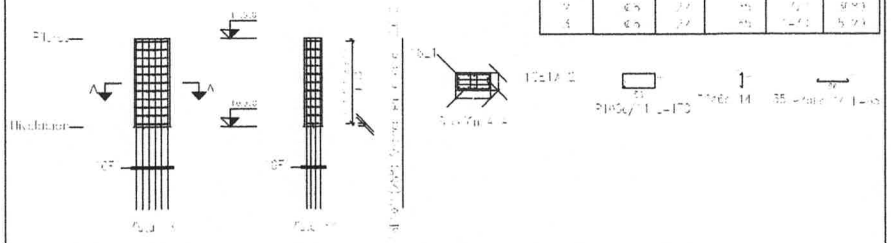
Acero: ADN 420 S (0.3 kg), Cuantía: [illegible] kg/m3		Planta: Pilares
Hormigón: H-20 (0.27 m3)	Tamaño máximo de agregado: 20 mm	Escala 1:100
Encofrado: 2.70 m2	Recubrimiento geométrico: ADN [illegible]	

Alder Rios
Ing. Civil
Reg. N° 1988

Elemento	Fos.	Cant.	No.	Esquema (cm)	Long. (cm)	Total (cm)	ADN 420 S (kg)
[illegible]		[illegible]			[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
						[illegible]	[illegible]
[illegible]		[illegible]			[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
						[illegible]	[illegible]
						[illegible]	[illegible]

Resumen Acero Columnas	Long. total (m)	Peso 10% (kg)
ADN 420 S Ø6	732.[illegible]	179

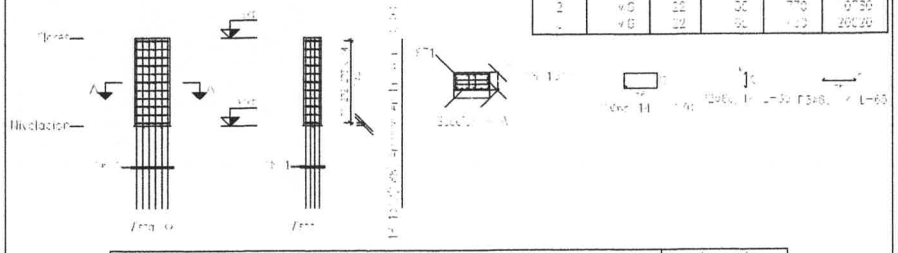
[illegible]



Acero: ADN 420 S (9.[illegible] kg), Cuantía: 33.1[illegible] kg/m3		Planta: Pilares
Hormigón: H-20 (0.27 m3)	Tamaño máximo de agregado: 20 mm	Escala 1:100
Encofrado: 2.70 m2	Recubrimiento geométrico: 2 cm	

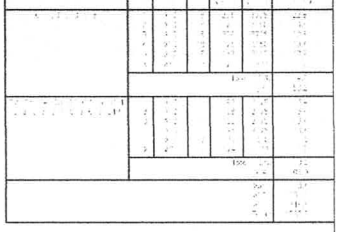
Planta: Pilares
Hormigón: H-20
Acero en estribos: ADN 420 S

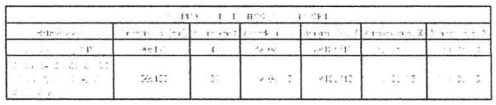
[illegible]

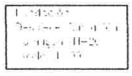


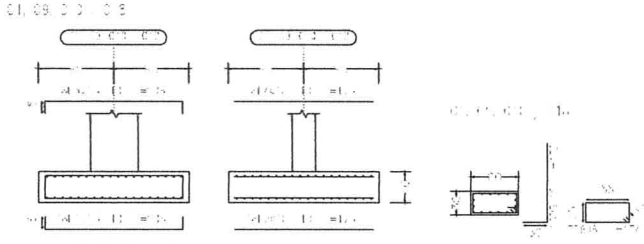
Acero: ADN 420 S (9.[illegible] kg), Cuantía: [illegible] kg/m3		Planta: Pilares
Hormigón: H-20 (0.27 m3)	Tamaño máximo de agregado: 20 mm	Escala 1:100
Encofrado: 2.70 m2	Recubrimiento geométrico: [illegible]	

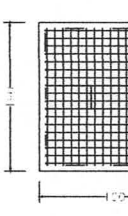
Alder Rios
Ing. Civil
Reg. N° 1958

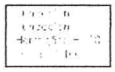


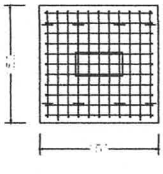


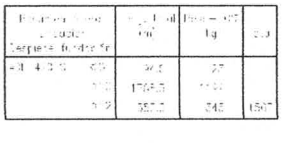




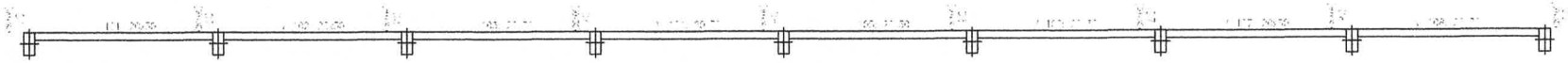


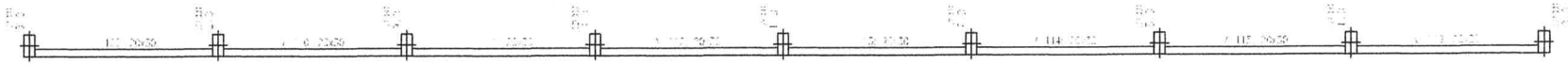




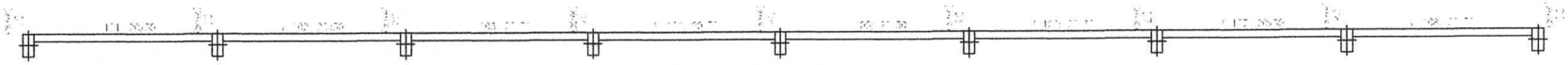


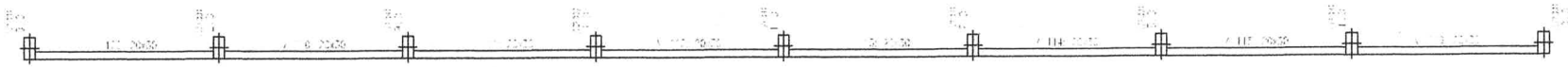
Alder Rios
Ing. Civil





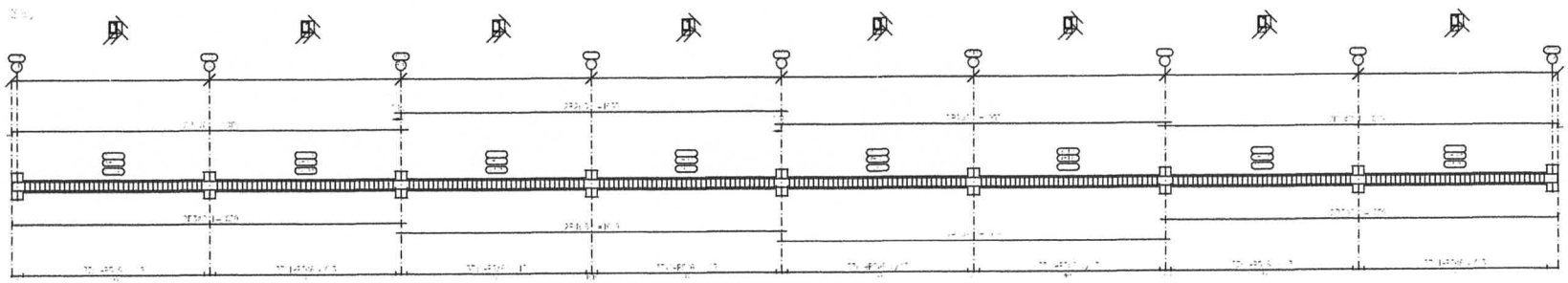
Alder Rios
Ing. Civil
Reg N° 1958



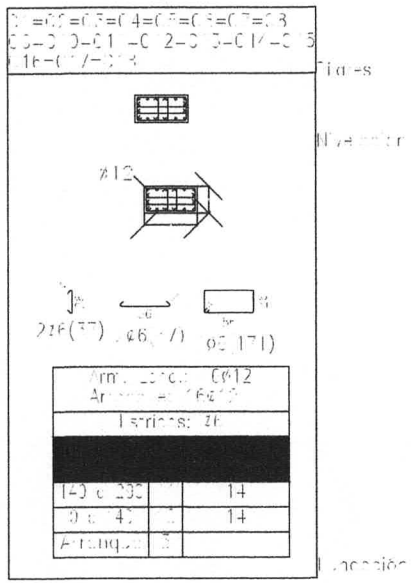


Alder Rios
Ing. Civil

1958



Alder Rios
Ing. Civil
Reg. N° 1958

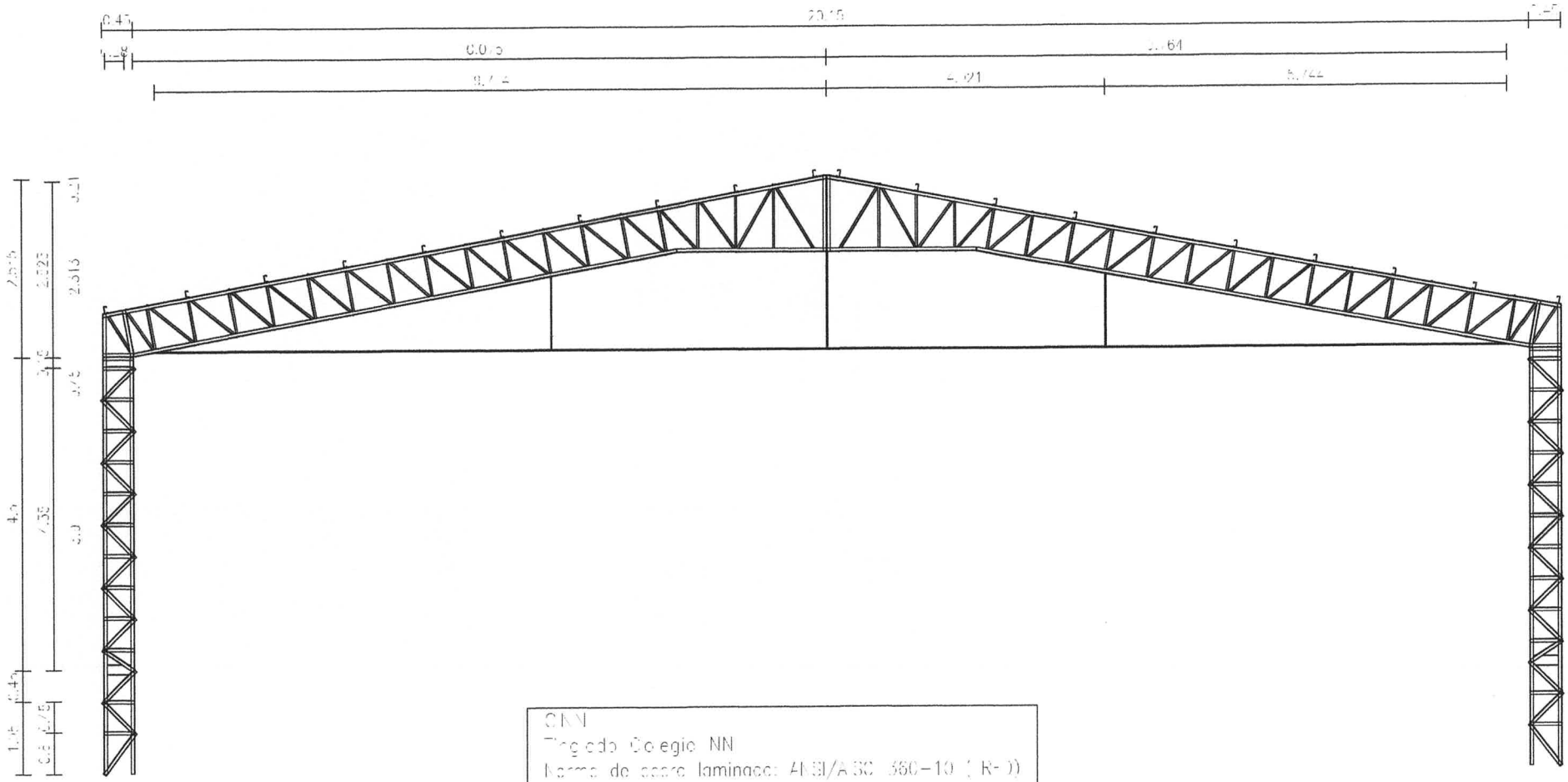


Cuadro de columnas
Escala 1:100
Hormigón: H-20
Acero en barras: ADN 420 S
Acero en estribos: ADN 420 S

Resumen Acero Cuadro de columnas		Long. total (m)	Peso 110% (kg)	Total
ADN 420 S	Ø6	1588.7	388	
	Ø12	1195.8	1168	1556

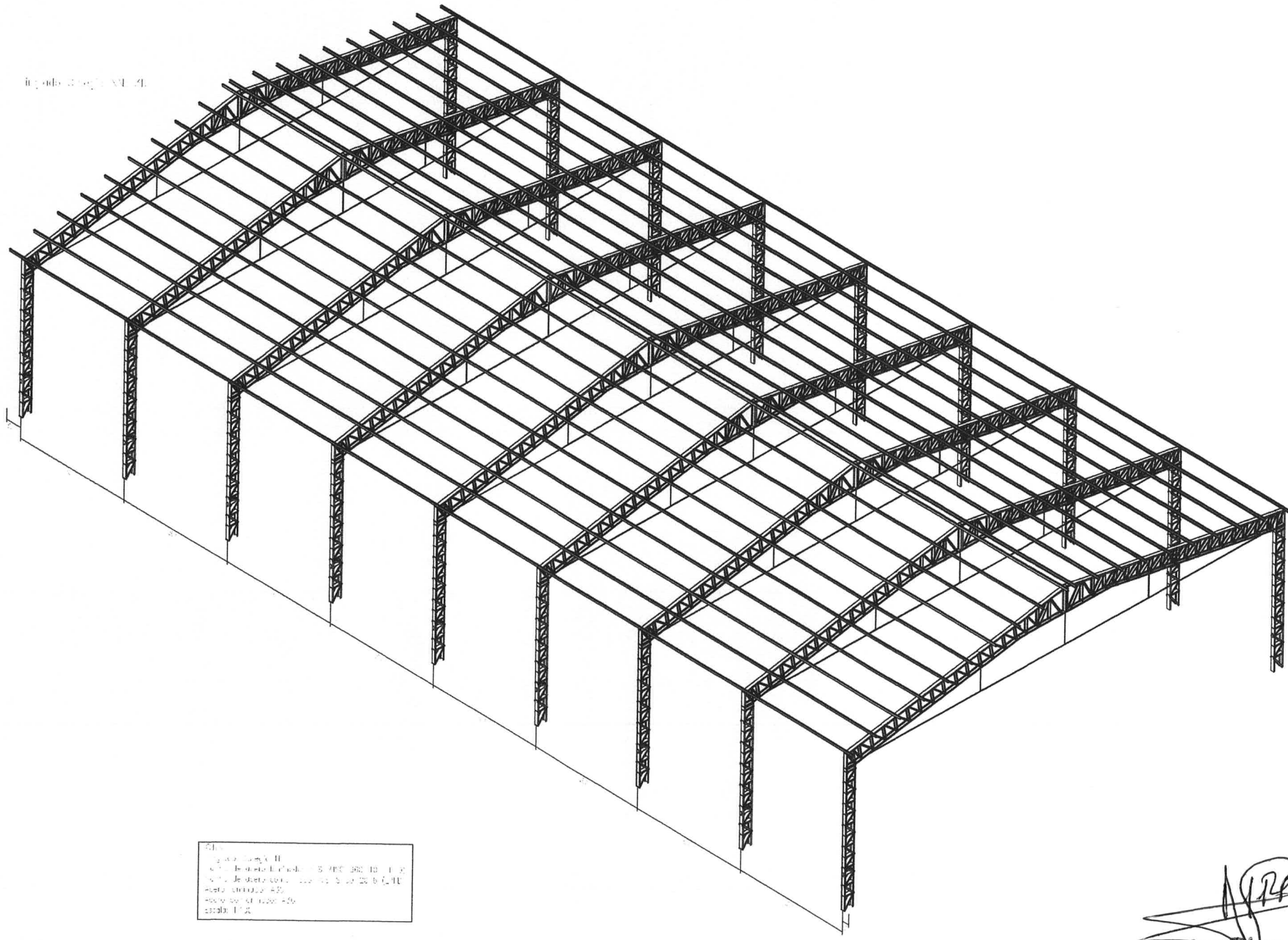
Alder Rios
Ing. Civil
Reg. Nº 1958

Tinglado Colegio NN: 2D: 2 D Fronta



CNN
Tinglado Colegio NN
Norma de acero laminado: AISI/AISC 360-10 (LRFD)
Norma de acero conformado: AISI S100-2016 (LRFD)
Acero laminado: A36
Acero conformado: A36
Escala: 1:100

Alder Rios
Ing. Civil
Rut N° 1958



Alder Rios
Ing. Civil
Reg. Nº 1988