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INGENIEROS CONSULTORES

44 AÑOS DE TRAYECTORIA EN INGENIERÍA ESTRUCTURAL

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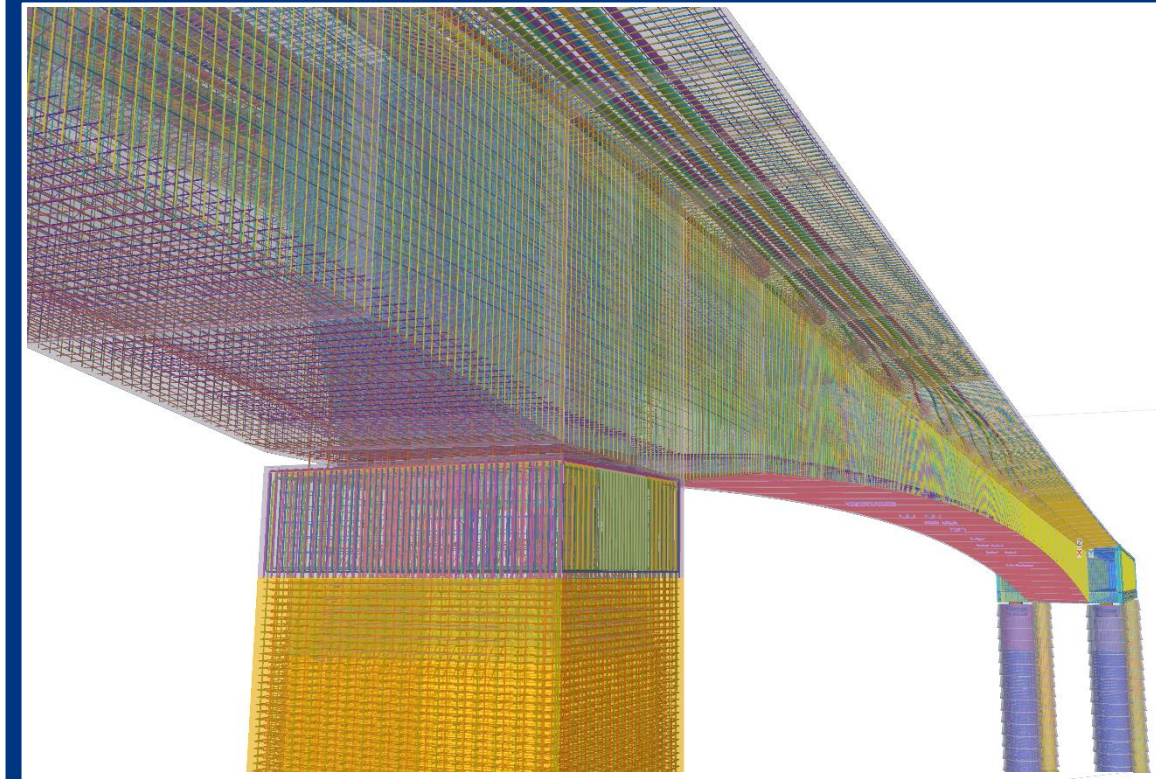
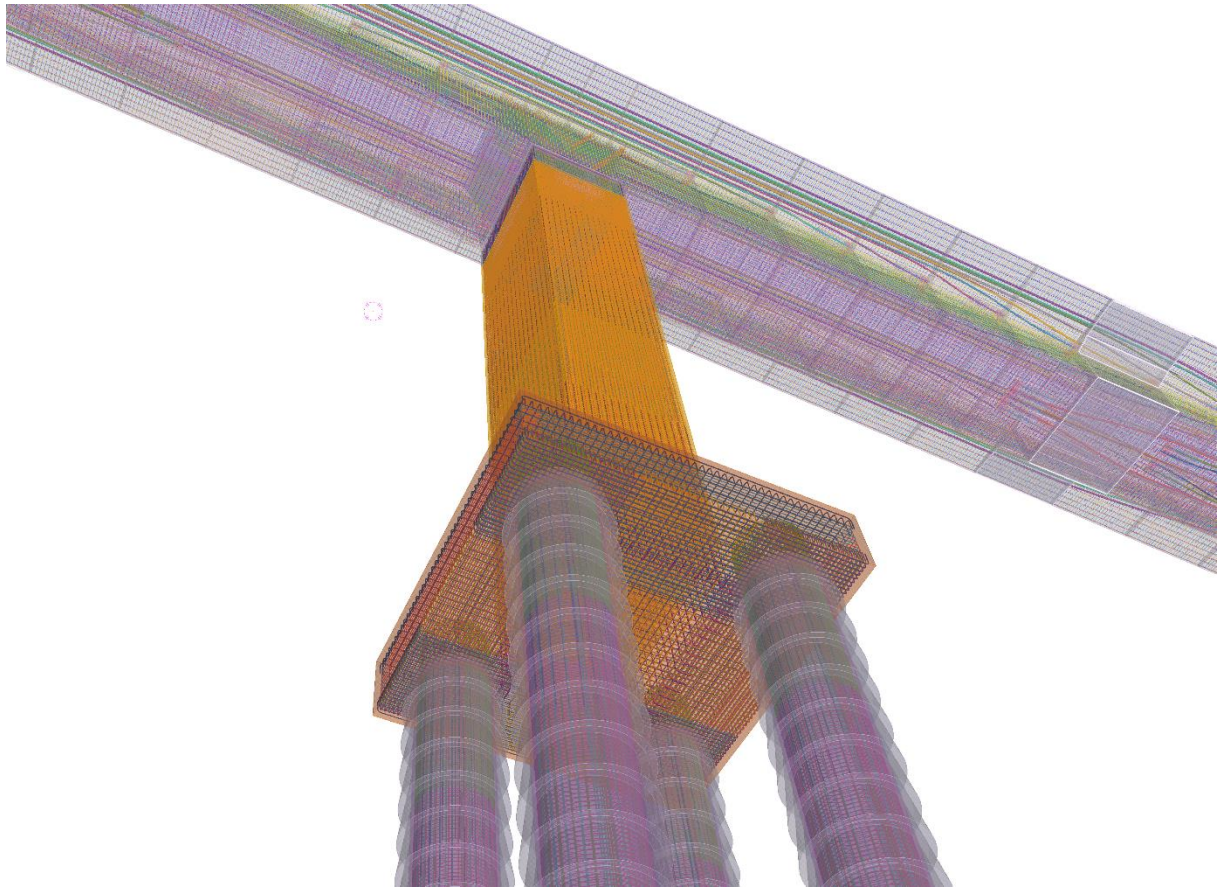
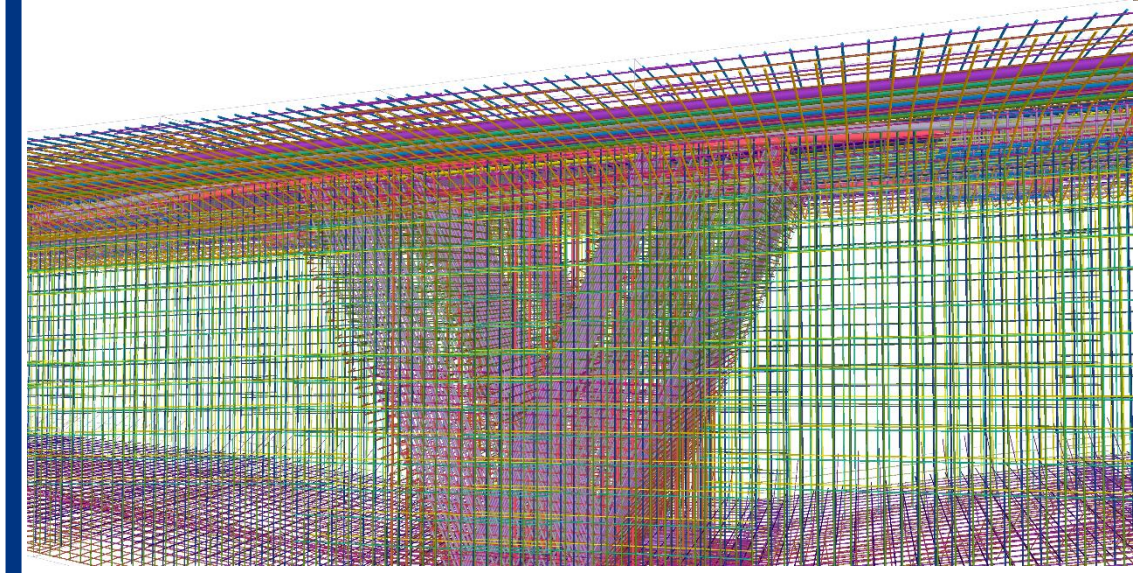
PUENTE 10
AUTOPISTAS PACIFICO 1







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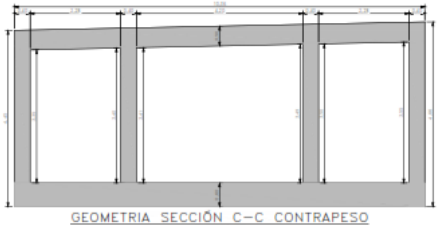
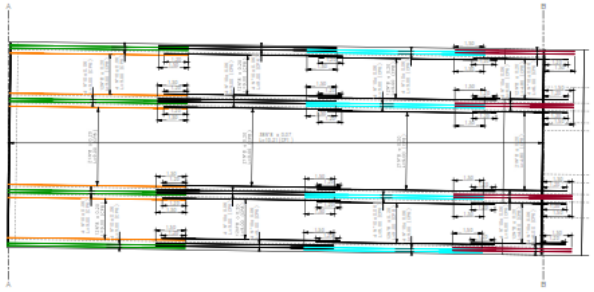
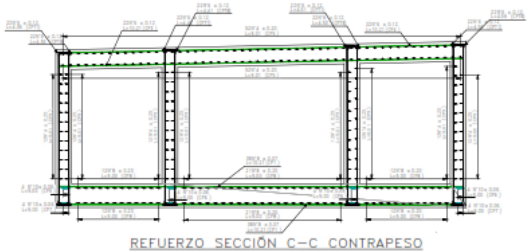
GEOMETRIA PLANTA CONTRAPESO
Escala 1:100



GEOMETRIA SECCIÓN C–C CONTRAPESO
Escala 1:50

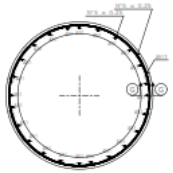


REFUERZO PLANTA CONTRAPESO LOSA INFERIOR
Escala 1:100



REFUERZO SECCIÓN C–C CONTRAPESO
Escala 1:50

REFUERZO ANILLOS SECCIÓN G – G
Escala 1:25



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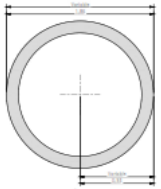
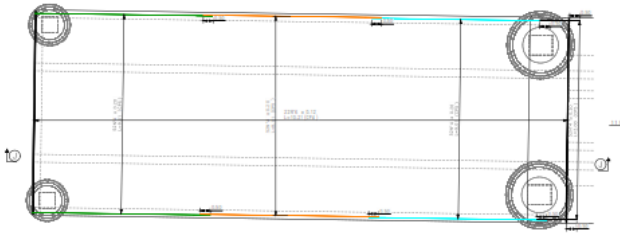
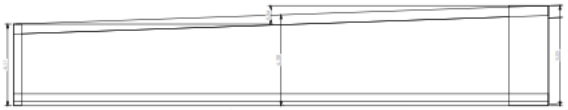


GEOMETRÍA ANILLOS SECCIÓN F - F
Escala 1:25



REFUERZO PLANTA CONTRAPESO LOSA SUPERIOR
Escala 1:100

SECCIÓN J – J
1:100



GEOMETRÍA PERFIL CONTRAPESO
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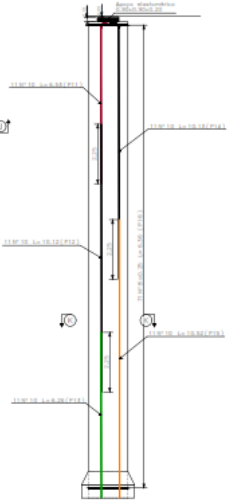
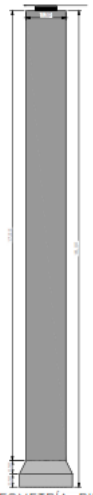
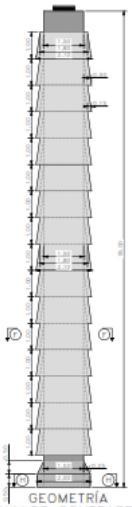


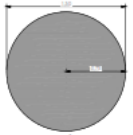
REFUERZO PILAS CONTRAPESO
Escala 1:75



GEOMETRÍA PILA MACIZA CONTRAPESO
Escala 1:75



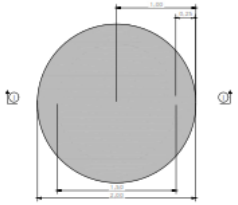
GEOMETRÍA ANILLOS CONTRAPESO
Escala 1:75



GEOMETRÍA PILA MACIZA SECCIÓN K – K
Escala 1:25

REFUERZO PILA MACIZA SECCIÓN K – K
Escala 1:25

DETALLE NEOPRENO EJE A
Escala 1:10



GEOMETRIA CAMPANA
SECCIÓN H – H
Escala 1:25

GEOMETRIA CAMPANA
SECCIÓN I – I
Escala 1:25

Cuadro de Despiece

TIPO	BARRA N°	CANTIDAD	LONGITUD [m]	PESO [kg]	Forma de plegado
AN1	5	1	1.01	461.31	1.01
CF1	8	386	10.21	31315.66	10.21
CF3	6	226	10.21	5158.20	10.21
CF4	6	226	10.21	5158.20	10.21
CF5	4	52	9.01	3000.00	9.01
CF6	10	4	9.00	3381.59	9.00
CF7	10	4	9.00	922.18	9.00
CF8	8	12	9.00	10465.80	9.00
CF9	4	12	9.01	1400.83	9.00 9.01
CFT1	6	226	4.36	9960.54	0.25 4.36 0.25
CFT8	6	226	4.36	9950.44	0.25 4.36 0.25
F11	10	11	6.53	459.71	0.25 6.53
F12	10	11	10.12	712.96	10.12
F13	10	11	6.26	440.84	0.25 6.26
F14	10	11	10.13	713.94	0.25 10.13
F15	10	11	10.52	741.07	10.52
TA1	5	9	4.35	322.96	0.25 4.35 0.25

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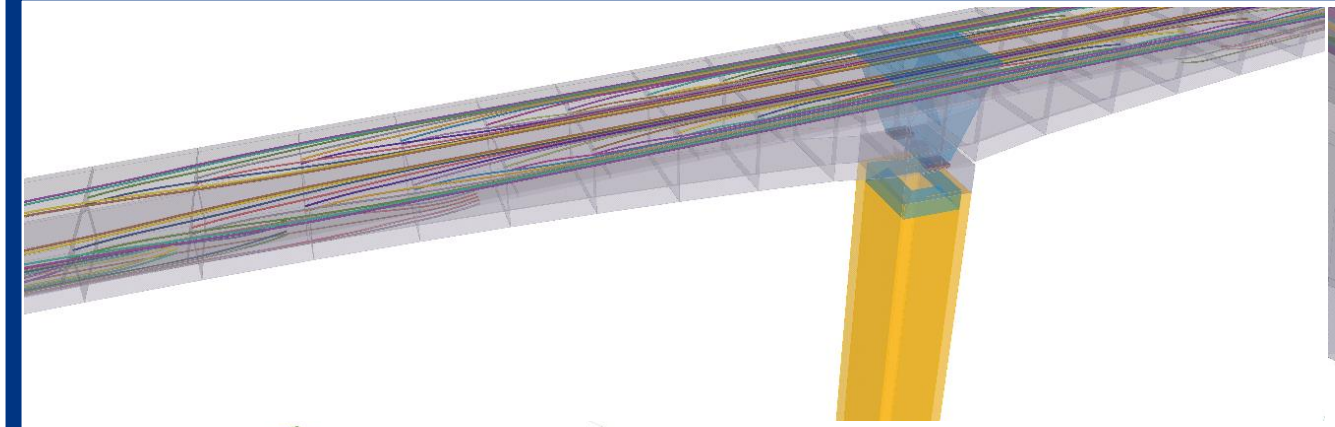

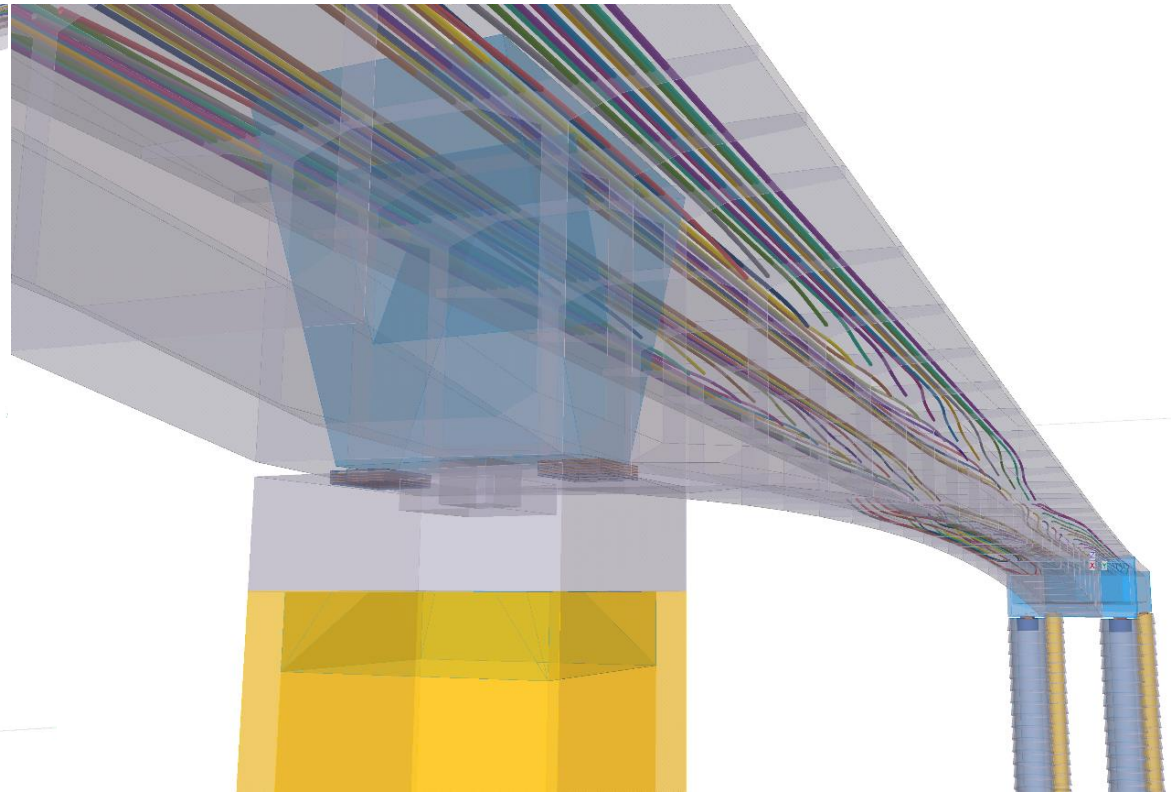

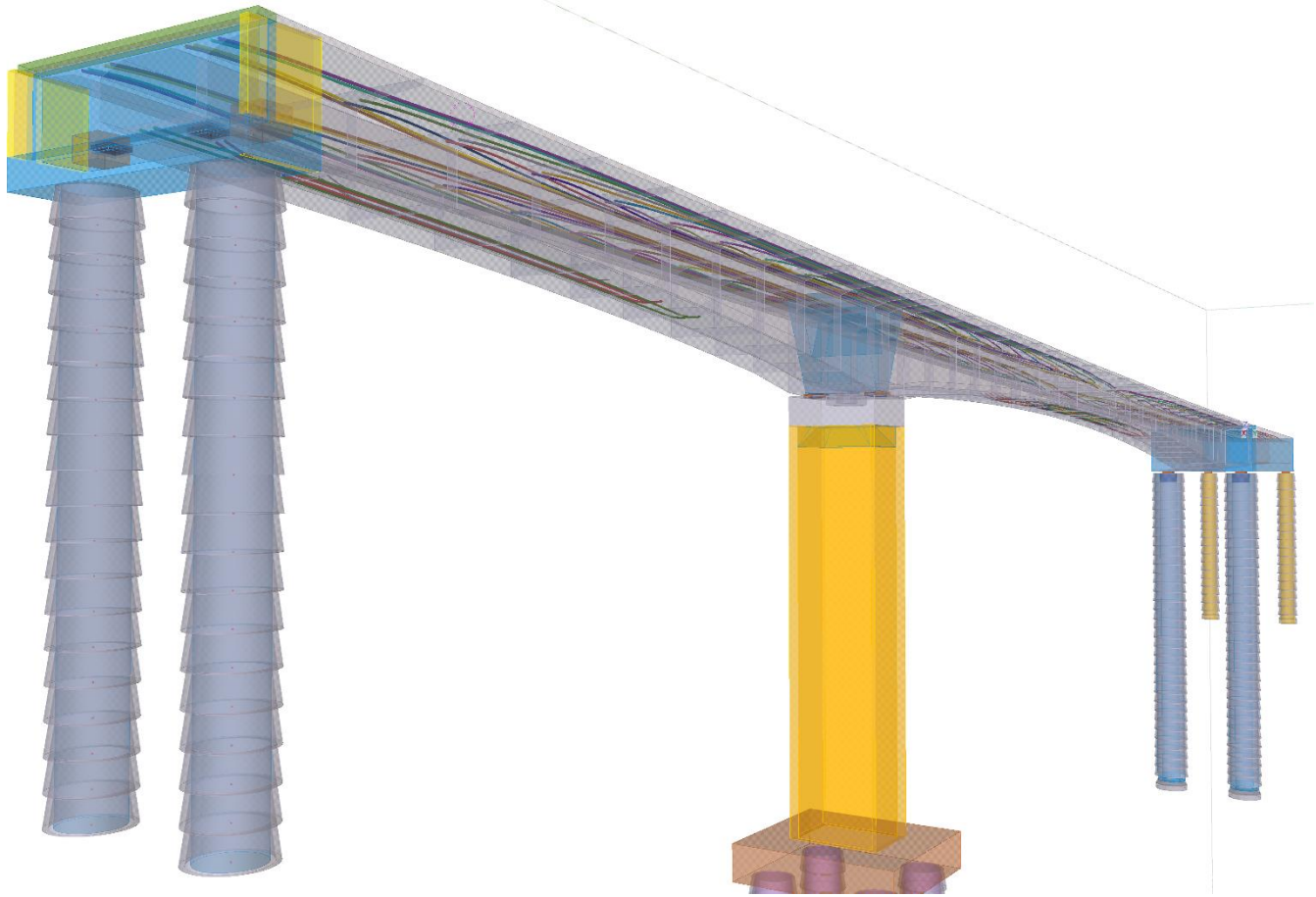

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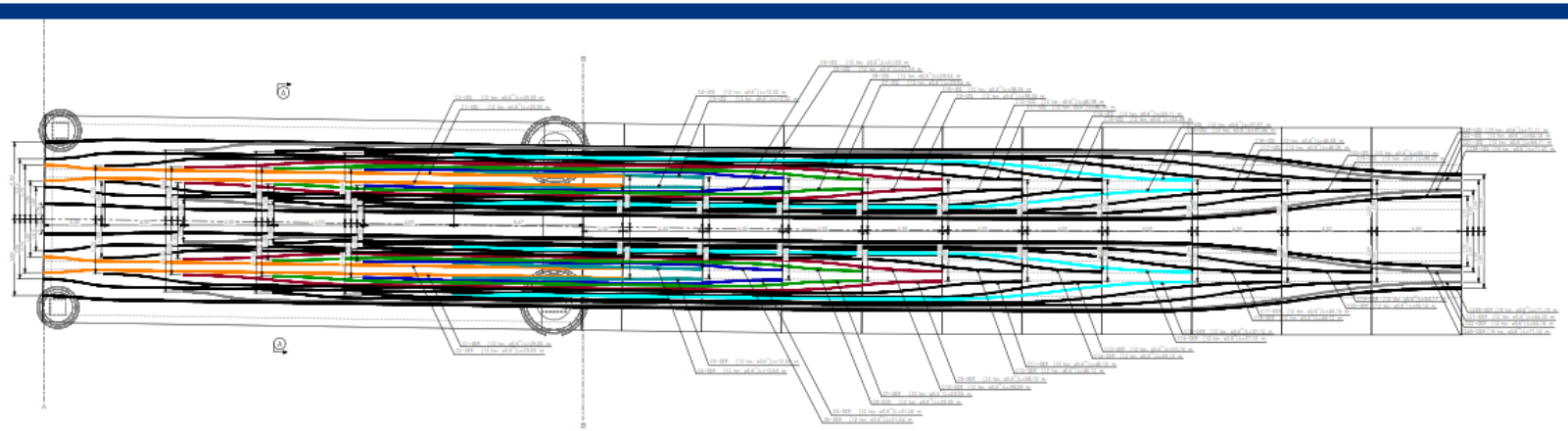
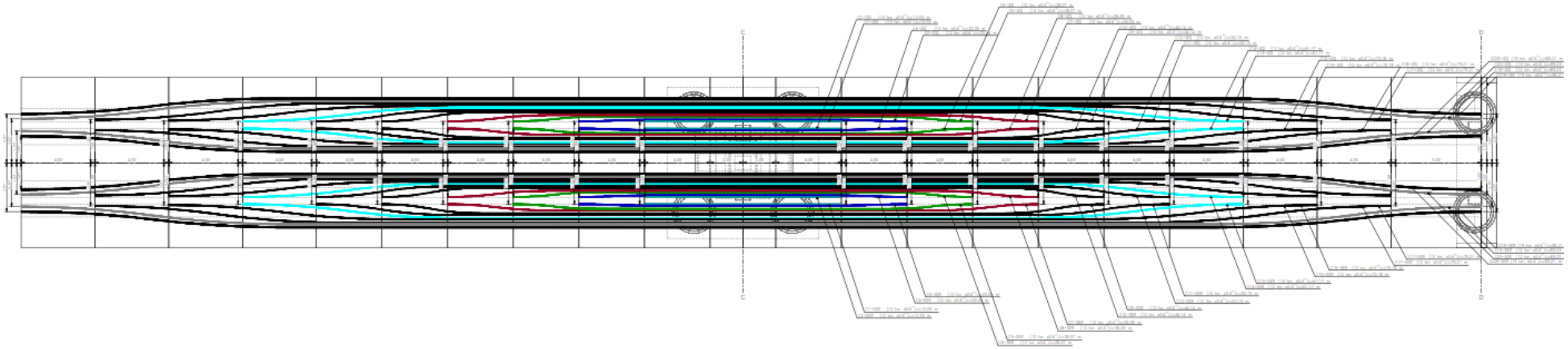


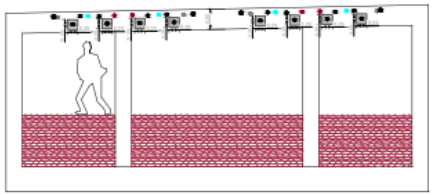
PLANTA TRAZADO CABLES SUPERIORES – CONTRAPESO Y VOLADIZO 1

Escala 1:100



PLANTA TRAZADO CABLES SUPERIORES – VOLADIZOS 2 Y 3

Escala 1:100



ANCLAJES CABLES CONTRAPESO

SECCIÓN A – A

1:50

Puente 10 CD - Elongaciones Cables Longitudinales Superiores Eje B - Voladizo 1

Cable	Tensionar en	Voladizo	# Torones	Longitud [m]	P_0 [ton]	Δ_1 [cm]	Δ_2 [cm]	Δ_{Total} [cm]
1	Dov 0	1	12	29.03	21	20.54	1.24	21.77
2	Dov 0	1	12	29.03	21	20.54	1.24	21.77
3	Dov 1	1	12	12.53	21	9.03	0.36	9.40
4	Dov 1	1	12	12.53	21	9.03	0.36	9.40
5	Dov 2	1	12	21.04	21	14.92	0.86	15.78
6	Dov 2	1	12	21.04	21	14.92	0.86	15.78
7	Dov 3	1	12	29.56	21	20.70	1.47	22.17
8	Dov 3	1	12	29.56	21	20.70	1.47	22.17
9	Dov 4	1	12	38.1	21	26.33	2.24	28.58
10	Dov 4	1	12	38.1	21	26.33	2.24	28.58
11	Dov 5	1	12	46.13	21	31.48	3.12	34.60
12	Dov 5	1	12	46.13	21	31.48	3.12	34.60
13	Dov 6	1	12	53.16	21	35.70	4.17	39.87
14	Dov 6	1	12	53.16	21	35.70	4.17	39.87
15	Dov 7	1	12	37.12	21	25.59	2.25	27.84
16	Dov 7	1	12	37.12	21	25.59	2.25	27.84
17	Dov 8	1	12	46.15	21	31.45	3.17	34.61
18	Dov 8	1	12	46.15	21	31.45	3.17	34.61
19	Dov 9	1	12	55.17	21	37.13	4.25	41.38
20	Dov 9	1	12	55.17	21	37.13	4.25	41.38
21	Dov 10	1	12	64.22	21	42.68	5.48	48.17
22	Dov 10	1	12	64.22	21	42.68	5.48	48.17
23 R	Dov 10	1	19	71.14	21	47.16	6.20	53.36
24 R	Dov 10	1	19	71.14	21	47.16	6.20	53.36

Puente 10 CD - Elongaciones Cables Longitudinales Superiores Eje C - Voladizos 2 y 3

Cable	Tensionar en	Voladizo	# Torones	Longitud [m]	P_0 [ton]	Δ_1 [cm]	Δ_2 [cm]	Δ_{Total} [cm]
1	Dov 1	2 y 3	12	12.03	21	8.66	0.36	9.02
2	Dov 1	2 y 3	12	12.03	21	8.66	0.36	9.02
3	Dov 2	2 y 3	12	20.05	21	14.27	0.76	15.04
4	Dov 2	2 y 3	12	20.05	21	14.27	0.76	15.04
5	Dov 3	2 y 3	12	28.07	21	19.76	1.29	21.05
6	Dov 3	2 y 3	12	28.07	21	19.76	1.29	21.05
7	Dov 4	2 y 3	12	36.09	21	25.13	1.94	27.07
8	Dov 4	2 y 3	12	36.09	21	25.13	1.94	27.07
9	Dov 5	2 y 3	12	44.14	21	30.39	2.72	33.11
10	Dov 5	2 y 3	12	44.14	21	30.39	2.72	33.11
11	Dov 6	2 y 3	12	52.15	21	35.49	3.62	39.11
12	Dov 6	2 y 3	12	52.15	21	35.49	3.62	39.11
13	Dov 7	2 y 3	12	61.17	21	41.12	4.76	45.88
14	Dov 7	2 y 3	12	61.17	21	41.12	4.76	45.88
15	Dov 8	2 y 3	12	70.18	21	46.67	5.97	52.64
16	Dov 8	2 y 3	12	70.18	21	46.67	5.97	52.64
17	Dov 9	2 y 3	12	79.21	21	52.07	7.33	59.41
18	Dov 9	2 y 3	12	79.21	21	52.07	7.33	59.41
19	Dov 10	2 y 3	12	89.23	21	58.09	8.84	66.92
20	Dov 10	2 y 3	12	89.23	21	58.09	8.84	66.92
21 R	Dov 10	2 y 3	19	89.23	21	58.18	8.74	66.92
22 R	Dov 10	2 y 3	19	89.23	21	58.18	8.74	66.92

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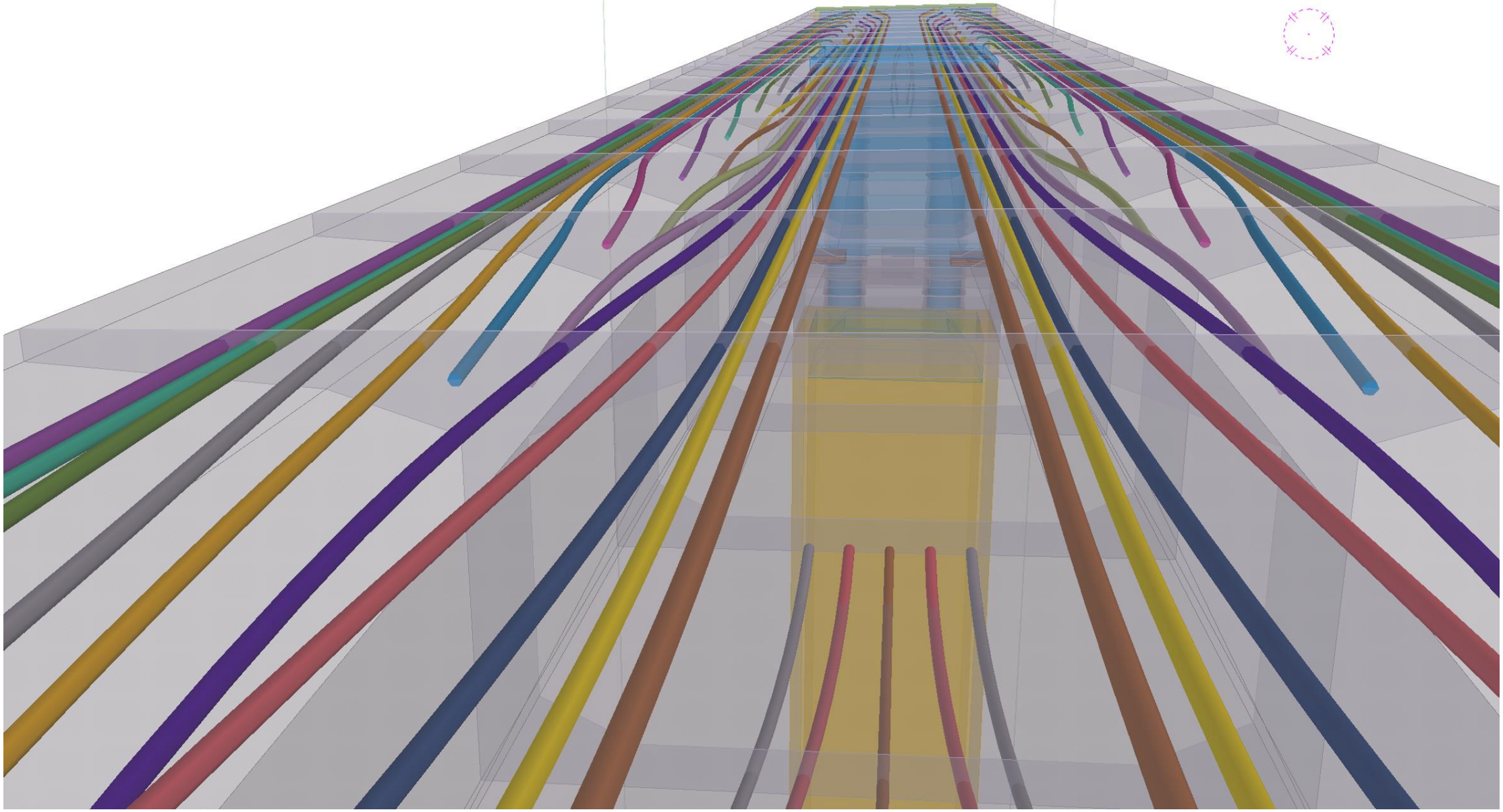

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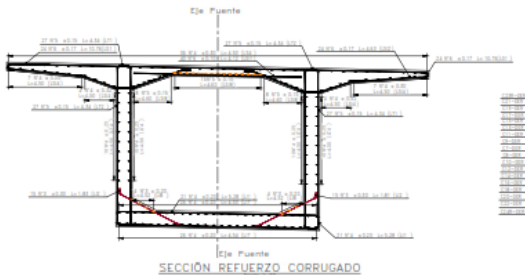
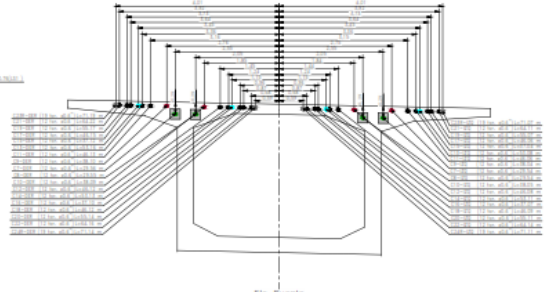
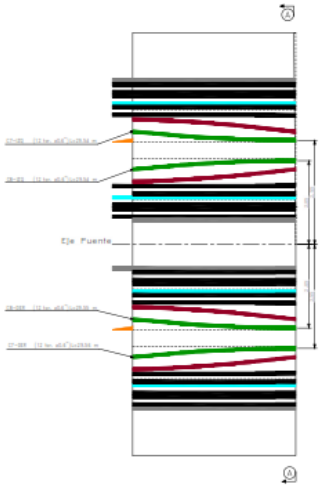


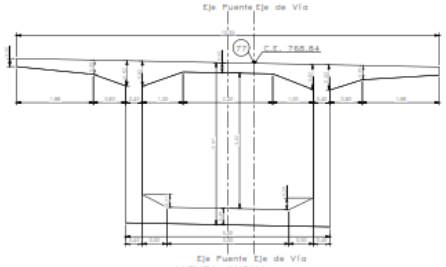
SECCIÓN REFUERZO CORRUGADO



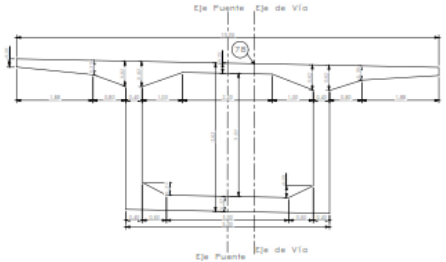
UBICACIÓN DE CABLES



PLANTA DE CABLES



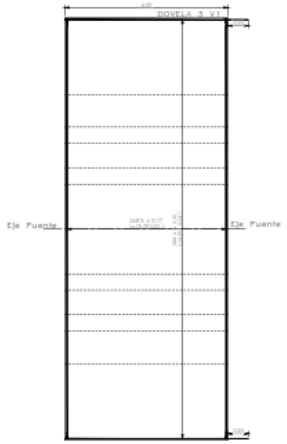
ALTURA INICIAL
Abscisa K8+931.790



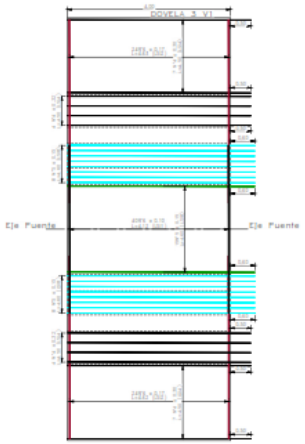
ALTURA FINAL
Abscisa K8+935.790

Cuadro de Despiece

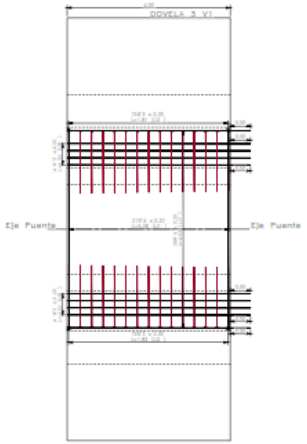
TIPO	BARRA N°	CANTIDAD	LONGITUD [m]	PESO [kg]	Forma de plegado
LI1	4	21	5.28	220.53	
LI2	3	15	1.81	30.00	
LI7	4	26	4.53	234.23	
LI8	3	4	4.52	20.27	
LS1	6	24	10.76	577.27	
LS4	4	36	4.50	161.16	
LSI1	6	40	4.12	368.44	
LSI2	6	24	4.63	496.04	
LSI4	4	7	4.50	98.48	
LSI8	5	8	4.60	221.49	
LT1	5	27	4.34	350.18	
LT2	5	27	4.34	350.18	
LT4	4	10	4.50	179.02	



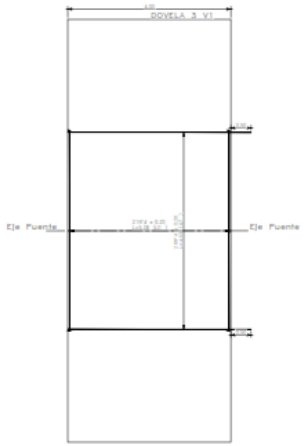
LOSA SUPERIOR CARA SUPERIOR



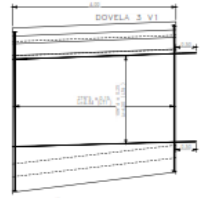
LOSA SUPERIOR CARA INFERIOR



LOSA INFERIOR CARA SUPERIOR



LOSA INFERIOR CARA INFERIOR



ELEVACIÓN REFUERZO TABIQUES

PLANTA GENERAL DOVELAS

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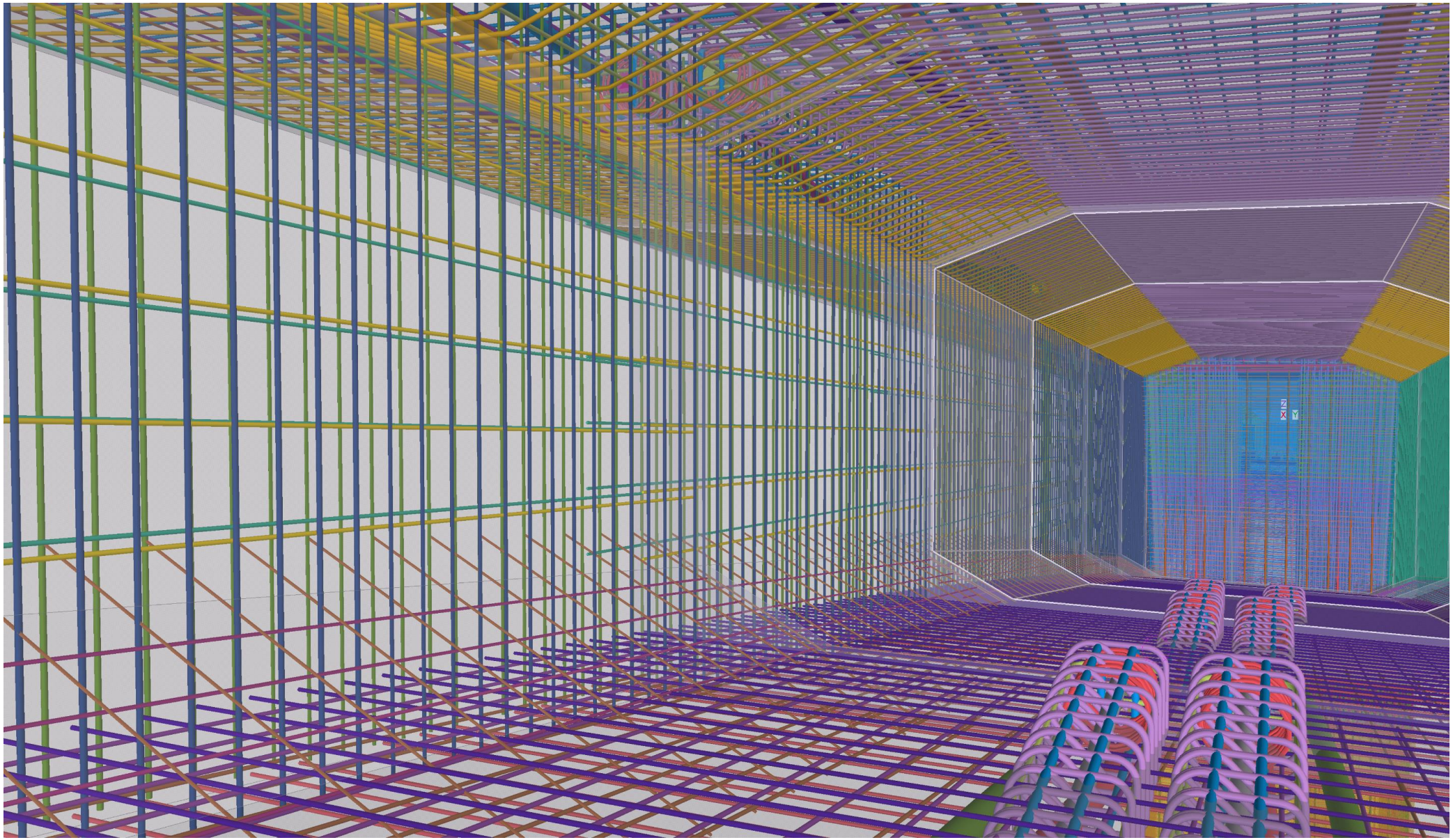

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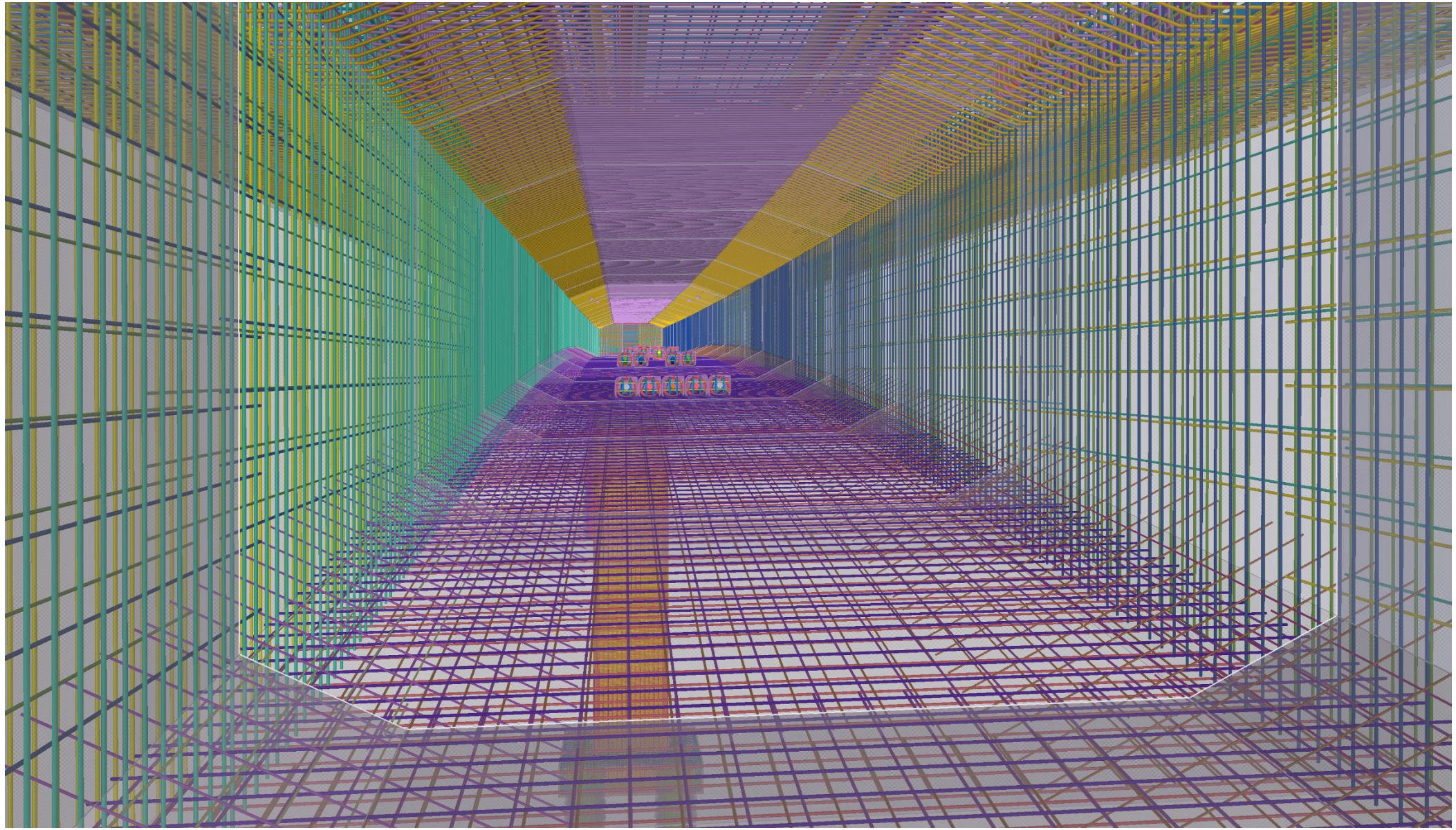

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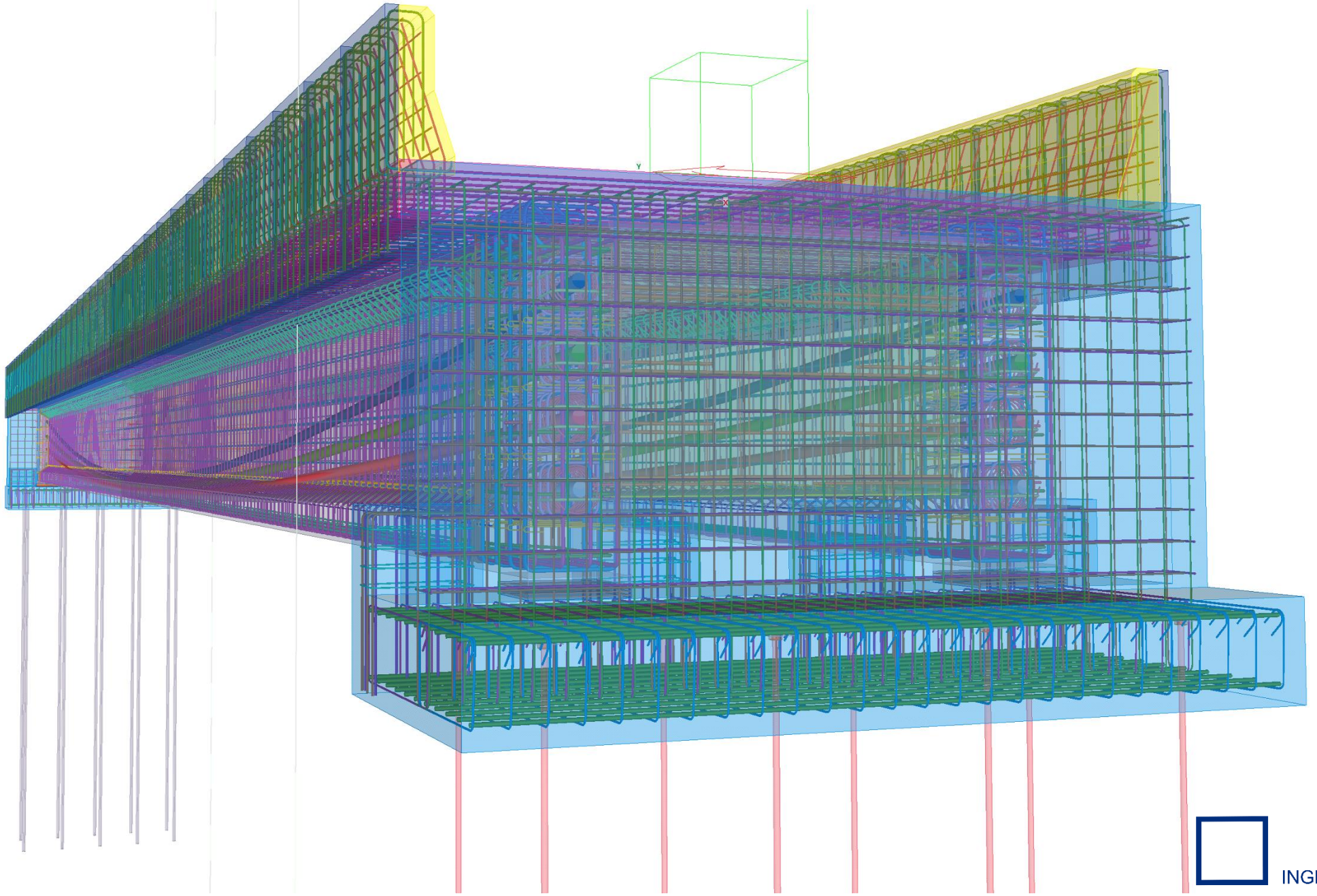
PUENTE PROVISIONAL DABEIBA



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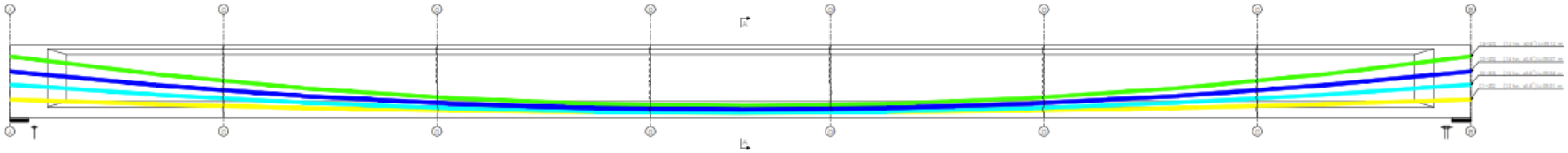
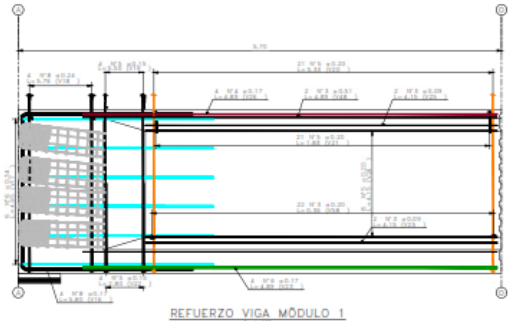
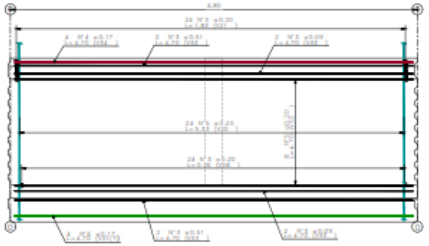
ELEVACIÓN VIGA MÓDULOS



TRAZADO DE CABLES



REFUERZO VIGA MÓDULO 1



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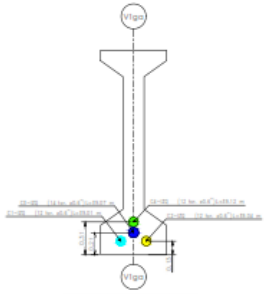
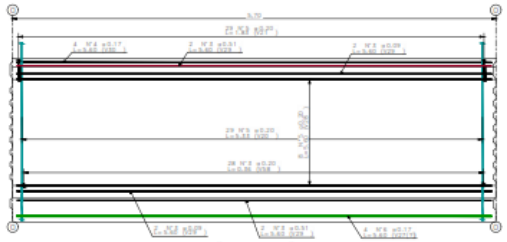


DETALLE TRAZADO TRANSVERSAL CABLES SECCIÓN A – A



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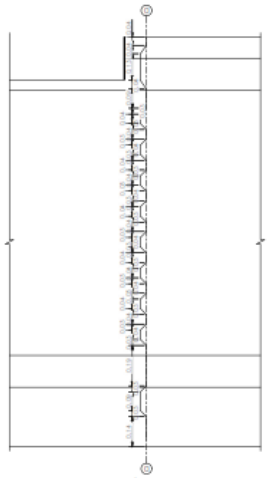
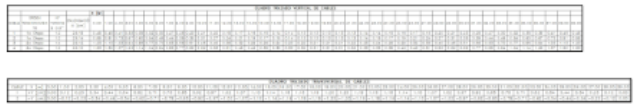


GEOMETRÍA UNION DENTADA ENTRE SEGMENTOS

SECCIÓN DE VIGA GEOMETRÍA



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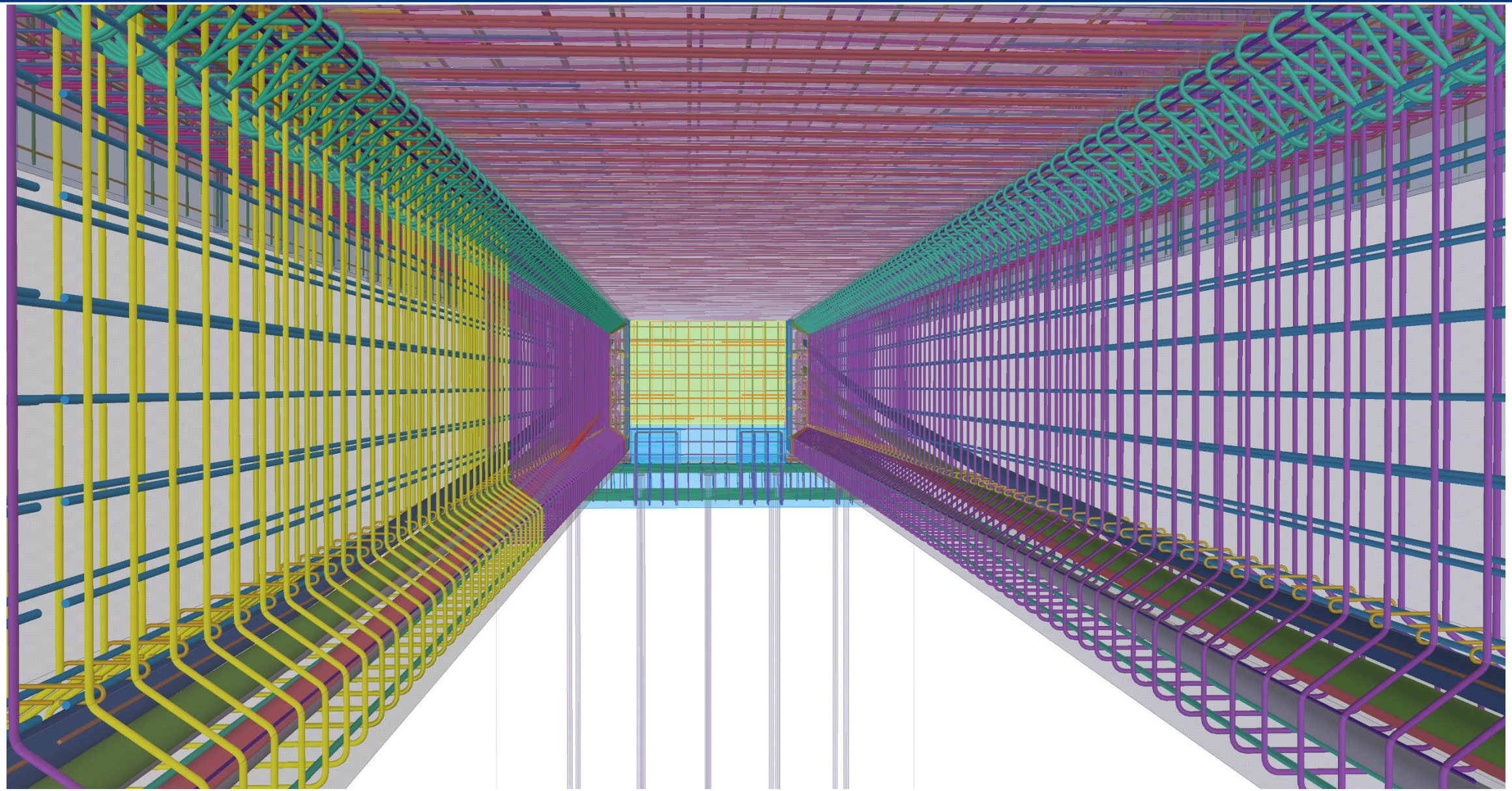

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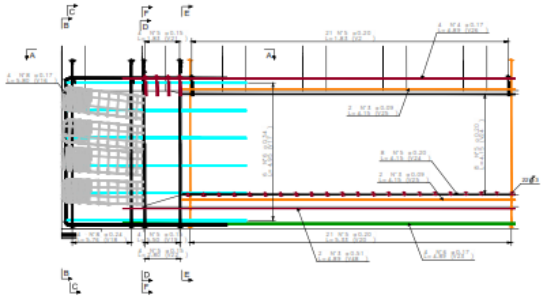
PERFIL VIGA



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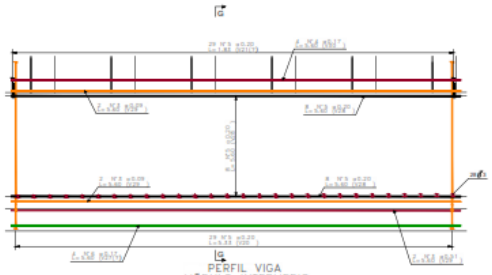
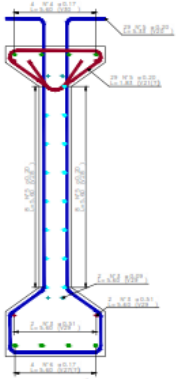
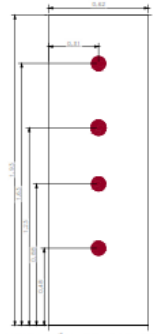


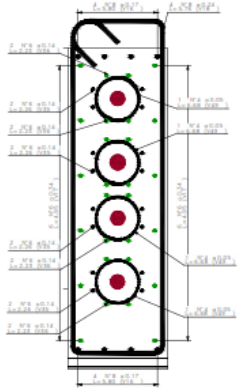
PERFIL VIGA
MÓDULO INTERMEDIO



SECCIÓN G – G



UBICACIÓN DE CABLES



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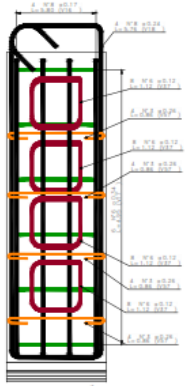

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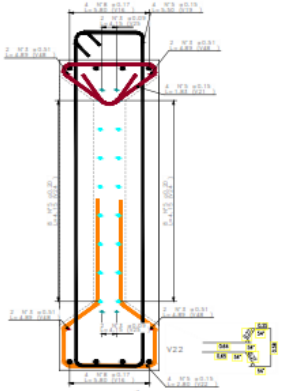
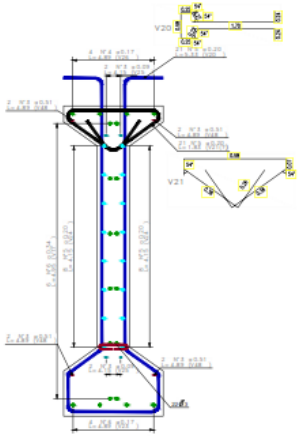
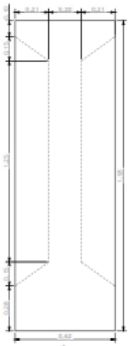


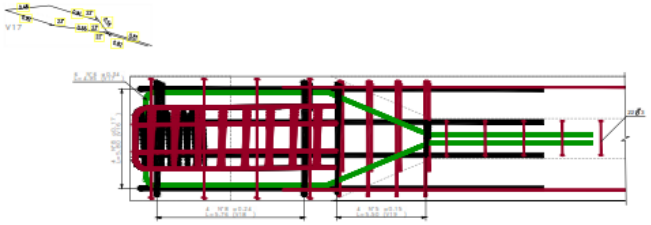
SECCIÓN D – D



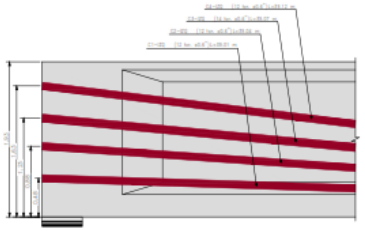
SECCIÓN E – E



SECCIÓN F – F



DETALLE PLANTA
SECCIÓN A – A



PERFIL VIGA

Cuadro de Despiece

TIPO	BARRA Nº	CANTIDAD	LONGITUD [m]	PESO [kg]	Forma de plegado
V16	8	16	5.80	368.85	
V17	6	24	4.95	265.57	
V18	8	16	5.76	366.36	
V19	5	16	5.50	127.33	
V20	5	364	5.33	3010.64	
V21(7)	5	380	1.83	1078.67	
V22	5	16	2.80	69.52	
V23	6	16	4.89	174.87	
V24	5	64	4.15	412.21	
V25	3	8	4.15	18.59	
V26	4	16	4.89	77.77	
V27(7)	6	32	5.60	400.51	
V28	5	128	5.60	1112.47	
V29	3	64	5.60	200.70	
V30	4	32	5.60	178.12	
V31(7)	6	8	4.70	84.04	
V32	5	32	4.70	233.42	
V33	3	16	4.70	42.11	
V34	4	8	4.70	37.37	
V35	6	32	2.26	161.60	
V36	6	32	2.23	159.78	
V37	6	128	1.12	318.48	
V48	3	16	4.89	43.81	
V57	3	64	0.86	30.73	
V58	3	360	0.36	73.32	
V49	4	16	6.68	106.29	
Total Peso				9153.15	

AREA
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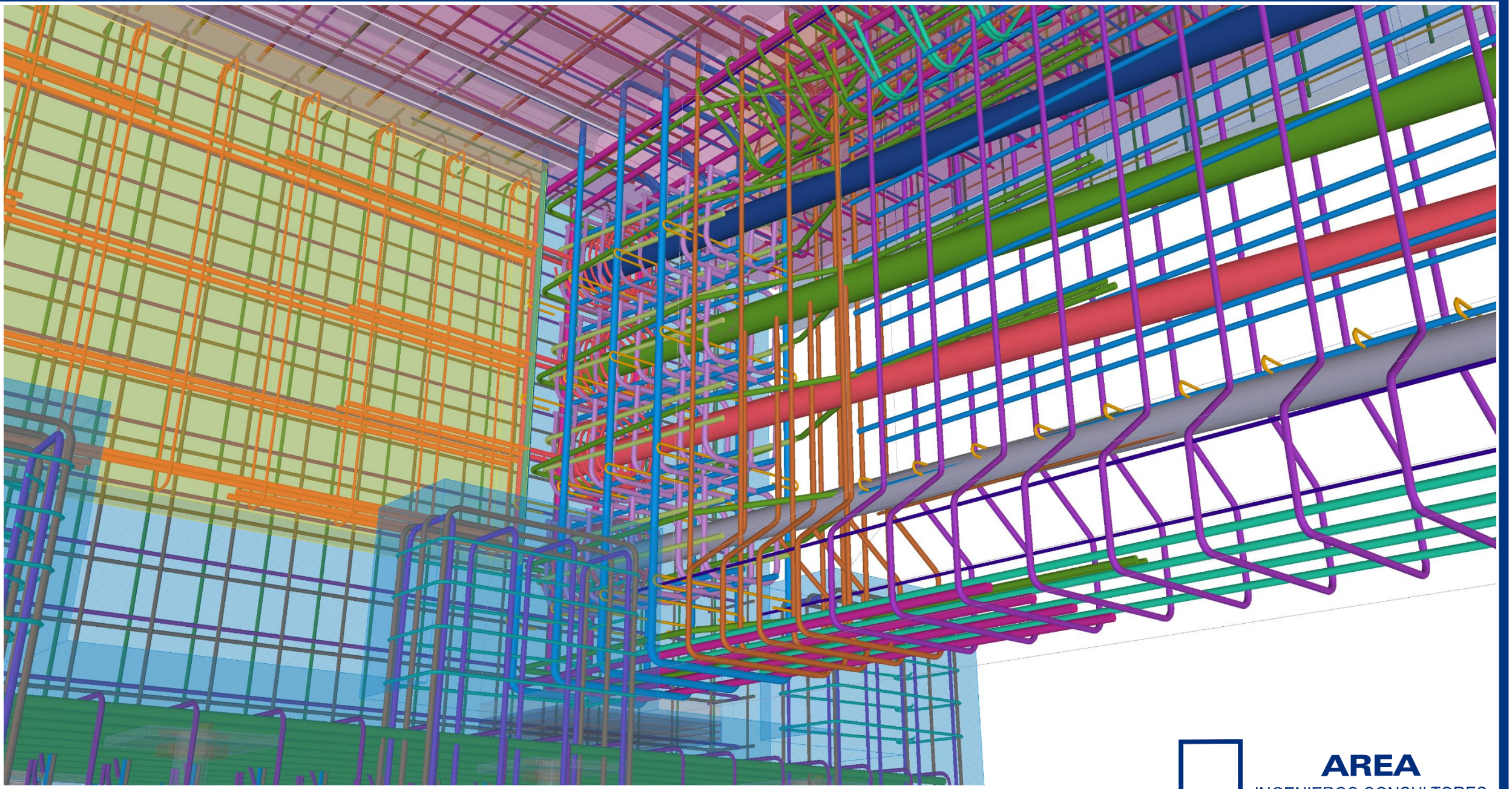

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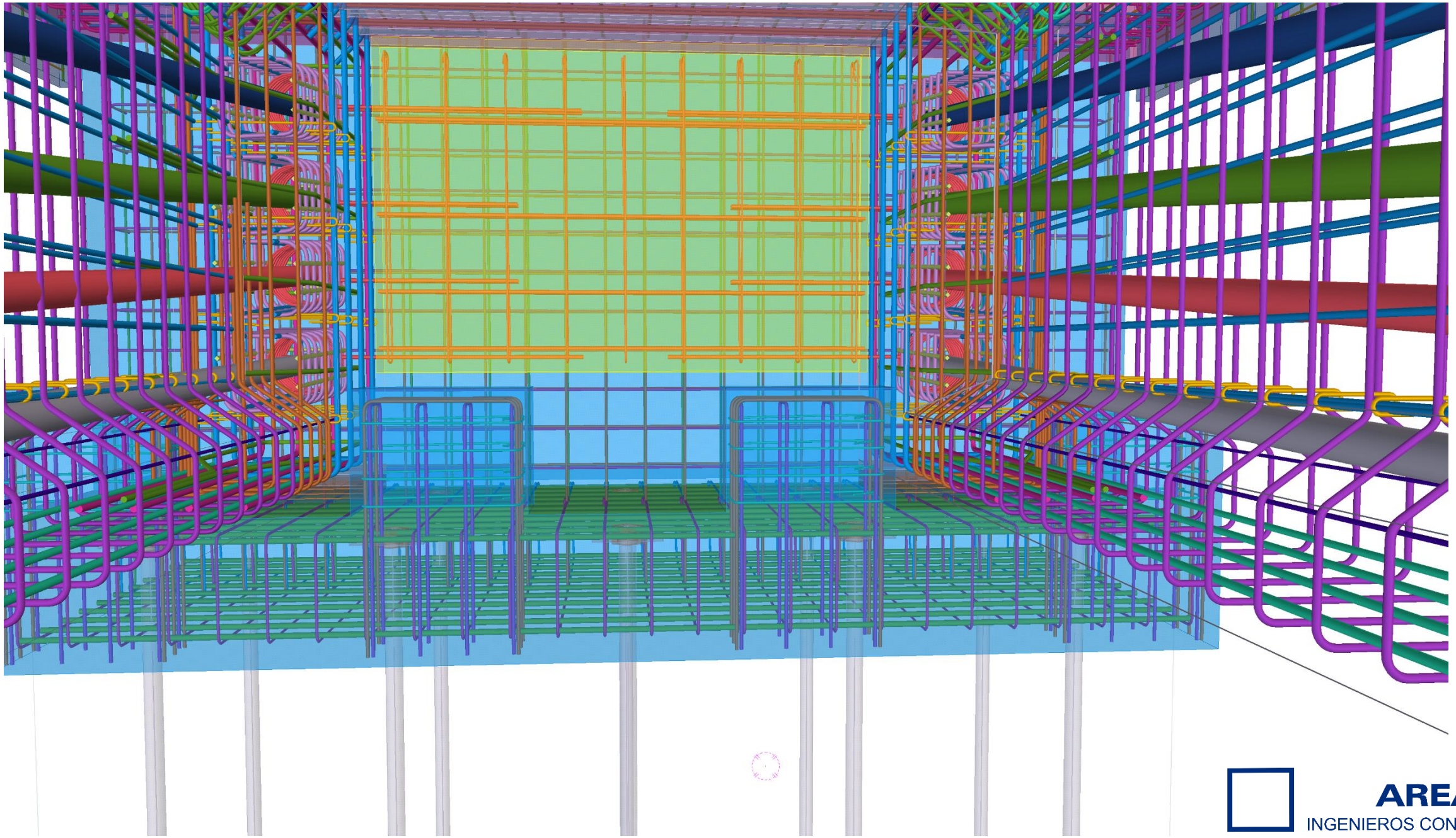

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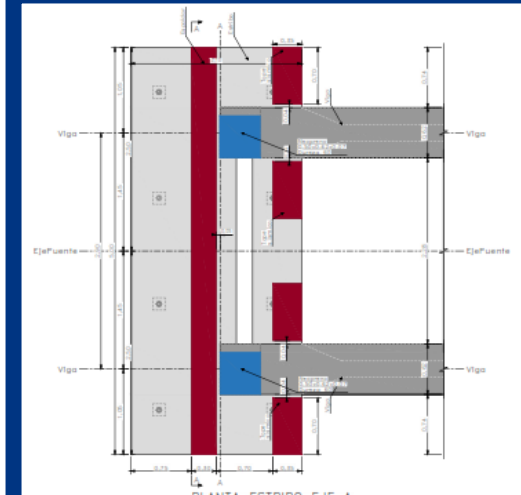
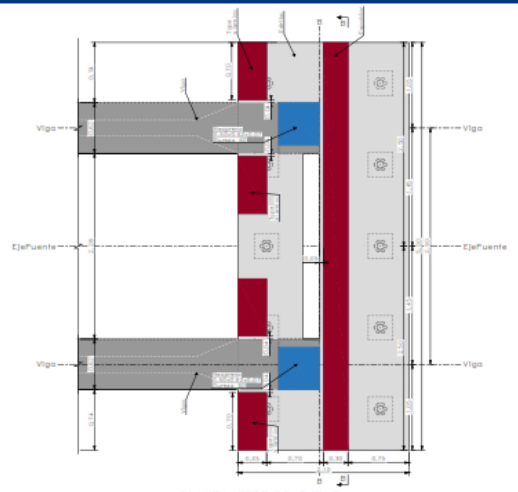
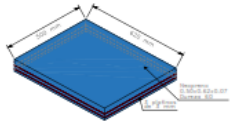
INGENIEROS CONSULTORES



PLANTA ESTRIBO EJE A

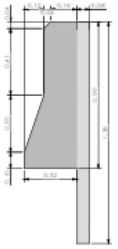


PLANTA ESTRIBO EJE B

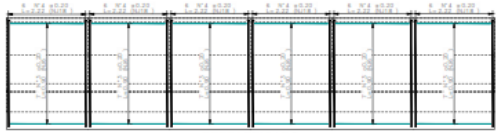


ISOMETRICO NEOPRENO 500X620X70 mm

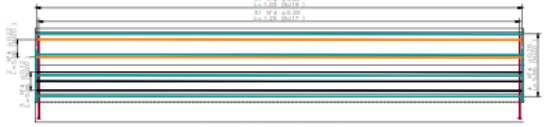
PERFIL NEOPRENO



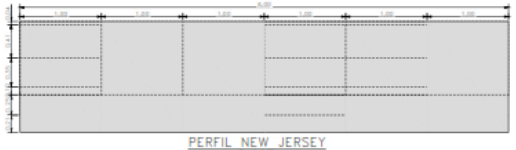
SECCIÓN GEOMETRÍA NEW JERSEY



PREFABRICADO NEW JERSEY

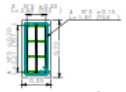


PERFIL NEW JERSEY

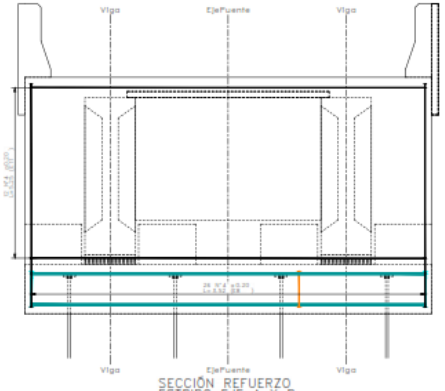


PERFIL NEW JERSEY

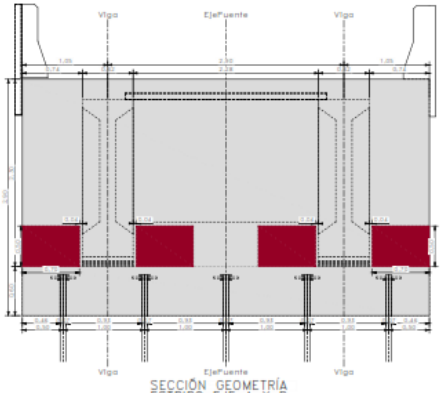
TOPE SÍSMICO



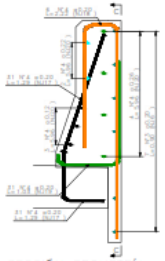
PLANTA TOPE SÍSMICO



SECCIÓN REFUERZO ESTRIBO EJE A Y B

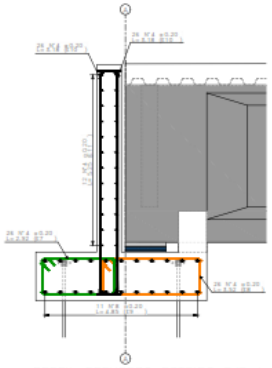


SECCIÓN GEOMETRÍA ESTRIBO EJE A Y B



SECCIÓN GEOMETRÍA NEW JERSEY

PERFIL GEOMETRÍA ESTRIBO EJE A



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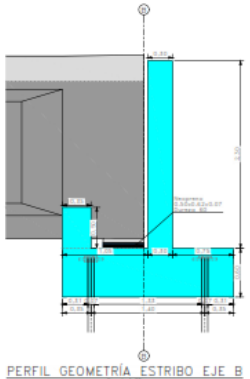

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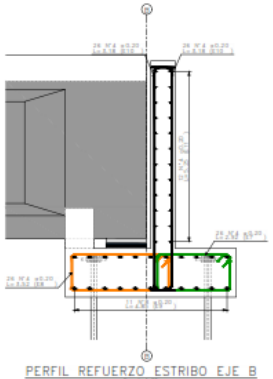

PERFIL REFUERZO ESTRIBO EJE B

Cuadro de Despiece

TIPO	BARRA Nº	CANTIDAD	LONGITUD [m]	PESO [kg]	Forma de plegado
E7	4	52	2.92	150.83	
E8	4	52	3.52	181.84	
E9	8	44	4.85	847.84	
E10	4	104	3.18	328.58	
E11	4	48	5.25	250.41	
NJ6	3	546	0.90	275.12	
NJ17	4	404	1.29	518.49	
NJ18	4	468	2.22	1032.26	
NJ19	4	404	1.03	412.98	
NJ20	4	54	5.96	319.91	
NJ22	4	54	5.96	319.81	
NJ23	4	18	2.96	52.95	
TS1	5	32	2.21	110.03	
TS2	5	24	2.63	97.79	
TS3	3	32	1.97	35.28	
Total Peso				4934.11	

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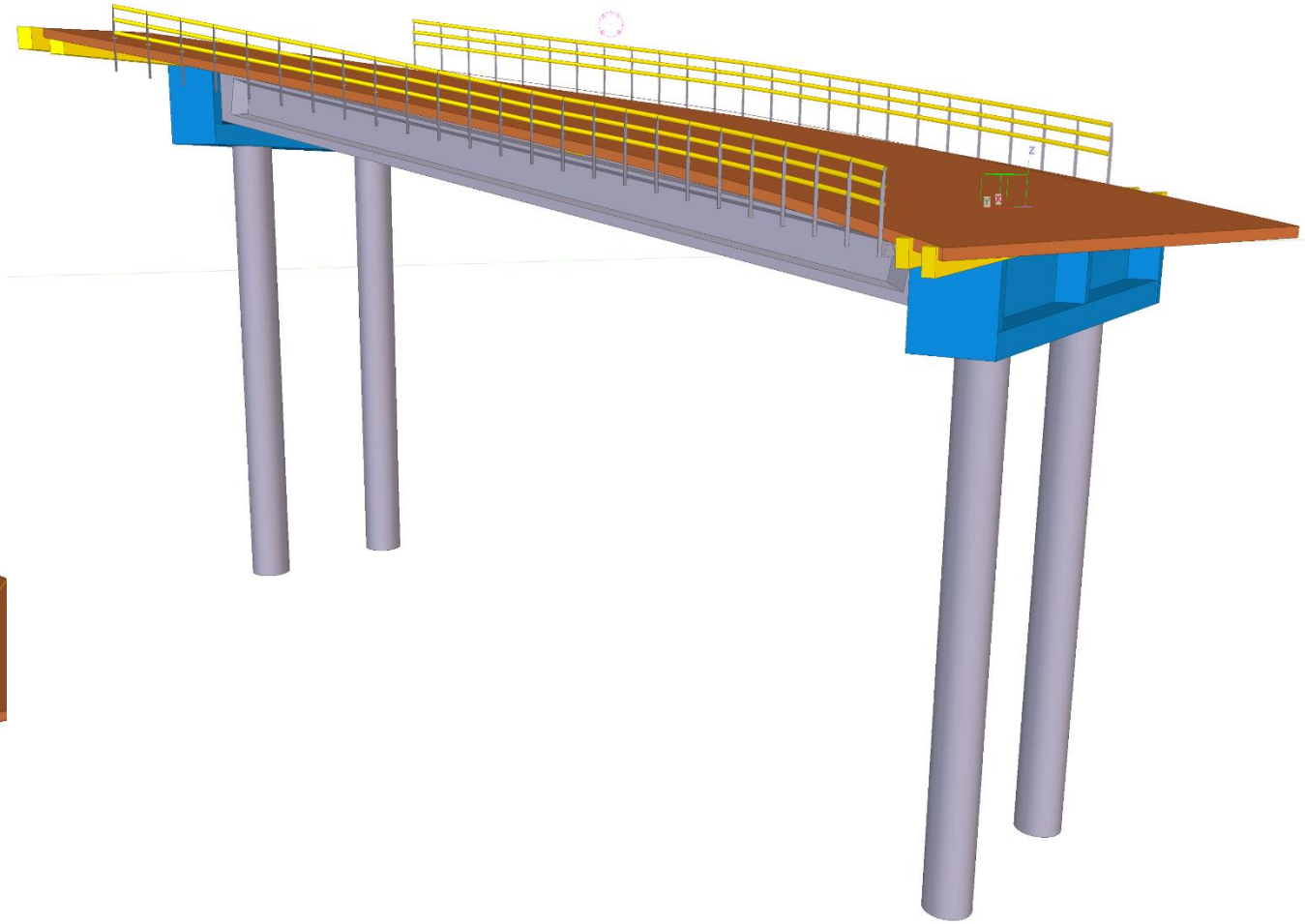
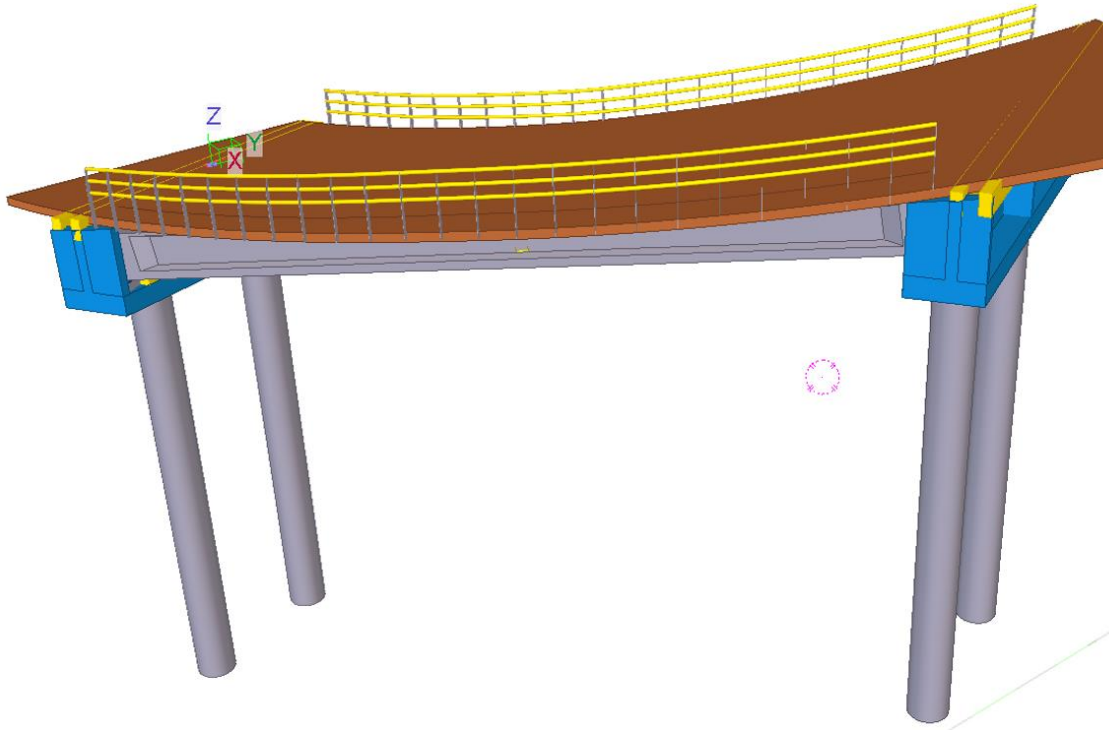
PUENTE URBANO MARSELLA





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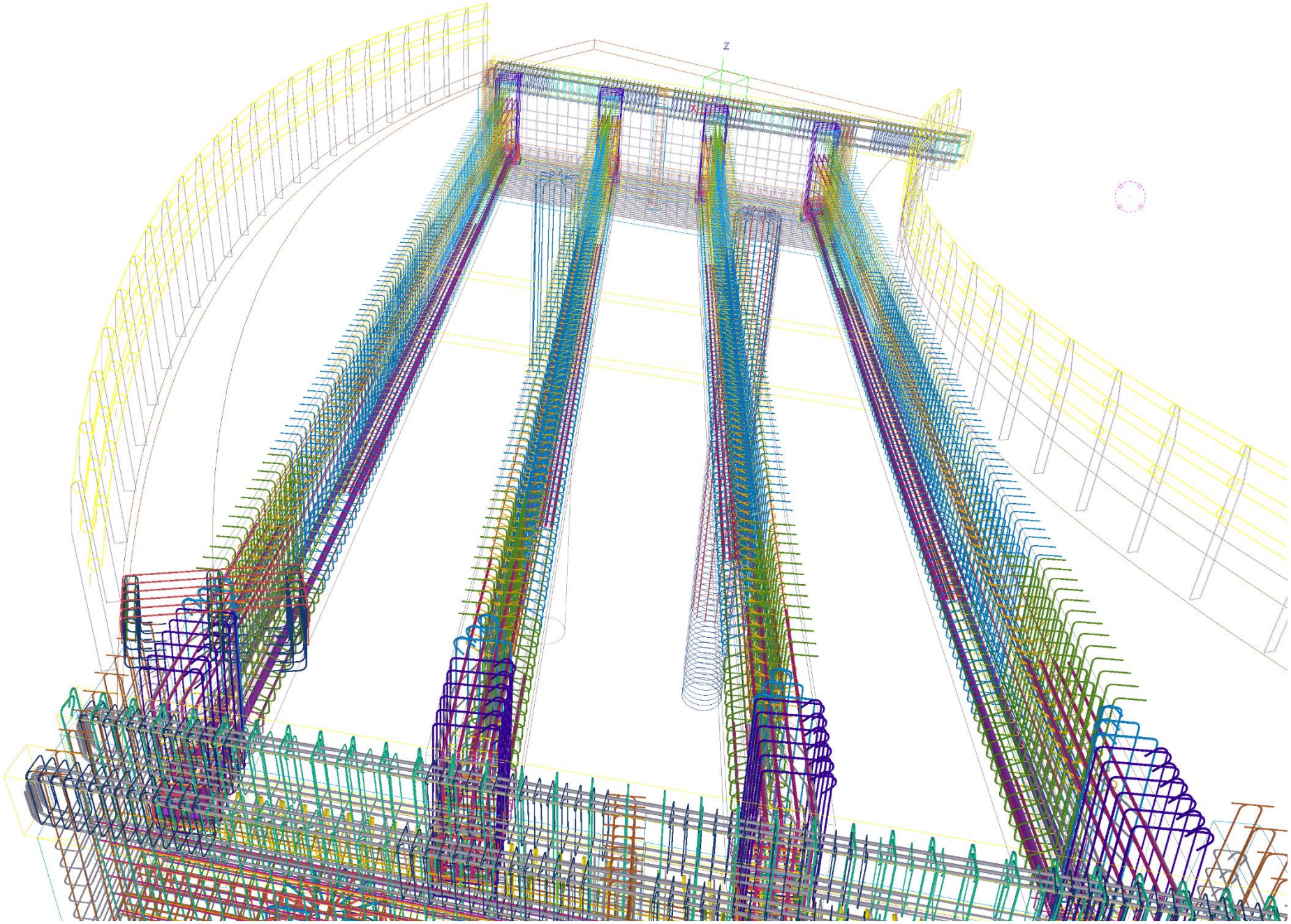

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