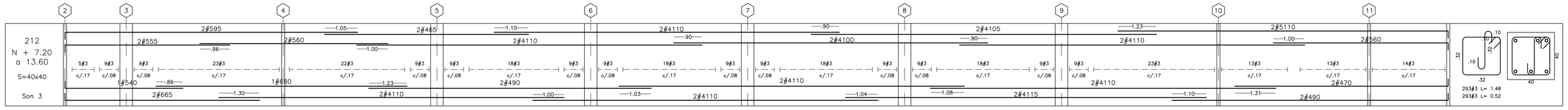
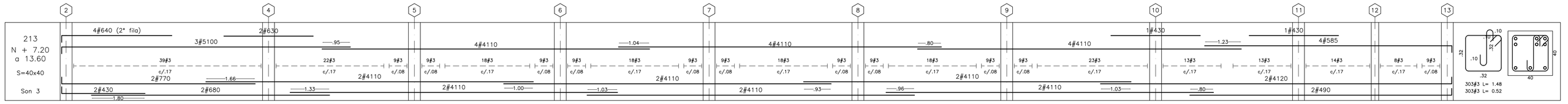
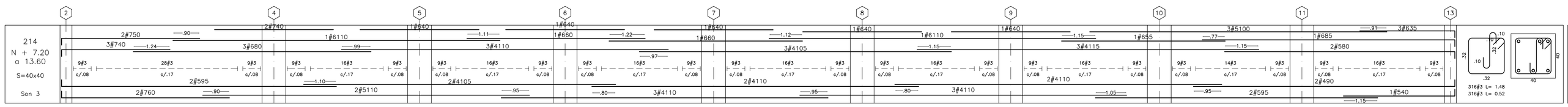
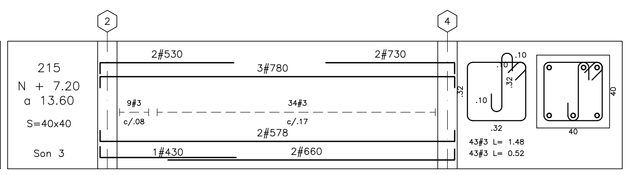
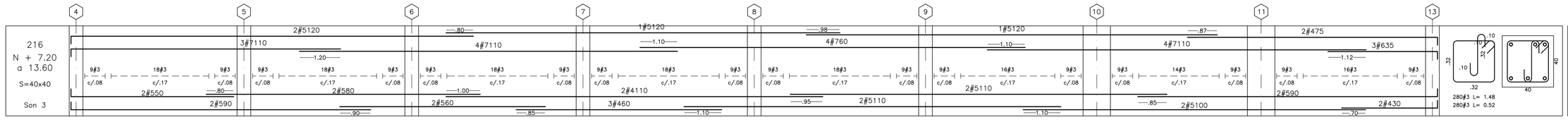
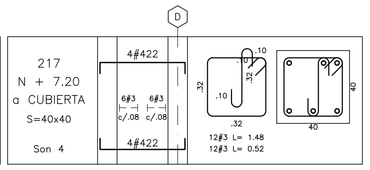


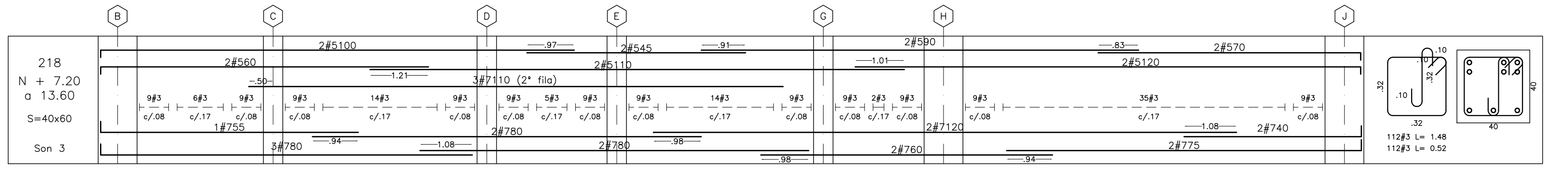


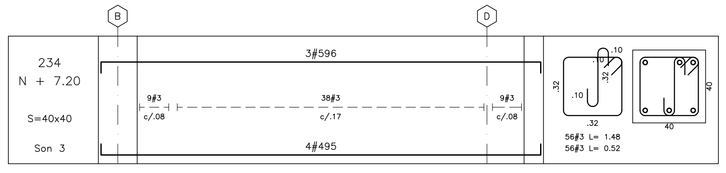


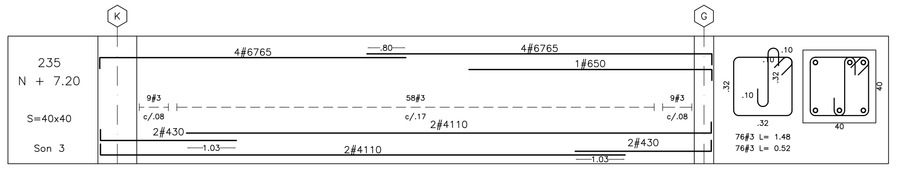


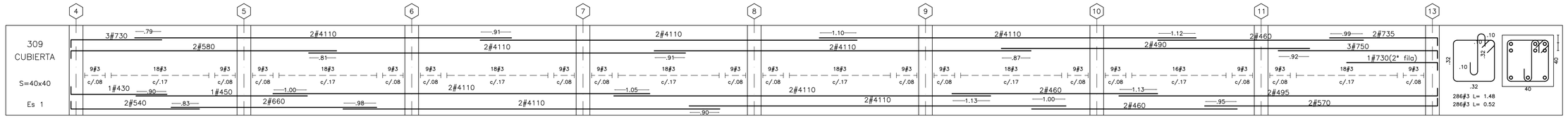


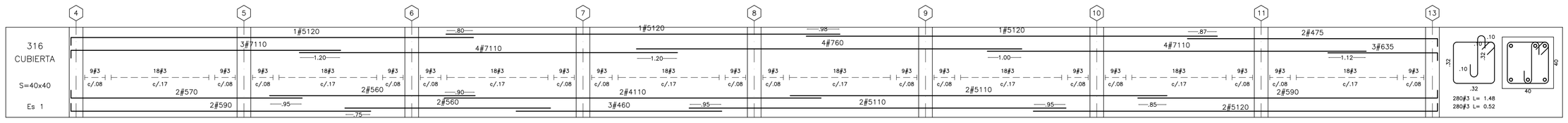


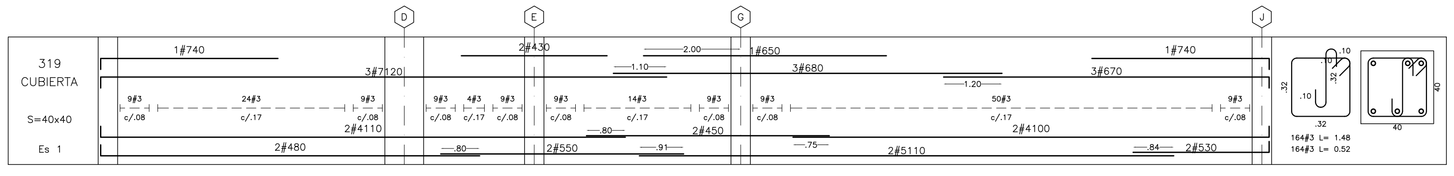


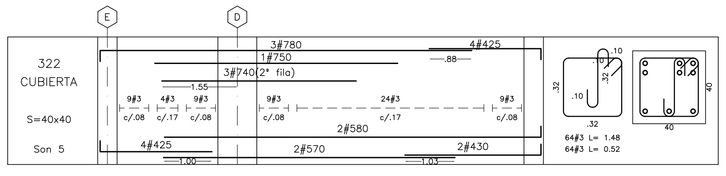


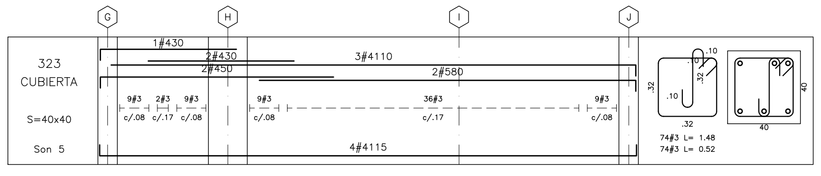


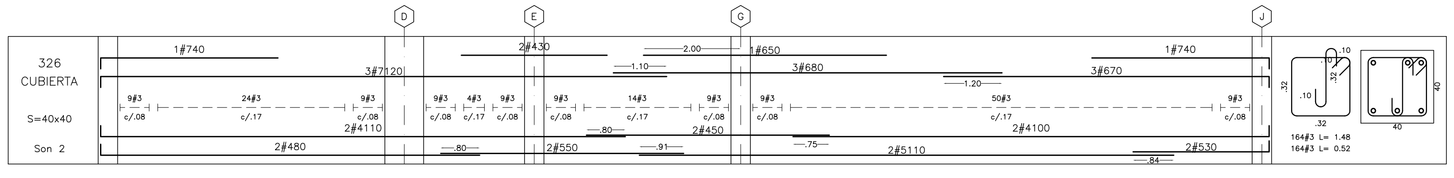


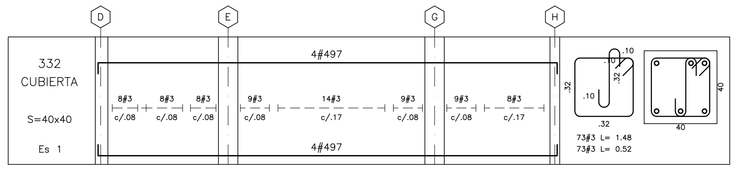


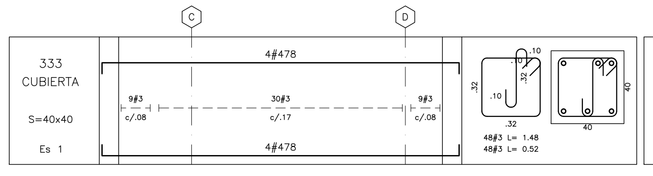


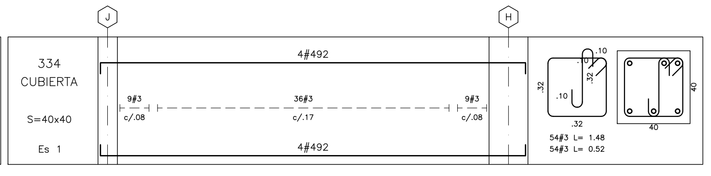






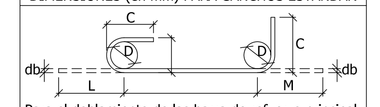






DIMENSIONES PARA EL DOBLAMIENTO DE VARILLAS

DIMENSIONES (en mm) PARA GANCHOS ESTANDAR



Para el doblamiento de las barra de refuerzo principal.

DESIGNACION DE LA BARRA	D	GANCHO 180°			GANCHO 90°	
		L	C	M	L	C
Nº4	76.2	190	102	102	222	203
Nº5	95.4	238	127	127	278	254
Nº6	114.6	286	153	153	334	306
Nº7	133.2	333	178	178	388	355
Nº8	152.4	381	203	203	444	406
Nº9	229.6	521	258	258	547	488
Nº10	258.4	586	291	291	616	549
Nº11	286.4	649	322	322	683	609
Nº14	430.0	915	430	430	887	774
Nº18	573.0	1219	573	573	1183	1031

Nota del calculista: La responsabilidad sobre los diseños estructurales se mantiene siempre y cuando la construccion se realice en su integridad de acuerdo a los presentes planos.

Ing. LISANDRO RODRIGUEZ
Especialista en Estructuras U.P.T.C

ESPECIFICACIONES

CONCRETO: f'c = 4.000 p.s.i (Colun. Y Pant.)
f'c = 3.000 p.s.i (Vigas y Otros)
ACERO: fy = 60.000 p.s.i # 3/8" ≥
fy = 34.000 p.s.i # 1/4"

NOMENCLATURA REFUERZO

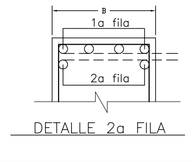
No VARILLA	DIAMPULG.	LONGITUD GANCHOS(cm)	TRASLAPOS MIN(cm)
2	1/4	10	45
3	3/8	15	55
4	1/2	20	70
5	5/8	25	85
6	3/4	30	125
7	7/8	35	140
8	1	40	180

MODIFICACIONES

FECHA	OBSERVACIONES	EJECUTO

NOTAS :

- CAPACIDAD MODERADA DE DISIPACION DE ENERGIA (D.M.O.).
- CARGA VIVA: 0.30 T/m2. (PLACAS). 0.05 T/m2 (CUBIERTA).
- CARGA MUERTA: 0.68 T/m2. (PLACAS). 0.05 T/m2 (CUBIERTA).
- SISTEMA ESTRUCTURAL: PORTICOS EN CONCRETO REFORZADO.
- GRUPO DE USO III.
- EL PRIMER FLEJE DEBE IR A 5cm DE LA CARA DEL APOYO.
- IMPERMEABILIZAR VIGA CANAL.



CLIENTE:

UNIVERSIDAD PEDAGOGICA Y TECNOLOGICA DE COLOMBIA

PROYECTO : EDIFICIO DE AULAS 2011
UNIVERSIDAD PEDAGOGICA Y TECNOLOGICA DE COLOMBIA SEDE CENTRAL -TUNJA-

CONTENIDO : DESPIECE DE VIGAS AEREAS

Calculo : L. RODRIGUEZ R.
Dibujo : L. RODRIGUEZ R.
Escala : 1 : 7 5

MAT. PROF. No : 1520021471 BOYACA
Archivo : EST EDIF AULAS UPTC TUNJA.dwg
Ciudad y Fecha : Tunja (Boyacá) Abril 2012

Plano No. : 13 DE 16