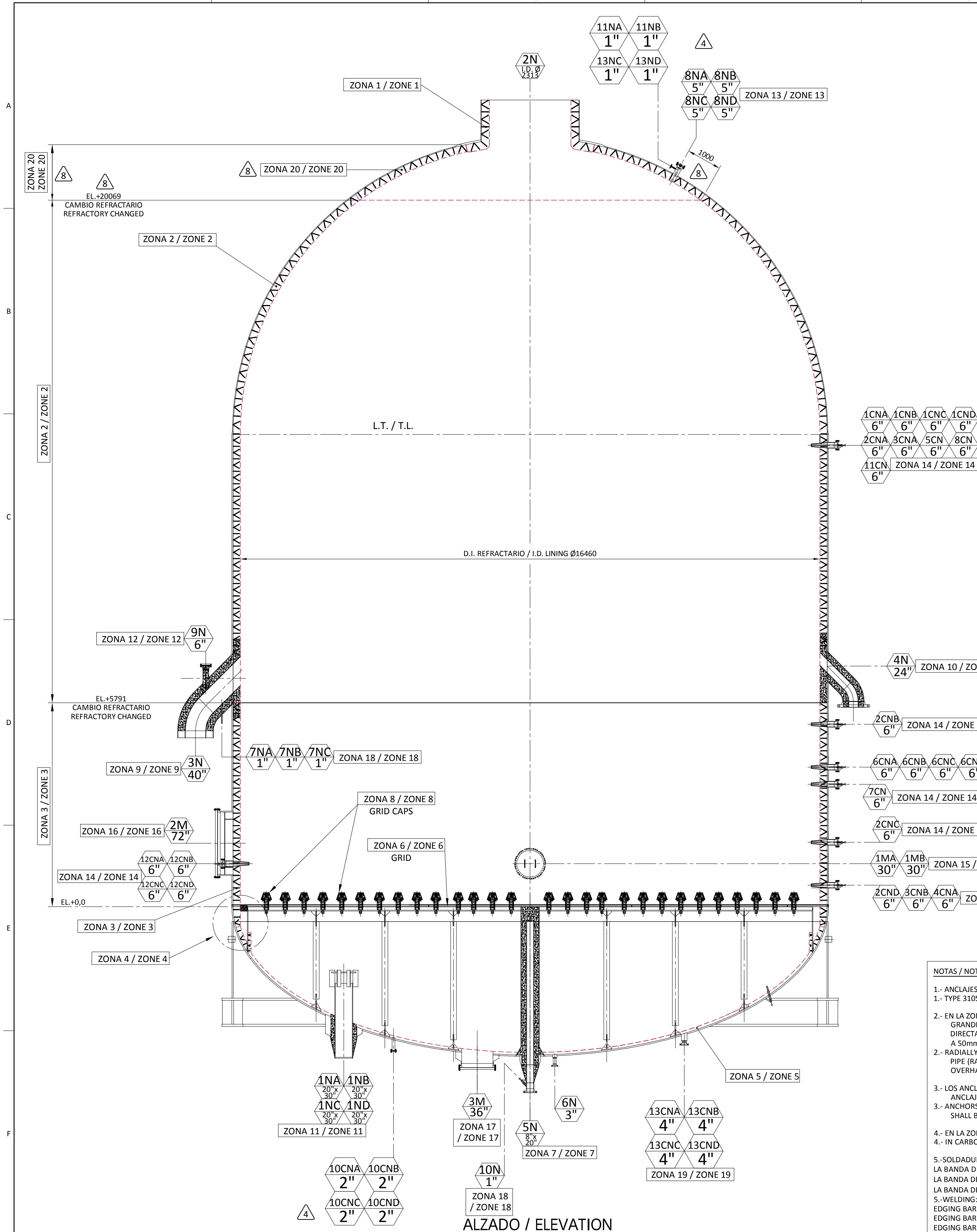
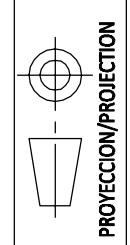


DIMENSION / DIMENSION	>3000
MECANIZADO TIPO MEDIO/MEDIUM MACHING	±1.2
ELEMENTO SOLDADO/WELDED STRUCTURE	±10
TOLERANCIAS GENERALES	±0.5
GENERAL TOLERANCES	±0.5



	APPLICATION OF REFRACTORY	Esp. REFRACT. Thk. REFRACT.	TIPO REFRACTARIO REFRACTORY TYPE	SOPORTE / SUPPORT	MAT. SOP. SUP. MAT.	LOCALIZACION DE ANCLAJE ANCHOR LOCATION
ZONA 1	BY OTHERS	229 mm	REFRACTORY LINING TYPE "3F" (CASTABLE)	V-ANCHOR (STUD)	310S	TUBULADURA FONDO SUPERIOR / TOP HEAD NOZZLE "2N"
ZONA 2	BY OTHERS	203 mm	REFRACTORY LINING TYPE "4F" (GUNNED or CASTABLE)	V-ANCHOR (STICK)	310S	FONDO SUPERIOR POR DEBAJO EL.+20069 TOP HEAD BELOW EL.+20069
				V-ANCHOR (STUD)	310S	EQUIPO POR ENCIMA EL.+5791 STRAIGHT SIDE TO VESSEL ABOVE EL.+5791
ZONA 3	BY OTHERS	203 mm	REFRACTORY LINING TYPE "4F" (CASTABLE)	V-ANCHOR (STUD)	310S	EQUIPO DESDE EL.+5791 HASTA EL.+0,0 VESSEL FROM EL.+5791 TO EL.+0,0
ZONA 4	BY OTHERS	203 mm	REFRACTORY LINING TYPE "4F" (CASTABLE)	V-ANCHOR (STICK)	310S	FONDO INFERIOR HASTA EXTERIOR DE CAMISA DEL "GRID" BOTTOM HEAD TO GRID SKIRT - OUTSIDE
		125 mm	REFRACTORY LINING TYPE "4"	V-ANCHOR (STUD)	310S	
		6 x 25mm + PACK	CERAMIC FIBER INSULATION & PACK CERAMID FIBER	-----	----	
ZONA 5	BY OTHERS	75 mm	REFRACTORY LINING TYPE "6" (GUNNED)	V-ANCHOR (STICK)	C.S	FONDO INFERIOR DENTRO DEL GRID BOTTOM HEAD BELOW GRID
				V-ANCHOR (STUD)	C.S	
ZONA 6	BY OTHERS	100 mm	REFRACTORY LINING TYPE "3F" (CASTABLE)	V-ANCHOR (STICK)	304H	PARTE SUPERIOR DEL "GRID" / TOPSIDE OF GRID
ZONA 7	BY IDESA	140 mm	REFRACTORY LINING TYPE "3F" (CASTABLE)	-----	----	POZO CENTRAL - INTERIOR TUB. "5N" CENTERWHEEL - INSIDE NOZZLE "5N"
ZONA 8	BY IDESA	----	REFRACTORY LINING TYPE "3F" (CASTABLE)	WIRE	304H / 446	GRID CAPS
		PACK	CERAMIC FIBER INSULATION	-----	----	
ZONA 9	BY IDESA	203 mm	REFRACTORY LINING TYPE "3F" (CASTABLE)	V-ANCHOR (STUD)	310S	ENVOLVENTE / SHELL
ZONA 10	BY IDESA	203 mm	REFRACTORY LINING TYPE "3F" (CASTABLE)	V-ANCHOR (STICK)	310S	TUBULADURA "3N" / NOZZLE "3N"
				V-ANCHOR (STUD)	310S	ENVOLVENTE / SHELL
				V-ANCHOR (STICK)	310S	TUBULADURA "4N" / NOZZLE "4N"
ZONA 11	BY IDESA	FILL	REFRACTORY LINING TYPE "6" + CERAMIC FIBER TAPE #3	-----	----	TUBULADURAS / NOZZLES - "1NA÷D"
ZONA 12	BY IDESA	PLUG	PACK CERAMIC FIBER + PLUG OF LINING TYPE "3F" (CASTABLE)	Y-ANCHOR	310S	TUBULADURA / NOZZLE - "9N"
ZONA 13	BY OTHERS	PACK	FILL CERAMIC FIBER + CERAMIC FIBER TAPE #1.5	-----	----	TUBULADURAS / NOZZLES - "8NA÷D"
ZONA 14	BY OTHERS	PACK	PACK CERAMIC FIBER BLANKET + LINING TYPE 4 + 4F	V-ANCHOR (STUD)	HR-160 or ALLOY 556	TUBULADURAS / NOZZLES - "1CNA÷D"; "2CNA÷D"; "3CNA/B"; "4CNA"; "6CNA÷D"; "7CN"; "8CN"; "11CN" & "12CN÷D"
ZONA 15	BY OTHERS	PLUG	FILL REFRACTORY LINING TYPE "9" + PLUG REFRACT. TYPE "4F" + ALUMINUM FOIL	6 RETAINING BARS		INTERIOR ENTRADAS DE HOMBRE / INSIDE MAWAYS "1MA/B"
ZONA 16	BY OTHERS	203 mm	REFRACTORY LINING TYPE "4F" (CASTABLE)	V-ANCHOR (STUD)	310S	ENVOLVENTE / SHELL
		228 mm	REFRACTORY LINING TYPE "4F" (CASTABLE)	V-ANCHOR (STICK)	310S	INTERIOR ENTRADA DE HOMBRE / INSIDE MAWAY "2M"
ZONA 17	BY OTHERS	75 mm+FILL	REFRACTORY LINING TYPE "6" (GUNNED) + REFRACTORY TYPE "9"	Y-ANCHOR	C.S	INTERIOR ENTRADA DE HOMBRE / INSIDE MAWAY "3M"
ZONA 18	BY IDESA	FILL	CERAMIC FIBER TUBES MAX COMPRESSION	-----	----	TUBULADURAS / NOZZLES - "7NA÷C" & "10N" (ENTRE TUBOS INTERIORES / BETWEEN INSIDE TUBES)
ZONA 19	BY OTHERS	PAPER	CERAMIC FIBER	-----	----	TI AIR BELOW GRID & GRID METAL
ZONA 20	BY OTHERS	203mm	REFRACTORY LINING TYPE "3F" (GUNNED or CASTABLE)	V-ANCHOR (STICK)	310S	FONDO SUPERIOR POR ENCIMA EL.+20069 TOP HEAD ABOVE EL.+20069

PARA LAS TUBULADURAS MENORES O IGUAL A 2" NO SON NECESARIOS SOPORTES / NOZZLES ≤ 2" SUPPORTS ARE NOT NECESSARY

MODERNIZACION REFINERIA de TALARA PETROPERU, S.A.

PETROPERU



PROJECT: MODERNIZACION REFINERIA DE TALARA

CONTRAC TR PROJECT N°: 02070

PURCHASE ORDER No. 020700342-I213

EQUIPMENTS / TAGS No. FCK-R-103

DOCUMENT CODE : PLD-0022

DOCUMENT No. V-020700342-I213-FCK-R-103-0013-I

REVIEW RESPONSE BY PURCHASER :

☐ REJECTED	☐ REVIEWED WITH COMMENTS	☒ REVIEWED WITHOUT COMMENTS
☐ COMMENTS AS NOTED	☐ REVIEWED AS BUILT	☐ FOR INFORMATION
☐ VOID		

DATE : 01/03/18

VENDOR IDENTIFICATION : IDESA

DOCUMENT TITLE : REFRACTORY SUPPORTS

VENDOR DOCUMENT NUMBER 2/982-308 (1/7) Rev. 8

8	DONDE SE INDICA / AS INDICATED	28.02.18	Jesús C.	28.02.18	Silvia	28.02.18	
7	CAMBIAN OTRAS HOJAS / CHANGED OTHERS SHEETS	26.09.16	SANDRA	26.09.16	SOLEADAD	26.09.16	BEGOÑA
6	DONDE SE INDICA / AS INDICATED	10.05.16	MARIO	10.05.16	SOLEADAD	10.05.16	BEGOÑA
5	DONDE SE INDICA / AS INDICATED	31.03.16	ALFREDO	31.03.16	SOLEADAD	31.03.16	BEGOÑA
4	DONDE SE INDICA / AS INDICATED	15.03.16	ALFREDO	15.03.16	SOLEADAD	15.03.16	BEGOÑA

REV.	OBJETO DE LA REVISION Subject of Revision	DATE	SIGNAT.	DATE	SIGNAT.	DATE	SIGNAT.
		ISSUED (D)		REVIEWED (Pr.E.)		APPROVED (T.M.)	

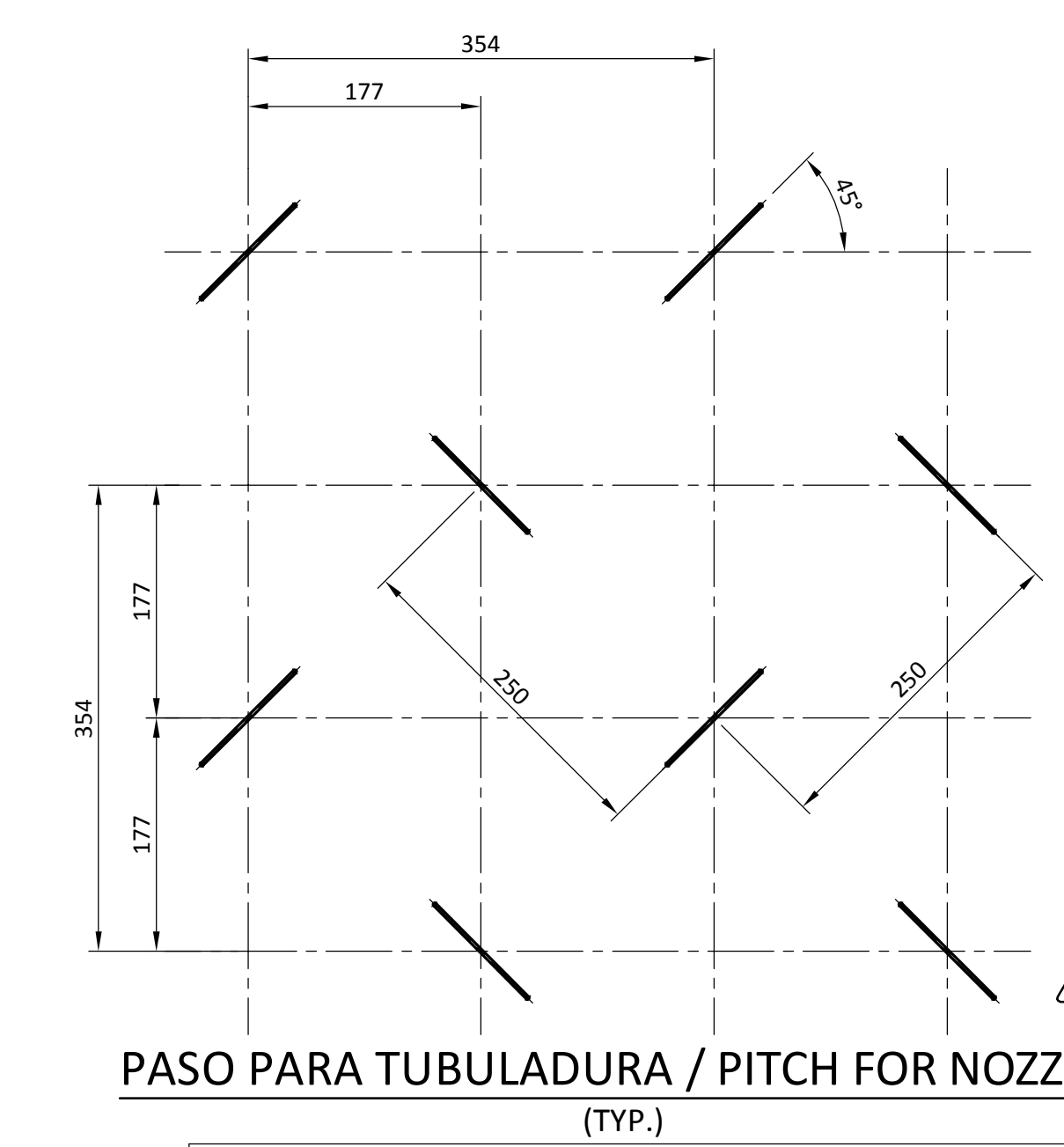
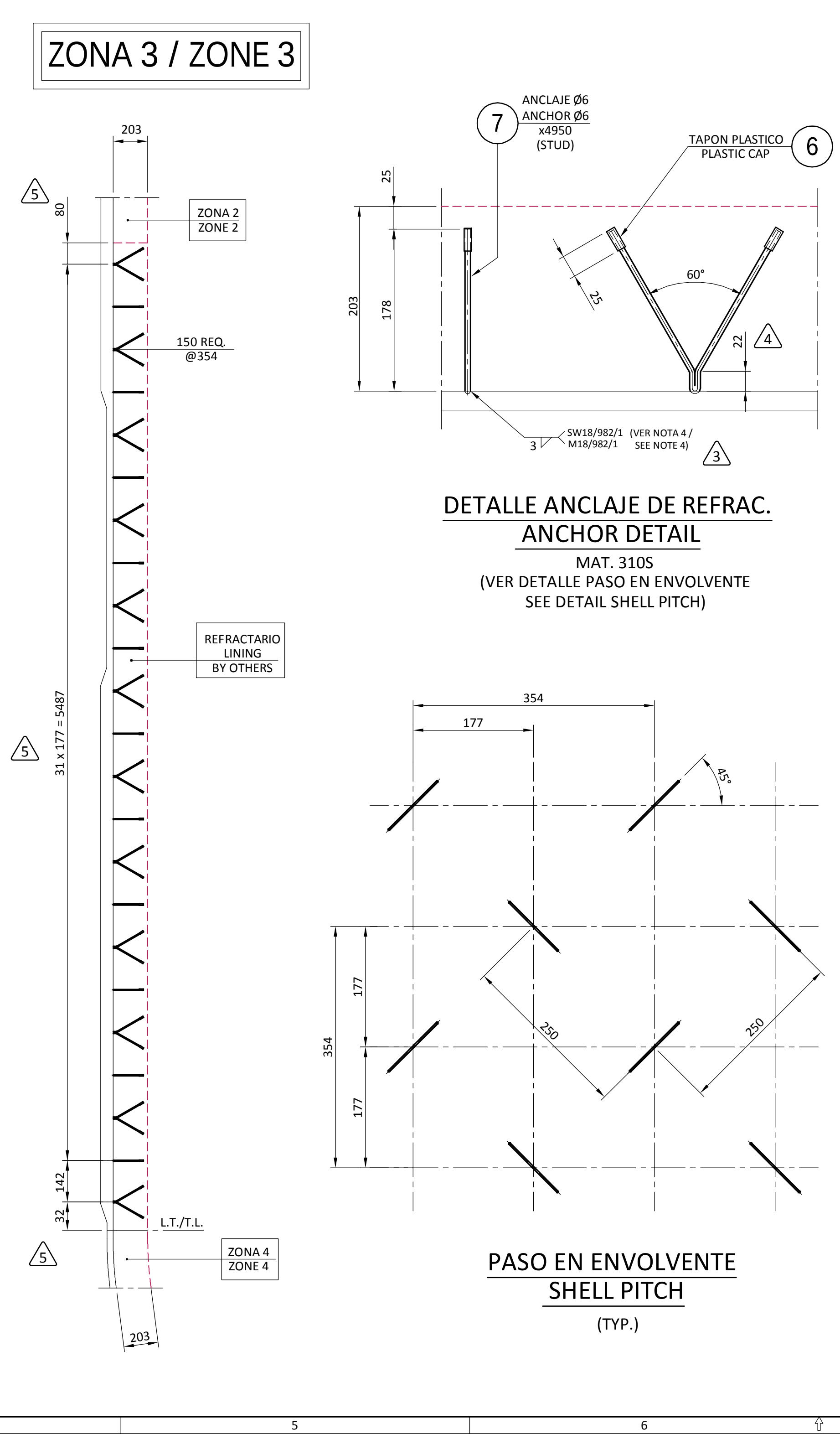
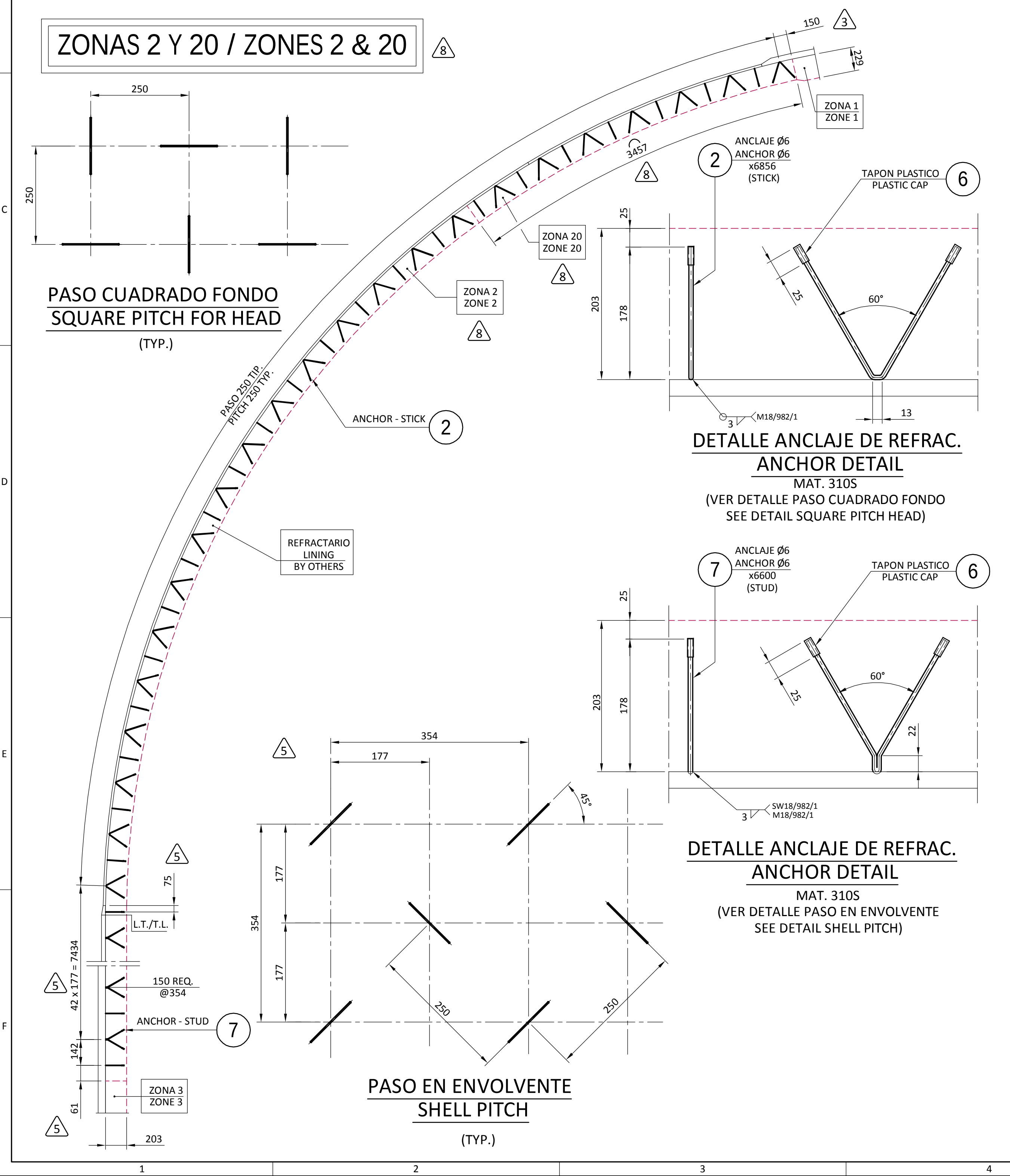
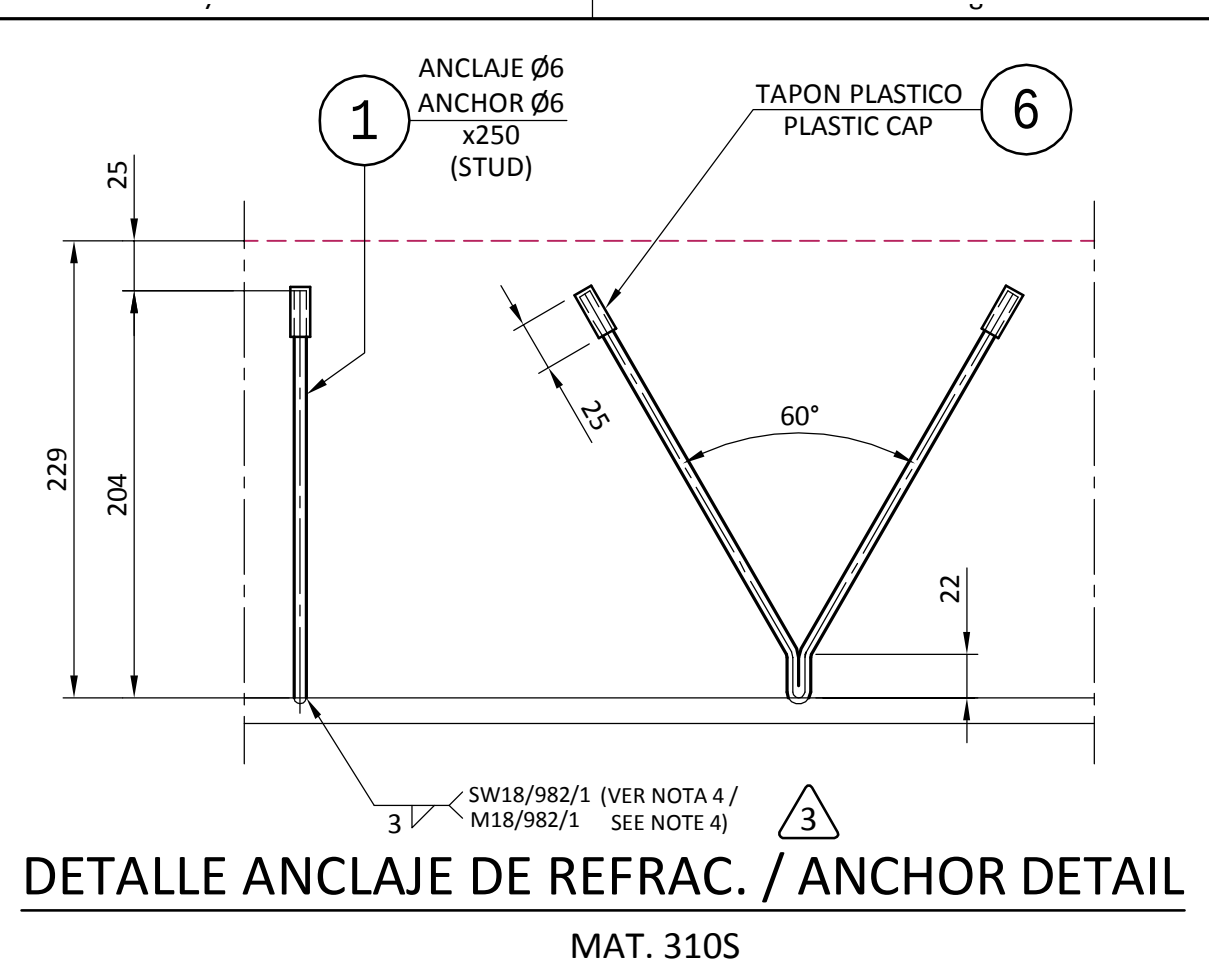
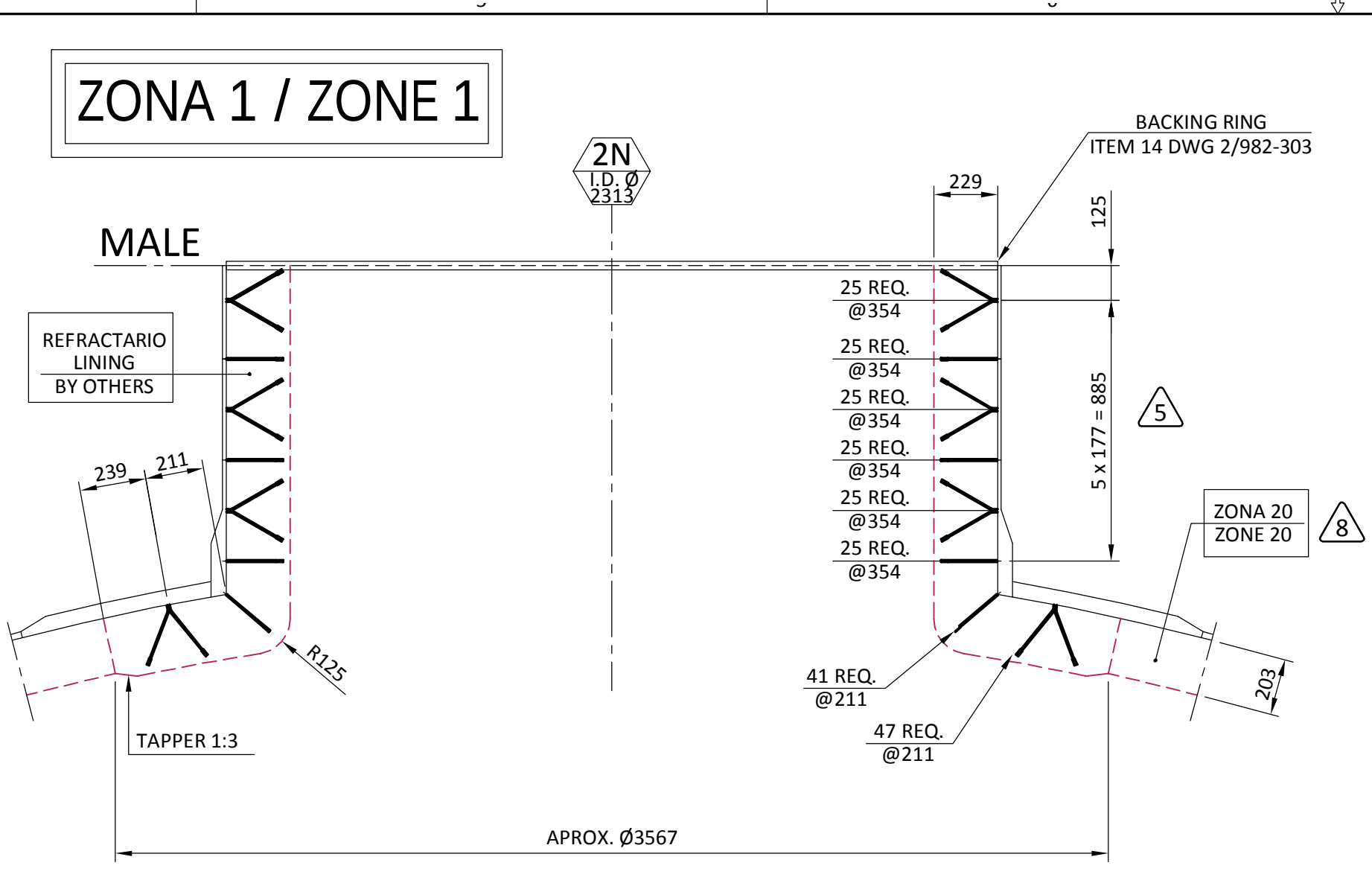
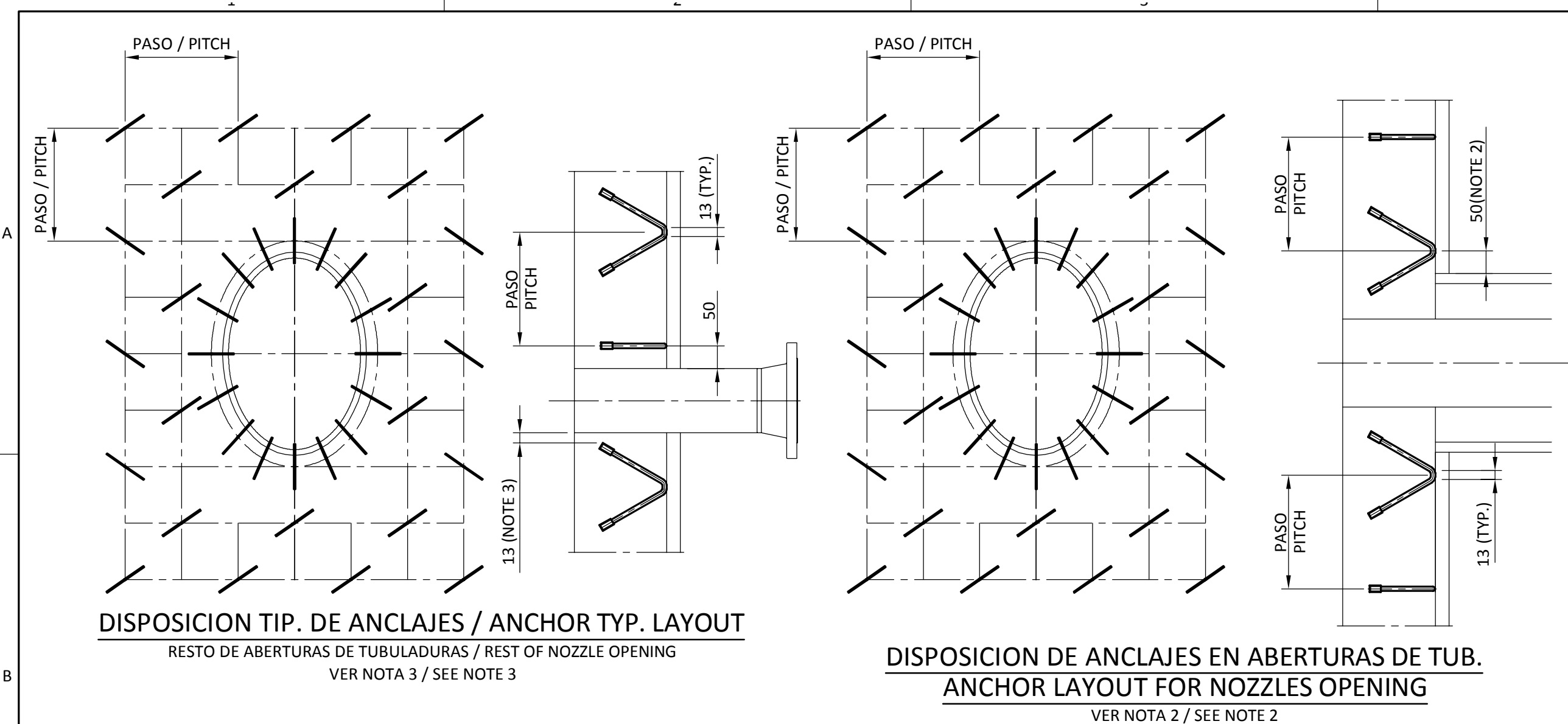
CLIENTE: T.R. /PETROPERU	Nº. ORDEN: 2/982	
Client: T.R. /PETROPERU	Job N°: 2/982	
OBRA: GASIFIER (FCK-R-103)		
Job: GASIFIER (FCK-R-103)		
DESIGNACION: SOPORTES DE REFRACTARIO REFRACTORY SUPPORTS		
Designation: SOPORTES DE REFRACTARIO REFRACTORY SUPPORTS		
PLANO N°: 2/982-308 (1/7)	REV. 8	SCALE 1:60
Drawing N°: 2/982-308 (1/7)	SIZE A1	
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PLANOS DE REFERENCIA / REFERENCE DWG.:

2/982-301 CONJUNTO GENERAL / GENERAL ASSEMBLY
2/982-303 TUBULADURAS DE LOS FONDOS HEAD NOZZLES
2/982-304 TUBULADURAS DE LA ENVOLVENTE SHELL NOZZLES
2/982-305 ENTRADAS DE HOMBRE / MAWAYS
2/982-307 DETALLES DEL "GRID"/"GRID" DETAILS

NOTAS / NOTES:

- ANCLAJES DE INOX. 310 DEBEN SOLDARSE CON ELECTRODOS E-309
1.- TYPE 310S S.S. ANCHORS SHALL BE ATTACHED TO SHELL WITH E-309 ELECTRODES
- EN LA ZONA DONDE EL ANGULO ENTRE LA TUBULADURA Y EL TUBO PRINCIPAL ES AGUDO Y HAY UNA ZONA GRANDE DE REFRACTARIO SIN SOPORTES, LOS ANCLAJES ORIENTADOS RADIALMENTE SE SOLDARAN DIRECTAMENTE SOBRE LA INTERSECCION ENTRE EL CUELLO DE LA TUBULADURA Y EL TUBO PRINCIPAL (Y NO A 50mm.)
2.- RADIALLY ORIENTED ANCHORS WILL BE WELDED AT THE INTERSECTION BETWEEN NOZZLE NECK AND MAIN PIPE (RATHER THAN 50mm AWAY) IN THE AREA WHERE THE ANGLE IS SHARP AND THERE IS A LONG OVERHANG OF REFRACTORY.
- LOS ANCLAJES SE SOLDARAN CON ORIENTACIONES ALEATORIAS (NO ALINEADOS). EL EXTREMO DE LOS ANCLAJES HA DE QUEDAR SEPARADO DE LA PROYECCION INTERNA DE LA TUBULADURA AL MENOS 13mm.
3.- ANCHORS WILL BE WELDED WITH RANDOM ORIENTATIONS (NOT BACK TO BACK). THE TIP OF THE ANCHORS SHALL BE AT LEAST 13mm AWAY FROM THE INTERNAL NOZZLE EXTENSION.
- EN LA ZONA DE A.C. CON PWHT LOS SOPORTES SE PUEDEN SOLDAR ANTES O DESPUES DEL PWHT.
4.- IN CARBON STEEL ZONE WITH PWHT THE SUPPORTS CAM BE WELDED BEFORE OR AFTER PWHT.
- SOLDADURA:
LA BANDA DE TERMINACIÓN (A.C.) SE SOLDARÁ AL METAL BASE (A.C.) DE ACUERDO AL WPS: P11/982/1
LA BANDA DE TERMINACIÓN (A.C.) SE SOLDARÁ AL METAL BASE (1/2P₀) DE ACUERDO AL WPS: P13/982/1
LA BANDA DE TERMINACIÓN (S.S.) SE SOLDARÁ AL METAL BASE (1/2P₀) DE ACUERDO AL WPS: P13/982/1
5.-WELDING:
EDGING BAR (A.C.) SHALL BE WELDED TO BASE METAL (A.C.) ACCORDING TO WPS: P11/982/1
EDGING BAR (A.C.) SHALL BE WELDED TO BASE METAL (1/2P₀) ACCORDING TO WPS: P13/982/1
EDGING BAR (S.S.) SHALL BE WELDED TO BASE METAL (1/2P₀) ACCORDING TO WPS: P13/982/1



MODERNIZACION REFINERIA de TALARA
PETROPERU, S.A.

PROJECT: MODERNIZACION REFINERIA DE TALARA	CONTRAC TR PROJECT N°: 02070
PURCHASE ORDER No. 020700342-I213	EQUIPMENTS / TAGS No. FCK-R-103
DOCUMENT CODE : PLD-0022	DOCUMENT No. V-020700342-I213-FCK-R-103-0013-I
REVIEW RESPONSE BY PURCHASER : ☐ REJECTED ☐ COMMENTS AS NOTED ☐ VOID ☐ REVIEWED WITH COMMENTS ☐ REVIEWED AS BUILT ☐ REVIEWED WITHOUT COMMENTS ☐ FOR INFORMATION DATE :	
VENDOR IDENTIFICATION : IDESA	
DOCUMENT TITLE : REFRACTORY SUPPORTS	
VENDOR DOCUMENT NUMBER 2/982-308 (2/7) Rev. 8	

8	DONDE SE INDICA / AS INDICATED	28.02.18	Jesús C.	28.02.18	Sandra	28.02.18	BEGOÑA
7	CAMBIAN OTRAS HOJAS / CHANGED OTHERS SHEETS	26.09.16	SANDRA	26.09.16	SOLEDAD	26.09.16	BEGOÑA
6	DONDE SE INDICA / AS INDICATED	10.05.16	MARIO	10.05.16	SOLEDAD	10.05.16	BEGOÑA
5	DONDE SE INDICA / AS INDICATED	31.03.16	ALFREDO	31.03.16	SOLEDAD	31.03.16	BEGOÑA
4	DONDE SE INDICA / AS INDICATED	15.03.16	ALFREDO	15.03.16	SOLEDAD	15.03.16	BEGOÑA
REV.	OBJETO DE LA REVISION Subject of Revision	DATE ISSUED (D)	SIGNAT. REVIEWED (Pr.E.)	DATE REVIEWED (Pr.E.)	SIGNAT. APPROVED (T.M.)	DATE REVIEWED (Pr.E.)	SIGNAT. APPROVED (T.M.)

CLIENTE:
Client:

OBRA:
Job:

DESIGNACION:
Designation:

N°. ORDEN:
Job N°:

2/982

GASIFIER (FCK-R-103)

SOPORTES DE REFRACTARIO
REFRACTORY SUPPORTS

PLANO N°:
Drawing N°:

2/982-308 (2/7)

REV.

8

SIZE

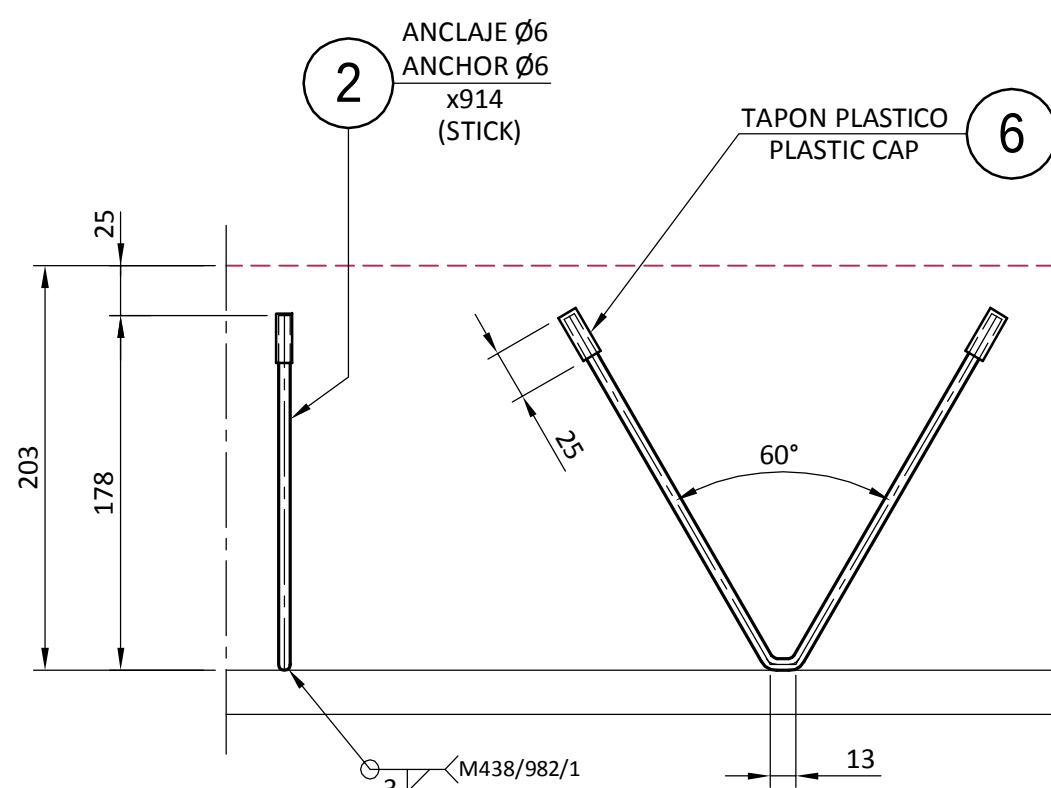
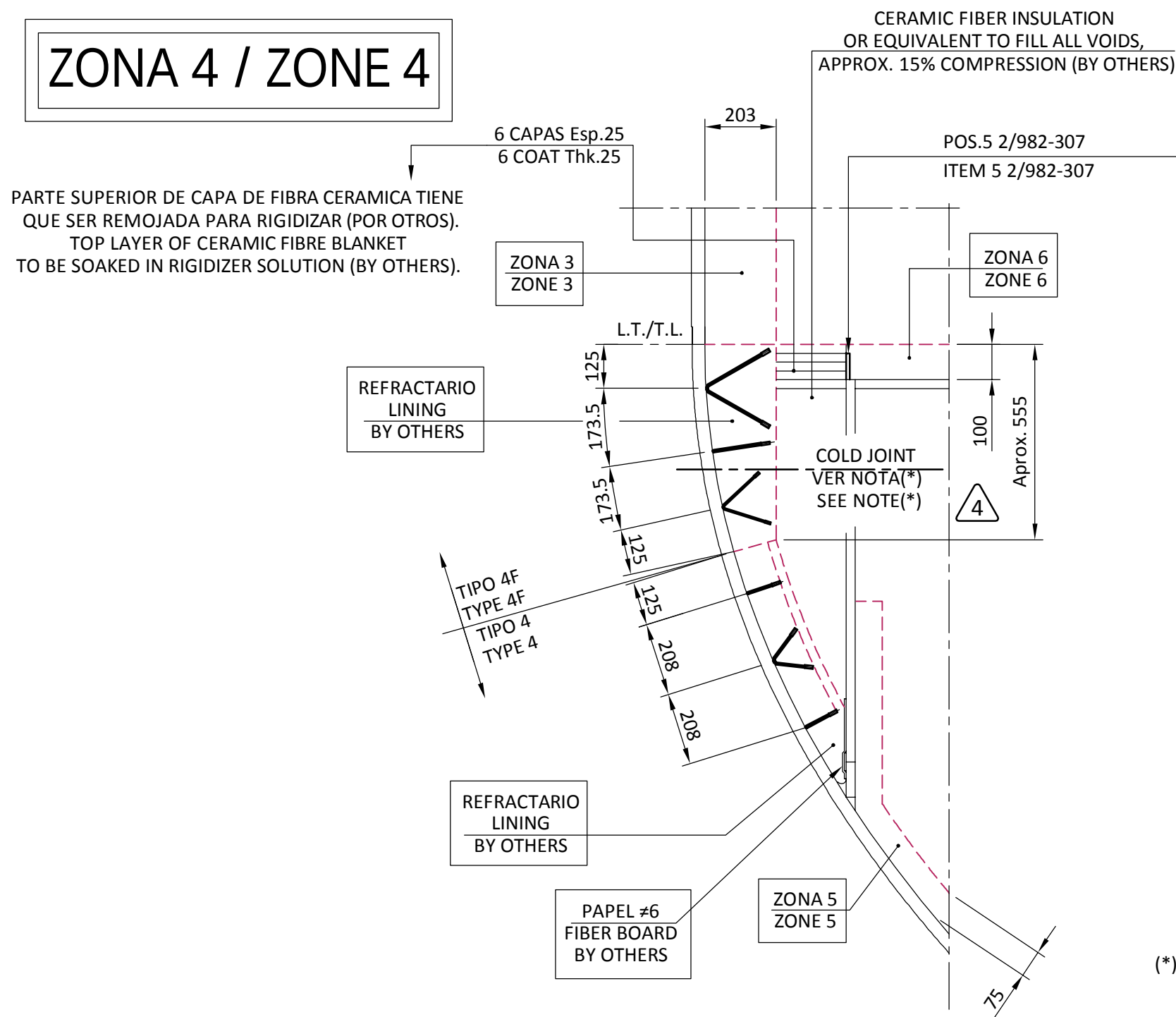
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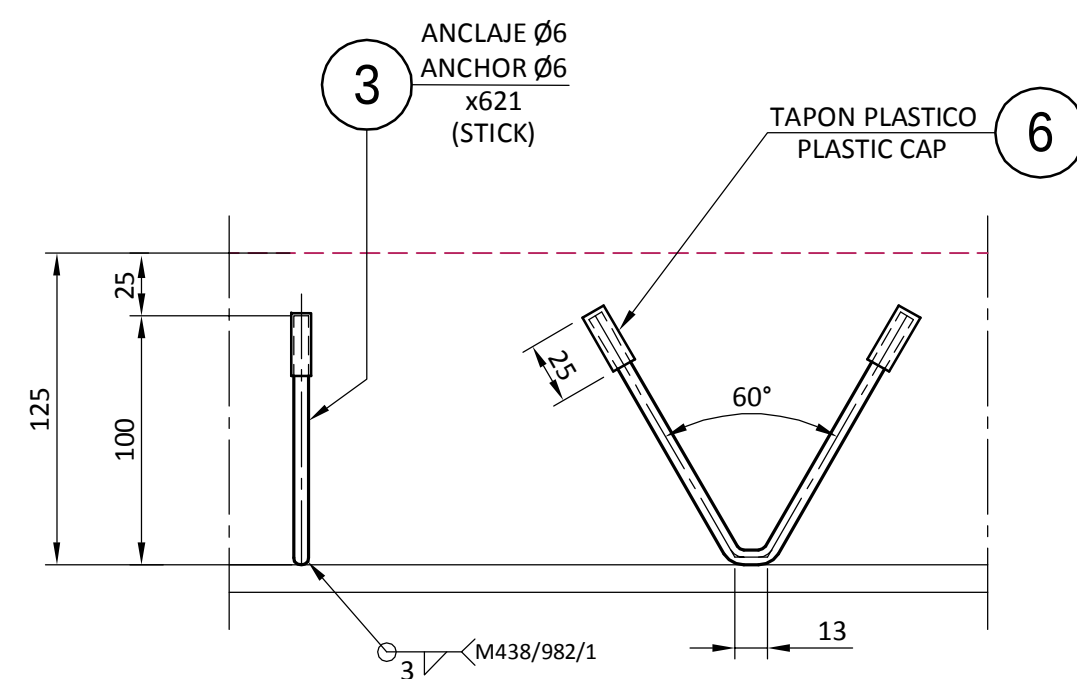
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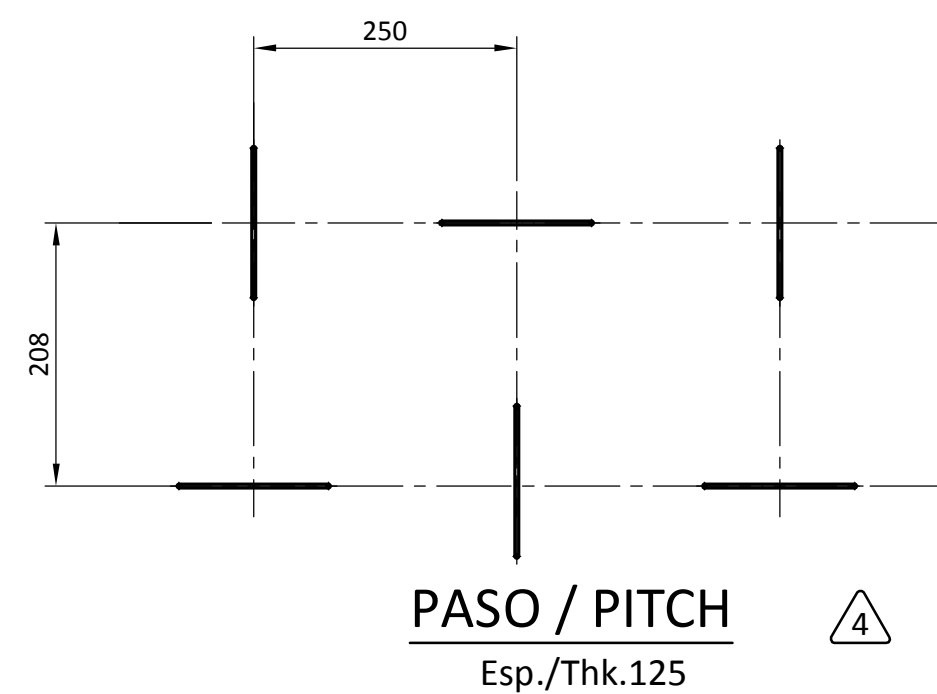
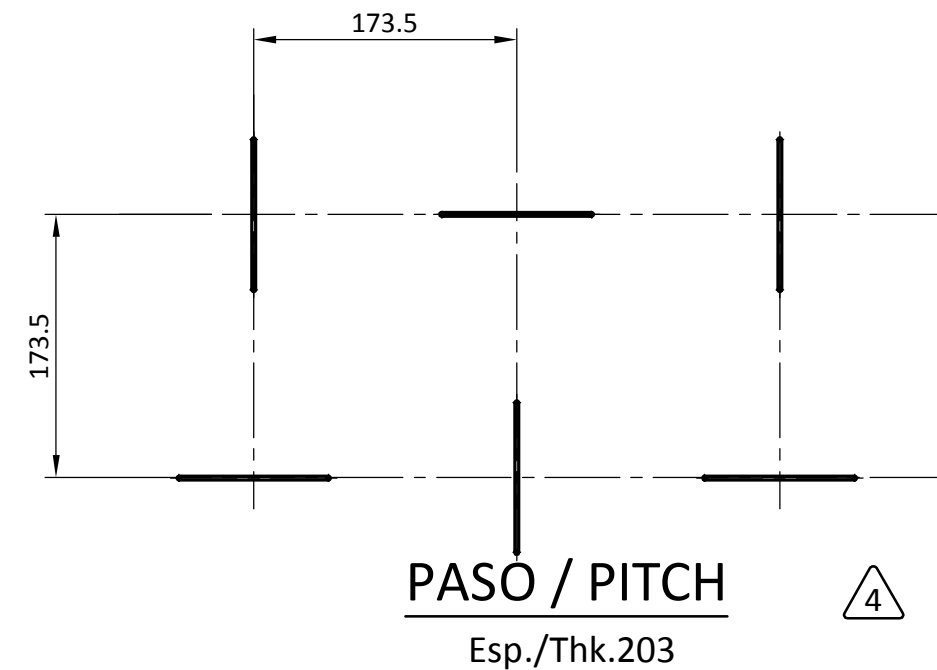
ZONA 4 / ZONE 4



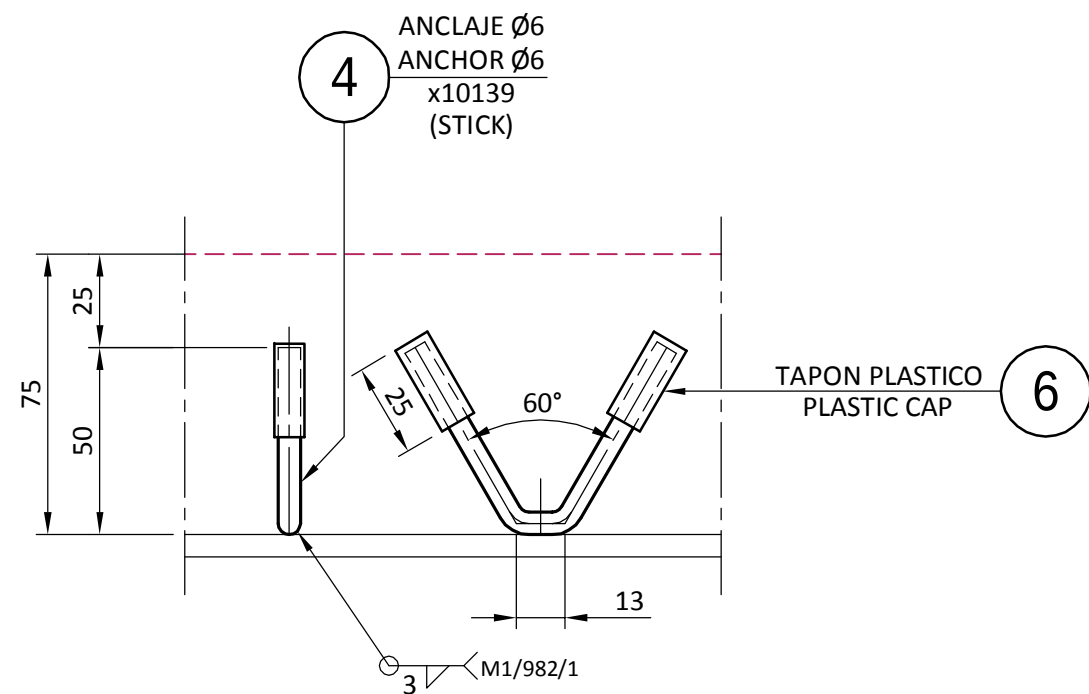
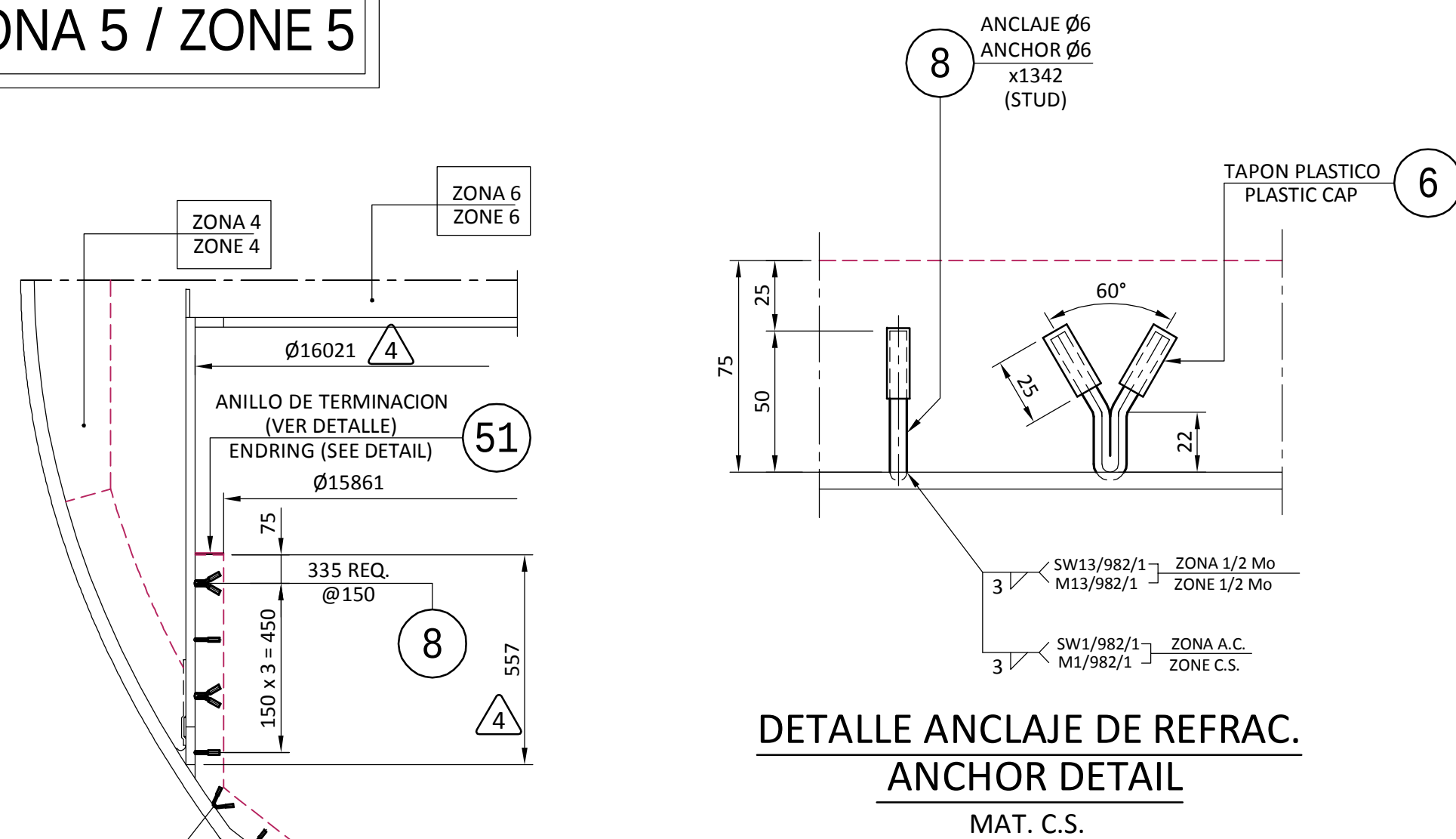
DETALLE ANCLAJE DE REFRAC.
ANCHOR DETAIL
MAT. 310S



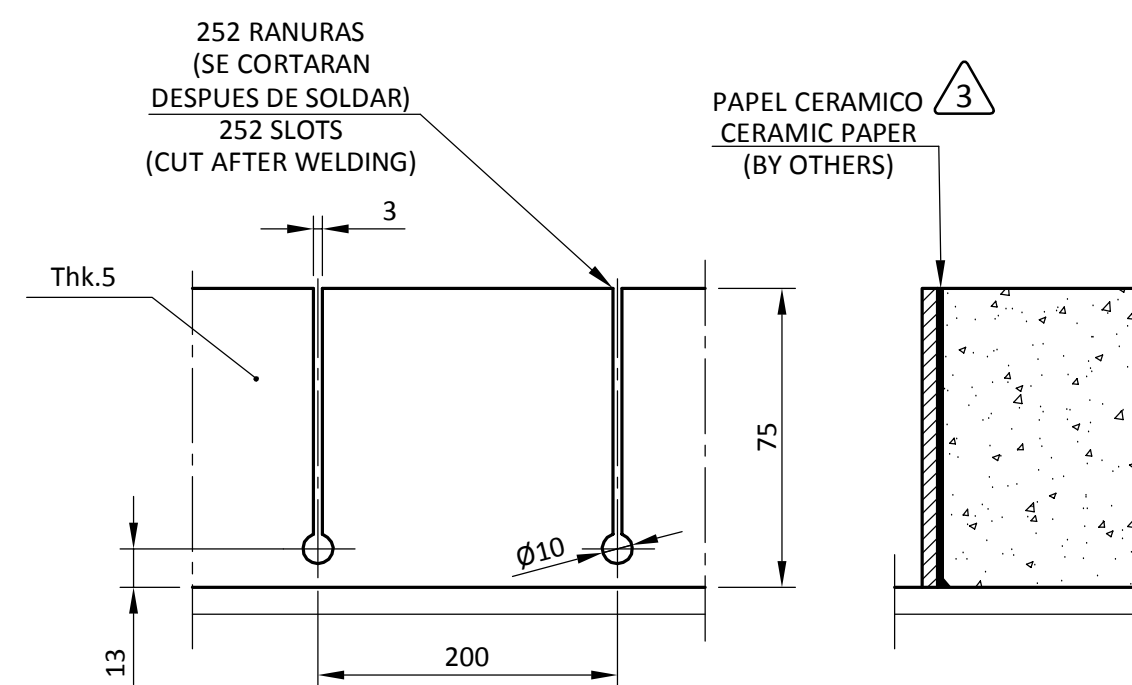
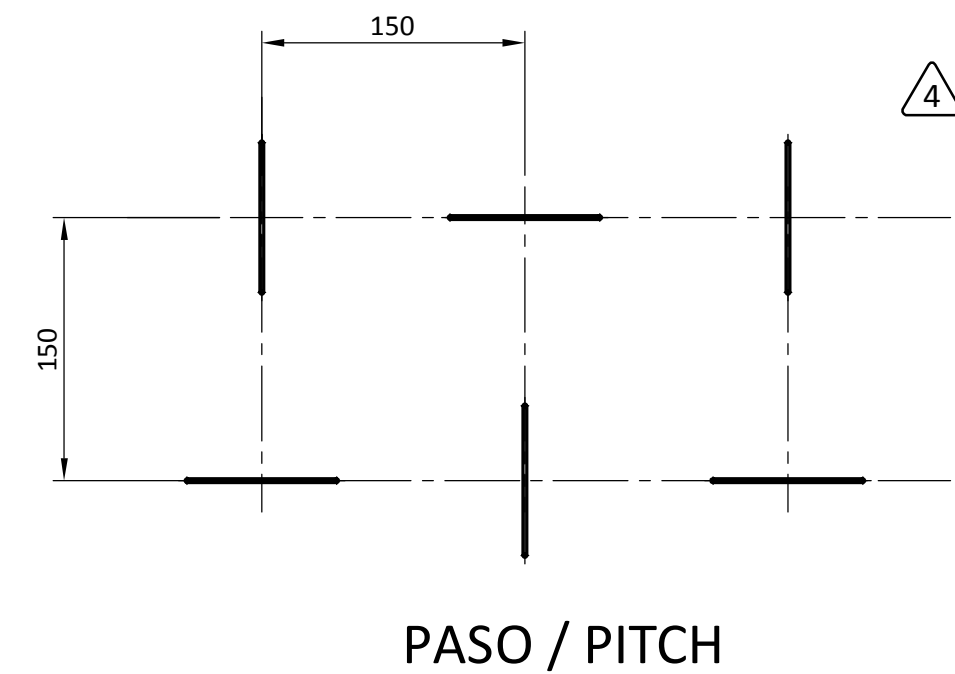
DETALLE ANCLAJE DE REFRAC.
ANCHOR DETAIL
MAT. 310S



ZONA 5 / ZONE 5



DETALLE ANCLAJE DE REFRAC.
ANCHOR DETAIL
MAT. C.S.



DETALLE / DETAIL (ITEM 51)
ANILLO DE TERMINACION (REFRACT.) / ENRING (LINING)
Mat.: SA-516 Gr.70N
SE PEGARA PAPEL CERAMICO A LA BANDA DE TERMINACION PARA QUE
LAS RANURAS QUEDEN LIMPIAS DE REFRACTARIO
OPENINGS SHALL BE CLEAR OF REFRACT. PROVIDE CERAMIC PAPER
BACKING GLUED TO EDGING BAR.

ANCHOR - STICK

REFRACTARIO LINING
BY OTHERS

4

ZONA 7
ZONE 7

MODERNIZACION REFINERIA de TALARA
PETROPERU, S.A.

PETROPERU



PROJECT:
MODERNIZACION REFINERIA DE TALARA

CONTRAC TR PROJECT N°:
02070

PURCHASE ORDER No.

020700342-I213

EQUIPMENTS / TAGS No.

FCK-R-103

DOCUMENT CODE :

PLD-0022

DOCUMENT No.

V-020700342-I213-FCK-R-103-0013-I

REVIEW RESPONSE BY PURCHASER :

☐ REJECTED
☐ COMMENTS AS NOTED
☐ VOID

☐ REVIEWED WITH
COMMENTS
☐ REVIEWED AS BUILT

☐ REVIEWED WITHOUT
COMMENTS
☐ FOR INFORMATION

DATE :

VENDOR IDENTIFICATION :

IDESA

DOCUMENT TITLE :

REFRACTORY SUPPORTS

VENDOR DOCUMENT NUMBER

2/982-308 (3/7)

Rev.

8

8	SIN CAMBIOS / NO CHANGES	28.02.18	Jesús C.	28.02.18	Sandra	28.02.18	Begoña
7	CAMBIAN OTRAS HOJAS / CHANGED OTHERS SHEETS	26.09.16	SANDRA	26.09.16	SOLEDAD	26.09.16	BEGOÑA
6	DONDE SE INDICA / AS INDICATED	10.05.16	MARIO	10.05.16	SOLEDAD	10.05.16	BEGOÑA
5	DONDE SE INDICA / AS INDICATED	31.03.16	ALFREDO	31.03.16	SOLEDAD	31.03.16	BEGOÑA
4	DONDE SE INDICA / AS INDICATED	15.03.16	ALFREDO	15.03.16	SOLEDAD	15.03.16	BEGOÑA
REV.	OBJETO DE LA REVISION Subject of Revision	DATE ISSUED (D)	SIGNAT. REVIEWED (Pr.E.)	DATE REVIEWED (Pr.E.)	SIGNAT. APPROVED (T.M.)	DATE REVIEWED (Pr.E.)	SIGNAT. APPROVED (T.M.)

CLIENTE:
Client:

T.R. /PETROPERU

N°. ORDEN:
Job N°:

2/982

OBRA:
Job:

GASIFIER (FCK-R-103)

DESIGNACION:
Designation:

SOPORTES DE REFRACTARIO
REFRACTORY SUPPORTS

PLANO N°:
Drawing N°:

2/982-308 (3/7)

REV.

8

SIZE

A1

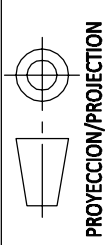
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SCALE

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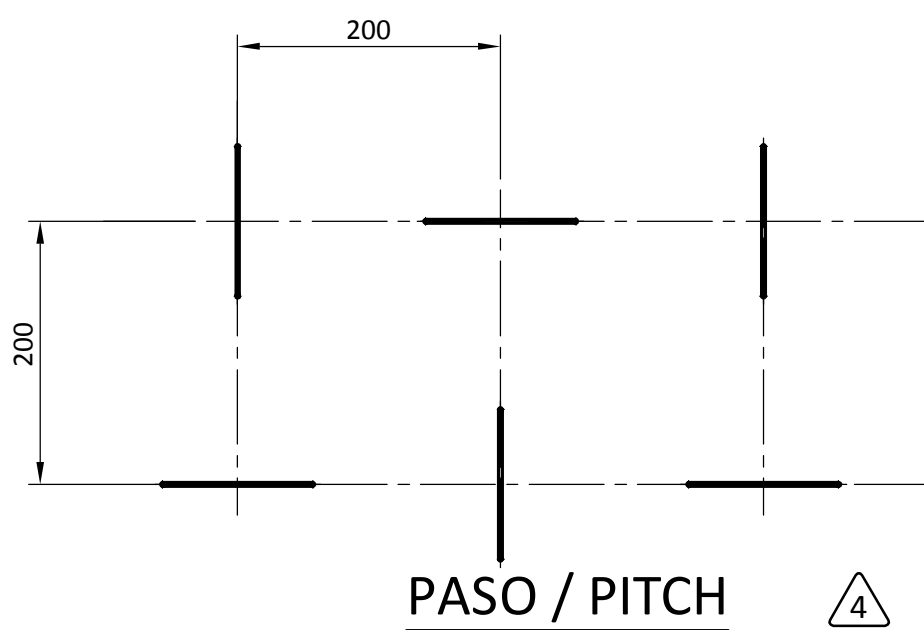
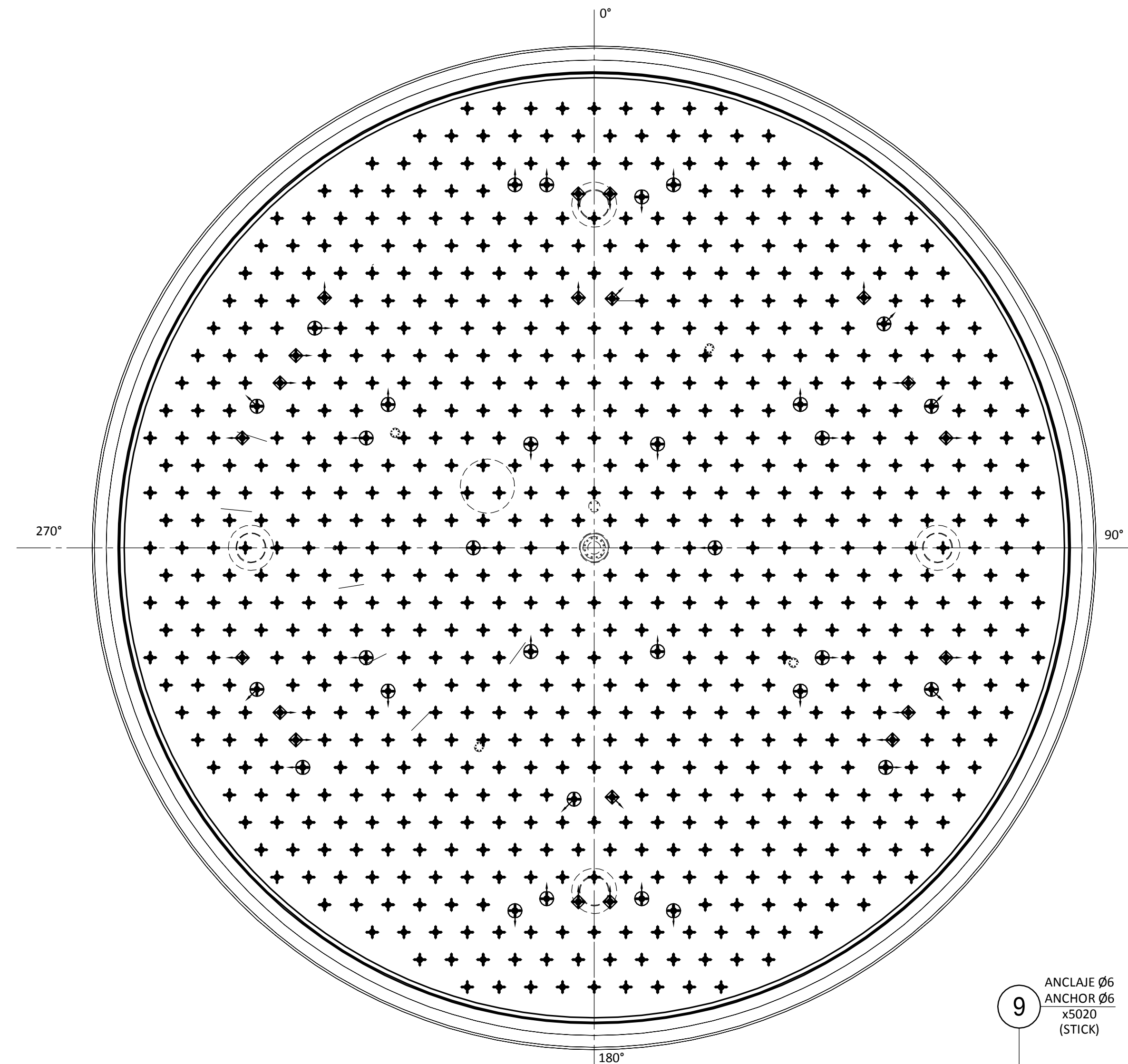
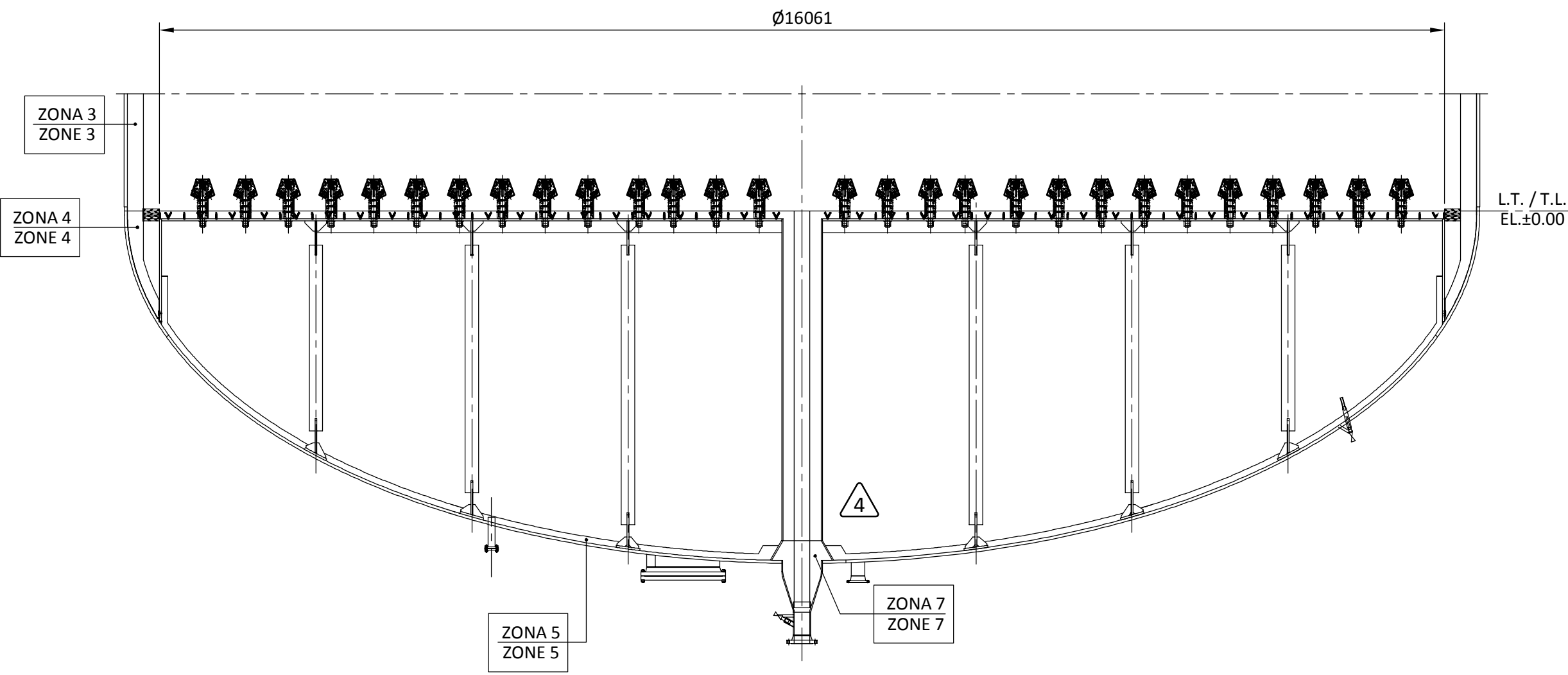


DIMENSION / DIMENSION	>2000
MEDICIONADO TIPO MEDIO/MEDIUM MACHING	±1.2
ELEMENTO SOLDADO/WELDED STRUCTURE	±1.0
TOLERANCIAS GENERALES	±1.2
GENERAL TOLERANCES	±1.0



ZONA 6 / ZONE 6

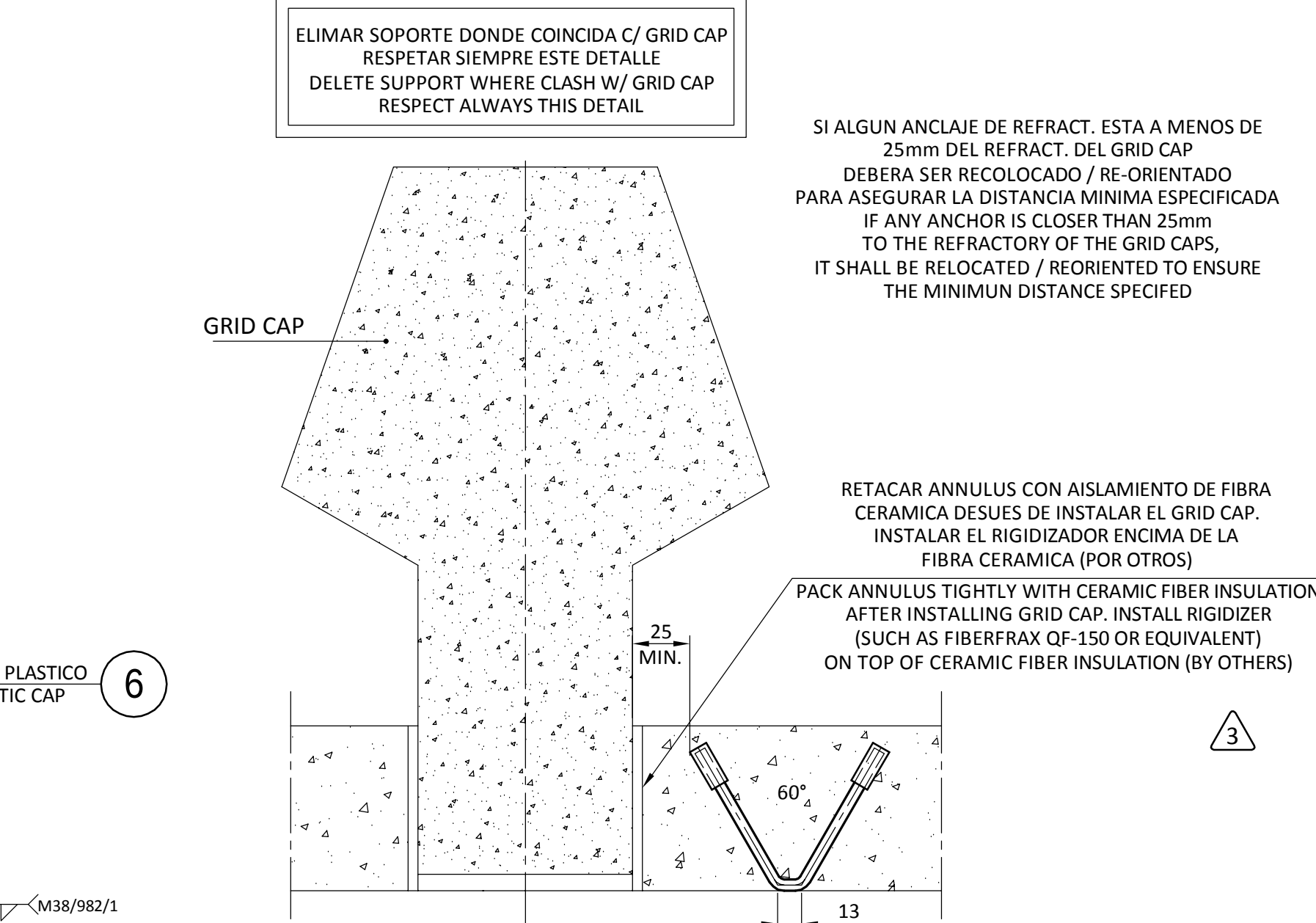
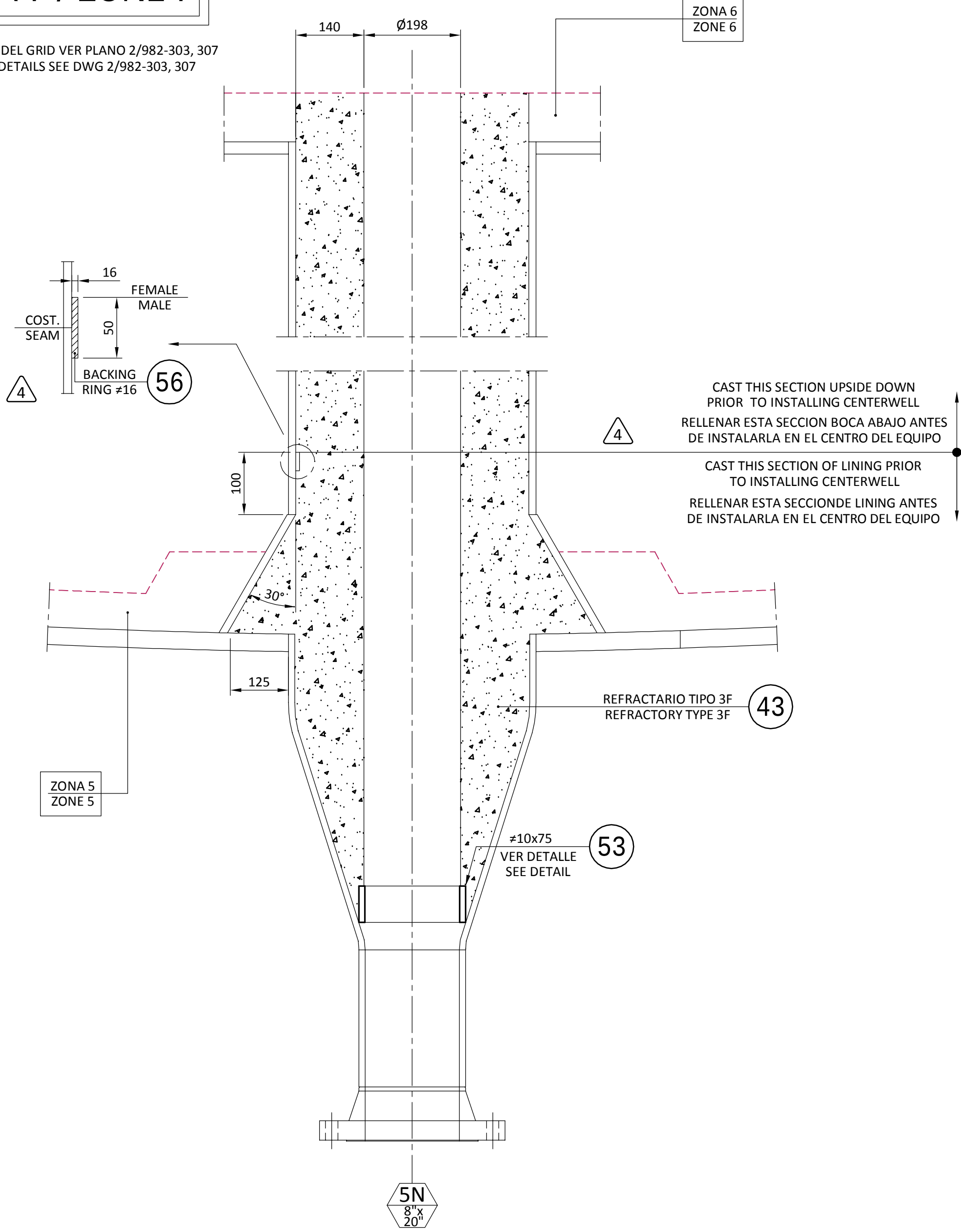
PARA DETALLES DEL GRID VER PLANO 2/982-307
FOR GRID'S DETAILS SEE DWG 2/982-307



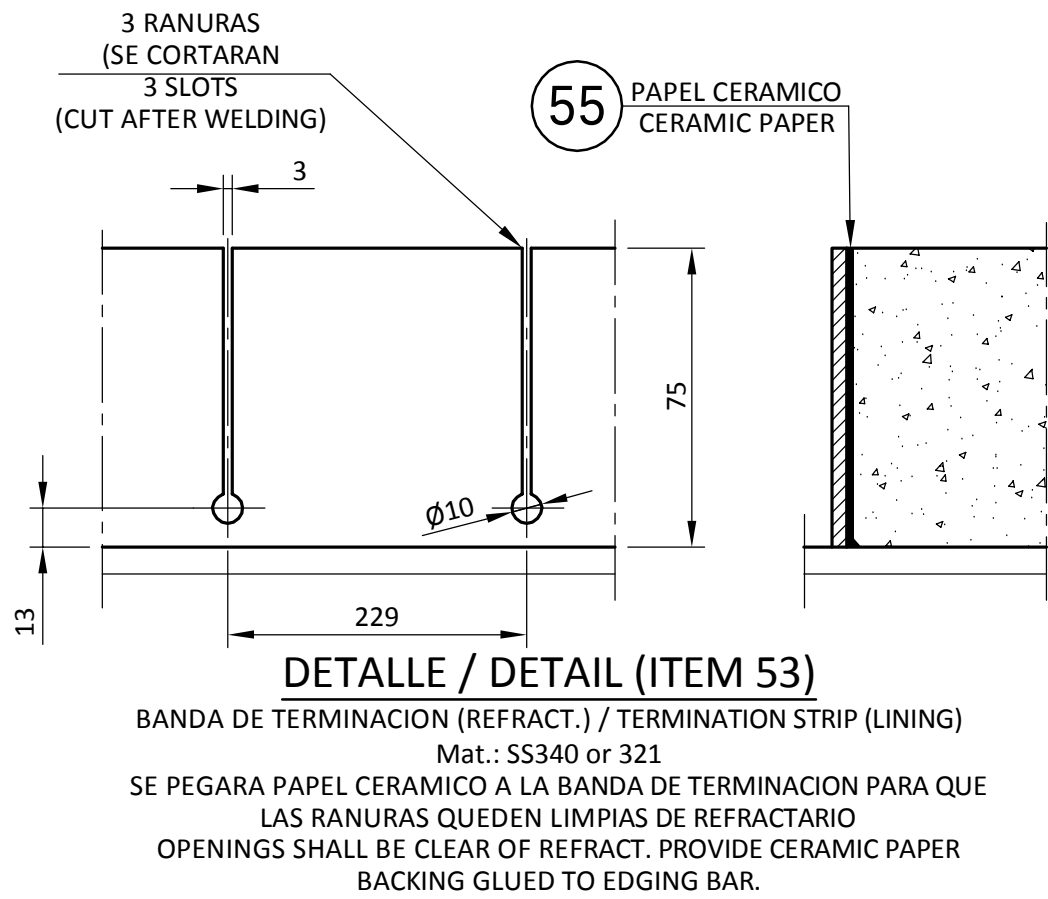
DETALLE ANCLAJE DE REFRAC.
ANCHOR DETAIL
MAT. 304H

ZONA 7 / ZONE 7

PARA DETALLES DEL GRID VER PLANO 2/982-303, 307
FOR GRID'S DETAILS SEE DWG 2/982-303, 307



DETALLE TIP. DE MONTAJE
TYP. DETAIL FOR ASSEMBLY



DETALLE / DETAIL (ITEM 53)
BANDA DE TERMINACION (REFRACT.) / TERMINATION STRIP (LINING)
Mat.: S5340 or 321
SE PEGARA PAPEL CERAMICO A LA BANDA DE TERMINACION PARA QUE
LAS RANURAS QUEDEN LIMPIAS DE REFRACTARIO
OPENINGS SHALL BE CLEAR OF REFRACT. PROVIDE CERAMIC PAPER
BACKING GLUED TO EDGING BAR.

MODERNIZACION REFINERIA de TALARA
PETROPERU, S.A.



PROJECT: MODERNIZACION REFINERIA DE TALARA	CONTRAC TR PROJECT N°: 02070
PURCHASE ORDER No. 020700342-I213	EQUIPMENTS / TAGS No. FCK-R-103
DOCUMENT CODE : PLD-0022	DOCUMENT No. V-020700342-I213-FCK-R-103-0013-I

REVIEW RESPONSE BY PURCHASER :					
☐	REJECTED	☐	REVIEWED WITH COMMENTS	☐	REVIEWED WITHOUT COMMENTS
☐	COMMENTS AS NOTED	☐	REVIEWED AS BUILT	☐	FOR INFORMATION
☐	VOID				
					DATE :

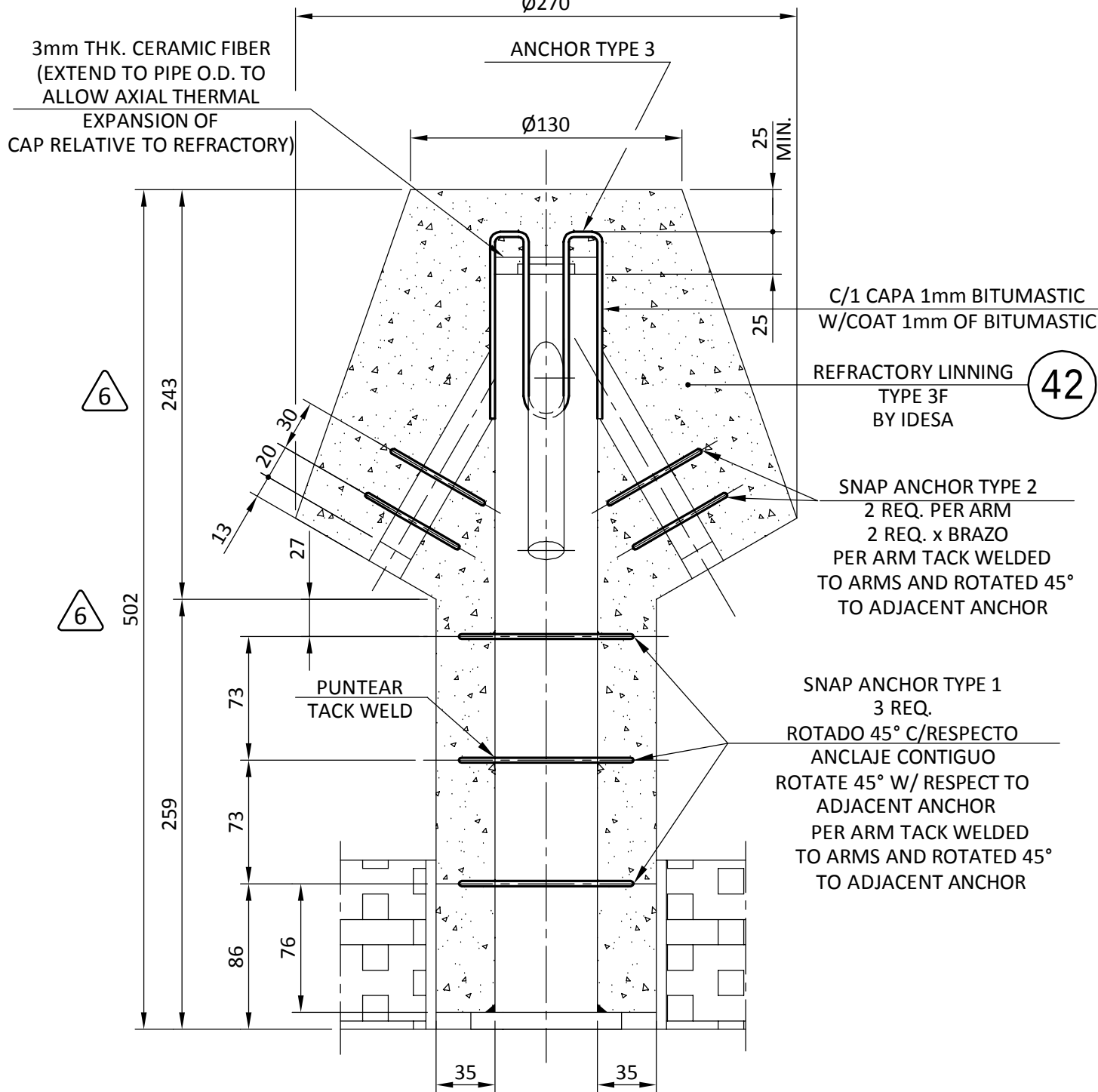
VENDOR IDENTIFICATION :	IDES A
DOCUMENT TITLE :	REFRACTORY SUPPORTS
VENDOR DOCUMENT NUMBER	2/982-308 (4/7)
Rev.	8

8	SIN CAMBIOS / NO CHANGES	28.02.18	Jesús C.	28.02.18	Soledad	28.02.18	Begoña
7	CAMBIAN OTRAS HOJAS / CHANGED OTHERS SHEETS	26.09.16	SANDRA	26.09.16	SOLEDAD	26.09.16	BEGOÑA
6	DONDE SE INDICA / AS INDICATED	10.05.16	MARIO	10.05.16	SOLEDAD	10.05.16	BEGOÑA
5	DONDE SE INDICA / AS INDICATED	31.03.16	ALFREDO	31.03.16	SOLEDAD	31.03.16	BEGOÑA
4	DONDE SE INDICA / AS INDICATED	15.03.16	ALFREDO	15.03.16	SOLEDAD	15.03.16	BEGOÑA
REV.	OBJETO DE LA REVISION Subject of Revision	DATE ISSUED (D)	SIGNAT. REVIEWED (Pr.E.)	DATE APPROVED (T.M.)	SIGNAT.	DATE	SIGNAT.

CLIENTE: Client:	T.R. /PETROPERU	N°. ORDEN: Job N°:	2/982
OBRA: Job:	GASIFIER (FCK-R-103)		
DESIGNACION: Designation:	SOPORTES DE REFRACTARIO REFRACTORY SUPPORTS		
PLANO N°: Drawing N°:	2/982-308 (4/7)	REV. 8	SIZE A1
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ZONA 8 / ZONE 8

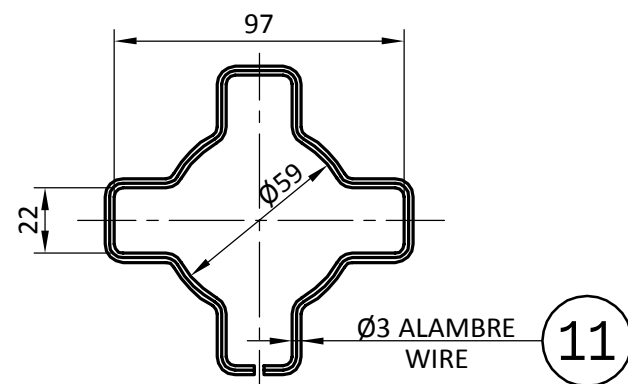
PARA DETALLES DEL GRID VER PLANO 2/982-307
FOR GRID'S DETAILS SEE DWG 2/982-307



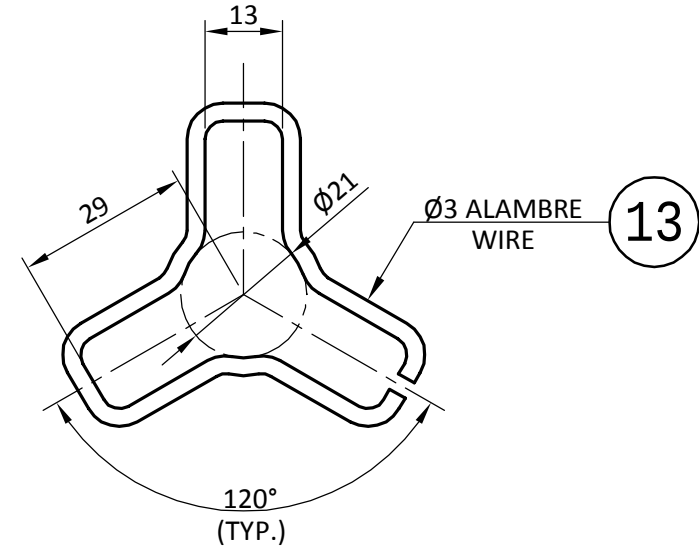
ANCLAJES EN GRID CAP ANCHORS IN GRID CAP

CANT.: 756

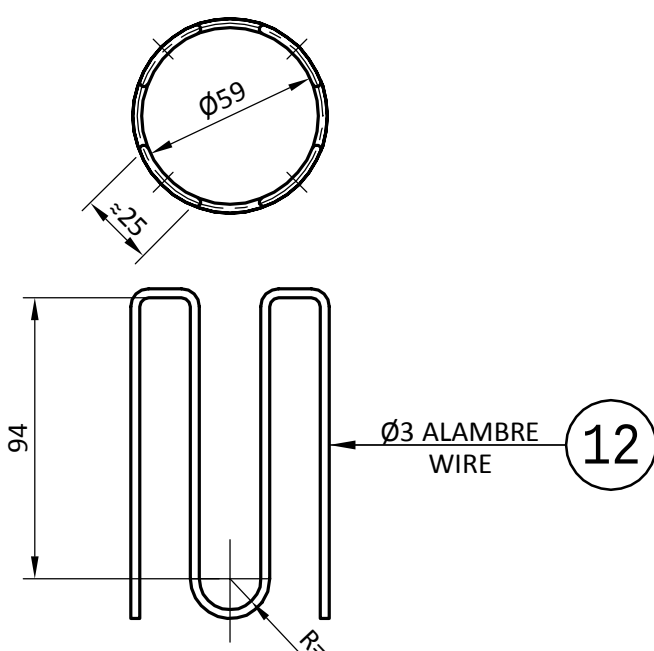
TAPAR LOS BRAZOS ANTES DE REFRACTRA PARA EVITAR
QUE EL REFRACTARIO ENTRE EN LOS BRAZOS
PLUG ARMS BEFORE CASTING REFRACTORY TO PREVENT
REFRACTORY FROM ENTERING ARMS.



ANCHOR TYPE 1 FOR GRID CAP CANT.: 2268 (MAT.: 304S.S.)



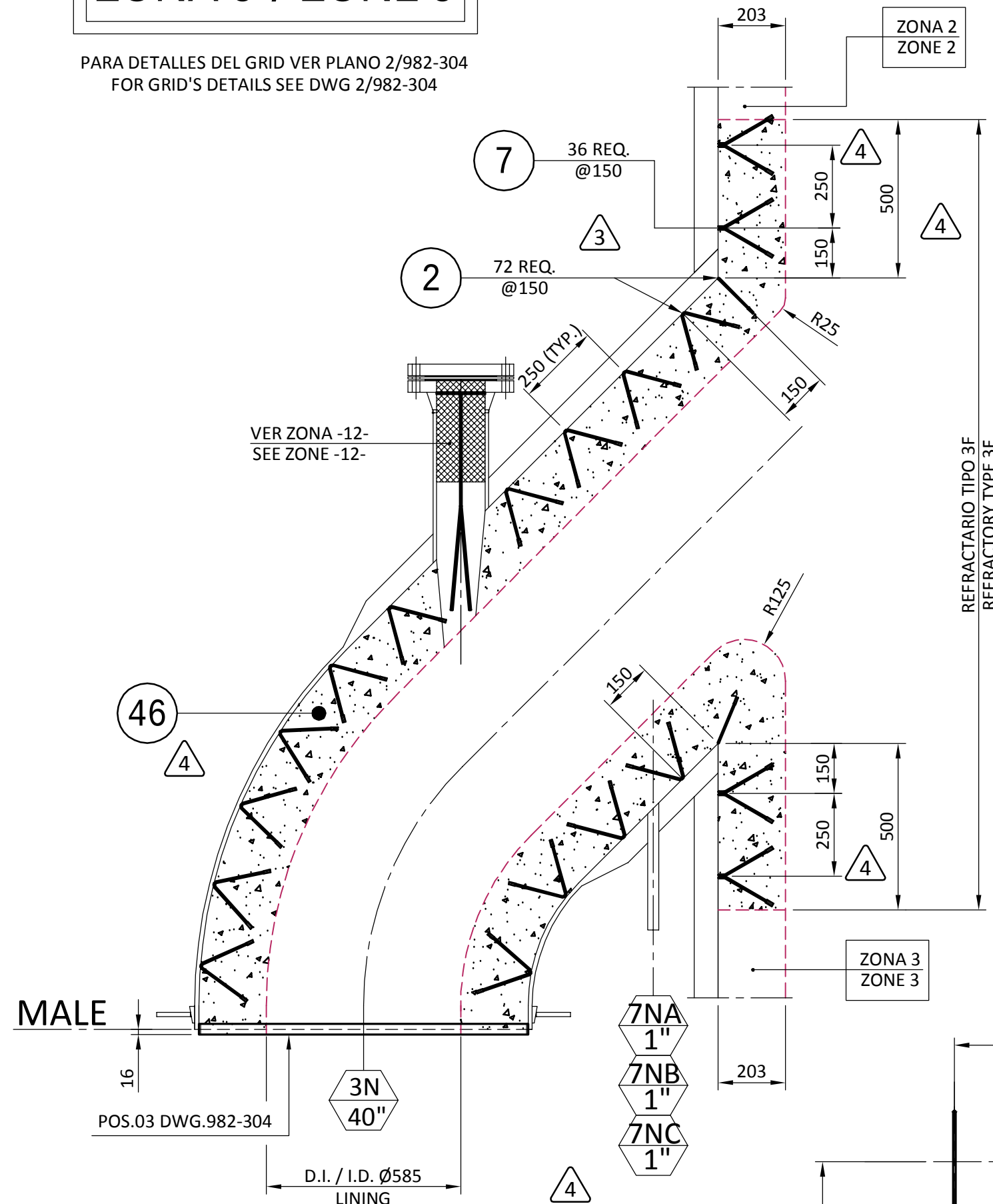
SNAP ANCHOR TYPE 2 FOR GRID CAP CANT.: 6048 (MAT.: 304S.S.)



ANCHOR TYPE 3 FOR GRID CAP CANT.: 756 (MAT.: HAYNESS 556)

ZONA 9 / ZONE 9

PARA DETALLES DEL GRID VER PLANO 2/982-304
FOR GRID'S DETAILS SEE DWG 2/982-304



MALE

POS.03 DWG.982-304

3N
40"

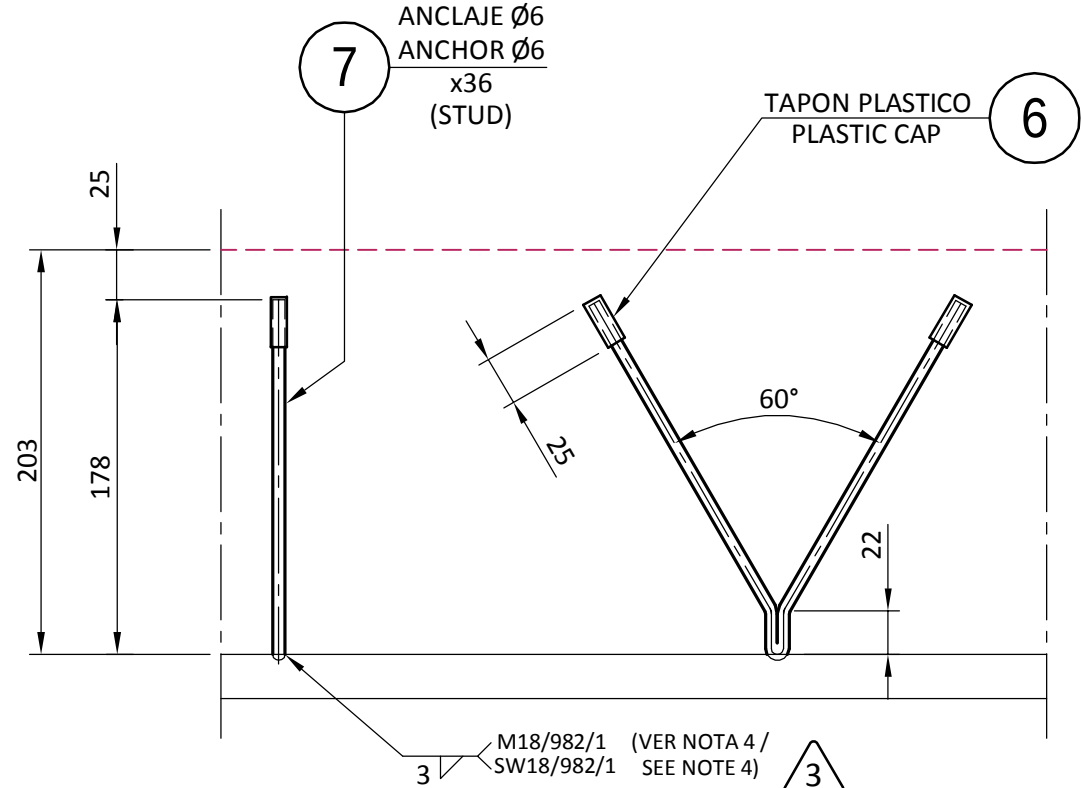
D.I. / I.D. Ø585
LINING

7NA
1"

7NB
1"

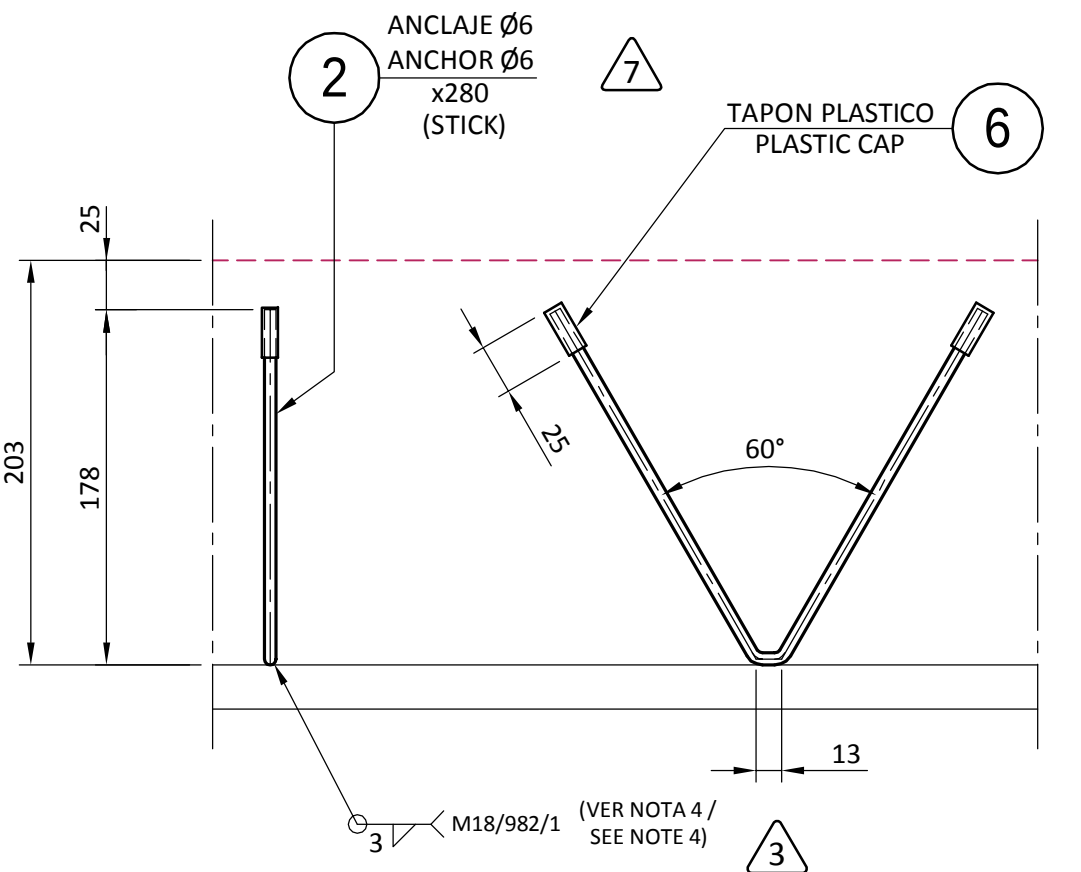
7NC
1"

PASO / PITCH (TYP.)



DETALLE ANCLAJE DE REFRAC. ANCHOR DETAIL

MAT. 310S

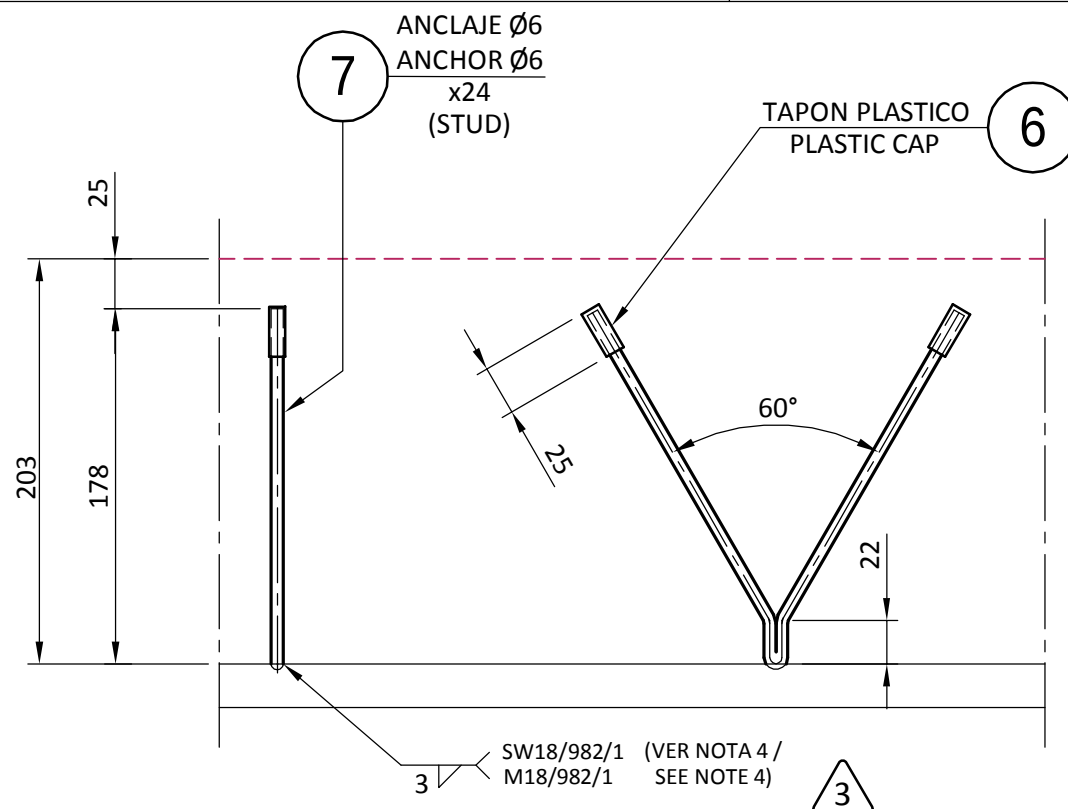
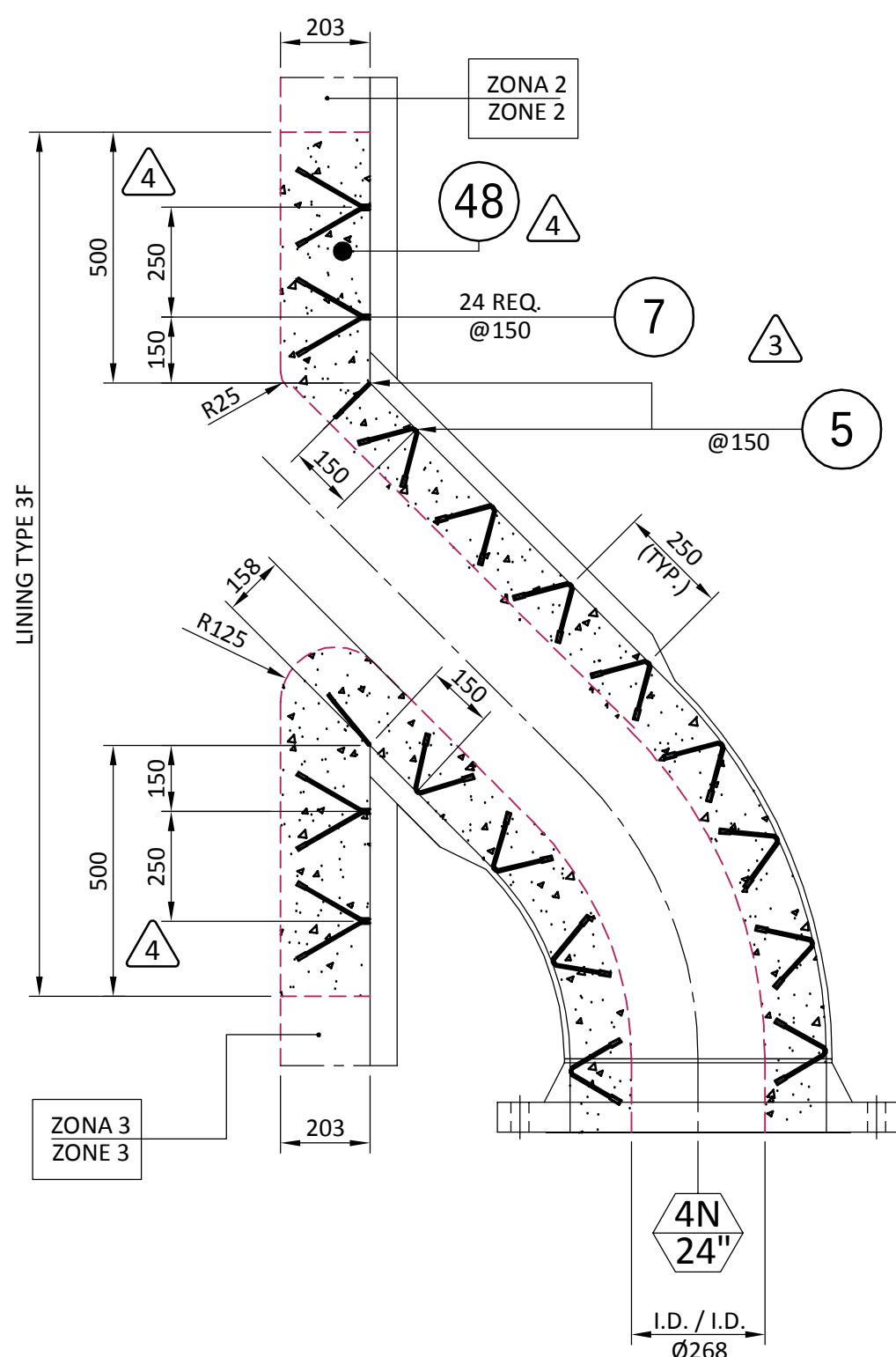


DETALLE ANCLAJE DE REFRAC. ANCHOR DETAIL

MAT. 310S

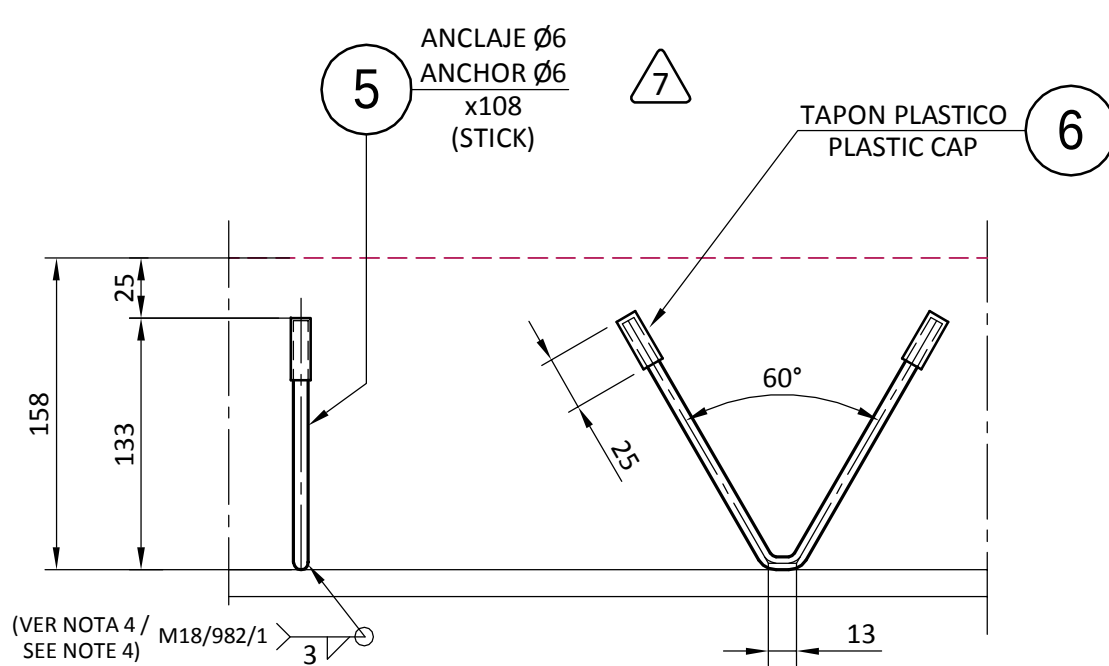
ZONA 10 / ZONE 10

PARA DETALLES DEL GRID VER PLANO 2/982-304
FOR GRID'S DETAILS SEE DWG 2/982-304



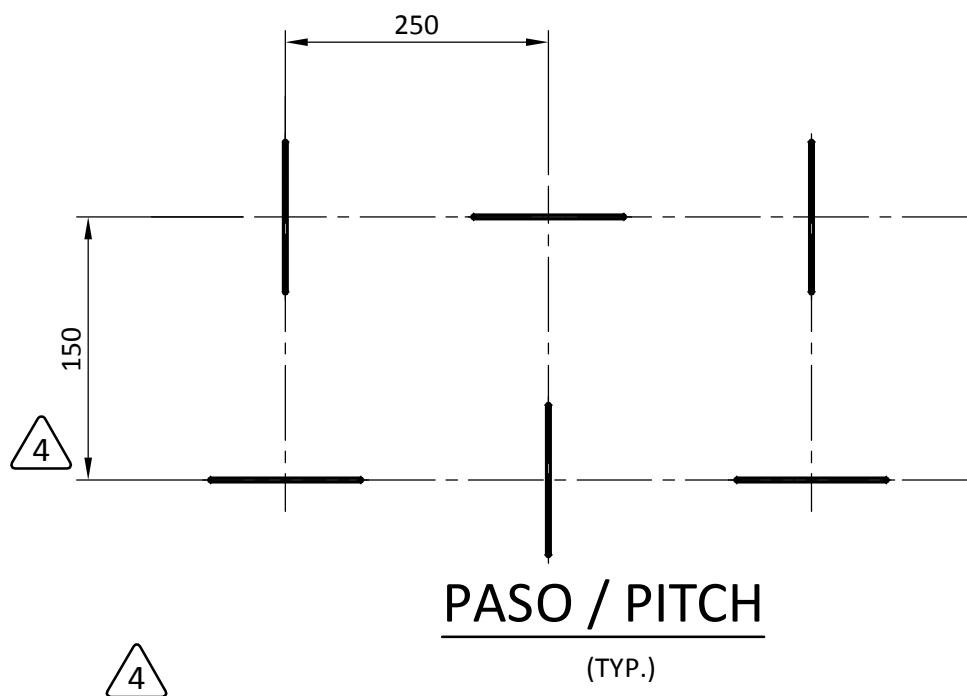
DETALLE ANCLAJE DE REFRAC. ANCHOR DETAIL

MAT. 310S



DETALLE ANCLAJE DE REFRAC. ANCHOR DETAIL

MAT. 310S



PASO / PITCH (TYP.)

MODERNIZACION REFINERIA de TALARA PETROPERU, S.A.

PETROPERU



PROJECT: MODERNIZACION REFINERIA DE TALARA

CONTRAC TR PROJECT N°: 02070

PURCHASE ORDER No. 020700342-1213

EQUIPMENTS / TAGS No. FCK-R-103

DOCUMENT CODE : PLD-0022

DOCUMENT No. V-020700342-1213-FCK-R-103-0013-I

REVIEW RESPONSE BY PURCHASER :

☐ REJECTED	☐ REVIEWED WITH COMMENTS	☐ REVIEWED WITHOUT COMMENTS
☐ COMMENTS AS NOTED	☐ REVIEWED AS BUILT	☐ FOR INFORMATION
☐ VOID		

DATE :

VENDOR IDENTIFICATION : IDESA

DOCUMENT TITLE : REFRACTORY SUPPORTS

VENDOR DOCUMENT NUMBER 2/982-308 (5/7) Rev. 8

8	SIN CAMBIOS / NO CHANGES	28.02.18	Jesús C.	28.02.18	Soledad	28.02.18	Soledad
7	DONDE SE INDICA / AS INDICATED	26.09.16	SANDRA	26.09.16	SOLEDAD	26.09.16	BEGOÑA
6	DONDE SE INDICA / AS INDICATED	10.05.16	MARIO	10.05.16	SOLEDAD	10.05.16	BEGOÑA
5	DONDE SE INDICA / AS INDICATED	31.03.16	ALFREDO	31.03.16	SOLEDAD	31.03.16	BEGOÑA
4	DONDE SE INDICA / AS INDICATED	15.03.16	ALFREDO	15.03.16	SOLEDAD	15.03.16	BEGOÑA

REV.	OBJETO DE LA REVISION Subject of Revision	DATE ISSUED (D)	SIGNAT. REVIEWED (Pr.E.)	DATE REVIEWED (Pr.E.)	SIGNAT. APPROVED (T.M.)
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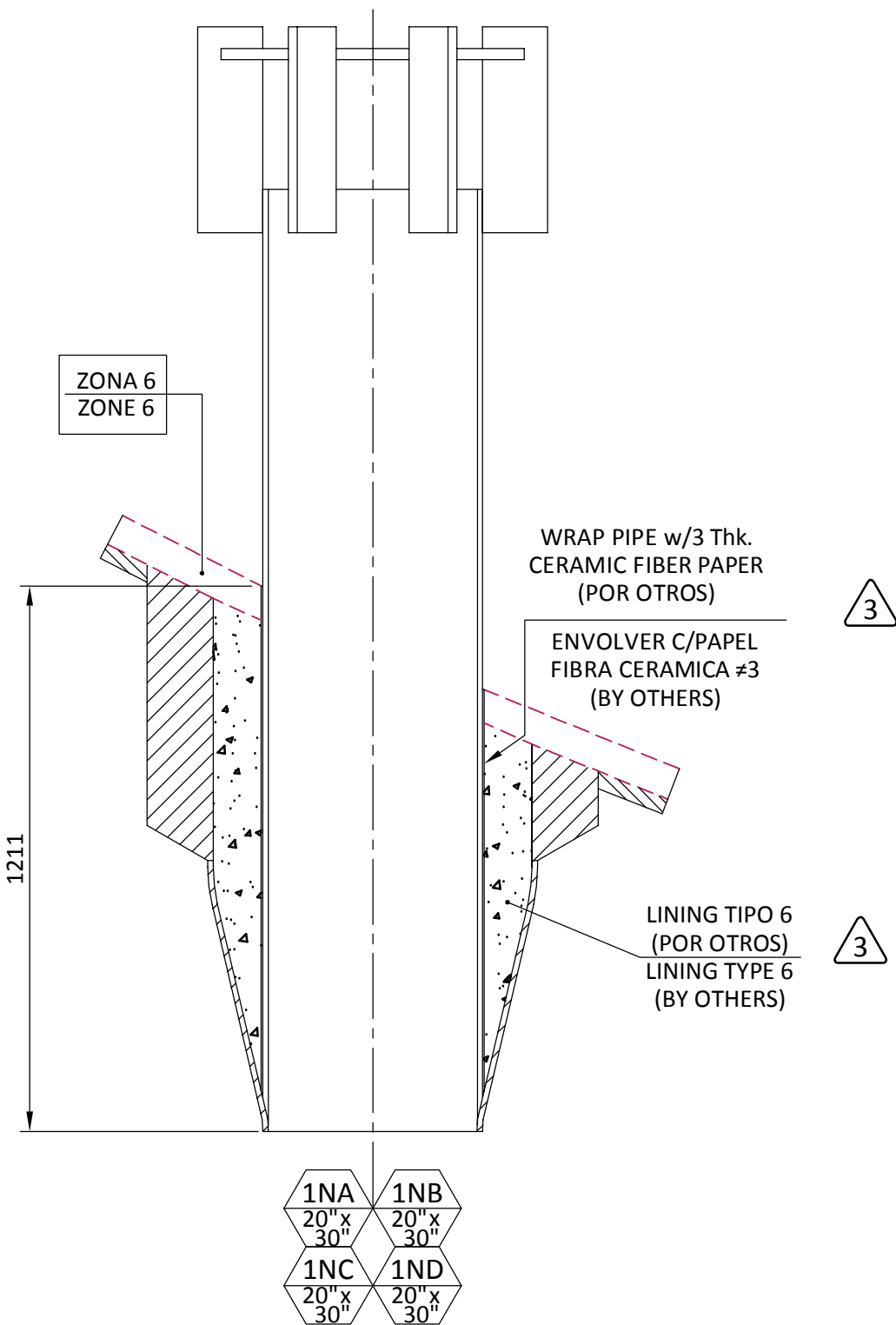
CLIENTE: Client:	T.R. /PETROPERU	N°. ORDEN: Job N°:	2/982
OBRA: Job:	GASIFIER (FCK-R-103)		
DESIGNACION: Designation:	SOPORTES DE REFRACTARIO REFRACTORY SUPPORTS		
PLANO N°: Drawing N°:	2/982-308 (5/7)	REV.	8
		SIZE	A1
		SCALE	1:60



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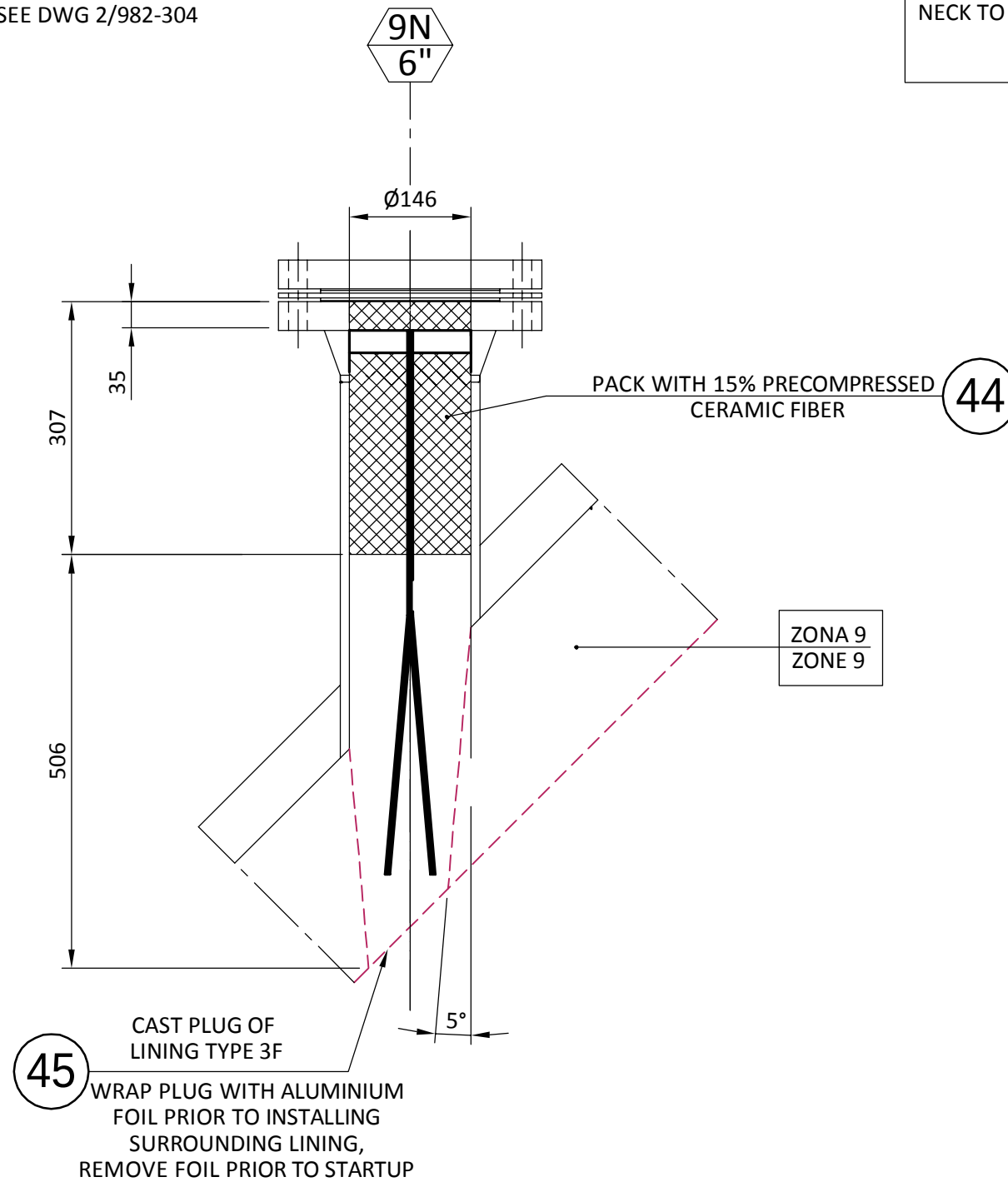
ZONA 11 / ZONE 11

PARA DETALLES DEL GRID VER PLANO 2/982-303
FOR GRID'S DETAILS SEE DWG 2/982-303



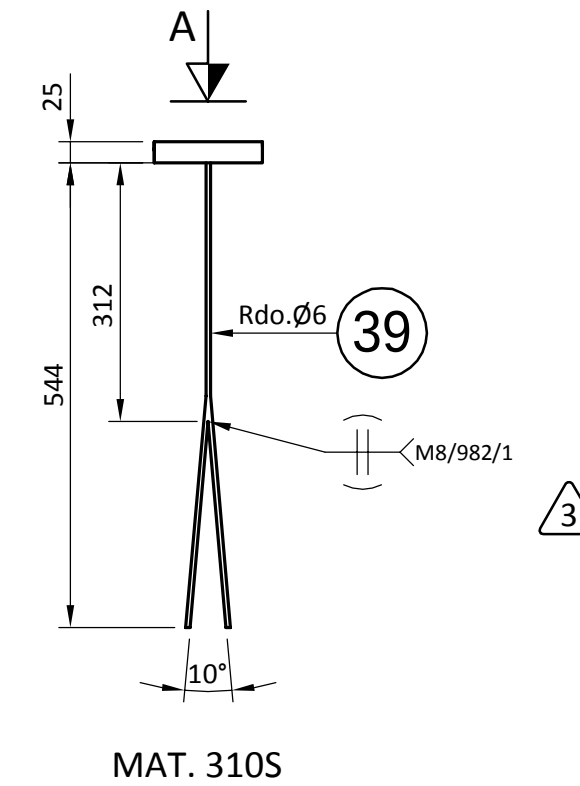
ZONA 12 / ZONE 12

PARA DETALLES DEL GRID VER PLANO 2/982-304
FOR GRID'S DETAILS SEE DWG 2/982-304



NORMAL OPERATING CONFIGURATION
START-UP COKE ADDITION NOZZLE "9N"

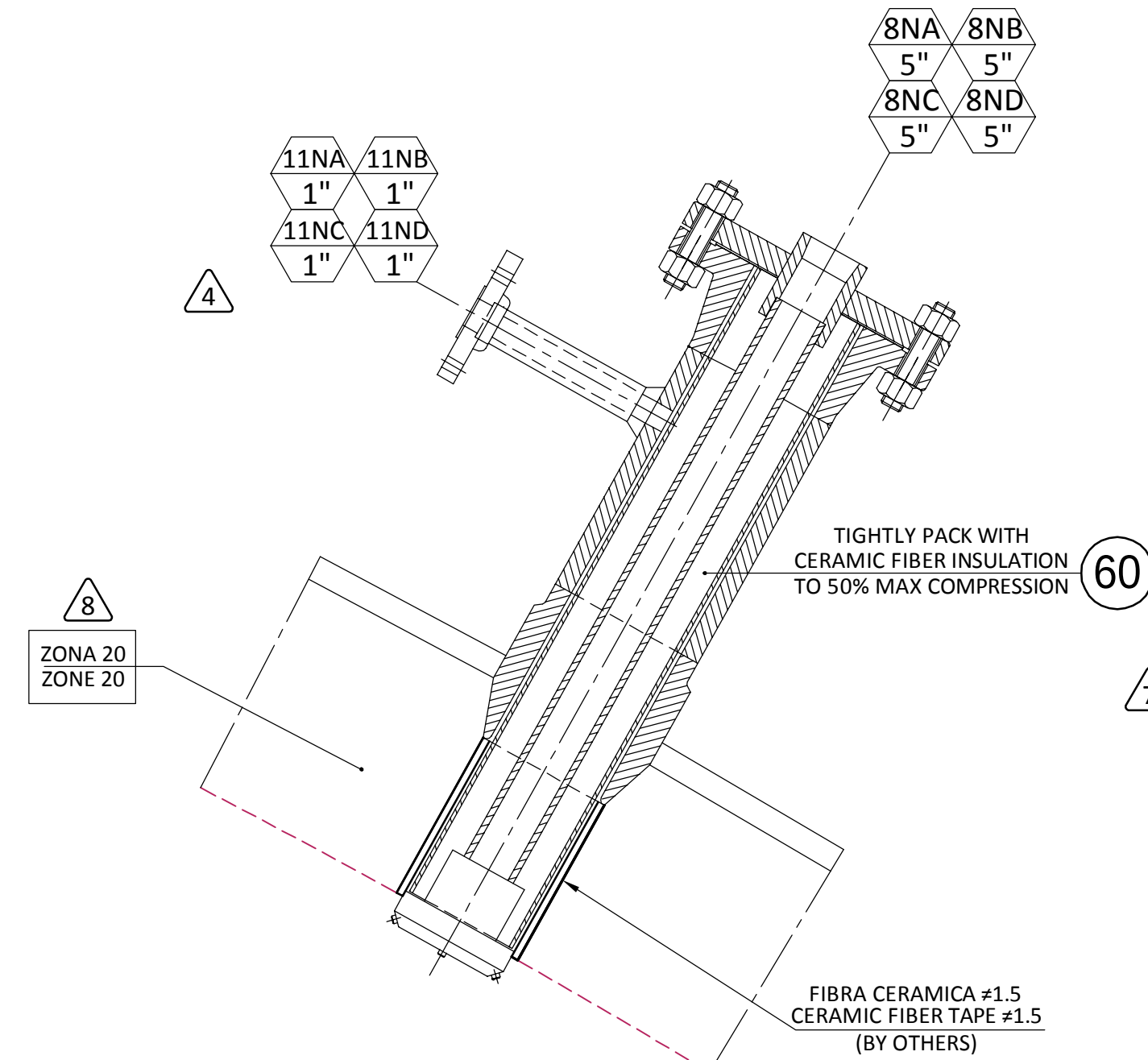
ATTACHEMENT WELDS TO NOZZLE
NECK TO BE GROUND SMOOTH WHEN
REMOVING PLUG



VISTA -A-
VIEW -A-

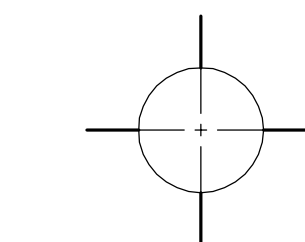
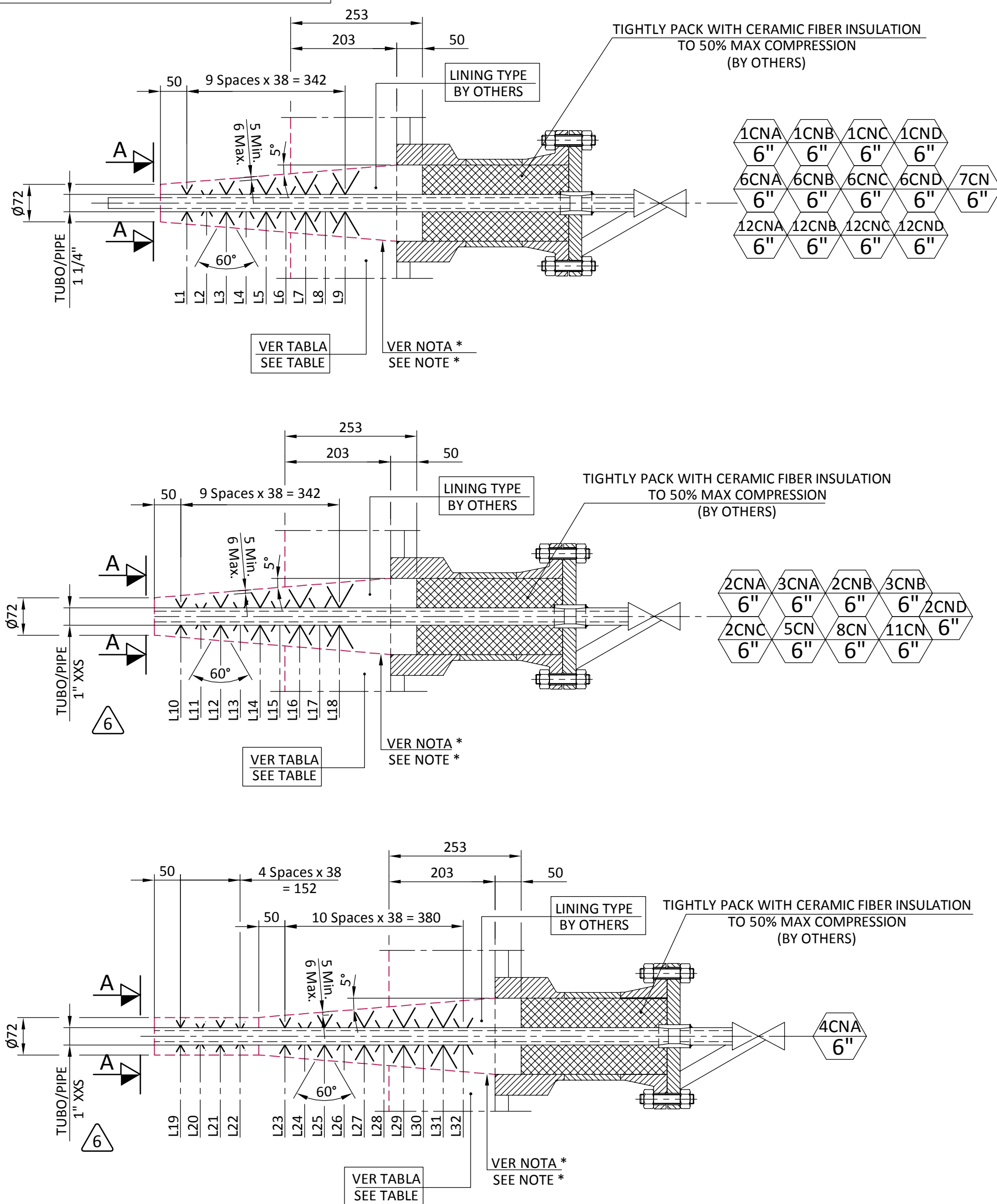
ZONA 13 / ZONE 13

PARA DETALLES DEL GRID VER PLANO 2/982-303
FOR GRID'S DETAILS SEE DWG 2/982-303

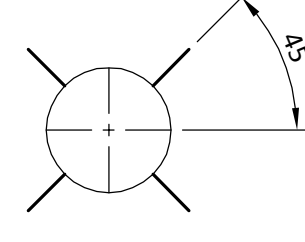


ZONA 14 / ZONE 14

PARA DETALLES DEL GRID VER PLANO 2/982-304
FOR GRID'S DETAILS SEE DWG 2/982-304



ORIENT. PARA L1-L31 IMPARES
L1-L31 ODD ORIENTATION



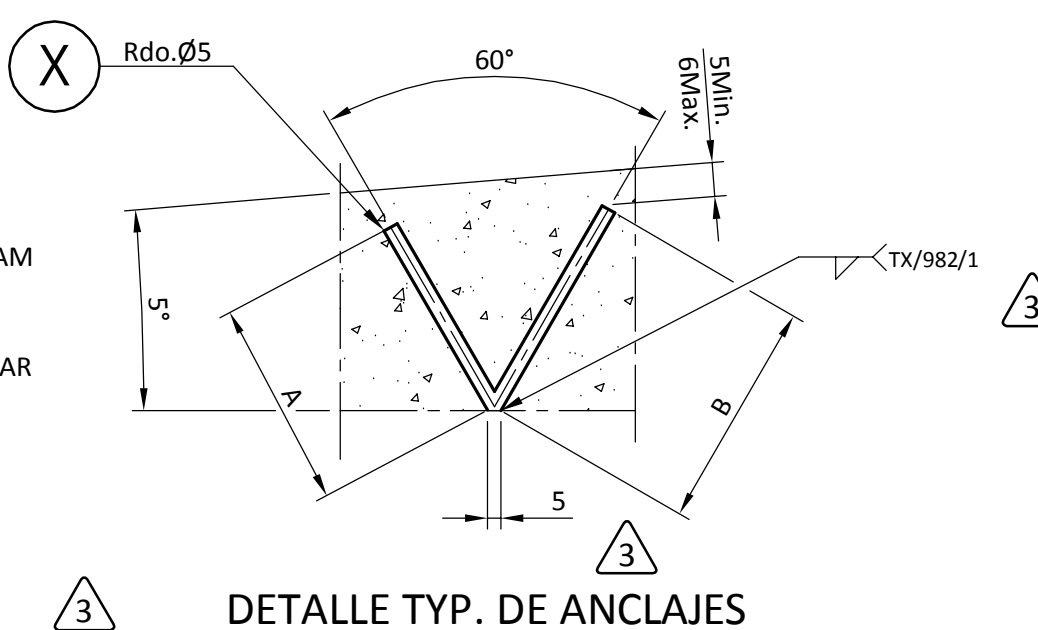
ORIENT. PARA L2-L30 PARES
L2-L30 EVEN ORIENTATION

SECCION A-A / SECTION A-A

CADA CIRCULO DE ANCLAJES ROTADO C/REPECTO AL CIRCULO PREVIO
EACH CIRCLE OF ANCHORS ROTATED W/RESPECT TO PREVIOUS CIRCLE

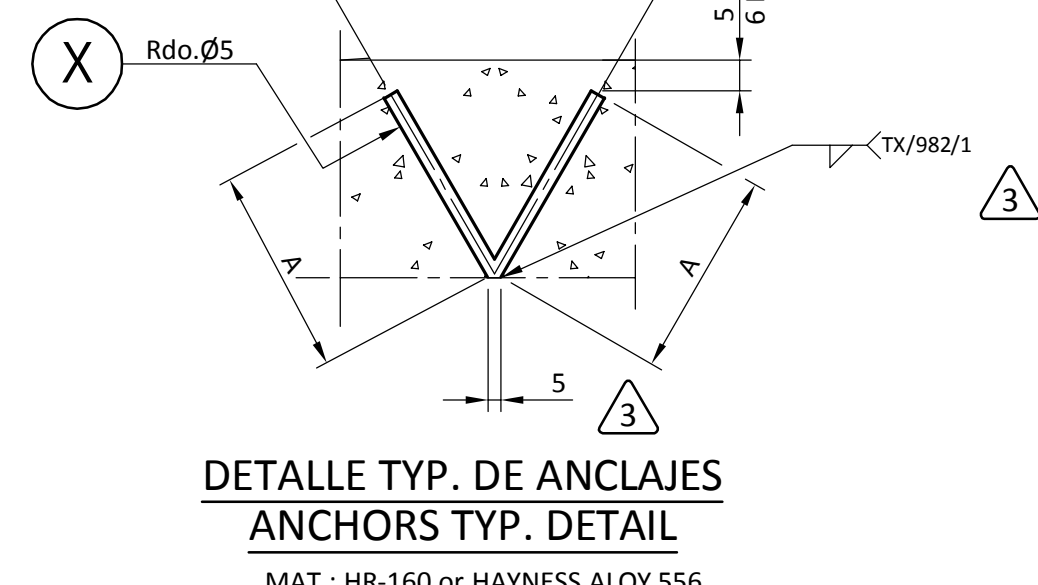
TUBULADURAS NOZZLES	ZONA ZONE	TIPO TYPE
1CNA, 1CNB, 1CNC, 1CND, 2CNA, 3CNA, 5CN, 8CN, 11CN	2	4
6CNA, 6CNB, 6CNC, 6CND, 7CN, 12CNA, 12CNB, 12CNC, 12CND, 2CNB, 3CNB, 2CNC, 2CND, 4CNA	3	4F

	A	B	X
L1	15	17	23
L2	19	21	24
L3	22	25	25
L4	26	29	26
L5	29	33	27
L6	32	36	28
L7	36	40	29
L8	39	44	30
L9	43	47	31
L10	15	17	23
L11	19	21	24
L12	22	25	25
L13	26	29	26
L14	29	33	27
L15	32	36	28
L16	36	40	29
L17	39	44	30
L18	43	47	31
L19	11	11	32
L20	11	11	32
L21	11	11	32
L22	11	11	32
L23	15	17	23
L24	19	21	24
L25	22	25	25
L26	26	29	26
L27	29	33	27
L28	32	36	28
L29	36	40	29
L30	39	44	30
L31	43	47	31
L32	46	51	33



DETALLE TYP. DE ANCLAJES ANCHORS TYP. DETAIL

MAT.: HR-160 or HAYNESS ALLOY 556



DETALLE TYP. DE ANCLAJES ANCHORS TYP. DETAIL

MAT.: HR-160 or HAYNESS ALOY 556

NOTA / NOTE *

REFRACTAR DE FORMA QUE EL TAPÓN FINALICE DE UNA FORMA SUAVE QUE SE ADAPTE. LA FORMA DEL AGUJERO EN EL REFRACTARIO PUEDE HACER CON STYROFOAM O TACOS DE MADERA EN CASO DE QUE EL TAPÓN NO ESTÉ DISPONIBLE. SI EL TAPÓN ESTÁ DISPONIBLE, ENVOLVER CON DOS CPAAS DE ALUMINIO (CUBRIENDO Y PROTEGIENDO LA ZONA REFRACTADA). REFRACTAR ALREDEDOR DEL TAPÓN. ELIMINAR EL ALUMINIO ANTES DE LA PUESTA EN MARCHA

CAST TAPERED REFRACTORY PLUG USING A SMOOTH FORM WITH THE SPECIFIED TAPER. THE HOLE IN THE LINING CAN BE MADE USING A STYROFOAM OR WOODEN FORM IF THE REFRACTORY COVERED INSTRUMENT TAP IS NOT AVAILABLE. IF THE INSTRUMENT TAP IS USE, WRAP THE TAP WITH 2 LAYERS OF ALUMINIUM FOIL (COVERING AND PROTECTING THE REFRACTPRY SLEEVE). GUN THE LINNING AROUND THE PLUG. REMOVE ALUMINUM FOIL PRIOR TO START-UP. (BY OTHERS)

MODERNIZACION REFINERIA de TALARA PETROPERU, S.A.

PETROPERU



PROJECT:
MODERNIZACION REFINERIA DE TALARA

CONTRAC TR PROJECT N°:
02070

PURCHASE ORDER No.

020700342-I213

EQUIPMENTS / TAGS No.
FCK-R-103

DOCUMENT CODE :

PLD-0022

DOCUMENT No.
V-020700342-I213-FCK-R-103-0013-I

REVIEW RESPONSE BY PURCHASER :

☐ REJECTED	☐ REVIEWED WITH COMMENTS	☐ REVIEWED WITHOUT COMMENTS
☐ COMMENTS AS NOTED	☐ REVIEWED AS BUILT	☐ FOR INFORMATION
☐ VOID		

DATE :

VENDOR IDENTIFICATION :

IDESA

DOCUMENT TITLE :

REFRACTORY SUPPORTS

VENDOR DOCUMENT NUMBER

2/982-308 (6/7)

Rev.

8

8	DONDE SE INDICA / AS INDICATED	28.02.18	Jesús C.	28.02.18	Soledad	28.02.18	Begoña
7	DONDE SE INDICA / AS INDICATED	26.09.16	SANDRA	26.09.16	SOLEDAD	26.09.16	BEGOÑA
6	DONDE SE INDICA / AS INDICATED	10.05.16	MARIO	10.05.16	SOLEDAD	10.05.16	BEGOÑA
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REV.	OBJETO DE LA REVISION Subject of Revision	DATE ISSUED (D)	SIGNAT. REVIEWED (Pr.E.)	DATE REVIEWED (Pr.E.)	SIGNAT. APPROVED (T.M.)
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CLIENTE:

T.R. /PETROPERU

Nº. ORDEN:

2/982

OBRA:

GASIFIER (FCK-R-103)

DESIGNACION:

SOPORTES DE REFRACTARIO
REFRACTORY SUPPORTS

PLANO N°:

Drawing N°:

2/982-308 (6/7)

REV.

8

SIZE

A1

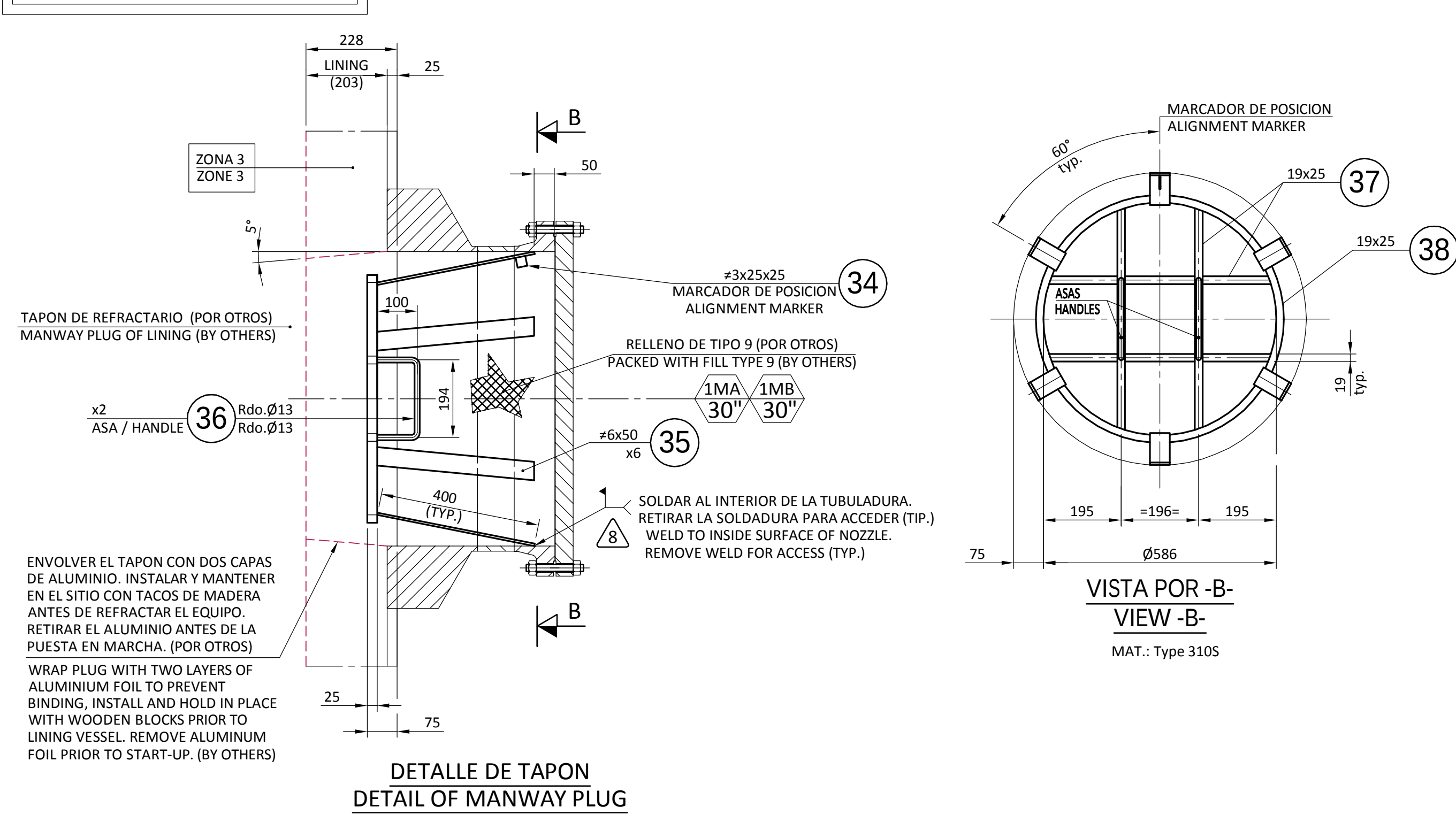
SCALE

1:60

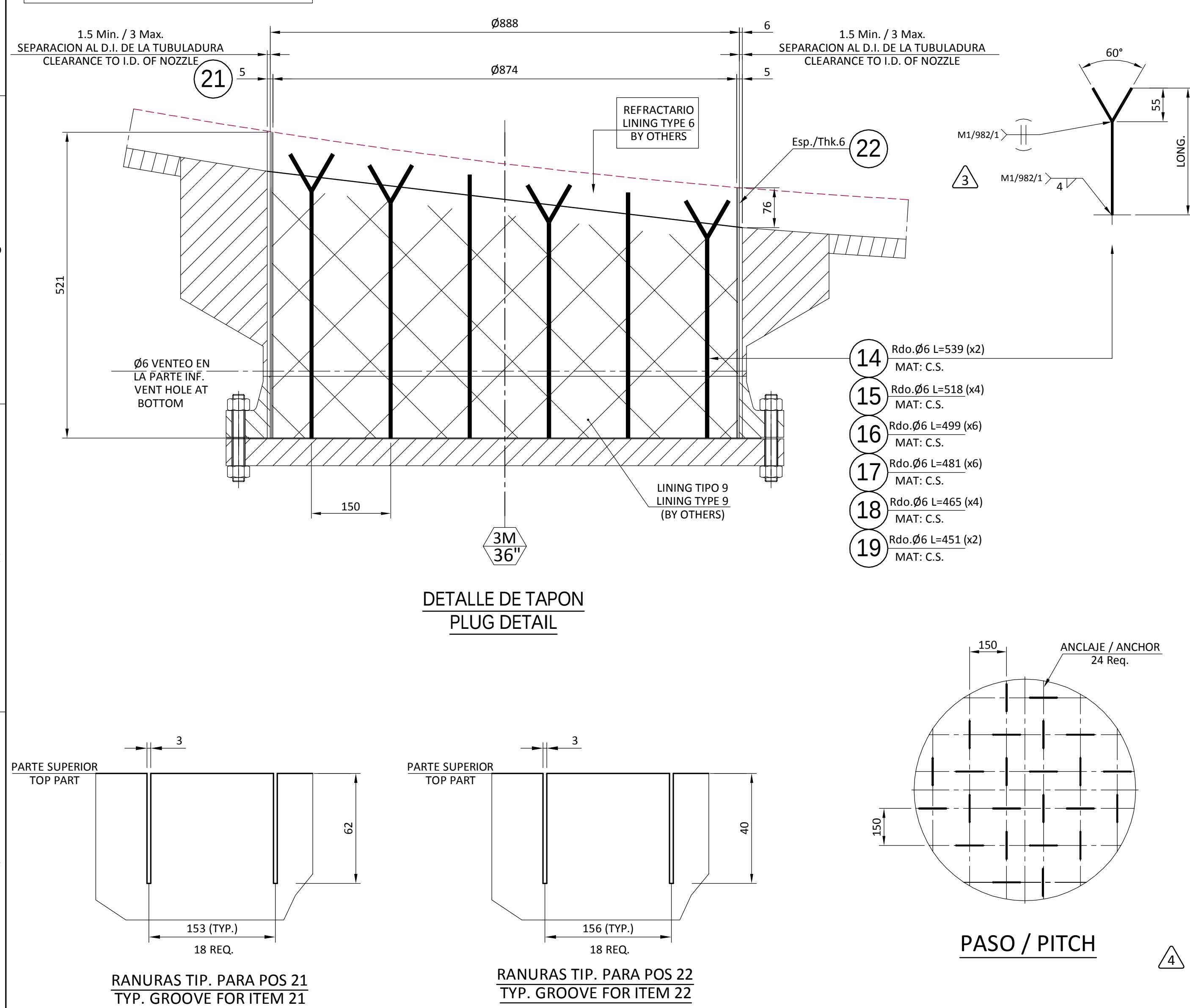


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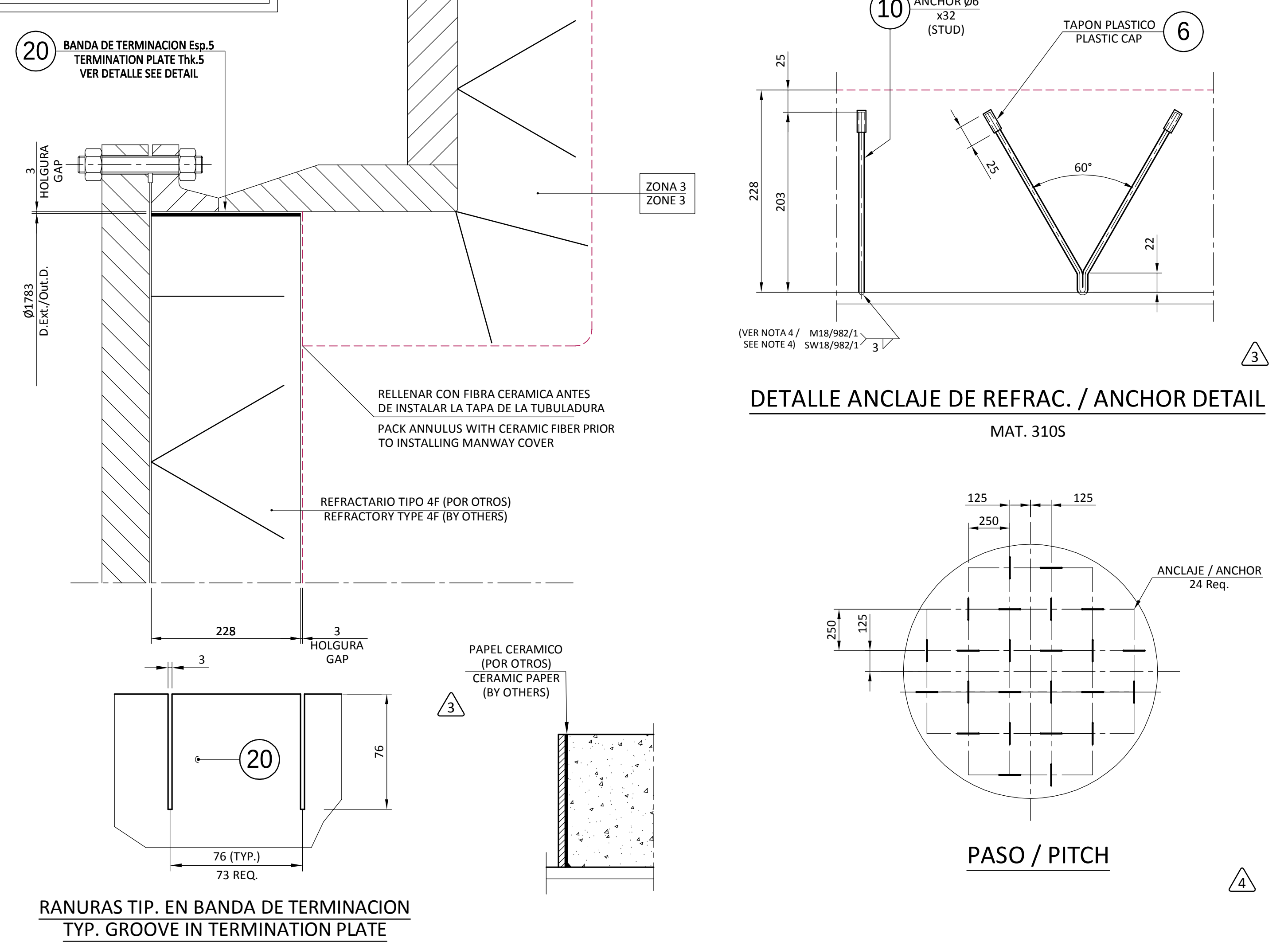
ZONA 15 / ZONE 15



ZONA 17 / ZONE 17



ZONA 16 / ZONE 16

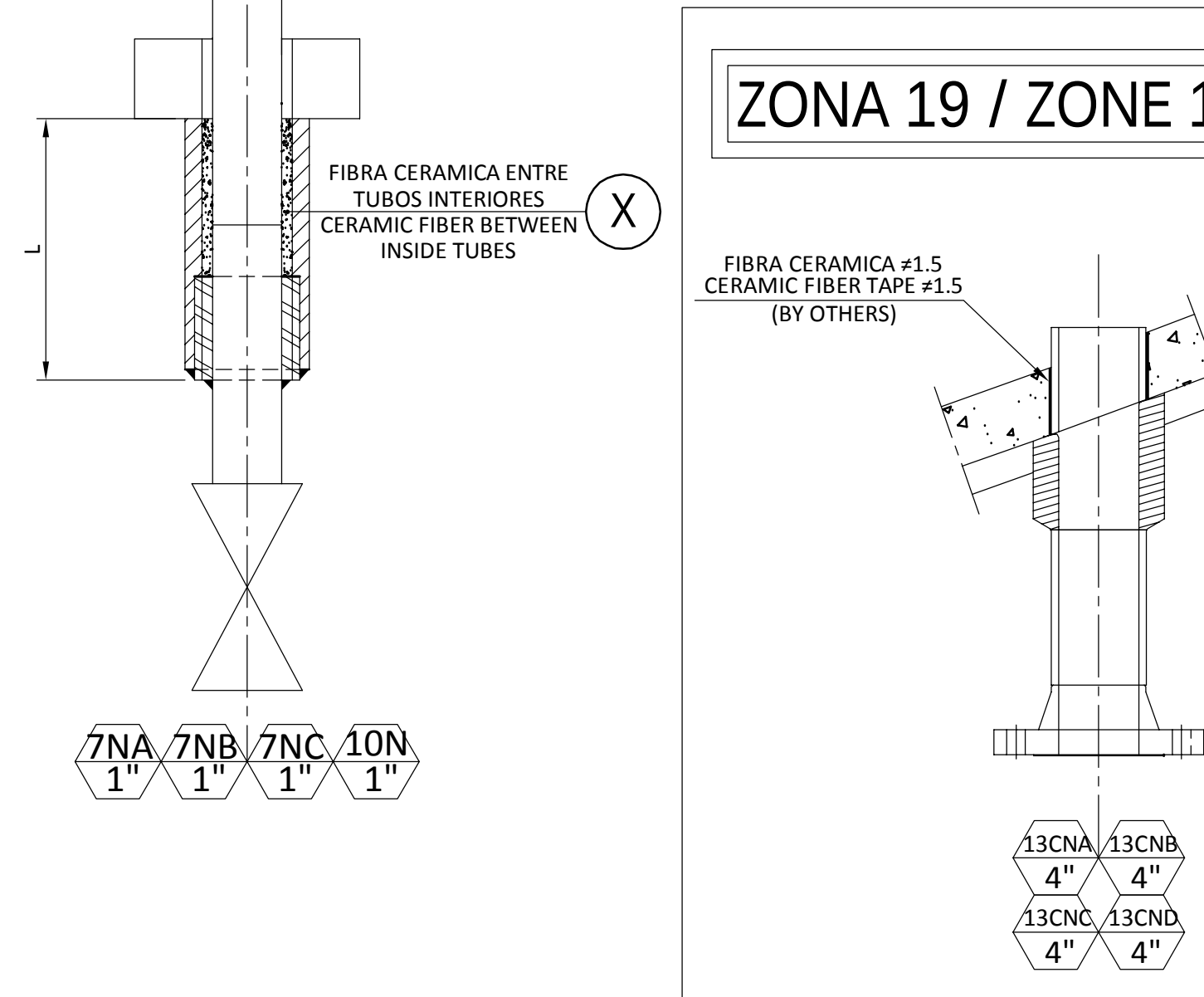


ZONA 18 / ZONE 18

PARA DETALLES DEL GRID VER PLANO 2/982-303 & 304
FOR GRID'S DETAILS SEE DWG 2/982-303 & 304

TUB. NOZZLE	L	POS.
7NA-B	82	49
7NC	71	57
10N	337	58

ZONA 19 / ZONE 19



**MODERNIZACION REFINERIA de TALARA
PETROPERU, S.A.**



PROJECT: MODERNIZACION REFINERIA DE TALARA	CONTRAC TR PROJECT N°: 02070
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PURCHASE ORDER No.	020700342-I213	EQUIPMENTS / TAGS No.	FCK-R-1

DOCUMENT CODE :	PLD-0022	DOCUMENT No. V-020700342-I213-FCK-R-103-06
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REVIEW RESPONSE BY PURCHASER: :

☐	REJECTED	☐	REVIEWED WITH COMMENTS	☐	REVIEWED WITHOUT COMMENTS
☐	COMMENTS AS NOTED	☐	REVIEWED AS BUILT	☐	FOR INFORMATION

☐ VOID
 ☐
☐
☐

DATE : _____

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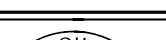
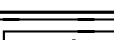
VENDOR IDENTIFICATION :	IDESA

DOCUMENT TITLE :	REFRACTORY SUPPORTS
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VENDOR DOCUMENT NUMBER 2/982-308 (7/7) Rev. 8

8	DONDE SE INDICA / AS INDICATED	28.02.18	<i>Jesús C</i>	28.02.18	<i>Sampedro</i>	28.02.18	☒
7	CAMBIAN OTRAS HOJAS / CHANGED OTHERS SHEETS	26.09.16	MARIA	26.09.16	SOLEDAAD	26.09.16	BEG
6	DONDE SE INDICA / AS INDICATED	10.05.16	SANDRO	10.05.16	SOLEDAAD	10.05.16	BEG
5	DONDE SE INDICA / AS INDICATED	31.03.16	ALFREDO	31.03.16	SOLEDAAD	31.03.16	BEG
4	DONDE SE INDICA / AS INDICATED	15.03.16	ALFREDO	15.03.16	SOLEDAAD	15.03.16	BEG
REV.	OBJETO DE LA REVISION Subject of Revision	DATE	SIGNAT.	DATE	SIGNAT.	DATE	SIGNAT.
		ISSUED (D)	REVIEWED (Pr.E.)	APPROVED (Pr.E.)	APPROVED (Pr.E.)		

CLIENTE: Client:	T.R. /PETROPERU	Nº. ORDEN: Job N°:	2/982	
OBRA: Job:	GASIFIER (FCK-R-103)			
DESIGNACION: Designation:	SOPORTES DE REFRACTARIO REFRACTORY SUPPORTS			

PLANO N°:	REV.	SIZE	 
Drawing N°:	8	A1	
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