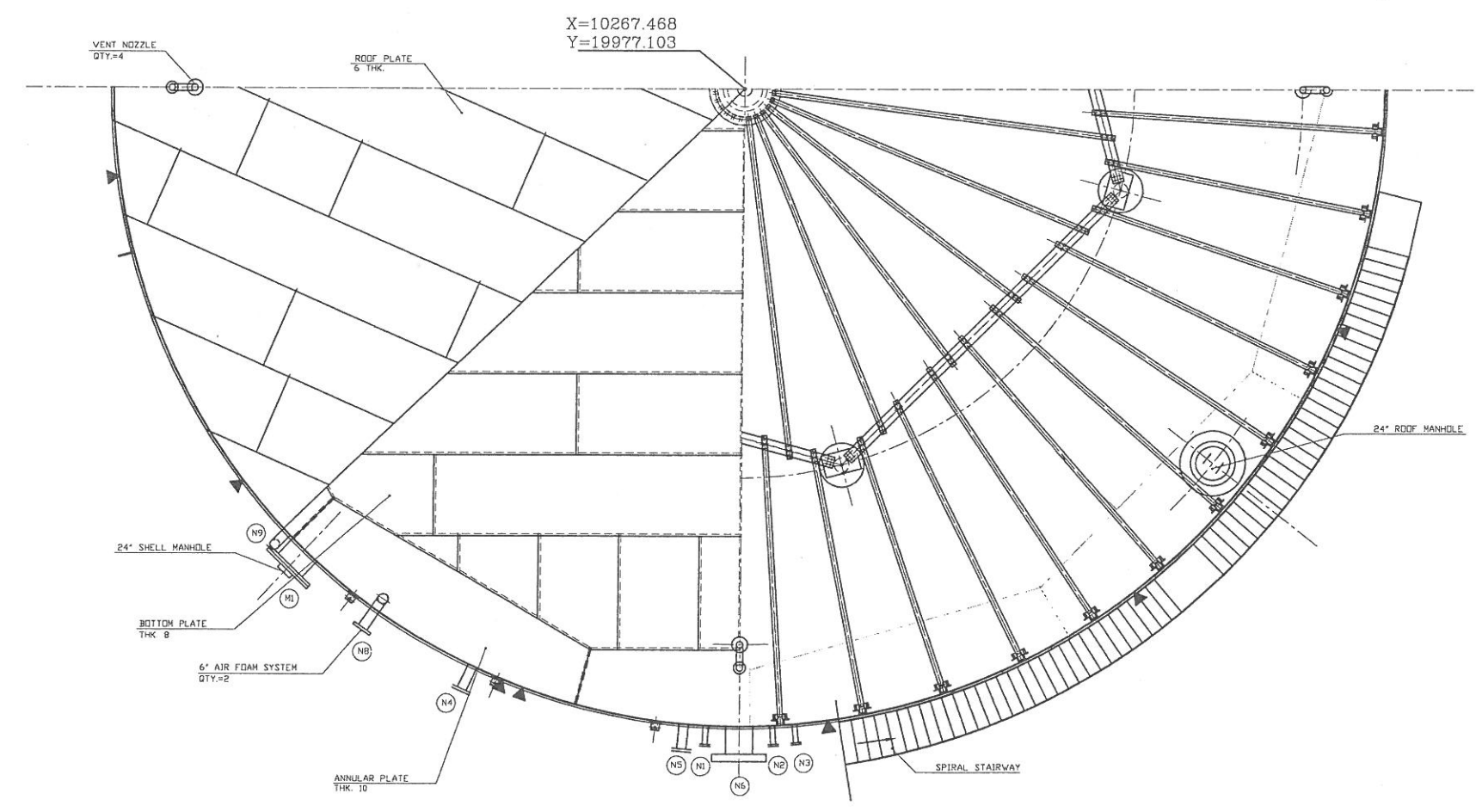


MAIN MATERIAL SPECIFICATION			
SHELL	RST37-2	Int / Ext. Bolt	A193 Gr.B7
ANNULAR PLATE	RST37-2	Int / Ext. Nut	A194 Gr.2H
ROOF & BOTTOM	RST37-2	ELBOW	A234 Gr WPB
FLANGES(FORGED)	A 105	STRUCT. PARTS	DIN S.T.N.D. SECTIONS
FLANGE-PLATE	Si37-2	REINF. PAD	RST37-2
NOZZLE-PIPE	A 106 Gr B	Earthing Lug	Si37-2
NOZZLE-PLATE	RST37-2		
PIPE-INTERNAL	A 106 Gr B		
COUPLING	A 105		
GASKETS	RCAF		

PAINTING : External Surfaces to be sandblast according to Standard Sa 21/2
 And painting With Zinc Rich Epoxy Primer 50 µm arr.
 Inner Surfaces to be sandblast according to Standard Sa 21/2
 And painting With Zinc Rich Epoxy Primer 100 µm arr. (only for bottom & 1.5m of shell plate from bottom)

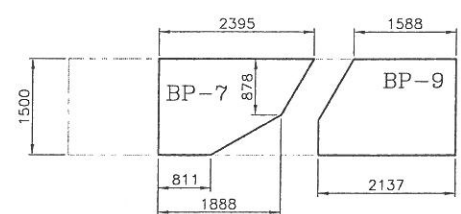
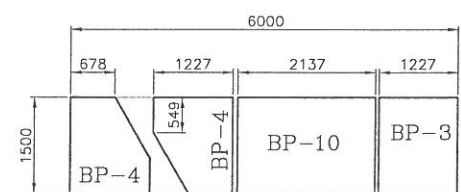
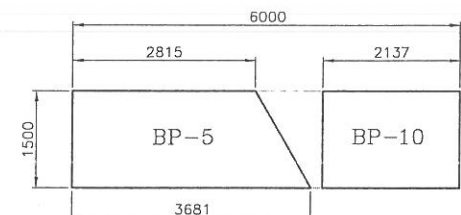
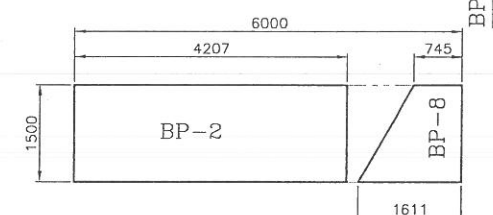
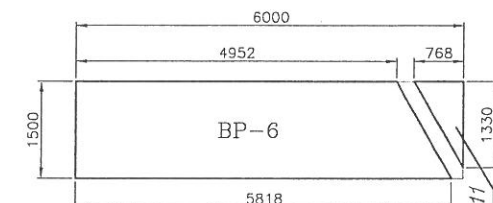
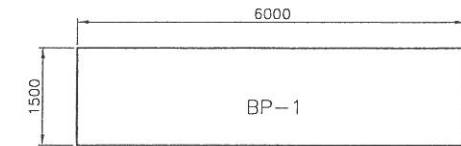
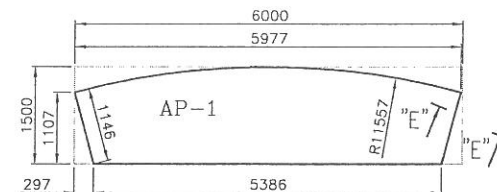
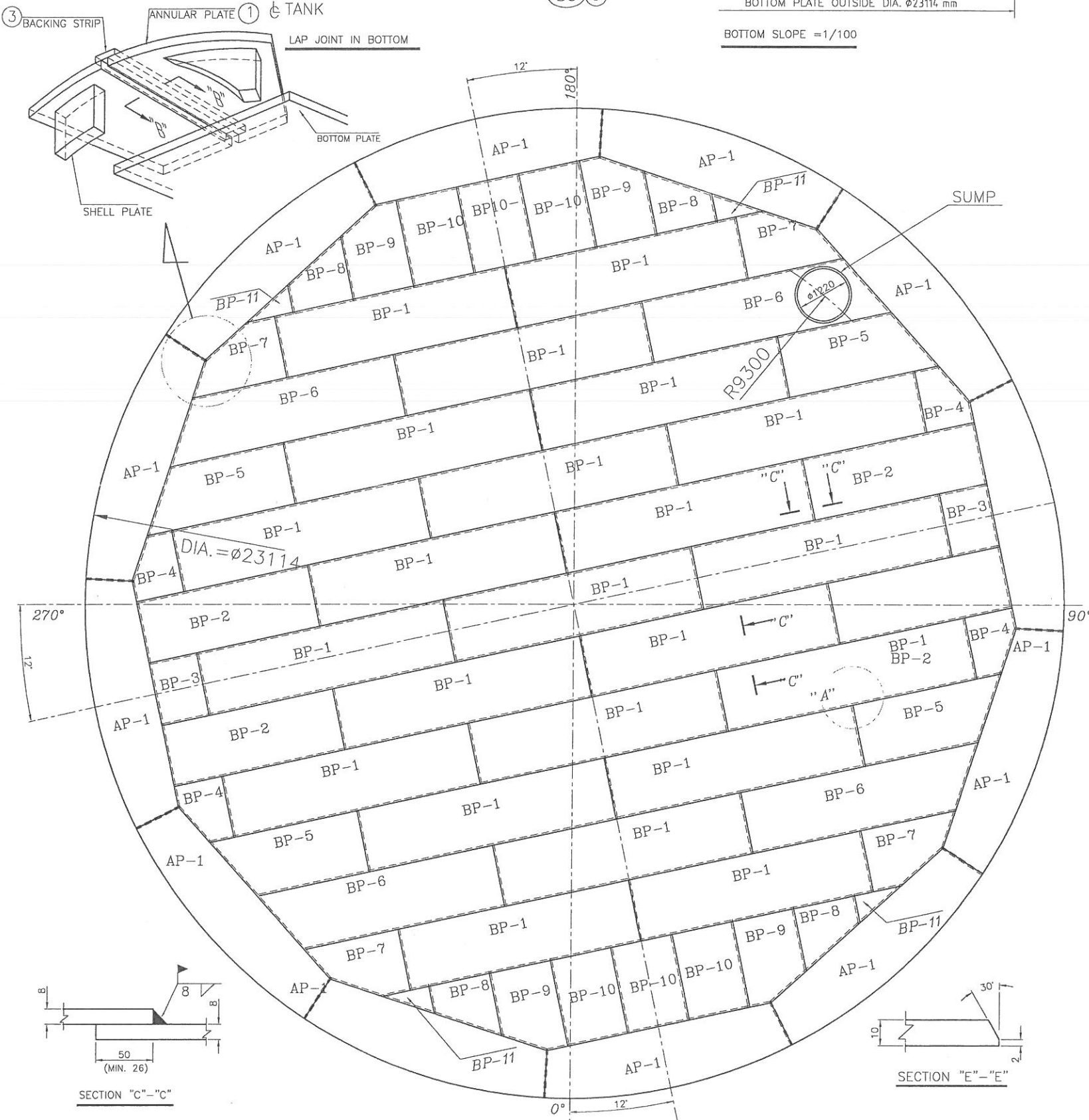
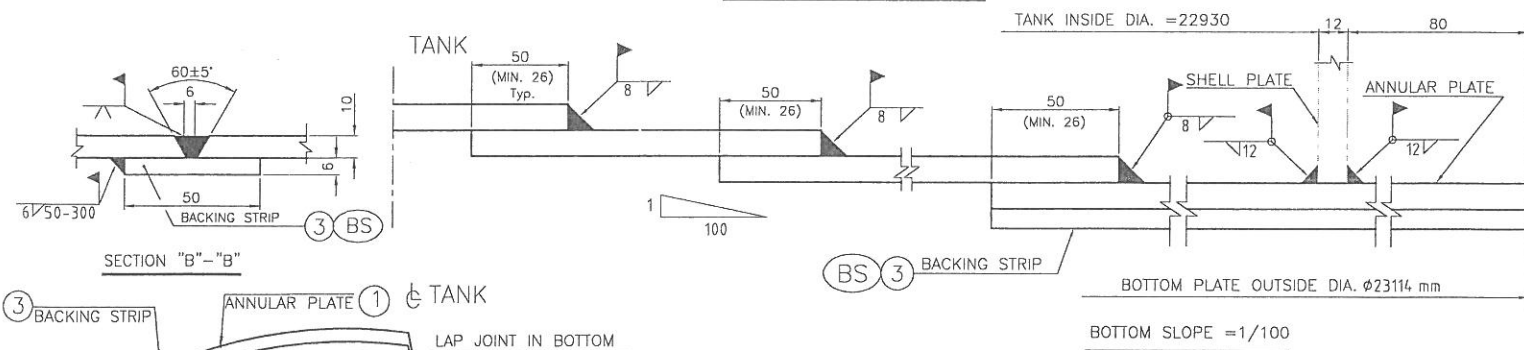
No.	ITEM	WEIGHT(Kg)
1	Empty Total	139510.4
2	Liquid Weight	4538904
3	Operating Weight	4668414.4
4	Test Weight	4808793.6



Drawing Title New Heavy Fuel Oil Storage Tank		Customer Payvand Golestan Cement Co.	
Drawing No. 1.242.UO.821.01.01		Rev. 0 Page 1 of 1	
Designed 08/10 Hossein	Date 08/10	Signature Hossein	Rev.
Drawn 08/10 Hossein	Date 08/10	Signature Hossein	Description
Checked 08/10 Hossein	Date 08/10	Signature Hossein	By
Approved 08/10 Hossein	Date 08/10	Signature Hossein	Date
Project No.		Scale 1:75	File Name Disk No.

IRAN INDUSTRIAL DESIGN CO.

BOTTOM PLATE PLAN



NO.	DESCRIPTION	MATERIAL	DIMENSIONS	NO. OF		WEIGHT Kg		REMARKS
				1 SET	1 PIECE	1 SET		
1	ANNULAR PLATE	RST37-2	PL. 10x1450x6000	12	683.0	8196		
2	BOTTOM PLATE	RST37-2	PL. 8x1500x6000	41	565.2	23173.2		
3	BACKING STRIP	RST37-2	PL. 6x50x1145	12	2.7	32.4		

TOTAL WEIGHT: 31401.6 kg

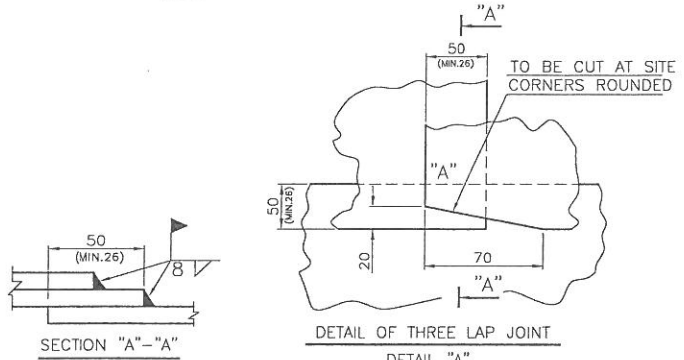
NOTE:
(1)-AP, (2)-BP, (3)-BS ARE ERECTION MARKS.

MARK	QTY.
AP-1	12
TOTAL	12

ANNULAR PLATE
AP 1 12-PL. 10x1450x6000

MARK	QTY.
(BP-1)	23
(BP-11)+(BP-6)	4
(BP-2)+(BP-8)	4
(BP-5)+(BP-10)	4
(BP-3)+(BP-10)+2(BP-4)	2
(BP-9)+(BP-7)	4
TOTAL	41

BOTTOM PLATE
BP 2 41-PL. 8x1500x6000



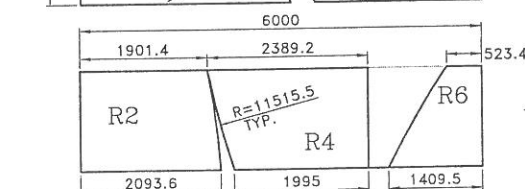
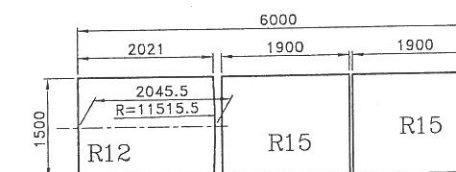
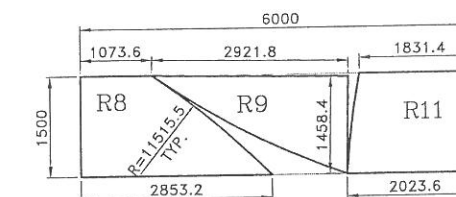
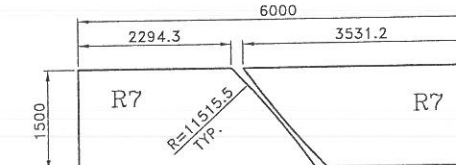
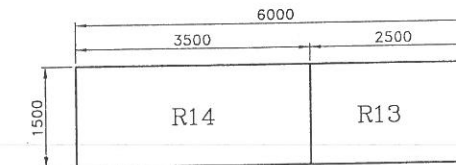
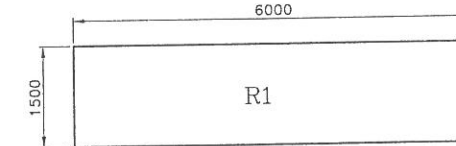
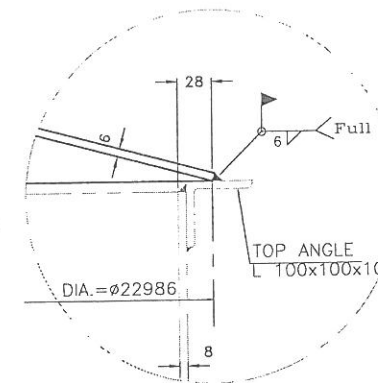
Drawing Title New Heavy Fuel Oil Storage Tank Bottom Plates Plan		Customer Payvand Golestan Cement Co.	
Drawing No. 1.242.UO.821.01.02		Rev. 0	
Designed 06/10 Rahmehide	Date 06/10	Signature Rahmehide	Rev.
Drawn 06/10 Rahmehide	Date 06/10	Signature Rahmehide	Rev.
Checked 06/10 Rahmehide	Date 06/10	Signature Rahmehide	Rev.
Approved 06/10 Rahmehide	Date 06/10	Signature Rahmehide	Rev.
Project No.	Scale 1:50	File Name	Disk No.

NO.	DESCRIPTION	MATERIAL	DIMENSIONS	NO.OF 1 SET	WEIGHT Kg		REMARKS
					1PIECE	1 SET	
1	ROOF PLATE	RST37-2	PL. 6x1500x6000	49	424	20776	

TOTAL WEIGHT: 20776 KG

NOTE:

(1)- RP1 IS ERECTION MARK.

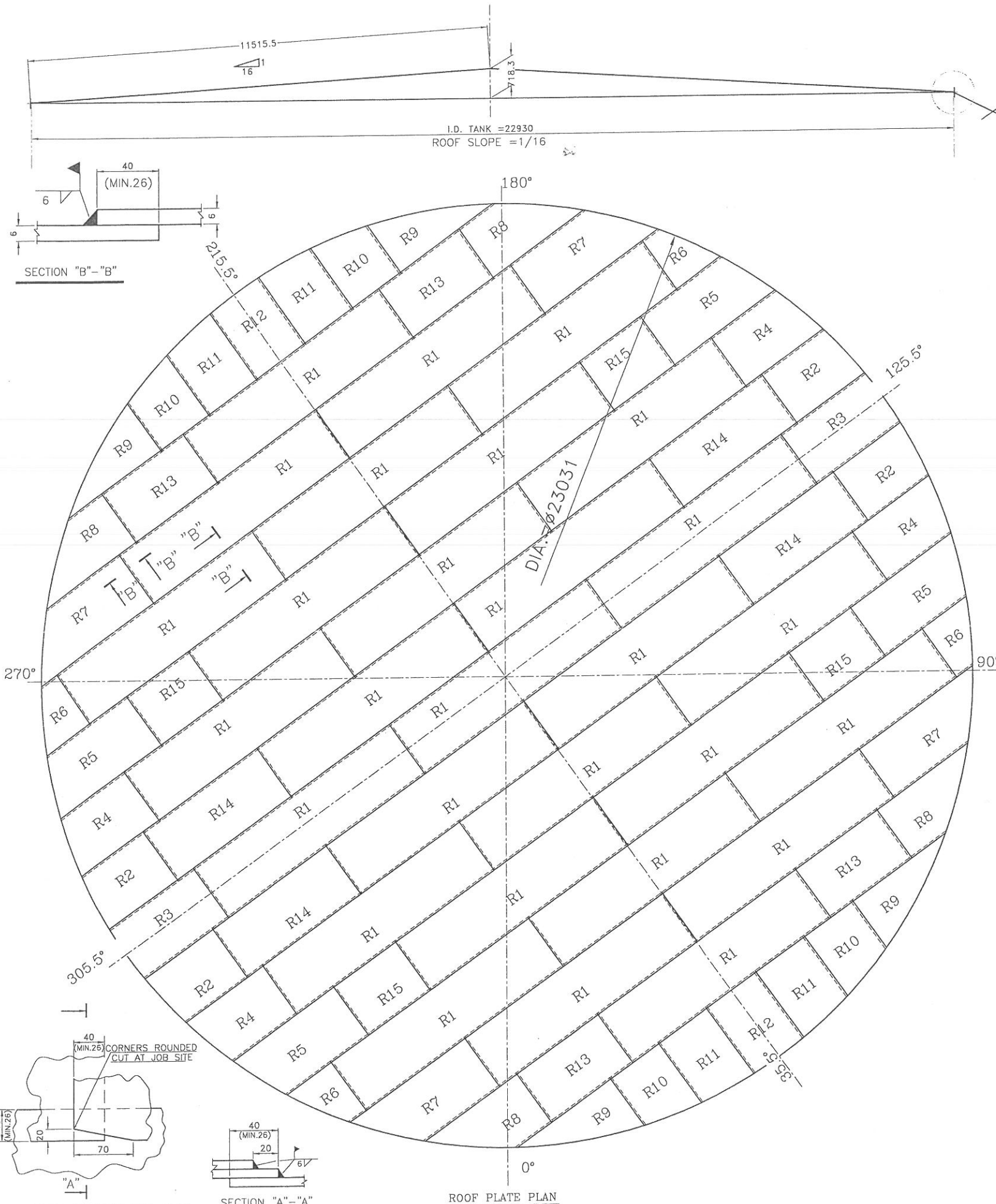


RP1 1 CUTTING PLAN

MARK	QUANT.
R1	29
R13+R14	4
2(R7)	2
R8+R9+R11	4
R3+2(R10)	2
R12+2(R15)	2
2(R5)	2
R2+R4+R6	4
TOTAL	49

ROOF PLATE

RP1 1 49-PL. 6x1500x6000

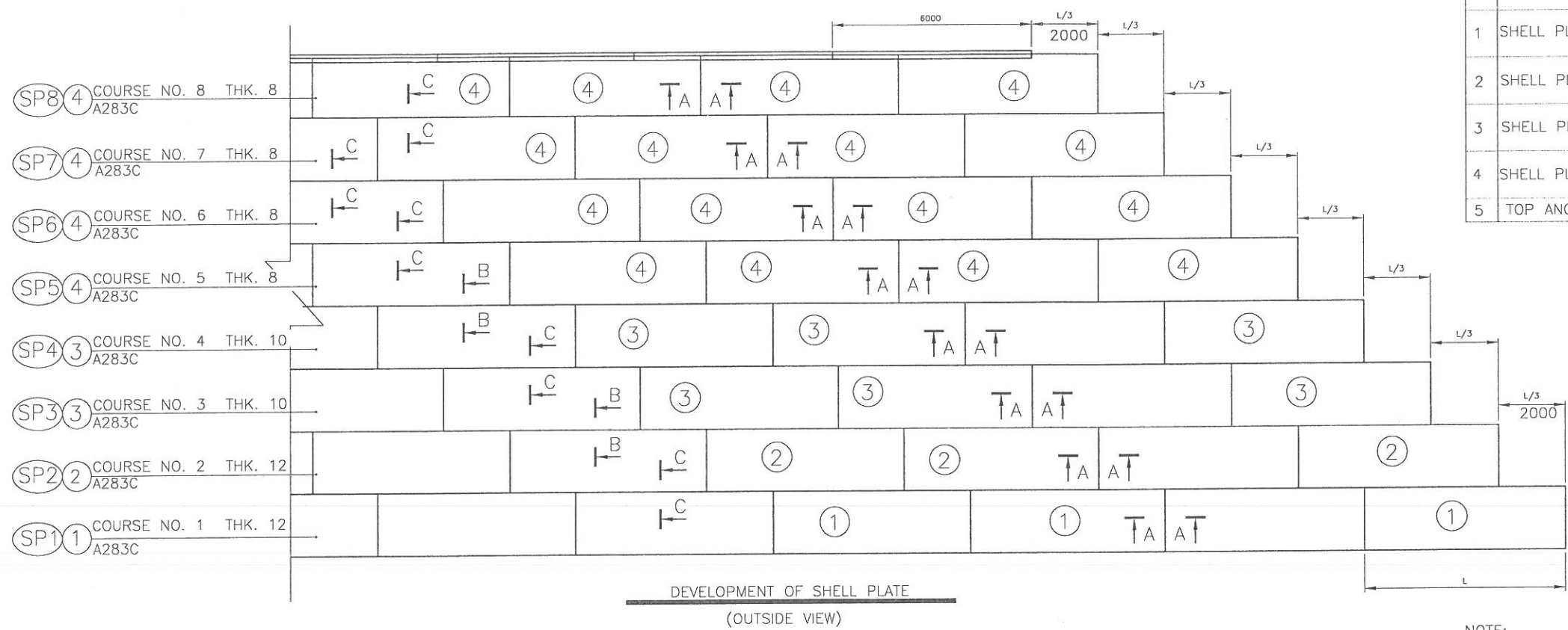


ROOF PLATE PLAN

Drawing Title New Heavy Fuel Oil Storage Tank Roof Plates Plan				Customer Payvand Golestan Cement Co.			
Drawing No. 1.242.UO.821.01.03				Rev. 0			
Designed 06/10 Hosseinbala	Date 06/10	Signature Hosseinbala	Rev.	Description	By	Date	
Drawn 06/10 Hosseinbala							
Checked 06/10 Hosseinbala							
Approved 06/10 Hosseinbala							
Project No.	Scale 1:50	File Name	Drawn	Disk No.			

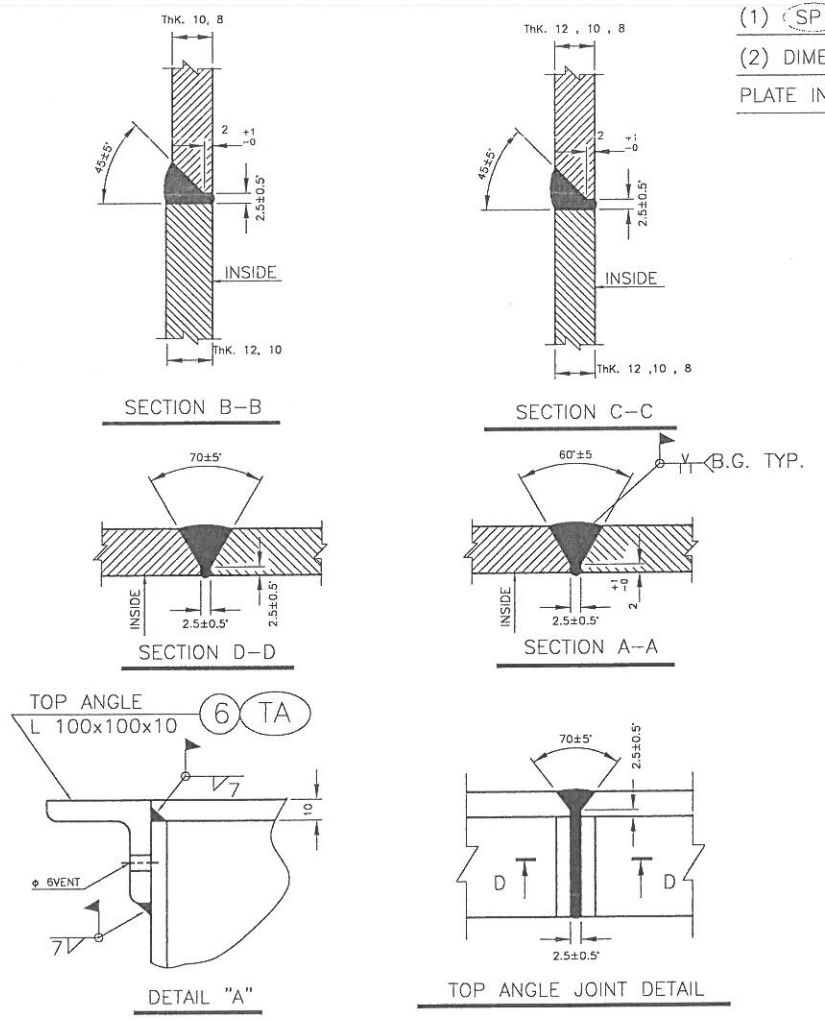
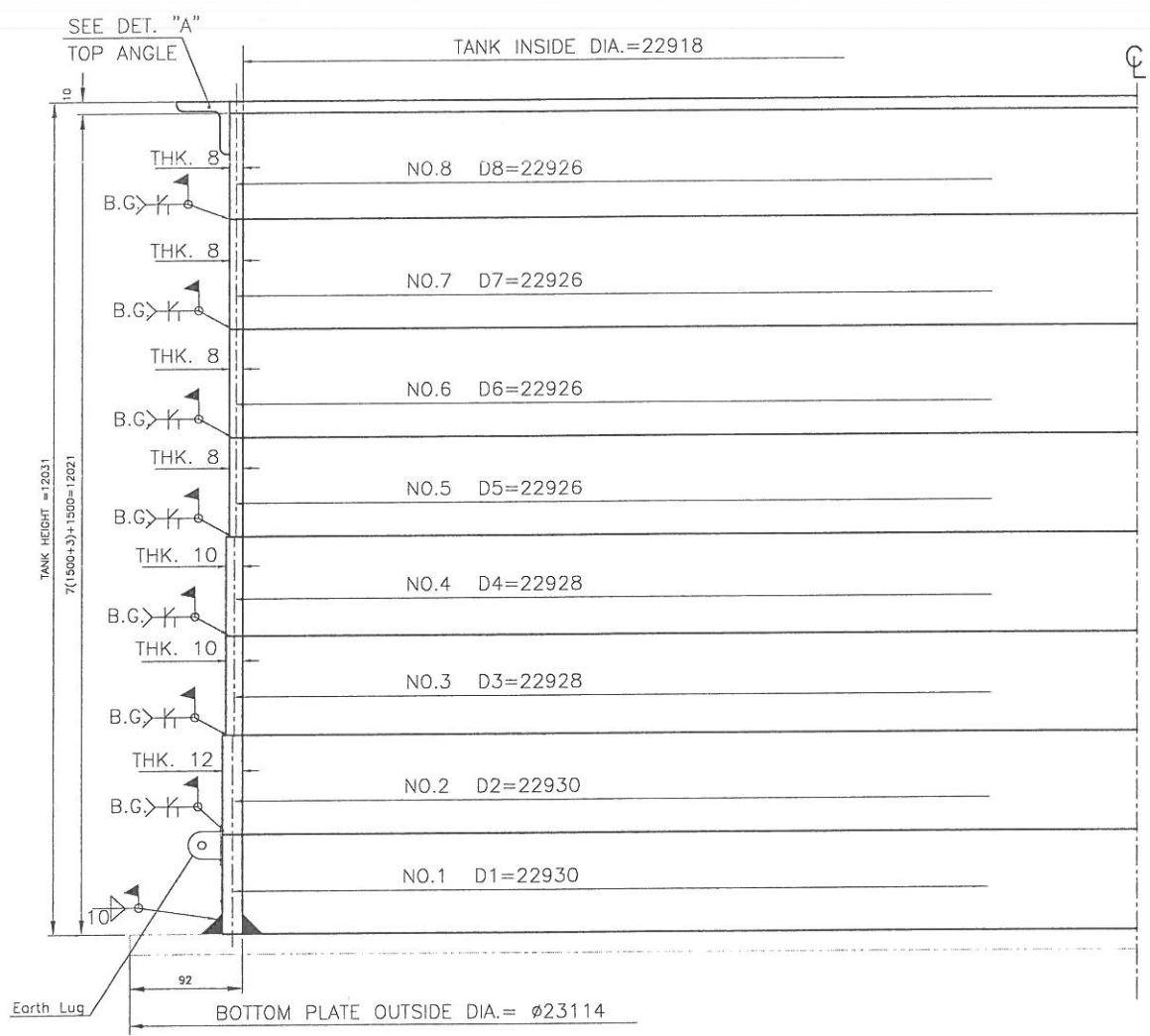
NO.	DESCRIPTION	MATERIAL	DIMENSIONS	NO. OF 1 SET	WEIGHT Kg		REMARKS
					1 PIECE	1 SET	
1	SHELL PLATE	RST37-2	PL.12x1500x6000	12	847.8	10173.6	
2	SHELL PLATE	RST37-2	PL.12x1500x6000	12	847.8	10173.6	
3	SHELL PLATE	RST37-2	PL.10x1500x6000	24	706.5	16956	
4	SHELL PLATE	RST37-2	PL. 8x1500x6000	48	565.2	27129.6	
5	TOP ANGLE	DIN1028	L100x100x10x72300	1	1092	1092	

TOTAL WEIGHT: 65524.8 Kg

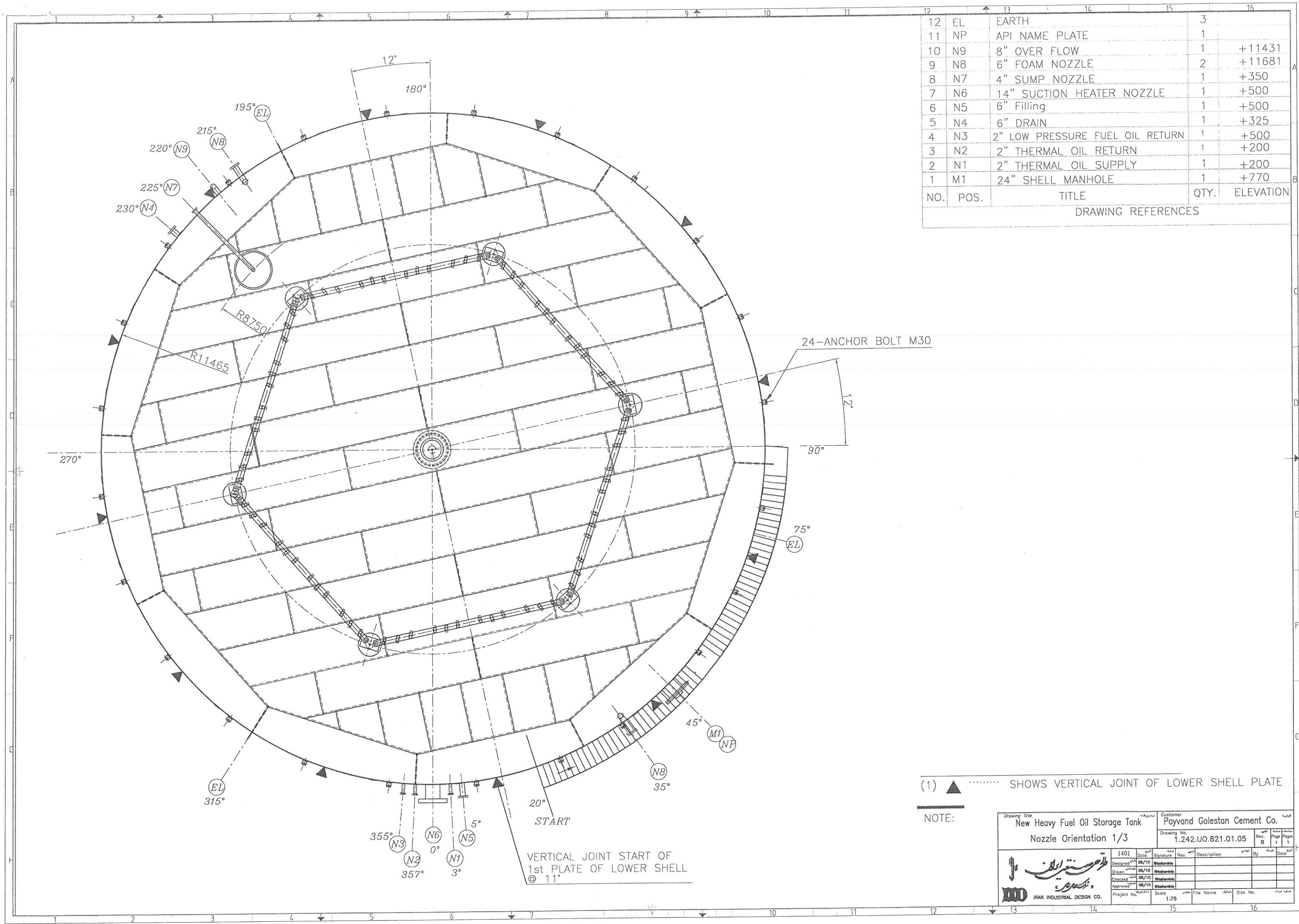


NOTE:

- (1) SP1,.....SP8 , TA ARE ERECTION MARKS.
- (2) DIMENSIONS SHOWN BY * IN THE TABLE, ARE THE LENGTH OF 12TH PLATE IN EACH COURSE TO REACH THE DESIRED DIAMETER OF THE TANK.



Drawing Title New Heavy Fuel Oil Storage Tank Shell Plates		Customer Payvand Golestan Cement Co.	
Drawing No. 1.242.UO.821.01.04		Rev. 0	
1401	Date 08/10	Signature [Signature]	Rev. 0
Designed 08/10	Drawn 08/10	Checked 08/10	Approved 08/10
Scale 1:75		File Name	Disk No.



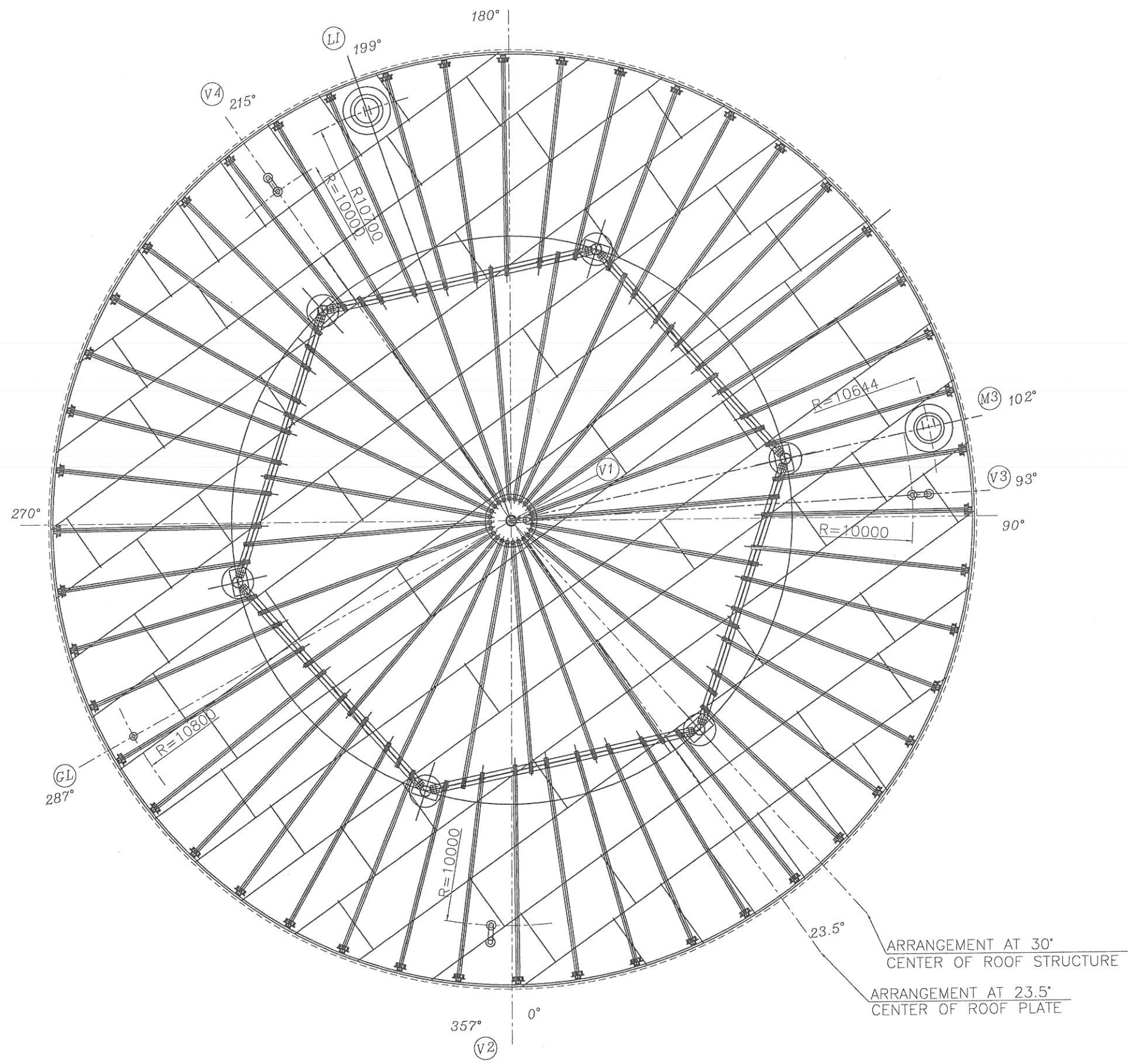
12	EL	EARTH	3	
11	NP	API NAME PLATE	1	
10	N9	8" OVER FLOW	1	+11431
9	N8	6" FOAM NOZZLE	2	+11681
8	N7	4" SUMP NOZZLE	1	+350
7	N6	14" SUCTION HEATER NOZZLE	1	+500
6	N5	6" Filling	1	+500
5	N4	6" DRAIN	1	+325
4	N3	2" LOW PRESSURE FUEL OIL RETURN	1	+500
3	N2	2" THERMAL OIL RETURN	1	+200
2	N1	2" THERMAL OIL SUPPLY	1	+200
1	M1	24" SHELL MANHOLE	1	+770
NO.	POS.	TITLE	QTY.	ELEVATION
DRAWING REFERENCES				

(1) SHOWS VERTICAL JOINT OF LOWER SHELL PLATE

NOTE:

Drawing Title		Customer	
New Heavy Fuel Oil Storage Tank		Payvand Golestan Cement Co.	
Nozzle Orientation 1/3		Drawing No.	1.242.UO.821.01.05
		Rev.	0
		Page	1
		Pages	1
1401		Date	08/10
Designed		Signature	Rev.
Drawn		Signature	Rev.
Checked		Signature	Rev.
Approved		Signature	Rev.
Project No.		Scale	1:75
		File Name	
		Disk No.	

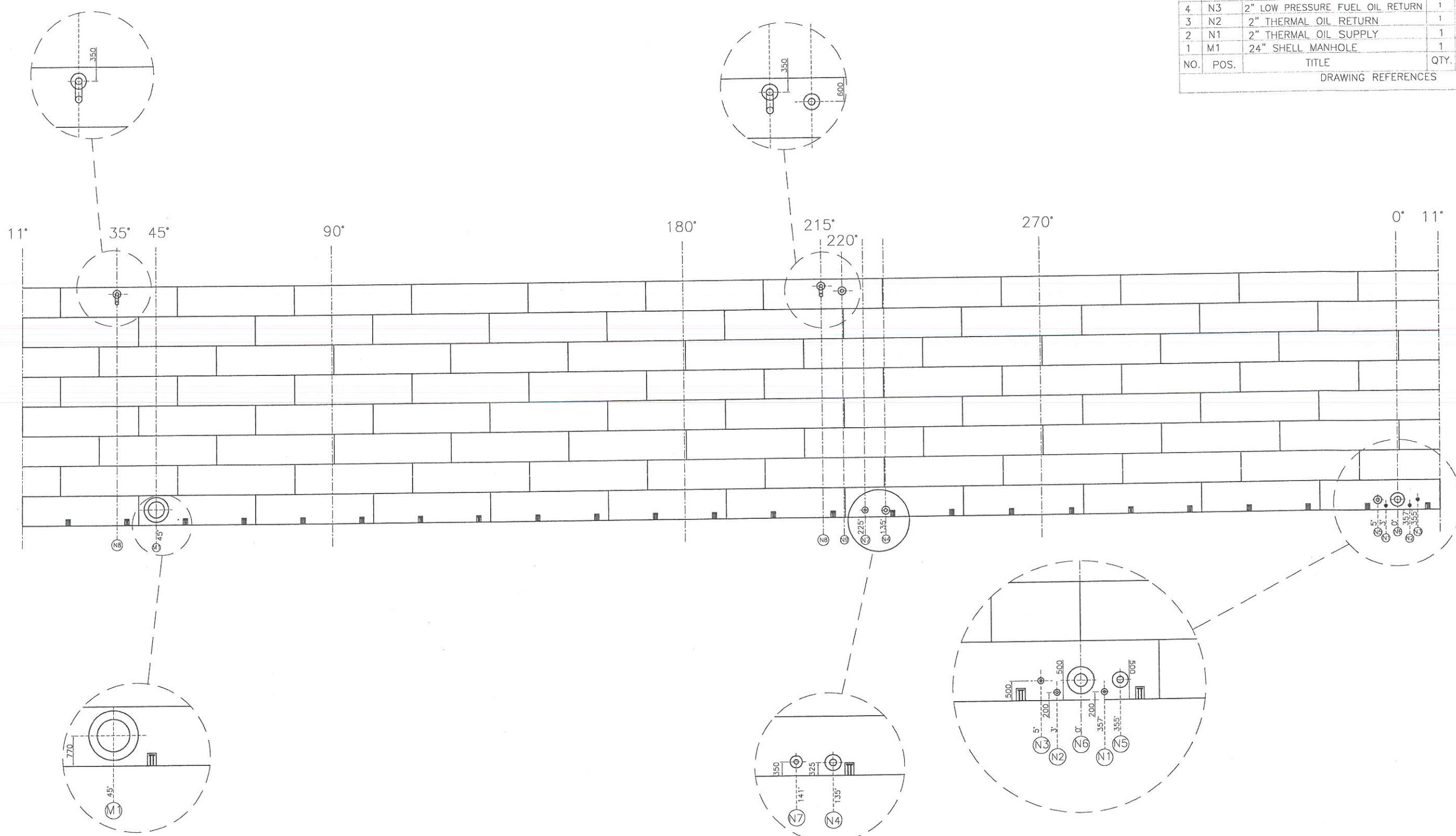
4	LI	LEVEL INDICATOR	1	
3	GL	3" GAUGE LEVEL	1	
2	V1/V2/V3/V4	4" VENT NOZZLE	4	
1	M3	24" ROOF MANHOLE	1	
NO.	POS.	TITLE	QTY.	REMARKS
DRAWING REFERENCES				



Drawing Title		Customer	
New Heavy Fuel Oil Storage Tank		Payvand Golestan Cement Co.	
Drawing No.		Rev.	
1.242.UO.821.01.06		0	
1401	Date	Signature	Rev.
06/10	06/10	06/10	06/10
Designed	Drawn	Checked	Approved
06/10	06/10	06/10	06/10
Project No.		Scale	File Name
1.242.UO.821.01.06		1:75	
Disk No.		Page	
1		1	

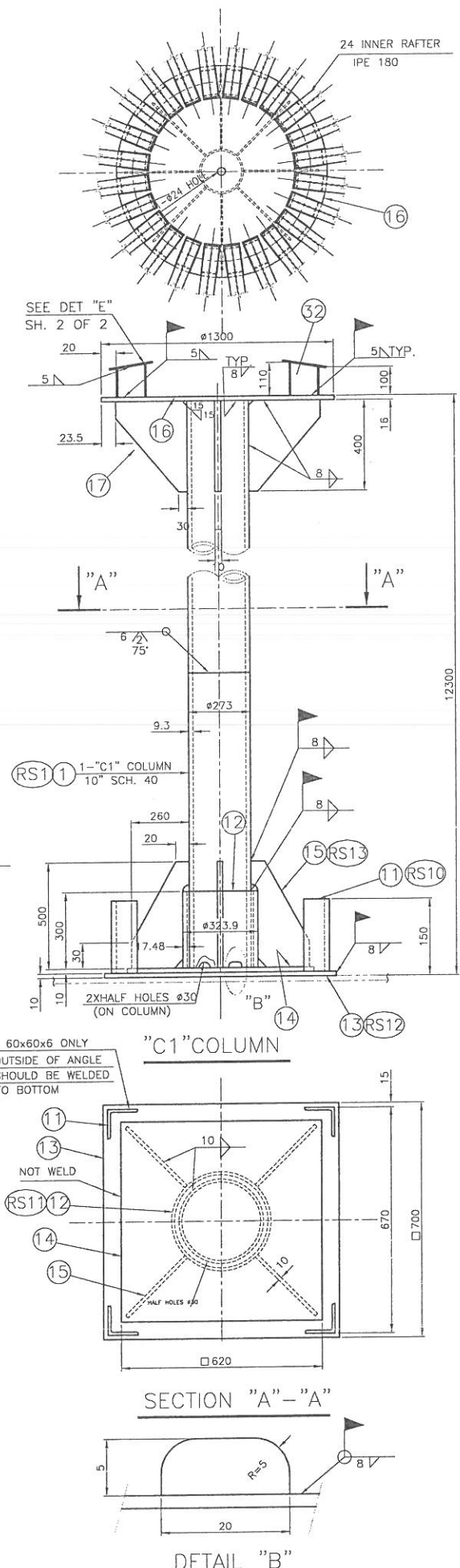
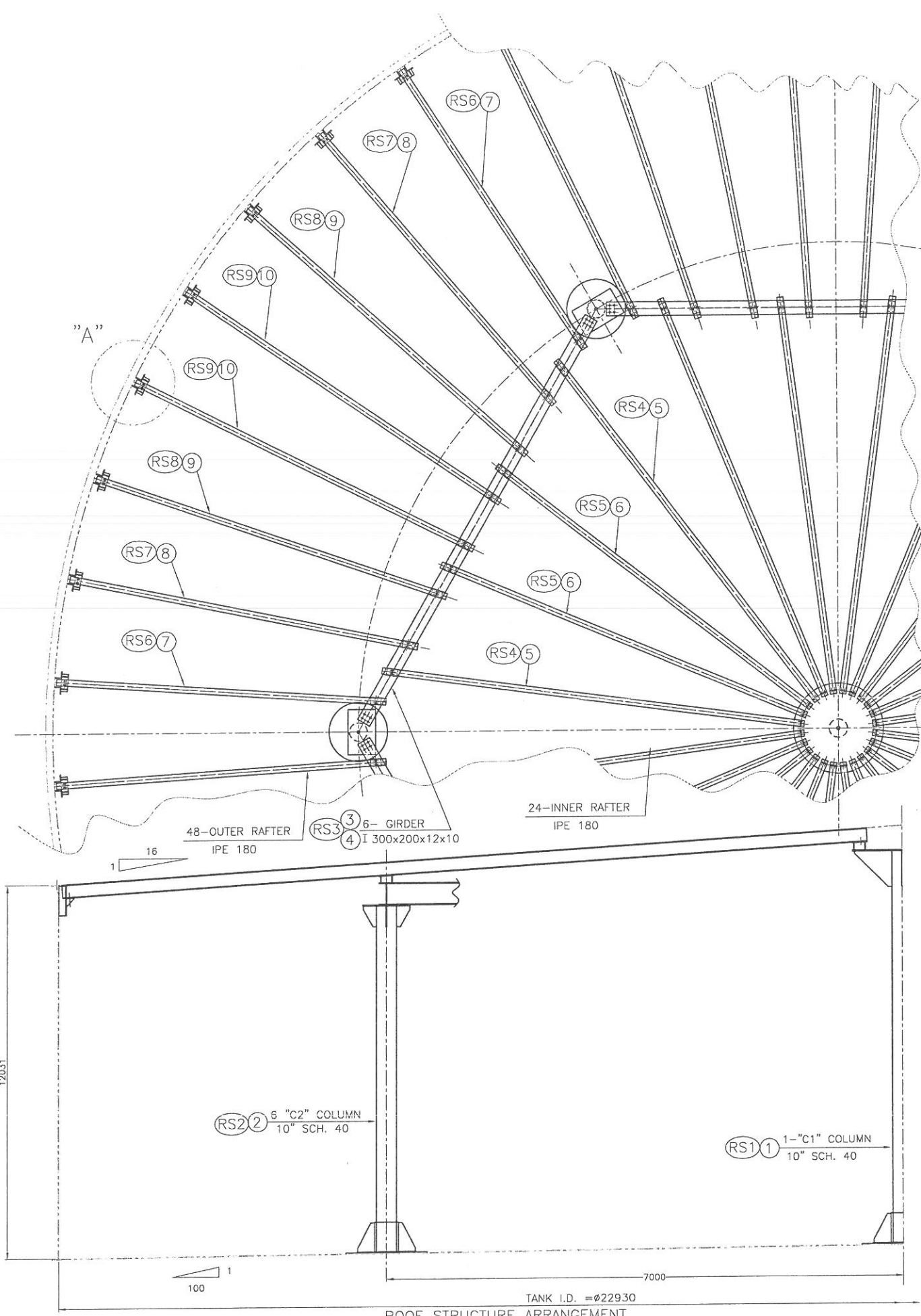


NO.	POS.	TITLE	QTY.	ELEVATION
12	EL	EARTH	3	
11	NP	API NAME PLATE	1	
10	N9	8" OVER FLOW	1	+11431
9	N8	6" FOAM NOZZLE	2	+11681
8	N7	4" SUMP NOZZLE	1	+350
7	N6	14" SUCTION HEATER NOZZLE	1	+500
6	N5	6" Filling	1	+500
5	N4	6" DRAIN	1	+325
4	N3	2" LOW PRESSURE FUEL OIL RETURN	1	+500
3	N2	2" THERMAL OIL RETURN	1	+200
2	N1	2" THERMAL OIL SUPPLY	1	+200
1	M1	24" SHELL MANHOLE	1	+770
DRAWING REFERENCES				



Drawing Title New Heavy Fuel Oil Storage Tank Nozzle Orientation 3/3		Customer Payvand Golestan Cement Co.	
Drawing No. 1.242.UO.821.01.07		Rev. 0	
1401	Date 06/10	Signature [Signature]	Rev. 0
Designed	06/10	Signature [Signature]	Description
Drawn	06/10	Signature [Signature]	
Checked	06/10	Signature [Signature]	
Approved	06/10	Signature [Signature]	
Project No.	Scale 1:75	File Name	Disk No





NO.	DESCRIPTION	MATERIAL	DIMENSIONS	NO. OF		WEIGHT Kg		REMARKS
				1 SET	1 PIECE	1 SET		
1	COLUMN	A-53Gr.B	10" SCH. 40 L=12264	1	738.5	738.5		
2	COLUMN	A-53Gr.B	10" SCH. 40 L=11620	6	701.3	4207.8		
3	PLATE OF GIRDER	SI37-2	PL 12x200x6800	12	128	1536		
4	PLATE OF GIRDER	SI37-2	PL 10x300x6800	6	160.14	960.84		
5	INNER RAFTER	DIN1025	IPE 180 L=6223	12	116	1392		
6	INNER RAFTER	DIN1025	IPE 180 L=5775	12	107.6	1291.2		
7	OUTER RAFTER	DIN1025	IPE 180 L=4729	12	89	1068		
8	OUTER RAFTER	DIN1025	IPE 180 L=5123	12	96.3	1152		
9	OUTER RAFTER	DIN1025	IPE 180 L=5344	12	100.5	1206		
10	OUTER RAFTER	DIN1025	IPE 180 L=5450.5	12	102.5	1230		
11	SUPPORT	DIN1028	L 60x60x6x140	28	0.76	21.3		
12	SLEEVE	A-53Gr.B	12" SCH. 80 L=300	7	39.6	277.2		
13	BASE PLATE	RST37-2	PL 10x700x700	7	38.5	269		
14	SLIDING PLATE	RST37-2	PL 10x620x620	7	30	210		
15	RIB PLATE	RST37-2	PL 10x260x500	28	10	280		
16	TOP PLATE	SI37-2	PL 16x 1300	1	166.7	166.7		
17	RIB PLATE	SI37-2	PL 10x400x500	4	14	56		
18	TOP PLATE	SI37-2	PL 16x 800	6	63	378		
19	RIB PLATE	SI37-2	PL 10x200x300	24	4.7	112.8		
20	BASE PLATE	SI37-2	PL 10x350x890	6	24.5	147		
21	GIRDER CLIP	DIN1025	IPE 160 L=100	12	1.58	19		
22	GIRDER CLIP	DIN1025	IPE 160 L=127.4	12	2	24		
23	GIRDER CLIP	DIN1025	IPE 160 L=137.4	12	2.17	26		
24	GIRDER CLIP	DIN1025	IPE 160 L=151	12	2.38	28.62		
25	GIRDER CLIP	DIN1025	IPE 160 L=155.3	12	2.45	29.44		
26	GIRDER CLIP	DIN1025	IPE 160 L=157.8	12	2.49	29.92		
27	BASE PLATE	SI37-2	PL 10x100x200	96	1.57	150.7		
28	ANGLE	DIN1028	L 100x100x10 L=400	96	6	576		
29	PLATE	SI37-2	PL 10x100x100	48	0.7	33.6		
30	PLATE	SI37-2	PL 16x100x250	48	3.14	150.7		
31	BOLT & NUT	8.8/8	M16 L=60	336	--	20		DIN933 DIN934
32	GIRDER CLIP	DIN1025	IPE 160 L=110	24	1.73	41.7		

TOTAL WEIGHT: 17644.6 KG

NOTE:
(1)-(RS1), (RS10) ARE ERECTION MARKS.

Drawing Title New Heavy Fuel Oil Storage Tank Roof Structure 1/2		Customer Payvand Golestan Cement Co.	
Drawing No. 1.242.UO.821.01.08		Rev. 0	
1401	Date	Signature	Rev.
Designed	08/10	Mohammadi	
Drawn	08/10	Mohammadi	
Checked	08/10	Mohammadi	
Approved	08/10	Mohammadi	
Project No.	Scale	File Name	Disk No.
	1:50		

TANK I.D. = 22930
ROOF STRUCTURE ARRANGEMENT

RS5 RS4 5 6

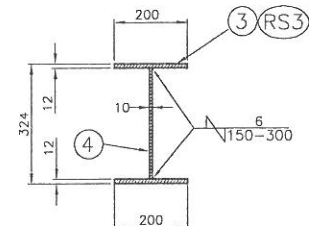
INNER RAFTER TO TANK CENTER CONNECTION

NO.	¹⁰ L ³⁹
5	6223
6	5775

RS9 RS8 RS7 RS6 10 9 8 7

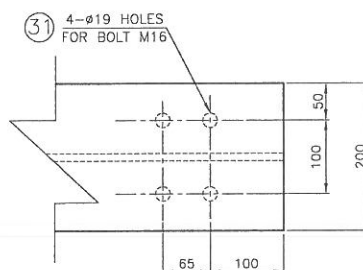
OUTER RAFTER TO SHELL PLATE CONNECTION

NO.	"L"
7	4729
8	5123
9	5344
10	5450.5

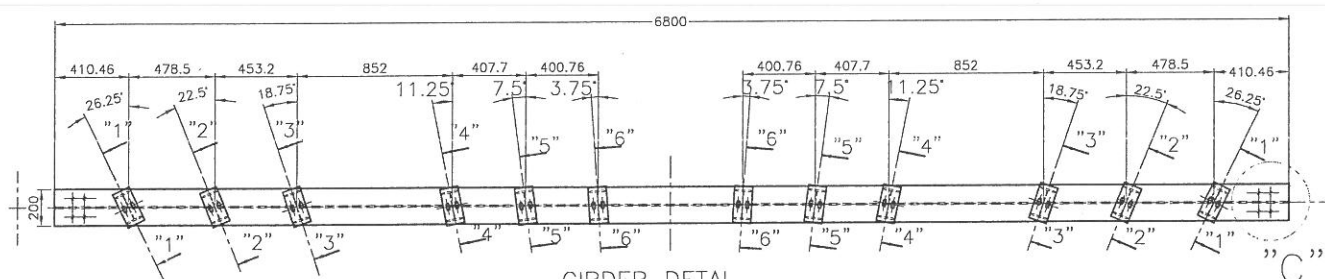


TYPICAL SECTION OF G1 GIRDER

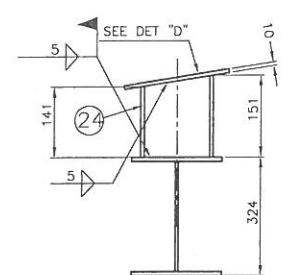
№0. = 6



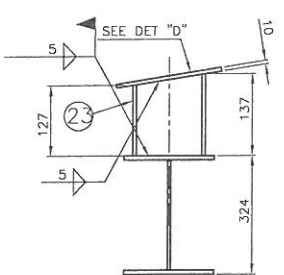
DETALE "C"



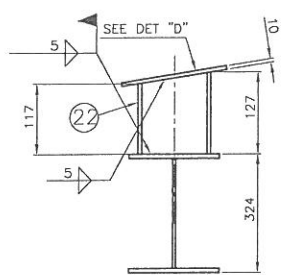
④③ GIRDER DETAIL
I 300x200x12x10



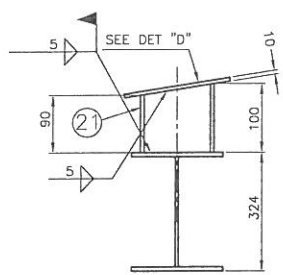
SECTION "4"-"4"



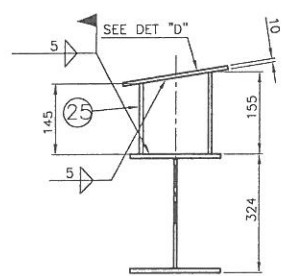
SECTION. "3"-"3"



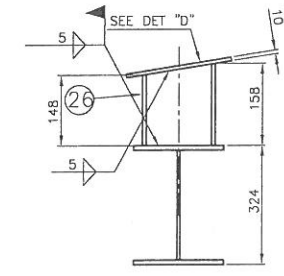
SECTION "2"-"2"



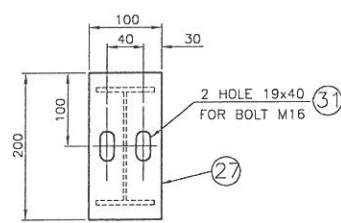
SECTION "1"-"1"



SECTION "5"-"5"

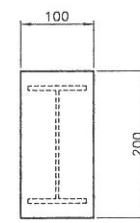


SECTION "6"-"6"



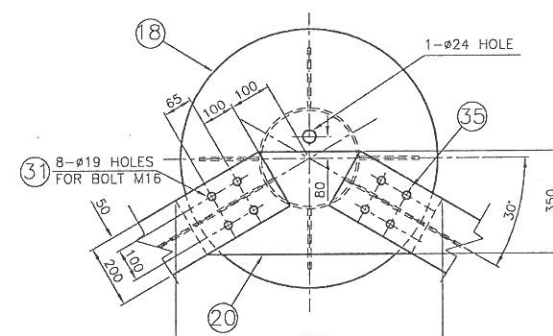
DETAIL "D"

NO. 48

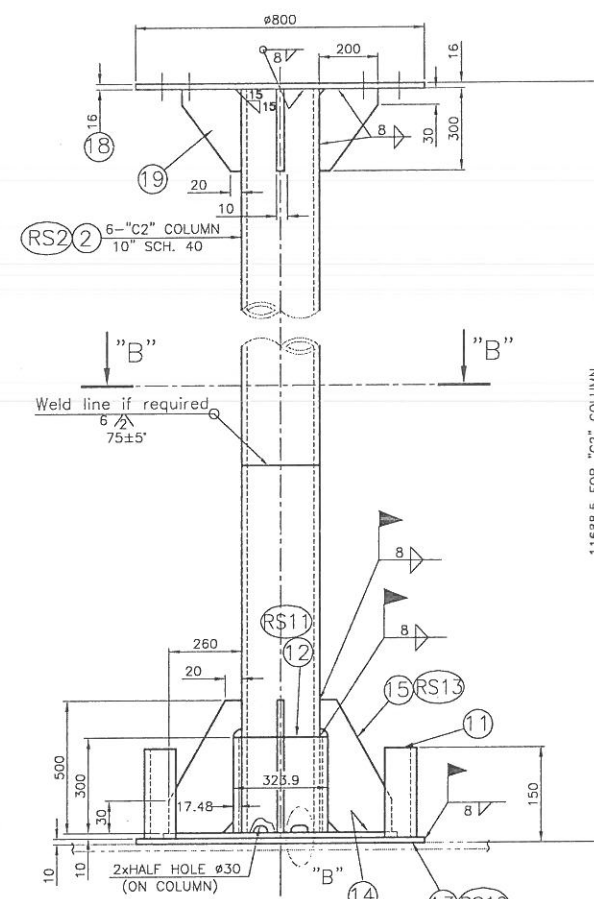


DETAIL "E"

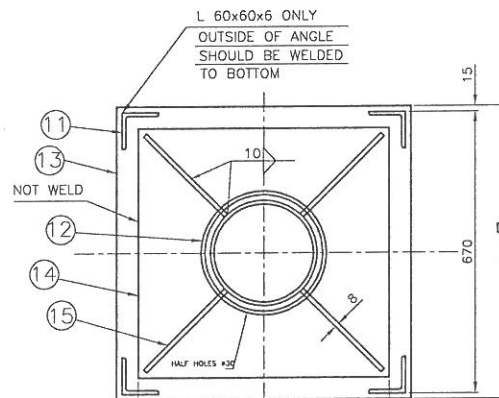
NO. = 24



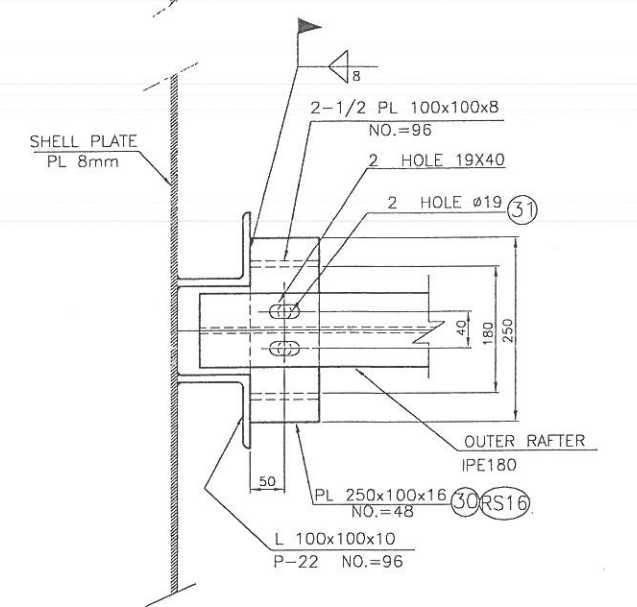
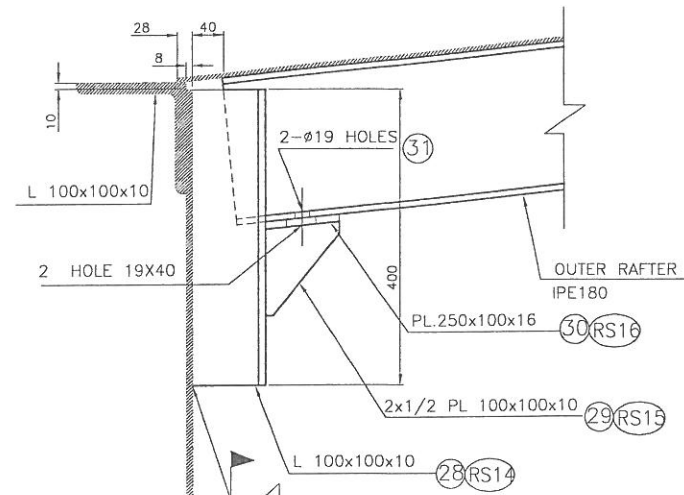
SECTION "C" - "C"
FOR "C2" COLUMN



"C2" COLUMN



SECTION "B" - "B"




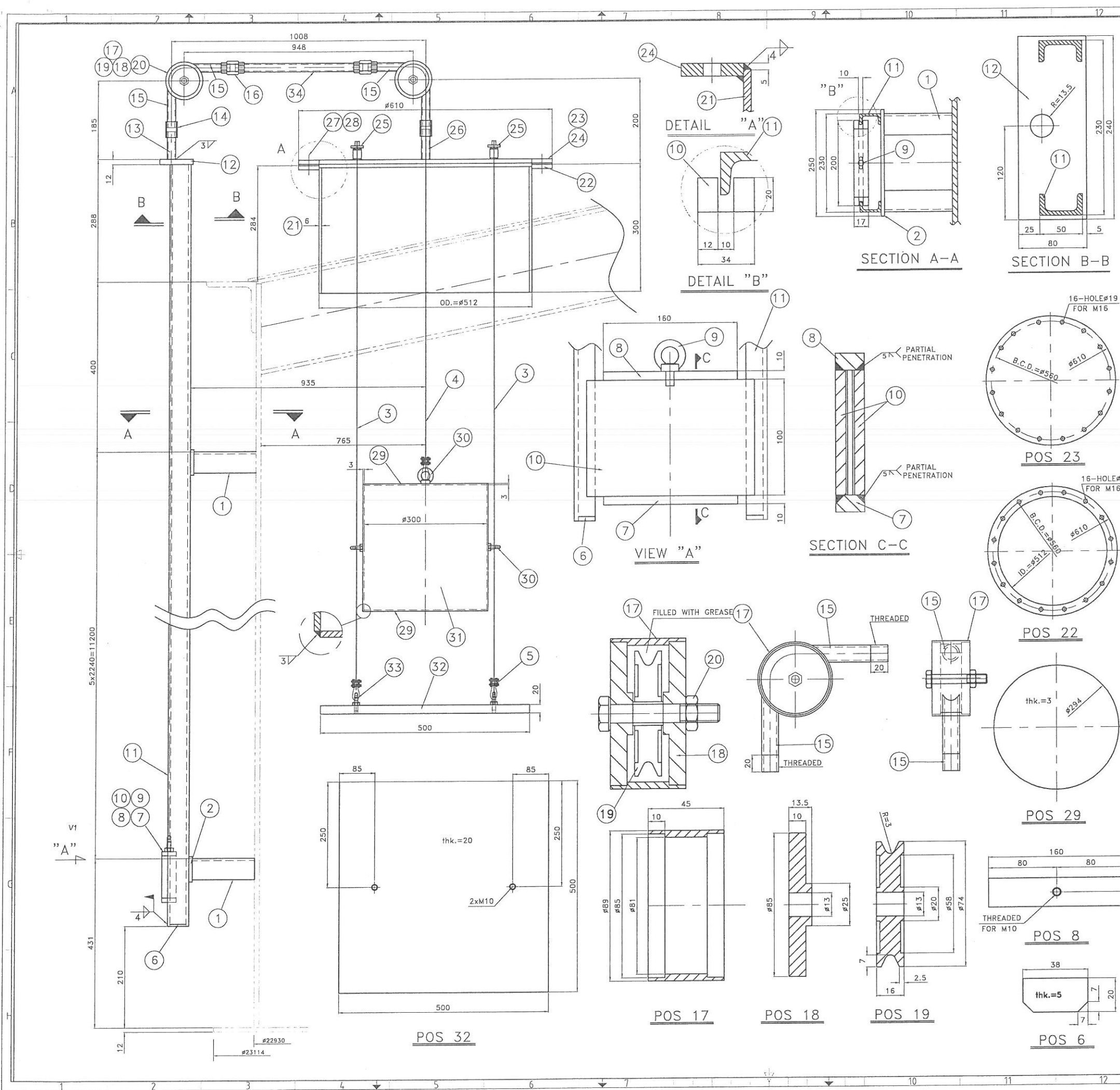
OUTER RAFTER TO SHELL PLATE CONNECTION

NO. 48

DETALE "A"

Drawing Title New Heavy Fuel Oil Storage Tank		Customer Payvand Golestan Cement Co.	
Roof Structure 2/2		Drawing No. 1.242.UO.821.01.09	Rev. 0 Page 1

	1401	Date	تاریخ	Signature	تایید	Description	توضیح	By	توسط	Date	تاریخ
	Designed	06/10		Hoshamshahi							
	Drawn	06/10		Hoshamshahi							
	Checked	06/10		Hoshamshahi							
	Approved	06/10		Hoshamshahi							
Project No.		Scale		File Name		Disk No.					
		1:50									



NO.	DESCRIPTION	MATERIAL	DIMENSIONS	NO. OF SET	WEIGHT Kg	REMARKS
1	ANGLE	DIN 1028	L 50x50x5x154 Lq.	12	0.5	6
2	PLATE	ST37-2	PL. 8x60x250	6	1	6
3	WIRE ROPE	STEEL	ø4, L=12500	2	1.2	2.4
4	WIRE ROPE	STEEL	ø4, L=14500	1	1.4	1.4
5	WIRE FITTING	STEEL	FOR WIRE ø4	8	—	—
6	PLATE	ST37-2	PL. 5x20x38	1	0.1	0.1
7	PLATE	ST37-2	PL. 10x34x160	1	0.4	0.4
8	PLATE	ST37-2	PL. 10x34x160	1	0.4	0.4
9	EYE BOLT,	DIN 580	M10 x 17	1	—	—
10	PLATE	ST37-2	PL. 12x100x200	2	1.9	3.8
11	UNP 50	DIN 1026	50x25x12065 Lq.	2	46.5	93
12	PLATE	ST37-2	PL. 12x80x240	1	1.8	1.8
13	PIPE	DIN 2448	20x2.3, L=65	1	0.1	0.1
14	COUPLING	—	DN 20	2	—	—
15	PIPE	DIN 2448	20x2.3, L=90	4	0.1	0.4
16	UNION CONNECTION	—	DN 20	2	—	—
17	PULLY RING,	ST37-2	PL. 45xø89xø81	2	0.2	0.4
18	PULLY SUPPORT,	ST37-2	13.5x ø85	4	.25	1
19	PULLY	ST37-2	ø74, THK.=16	2	0.5	1
20	BOLT & NUT,	8.8, 8	M12, L=65 (SET)	2	0.1	0.2
21	NOZZLE BODY,	ST37-2	PL. 1589x295x6	1	22	22
22	PLATE	ST37-2	PL. 10x ø610/ø512	1	6.7	6.7
23	PLATE	ST37-2	10xø610	1	23	23
24	GASKET	Asbestos	3t xø610/ø512	1	—	—
25	WIRE FASTENER,	—	FOR WIRE ø4	2	—	—
26	PIPE,	DIN 2448	20x2.3, L=70	1	0.1	0.1
27	HEX BOLT,	8.8	M16, L=50	16	0.1	1.6
28	NUT,	8	M16	16	—	DIN 934
29	PLATE	ST37-2	PL. 3x ø294	2	2	4
30	EYE NUT,	DIN 582	M10	3	—	—
31	PLATE	ST37-2	PL. 3x952x300	1	6.7	6.7
32	PLATE	ST37-2	PL. 20x500x500	1	39.2	39.2
33	EYE BOLT,	DIN 580	M10 x 13	2	—	—
34	PIPE,	DIN 2448	20x2.3, L=400	1	0.5	0.5

TOTAL WEIGHT =222.2 Kg

Drawing Title New Heavy Fuel Oil Storage Tank Level Indicator		Customer Payvand Golestan Cement Co.	
Drawing No. 1.242.UO.821.01.10		Rev. 0	
Designed 06/10	Drawn 06/10	Checked 06/10	Approved 06/10
Project No.		Scale NSC.	File Name
Disk No.		Date	

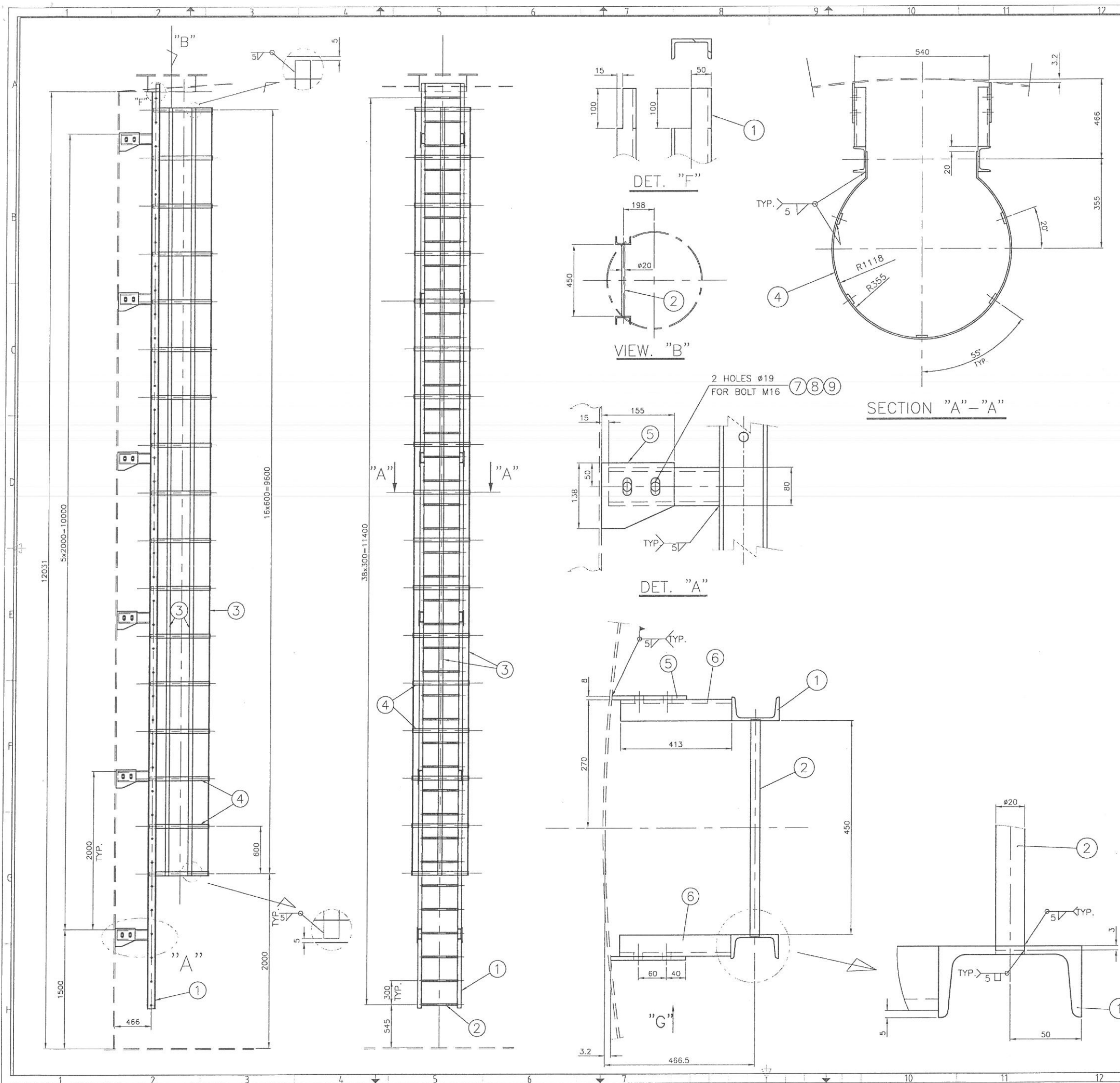
NO.	DESCRIPTION	MATERIAL	DIMENSION	NO. OF SET	WEIGHT Kg	REMARKS
1	PLATFORM FRAME	DIN1028	L 70x70x7x2520	1	18.5	18.5
2	FLOOR PLATE	St37-2	980x720x6THK.	1	33.2	33.2
3	HANDRAIL	DIN2458	ø42.4x3.2x2770	1	8.4	8.4
4	BRACKE	DIN1028	L 50x50x5x1240	2	4.7	9.4
5	PLATFORM FRAME	DIN1028	L 70x70x7x2535	1	13.8	13.8
6	HANDRAIL POST	DIN1028	L 50x50x5x1018	1	3.6	3.6
7	TREAD	St37-2	PL.6x195x740	59	6.79	401
8	TREAD FRAME	St37-2	□ 50x6x9000	4	21.2	84.8
9	MID. HANDRAIL	St37-2	□ 50x6x1780	1	4.5	4.5
10	TOE BOARD	St37-2	□ 75x6x1780	1	6.5	6.5
11	HANDRAIL POST	DIN1028	L 50x50x5x1100	3	3.8	11.4
12	BRACING	DIN1028	L 70x70x7x1240	2	9.1	18.2
13	PAD PLATE	St37-2	PL. 6x300x300	16	4.2	67.2
14	HANDRAIL	DIN2458	ø42.4x3.2x9000	1	28.6	28.6
15	MID. HANDRAIL	St37-2	□ 50x6x9000	2	21.2	42.4
16	HANDRAIL POST	DIN1028	L 50x50x5x1140	10	4.3	43
17	HANDRAIL	DIN2458	ø42.4 0.0x3.2x3028	1	9.4	9.4
18	HANDRAIL POST	DIN1028	L 50x50x5x1079	10	3.8	38
19	MID. HANDRAIL	St37-2	□ 50x6x900	1	2.1	2.1
20	TOE BOARD	St37-2	□ 75x6x900	1	3.2	3.2
21	HANDRAIL	DIN2458	ø42.40.D x3.2x9500	1	30.2	30.2
22	FRAME	DIN1028	L 40x40x4x1942	59	4.69	276.7
23	FLOOR PLATE	St37-2	980x732x6THK.	1	33.7	33.7

TOTAL WEIGHT: 1187.8 Kg

NOTE:
 (1) STAIRWAY IS COUNTER-CLOCKWISE.
 (2) (SW1) (SW23) ARE ERECTION MARKS.

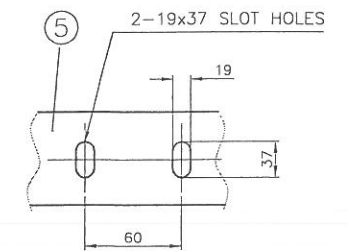
Drawing Title New Heavy Fuel Oil Storage Tank Spiral Stairway		Customer Payvand Golestan Cement Co.	
Designed 08/10 [Signature]		Rev. 0	
Drawn 08/10 [Signature]		Page 1 of 1	
Checked 08/10 [Signature]		Date	
Approved 08/10 [Signature]		Scale	
Project No.		File Name	
Scale		Disk No.	

IRAN INDUSTRIAL DESIGN CO.



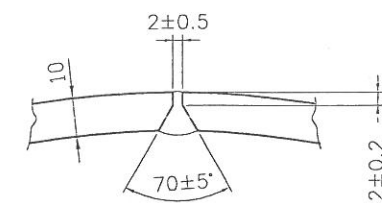
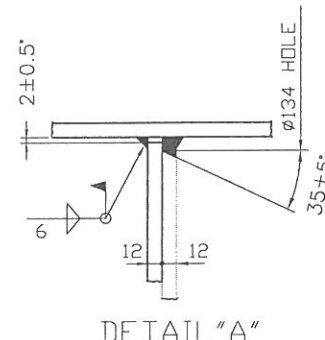
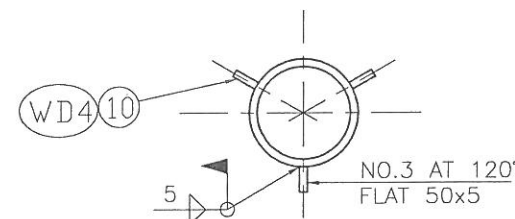
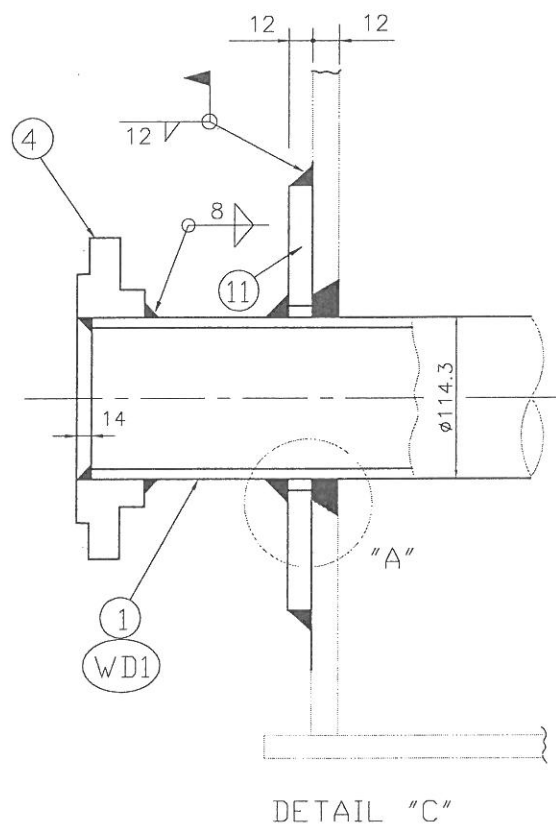
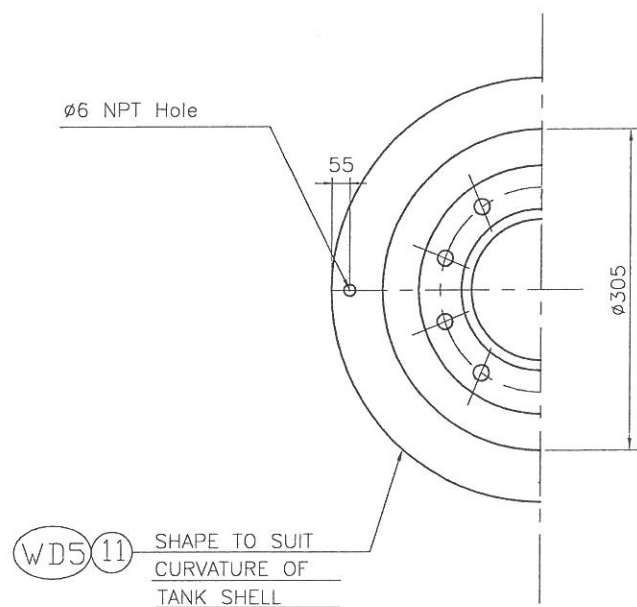
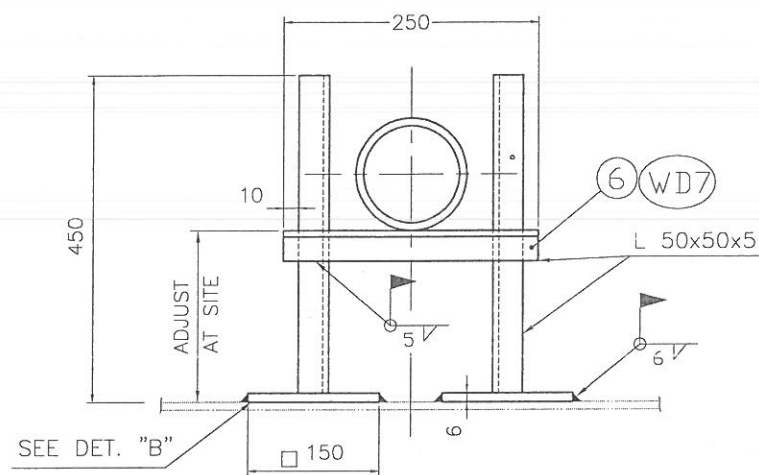
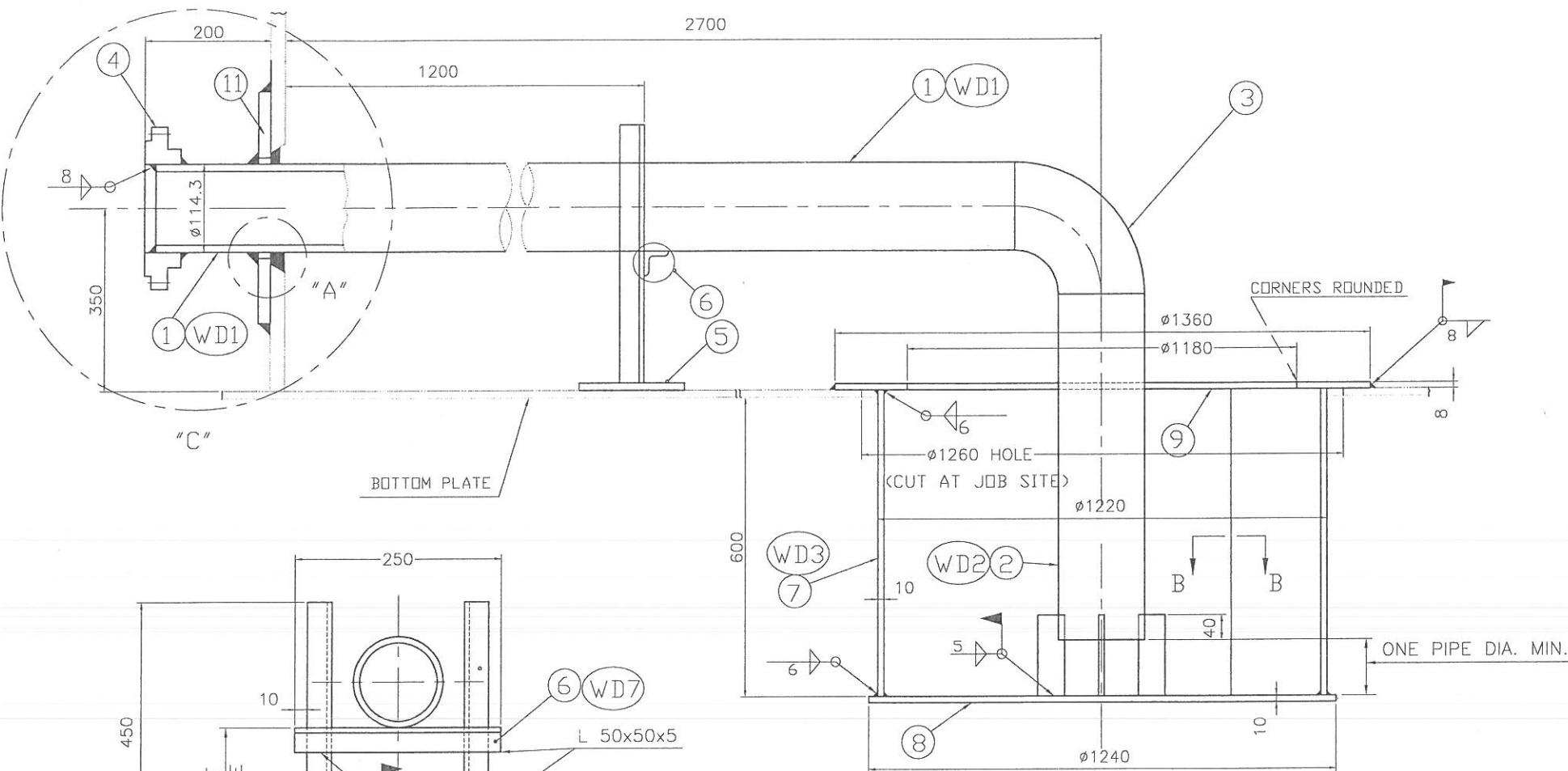
NO.	DESCRIPTION	MATERIAL	DIMENSIONS	NO. OF WEIGHT Kg			REMARKS
				1 SET	1 PIECE	1 SET	
1	SIDE RAIL	DIN1026	UNP 100, L=11625	2	123.2	246.4	
2	RUNG	ST 37-2	R.B. $\phi 20 \times L=456$	39	1.1	43	
3	CAGE VER.BAR	ST 37-2	FL. $50 \times 6 \times L=9640$	5	22.7	113.5	
4	HOOP	ST 37-2	FL. $50 \times 6 \times L=1979$	17	4.6	78.2	
5	LUG	ST 37-2	PL. $158 \times 138 \times 8$	12	1.3	15.6	
6	LUG	DIN1026	UNP 80, L=413	12	3.5	42	
7	HEX. BOLT	8.8	M16X50	24	-	-	DIN933
8	NUT	8	M16	24	-	-	DIN934
9	WASHER	St	D17	48	-	-	DIN125

TOTAL WEIGHT = 538.7 Kg

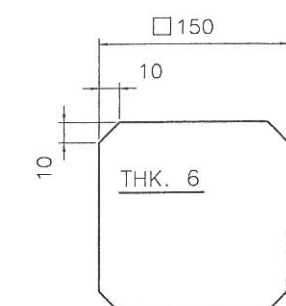


VIEW "G"

Drawing Title		Customer	
New Heavy Fuel Oil Storage Tank		Payvand Golestan Cement Co.	
Internal Ladder		Drawing No. 1.242.UO.821.01.12	
1401	Date	Signature	Rev.
08/10	08/10	08/10	08/10
Designed	08/10	08/10	08/10
Drawn	08/10	08/10	08/10
Checked	08/10	08/10	08/10
Approved	08/10	08/10	08/10
Project No.		Scale	File Name
NSC.		NSC.	NSC.



SECTION B-B



DETAIL "B"

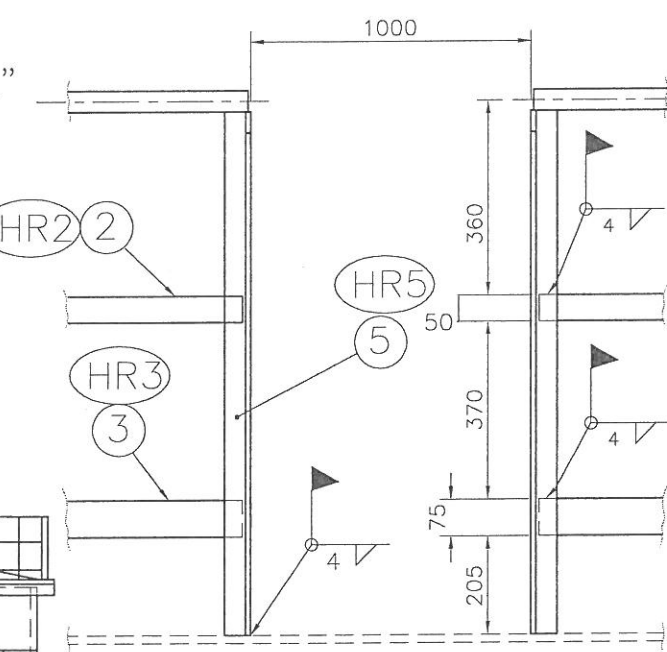
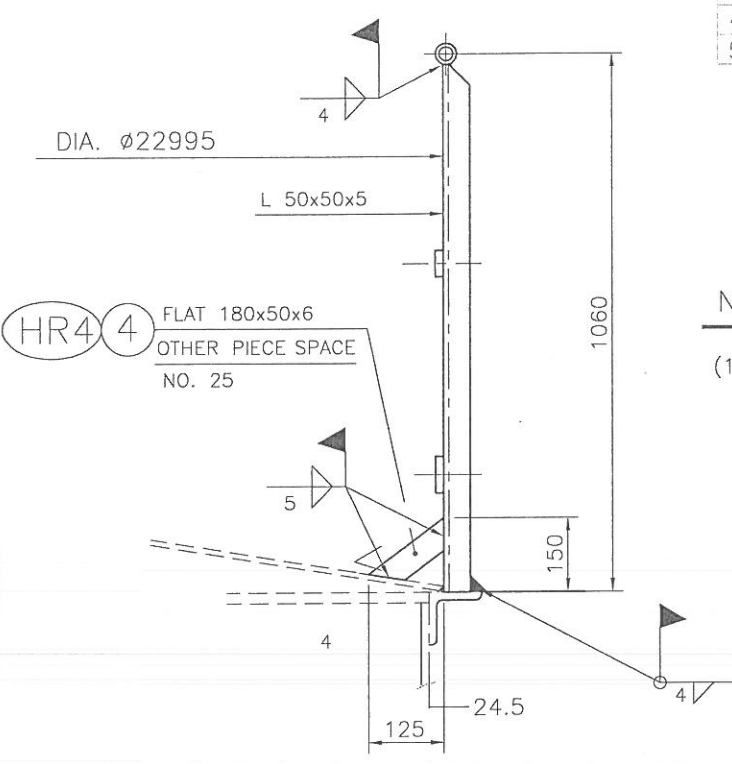
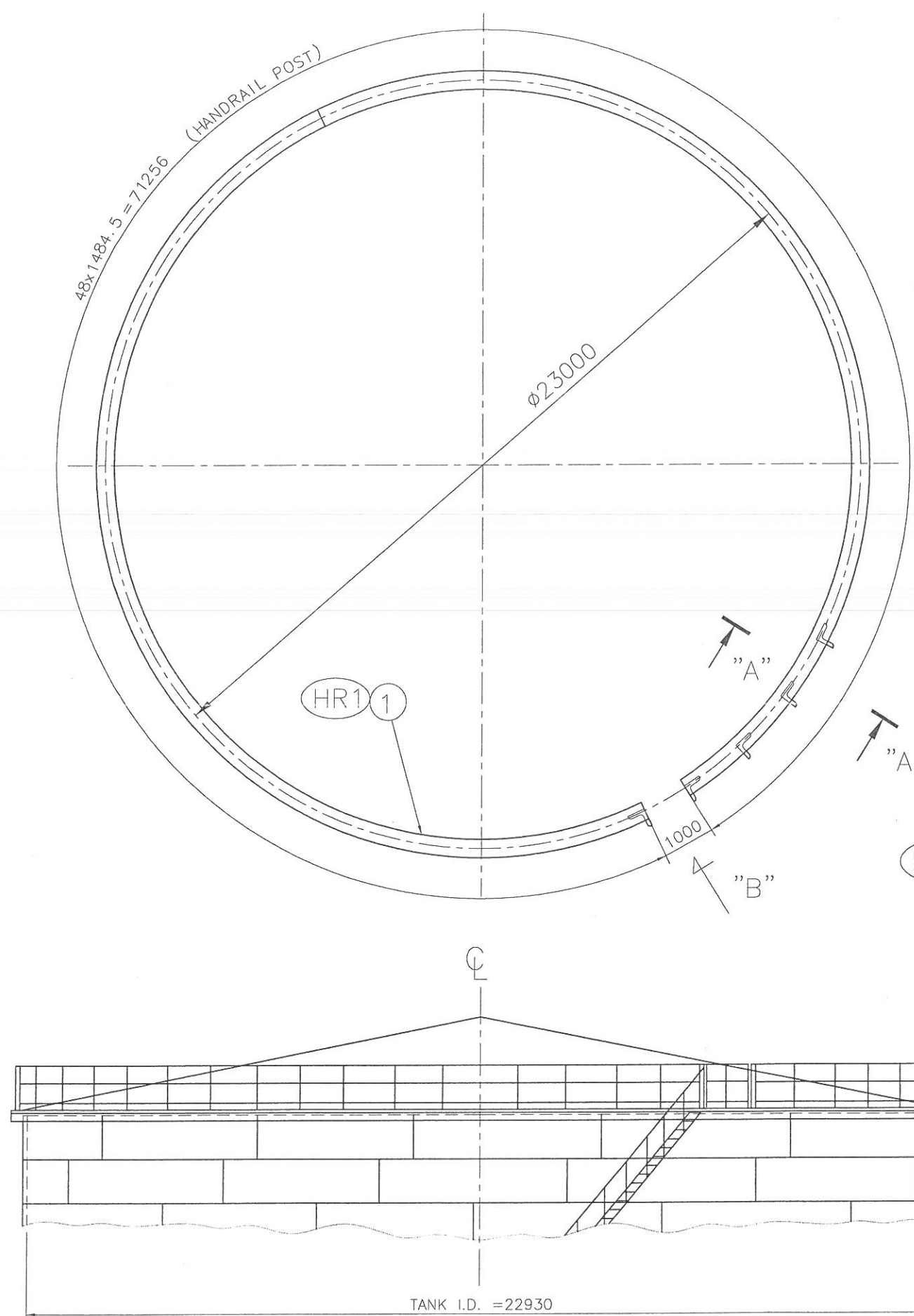
NO.	DESCRIPTION	MATERIAL	DIMENSIONS	NO. OF SET	WEIGHT Kg	REMARKS
1	PIPE	A106-B	4"sch.40x2761 lg.	1	61.5	61.5
2	PIPE	A106-B	4"sch.40x700 lg.	1	15.6	15.6
3	4" ELBOW	A234-WPB	90° L.R. SCH 40	1	6.2	6.2
4	FLANGE	A105	4"ANSI #150 R.F S.O	1	5.5	5.5
5	PLATE	RST37-2	PL. 6x□ 150	2	1	2
6	ANGLE	DIN1028	L 50x50x5x250	1	0.9	0.9
7	SUMP	RST37-2	PL. 10x608x3600	1	181.3	181.3
8	SUMP	RST37-2	PL. 10x□1240	1	94.8	94.8
9	SUMP	RST37-2	PL.10x□1360φ1180	1	28.2	28.2
10	SUPPORT	St37-2	FLAT 50x5x L=150	3	0.25	0.75
11	REINF. PLATE	RST37-2	PL. 12x φ305	1	8.6	8.6
12	ANGLE	DIN1028	L 50x50x5x444	2	1.7	3.4

TOTAL WEIGHT: 408.75 Kg

NOTE:

(1)-(WD1)....(WD8) ARE ERECTION MARKS.

Drawing Title New Heavy Fuel Oil Storage Tank N7-4" Sump Nozzle		Customer Payvand Golestan Cement Co.	
Drawing No. 1.242.UO.821.01.13		Rev. 0	
1401	Date 06/10	Signature [Signature]	Rev. 0
Designed	06/10	Checked	06/10
Drawn	06/10	Approved	06/10
Project No.	Scale	File Name	Disk No.



NO.	DESCRIPTION	MATERIAL	DIMENSIONS	NO. OF		WEIGHT Kg		REMARKS
				1 SET	1 PIECE	1 SET	1 SET	
1	PIPE	DIN2448	42.4x3.2x71300	1	222	222		
2	FLAT	St37-2	50x6x71300	1	168	168		
3	FLAT	St37-2	75x6x71300	1	252	252		
4	FLAT	St37-2	50x6x180	25	0.5	12.5		
5	HANDRAIL POST	St37-2	L 50x50x5x1039	49	4	196		

TOTAL WEIGHT: 850.5 Kg

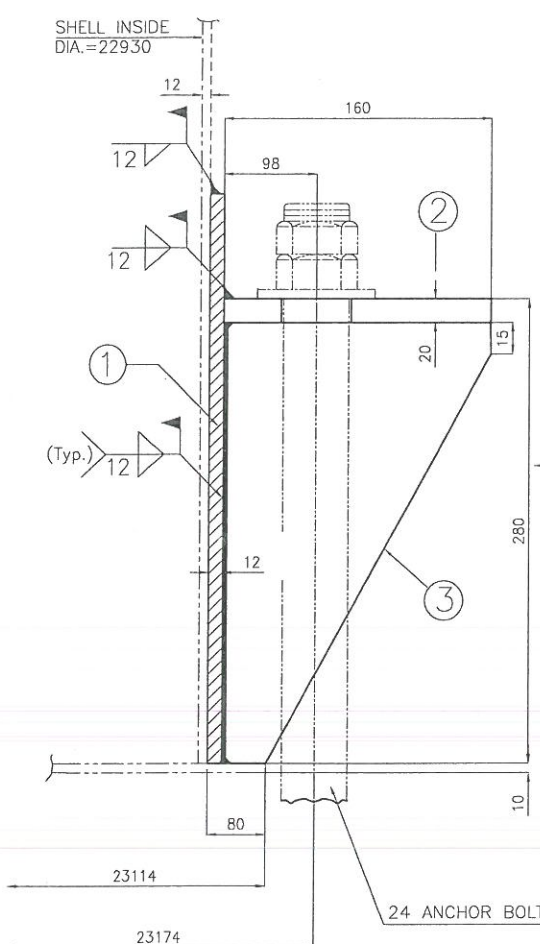
NOTE:

(1) HR1 HR5 ARE ERECTION MARKS.

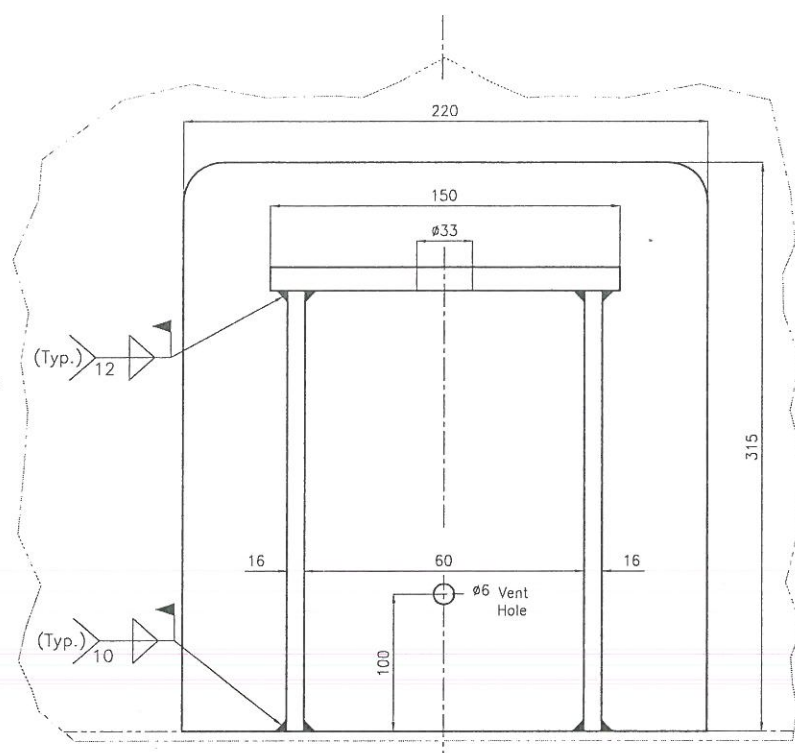
Drawing Title New Heavy Fuel Oil Storage Tank Roof Handrail				Customer Payvand Golestan Cement Co.			
Drawing No. 1.242.UO.821.01.14				Rev. 0			
1401	Date	Signature	Rev.	Description	By	Date	
Designed	06/10						
Drawn	06/10						
Checked	06/10						
Approved	06/10						
Project No.		Scale		File Name		Disk No.	
		NSC.					

NO.	DESCRIPTION	MATERIAL	DIMENSIONS	NO. OF		WEIGHT Kg		REMARKS
				1 SET	1 PIECE	1 SET	1 SET	
1	REIN. PLATE	ST37-2	PL. 315x220x12	1	6.53	6.35		
2	TOP PLATE	ST37-2	PL. 160x150x20	1	3.76	3.76		
3	RIB PLATE	ST37-2	PL. 260x160x16	2	5.2	10.4		
4	ROUND BAR	ST-37	R.B. Ø30 L=700	1	4.4	4.4		
5	NUTS	GRADE 8	M30	2	0.223	0.446	DIN 934	
6	ROUND BAR	ST-37	R.B. Ø30 L=100	1	.65	.65		
7	WASHER	ST	D32	1	~	~	DIN 125	

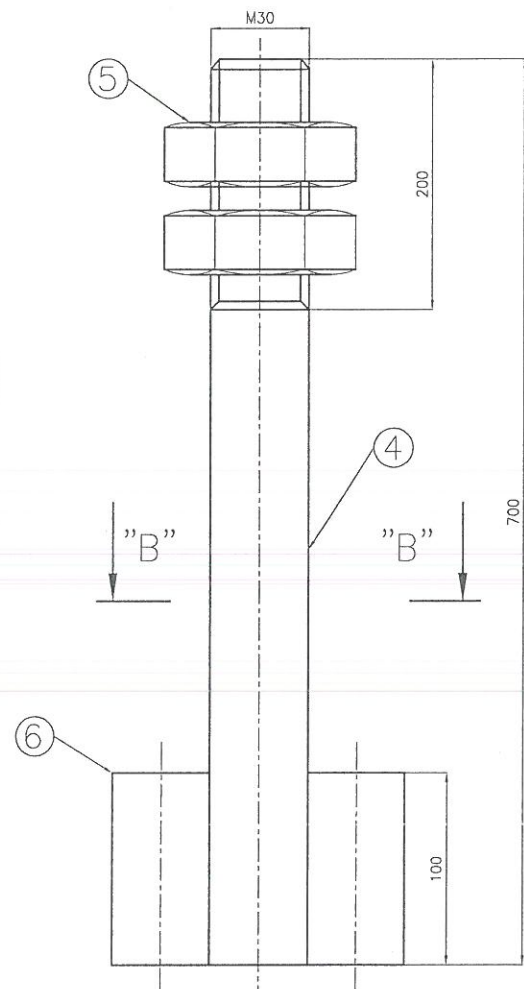
TOTAL WEIGHT = 24x26=624.14 Kg



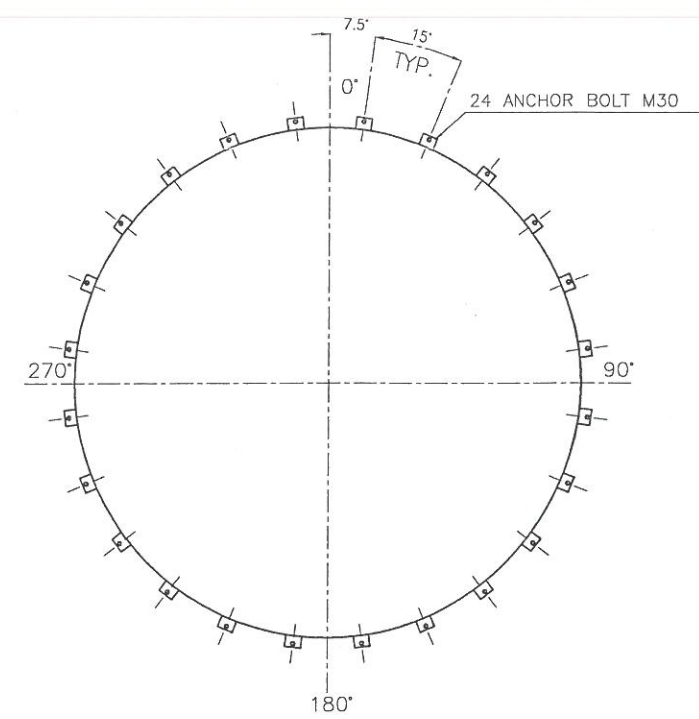
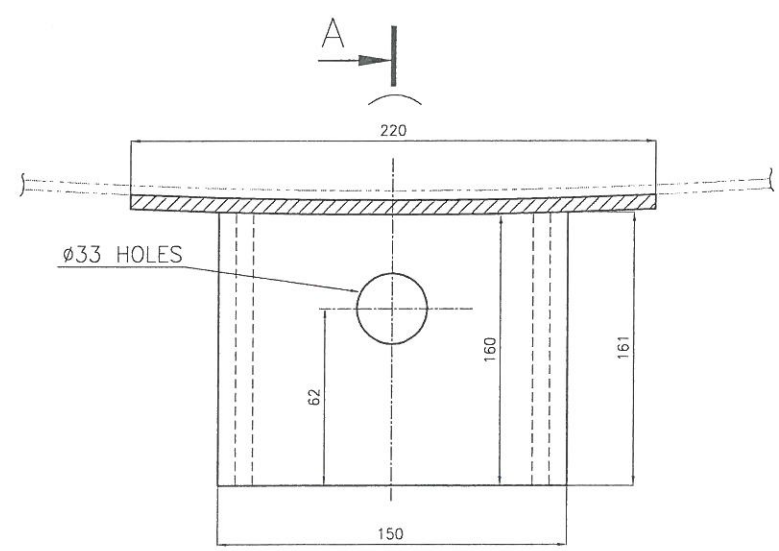
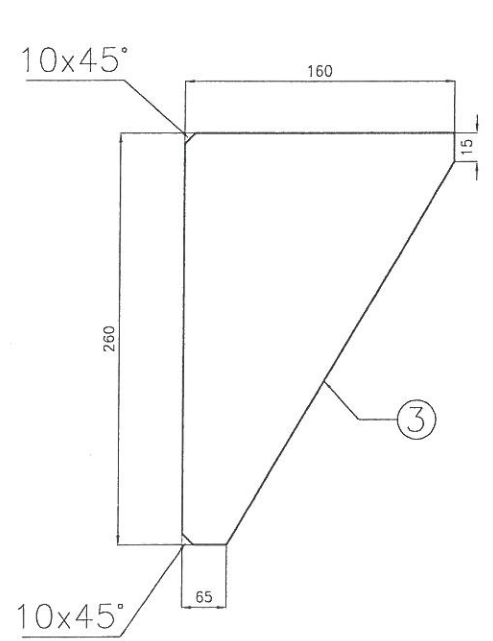
SECTION A-A



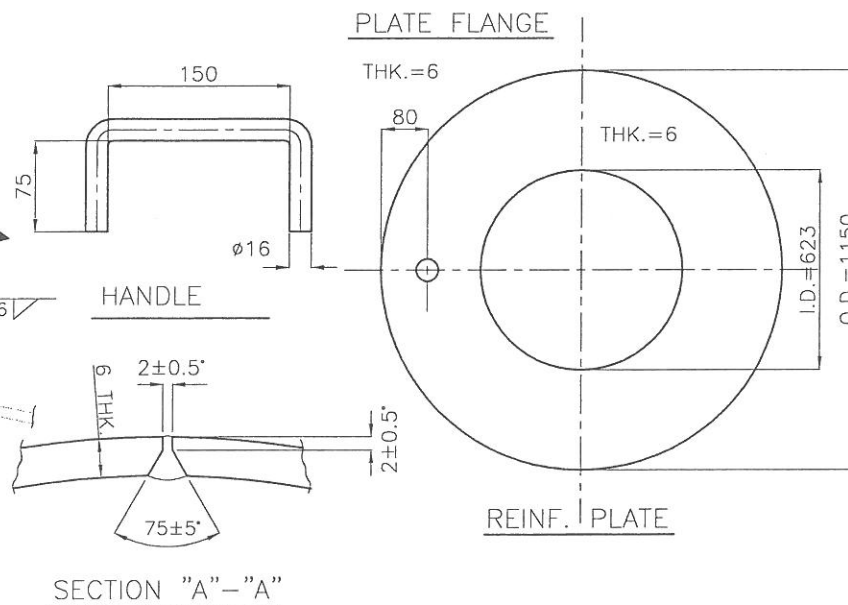
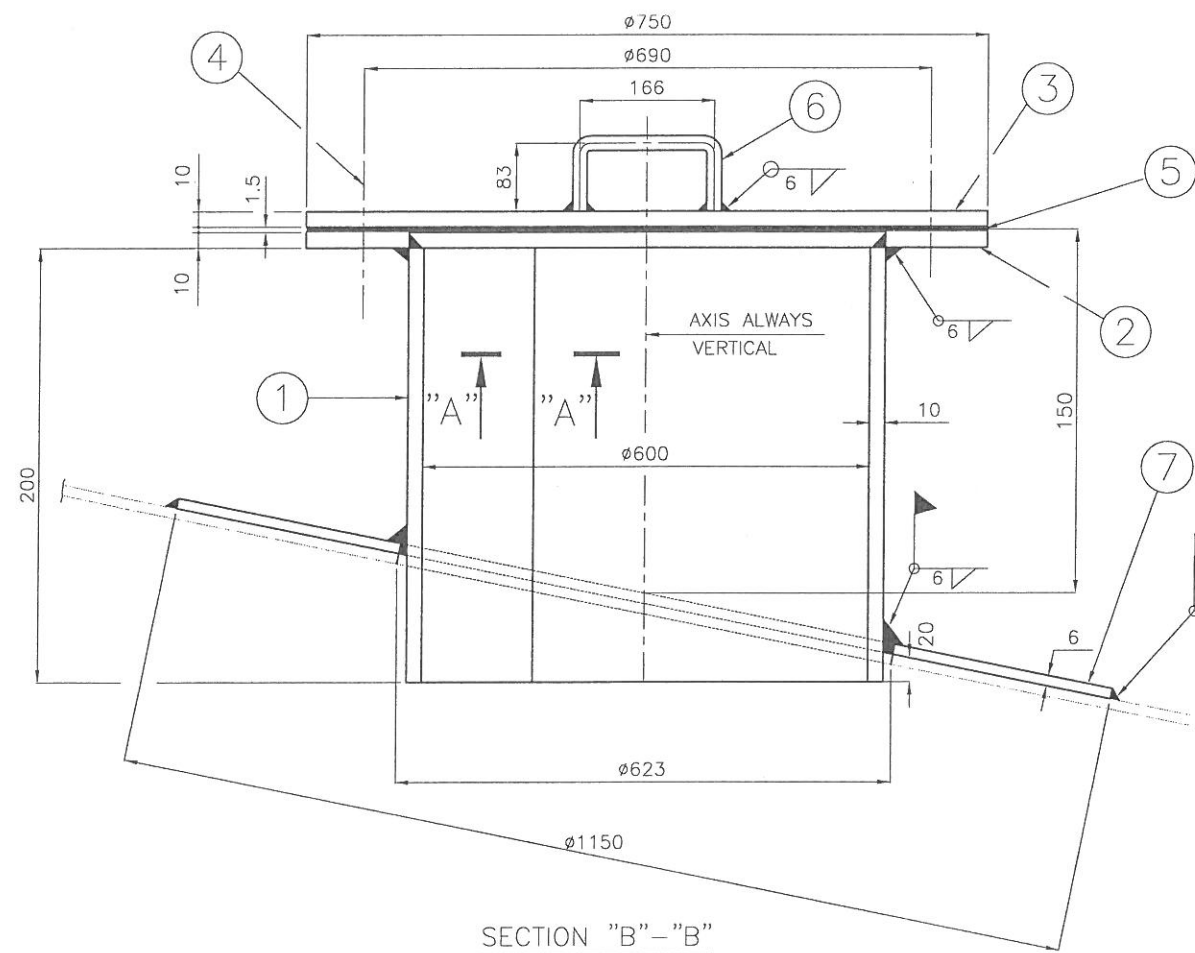
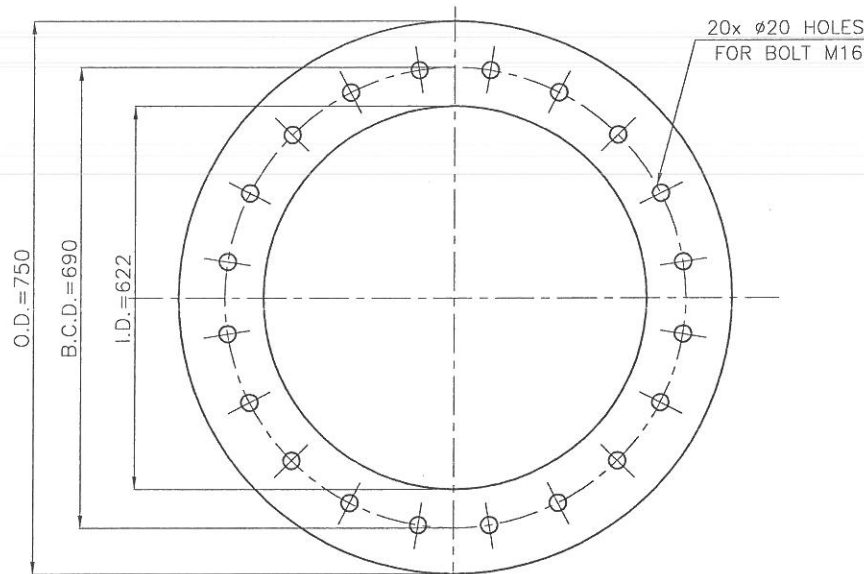
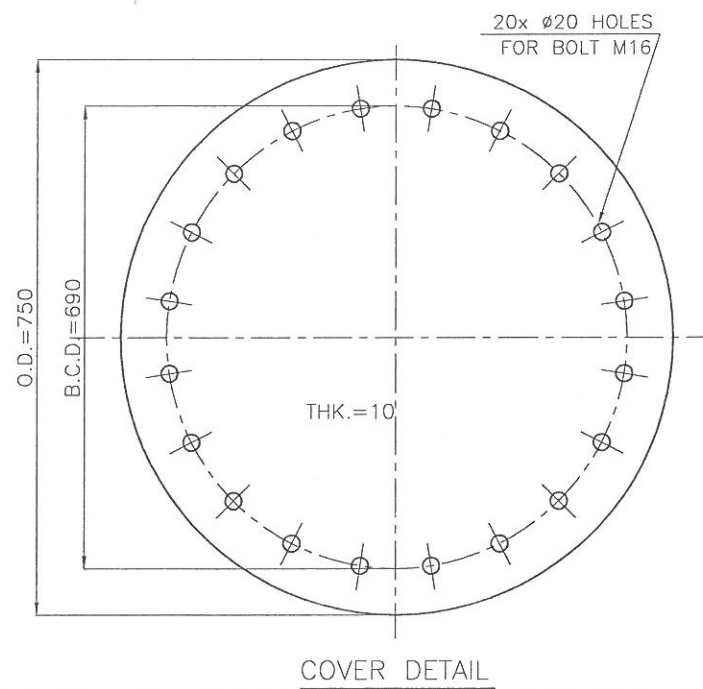
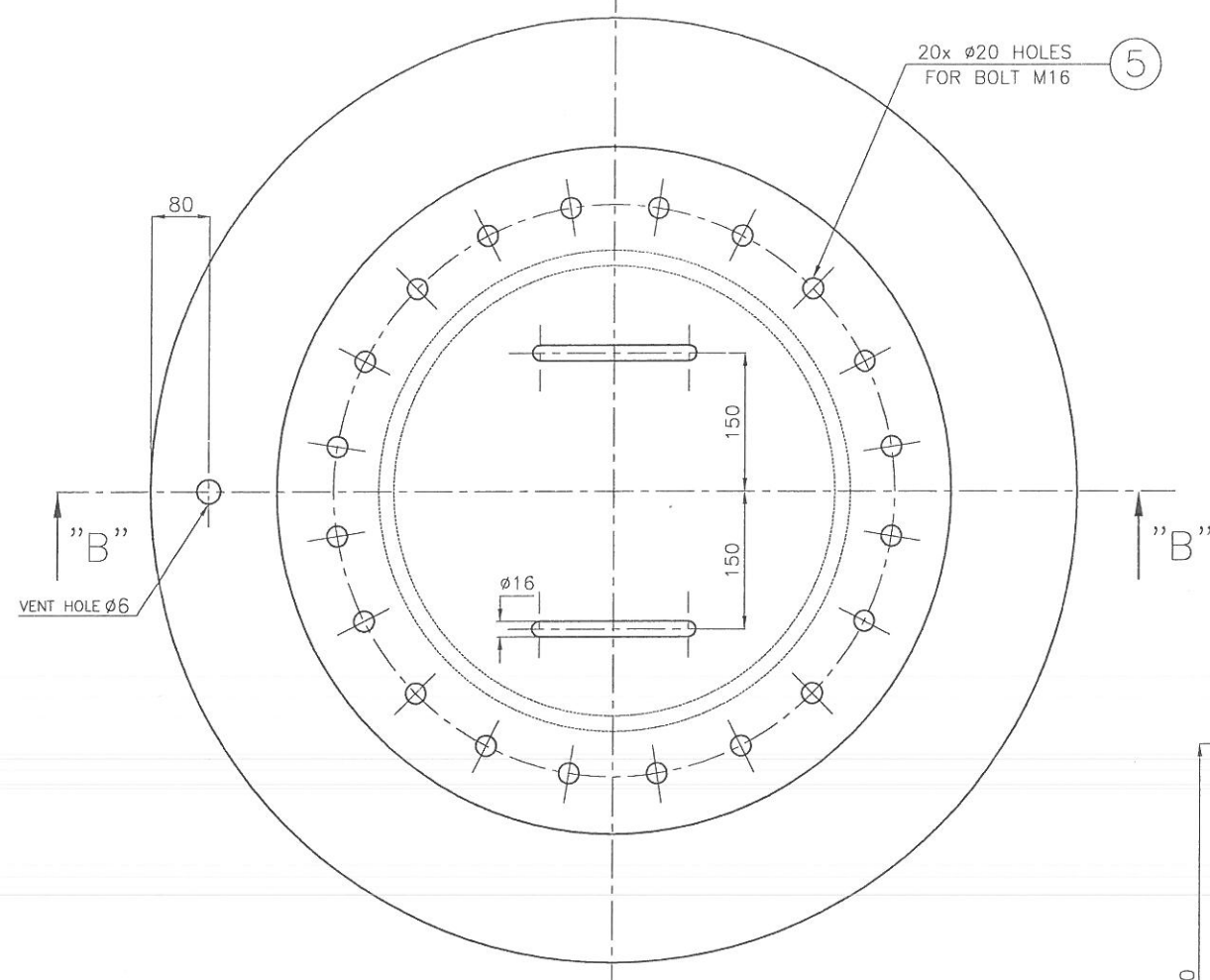
VIEW "A"



SECTION "B" - "B"



Drawing Title		Customer	
New Heavy Fuel Oil Storage Tank		Payvand Golestan Cement Co.	
Drawing No.		Rev.	
1.242.UO.821.01.15		0	
Project No.		Scale	
1401		NSe.	
Designed	08/10	Signature	Rev.
Drawn	08/10	Signature	Rev.
Checked	08/10	Signature	Rev.
Approved	08/10	Signature	Rev.
Project No.		Scale	
1401		NSe.	
File Name		Disk No.	

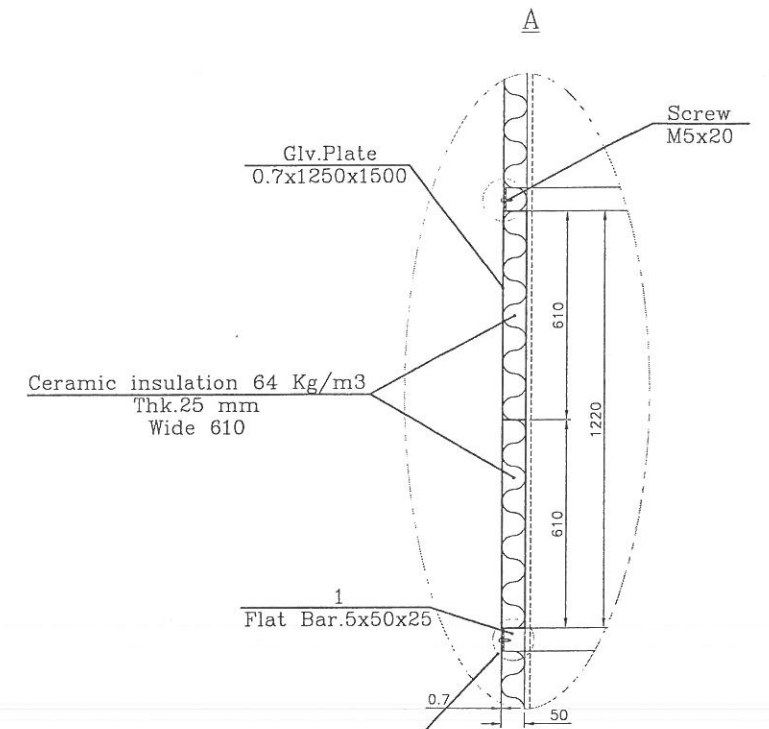
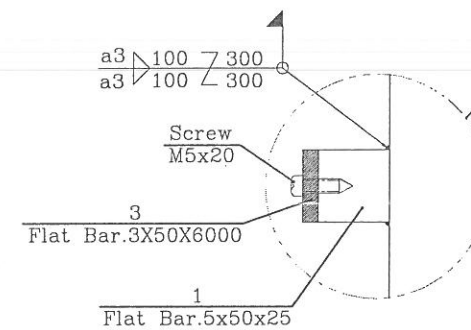
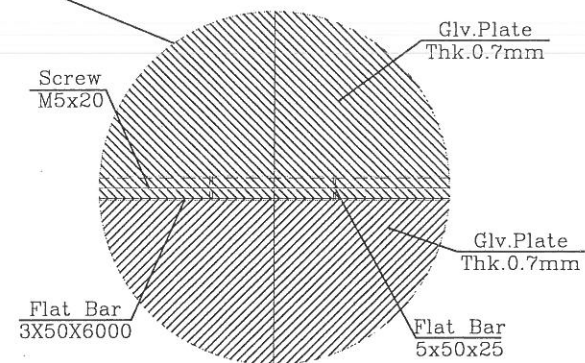
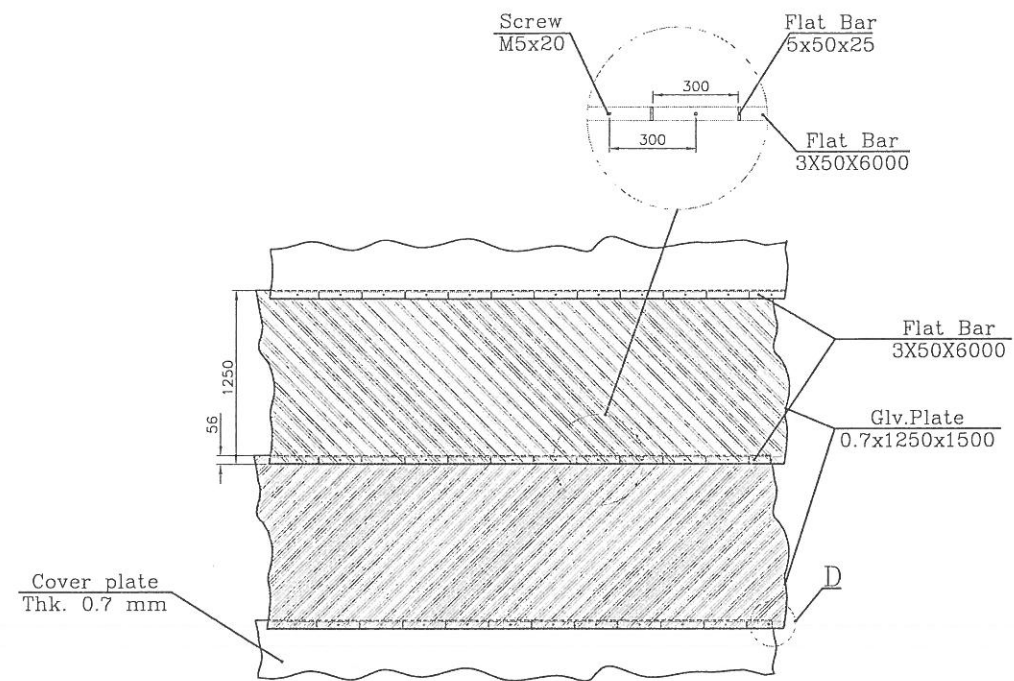
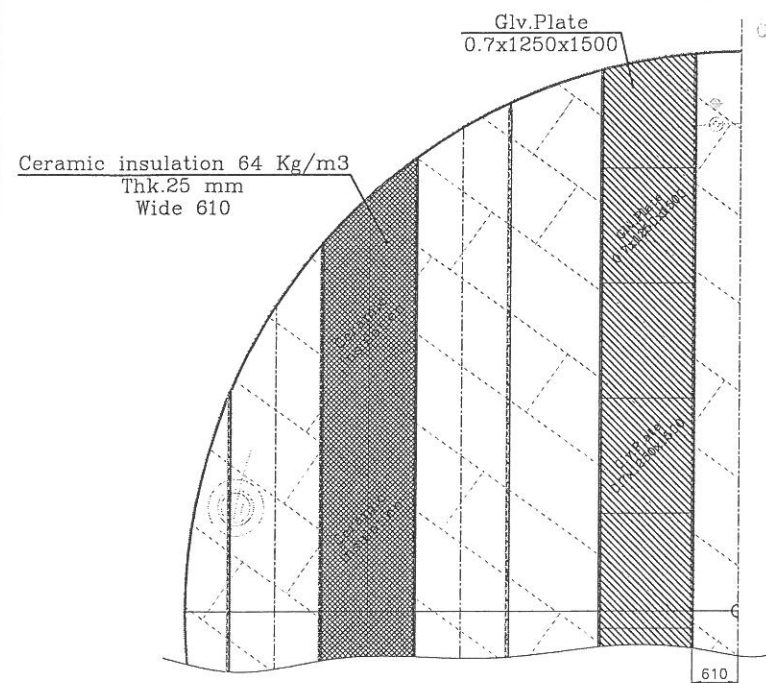
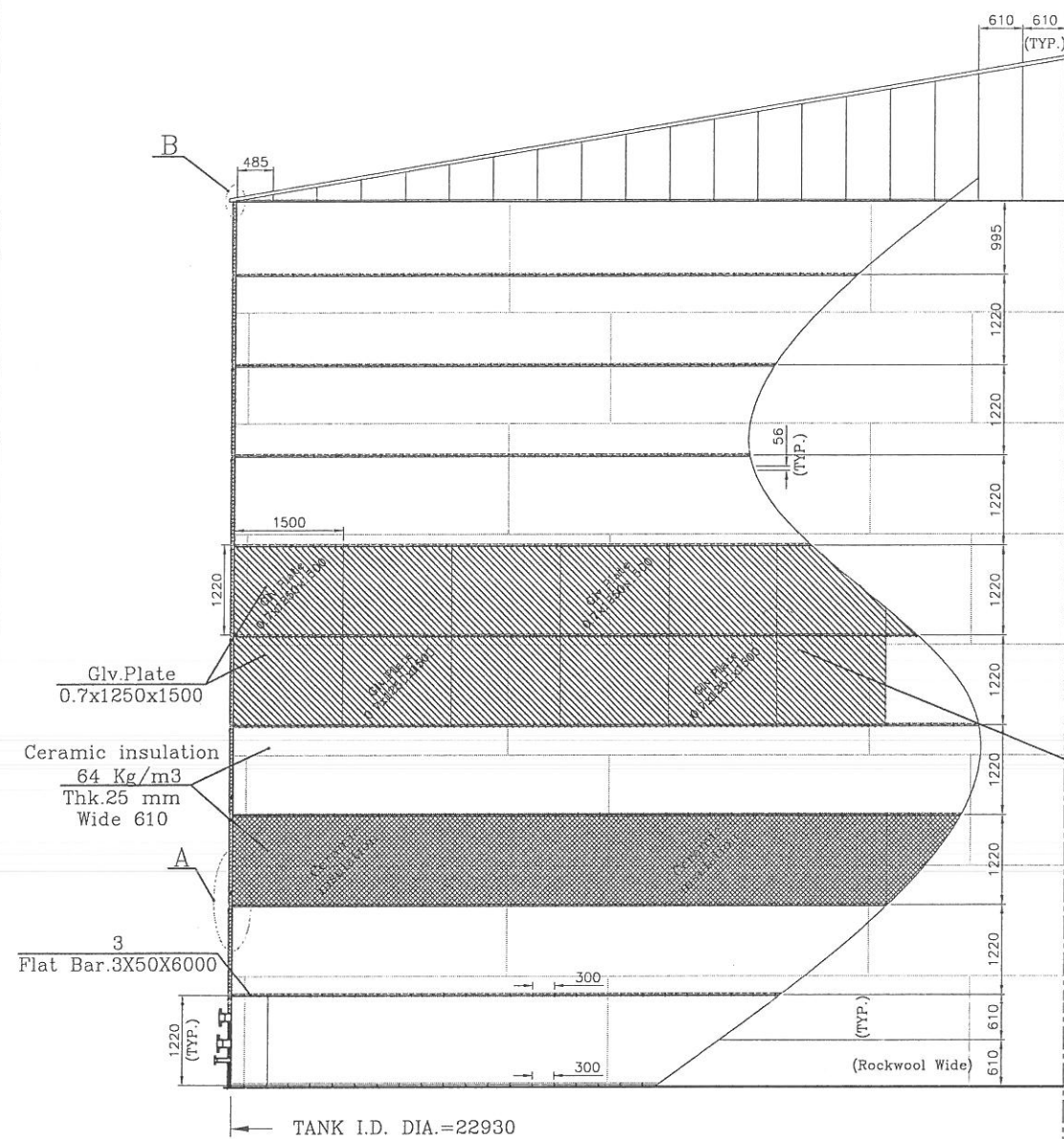


NO.	DESCRIPTION	MATERIAL	DIMENSIONS	NO. OF			WEIGHT (KG)	REMARKS
				1 SET	1 PIECE	1 SET		
1	MANWAY NECK	RST37-2	PL.10x200x1916	1	30	30		
2	PLATE FLANGE	RST37-2	PL.Ø750/620x10	1	10.9	10.9		
3	COVER PLATE	RST37-2	PL Ø750x10	1	28.8	28.8		
4	BOLT&NUT	8.8/8	M16X60	20	-	-		DIN933 DIN934
5	GASKET	CAF	3 t x Ø750/600	1+1	-	-		
6	HANDLE	A 36 OR EQ.	R.B. 16x312	2	0.5	1		
7	REINF. PLATE	RST37-2	PL.Ø1150/623x6	1	35	35		

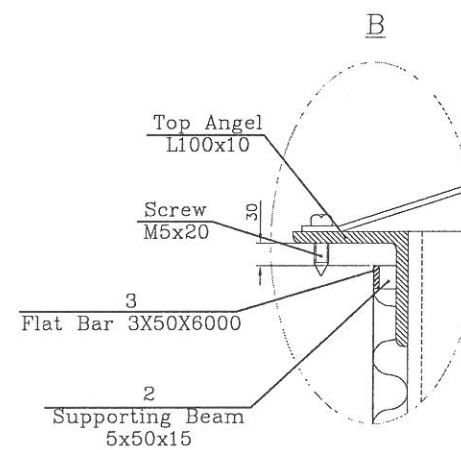
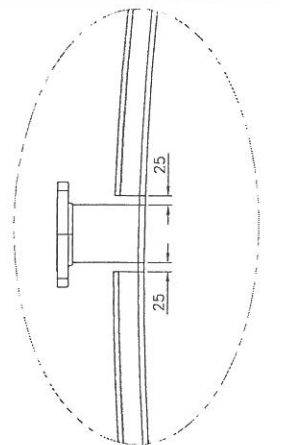
TOTAL WEIGHT: 103.8 KG

Drawing Title				Customer			
New Heavy Fuel Oil Storage Tank				Payvand Golestan Cement Co.			
M3-24" Roof Manhole				Drawing No. 1.242.UO.821.01.16			
1401	Date	Signature	Rev.	Description	By	Date	
Designed	08/10	Mohammadi					
Drawn	08/10	Mohammadi					
Checked	08/10	Mohammadi					
Approved	08/10	Mohammadi					
Project No.	Scale			File Name	Disk No.		
	NSC.						

Cover holder arrangement on Tank's Wall & Roof



Detail Around Nozzles





NOTE:

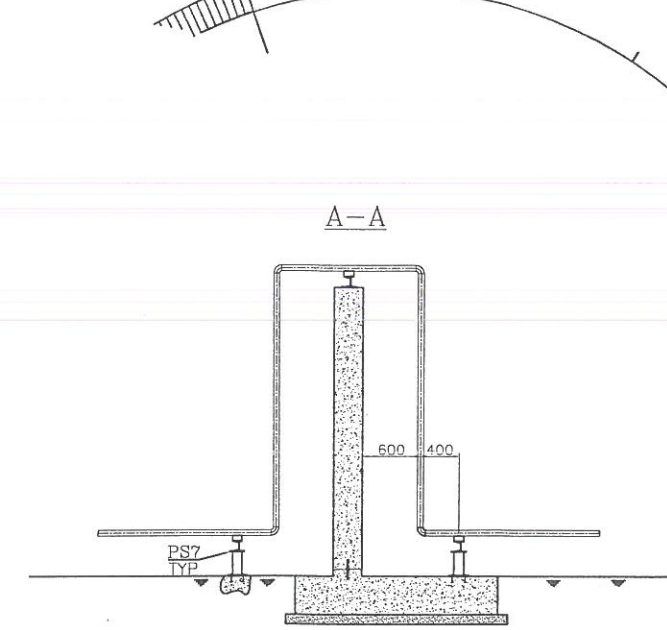
1-SUPPORTING RING PER 1220 MM OF TANK WALL & ROOF IS REQUIRED.
2-FOUR PCS. SCREW M5x20 PER METER OF PL 5X50X25 IS REQUIRED.
3-SUPPORT PL 5X50X25 WILL BE WELDED TO WALL & COVER PLATE WILL BE SCREW TO COVER HOLDER.

* Material List For Each Tank Insulation.

Item	Type	Unit	QTY.	Material	Standard Weight(KG)	
1	Flat Bar 5x50x50	Pcs.	3241	St-37	-	159
2	Flat Bar 5X50X35	Pcs.	217	St-37	-	6.5
3	Flat Bar 3X50X6000	L=6m	201	St-37	DIN1623	1420
4	Screw M5x20	Pcs.	4517	-	DIN7981	-
5	Glv.Plte Thk.0.7	1.6x1.25m	740	-	-	-
6	Ceramic insulation 64Kg/m3 Thk 25mm	m	1400	Ceramic	-	-

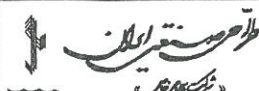
Total Weight

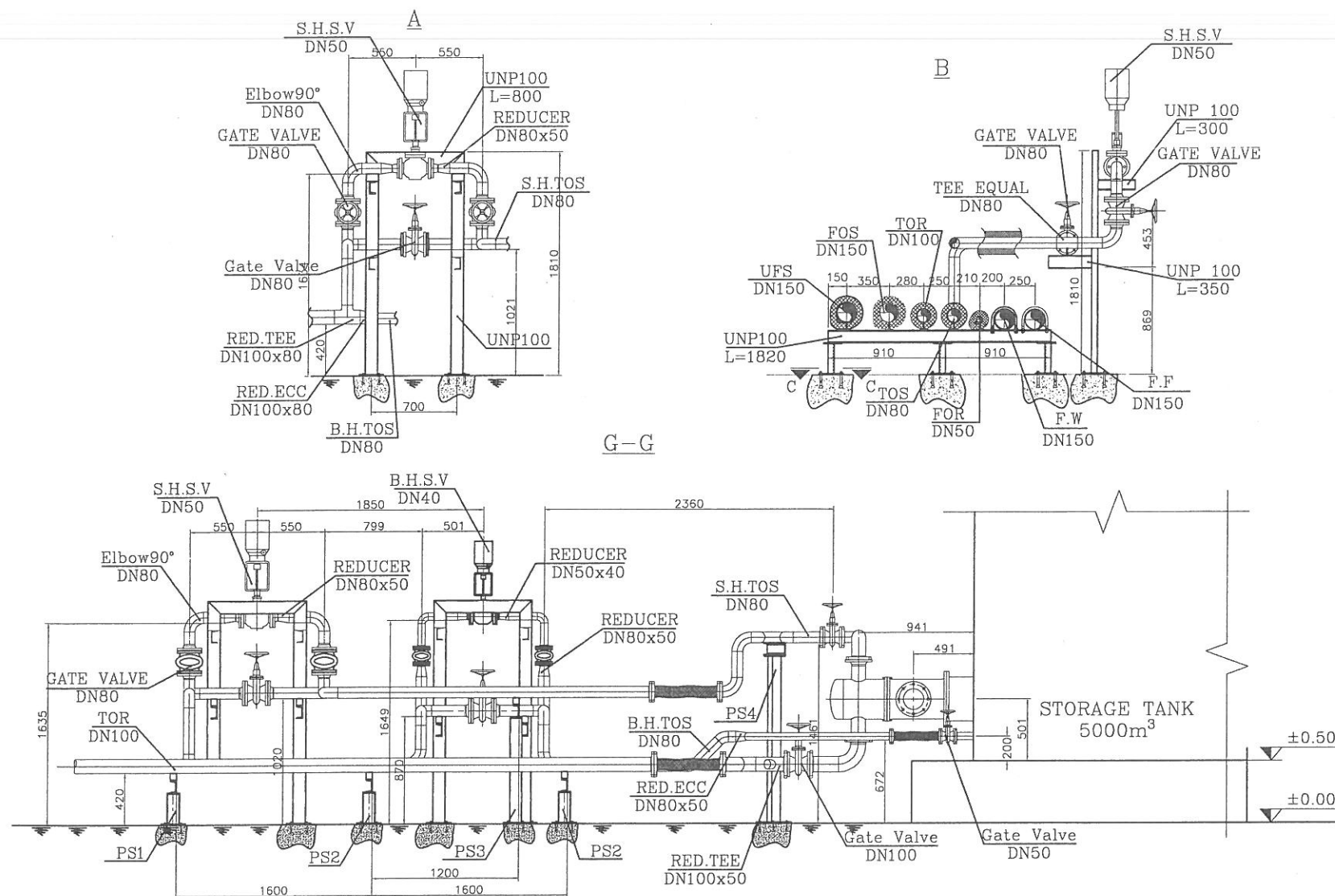
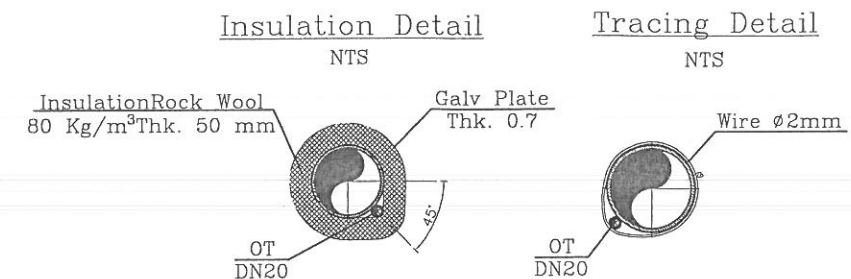
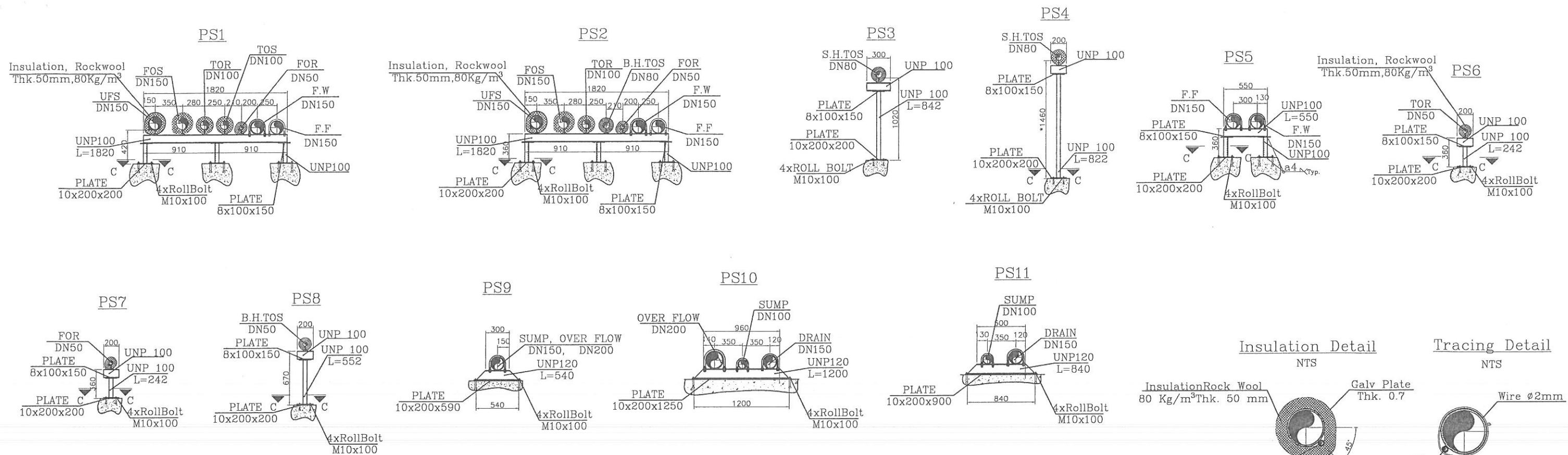
Drawing Title New Heavy Fuel Oil Storage Tank Insulation		Customer Payvand Golestan Cement Co.		تاریخ 1382/08/10							
Drawing No. 1.242.UO.821.13.00		Rev. 0		ملاحظات صفحه Page 1 Pages 1							
 <p>طراحی صنعتی ایران</p> <p>«تیرنگ سازه»</p>  <p>IRAN INDUSTRIAL DESIGN CO.</p>	1401	Date	تاریخ	Signature	Rev.	Description	توضیح	By	توسط	Date	
	Designed	05/21		Rizhashinia							
	Drawn	05/21		Rizhashinia							
	Checked	05/21		Rizhashinia							
	Approved	05/21		Rizhashinia							
Project No.		Scale		مقیاس		File Name		نام فایل		Disk No.	
		1:100									



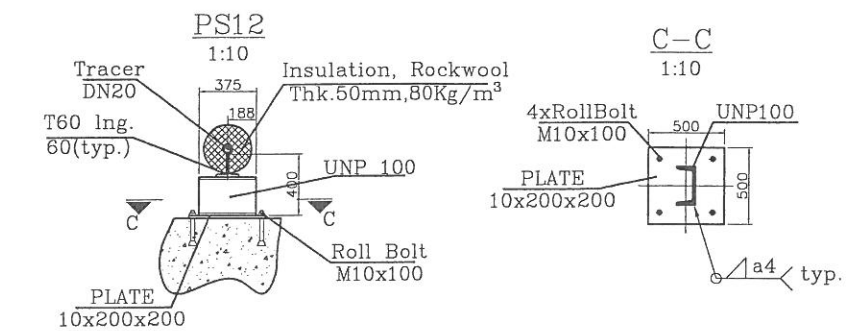
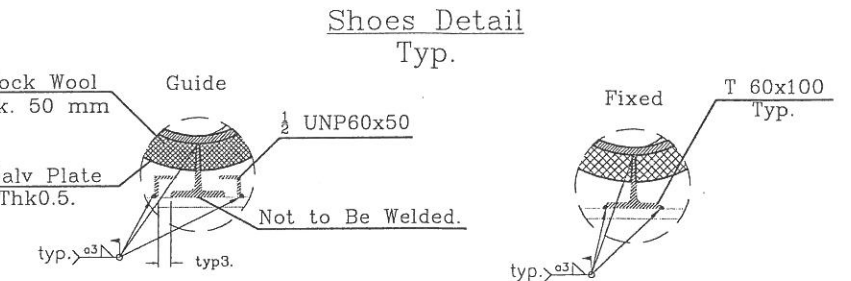
NOTE:

1. *DIMENSIONS SHOULD BE ADJUSTED AT SITE.
2. ALL DIMENSIONS ARE IN MM, ELEVATIONS & COORDINATES ARE IN METER'S UNLESS OTHERWISE NOTED.
3. ALL PIPING HIGH POINTS SHALL BE VENTED & LOW POINTS SHALL BE DRAINED. THESE VENTS & DRAINS USED FOR SYSTEM VENTING & DRAINING INCLUDING HYDROTESTS CAN ONLY BE LOCATED AFTER PIPING IS COMPLETE & NOMINAL SIZE FOR VENTING IS DN15 AND FOR DRAINING IS DN20.
4. OIL TRACER PIPES SHALL BE LOCATED BESIDE FUEL OIL PIPELINES.
5. FOR OIL TRACER PIPE SUPPORT USE WIRE WITH $\phi 2\text{MM}$ THK. & DISTANCE BETWEEN EACH WIRE IS 2000 MM.
6. ALL PIPE SUPPORTS ARE GUIDE SUPPORT UNLESS OTHERWISE STATED.

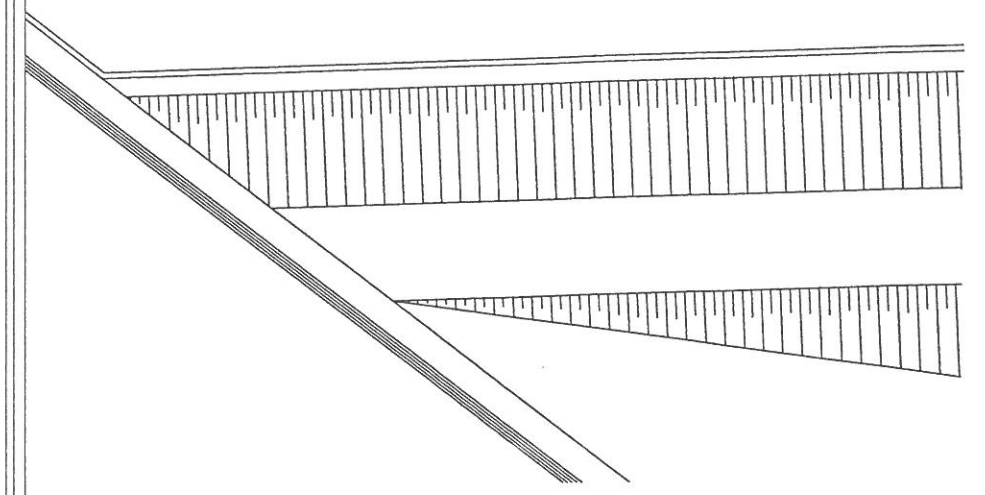
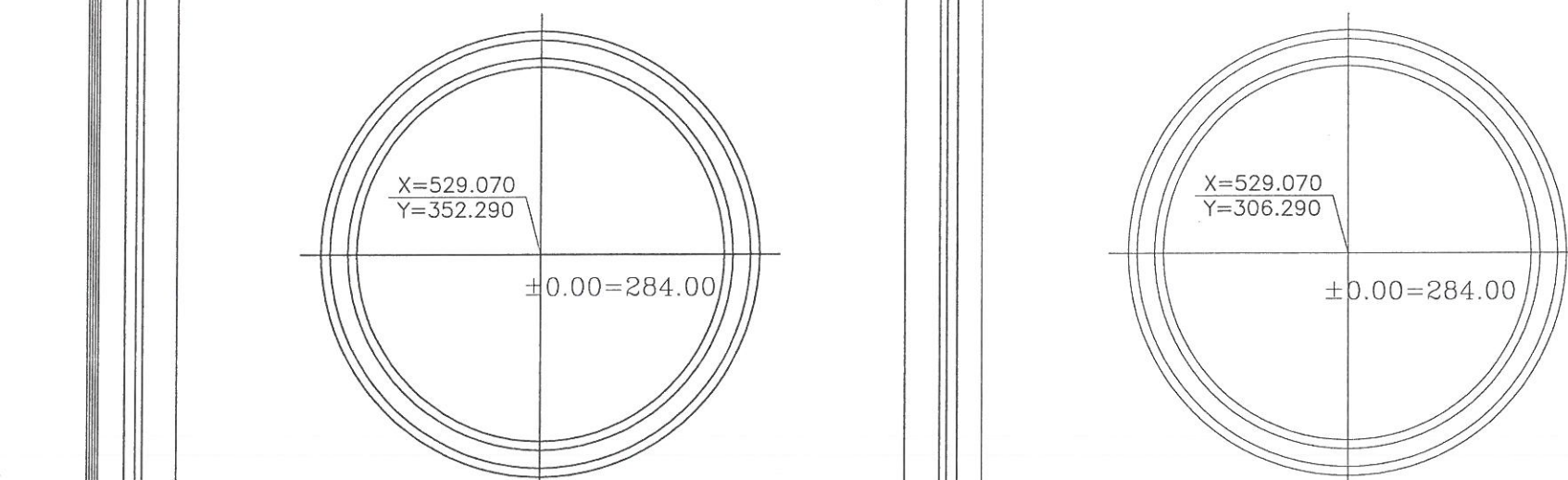
Drawing Title New Heavy Fuel Oil Storage Tank				Customer Payvand Golestan Cement Co.			
Piping Plan & Sections				Drawing No. 1.242.UO.821.14.00/A		Rev. 1	Page 1 of 3
 IRAN INDUSTRIAL DESIGN CO.	1401	Date	Signature	Rev.	Description	By	Date
	Designed	05/21	Mohammadi				
	Organ	05/21	Mohammadi				
	Checked	05/21	Mohammadi				
	Approved	05/21	Mohammadi	1	Nozzle Orientation	Mohammadi	05/10
	Project No.	Scale	File Name	Disk No.			
		1:100					



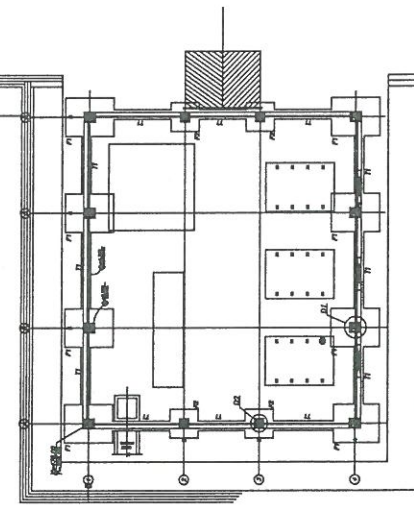
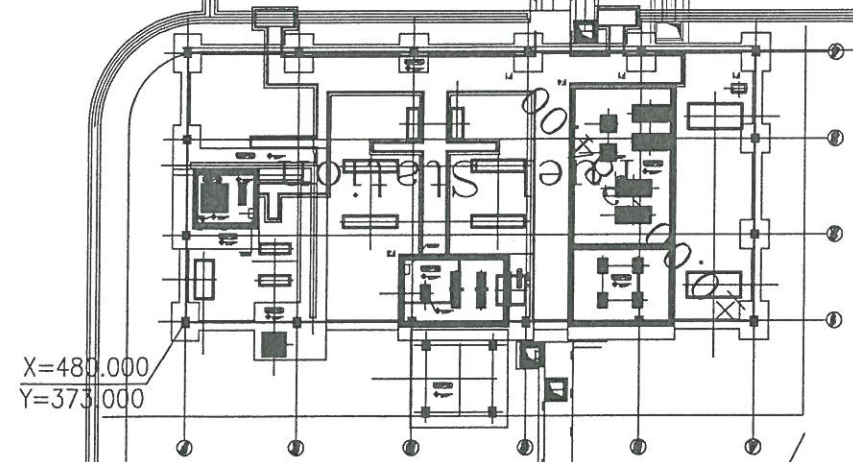
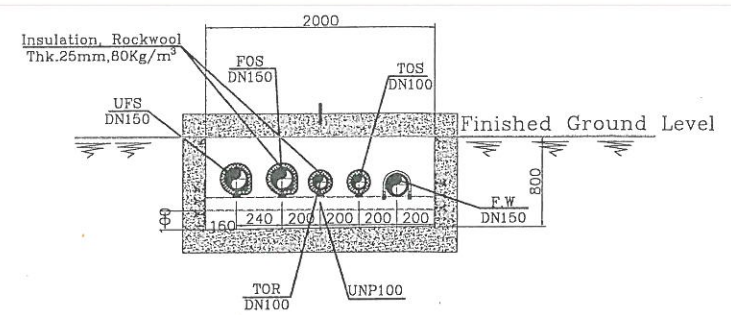
P.S. NO.	Qty.
P.S.1	2
P.S.2	2
P.S.3	1
P.S.4	1
P.S.5	1
P.S.6	1
P.S.7	2
P.S.8	2
P.S.9	2
P.S.10	6
P.S.11	1
P.S.12	2



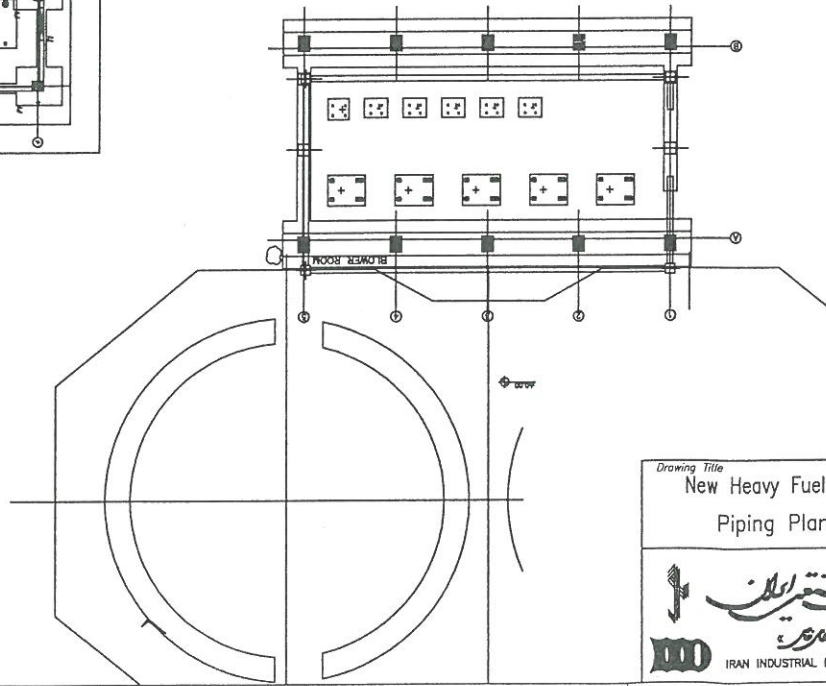
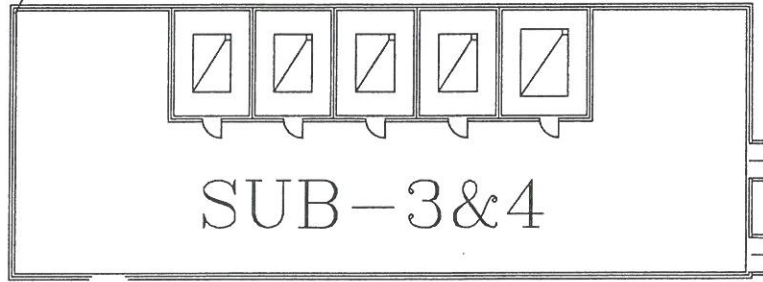
Drawing Title New Heavy Fuel Oil Storage Tank Piping Plan & Sections		Customer Payvand Golestan Cement Co.	
Drawing No. 1.242.UO.821.14.00		Rev. 0	
Date 05/21		Signature [Signature]	
Designed 05/21		Rev. 0	
Checked 05/21		Description [Description]	
Approved 05/21		By [By]	
Project No. 1401		Scale 1:25	
File Name [File Name]		Disk No. [Disk No.]	



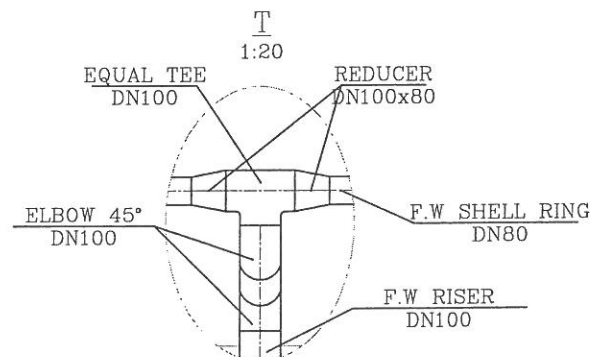
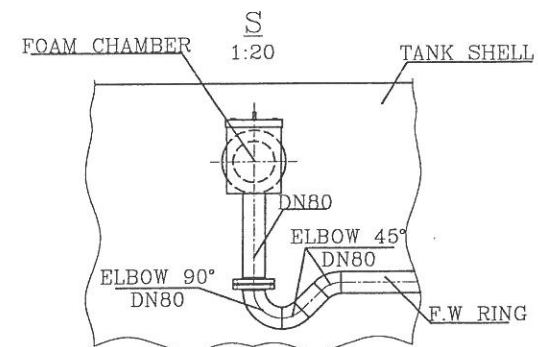
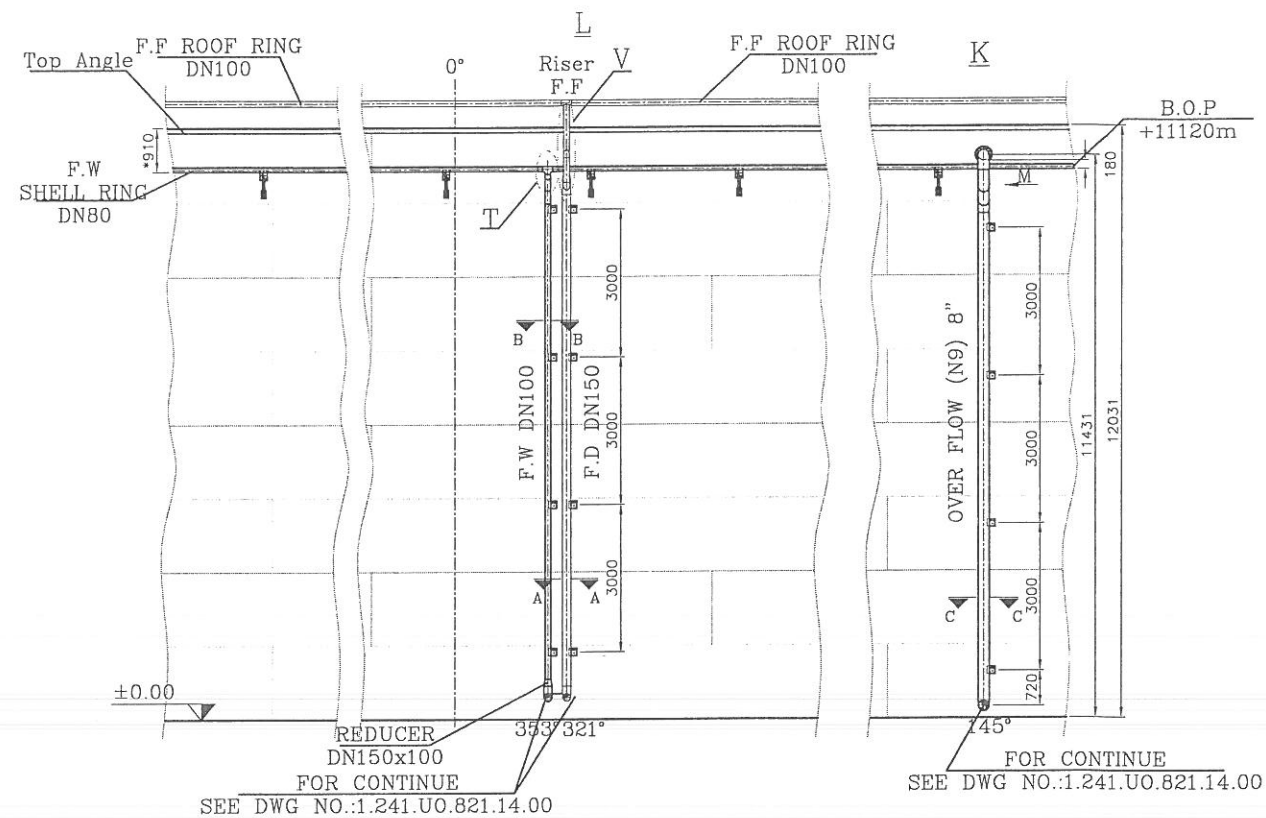
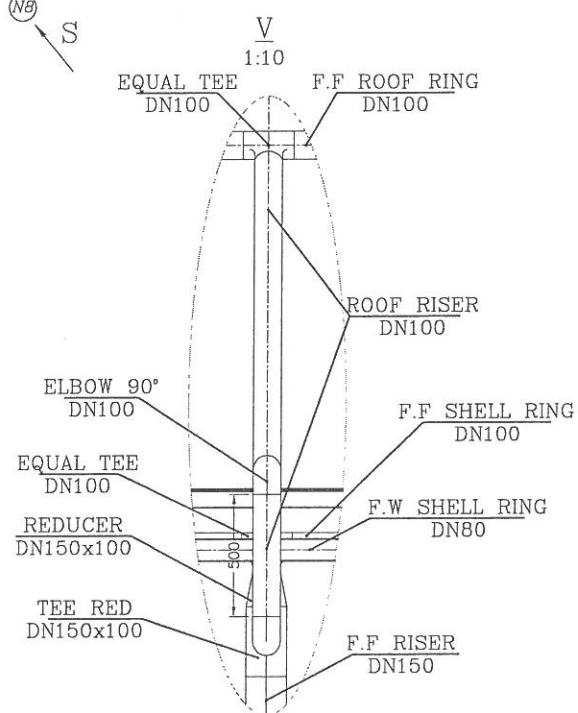
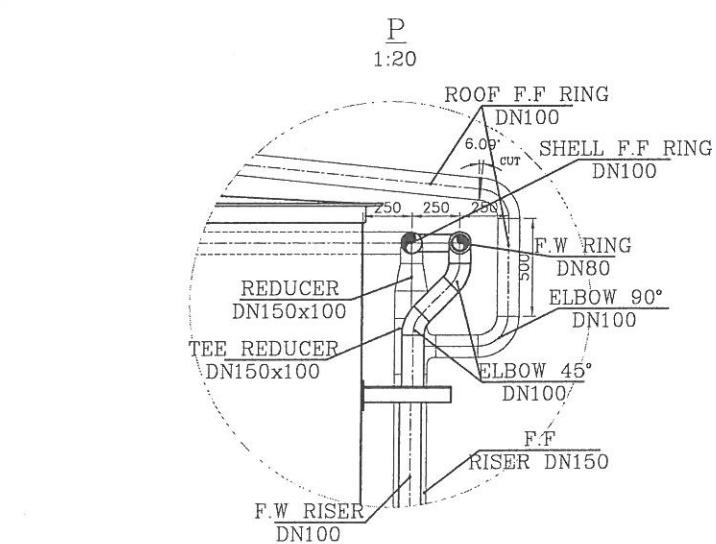
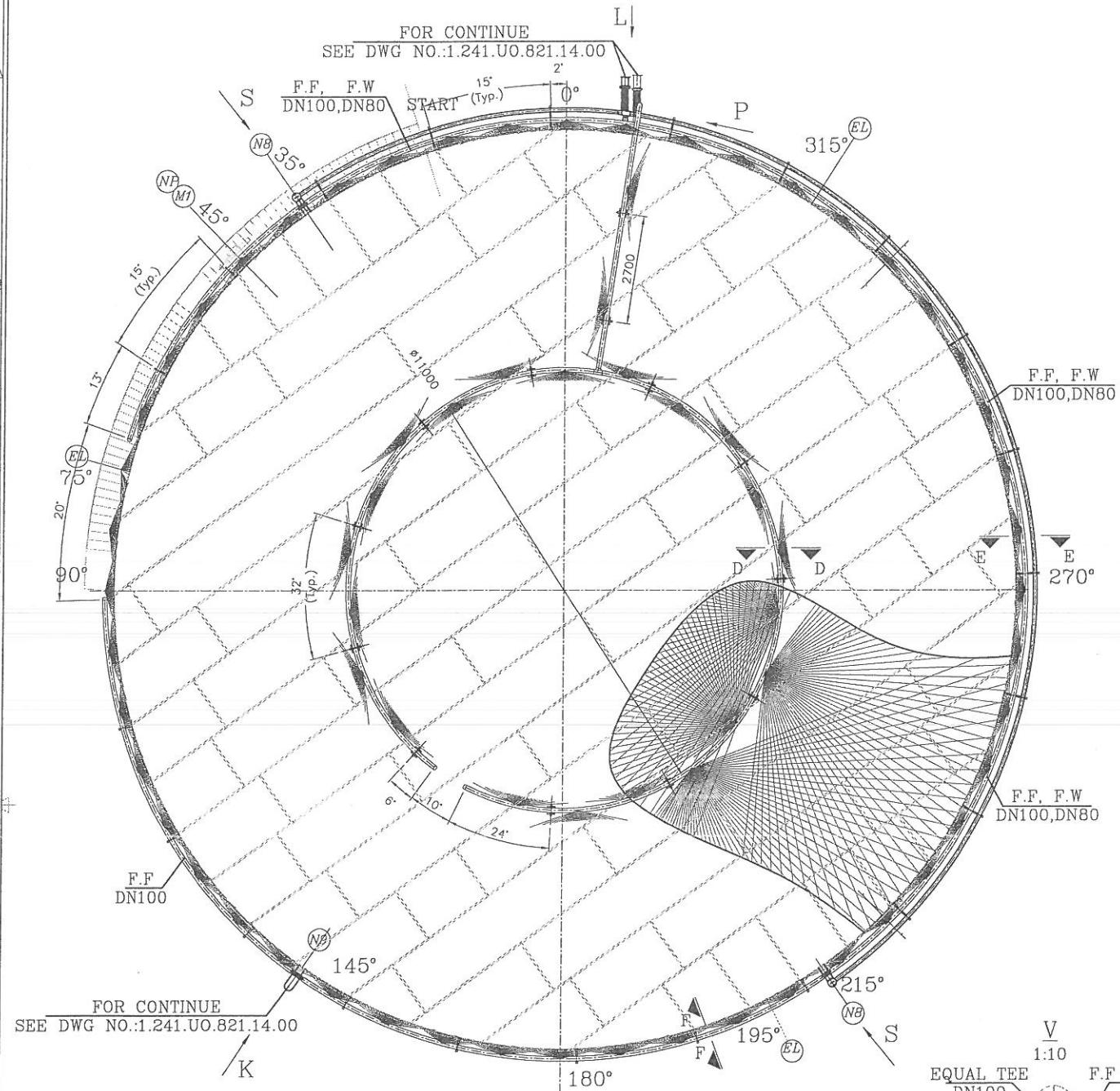
A-A



BT3



Drawing Title New Heavy Fuel Oil Storage Tank Piping Plan & Sections		Customer Payvand Golestan Cement Co.	
Drawing No. 1.242.UO.821.14.00		Rev. 0 Page 3	
1401	Date 05/21	Signature [Signature]	Rev. 0
Designed [Signature]	05/21	Checked [Signature]	05/21
Drawn [Signature]	05/21	Approved [Signature]	05/21
Project No.	Scale 1:200	File Name	Disk No.

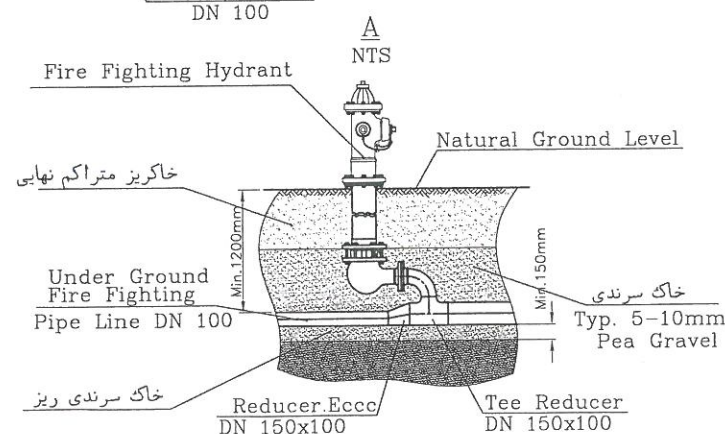
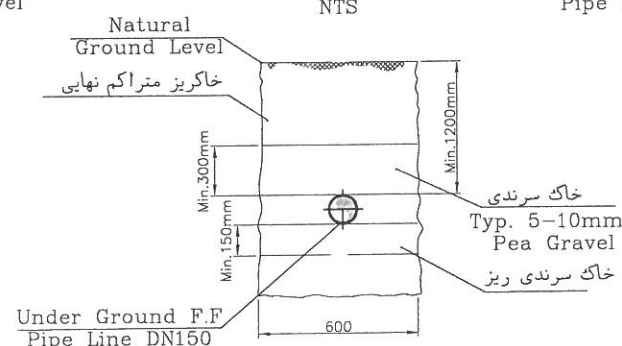
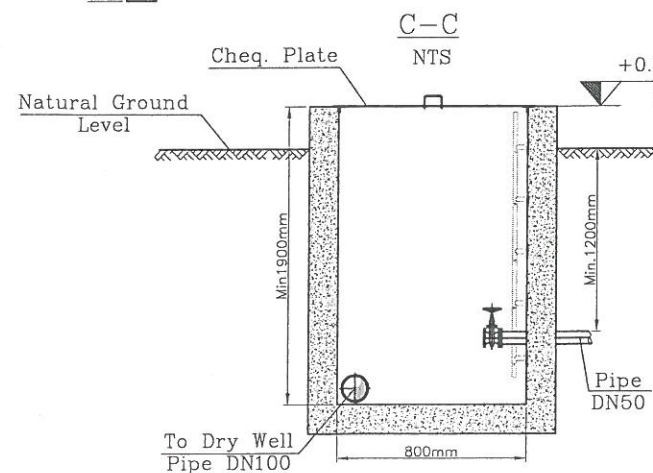
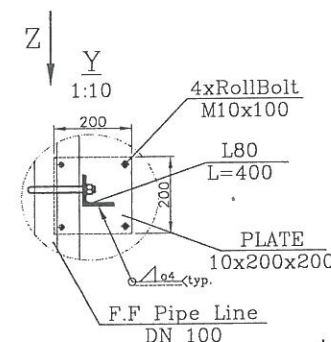
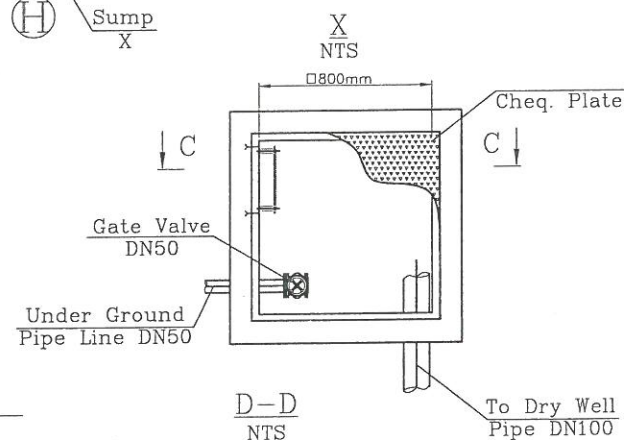
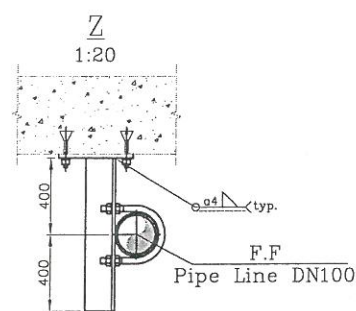
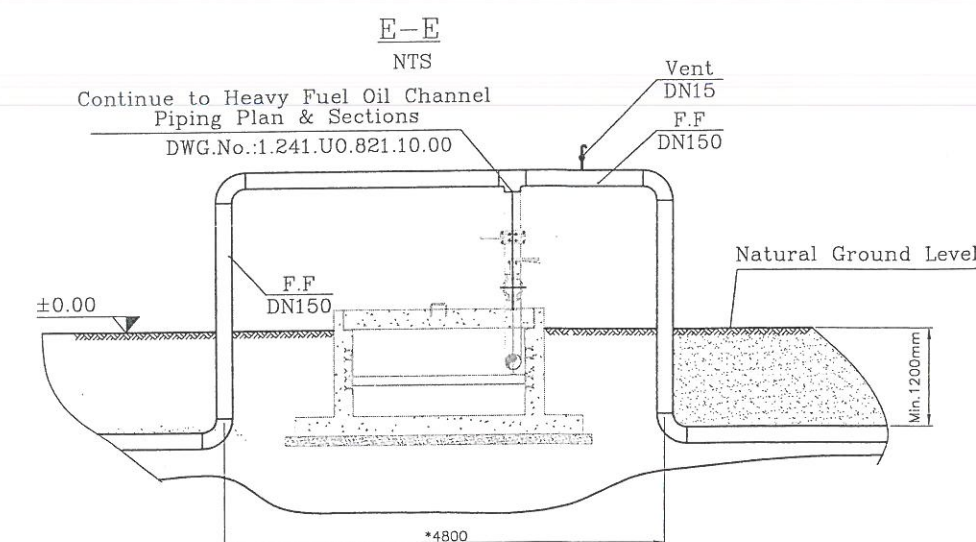
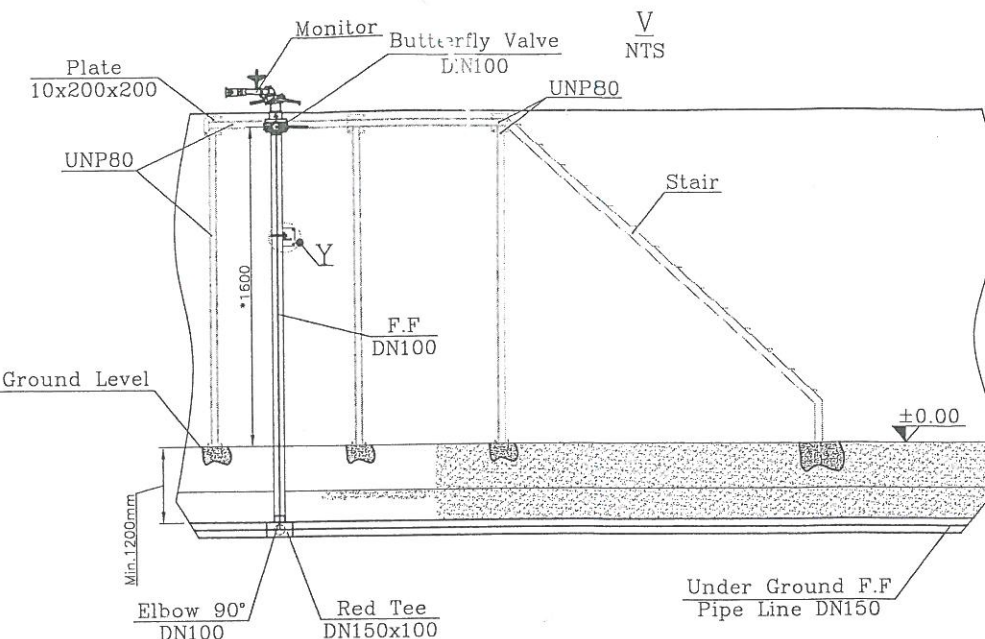
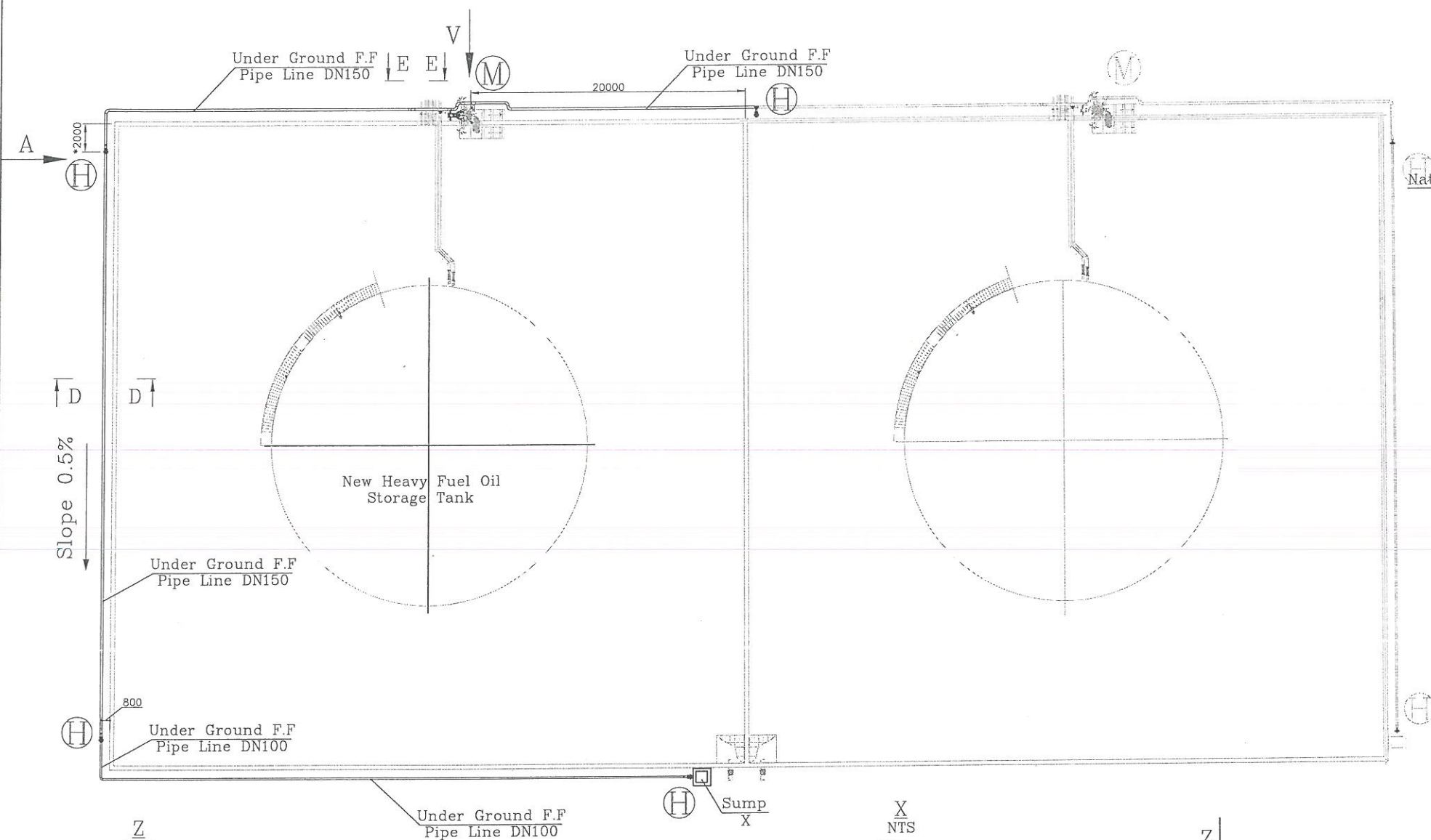


LEGEND:

F.W: FOAM & WATER
F.F: FIRE FIGHTING WATER
NOTE:

- *1.DIMENSIONS SHOULD BE ADJUSTED AT SITE.
- 2.SUPPORTS SHOULD NOT MEET THE WELDING LINES OF ROOF PLATES.
- 3.DISTANCE BETWEEN SPRAY NOZZLES 1.5M.

Drawing Title New Heavy Fuel Oil Storage Tank		Customer Payvand Golestan Cement Co.	
Fire Fighting Piping Plan & Section		Drawing No. 1.242.UO.821.15.00	
Rev. 0	Page 1	Rev. 0	Page 1
1401	Date 06/10	Signature [Signature]	Rev. [Rev.]
Designed	06/10	Checked	06/10
Drawn	06/10	Approved	06/10
Project No.	Scale 1:75	File Name	Disk No.
IRAN INDUSTRIAL DESIGN CO.			

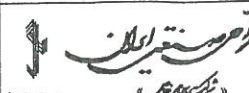


LEGEND:

M: FIRE FIGHTING MONITOR
H: FIRE FIGHTING HYDRANT.
F.F: FIRE FIGHTING WATER.

NOTE:

- *DIMENSIONS SHOULD BE ADJUSTED AT SITE.
- ALL DIMENSIONS ARE IN MM, ELEVATIONS & COORDINATES ARE IN METER'S UNLESS OTHERWISE NOTED.
- IN ORDER TO PREVENT FREEZING ALL FIRE FIGHTING PIPES SHOULD BE DRAINED IN WINTER.
- UNDER GROUND PIPE LINE SHOULD BE COATED & LAMINATED ACCORDING TO IPS-E-TP-270 OR IPS-M-TP-310.

Drawing Title		Customer		Drawing No.		Rev.		Page		Page		
New Heavy Fuel Oil Storage Tank		Payvand Golestan Cement Co.		1.242.UO.821.16.00				1		1		
Fire Fighting Piping Plan & Sections												
		1401	Date	Signature	Rev.	Description	By	Date				
		Designed	05/21	Mahmoudi								
		Drawn	05/21	Mahmoudi								
		Checked	05/21	Mahmoudi								
		Approved	05/21	Mahmoudi								
		Project No.	Scale		File Name		Disk No.					
		1:200										