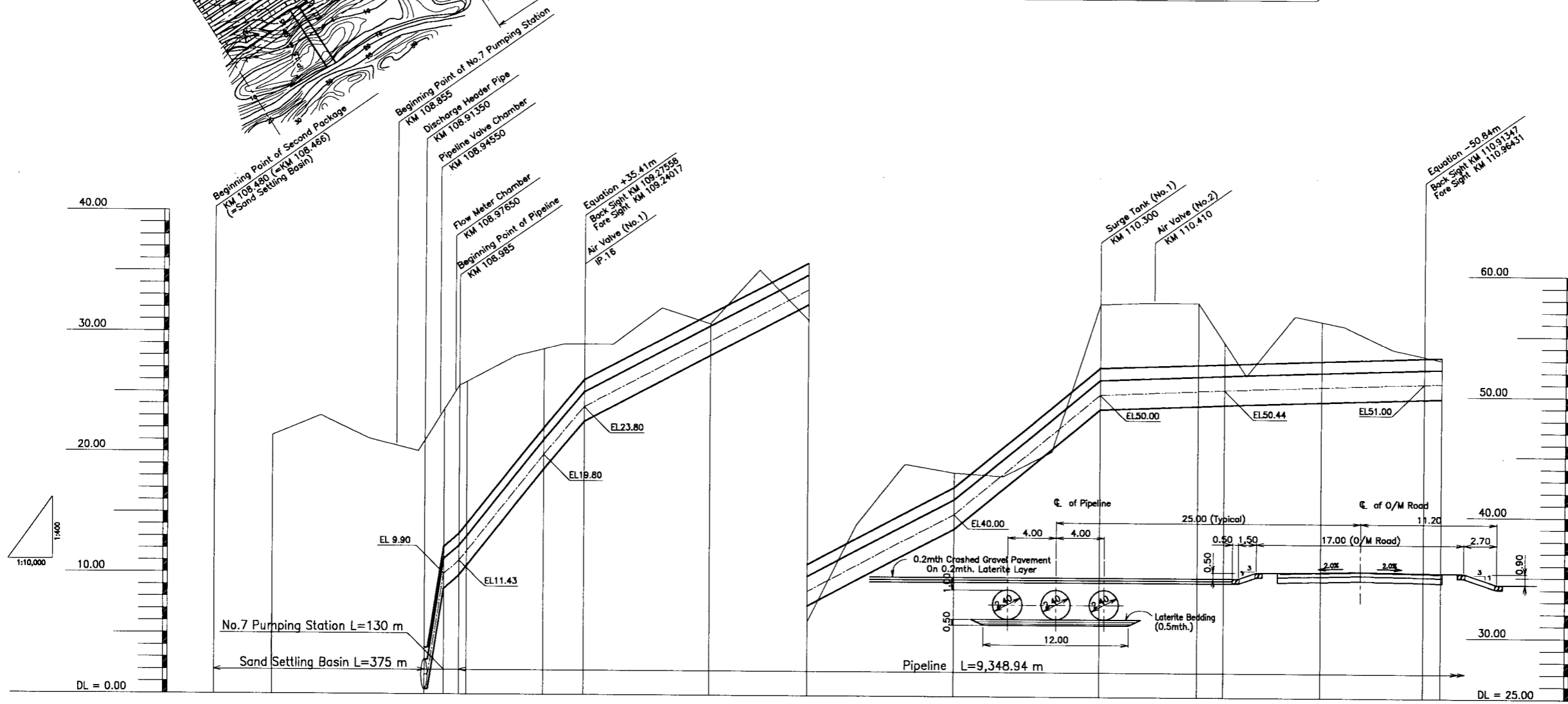


- NOTES:**
- This drawing shows "DISTANCE KM 108.480(=KM 108.466) to KM 111.000".
 - The DISTANCE(KM)s are the distance from Suez Siphon.
 - The distances of principal peg (IP) are shown in the following Table.

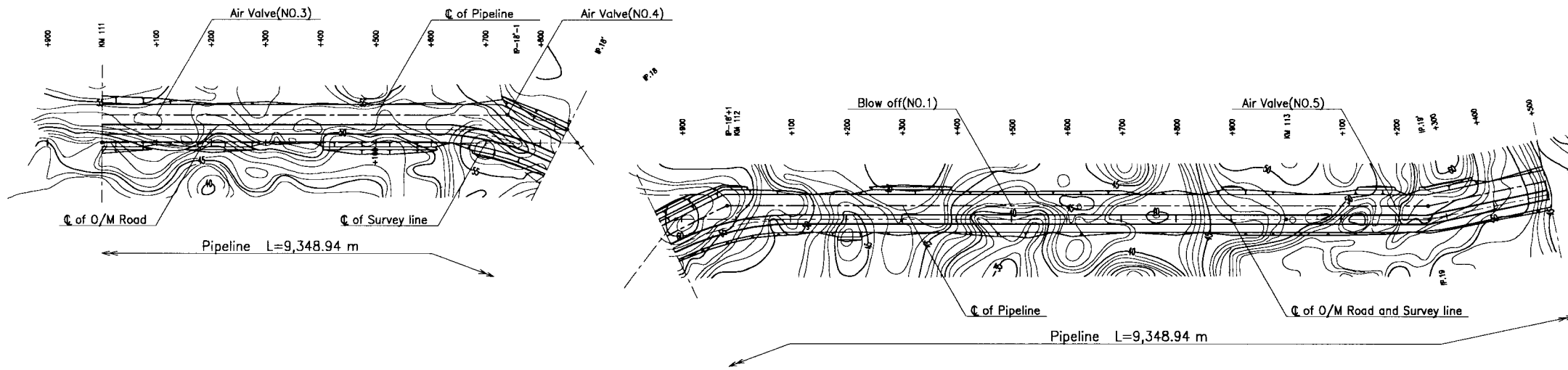
Principal peg	Distance (M)
IP-16	109,240.17
IP-17	110,790.18



DISTANCE (KM)	108.400	108.466	108.500	108.600	108.700	108.800	108.900	108.945	108.985	109.100	109.167	109.200	109.240	109.300	109.400	109.500	109.600	109.700	109.800	109.900	110.000	110.100	110.200	110.300	110.400	110.500	110.535	110.600	110.700	110.750	110.800	110.900	110.945	111.000
ORIGINAL GROUND SURFACE				21.35	23.01	21.08	20.06	25.52	27.96	28.88	29.01	32.02	30.75	35.21	31.04	39.07	44.16	43.46	45.25	57.50	57.67	57.63	50.44	51.61	56.60	55.74	53.86	52.95						
ELEVATION OF PIPE CENTER								11.43	17.01	19.80	21.55	23.80	25.08	27.21	29.34	31.47	33.60	35.74	37.87	40.00	43.33	46.67	50.00	50.17	50.35	50.44	50.51	50.67	50.72	50.74	50.90	51.00	51.05	52.95
GRADIENT OF PIPE CENTER								$i=0.048466$ $L=172.92$ $H=6.37$	$i=0.033333$ $L=171.96$ $H=6.00$				$i=0.021321$ $L=759.83$ $H=16.20$							$i=0.033333$ $L=300.00$ $H=10.00$			$i=0.001735$ $L=253.65$ $H=0.44$			$i=0.001556$ $L=359.82$ $H=0.56$					$i=0.001279$ $L=781.83$ $H=1.00$			
DIAMETER & WALL THICKNESS	Dia 2400mm Wall Thickness t=22mm																																	
TOP OF BACKFILL EMBANK. ON PIPE								13.65	19.23	22.02	23.77	26.02	27.30	29.43	31.56	33.69	35.82	37.96	40.09	42.22	45.55	48.89	52.22	52.39	52.57	52.66	52.73	52.89	52.94	52.96	53.12	53.22	53.27	
HORIZONTAL ANGLE								IP-16 IA=34-50-00																IP-17-1 IA=10-54-59			IP-17 IA=21-49-57		IP-17+1 IA=10-54-59					

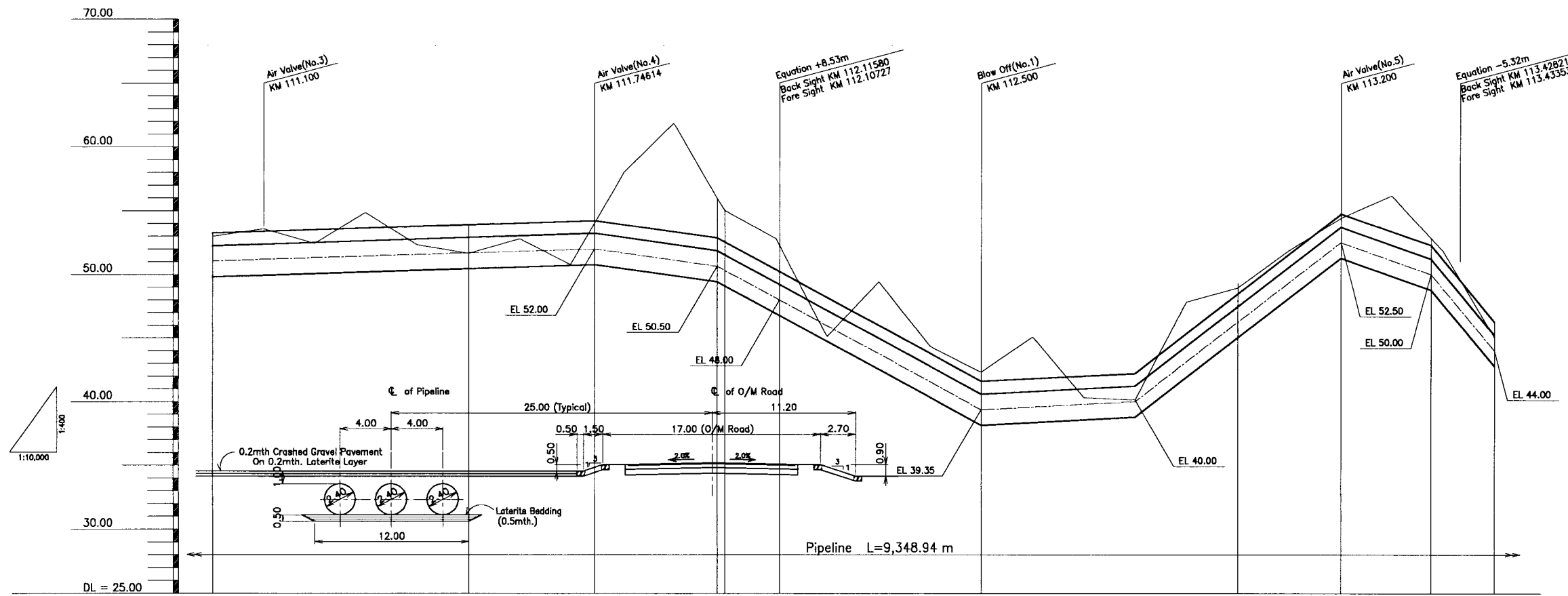
THE ARAB REPUBLIC OF EGYPT
 MINISTRY OF WATER RESOURCES AND IRRIGATION
 NORTH SINAI DEVELOPMENT ORGANIZATION
THE NORTH SINAI INTEGRATED RURAL DEVELOPMENT PROJECT (PHASE III)
 CONVEYANCE SYSTEM OF EL SHEIKH GABER EL SABBABH CANAL
 BETWEEN KM 108.466 AND KM 118.560
 EL SALAAM No.7 (BIR EL ABD) PUMPING STATION
DELIVERY PRESSURED PIPELINE PLAN AND PROFILE OF PIPELINE (1/4)
 BETWEEN KM 108.480 AND KM 111.000
 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 SANYU CONSULTANTS INC./PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED	
TRACED	
CHECKED	
APPROVED	
DRAWING NO.	DPP-201



- NOTES:**
- This drawing shows "DISTANCE KM 111.000 to KM 113.500".
 - The DISTANCE(KM)s are the distance from Suez Siphon.
 - The distances of principal pip(IP) are shown in the following Table.

Principal pip	Distance (M)
IP-18	111,890.26
IP-19	113,380.24



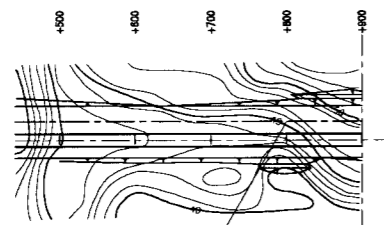
DISTANCE (KM)	111.000	111.100	111.200	111.300	111.400	111.500	111.600	111.700	111.800	111.900	112.000	112.100	112.200	112.300	112.400	112.500	112.600	112.700	112.800	112.900	113.000	113.100	113.200	113.300	113.400	113.500		
ORIGINAL GROUND SURFACE	52.95	53.56	52.43	54.87	52.33	51.66	52.80	50.78	58.07	61.87	55.03	52.80	45.10	48.42	44.33	42.30	45.08	40.30	40.14	47.81	48.94	51.87	54.42	56.17	51.85	45.05		
ELEVATION OF PIPE CENTER	51.05	51.17	51.30	51.43	51.56	51.69	51.81	51.94	52.00	51.63	51.07	50.78	48.15	43.76	41.55	39.35	39.57	39.78	40.00	43.13	45.25	48.38	52.50	51.09	50.00	49.12	44.00	
GRADIENT OF PIPE CENTER	i=0.001279 L=761.85 H=1.00		i=0.008087 L=246.44 H=1.50		i=0.02029 L=123.32 H=2.50		i=0.022025 L=392.73 H=8.65		i=0.002167 L=300.00 H=0.65		i=0.031250 L=400.00 H=12.50		i=0.014078 L=177.58 H=2.50		i=0.05124 L=117.10 H=6.00													
DIAMETER & WALL THICKNESS	Dia #2400mm Wall Thickness t=22mm																											
TOP OF BACKFILL EMBANK. ON PIPE	53.27	53.39	53.52	53.65	53.78	53.91	54.03	54.16	54.22	53.85	53.29	52.70	50.22	48.18	45.98	43.77	41.57	41.79	42.00	42.22	45.35	48.47	51.80	54.72	53.31	52.22	51.34	46.22
HORIZONTAL ANGLE	IP-18'-1 IA= 26-25-00										IP-18'+1 IA= 26-25-00										IP-19' IA= 12-10-00							

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 CONVEYANCE SYSTEM OF EL SHEIKH GABER EL SABBABH CANAL BETWEEN KM 108.466 AND KM 118.560
 EL SALAAM No.7 (BIR EL ABD) PUMPING STATION
DELIVERY PRESSURED PIPELINE PLAN AND PROFILE OF PIPELINE (2/4)
 BETWEEN KM 111.000 AND KM 113.500

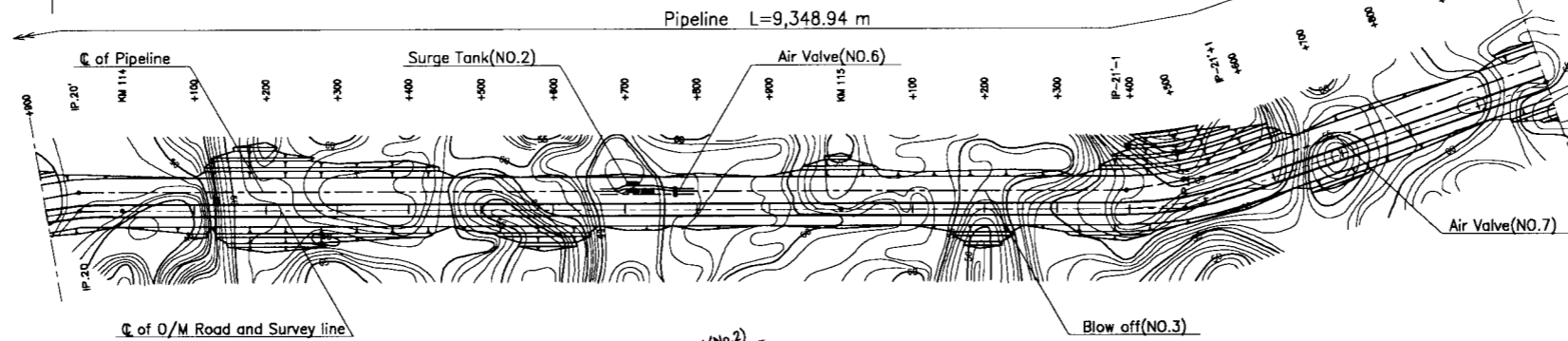
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 SANYU CONSULTANTS INC. PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED	
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DRAWING NO.	DPP-202

Pipeline L=9,348.94 m



Blow off(NO.2)

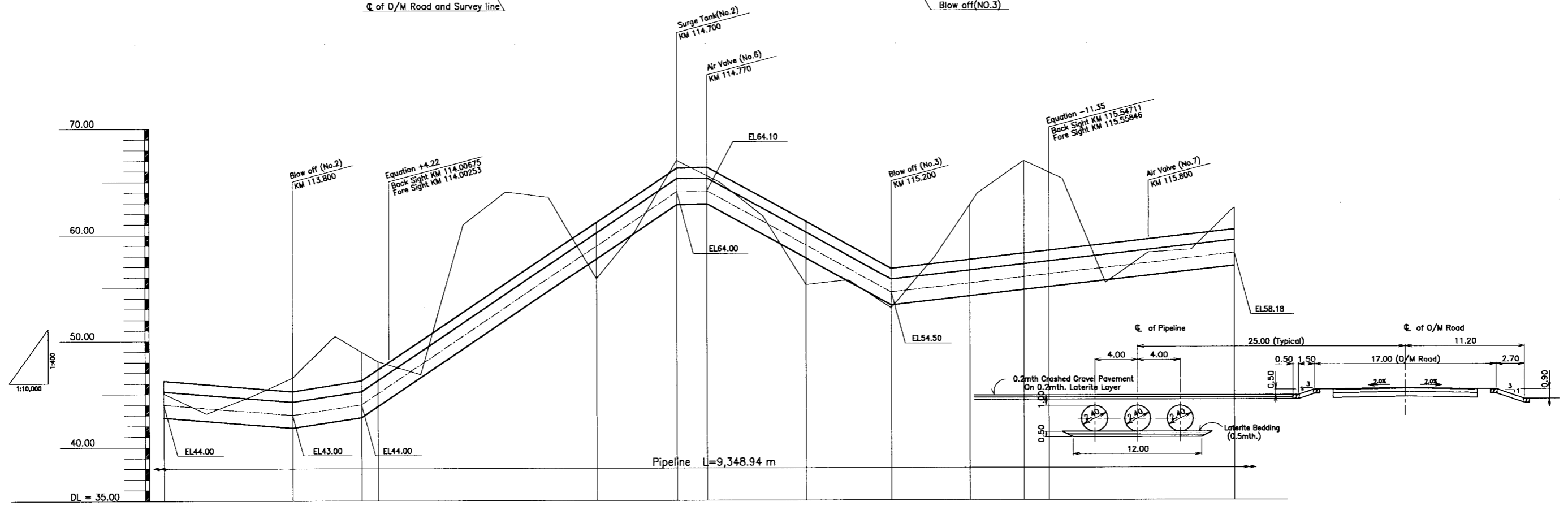


Pipeline L=9,348.94 m

NOTES:

- 1.This drawing shows "DISTANCE KM 113.500 to KM 116.000".
- 2.The DISTANCE(KM)s are the distance from Suez Siphon.
- 3.The distances of principal peg(IP) are shown in the following Table.

Principal peg	Distance (M)
IP-20	113,960.25
IP-21	115470.30



DISTANCE (KM)	113.500	113.600	113.700	113.800	113.900	IP-20' 113.96025	114.000	114.100	114.200	114.300	114.400	114.500	114.600	114.700	114.770	114.800	114.900	115.000	115.100	115.200	115.300	IP-21'-1 115.47030	115.500	IP-21'+1 115.54711	115.600	115.700	115.800	115.900	116.000	
ORIGINAL GROUND SURFACE	45.05	43.16	44.71	48.51	50.43	48.04	48.04	48.80	60.95	64.03	63.50	55.83	60.17	66.98	64.91	61.67	55.20	55.85	53.01	57.82	63.81	66.90	65.21	55.38	58.23	58.48	62.47			
ELEVATION OF PIPE CENTER	44.00	43.67	43.33	43.00	43.62	44.00	45.13	47.82	50.52	53.22	55.91	58.61	61.30	64.00	64.10	63.43	61.20	58.97	56.73	54.50	54.97	55.35	55.43	55.84	56.12	56.31	56.78	57.25	57.71	58.18
GRADIENT OF PIPE CENTER	$i=0.003333$ $L=300.00$ $H=1.00$		$i=0.006159$ $L=162.56$ $H=1.00$		$i=0.026960$ $L=741.86$ $H=20.00$				$i=0.001429$ $L=70.00$ $H=0.10$				$i=0.022326$ $L=430.00$ $H=9.60$				$i=0.004666$ $L=788.65$ $H=3.68$													
DIAMETER & WALL THICKNESS	Dia #2400mm Wall Thickness t=22mm																													
TOP OF BACKFILL EMBANK. ON PIPE	46.22	45.89	45.55	45.22	45.84	46.22	47.35	50.04	52.74	55.44	58.13	60.83	63.52	66.22	66.32	65.65	63.42	61.19	58.95	56.72	57.19	57.57	57.65	58.06	58.34	58.53	59.00	59.47	59.93	60.40
HORIZONTAL ANGLE	IP-20' IA= 9-40-00															IP21'-1 IA=10-00-00					IP21'+1 IA=10-00-00									

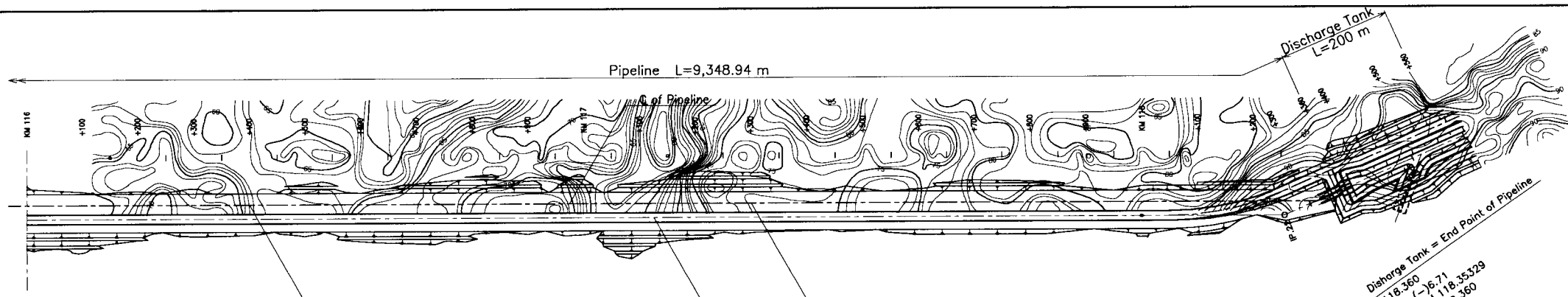
THE ARAB REPUBLIC OF EGYPT
MINISTRY OF WATER RESOURCES AND IRRIGATION
NORTH SINAI DEVELOPMENT ORGANIZATION

THE NORTH SINAI INTEGRATED RURAL DEVELOPMENT PROJECT (PHASE III)

CONVEYANCE SYSTEM OF EL SHEIKH GABER EL SABBAAH CANAL
BETWEEN KM 108.466 AND KM 118.560
EL SALAAM No.7 (BIR EL ABD) PUMPING STATION
DELIVERY PRESSURED PIPELINE PLAN AND PROFILE OF PIPELINE (3/4)
BETWEEN KM 113.500 AND KM 116.000

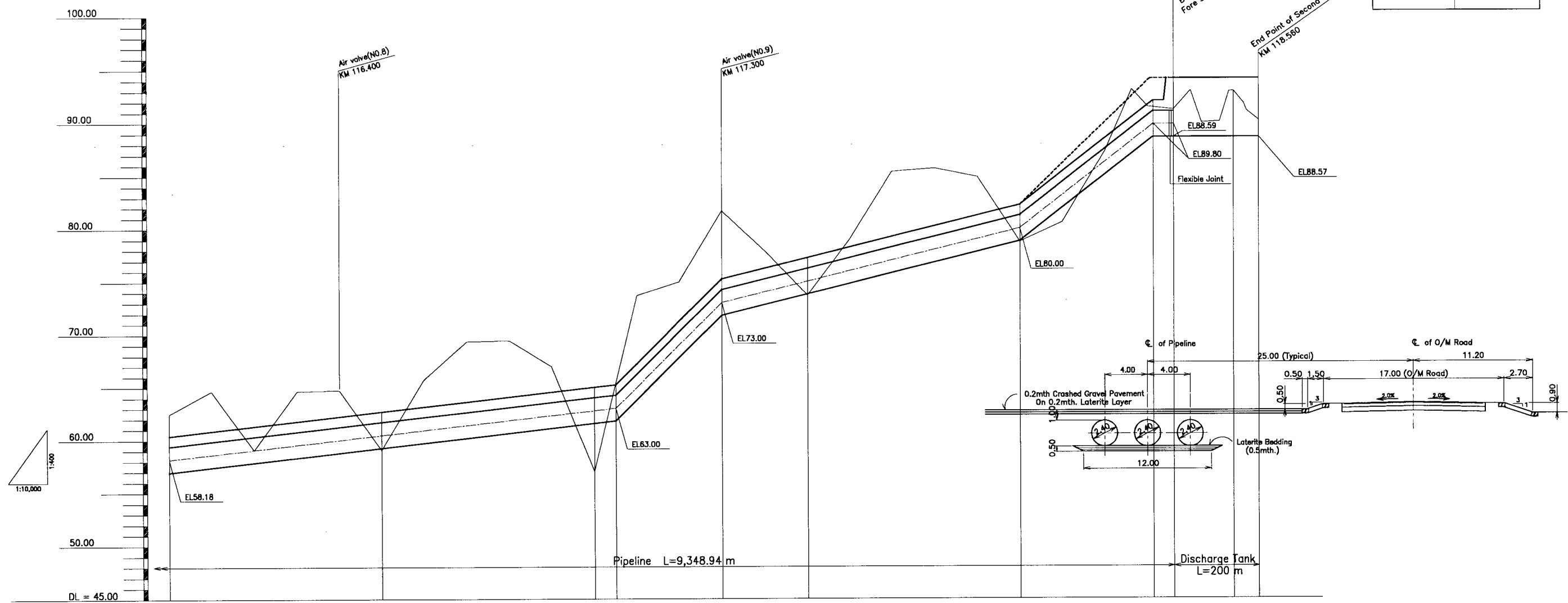
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
SANYU CONSULTANTS INC./PACIFIC CONSULTANTS INTERNATIONAL

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CHECKED	
APPROVED	
DRAWING NO.	DPP-203



- NOTES:**
- This drawing shows "DISTANCE KM 116.000 to KM 118.560".
 - The DISTANCE(KM)s are the distance from Suez Siphon.
 - The distances of principal peg(IP) are shown in the following Table.

Principal peg	Distance (M)
IP-22	118,262.68



DISTANCE (KM)	116.000	116.100	116.200	116.300	116.400	116.500	116.600	116.700	116.800	116.900	117.000	117.050	117.100	117.200	117.300	117.400	117.500	117.600	117.700	117.800	117.900	118.000	118.100	118.200	118.300	118.360	118.400	118.500	118.560	
ORIGINAL GROUND SURFACE	62.47	64.62	59.08	64.63	64.73	59.07	65.72	69.35	69.45	66.98	57.00	63.00	65.00	74.97	81.67	77.87	73.67	78.99	85.36	85.67	84.86	80.00	83.20	87.26	91.44	91.15	92.05	92.94	92.92	90.18
ELEVATION OF PIPE CENTER	58.18	58.64	59.10	59.56	60.02	60.48	60.83	61.39	61.85	62.31	62.77	63.00	65.00	69.00	73.00	74.00	75.00	76.00	77.00	78.00	79.00	80.00	83.20	86.41	88.80	89.80	88.59	88.59	88.58	88.57
GRADIENT OF PIPE CENTER	$i=0.004590$ $L=1060.00$ $H=4.82$										$i=0.04000$ $L=250.00$ $H=10.00$					$i=0.01000$ $L=700.00$ $H=7.00$				$i=0.03203$ $L=305.94$ $H=9.80$			$i=0.010000$ $L=200.00$ $H=0.02$							
DIAMETER & WALL THICKNESS	Dia ϕ 2400mm Wall Thickness $t=22$ mm																													
TOP OF BACKFILL EMBANK. ON PIPE	60.40	60.86	61.32	61.78	62.24	62.70	63.15	63.61	64.07	64.53	64.99	65.22	67.22	71.22	75.22	76.22	77.22	78.22	79.22	80.22	81.22	82.22	85.42	88.63	91.86	92.02	92.02	92.02	92.02	
HORIZONTAL ANGLE	IP-22' $\alpha=30-1-20$																													

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 EL SALAAM No.7 (BIR EL ABD) PUMPING STATION
DELIVERY PRESSURED PIPELINE PLAN AND PROFILE OF PIPELINE (4/4) BETWEEN KM 116.000 AND KM 118.560
 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 SANYU CONSULTANTS INC., PACIFIC CONSULTANTS INTERNATIONAL

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DRAWING NO.	DPP-204