



Lanka IOC

LANKA IOC PLC
LEVEL 20, WEST TOWER, WORLD TRADE CENTRE,
ECHELON SQUARE,
COLOMBO - 01
SRI LANKA

- 1 TENDER NUMBER :LIOC/ ENG/ PT/ 08/ 2017-18
- 2 NAME OF WORK : SUPPLY, LAYING AND WELDING OF 10" STEEL PIPELINES FOR PETROLEUM PRODUCT (BASE OIL) AT LIOC TERMINAL TRINCOMALEE
- 3 PLACE OF WORK: LIOC TERMINAL TRINCOMALEE
- 4 COMPLETION TIME: 08 WEEKS
- 5 BID BOND: LKR 275,000.00 (BY DD/ BG AS PER FORMAT ISSUED IN TENDER)
- 6 DUE DATE & TIME : 02/ 01/ 2018 AT 11:30 HRS

SCHEDULE OF WORKS

SL NO	DESCRIPTION OF WORK	QTY	RATE(LKR)	UNIT	AMOUNT (LKR)
PART 1 : PIPELINE WORKS FROM PUMP HOUSE TO PRODUCT TANK NO 11 FOR BASE OIL					
1	PIPELINE INSTALLATION WORKS Laying and welding (3 runs min.) above ground/ below ground pipelines from supplied MS pipes (pipes to be supplied anywhere within the depot and the contractor shall shift the same to the site of work at no extra cost with all leads and lifts) of the following sizes as described below, including cutting bevelling and fixing the supplied specials such as elbows, bends tees, reducers etc complete The job includes blast cleaning of the outer surfaces of above ground piping (product) to SA 2.5 ; AG piping shall be painted with one coats of Zinc Ethyl Silicate primer for a DFT of 75 microns, one coat of Epoxy Micaceous Iron Oxide (MIO) paint to a DFT of 125 microns & two coats of 2 pack aliphatic acrylic polyurethane paint for DFT of 100 microns. Total DFT of painting system shall be 300 microns (min). Finish colour of the piping shall be Aluminium. The entire works shall be completed as per enclosed specifications & directions. Note: a. The primer and paint shall be as per the list of paint manufacturers enclosed. The make and quality of paint shall be decided in consultation with LIOC prior to use. b. Pipeline colour coding shall be carried out as per LIOC specifications at no extra cost for product piping. c. Successful tenderer shall prepare the complete pipeline routing and get the same approved prior to execution of works				
1.1	PRODUCT PIPELINES Above ground pipeline to be laid on concrete pedestals (which is to be constructed as per the respective item of this schedule)/ bowser shed/ pump house and manifolds & painting the pipeline as per the specifications enclosed including colour coding coding as per IOC specifications. Welding of pipeline should conform to Radiography quality. Note: a. Any repairs to the defective welding shall be made good at no extra cost. b) The rates quoted also to include colour coding of pipelines as per the standards.				
1.1.1	250 mm dia pipes	600	5,750.00	RM	3,450,000.00
1.1.2	25 mm dia pipes	25	617.37	RM	15,434.25
1.2	Welding of the supplied WNRF flanges on the pipe lines with welding on inside and outside etc complete and as per specifications				
1.2.1	400 mm dia	2	10,307.37	NO	20,614.74
1.2.2	250 mm dia	40	6,000.00	NO	240,000.00
1.2.3	80 mm dia	4	2,061.47	NO	8,245.88

SL NO	DESCRIPTION OF WORK	QTY	RATE(LKR)	UNIT	AMOUNT (LKR)
1.2.4	25 mm dia	16	644.21	NO	10,307.36
1.3	Making flanged joints for both weld neck and blind flanges including supplying and fixing 3 mm thk non metallic compressed asbestos Fibre gaskets, studs/ nuts etc of approved make for the following sizes as per IOC specifications and site instructions. The flange joints shall also include providing and fixing 8 SWG copper wire for bonding of product pipelines.				
1.3.1	250 mm dia	14	7,875.00	NO	110,250.00
1.4	Fixing supplied GOVs/ CS gate valves/ HBV/ NRVs/ball valves of the following sizes on the pipeline including supplying & fixing 3 mm thk non metallic gaskets, studs/ nuts etc of approved make for the following sizes as per specifications and site instructions. Note: The rate quoted for the above items should include a. mechanical cleaning of the valves after erection. b. supplying and painting the valves/ fittings etc. with two coats of Zinc phosphate primer and two coats of Synthetic enamel finish paint of approved colour and shade as per colour coding specifications for fittings on product lines.				
1.4.1	400 mm dia	2	31,781.05	NO	63,562.10
1.4.2	250 mm dia	24	17,760.00	NO	426,240.00
1.4.3	80 mm dia (includes ball valves)	2	9,534.32	NO	19,068.64
1.4.4	25 mm dia (includes ball valves)	12	4,934.00	NO	59,208.00
1.5	Supplying and providing GI strips for bonding of valves & fittings to be installed in product piping . The job includes bending of GI flats including drilling of holes for bolting purposes.				
1.5.1	30mm x 6mm GI strip for fittings of size upto & including 250 mm dia	80	500.00	NO	40,000.00
1.5.2	50mm x 6mm GI strip for fitting of size 300 mm and above	10	600.00	NO	6,000.00
1.6	Carrying out hydrotesting of the newly laid product pipelines from the jetty up to and including exchange pit to a pressure not exceeding 10.5 KSC. All equipment required for conducting pressure test comprising of pipeline spools, nipples, pressure gages, pressure pumps, water tanks etc shall be supplied by the contractor. Water required for carrying out the pressure test shall be supplied by the terminal free of cost. Note: a) Pressure test to be carried out after mechanical completion of works including erection of valves & fittings and prior to undertaking the pipeline painting. b. The pressure shall be maintained for a period of 4 hrs (during day time) and pressure readings shall be submitted for review by LIOC. c. In case of repairs to piping due to leak, the pipelines shall be once again pressure tested for integrity before commissioning.				
	Piping from 300 mm - 400mm dia including all connected fittings	1	150,000.00	NO	150,000.00
1.7	Supplying, fabricating, erecting including cutting, welding, fixing in position of structural MS gratings for catwalks comprising of 25 mm X 6 mm FB for outer framework and main members; 25 mm X 3 mm FB as intermediate members bent to shape and welded as per drawings and requirement. The finished gratings shall be				

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	mechanically cleaned and painted in 2 coats of Epoxy Zinc Phosphate primer & 2 coats of Synthetic enamel finish paint as per specifications Note: Gratings shall have outer members as 25 mm X 6 mm FB.	2000	375.00	KG	750,000.00
1.9	Supply and installation of hot dip galvanized GI earth bus (Galvanizing 910 gm/M ²) as per drawing issued. The work includes drilling of holes, bending earth bus as per shape and dimensions given in the drawing including fixing the GI bus in the earth pits using necessary anchor bolts.	4	1,975.00	NO	7,900.00
1.11	Supply, fabrication, cutting, welding for saddle plates for pipeline	100	940.00	NO	94,000.00
2	SUPPLY OF ITEMS TO SITE				
2.1	Supply of MS pipes as per specifications. Note: 1. All items under this section shall be quoted for supply to site including unloading. The materials must be ordered based on ascertaining the exact requirement at the site. The materials to be supplied must also be associated with the manufacturer's test certificate for acceptance by LIOC.				
2.1.2	250 mm dia (API 5L GRADE B PSL 1)	600	10,256.40	RM	6,153,840.00
2.1.4	25 mm (BS 1387 Heavy Duty)	25	458.33	RM	11,458.25
2.2	Supply of following WRNF flanges (Class 150; ANSI B 16.9 as per BS 4360)				
2.2.1	400 mm dia	2	24,150.00		48,300.00
2.2.2	250 mm dia	40	9,332.00	NO	373,280.00
2.2.3	80 mm dia	4	1,935.00	NO	7,740.00
2.2.4	25 mm dia	16	737.00	NO	11,792.00
2.3	Supply of following BLRF flanges (Class 150; ANSI B 16.5 as per BS 4360)				
2.3.2	250 mm dia	14	15,000.00	NO	210,000.00
2.4	Supply of CS rising stem valves as per API 600 & testing as per API 598/ 6D				
2.4.1	400 mm dia valves	2	395,000.00	NO	790,000.00
2.4.2	250 mm dia valves	22	346,950.00	NO	7,632,900.00
2.4.3	80 mm dia valves	2	45,000.00	NO	90,000.00
2.4.4	25 mm dia valves	10	10,500.00	NO	105,000.00
2.5	NRV				
2.5.1	250 mm dia valves	2	346,950.00	NO	693,900.00

SL NO	DESCRIPTION OF WORK	QTY	RATE(LKR)	UNIT	AMOUNT (LKR)
2.5.2	25 mm dia valves	2	10,500.00	NO	21,000.00
2.6	1/2" Pressure Gauge arrangement	10	13,090.00		130,900.00
2.7	Supplying the following sizes of Elbows/ Tees/ Reducer made of carbon steel seamless pipes with bevelled ends as per enclosed specifications for the following sizes Note: The fittings shall be as per ASTM A 234 Grade WPB schedule 40 and dimensions as per ASME B 16.5 Note: The quantities given are only indicative. The actual quantities to be supplied will be based on the finalised drawing for pipeline routing.				
2.7.1	<u>90 Deg LR elbow (1.5D)</u>				
2.7.1.2	250 mm dia	25	14,000.00	NO	350,000.00
2.7.1.3	25mm dia	4	96.00	NO	384.00
2.7.2	<u>45 Deg Elbow (1.5D)</u>				
2.7.2.1	250 mm dia	25	8,500.00	NO	212,500.00
2.7.3	<u>Equal Tee</u>				
2.7.3.1	250 X 250 X 250 mm	11	15,950.00	NO	175,450.00
2.7.3	<u>Reducer</u>				
2.7.3.1	400mm x 250mm	2	8,000.00	NO	16,000.00
3	CIVIL WORKS FOR ROAD FORMATION, CULVERTS, PIPELINE PEDESTALS/ RCC HUME PIPES, MS STRUCTURAL WORKS ETC				
3.1	Earthwork excavation in all kinds of soil including soft rock except for hardrock for foundation including shoring, shuttering, bailing out subsoil water if necessary, back filling the sides of foundation/ pits with excavated earth and disposal of surplus earth outside depot premises as directed with all leads and lifts and as per site directions. Excavation up to 1.5m depth	250	900.00	CUM	225,000.00
3.2	Spreading, levelling excavated earth free from vegetation, ash & foreign materials etc. brought from inside the terminal in layers not exceeding 250 mm thick including all leads and lifts, watering, rolling with power roller of 8 - 10 MT capacity to its maximum dry density at optimum moisture content to the required level & profile etc complete & as per technical specifications etc and as directed by site engineer. The job also includes consolidating the original ground level of with a maximum of 6 (six) passes of 8 - 10 MT power roller prior to starting of filling operations. NOTE: a. For the purpose of this item, any land cutting that would be required within terminal area in order to arrive at the final levels shall be included as part of the rate quoted towards the item. The payment towards the item shall be made on initial and final level of GL based on consolidated land area.	100	490.00	CUM	49,000.00

SL NO	DESCRIPTION OF WORK	QTY	RATE(LKR)	UNIT	AMOUNT (LKR)
3.3	Providing and laying of plain cement concrete (PCC) of specified grade conforming to BS 8110 Part 1 for all works in foundation, plinth & superstructure. Item includes cost of all materials, mixing, pouring in position, compaction, curing, finishing etc complete as specified in detailed description. Formwork shall be paid separately. (The rate shall include dewatering of the PCC 1:3:6 using 40mm nominal size aggregates	60	15,174.00	CUM	910,440.00
3.4	Providing, bending, laying, binding & fixing in position High Yield Tor Steel Bar and MS steel bar reinforcement conforming to BS 8110 Part 1 of approved make, including supplying & providing soft annealed wire used for binding at all levels and locations for RCC work with all leads & lifts Reinforcement 6 mm - 32mm dia. Bar and links	1000	220.00	KG	220,000.00
	TOTAL				23,909,720.00
QUOTE RATE IN TERMS OF PERCENTAGE OVER ESTIMATED AMOUNT GIVEN ABOVE					
1	PLUS (+) IN FIGURES				
	PLUS (+) IN WORDS				
2	MINUS (-) IN FIGURES				
	MINUS (-) IN WORDS				
3	AT PAR				

NOTE:

- 1 The amount quoted towards the tender shall be arrived at based on applying the percentage quoted on the above indicated estimated amount.
- 2 In case "0" percentage is quoted then it shall be presumed that the tenderer shall accept to carry out the works at par.
- 3 VAT at prevailing rate shall be paid on the above quoted amount.

SVP (ENGG)
LANKA IOC PLC