

# ORIGINAL

**BILL OF QUANTITY FOR SUPPLY, INSTALLATION, COMMISSIONING AND MAINTENANCE OF THREE NOS OF PELICANS AT CHINTHAMPALAN A GARDINAR MAWATHA (IN FRONT OF POLICE STATION) / RECLEMATION ROAD (NEAR PORT ENTRANCE) / SANGARAJA MAWATHA (IN FRONT OF NO.367 GARDEN)**

DESCRIPTION	CIVIL WORKS (BILL 1) SL Rs.	SIGNAL WORKS (BILL 2) SL Rs.	SUB TOTAL (SL Rs.)
PRELIMINARIES			
THREE NOS OF PELICANS (CHINTHAMPALAN A GARDINAR MAWATHA / RECLEMATION ROAD/ SANGARAJA MW)			
Sub Total 1			
Add 10% contingensies			
<b>Sub total 2</b>			
Add 8% VAT			
<b>Tender Amount</b>			

Tendered Amount in words Rs. ....

.....

.....  
Signature of Contractor

.....  
Date

**BILL OF QUANTITY FOR SUPPLY, INSTALLATION, COMMISSIONING AND MAINTENANCE OF  
THREE NOS OF PELICANS AT CHINTHAMPALAN A GARDINAR MAWATHA (IN FRONT OF  
POLICE STATION) / RECLEMATION ROAD (NEAR PORT ENTRANCE) / SANGARAJA  
MAWATHA (IN FRONT OF NO.367 GARDEN)**

Item	Pay item	Description of Item	Unit	Qty.	Unit Cost Rs.	Amount Rs.
<b>Bill No. 1 Civil Works</b>						
1	1.00(1)	Site clearing, Removal of existing paving tiles / tar mac and handed over of reusable tiles to campbell park depot and removal of surplus material	Item	Allow		
2	1.00(2)	Remove and transport of reusable street furniture, Guardrails, existing signal light columns, Signal heads etc	Item	Allow		
3	2.00(1)	Excavation for signal column foundation for column with horizontal arm	m <sup>3</sup>	6		
4	2.00(2)	Excavation for signal column foundation for column without horizontal arm	m <sup>3</sup>	0		
4	2.00(3)	Approved ABC (Aggregate Base Course) filling with compaction.	m <sup>3</sup>	6		
5	2.00(4)	Removal of excavated surplus material of column foundation	m <sup>3</sup>	42.0		
6	3.00(1)	Cement concrete 1 : 2 : 4 (3/4") in signal column bases with horizontal arm.	m <sup>3</sup>	6.30		
8	3.00(2)	Cement concrete 1 : 2 : 4 (3/4") in signal column bases without horizontal arm.	m <sup>3</sup>	0		
7	3.00(3)	Form work for signal column bases with horizontal arm	m <sup>2</sup>	25.0		
10	3.00(4)	Form work for signal column bases without horizontal arm	m <sup>2</sup>	0		
8	4.00(1)	10mm dia. mild steel reinforcements for signal column bases	Kg	50.0		
9	4.00(1)	10mm dia. tor steel reinforcements for signal column bases	Kg	162.0		
10	5.00(1)	Supply and Lay 110mm PVC duct ( type 1000)	Lm	74		
11	5.00(2)	Construction of manholes	No	6		
12	5.00(3)	Construction of controller bases	No	3		
13	6.00(1)	Traffic management and safety	Month	1		
14		Submission of As built Drawings	Item	1		
<b>Bill No. 1 Total Carried over to Summary</b>						

	Bill No. 2 Signal Works	Unit	Qty	Rate	Amount
1	Supply, fabrication and installation of traffic signal columns of clear height 6000mm for horizontal mounting (6000mm from ground level ) for three aspects signal heads with electrical terminating unit. Horizontal arm is 7500mm. Columns to be fabricated with horizontal arm as per detail drawing. Drg. No. TDRS / SIG / OD / 03. Rate should include connecting mechanism of two columns by welding or flange mechanism system.	Nos.	4		
2	Supply, fabrication and installation of traffic signal columns of clear height 6000mm for horizontal mounting (6000mm from ground level ) for three aspects signal heads with electrical terminating unit. Horizontal arm is 6000mm. Columns to be fabricated with horizontal arm as per detail drawing. Drg. No. TDRS / SIG / OD / 02. Rate should include connecting mechanism of two columns by welding or flange mechanism system.	Nos.	2		
3	Supply and installation of three aspects ( R/A/G) or ( R/A/GA) LED traffic signal heads including green arrow of 300 mm optic dia. prepared for horizontal mounting with fixing brackets. ( Arm size is 250mm to 200mm)	Nos.	12		
4	Supply and installation of three aspects ( R/A/G) or ( R/A/GA) LED traffic signal heads of 300 mm optic dia. prepared for vertical mounting with fixing brackets. Vertical column size is 200mm.	Nos.	6		
5	Supply and installation of pedestrian two aspects (RM/GM) LED signal heads of 300mm optic dia. prepared for vertical mounting with fixing brackets for pedestrian crossings. This should contain digital Countdown heads with at least the digit size of 16 cm and audible syren system. The rate should include pedestrian waiting time shown in the same panel with different colour upon the pressing of push button. ( Vertical column size is 200mm )	Nos.	6		
6	Supply and installation of Pedestrian push Button units with 'WAIT' indicator.	Nos.	6		
7	Supply and installation of 'Waiting Pedestrian' detector cameras. Specifications mentioned in the 2.3 of the tender specification.	Nos.	6		

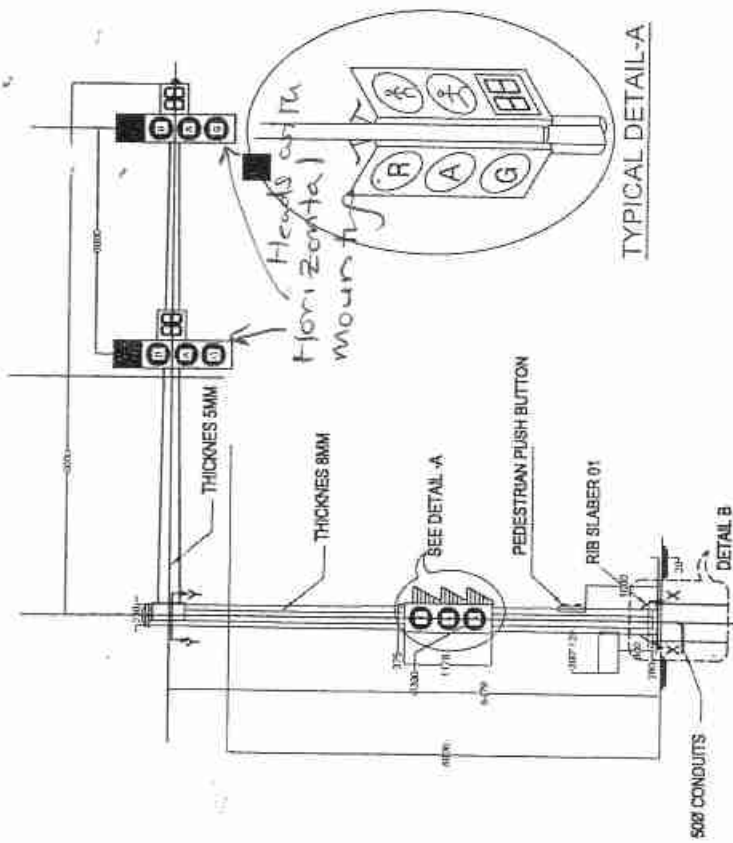
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8	Supply & Installation of vehicle count down system as per specification 2.1 count down Heads should be framed with a Target board of 0.5mm Aluminum board with durable coating. Sample of the target board should be approved before fixing.	Nos.	6		
9	Installation of Microprocessor based road traffic control system Controller as per 3.11 of specification with capacity to control the pelican crossing and should be able to link traffic signals installed in future.	Nos.	3		
10	Supply and installation of Armored 1.5mm 2 copper cable. 4 core	m	350		
	8 core	m	165		
11	Supply and Install LED Luminaire to light up the pedestrian crossing including wiring and controls as per the specifications.	Item	6		
12	Commissioning of the pelican crossings.	Item	Allow		
	<b>Bill No. 2 B Total Carried over to Summary</b>				

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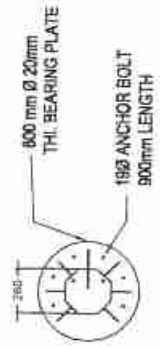
**Section -8**  
**DRAWINGS**



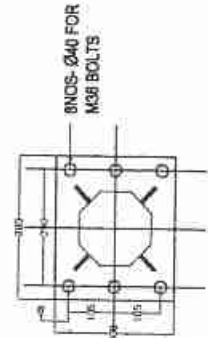
TYPICAL DETAIL-A



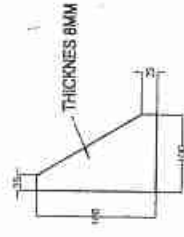
SECTION Y-Y



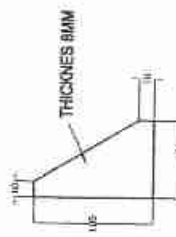
SECTION X-X



SECTION Z-Z



RIB SLABER 01 (8PCS)



RIB SLABER 01 (4PCS)

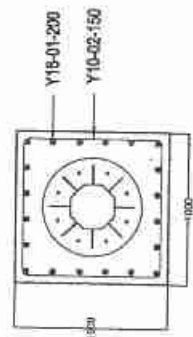
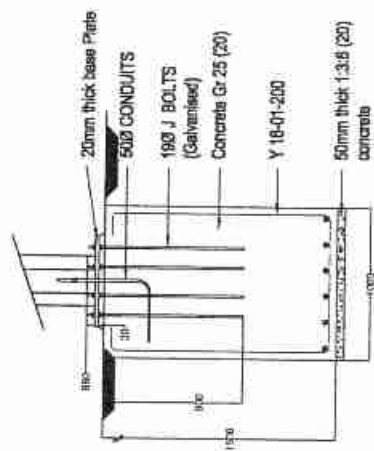
TRAFFIC SIGNAL COLOUMN-TYPE E

Notes:

- Dimensions shown are in millimeters unless indicated otherwise.
- Traffic signal head arrangement of the pole may change as per the requirement given in Head Arrangement Drawing
- Pole bearing plates and mounting coupling shall be Hot Galvanized after fabrication, then powdercoated (white colour)
- Material of the Pole : Q235. Cross Shape : Octagonal
- Diameter of the main pole : At top 230 at bottom 280
- Diameter of the arm : At top 100 at bottom 180
- All welding are full welding, no pores or welding defects
- SPCs of M16-90 bolts and nuts for connection between arm and pole
- All signal lights shall be low power consuming Light-Emitting Diodes (LEDs), of the high intensity type possessing high resistance to shock and vibration. Equipment shall comply with BS 592 (or equivalent international standard) and shall be vermin proof.
- All lanterns shall be of 300 mm in diameter.
- All signal heads and the optical systems shall be a combination of the high intensity LED type with high rate of durability. Equipment shall be to the IP 55 to ISEN 60529 /IEC 60529. Suitable visors shall be fitted to all optical units. Louvers and sighting screens shall be supplied to give the most efficient
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NOTE

R	RED LIGHT
A	AMBER LIGHT
G	GREEN LIGHT
☐	COUNT DOWN

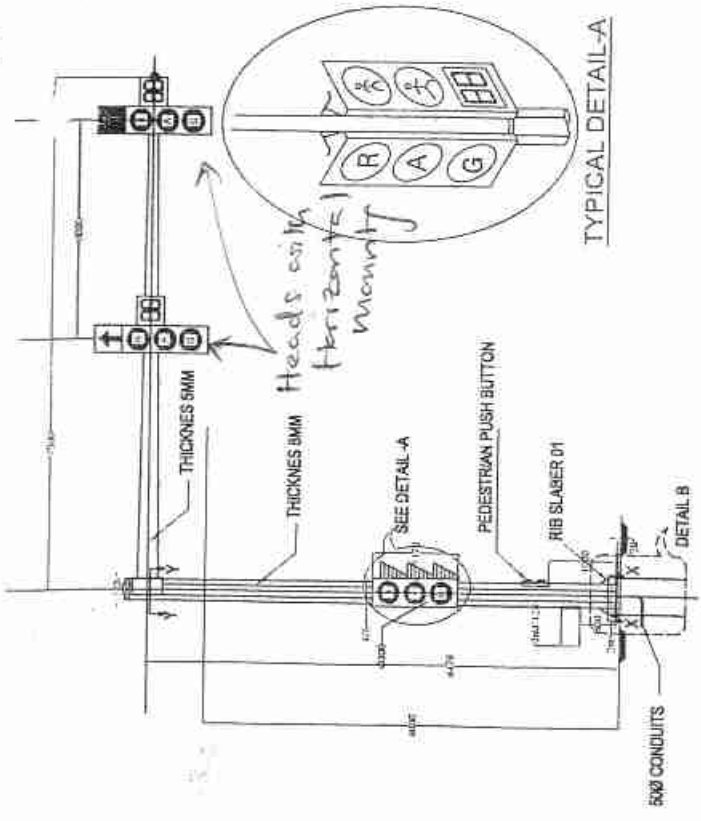


DETAILS B - FOUNDATION

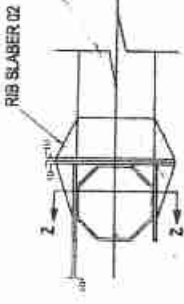
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COLOMBO MUNICIPAL COUNCIL  
MUNICIPAL ENGINEER'S DEPARTMENT

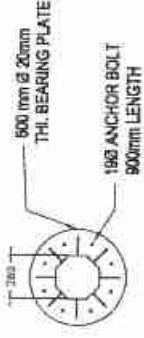
TITLE : TYPICAL DRAWING FOR SIGNAL POST	
SCALE - NOT TO SCALE	DESIGN ENGINEER
DATE : 12-06-2020	DEPUTY DIRECTOR ENGINEER
TDRS/SIG/OD/C/2	DIRECTOR ENGINEER (TDRS)
DATE	DEPUTY MUNICIPAL COMMISSIONER (E.S)



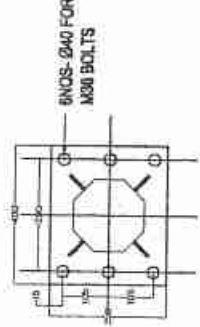
**TYPICAL DETAIL-A**



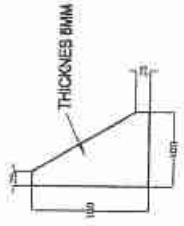
**SECTION Y-Y**



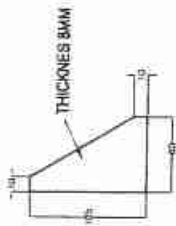
**SECTION X-X**



**SECTION Z-Z**



**RIB SLABER 01 (8PCS)**



**RIB SLABER 01 (4PCS)**

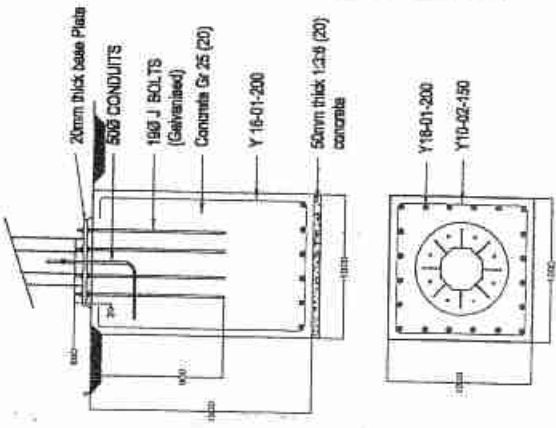
**TRAFFIC SIGNAL COLOUMN-TYPE F**

**NOTES:**

- Dimensions shown are in millimeters unless indicated otherwise.
- Traffic signal head arrangement of the pole may change as per the requirement given in Head Arrangement Drawing.
- Pole bearing plates and mounting coupling shall be Hot Galvanized after fabrication, then powdercoated (white colour).
- Material of the Pole : Q355. Cross Shape : Octagonal
- Diameter of the main pole : At top 230 at bottom 280
- Diameter of the arm : At top 100 at bottom 180
- All Welding arm full welding, no pores or welding defects
- 8PCS of M36\*90 bolts and nuts for connection between arm and pole
- All signal lights shall be low power consuming Light-Emitting Diodes (LEDs) of the High Intensity type possessing high resistance to shock and vibration. Equipment shall comply with BS 505 (or equivalent international standard) and shall be vermin proof.
- All lanterns shall be of 300 mm in diameter.
- All signal heads and the optical systems shall be a combination of the high intensity LED type with high rate of durability. Equipment shall be to the IP 55 to IEC 60529 (IEC 60529). Suitable visors shall be fitted to all optical units. Louvers and sighting screens shall be supplied to give the most efficient

**NOTE**

R	RED LIGHT
A	AMBER LIGHT
G	GREEN LIGHT
BB	COUNT DOWN



**DETAILS B - FOUNDATION**

<b>COLOMBO MUNICIPAL COUNCIL</b> MUNICIPAL ENGINEER'S DEPARTMENT	
TITLE: <b>TYPICAL DRAWING FOR SIGNAL POST</b>	
SCALE: NOT TO SCALE	DESIGN ENGINEER:
DATE: 13-06-2020	DEPUTY DIRECTOR ENGINEER
TDRS/SIG/OD/03	DIRECTOR ENGINEER (TDHS)
DATE:	DEPUTY MUNICIPAL COMMISSIONER (E.S)

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**SECTION 9**  
**STANDARD FORMS (BID)**



**Note:**

It is the responsibility of bidders to comply with all the requirements given in the bidding document. Failure to non compliance with any of the may be a reason for rejection of the bid.

**Notes on Standard Forms:**

- Bidders shall submit the completed form of bid security/Bid Securing Declaration as appropriate in compliance with the requirements of the bidding documents.
- Bidders should not complete the Form of Agreement at the time of preparation of bids.
- The successful bidder will be required to sign the Form of Agreement, after the award of contract.
- Any corrections or modifications to the accepted bid resulting from arithmetic corrections, acceptable deviations, or quantity variations in accordance with the requirements of the bidding documents should be incorporated into the Agreement.
- The Form of Performance security, Form of Advance Payment Security and Form of Retention Money Guarantee should not be completed by the bidders at the time of submission of bids.
- The successful bidder will be required to provide these securities in compliance with the requirements herein or as acceptable to the Employer.

**FORM OF BID SECURITY**

..... [ insert issuing agency's name, and address of issuing branch or office]

**Beneficiary :Municipal Commissioner, Colombo Municipal Council, Town Hall, Colombo 7**

**Date :..... [ insert (by issuing agency) date]**

**BID GUARANTEE No: ..... insert (by issuing agency number]**

We have been informed that ..... [insert (by issuing agency) name of the Bidder] (hereinafter called "the Bidder") has submitted to you its bid dated ..... ] insert (by issuing agency) date] (hereinafter called "the Bid") for improvements to ..... (insert name of contract)for Bids No. .... (insert reference number of the bid).

Furthermore, we understand that, according to your conditions, Bids must be supported by a Bid Guarantee.

At the request of the Bidder, we ..... [insert name of issuing agency] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of ..... [insert amount in figures] ..... [ insert amount on words] upon receipt by us of your first demand in writing accompanied by a written statement stating that the Bidder is in breach of its obligation(s) under the bid conditions, because the Bidder:

- a) Has withdrawn its Bid during the period of bid validity specified; or
- b) Does not accept the correction of errors in accordance with the instructions to Bidders (hereinafter "the ITB");or
- c) Having been notified of the acceptance of its Bid by the Employer during the period of bid validity, (i) fails or refuses to execute the contract Form, if required, or (ii) fails or refuses to furnish the Performance Security , in accordance with the ITB.

This Guarantee shall expire: (a) if the Bidder is the successful bidder, upon our receipt of copies of the Contract signed by the Bidder and of the Performance Security issued to you by the Bidder: or (b) if the Bidder is not the successful bidder, upon the earlier of the successful bidder furnishing the performance security, otherwise it will remain in force up to .....

Consequently, any demand for payment under this Guarantee must be received by us at the office on or before that date.

[ signature(s) and name(s) of authorized representative(s)]

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**SECTION 10**

**Other documents**