

ELECTRICAL WORKS

Table of Contents

	Page No.
1.1 Conduit Pipes & Conduit Accessories	1
1.1.1 Conduit Pipe	1
1.1.2 Flexible Pipe	1
1.1.3 Conduit Accessories	1
1.1.4 Installation Instructions	1
1.1.5 Measurement	2
1.2 Wires, Cables and Cords	3
1.2.1 Wires & Cords	3
1.2.2 Installation Instructions	3
1.3 Point Wiring, Circuit Wiring and Socket Outlet Wiring	4
1.3.1 General	4
1.3.2 Measurement	4
1.4 Fans	5
1.4.1 General	5
1.4.2 Installation Instructions	5
1.4.3 Exhaust Fans	5
1.4.4 Measurement	5
1.5 Light Fixtures (Internal)	6
1.5.1 General	6
1.5.2 Incandescent Light Fixtures	6
1.5.3 Fluorescent Light Fixtures	6
1.5.4 Installation Instructions	6
1.5.5 Measurement	7
1.5.6 Make	7

1.6	Power Cable	8
1.6.1	General	8
1.6.2	H.T. Cables (11 kV power Cable)	8
1.7	L.T. Cables	9
1.7.1	General	9
1.7.2		9
1.7.3		9
1.7.4		9
1.7.5		9
1.7.6		9
1.7.7		9
1.7.8		9
1.7.9		9
1.7.10		9
1.7.11		9
1.7.12	Cables Terminations	9
1.7.13	Cable Markers	9
1.7.14	Cables Joints	10
1.7.15	Installation Instructions	10
1.7.16		10
1.7.17		10
1.7.18		10
1.7.19		10
1.7.20		10
1.7.21		10
1.7.22		10
1.7.23	Measurement	10
1.7.24	Make	10
1.8	Main L.T. Switchboard	11
1.8.1	General	11
1.8.2	Air Circuit Breaker	11
1.8.3	Moulded Case Circuit Breakers	12
1.8.4	Load Break Switches	12
1.8.5	HRC Fuses	12

1.8.6	Bus Bars and Connections	12
1.8.7	Enclosures	12
1.8.8	Earthing	12
1.8.9	Accessories	13
1.8.10	Testing	13
1.8.11	Installation Instruction	13
1.8.12	Measurement	13
1.9	Sub-Main Board	14
1.9.1	Measurement	14
1.10	Distribution Board	15
1.10.1	General	15
1.10.2	Components	15
1.10.3	MCB's	15
1.10.4	Installation Instructions	15
1.10.5	Testing	15
1.10.6	Measurement	15
1.10.7	Make	15
1.11	Earthing	16
1.11.1	General	16
1.11.2	Earth Continuity Conductor	16
1.11.3	Earth Point	16
1.11.4	Earth Connecting Point	16
1.11.5	Earth Electrode	16
1.11.6	Manhole	16
1.11.7	Installation Instructions	16
1.11.8	Measurement	17
1.12	Light Fixtures (External)	18
1.12.1	General	18
1.12.2		18
1.12.3		18
1.12.4		18

1.12.5		18
1.12.6		18
1.12.7		18
1.12.8		18
1.12.9		18
1.12.10		18
1.13	Lamps	19
1.13.1	General	19
1.13.2		19
1.13.3		19
1.13.4		19
1.13.5		19
1.13.6		19
1.14	Garden / Flood Light Poles	20
1.14.1		20
1.14.2		20
1.14.3		20
1.14.4		20
1.14.5		20
1.14.6		20
1.14.7		20
1.14.8		20
1.14.9		20
1.14.10		20
1.14.11		20
1.14.12		20
1.14.13		21
1.14.14		21
1.14.15		21
1.14.16		21
1.14.17		21
1.14.18		21
1.14.19		21
1.14.20	Make	21

1.15	Service Terminal Boxes	22
1.15.1		22
1.15.2		22
1.15.3		22
1.15.4		22
1.15.5		22
1.15.6		22
1.15.7		22
1.15.8		22
1.15.9		22
1.15.10		22
1.15.11		22
1.15.12		22
1.15.13		22
1.15.14		22
1.15.15		22
1.15.16		22
1.16	Substation Equipment	23
1.16.1	High Tension Switchgear	23
1.16.2	Power Factor Improvement Plant	29
1.16.3	Power Transformer	30
1.16.4	Oil for Transformer	33
1.17	Testing	34
1.17.1	General	34
1.17.2	Insulation Test	34
1.17.3	Earth Resistance Tests	34
1.18	Telephone and Intercom System	35
1.18.1	General	35
1.18.2	Telephone Services	35
1.18.3	Telephone and Intercom Conduit System	35
1.18.4	Make	36

1.19	Fire Detection and Alarm System	37
1.19.1	Description	37
1.19.2	Guaranty	37
1.19.3	Contract Maintenance	37
1.19.4	Applicable Publication	38
1.19.5	Approvals	38
1.19.6	Make	39
1.20	Products	40
1.20.1	Equipment and Material, General	40
1.20.2	Conduit and Wire	40
1.21	Execution	43
1.21.1	Installation	43
1.21.2	Test	43
1.21.3	Final Inspection	43
1.21.4	Instruction	43