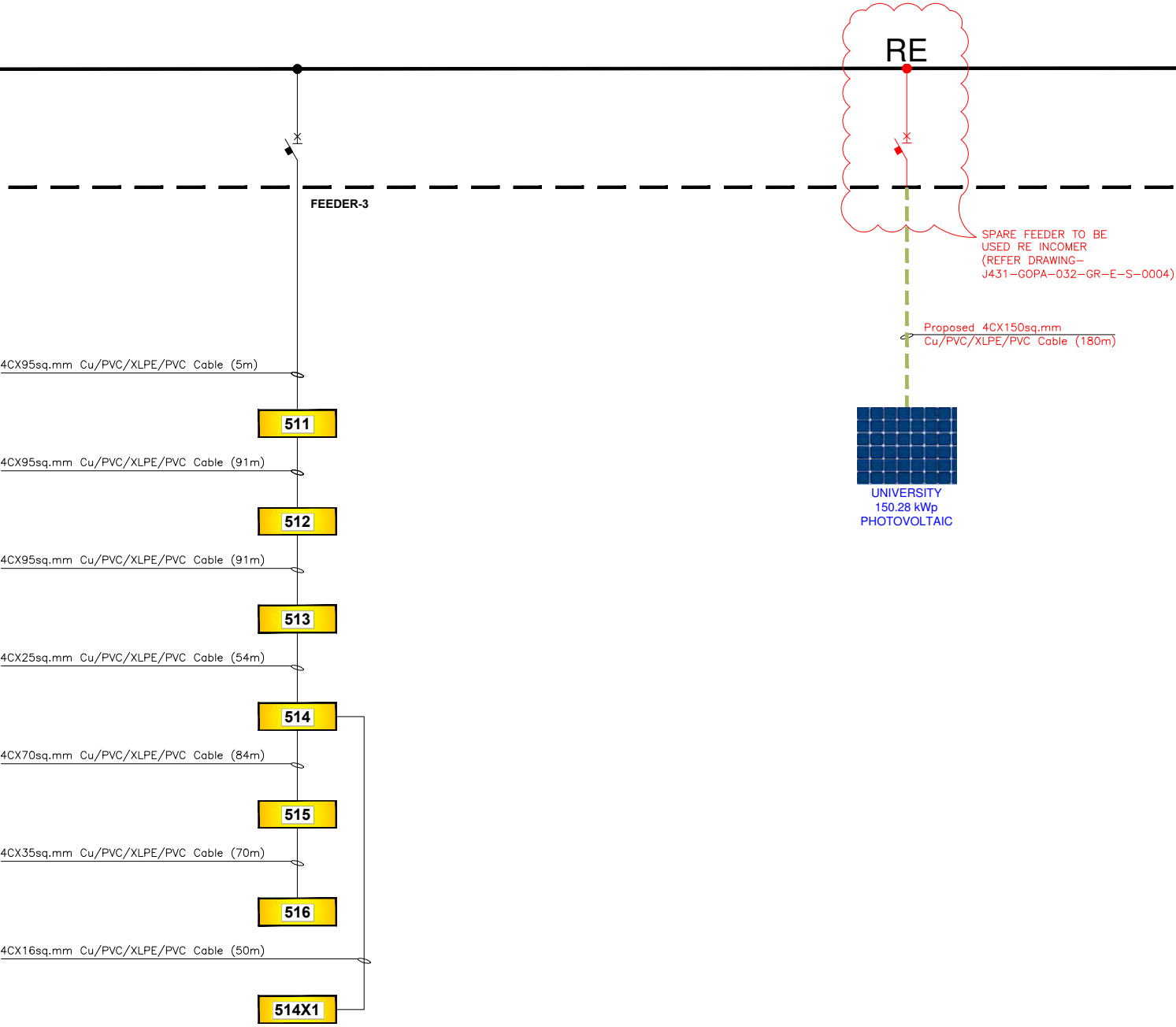


SUBSTATION - 5 (KULHUDHUFFUSHI)
MAIN LV DISTRIBUTION BOARD



NOTES:-

- THESE DRAWINGS ARE PRELIMINARY AND ARE FOR TENDERING PURPOSES ONLY.
- CONTRACTOR SHALL CARRY OUT DETAILED SITE SURVEY AND ENGINEERING / STUDY TO EVALUATE AND PROPOSE THE EXTENT OF REPLACEMENT / MODIFICATION REQUIRED IN THE EXISTING DISTRIBUTION NETWORK. THIS IS SUBJECT TO REVIEW AND APPROVAL BY THE EMPLOYER DURING THE ENGINEERING PHASE OF THE PROJECT.

LEGEND:-

SYMBOL	DESCRIPTION	QUANTITY
<div></div>	PROPOSED 150sq.mm Cu/PVC/XLPE/PVC Cable	180
<div></div>	EXISTING Cable	-
<div>D/B</div>	DISTRIBUTION BOX	-
<div>D/B</div>	EXISTING DISTRIBUTION BOX TO BE REPLACED	07 Nos.
<div>D/B</div>	EXISTING DISTRIBUTION BOX TO BE MODIFIED	-

	PURPOSE OF SUBMISSION	REV	AUTHORISED BY	DATE	DRAWING TITLE NETWORK DIAGRAM FOR KULHUDHUFFUSHI SUBSTATION 5		DESIGN : ESM	SCALE : N.T.S
	FIRST REVISION	A	GKH	17/04/16			DRAWN : MUM	DRW NO. : J431-GOPA-032-GR-E-D-0005-RevA
					PROJECT PREPARING OUTER ISLANDS SUSTAINABLE DEVELOPMENT	CLIENT: GOVERNMENT OF THE REPUBLIC OF MALDIVES	LICENCE NO:	ISLAND NAME : KULHUDHUFFUSHI
							DATE: : 17APR16	PAGE : 1/2

KULHUDHUFFUSHI-SS5-EXISTING

From	To	No. of Runs	Cable Size (sq.mm)	Length (M)	Cable Current Capacity (A)	Cable Current Capacity After Deration (0.6) (A)	Power (kW)	Current (A)	Cable Loading (%)	Voltage (%) at DB Main Bus	Total Voltage Drop (%) in Cable Section	% Voltage Drop upto Distribution Boards	% Voltage Drop Acceptable (Less Than 5%)	Remarks
Feeder-1	DB-511	1	4C x 95	5	315	189	35.41	63.62	33.70	99.97	0.03	0.03	YES	
DB-511	DB-512	1	4C x 95	91	315	189	30.40	54.60	28.90	99.47	0.50	0.53	YES	
DB-512	DB-513	1	4C x 95	91	315	189	25.22	45.55	24.10	99.05	0.42	0.95	YES	
DB-513	DB-514	1	4C x 25	54	150	90	20.10	36.48	40.50	98.4	0.65	1.60	YES	
DB-514	DB-514x1	1	4C x 16	50	115	69	4.98	9.12	13.20	98.17	0.23	1.83	YES	
DB-514	DB-515	1	4C x 70	84	265	159	9.96	18.25	11.50	98.2	0.20	1.80	YES	
DB-515	DB-516	1	4C x 35	70	180	108	4.97	9.13	8.50	98.05	0.15	1.95	YES	

KULHUDHUFFUSHI-SS5-PROPOSED PV FEEDER

From	To	No. of Runs	Cable Size (sq.mm)	Length (M)	Cable Current Capacity (A)	Cable Current Capacity After Deration (0.6) (A)	Power (kW)	Current (A)	Cable Loading (%)	Voltage (%) at DB Main Bus	Total Voltage Drop (%) in Cable Section	% Voltage Drop upto Distribution Boards	% Voltage Drop Acceptable (Less Than 5%)	Losses (%)	Remarks
UNIVERSITY-PV	KULHUDHUFFUSHI-SUBSTATION -5	1	1 - 150	180	405	243	120	169.8	69.9	102.00	2	2.00	YES	1.99%	Proposed 4C x 150 sq.mm LVCable

	PURPOSE OF SUBMISSION	REV	AUTHORISED BY	DATE	DRAWING TITLE NETWORK DIAGRAM FOR KULHUDHUFFUSHI SUBSTATION 5		DESIGN : ESM	SCALE : N.T.S
	FIRST REVISION	A	GKH	19/04/16			DRAWN : MUM	DRW NO. : J431-GOPA-032-GR-E-D-0005-RevA
					PROJECT PREPARING OUTER ISLANDS SUSTAINABLE DEVELOPMENT	CLIENT: GOVERNMENT OF THE REPUBLIC OF MALDIVES	LICENCE NO:	ISLAND NAME : KULHUDHUFFUSHI
							DATE: : 19APR16	PAGE : 2/2