



Republic of the Philippines
BULACAN AGRICULTURAL STATE COLLEGE
Office of Bids and Awards Committee
Pinaod, San Ildefonso, Bulacan, Philippines 3010

May 29, 2022

Bid Bulletin No. 1

Name of Project:	2022-04G: Upgrading of Five (5) Units of Greenhouses at BASC College of Agriculture Campus and One(1) Unit at DRT Campus to Automated Greenhouses (Lot 3: Solar Power)
ABC: Php9,000,000.00	

This Bid Bulletin No. 1 is issued to modify or amend items in the Bidding Documents for the above cited project. This shall form an integral part of the said Bidding Documents. The changes in the technical description shall also apply to the Schedule of Requirements and Price Schedules found in the Bidding Documents

Section VII. Technical Specifications

Item	From	To
1	8kw off grind inverter Solar power 90 units solar panels Rated Maximum Power: 545W, Maximum Power Voltage: 40.80V Open Circuit Voltage: 49.52V Short Circuit Current: 13.36A Maximum Power Current: 13.94A Bassbar: Multi Busbar technology HC Technology PV Size: 2182*1029*40mm Glass: 3.2mm, Anti-Reflection Coating, High Transmission, low iron, tempered glass Frame: Anodized aluminum alloy 6 units SC-8K Battery type: AGM/GEL Battery Voltage: 96V; ; power range: 230VAC: 84V-276VAC; Frequency range 60-65Hz; DC voltage: 96VDC; Input Voltage range: 84- 120VDC; Floating Charge set: 103.2V -108.8; Low Voltage restored: 100.8V-115.2V; Voltage Shutdown 80V-87.2V Starting electronic motor: 3hp; power factor 100% wave form: pure sinewave; MPPT: 80A Solar input: 9600W Solar input voltage: 280V Size: 840*405*320mm 6 lots Ground Mounted Railings End clamp, Mid clamp G-footing 6 set	8kw off grind inverter Solar power (equivalent or higher) 90 units solar panels Minimum Rated Power: 545W Minimum Power Voltage: 40.80V Open Circuit Voltage: 49.52V Short Circuit Current: 13.36A Maximum Power Current: 13.94A Bassbar: Multi Busbar technology HC Technology PV Size: 2182*1029*40mm Glass: 3.2mm, Anti-Reflection Coating, High Transmission, low iron, tempered glass Frame: Anodized aluminum alloy 6 units SC-8K (equivalent or Higher) Battery type: AGM/GEL Battery Voltage: 96V; ; power range: 230VAC: 84V-276VAC; Frequency range 60-65Hz; DC voltage: 96VDC; Input Voltage range: 84- 120VDC; Floating Charge set: 103.2V -108.8; Low Voltage restored: 100.8V-115.2V; Voltage Shutdown 80V-87.2V Starting electronic motor: 3hp; power factor 100% wave form: pure sinewave; MPPT: 80A Solar input: 9600W Solar input voltage: 280V Size: 840*405*320mm 6 lots Ground Mounted Railings End clamp, Mid clamp G-footing



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LACD200V Voltage:96V200AH Energy: 9.6kWh Size: 680*495*190mm Weight: 87kg Life Cycles(50% DOD) Solar Cable, Cable protection, Clips, and Clamps, AC/DC protection, AC/DC SPD, Enclosure box and other installation equipments and gears w/ installation, training and tutorials	6 set LACD200V Voltage:96V200AH Energy: 9.6kWh Size: 680*495*190mm Weight: 87kg Life Cycles(50% DOD) Solar Cable, Cable protection, Clips, and Clamps, AC/DC protection, AC/DC SPD, Enclosure box and other installation equipments and gears w/ installation, training and tutorials
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	OWNER: BULACAN AGRICULTURAL STATE COLLEGE PROJECT AND LOCATION: PROPOSED CONSTRUCTION OF GREEN HOUSE POBLACION, SAN ILDEFONSO, BULACAN	DESIGNED BY: EDWIN C. SUMAWAY, C.E. COLLEGE ENGINEER APPROVED BY: JOHN EDWARD Y. CRUZ DIRECTOR OF PLANNING & DEVELOPMENT	APPROVED BY: JAMESON H. TAN, Ed. D. COLLEGE PRESIDENT	REVISION NO.: SCHEDULE OF LOADS ONE LINE DIAGRAM COMPUTATION	SHEET NO.:
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COMPUTATION:

$$I_T = \frac{10,000 + 39,280 (0.40)}{230} = 111.79 \text{ AMP.}$$

USE 2-53.5mm² THW ON 38mmØ RSC
MAIN CIRCUIT BREAKER: 125 AT, SINGLE PHASE

SCHEDULE OF LOADS

CKN NO.	# OF OUTLETS	LOAD DESCRIPTION	VOLTAGE	RATING	AMPERE	CIRCUIT BREAKER	WIRE CONDUIT
1	1	1 HP WATER PUMP	230	8000	34.78	40 AMP	5.5mm ² / 13mm CONDUIT
2	12	CONVENIENCE OUTLET	230	2160	9.39	20 AMP	3.5mm ² / 20mm CONDUIT
3	1	SUPPLEMENTARY HORIZONTAL LINE LIGHTS	230	11520	25.04	30 AMP	5.5mm ² / 20mm CONDUIT
4	1	FOODS & DRINK PUMP	230	4000	17.39	20 AMP	3.5mm ² / 20mm CONDUIT
5	1	AIR CIRCULATOR MOTOR	230	4800	20.87	30 AMP	5.5mm ² / 20mm CONDUIT
6	1	EXHAUST FAN 50"	230	8800	38.28	40 AMP	5.5mm ² / 13mm CONDUIT
7		SPARE					
8		SPARE					
TOTAL							39,280 WATTS

ONE LINE DIAGRAM
NOT TO SCALE



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For the guidance and information of all concerned.


RONALD REAGAN T. ALONZO, Ph.D.
BAC Chairperson