

PHILIPPINE BIDDING DOCUMENTS

DESIGN AND BUILD OF THE NATIONAL ACADEMY OF SPORTS (NAS) -PHASE 2 AT NEW CLARK CITY

Government of the Republic of the Philippines

Sixth Edition

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Glossary of Terms, Abbreviations, and Acronyms

ABC – Approved Budget for the Contract.

ARCC – Allowable Range of Contract Cost.

SBAC – Special Bids and Awards Committee.

Bid – A signed offer or proposal to undertake a contract submitted by a bidder in response to and in consonance with the requirements of the bidding documents. Also referred to as *Proposal* and *Tender*. (2016 revised IRR, Section 5[c])

Bidder – Refers to a contractor, manufacturer, supplier, distributor and/or consultant who submits a bid in response to the requirements of the Bidding Documents. (2016 revised IRR, Section 5[d])

Bidder’s Authorized Representative (Authorized Representative) - shall refer to the person identified as the duly authorized and designated representative of the bidder in the Omnibus Sworn Statement.

Bidding Documents – The documents issued by the Procuring Entity as the bases for bids, furnishing all information necessary for a prospective bidder to prepare a bid for the Goods, Infrastructure Projects, and/or Consulting Services required by the Procuring Entity. (2016 revised IRR, Section 5[e])

BIR – Bureau of Internal Revenue.

BSP – Bangko Sentral ng Pilipinas.

CDA – Cooperative Development Authority.

Consulting Services – Refer to services for Infrastructure Projects and other types of projects or activities of the GOP requiring adequate external technical and professional expertise that are beyond the capability and/or capacity of the GOP to undertake such as, but not limited to: (i) advisory and review services; (ii) pre-investment or feasibility studies; (iii) design; (iv) construction supervision; (v) management and related services; and (vi) other technical services or special studies. (2016 revised IRR, Section 5[i])

Contract – Refers to the agreement entered into between the Procuring Entity and the Supplier or Manufacturer or Distributor or Service Provider for procurement of Goods and Services; Contractor for Procurement of Infrastructure Projects; or Consultant or Consulting Firm for Procurement of Consulting Services; as the case may be, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.

Contractor – is a natural or juridical entity whose proposal was accepted by the Procuring Entity and to whom the Contract to execute the Work was awarded. Contractor as used in these Bidding Documents may likewise refer to a supplier, distributor, manufacturer, or consultant.

CPI – Consumer Price Index.

DOLE – Department of Labor and Employment.

DTI – Department of Trade and Industry.

Foreign-funded Procurement or Foreign-Assisted Project – Refers to procurement whose funding source is from a foreign government, foreign or international financing institution as specified in the Treaty or International or Executive Agreement. (2016 revised IRR, Section 5[b]).

GFI – Government Financial Institution.

GOCC – Government-owned and/or –controlled corporation.

Goods – Refer to all items, supplies, materials and general support services, except Consulting Services and Infrastructure Projects, which may be needed in the transaction of public businesses or in the pursuit of any government undertaking, project or activity, whether in the nature of equipment, furniture, stationery, materials for construction, or personal property of any kind, including non-personal or contractual services such as the repair and maintenance of equipment and furniture, as well as trucking, hauling, janitorial, security, and related or analogous services, as well as procurement of materials and supplies provided by the Procuring Entity for such services. The term “related” or “analogous services” shall include, but is not limited to, lease or purchase of office space, media advertisements, health maintenance services, and other services essential to the operation of the Procuring Entity. (2016 revised IRR, Section 5[r])

GOP – Government of the Philippines.

Infrastructure Projects – Include the construction, improvement, rehabilitation, demolition, repair, restoration or maintenance of roads and bridges, railways, airports, seaports, communication facilities, civil works components of information technology projects, irrigation, flood control and drainage, water supply, sanitation, sewerage and solid waste management systems, shore protection, energy/power and electrification facilities, national buildings, school buildings, hospital buildings, and other related construction projects of the government. Also referred to as *civil works or works*. (2016 revised IRR, Section 5[u])

LGUs – Local Government Units.

NFCC – Net Financial Contracting Capacity.

NGA – National Government Agency.

PCAB – Philippine Contractors Accreditation Board.

PhilGEPS - Philippine Government Electronic Procurement System.

Procurement Project – refers to a specific or identified procurement covering goods, infrastructure projects or consulting services. A Procurement Project shall be described, detailed, and scheduled in the Project Procurement Management Plan prepared by the agency which shall be consolidated in the procuring entity's Annual Procurement Plan. (GPPB Circular No. 06-2019 dated 17 July 2019)

PSA – Philippine Statistics Authority.

SEC – Securities and Exchange Commission.

SLCC – Single Largest Completed Contract.

UN – United Nations.

Section I. Invitation to Bid

Invitation to Bid for the Design and Build of the National Academy of Sports (NAS) -Phase 2 at New Clark City

1. The Bases Conversion and Development Authority (BCDA), through the 2022 General Appropriations Act (GAA) intends to apply the sum of **Pesos: Two Hundred Seventy-Three Million Seven Hundred Forty Thousand Pesos (PHP 273,740,000.00)** inclusive of all applicable taxes and fees, being the Approved Budget for the Contract (ABC) to payments under the contract for the Design and Build of the National Academy of Sports (NAS) -Phase 2 at New Clark City (Project). Bids received in excess of the ABC shall be automatically rejected at bid opening.
2. The BCDA now invites bids for the above procurement Project. Completion of the Works is required within **Four Hundred Twenty-Six (426) Calendar Days** after the issuance of the Notice to Proceed. Bidders should have completed a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).
3. Bidding will be conducted through open competitive bidding procedures using non-discretionary “*pass/fail*” criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.
4. A complete set of Bidding Documents may be acquired by interested bidders from **26 July 2023 to 22 August 2023** from **8:00 AM to 5:00 PM** and on **23 August 2023**, from **8:00 AM to 12:00 NN** at the BCDA office address indicated below.
5. All payments of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of **Pesos: Fifty Thousand (Php 50,000.00)** shall be made through online transfer or bank deposit to BCDA’s Landbank prior to issuance of the bidding documents. Kindly coordinate with the Secretariat on the bank details. The Procuring Entity shall allow the bidder to present its proof of payment for the fees through the email address **sbac_sec_nasp2@bcda.gov.ph**.

It may also be downloaded free of charge from the Philippine Government Electronic Procurement System (PhilGEPS) and the BCDA websites, provided that payment of the non-refundable fee as above for the Bid Documents shall be made prior to submission of bids.

6. The BCDA will hold a Pre-Bid Conference on **02 August 2023 at 9:30 AM**, at BCDA Corporate Center, 9/F One West Aeropark Building, Industrial Estate 5, Clark Global City, Clark Freeport Zone, Pampanga. Please check the BCDA website for advisories regarding the participation in the Pre-Bid Conference.

7. Bids must be duly received by the BAC Secretariat through manual submission at the office address as indicated below on or before **23 August 2023 at 12:00 Noon**. Late bids shall not be accepted.
8. All bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 15.1.
9. Bid opening shall be on **23 August 2023, 1:30 PM** at BCDA Corporate Center, 9/F One West Aeropark Building, Industrial Estate 5, Clark Global City, Clark Freeport Zone, Pampanga. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.
10. BCDA reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of 2016 revised Implementing Rules and Regulations (IRR) of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.
11. For further information, please refer to:

MARY GRACE PADIN

Acting Head, SBAC-NAS Secretariat

Tel: (02) 8575-1780

Email: sbac_sec_nasp2@bcda.gov.ph

Date of Posting: 26 July 2023

RICHARD BRIAN M. CEPE

Chairperson

Special Bids and Awards Committee for NAS



SBAC – National Academy for Sports Phase 2

SBAC – NASP22023 – 0004



Section II. Instructions to Bidders

1. Scope of Bid

The Procuring Entity, *Bases Conversion and Development Authority* invites Bids for the *Design and Build of the National Academy of Sports (NAS) -Phase 2 at New Clark City*.

The Procurement Project (referred to herein as “Project”) is for the construction of Works, as described in Section VI (Specifications).

2. Funding Information

2.1. The GOP through the source of funding as indicated below for *GAA 2022* in the amount of *Php 273,740,000.00 inclusive of all applicable fees and taxes*.

2.2. The source of funding is:

General Appropriations Act.

3. Bidding Requirements

The Bidding for the Project shall be governed by all the provisions of RA No. 9184 and its 2016 revised IRR, including its Generic Procurement Manual and associated policies, rules and regulations as the primary source thereof, while the herein clauses shall serve as the secondary source thereof.

Any amendments made to the IRR and other GPPB issuances shall be applicable only to the ongoing posting, advertisement, or invitation to bid by the SBAC through the issuance of a supplemental or bid bulletin.

The Bidder, by the act of submitting its Bid, shall be deemed to have inspected the site, determined the general characteristics of the contracted Works and the conditions for this Project, such as the location and the nature of the work; (b) climatic conditions; (c) transportation facilities; (c) nature and condition of the terrain, geological conditions at the site communication facilities, requirements, location and availability of construction aggregates and other materials, labor, water, electric power and access roads; and (d) other factors that may affect the cost, duration and execution or implementation of the contract, project, or work and examine all instructions, forms, terms, and project requirements in the Bidding Documents.

4. Corrupt, Fraudulent, Collusive, Coercive, and Obstructive Practices

The Procuring Entity, as well as the Bidders and Contractors, shall observe the highest standard of ethics during the procurement and execution of the contract. They or through an agent shall not engage in corrupt, fraudulent, collusive, coercive, and obstructive practices defined under Annex “I” of the 2016 revised IRR of RA No. 9184 or other integrity violations in competing for the Project.

5. Eligible Bidders

- 5.1. Only Bids of Bidders found to be legally, technically, and financially capable will be evaluated.
- 5.2. The Bidder must have an experience of having completed a Single Largest Completed Contract (SLCC) that is similar to this Project, equivalent to at least fifty percent (50%) of the ABC adjusted, if necessary, by the Bidder to current prices using the PSA's CPI, except under conditions provided for in Section 23.4.2.4 of the 2016 revised IRR of RA No. 9184.

A contract is considered to be "similar" to the contract to be bid if it has the major categories of work stated in the **BDS**. (Please refer to Section 9 [Eligibility Criteria] of the Terms of Reference.)
- 5.3. For Foreign-funded Procurement, the Procuring Entity and the foreign government/foreign or international financing institution may agree on another track record requirement, as specified in the Bidding Document prepared for this purpose.
- 5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.2 of the 2016 IRR of RA No. 9184.

6. Origin of Associated Goods

There is no restriction on the origin of Goods other than those prohibited by a decision of the UN Security Council taken under Chapter VII of the Charter of the UN.

7. Subcontracts

- 7.1. The Bidder may subcontract portions of the Project to the extent allowed by the Procuring Entity as stated herein, but in no case more than fifty percent (50%) of the Project.

The Procuring Entity has prescribed that: Subcontracting is allowed.
- 7.1. The Bidder must submit together with its Bid the documentary requirements of the subcontractor(s) complying with the eligibility criteria stated in **ITB** Clause 5 in accordance with Section 23.4 of the 2016 revised IRR of RA No. 9184 pursuant to Section 23.1 thereof.
- 7.2. The Contractor may identify its subcontractor during the contract implementation stage. Subcontractors identified during the bidding may be changed during the implementation of this Contract. Subcontractors must submit the documentary requirements under Section 23.1 of the 2016 revised IRR of RA No. 9184 and comply with the eligibility criteria specified in **ITB** Clause 5 to the implementing or end-user unit.

- 7.3. Subcontracting of any portion of the Project does not relieve the Contractor of any liability or obligation under the Contract. The Contractor will be responsible for the acts, defaults, and negligence of any subcontractor, its agents, servants, or workmen as fully as if these were the Contractor's own acts, defaults, or negligence, or those of its agents, servants, or workmen.

8. Pre-Bid Conference

The Procuring Entity will hold a pre-bid conference for this Project on the specified date and time and either at its physical address indicated in paragraph 6 of the **IB**.

9. Clarification and Amendment of Bidding Documents

Prospective bidders may request for clarification on and/or interpretation of any part of the Bidding Documents. Such requests must be in writing and received by the Procuring Entity, either at its given address or through electronic mail indicated in the **IB**, at least ten (10) calendar days before the deadline set for the submission and receipt of Bids.

10. Documents Comprising the Bid: Eligibility and Technical Components

- 10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in **Section IX. Checklist of Technical and Financial Documents**.
- 10.2. If the eligibility requirements or statements, the bids, and all other documents for submission to the SBAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. For Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.
- 10.3. A valid PCAB License is required, and in case of joint ventures, a valid special PCAB License, and registration for the type and cost of the contract for this Project. Any additional type of Contractor license or permit shall be indicated in the **BDS**.
- 10.4. A List of Contractor's key personnel (e.g., Project Manager, Project Engineers, Materials Engineers, and Foremen) assigned to the contract to be bid, with their complete qualification and experience data shall be provided. These key personnel must meet the required minimum years of experience set in the **BDS**.
- 10.5. A List of Contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership, certification of availability of equipment from the equipment lessor/vendor for the duration of

the project, as the case may be, must meet the minimum requirements for the contract set in the **BDS**.

11. Documents Comprising the Bid: Financial Component

- 11.1. The second bid envelope shall contain the financial documents for the Bid as specified in **Section IX. Checklist of Technical and Financial Documents**.
- 11.2. Any bid exceeding the ABC indicated in paragraph 1 of the **IB** shall not be accepted.
- 11.3. For Foreign-funded procurement, a ceiling may be applied to bid prices provided the conditions are met under Section 31.2 of the 2016 revised IRR of RA No. 9184.

12. Alternative Bids

Bidders shall submit offers that comply with the requirements of the Bidding Documents, including the basic technical design as indicated in the drawings and specifications. Unless there is a value engineering clause in the **BDS**, alternative Bids shall not be accepted.

13. Bid Prices

All bid prices for the given scope of work in the Project as awarded shall be considered as fixed prices, and therefore not subject to price escalation during contract implementation, except under extraordinary circumstances as determined by the NEDA and approved by the GPPB pursuant to the revised Guidelines for Contract Price Escalation guidelines.

14. Bid and Payment Currencies

- 14.1. Bid prices may be quoted in the local currency or tradeable currency accepted by the BSP at the discretion of the Bidder. However, for purposes of bid evaluation, Bids denominated in foreign currencies shall be converted to Philippine currency based on the exchange rate as published in the BSP reference rate bulletin on the day of the bid opening.
- 14.2. Payment of the contract price shall be made in: *Philippine Pesos*.

15. Bid Security

- 15.1. The Bidder shall submit a Bid Securing Declaration or any form of Bid Security in the amount indicated in the **BDS**, which shall be not less than the percentage of the ABC in accordance with the schedule in the **BDS**.

- 15.2. The Bid and bid security shall be valid for *one hundred twenty (120) calendar days from the Opening of Bid*. Any bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

16. Sealing and Marking of Bids

Each Bidder shall submit one copy of the first and second components of its Bid.

The Procuring Entity may request additional hard copies and/or electronic copies of the Bid. However, failure of the Bidders to comply with the said request shall not be a ground for disqualification.

If the Procuring Entity allows the submission of bids through online submission to the given website or any other electronic means, the Bidder shall submit an electronic copy of its Bid, which must be digitally signed. An electronic copy that cannot be opened or is corrupted shall be considered non-responsive and, thus, automatically disqualified.

17. Deadline for Submission of Bids

The Bidders shall submit on the specified date and time and either at its physical address or through online submission as indicated in paragraph 7 of the **IB**.

18. Opening and Preliminary Examination of Bids

- 18.1. The SBAC shall open the Bids in public at the time, on the date, and at the place specified in paragraph 9 of the **IB**. The Bidders' representatives who are present shall sign a register evidencing their attendance. In case videoconferencing, webcasting or other similar technologies will be used, attendance of participants shall likewise be recorded by the SBAC Secretariat.

In case the Bids cannot be opened as scheduled due to justifiable reasons, the rescheduling requirements under Section 29 of the 2016 revised IRR of RA No. 9184 shall prevail.

- 18.2. The preliminary examination of Bids shall be governed by Section 30 of the 2016 revised IRR of RA No. 9184.

19. Detailed Evaluation and Comparison of Bids

- 19.1. The Procuring Entity's SBAC shall immediately conduct a detailed evaluation of all Bids rated "*passed*" using non-discretionary pass/fail criteria. The SBAC shall consider the conditions in the evaluation of Bids under Section 32.2 of 2016 revised IRR of RA No. 9184.

- 19.2. If the Project allows partial bids, all Bids and combinations of Bids as indicated in the **BDS** shall be received by the same deadline and opened and evaluated simultaneously so as to determine the Bid or combination of Bids

offering the lowest calculated cost to the Procuring Entity. Bid Security as required by **ITB** Clause 16 shall be submitted for each contract (lot) separately.

- 19.3. In all cases, the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184 must be sufficient for the total of the ABCs for all the lots participated in by the prospective Bidder.

20. Post Qualification

Within a non-extendible period of five (5) calendar days from receipt by the Bidder of the notice from the SBAC that it submitted the Lowest Calculated Bid, the Bidder shall submit its latest income and business tax returns filed and paid through the BIR Electronic Filing and Payment System (eFPS), and other appropriate licenses and permits required by law and stated in the **BDS**.

21. Signing of the Contract

The documents required in Section 37.2 of the 2016 revised IRR of RA No. 9184 shall form part of the Contract. Additional Contract documents are indicated in the **BDS**.

Section III. Bid Data Sheet

Bid Data Sheet

ITB Clause	
5.2	For this purpose, contracts similar to the Project refer to Building Project of at least 2 Storey. (SLCC Form provided in Annex G) (Please refer to Section 9 [Eligibility Criteria] of the Terms of Reference.)
7.1	<p>Subcontracting is allowed subject to the following additional qualifications:</p> <p>a. The contractor shall secure prior written approval from BCDA prior to subcontracting.</p> <p>b. The subcontractor shall have the same qualifications and/or eligibility as the main contractor; and</p> <p>The portions of Project and the maximum percentage allowed to be subcontracted shall not exceed fifty percent (50%) of the awarded contract.</p>
10.3	<p>PCAB License: Category AAA for General Building and License Classification of Large B for Vertical Buildings</p> <p>For joint venture or consortium bidder, a Joint Special License issued by the PCAB pursuant to Section 38 of RA 4566. Failure of the joint venture or consortium bidder to submit a Joint Special License shall be a ground for its disqualification.</p> <p>In addition, the Technical Proposal shall contain all the required documents and the following additional documents:</p> <ol style="list-style-type: none"> 1. Preliminary Site Development Plan for the entire 4.3-hectare area (NAS Block) to consider the existing Phase 1 and future expansion areas of the facilities within the entire NAS Block, in reference to Part II, Section VI. Technical References (NAS Site Development Plan); 2. Architectural Plans for the Phase II Facilities, in accordance with the degree of details specified in Part II, Section I. Terms of Reference and Part II. Technical References, such as, but not limited to: <ol style="list-style-type: none"> A. Floor Plans B. Elevations C. Sections D. CAD 3D Rendered Perspective (Architectural Character) E. BIM Platform (e.g., Autodesk Revit, etc.); 3. Design and construction methods;

	<p>4. List of design and construction personnel, to be assigned to the contract to be bid, with their complete qualification and experience data; and</p> <p>5. Value Engineering analysis of design and construction method.</p>																												
10.4	<p>The list of nominated key personnel with the minimum required years of experience for the Project are as follows:</p> <p>1. <u>Detailed Design Phase</u></p> <table border="1" data-bbox="359 743 1369 1966"> <thead> <tr> <th data-bbox="359 743 606 815">Key Personnel</th> <th data-bbox="606 743 909 815">General Experience</th> <th data-bbox="909 743 1270 815">Required Experience</th> <th data-bbox="1270 743 1369 815">Qty</th> </tr> </thead> <tbody> <tr> <td data-bbox="359 815 606 994">Project Design Manager</td> <td data-bbox="606 815 909 994">Licensed Engineer or Architect for at least 10 years</td> <td data-bbox="909 815 1270 994">At least 5 years of experience as Project Design Manager on Building Projects</td> <td data-bbox="1270 815 1369 994">1</td> </tr> <tr> <td data-bbox="359 994 606 1173">Structural Engineer</td> <td data-bbox="606 994 909 1173">Licensed Civil Engineer for at least 5 years</td> <td data-bbox="909 994 1270 1173">At least 3 years of experience as Structural Engineer on Building Projects</td> <td data-bbox="1270 994 1369 1173">1</td> </tr> <tr> <td data-bbox="359 1173 606 1352">Geodetic Engineer</td> <td data-bbox="606 1173 909 1352">Licensed Geodetic Engineer for at least 5 years</td> <td data-bbox="909 1173 1270 1352">At least 3 years of experience as Geodetic Engineer on Building Projects</td> <td data-bbox="1270 1173 1369 1352">1</td> </tr> <tr> <td data-bbox="359 1352 606 1576">Electrical Engineer</td> <td data-bbox="606 1352 909 1576">Licensed Professional Electrical Engineer for at least 5 years</td> <td data-bbox="909 1352 1270 1576">At least 3 years of experience as Professional Electrical Engineer on Building Projects</td> <td data-bbox="1270 1352 1369 1576">1</td> </tr> <tr> <td data-bbox="359 1576 606 1800">Mechanical Engineer</td> <td data-bbox="606 1576 909 1800">Licensed Professional Mechanical Engineer for at least 5 years</td> <td data-bbox="909 1576 1270 1800">At least 3 years of experience as Professional Mechanical Engineer on Building Projects</td> <td data-bbox="1270 1576 1369 1800">1</td> </tr> <tr> <td data-bbox="359 1800 606 1966">Drainage Engineer</td> <td data-bbox="606 1800 909 1966">Licensed Civil/Sanitary Engineer for at least 5 years</td> <td data-bbox="909 1800 1270 1966">At least 3 years of experience as Drainage Engineer</td> <td data-bbox="1270 1800 1369 1966">1</td> </tr> </tbody> </table>	Key Personnel	General Experience	Required Experience	Qty	Project Design Manager	Licensed Engineer or Architect for at least 10 years	At least 5 years of experience as Project Design Manager on Building Projects	1	Structural Engineer	Licensed Civil Engineer for at least 5 years	At least 3 years of experience as Structural Engineer on Building Projects	1	Geodetic Engineer	Licensed Geodetic Engineer for at least 5 years	At least 3 years of experience as Geodetic Engineer on Building Projects	1	Electrical Engineer	Licensed Professional Electrical Engineer for at least 5 years	At least 3 years of experience as Professional Electrical Engineer on Building Projects	1	Mechanical Engineer	Licensed Professional Mechanical Engineer for at least 5 years	At least 3 years of experience as Professional Mechanical Engineer on Building Projects	1	Drainage Engineer	Licensed Civil/Sanitary Engineer for at least 5 years	At least 3 years of experience as Drainage Engineer	1
Key Personnel	General Experience	Required Experience	Qty																										
Project Design Manager	Licensed Engineer or Architect for at least 10 years	At least 5 years of experience as Project Design Manager on Building Projects	1																										
Structural Engineer	Licensed Civil Engineer for at least 5 years	At least 3 years of experience as Structural Engineer on Building Projects	1																										
Geodetic Engineer	Licensed Geodetic Engineer for at least 5 years	At least 3 years of experience as Geodetic Engineer on Building Projects	1																										
Electrical Engineer	Licensed Professional Electrical Engineer for at least 5 years	At least 3 years of experience as Professional Electrical Engineer on Building Projects	1																										
Mechanical Engineer	Licensed Professional Mechanical Engineer for at least 5 years	At least 3 years of experience as Professional Mechanical Engineer on Building Projects	1																										
Drainage Engineer	Licensed Civil/Sanitary Engineer for at least 5 years	At least 3 years of experience as Drainage Engineer	1																										

Materials Engineer II	Licensed Civil Engineer and DPWH accredited Materials Engineer II for at least 5 years	At least 3 years of experience as Materials Engineer II on Building Projects	1
Quantity Surveyor	Licensed Engineer or Architect for at least 5 years	At least 3 years of experience as Quantity Surveyor on Building Projects	1
Architect	Licensed Architect for at least 5 years	At least 3 years of experience as Architect	1
BIM Specialist	Licensed Engineer or Architect for at least 5 years	At least 3 years of experience as BIM Specialist on Building Projects	1

2. Construction Phase

Key Personnel	General Experience	Required Experience	Qty
Project Manager	Licensed Civil Engineer for at least 10 years	At least 5 years of experience as Project Manager on Building Projects	1
Deputy Project Manager	Licensed Civil Engineer for at least 5 years	At least 3 years of experience as Deputy Project Manager on Building Projects	1
Structural Engineer	Licensed Civil Engineer for at least 5 years	At least 3 years of experience as Structural Engineer on Building Projects	1
Geodetic Engineer	Licensed Geodetic Engineer for at least 5 years	At least 3 years of experience as Geodetic Engineer on Building Projects	1
Electrical Engineer	Licensed Electrical Engineer for at least 5 years or Professional Electrical Engineer	At least 3 years of experience as Electrical Engineer on Building Projects	1

		for at least 2 years.		
Mechanical Engineer	Licensed Mechanical Engineer for at least 5 years or Professional Mechanical Engineer for at least 2 years.	At least 3 years of experience as Mechanical Engineer on Building Projects		1
Drainage Engineer	Licensed Civil/Sanitary Engineer for at least 5 years	At least 3 years of experience as Drainage Engineer		1
Materials Engineer II	Licensed Civil Engineer and DPWH accredited Materials Engineer II for at least 5 years	At least 3 years of experience as Materials Engineer II on Building Projects		1
Quantity Surveyor	Licensed Engineer or Architect for at least 5 years	At least 3 years of experience as Quantity Surveyor on Building Projects		1
Architect	Licensed Architect for at least 5 years	At least 3 years of experience as Architect		1
BIM Specialist	Licensed Engineer or Architect for at least 5 years	At least 3 years of experience as BIM Specialist on Building Projects		1
Health and Safety Officer	DOLE accredited safety officer for at least 5 years	At least 3 years of experience as DOLE accredited Health and Safety Officer		1

Note:

(1) The bidder shall also submit a duly signed Statement of Availability of Key Personnel and Equipment in the form prescribed in "Annex B" of the Bid Forms under Section IX. Checklist of Technical and Financial Documents.

(2) If a proposed Key Technical Personnel is an employee of the bidder and working on another project at the time of the bidding, the bidder shall submit a certification duly signed by the Authorized Representative that:

(i.1) the personnel will be pulled out from the ongoing project once the bidder is awarded the contract, or

(i.2) the personnel will be replaced with another technical person of

equal or better qualifications;

(3) The bidder may propose key technical personnel who is not its employee, provided that the said personnel shall submit a certification that he/she will work for the bidder if the latter is awarded the contract for the Project.

(4) Each key technical personnel shall only be nominated to a single position and not nominated by any other bidder.

(5) The bidder shall ensure that its nominated key technical personnel shall work full time in this Project under bidding.

(6) The bidder must accomplish the prescribed form in Annex "D-1" (Detailed Design Phase) and Annex "D-2" (Construction Phase) of the Bid Forms for the above list of the nominated key personnel and must be supported by the following documents:

- a. Individual CVs as prescribed in Annex "E-1" (Detailed Design Phase) and Annex "E-2" (Construction Phase) of the Bid Form under Section IX. Checklist of Technical and Financial Documents; and
- b. Photocopy of PRC Licenses/Accreditation from DOLE or DPWH. Expired PRC License may be accepted provided that proof for the renewal of application shall be submitted, and provided further that the appointment date of the renewal shall fall on the day or after the deadline of bid submission, otherwise, the bidder must submit the renewed PRC license. Valid or renewed PRC license of all nominated key technical personnel must be submitted during Post-Qualification.

10.5 The list of minimum equipment required for the Project is as follows:

Equipment	Minimum Capacity	Quantity
Mobile Truck Mounted Crane	50 Tons	1
Backhoe crawler type	1 cu.m.	2
10-wheeler truck with boom	5 Tons	1
Dump Truck	15 cu.m	3
Water Truck	5,000L	1
Generator Set	150 KVA	1

	<p>The bidder must accomplish the prescribed form in “Annex F” of the Bid Forms and shall submit the following acceptable proofs as attachment to the list of equipment, as applicable:</p> <p>a. If owned, supported by any proof of ownership as follows:</p> <ul style="list-style-type: none"> ● Deed of sale ● Valid OR/CR ● Sales invoice showing payment of VAT ● Proforma Invoice supported by a Sales Invoice ● Letter of credit from bank with attached Purchase Order supported by a Sales Invoice ● Original Invoice with attached Packing List ● Bill of Lading <p>And certification by the bidder of availability of equipment for the duration of the project using the prescribed form in Annex “C-1”;</p> <p>b. If leased, supported by all of the following:</p> <ul style="list-style-type: none"> ● lease agreement between lessor and lessee, ● proof of ownership of the lessor, and ● certification of availability of equipment from the equipment lessor for the duration of the project using the prescribed form in Annex “C-2”; or <p>c. If under purchase agreement, supported by all of the following:</p> <ul style="list-style-type: none"> ● Purchase Agreement between the bidder and the owner, and ● certification of availability of equipment from the vendor for the duration of the project using the prescribed form in Annex “C-3”. <p>Optional documents to be submitted:</p> <ol style="list-style-type: none"> 1. Photo of the vehicle/equipment 2. Photo of body marking showing the capacity of the vehicle/equipment <p>Details and particulars contained in all the supporting documents submitted for each offered equipment must be consistent as represented by the bidder in all other parts of their bid submission.</p>
11.1	<p>In addition to the Bid Form (Annex A), the following shall be included in the Financial Component:</p> <ol style="list-style-type: none"> 1. Lump sum bid prices, which shall include the detailed engineering cost, in the Annex “O-1” and Annex “O-2”; 2. Daywork schedule showing detailed estimates including a summary sheet indicating the unit prices of construction materials, labor rates and equipment rentals (Annex P1, P2 & P3) used in coming up with the

	<p>bid considering 5% VAT; and</p> <p>3. Cash flow based on payment schedule as provided for under Clause 14 of the Special Conditions of Contract;</p> <p>Notes:</p> <p>1. Failure to submit dayworks and cash flow shall be grounds for disqualification. See forms at Section IX. Checklist of Technical and Financial Documents.</p> <p>2. Bidders with incomplete submission and/or omissions shall be disqualified. (See Section 32.2.1 (a) of the RIRR of RA9184).</p> <p>3. In filling out the bid form, bidders shall provide a discount offer in the form of amount, in figures and in words, including its application and methodology. In case of no discount offered, bidders shall write "None."</p>
12	Alternative bid is not allowed.
15.1	<p>The bid security shall be in the form of a Bid Securing Declaration (Annex M) or any of the following forms and amounts:</p> <p>a. The amount of not less than <i>Php 5,474,800.00</i> if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; (Form of Bank Guarantee provided in Annex L)</p> <p>b. The amount of not less than <i>Php 13,687,000.00</i> if bid security is in Surety Bond.</p> <p>Note: The Surety Bond must be submitted by the bidder together with a certification issued by the Insurance Commission (IC) which shall expressly state that the surety or insurance company is specially authorized to issue surety bonds callable on demand and shall be valid for one hundred twenty (120) days from the Bid Opening.</p> <p>Further, we wish to note that since the surety bond required under Section 15.1b is required to be project specific, the certification from the Insurance Commission must also be project specific (GPPB NPM 17-2012).</p>
19.2	Partial bids are not allowed.
20	<p>For purposes of Post-qualification, the following document(s) shall be required to be submitted/presented within five (5) calendar days from receipt of notice of post-qualification from the SBAC:</p> <p>1. Income Tax Returns for year 2021 (BIR Form 1701 or 1702);</p>

	<ol style="list-style-type: none"> 2. Latest Value Added Tax Returns (Forms 2550M and 2550Q) or Percentage Tax Returns (Form 2551M) for the last six (6) months before the deadline of the submission of bids. The income tax and business tax returns stated above should have been filed through the Electronic Filing and Payment System (eFPS). 3. Updated Certificate of accomplishments signed by the Owner or Owner's Project Engineer for on-going projects
21	<p>Additional contract documents relevant to the Project that may be required by existing laws and/or the Procuring Entity, such as construction schedule and S-curve, manpower schedule, construction methods, equipment utilization schedule, construction safety and health program stamped "received" by the DOLE, and other acceptable tools of project scheduling.</p>

Section IV. General Conditions of Contract

1. **Scope of Contract**

This Contract shall include all such items, although not specifically mentioned, that can be reasonably inferred as being required for its completion as if such items were expressly mentioned herein. All the provisions of RA No. 9184 and its 2016 revised IRR, including the Generic Procurement Manual, and associated issuances, constitute the primary source for the terms and conditions of the Contract, and thus, applicable in contract implementation. Herein clauses shall serve as the secondary source for the terms and conditions of the Contract.

This is without prejudice to Sections 74.1 and 74.2 of the 2016 revised IRR of RA No. 9184 allowing the GPPB to amend the IRR, which shall be applied to all procurement activities, the advertisement, posting, or invitation of which were issued after the effectivity of the said amendment.

2. **Sectional Completion of Works**

If sectional completion is specified in the **Special Conditions of Contract (SCC)**, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date shall apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).

3. **Possession of Site**

- 3.1. The Procuring Entity shall give possession of all or parts of the Site to the Contractor based on the schedule of delivery indicated in the **SCC**, which corresponds to the execution of the Works. If the Contractor suffers delay or incurs cost from failure on the part of the Procuring Entity to give possession in accordance with the terms of this clause, the Procuring Entity's Representative shall give the Contractor a Contract Time Extension and certify such sum as fair to cover the cost incurred, which sum shall be paid by Procuring Entity.
- 3.2. If possession of a portion is not given by the above date, the Procuring Entity will be deemed to have delayed the start of the relevant activities. The resulting adjustments in contract time to address such delay may be addressed through contract extension provided under Annex "E" of the 2016 revised IRR of RA No. 9184.

4. **The Contractor's Obligations**

The Contractor shall employ the key personnel named in the Schedule of Key Personnel indicating their designation, in accordance with **ITB** Clause 10.3 and specified in the **BDS**, to carry out the supervision of the Works.

The Procuring Entity will approve any proposed replacement of key personnel only if their relevant qualifications and abilities are equal to or better than those of the personnel listed in the Schedule.

5. Performance Security

- 5.1. Within ten (10) calendar days from receipt of the Notice of Award from the Procuring Entity but in no case later than the signing of the contract by both parties, the successful Bidder shall furnish the performance security in any of the forms prescribed in Section 39 of the 2016 revised IRR.
- 5.2. The Contractor, by entering into the Contract with the Procuring Entity, acknowledges the right of the Procuring Entity to institute action pursuant to RA No. 3688 against any subcontractor be they an individual, firm, partnership, corporation, or association supplying the Contractor with labor, materials and/or equipment for the performance of this Contract.

6. Site Investigation Reports

The Contractor, in preparing the Bid, shall rely on any Site Investigation Reports referred to in the SCC supplemented by any information obtained by the Contractor.

7. Warranty

- 7.1. In case the Contractor fails to undertake the repair works under Section 62.2.2 of the 2016 revised IRR, the Procuring Entity shall forfeit its performance security, subject its property(ies) to attachment or garnishment proceedings, and perpetually disqualify it from participating in any public bidding. All payables of the GOP in his favor shall be offset to recover the costs.
- 7.2. The warranty against Structural Defects/Failures, except that occasioned-on force majeure, shall cover the period from the date of issuance of the Certificate of Final Acceptance by the Procuring Entity. Specific duration of the warranty is found in the SCC.

8. Liability of the Contractor

Subject to additional provisions, if any, set forth in the SCC, the Contractor's liability under this Contract shall be as provided by the laws of the Republic of the Philippines.

If the Contractor is a joint venture, all partners to the joint venture shall be jointly and severally liable to the Procuring Entity.

9. Termination for Other Causes

Contract termination shall be initiated in case it is determined *prima facie* by the Procuring Entity that the Contractor has engaged, before, or during the implementation of the contract, in unlawful deeds and behaviors relative to contract acquisition and implementation, such as, but not limited to corrupt, fraudulent, collusive, coercive, and obstructive practices as stated in ITB Clause 4.

10. Dayworks

Subject to the guidelines on Variation Order in Annex “E” of the 2016 revised IRR of RA No. 9184, and if applicable as indicated in the SCC, the Dayworks rates in the Contractor’s Bid shall be used for small additional amounts of work only when the Procuring Entity’s Representative has given written instructions in advance for additional work to be paid for in that way.

11. Program of Work

11.1. The Contractor shall submit to the Procuring Entity’s Representative for approval the said Program of Work showing the general methods, arrangements, order, and timing for all the activities in the Works. The submissions of the Program of Work are indicated in the SCC.

11.2. The Contractor shall submit to the Procuring Entity’s Representative for approval an updated Program of Work at intervals no longer than the period stated in the SCC. If the Contractor does not submit an updated Program of Work within this period, the Procuring Entity’s Representative may withhold the amount stated in the SCC from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program of Work has been submitted.

12. Instructions, Inspections and Audits

The Contractor shall permit the GOP or the Procuring Entity to inspect the Contractor’s accounts and records relating to the performance of the Contractor and to have them audited by auditors of the GOP or the Procuring Entity, as may be required.

13. Advance Payment

The Procuring Entity shall, upon a written request of the Contractor which shall be submitted as a Contract document, make an advance payment to the Contractor in an amount not exceeding fifteen percent (15%) of the total contract price, to be made in lump sum, or at the most two installments according to a schedule specified in the SCC, subject to the requirements in Annex “E” of the 2016 revised IRR of RA No. 9184.

14. Progress Payments

The Contractor may submit a request for payment for Work accomplished. Such requests for payment shall be verified and certified by the Procuring Entity’s Representative/Project Engineer. Except as otherwise stipulated in the SCC, materials and equipment delivered on the site but not completely put in place shall not be included for payment.

15. Operating and Maintenance Manuals

- 15.1. If required, the Contractor will provide “as built” Drawings and/or operating and maintenance manuals as specified in the **SCC**.
- 15.2. If the Contractor does not provide the Drawings and/or manuals by the dates stated above, or they do not receive the Procuring Entity’s Representative’s approval, the Procuring Entity’s Representative may withhold the amount stated in the **SCC** from payments due to the Contractor.

Section V. Special Conditions of Contract

Special Conditions of Contract

GCC Clause	
2	The intended Contract Completion is on the 426th day reckoned from the start date indicated in the Notice to Proceed (NTP).
3.1	The BCDA shall give possession of all parts of the site to the contractor from the start date indicated in the Notice to Proceed (NTP).
6	Conduct of site investigations, surveys, soil testing and other similar activities which are required for finalizing the detailed building design shall be completed by the DBC during the preparatory construction works such that the final design addresses the findings from these activities. Refer to Section 2.2. of the Terms of Reference.
7.2	Fifteen (15) years from the date of issuance of the Certificate of Final Acceptance by the Procuring Entity.
8	If the Contractor is a joint venture or consortium, all partners to the joint venture or consortium shall be jointly and severally liable to the BCDA.
10	Dayworks are applicable at the rate shown in the Contractor's original Bid.
11.1	The Contractor shall submit the Program of Work to the Procuring Entity's Representative within fourteen (14) days from receipt of the Notice of Proceed.
11.2	The Program of Work shall be updated and shall be submitted to BCDA for approval together with the request for Variation Orders, either in the form of a change order or extra work order, that shall cover any increase or decrease in the original quantities of the Contract.
13	<p>The Winning Bidder/Contractor may request for an advance payment in an amount not exceeding fifteen percent (15%) of the total contract price which will be divided into two (2) payments:</p> <ol style="list-style-type: none"> 1. Three percent (3%) of the contract price upon issuance of the Notice to Proceed; and 2. Twelve percent (12%) of the contract price upon issuance of the notice to commence the preparatory and construction works.
14	<p>Materials and equipment delivered on the site but not completely put in place or installed and accepted by the Procuring Entity's Representative shall not be included for payment.</p> <p>Payments shall be made through a modified scheme upon completion of the following milestones as shown below:</p> <p>1st Payment: Shall be at 20% actual accomplishment; 2nd Payment: Shall be at 30% actual accomplishment; 3rd Payment: Shall be at 40% actual accomplishment; 4th Payment: Shall be at 50% actual accomplishment;</p>

	<p>5th Payment: Shall be at 60% actual accomplishment; 6th Payment: Shall be at 70% actual accomplishment; 7th Payment: Shall be at 80% actual accomplishment; 8th Payment: Shall be at 90% actual accomplishment; and Final Payment: Shall be at 100% actual accomplishment.</p> <p>Payments are subject to applicable deductions under the IRR of RA9184</p>
15.1	<p>The Operating and Maintenance Manuals (one (1) original and three (3) copies and PDF file in USB); and As-Built Drawings (one (1) Original in Mylar, three (3) Blueprint Copies and electronic file in USB) shall be submitted to and approved by the Procuring Entity or its duly authorized representative before the issuance of the Certificate of Completion.</p>
15.2	<p>The final payment shall be withheld for failing to submit the complete sets and copies of Operating and Maintenance Manuals, and As-Built Drawings.</p>

***Section VI. Minimum Performance Standards
and Specifications***

(Attached as Part 2 Bidding Documents)

Section VII. Conceptual Plans and Drawings

(Attached as Part 2 Bidding Documents)

Section VIII. Bill of Quantities

(Use the Annex O-1 & O-2 Forms)

Section IX. Checklist of Technical and Financial Documents

Checklist of Technical and Financial Documents

I. TECHNICAL COMPONENT ENVELOPE	
<i>Class "A" Documents</i>	
<u>Legal Documents</u>	
<input type="checkbox"/>	(a) Valid and updated PhilGEPS Registration Certificate (Platinum Membership) (all pages) (in compliance with GPPB Resolution No. 15-2021); and
<u>Technical Documents</u>	
<input type="checkbox"/>	(b) Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid; and
<input type="checkbox"/>	(c) Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided under the rules <i>(This statement shall be supported by contracts, owner's final acceptance or equivalent document, and CPES rating sheets, if applicable. These supporting documents shall be numbered and tabbed in the same sequence as the list of contracts appears in this statement.); and</i>
<input type="checkbox"/>	Special PCAB License in case of Joint Ventures/Consortium; and registration for the type and cost of the contract to be bid (GPPB Resolution No.15-2021); and
<input type="checkbox"/>	(d) Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission; or Original copy of Notarized Bid Securing Declaration; and
	(e) Project Requirements, which shall include the following:
<input type="checkbox"/>	a. Organizational chart for the contract to be bid;
<input type="checkbox"/>	b. List of contractor's key personnel to be assigned to the contract to be bid, with their complete qualification and experience data;
<input type="checkbox"/>	c. List of contractor's major equipment units, which are owned, leased, under purchase agreements, supported by proof of ownership or certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be;
	d. Preliminary Conceptual Design Plans in accordance with the degree of details specified in Part II. Technical Reference (TOR and MPSP), such as, but not limited to: 1. CAD 3D Rendered Perspective (Architectural Character) 2. Site Development Plan 3. Architectural Plans A. Floor Plans B. Elevations C. Sections D. BIM Platform (e.g., Autodesk Revit, etc.)

	e. Design and Construction Method;
	f. Value Engineering Analysis of design and construction method; and
<input type="checkbox"/>	(f) Original duly signed Omnibus Sworn Statement (OSS); and if applicable, Original Notarized Secretary's Certificate in case of a corporation, partnership, or cooperative; or Original Special Power of Attorney of all members of the joint venture or consortium giving full power and authority to its officer to sign the OSS and do acts to represent the Bidder. and
<i>Financial Documents</i>	
<input type="checkbox"/>	(g) The prospective bidder's audited financial statements, showing, among others, the prospective bidder's total and current assets and liabilities, stamped "received" by the BIR or its duly accredited and authorized institutions, for the preceding calendar year which should not be earlier than two (2) years from the date of bid submission; and
<input type="checkbox"/>	(h) The prospective bidder's computation of Net Financial Contracting Capacity (NFCC).
<i>Class "B" Documents</i>	
<input type="checkbox"/>	(i) If applicable, duly signed joint venture agreement (JVA) or consortium agreement in accordance with RA No. 4566 and its IRR in case the joint venture is already in existence; or duly notarized statements from all the potential joint venture/consortium partners stating that they will enter into and abide by the provisions of the JVA or consortium agreement in the instance that the bid is successful.
II. FINANCIAL COMPONENT ENVELOPE	
<input type="checkbox"/>	(j) Original of duly signed and accomplished Financial Bid Form;
<i>Other documentary requirements under RA No. 9184</i>	
<input type="checkbox"/>	(k) Original of duly signed Bid Prices (Summary and Detailed);
<input type="checkbox"/>	(l) Duly accomplished Detailed Unit Price Analyses;
<input type="checkbox"/>	(m) Dayworks Schedule, indicating the unit prices of construction materials, labor rates, and equipment; and
<input type="checkbox"/>	(n) Cash Flow by Payment Schedule.

Bidding Forms

Bid Form for the Procurement of Design and Build of the National Academy of Sports (NAS) -Phase 2 at New Clark City

[shall be submitted with the Bid]

BID FORM

Date : _____

To: **BCDA Special Bids and Awards Committee for NAS**

Having examined the Philippine Bidding Documents (PBDs) including the Supplemental or Bid Bulletin Numbers *[insert numbers]*, the receipt of which is hereby duly acknowledged, we, the undersigned, declare that:

- a. We have no reservation to the PBDs, including the Supplemental or Bid Bulletins, for the Procurement Project: ***Design and Build of the National Academy of Sports (NAS) -Phase 2 at New Clark City***
- b. We offer to execute the Works for this Contract in accordance with the PBDs;
- c. The total price of our Bid in words and figures, excluding any discounts offered below is: *[total bid price in words]* and *[total bid price in figures]*;
- d. The discounts offered and the methodology for their application are: *[insert percentage or amount]* and *[information for their application]*;
- e. The total bid price includes the cost of all taxes, such as, but not limited to: (i) value added tax (VAT), (ii) income tax, (iii) local taxes, and (iv) other fiscal levies and duties, which are itemized herein and reflected in the detailed estimates,
- f. Our Bid shall be valid within the period stated in the PBDs, and it shall remain binding upon us at any time before the expiration of that period;
- g. If our Bid is accepted, we commit to obtain a Performance Security in the amount of Thirty ***percent (30%)*** of the Contract Price for the due performance of the Contract;
- h. We are not participating, as Bidders, in more than one Bid in this bidding process, other than alternative offers in accordance with the Bidding Documents;
- i. We understand that this Bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between

us, until a formal Contract is prepared and executed; and

- j. We understand that you are not bound to accept the Lowest Calculated Bid or any other Bid that you may receive.
- k. We likewise certify/confirm that the undersigned, is the duly authorized representative of the bidder, and granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for the **Design and Build of the National Academy of Sports (NAS) -Phase 2 at New Clark City**
- l. We acknowledge that failure to sign each and every page of this Bid Form, including the Bill of Quantities, shall be a ground for the rejection of our bid.

Name: _____

Legal Capacity: _____

Signature: _____

Duly authorized to sign the Bid for and behalf of: _____

Date: _____

STATEMENT OF AVAILABILITY OF KEY PERSONNEL

Design and Build of the National Academy of Sports (NAS) -Phase 2 at New Clark City

[Date of Issuance]

To: BCDA Special Bids and Awards Committee for NAS

In compliance with the requirements of the BCDA Special Bids and Awards Committee for NAS for the bidding of the Design and Build of the National Academy of Sports (NAS) - Phase 2 at New Clark City (“the Project”), we certify that *[Name of the Bidder]* has in its employ the following key personnel who will be engaged for the construction of the said Project:

1. Detailed Design Phase

Position	Name
Project Design Manager	
Structural Engineer	
Geodetic Engineer	
Professional Electrical Engineer	
Professional Mechanical Engineer	
Drainage Engineer	
Materials Engineer II	
Quantity Surveyor	
Architect	
BIM Specialist	

2. Construction Phase

Position	Name
Project Manager	
Deputy Project Manager	

Structural Engineer	
Geodetic Engineer	
Electrical Engineer	
Mechanical Engineer	
Drainage Engineer	
Materials Engineer II	
Quantity Surveyor	
Architect	
BIM Specialist	
Health and Safety Officer	

Very truly yours,
[Name of Authorized Representative]
[Name of Bidder]

Annex “C-1”

STATEMENT OF AVAILABILITY OF OWNED EQUIPMENT BY THE BIDDER

Design and Build of the National Academy of Sports (NAS) -Phase 2 at New Clark City

[Date of Issuance]

For: The BCDA Special Bids and Awards Committee for NAS

In compliance with the requirements of the BCDA Special Bids and Awards Committee for NAS for the bidding of the Design and Build of the National Academy of Sports (NAS) - Phase 2 at New Clark City (“the Project”), we hereby certify the availability of the following equipment that is owned by :

Equipment	Brand/Model	Capacity	Registered Owner
1.			
2.			

3.			
4.			

Very truly yours,

[Name of Bidder]

[Position]

[Name of Company]

STATEMENT OF AVAILABILITY OF LEASED EQUIPMENT

Design and Build of the National Academy of Sports (NAS) -Phase 2 at New Clark City

[Date of Issuance]

For: The BCDA Special Bids and Awards Committee for NAS

In compliance with the requirements of the BCDA Special Bids and Awards Committee for NAS for the bidding of the Design and Build of the National Academy of Sports (NAS) - Phase 2 at New Clark City (“the Project”), we hereby certify the availability of the following equipment that is under lease agreement between *[Name of Lessor]* and *[Name of Bidder]*:

Equipment	Brand/Model	Capacity
1.		
2.		
3.		

Very truly yours,

[Name of Equipment Lessor]

[Position]

[Name of Company]

**STATEMENT OF AVAILABILITY OF EQUIPMENT
UNDER PURCHASE AGREEMENT**

Design and Build of the National Academy of Sports (NAS) -Phase 2 at New Clark City

[Date of Issuance]

To: BCDA Special Bids and Awards Committee for NAS

In compliance with the requirements of the BCDA Special Bids and Awards Committee for NAS for the bidding of the Design and Build of the National Academy of Sports (NAS) - Phase 2 at New Clark City ("the Project"), we hereby certify the availability of the following equipment that is under purchase agreement between *[Name of Vendor]* and *[Name of Bidder]*:

Equipment	Brand/Model	Capacity

Very truly yours,

[Name of Equipment Vendor]

[Position]

[Name of Company]

**LIST OF KEY TECHNICAL PERSONNEL TO BE ASSIGNED TO THE PROJECT
DETAILED DESIGN PHASE**

Design and Build of the National Academy of Sports (NAS) -Phase 2 at New Clark City

Bidder : _____

	Project Design Manager	Structural Engineer	Geodetic Engineer	Electrical Engineer	Mechanical Engineer	Drainage Engineer	Materials Engineer II	Quantity Surveyor	Architect	BIM Specialist
Name										
1. Date of Birth										
2. Educational Attainment										
3. PRC License No./ Accreditation No. from DOLE (for the Safety and Health Officer)/ DPWH Accreditation No. (for the Materials Engineer II)										
4. Years of Experience in the Nominated Position										

Note:

- A. This List must be supported by the following documents:
 - 1. Individual CVs to show proof of the following:
 - a. that the proposed personnel meets the required profession and relative experience;
 - b. list of projects handled with the corresponding position and its inclusive years of experience (e.g., Construction of Road, Project Manager, 2012-2017)
 - 2. Photocopy of PRC Licenses/Accreditation from DOLE or DPWH.
- B. The details provided above shall be further validated with the submitted CVs. In case of discrepancies, the CV shall prevail.

Submitted by : _____
(Printed Name & Signature of Authorized Representative)

Date : _____

**LIST OF KEY TECHNICAL PERSONNEL TO BE ASSIGNED TO THE PROJECT
CONSTRUCTION PHASE**

Design and Build of the National Academy of Sports (NAS) -Phase 2 at New Clark City

Bidder : _____

	Project Manager	Deputy Project Manager	Structural Engineer	Geodetic Engineer	Electrical Engineer	Mechanical Engineer	Drainage Engineer	Materials Engineer II	Quantity Surveyor	Architect	BIM Specialist	Health and Safety Officer
Name												
1. Date of Birth												
2. Educational Attainment												
3. PRC License No./ Accreditation No. from DOLE (for the Safety and Health Officer)/ DPWH Accreditation No. (for the Materials Engineer II)												
4. Years of Experience in the Nominated Position												

Note:

- C. This List must be supported by the following documents:
 - 1. Individual CVs to show proof of the following:
 - a. that the proposed personnel meets the required profession and relative experience;
 - b. list of projects handled with the corresponding position and its inclusive years of experience (e.g., Construction of Road, Project Manager, 2012-2017)
 - 2. Photocopy of PRC Licenses/Accreditation from DOLE or DPWH.
- D. The details provided above shall be further validated with the submitted CVs. In case of discrepancies, the CV shall prevail.

Submitted by : _____
(Printed Name & Signature of Authorized Representative)

Date : _____

**KEY TECHNICAL PERSONNEL – DETAILED DESIGN PHASE
(FORMAT OF CURRICULUM VITAE)**

Design and Build of the National Academy of Sports (NAS) -Phase 2 at New Clark City

Proposed Position: _____

Name of Firm/Entity/JV/Consortium: _____

Name of Staff: _____

Profession: _____

Date of Birth: _____ Nationality: _____

Years with Firm/Entity: _____ years, from [mm/dd/yy] to [mm/dd/yy]

Current Position in the Firm: _____

Membership in Professional Societies: _____

Detailed Tasks Assigned: _____

Education:

[Summarize college/university and other specialized education of staff members, giving names of schools, dates attended, and degrees obtained. Use about one quarter of a page.]

College/University	Degree/Title Obtained	Inclusive Dates	
		From (MM/DD/YY)	To (MM/DD/YY)

* Complete the details of the inclusive dates (month, day, and year)

Memberships in Professional Regulatory Body

[Give an outline of all memberships in PRC using the matrix below]

Name of Profession	Name of Professional Regulatory Body <i>(please do not abbreviate)</i>	Date of Registration (MM/DD/YYYY)	License/Registration Number	Validity Date (MM/DD/YYYY)

* Complete the details of the inclusive dates (month, day and year)

Relevant Work Experience:

[Provide outline of projects undertaken using the matrix below]

Project Title	Project Description	Project Owner	Position and Description of the Nature of Work/ Engagement in the project	Start Date (MM/DD/YYYY)	End Date (MM/DD/YYYY)
(latest/most recent)					
(previous)					

*Rank from previous to latest/most recent project

* Complete the details of the inclusive dates (month, day, and year)

On-Going Projects

[Provide outline of on-going projects using the matrix below]

Project Title	Project Description	Project Owner	Position and Description of the Nature of Work/ Engagement in the project	Start Date (MM/DD/YYYY)	End Date (MM/DD/YYYY)
(latest/most recent)					
(previous)					

*Rank from previous to latest/most recent on-going project

* Complete the details of the inclusive dates (month, day, and year)

Certification:

I, *[full name of nominated key technical personnel]*, certify that to the best of my knowledge and belief, these data correctly describe me, my qualifications, and my experience.

Commitment:

I also commit to work for the Project as *[proposed position]* and assume the post of *[proposed position]* within seven (7) days upon receipt of the Notice to Proceed by the *[Name of Bidder]*.

Date: _____

[Signature over printed name of nominated key technical personnel]

_____ Date: _____
[Signature over printed name of authorized representative]

Annex “E-2”

**KEY TECHNICAL PERSONNEL – CONSTRUCTION PHASE
 (FORMAT OF CURRICULUM VITAE)**

Design and Build of the National Academy of Sports (NAS) -Phase 2 at New Clark City

Proposed Position: _____

Name of Firm/Entity/JV/Consortium: _____

Name of Staff: _____

Profession: _____

Date of Birth: _____ Nationality: _____

Years with Firm/Entity: _____ years, from [mm/dd/yy] to [mm/dd/yy]

Current Position in the Firm: _____

Membership in Professional Societies: _____

Detailed Tasks Assigned: _____

Education:

[Summarize college/university and other specialized education of staff members, giving names of schools, dates attended, and degrees obtained. Use about one quarter of a page.]

College/University	Degree/Title Obtained	Inclusive Dates	
		From (MM/DD/YY)	To (MM/DD/YY)

* Complete the details of the inclusive dates (month, day, and year)

Memberships in Professional Regulatory Body

[Give an outline of all memberships in PRC using the matrix below]

Name of Profession	Name of Professional Regulatory Body <i>(please do not abbreviate)</i>	Date of Registration (MM/DD/YYYY)	License/Registration Number	Validity Date (MM/DD/YYYY)

* Complete the details of the inclusive dates (month, day and year)

Relevant Work Experience:

[Provide outline of projects undertaken using the matrix below]

Project Title	Project Description	Project Owner	Position and Description of the Nature of Work/ Engagement in the project	Start Date (MM/DD/YYYY)	End Date (MM/DD/YYYY)
(latest/most recent)					
(previous)					

*Rank from previous to latest/most recent project

* Complete the details of the inclusive dates (month, day, and year)

On-Going Projects

[Provide outline of on-going projects using the matrix below]

Project Title	Project Description	Project Owner	Position and Description of the Nature of Work/ Engagement in the project	Start Date (MM/DD/YYYY)	End Date (MM/DD/YYYY)
(latest/most recent)					
(previous)					

*Rank from previous to latest/most recent on-going project

* Complete the details of the inclusive dates (month, day, and year)

Certification:

I, *[full name of nominated key technical personnel]*, certify that to the best of my knowledge and belief, these data correctly describe me, my qualifications, and my experience.

Commitment:

I also commit to work for the Project as *[proposed position]* and assume the post of *[proposed position]* within seven (7) days upon receipt of the Notice to Proceed by the *[Name of Bidder]*.

Date: _____

[Signature over printed name of nominated key technical personnel]

Date: _____

[Signature over printed name of authorized representative]

LIST OF EQUIPMENT OWNED OR LEASED AND/OR UNDER PURCHASE AGREEMENT, PLEDGED TO THE PROPOSED CONTRACT

Design and Build of the National Academy of Sports (NAS) -Phase 2 at New Clark City

Description	Model/Year	Capacity/ Performance/Size	Plate No.	Motor No./ Body No./Chasis No.	Location	Proof of Ownership/ Lease/Purchase
A. Owned ¹						
i.						
ii.						
iii.						
B. Leased ²						
i.						
ii.						
iii.						
C. Under Purchase Agreement ³						
i.						
ii.						
iii.						

¹ Please refer to BDS Section 10.5a for the list of acceptable supporting documents for owned equipment

² Please refer to BDS Section 10.5b for the list of acceptable supporting documents for leased equipment

³ Please refer to BDS Section 10.5c for the list of acceptable supporting documents for equipment under purchase agreement

Submitted by : _____
(Printed Name & Signature of Authorized Representative)

Date : _____

STATEMENT OF SINGLE LARGEST COMPLETED CONTRACT (SLCC)

Design and Build of the National Academy of Sports (NAS) -Phase 2 at New Clark City

Date: _____

For: The BCDA Special Bids and Awards Committee for NAS

In compliance with the eligibility requirements for the bidding of Design and Build of the National Academy of Sports (NAS) - Phase 2 at New Clark City, this is to certify that *[name and complete address of Bidder]* has the following completed government and private contracts:

Tab No.	Name of Contract	Start Date of Contract	Contract Duration	Project Owner’s Name and Address	Contractor’s Role (whether sole contractor, subcontractor or partner in a JV) if subcontractor, indicate the total amount subcontracted if Joint Venture, indicate the total amount of participation in the JV	Total Contract Value at Award (in PhP)	Date of Completion	Total Contract Value at Completion (in PhP)	CPES Rating, if applicable

Yours sincerely,

[Signature over printed name of Authorized Representative]

[Title]

[Name of Firm]

Note: This statement shall be supported by contracts, certificate of completion or owner’s final acceptance and CPES rating sheets, if applicable. These supporting documents shall be numbered and tabbed in the same sequence as the list of contracts appears in this statement.

**STATEMENT OF ALL ON-GOING GOVERNMENT AND PRIVATE CONTRACTS,
INCLUDING CONTRACTS AWARDED BUT NOT YET STARTED, IF ANY**

Design and Build of the National Academy of Sports (NAS) -Phase 2 at New Clark City

Date: _____

For: The BCDA Special Bids and Awards Committee for NAS

In compliance with the eligibility requirements for the bidding of **Design and Build of the National Academy of Sports (NAS) - Phase 2 at New Clark City**, this is to certify that *[name and complete address of Bidder]* has the following on-going government and private contracts. [Including contracts awarded but not yet started]:

Tab No.	Name of Contract	Date of Contract	Contract Duration	Owner's Name and Address	Nature of Work	Contractor's Role (whether sole contractor, subcontractor or partner in a JV) if subcontractor, indicate the total amount subcontracted if Joint Venture, indicate the total amount of participation in the JV	Total Contract Value at Award (in PhP)	[Estimated] Date of Completion	Total Contract Value at Completion, if applicable (in PhP)	Percentages of Planned & Actual Accomplishment, if applicable	Value of Outstanding Works, if applicable (in PhP)
TOTAL AMOUNT:											

Yours sincerely,

[Signature over printed name of Authorized Representative]

[Title]

[Name of Firm]

Note: This statement shall be supported by contracts or notices of award or notices to proceed issued by the owners. The original copies of these supporting documents shall be presented during the conduct of Post-Qualification.

OMNIBUS SWORN STATEMENT

REPUBLIC OF THE PHILIPPINES)
CITY/MUNICIPALITY OF _____) S.S.

AFFIDAVIT

I, *[Name of Affiant]*, of legal age, *[Civil Status]*, *[Nationality]*, and residing at *[Address of Affiant]*, after having been duly sworn in accordance with law, do hereby depose and state that:

1. **Select one, delete the other:**

If a sole proprietorship: I am the sole proprietor or authorized representative of *[Name of Bidder]* with office address at *[address of Bidder]*;

If a partnership, corporation, cooperative, or joint venture: I am the duly authorized and designated representative of *[Name of Bidder]* with office address at *[address of Bidder]*;

2. **Select one, delete the other:**

If a sole proprietorship: As the owner and sole proprietor or authorized representative of *[Name of Bidder]*, I have full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for *[Name of the Project]* of the *[Name of the Procuring Entity]* *[insert "as shown in the attached duly notarized Special Power of Attorney" for the authorized representative]*;

If a partnership, corporation, cooperative, or joint venture: I am granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for *[Name of the Project]* of the *[Name of the Procuring Entity]*, accompanied by the duly notarized Special Power of Attorney, Board/Partnership Resolution, or Secretary's Certificate, whichever is applicable;

3. *[Name of Bidder]* is not "blacklisted" or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board;
4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;

5. *[Name of Bidder]* is authorizing the Head of the Procuring Entity or its duly authorized representative(s) to verify all the documents submitted;

6. **Select one, delete the rest:**

If a sole proprietorship: The owner or sole proprietor is not related to the Head of the Procuring Entity, members of the Special Bids and Awards Committee (SBAC), the Technical Working Group, and the SBAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

If a partnership or cooperative: None of the officers and members of *[Name of Bidder]* is related to the Head of the Procuring Entity, members of the Special Bids and Awards Committee (SBAC), the Technical Working Group, and the SBAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

If a corporation or joint venture: None of the officers, directors, and controlling stockholders of *[Name of Bidder]* is related to the Head of the Procuring Entity, members of the Special Bids and Awards Committee (SBAC), the Technical Working Group, and the SBAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

7. *[Name of Bidder]* complies with existing labor laws and standards; and

8. *[Name of Bidder]* is aware of and has undertaken the following responsibilities as a Bidder:

- a) Carefully examine all of the Bidding Documents;
- b) Acknowledge all conditions, local or otherwise, affecting the implementation of the Contract;
- c) Made an estimate of the facilities available and needed for the contract to be bid, if any; and
- d) Inquire or secure Supplemental/Bid Bulletin(s) issued for the *[Name of the Project]*.

9. *[Name of Bidder]* did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.

10. In case advance payment was made or given, failure to perform or deliver any of the obligations and undertakings in the contract shall be sufficient grounds to constitute criminal liability for Swindling (Estafa) or the commission of fraud with unfaithfulness or abuse of confidence through misappropriating or converting any payment received by a person or entity under an obligation involving the duty to deliver certain goods or services, to the prejudice of the public and the government of the Philippines pursuant to Article 315 of Act No. 3815 s. 1930, as amended, or the

Revised Penal Code.

IN WITNESS WHEREOF, I have hereunto set my hand this ___ day of ___, 20__ at _____, Philippines.

Bidder's Representative/Authorized Signatory

SUBSCRIBED AND SWORN to before me this ___ day of *[month]* *[year]* at *[place of execution]*, Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her *[insert type of government identification card used]*, with his/her photograph and signature appearing thereon, with no. _____ and his/her Community Tax Certificate No. _____ issued on ___ at _____.

Witness my hand and seal this ___ day of *[month]* *[year]*.

NAME OF NOTARY PUBLIC

Serial No. of Commission _____

Notary Public for _____ until _____

Roll of Attorneys No. _____

PTR No. __, *[date issued]*, *[place issued]*

IBP No. __, *[date issued]*, *[place issued]*

MCLE No. __

Doc. No. _____

Page No. _____

Book No. _____

Series of _____

JOINT VENTURE/ CONSORTIUM AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

This **JOINT VENTURE/ CONSORTIUM AGREEMENT** (hereinafter referred to as the “Agreement”), entered into this _____ day of _____ 20__ at _____ City, Philippines by and among:

_____, a domestic corporation duly organized, registered and existing under and by virtue of the laws of the Republic of the Philippines, with office address at _____, represented by its _____, _____, hereinafter referred to as “_____”;
- and -

_____, a domestic corporation duly organized, registered and existing under and by virtue of the laws of the Republic of the Philippines, with office address at _____, represented by its _____, _____, hereinafter referred to as “_____”;

- and -

_____ a foreign corporation organized and existing under and by virtue of the laws of _____, represented by its _____, _____, hereinafter referred to as “_____”;

(Henceforth collectively referred to as the “Parties”)

WITNESSETH: That

WHEREAS, BCDA has recently published an Invitation to Apply for Eligibility and to Bid for the Design and Build of the National Academy of Sports (NAS) -Phase 2 at New Clark City;

WHEREAS, the parties have agreed to pool their resources together to form the “_____ Joint Venture/Consortium”, hereinafter referred to as the Joint Venture/Consortium, under the laws of the Philippines, for the purpose of participating in the abovementioned procurement of BCDA;

NOW, THEREFORE, for and in consideration of the foregoing premises and the covenants hereto set forth, the Parties have agreed as follows:

ARTICLE I

ORGANIZATION OF THE JOINT VENTURE/CONSORTIUM

SECTION 1. Formation – The Parties do hereby agree and bind themselves to establish, form and organize a Joint Venture pursuant to the laws of the Republic of the Philippines, in order for the JV to carry on the purposes and objectives for which it is created;

SECTION 2. Name – The name and style under which the JV/Consortium shall be conducted is “_____”;

SECTION 3. Principal Place of Business – The JV/Consortium shall maintain its principal place _____ of _____ business _____ at _____ ;

SECTION 4. Preparation and Documentation – The Parties shall secure and/or execute such certifications, documents, deeds and instruments as may be required by the laws of the Republic of the Philippines for the realization of the JV/Consortium and in compliance with the Project. Further, they shall do all other acts and things requisite for the continuation of the JV/Consortium pursuant to applicable laws;

SECTION 5. The Joint Venture/Consortium shall be represented by the _____ in all biddings, related procurement transactions and other official dealings that it shall enter into with BCDA and third parties, such transactions to include, among others, the submission of eligibility documents, bids, registration documents obtaining bonds, performing the principal contract in the event that the contract is awarded in favor of the Joint Venture/Consortium, receipt of payment for goods delivered, and similar and related activities.

SECTION 6. The period of the Joint Venture/Consortium shall begin upon execution of this Agreement and shall continue until the complete performance of its contractual obligations to BCDA, as described in Article II hereof, or upon its termination for material breach of any term or condition of this Agreement, by service of a written statement in English on the other Party, not less than 90 days prior to the intended date termination

ARTICLE II PURPOSE

SECTION 1. The primary purpose of the Joint Venture/Consortium is to participate in the public bidding to be conducted by the BCDA Special Bids and Awards Committee for the Design and Build of the National Academy of Sports (NAS) -Phase 2 at New Clark City.

SECTION 2. If the above-described contract/s is/are awarded to the Joint Venture/Consortium, the Joint Venture/Consortium shall undertake the performance thereof to BCDA, and such other incidental activities necessary for the completion of its contractual obligations.

**ARTICLE III
SOLIDARY LIABILITY OF THE PARTIES**

SECTION 1. In the performance of the contract/s that may be awarded to the Joint Venture/Consortium by BCDA, and all other related activities/obligations, as described in Article II hereof, the Parties bind themselves jointly and solidarily, in the concept of solidarily debtors, subject to the right of reimbursement, as provided in the relevant provisions of the Civil Code of the Philippines.

**ARTICLE IV
CONTRIBUTION AND OTHER ARRANGEMENTS**

SECTION 1. Contribution – The Parties shall contribute the amount of _____ (Php) to support the financial requirements of the Joint Venture/Consortium, in the following proportion:

A.	-	P	.00
B.	-	P	.00
TOTAL		P	.00

Additional contributions to the Joint Venture/Consortium shall be made as may be required for contract implementation. In addition, ____ shall contribute any labor and contract management requirements.

SECTION 2. Profit Sharing – The share of the Parties to the JV/Consortium from any profit derived or obtained from the implementation and execution of the Project shall be distributed pro rata to each, in accordance with the contribution and resources each has provided to the JV/Consortium;

SECTION 3. Liquidation and Distributions – Any sum remaining after deducting from the total of all moneys or benefits received for the performance of the contract, all costs incurred by the JV/Consortium after award of the contract for the Project pursuant to the accounting practices established for the JV/Consortium, shall be distributed in accordance with the relative balances in the accounts of each Party pursuant to Sec.1 of this Article upon completion, final accounting, termination and liquidation of the JV/Consortium. In the event of liquidation and termination of JV/Consortium, and after taking into account the shares of the Parties in all income, gain, deductions, expenses, and losses, should the account of a Party

contain a negative balance, such Party shall contribute cash to the JV/Consortium sufficient to restore the said balance to zero;

SECTION 4. Sharing of Burden of a Net Loss – In case a net loss is incurred, additional contributions shall be made by the Parties in accordance with their respective shares.

ARTICLE V
MISCELLANEOUS PROVISIONS

SECTION 1. The provisions of the Instructions to Bidders, Supplemental Bid Bulletin, and other bidding documents issued by BCDA in relation to the contract described in Article II hereof, shall be deemed incorporated in this Agreement and made an integral part thereof.

SECTION 2. This Agreement shall be binding upon and inure to the benefit of the Parties and their respective successors and assigns.

SECTION 3. The Parties herein are duly represented by their authorized officers.

SECTION 4. Governing Law - This Agreement shall be governed by and construed according to the laws of the Republic of the Philippines. Venue of any court action arising from this Agreement shall be exclusively laid before the proper court of the _____, Philippines.

IN WITNESS WHEREOF, the parties have set their hands and affixed their signatures on the date and place first above-stated.

Signed in the Presence of:

ACKNOWLEDGMENT

REPUBLIC OF THE PHILIPPINES)
CITY/MUNICIPALITY OF _____) S.S.
PROVINCE OF (in the case of Municipality)

BEFORE ME, a Notary Public for and in the City/Municipality of (indicate also the Province in the case of Municipality), this day of (month & year) personally appeared the following:

 Name

 ID Name, Number and Validity Date

Known to me and to me known to be the same persons who executed the foregoing instrument and they acknowledge to me that the same is their free and voluntary act and deed and that of the corporation(s) they represent.

This instrument refers to a Joint Venture/Consortium Agreement consisting of pages, including the page on which this Acknowledgement is written, and signed by the parties and their instrumental witnesses.

WITNESS MY HAND AND NOTARIAL SEAL on the place and on the date first above written.

(Notary Public)

Until
PTR No.
Date
Place
TIN
IBP

Doc. No. ;
Page No. ;
Book No. ;
Series of 20 .

Note: The competent evidence of identity for Notary shall comply with Sec. 12 (a), Rule II of the 2004 Rules on Notarial Practice. “Sec. 12. Competent Evidence of Identity – The phrase “competent evidence of identity” refers to the identification of an individual based on at least one current identification document issued by an official agency bearing the photograph and signature of the individual, such as but not limited to, passport, driver’s license, Professional Regulations Commission ID, National Bureau of Investigation clearance, police clearance, postal ID, voter’s ID, Barangay certification, Government Service and Insurance System (GSIS) e-card, Social Security System (SSS) card, Philhealth card, senior citizen card, Overseas Workers Welfare Administration (OWWA) ID, OFW ID, seaman’s book, alien certificate of registration/immigrant certificate of registration, government office ID, certification from the National Council for the Welfare of Disabled Persons (NCWDP), Department of Social Welfare and Development (DSWD) certification;

UNDERTAKING OF AGREEMENT TO ENTER INTO SUBCONTRACTING

This **UNDERTAKING OF AGREEMENT TO ENTER INTO SUBCONTRACTING**, executed by _____, a sole proprietorship/partnership/corporation duly organized and existing under and by virtue of the laws of the Philippines, with offices located at _____, representative herein by its _____, _____ hereafter referred to as “_____”.

-and-

_____ a sole proprietorship/partnership/corporation duly organized and existing under and by virtue of the laws of the Philippines, with offices located at _____, representative herein by its _____, _____ hereafter referred to as “_____”;

For submission to the Special Bids and Awards Committee (SBAC) of the Bases Conversion and Development Authority (BCDA), **pursuant to Item (9) (9.2) (ii) (b) of Annex G (Guidelines for the Procurement and Implementation of Contracts for Design and Build Infrastructure Projects) of the 2016 Revised Implementing Rules and Regulations (RIRR) of Republic Act (RA) No. 9184.**

WITNESSETH that:

WHEREAS, the Parties desire to participate as a Contractor and Subcontracting Entity in the public bidding that will be conducted by BCDA pursuant to Republic Act No. 9184 and 2016 RIRR, with the following particulars:

Name/Title of Procurement Project	
Approved Budget for the Contract	

NOW THEREFORE, in consideration of the foregoing, the Parties undertake to enter into a **SUBCONTRACTING** and sign a **SUBCONTRACTING Agreement** relative to their **SUBCONTRACTING** cooperation for this project, in the event that the bid is successful, furnishing the BCDA-SBAC a duly signed and notarized copy thereof **within ten (10) calendar days** from receipt of Notice from the BCDA-SBAC that the bid has the lowest calculated responsive bid or highest rated responsive bid (as case may be).

For purposes of this bid project, and unless modified by the terms of the **SUBCONTRACTING Agreement**, the following party shall be the authorized representative of the **SUBCONTRACTING**

(Name of Company)

Authorized Representative of the SUBCONTRACTING AGREEMENT: (per attached Secretary's Certificate)

Name

Designation

That furthermore, the parties agree to be bound jointly and severally under the said SUBCONTRACTING Agreement;

That finally, failure to enter into the SUBCONTRACTING and/or sign the SUBCONTRACTING Agreement for any reason after the Notice of Award (NOA) has been issued by shall be a ground for non-issuance of BCDA of the Notice to Proceed (NTP), forfeiture of the bid security and such other administrative and/or civil liabilities as may be imposed by BCDA under the provisions of R.A. No. 9184 and its 2016 RIRR, without any liability on the part of BCDA.

This undertaking shall form an integral part of the Eligibility Documents for the above-mentioned project.

IN WITNESS THEREOF, the Parties have signed this Undertaking on the date first above-written.

Contractor's Representative/Authorized Signatory

SUBCONTRACTING Entity's Representative/Authorized Signatory

CONTRACTOR'S LETTERHEAD

(PROFORMA LETTER FOR WITHDRAWAL OF DOCUMENTS)

Date

BCDA Special Bids and Awards Committee for NAS

This has reference to Public Bidding No. _____ for _____ (Name of Project) _____.
Name of Company) _____ respectfully requests for the following:

- Withdraw of Bid Submissions
- Refund of Bid Security
(Attached is a photocopy of BCDA Official Receipt)
- Cancellation of Credit Line Certificate

It is understood that _____ waives its right to file any motion for reconsideration and/pr protest in connection with the above-cited Public Bidding Project.

Thank you.

Very truly yours,

Authorized Representative

FORM OF PERFORMANCE SECURITY (BANK GUARANTEE)

Design and Build of the National Academy of Sports (NAS) -Phase 2 at New Clark City

To : **Bases Conversion and Development Authority**

WHEREAS, _____ (*Name and Address of Contractor*) (hereinafter called "the Contractor") has undertaken, in pursuance of Purchase Order No. _____ dated _____ to execute (*Name of Contract and Brief Description*) (hereinafter called "the Contract");

AND WHEREAS, it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS, we have agreed to give the Contractor such a Bank Guarantee;

NOW THEREFORE, we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of [*Amount of Guarantee*] proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of [*Amount of Guarantee*] as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract to be performed thereunder or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until the date of issue of the Final Acceptance [Inspection, & Certification of Acceptance Report (I.C.A.R.)].

SIGNATURE AND SEAL OF THE GUARANTOR
NAME OF BANK
ADDRESS

DATE

Annex "M"

REPUBLIC OF THE PHILIPPINES)
CITY OF _____) S.S.
X-----X

BID SECURING DECLARATION

Design and Build of the National Academy of Sports (NAS) -Phase 2 at New Clark City

To: **BCDA Special Bids and Awards Committee for NAS**

I/We, the undersigned, declare that:

1. I/We understand that, according to your conditions, bids must be supported by a Bid Security, which may be in the form of a Bid Securing Declaration.
2. I/We accept that: (a) I/we will be automatically disqualified from bidding for any contract with any procuring entity for a period of two (2) years upon receipt of your Blacklisting Order; and, (b) I/we will pay the applicable fine provided under Section 6 of the Guidelines on the Use of Bid Securing Declaration, within fifteen (15) days from receipt of written demand by the procuring entity for the commission of acts resulting to the enforcement of the bid securing declaration under Sections 23.1(b), 34.2, 40.1 and 69.1, except 69.1 (f), of the IRR of RA 9184; without prejudice to other legal action the government may undertake:
3. I/We understand that this Bid-Securing Declaration shall cease to be valid on the following circumstances:
 - (a) Upon expiration of the bid validity period, or any extension thereof pursuant to your request;
 - (b) I am/we are declared ineligible or post-disqualified upon receipt of your notice to such effect, and (i) I/we failed to timely file a request for reconsideration or (ii) I/we filed a waiver to avail of said right;
 - (c) I am/we are declared as the bidder with the Lowest Calculated Responsive Bid, and I/we have furnished the performance security and signed the Contract.

IN WITNESS WHEREOF, I/We have hereunto set my/our hand/s this ____ day of [month] [year] at [place of execution].

[Insert NAME OF BIDDER'S AUTHORIZED REPRESENTATIVE]
[Insert signatory's legal capacity]

Affiant

SUBSCRIBED AND SWORN to before me this __ day of [month] [year] at [place of execution], Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her [insert type of government identification card used], with his/her photograph and signature appearing thereon, with no. _____.

Witness my hand and seal this ____ day of [month] [year].

NAME OF NOTARY PUBLIC

Serial No. of Commission _____

Notary Public for _____ until _____

Roll of Attorneys No. _____

PTR No. __, [date issued], [place issued]

IBP No. __, [date issued], [place issued]

Doc. No. ____

Page No. ____

Book No. ____

Series of ____.

**Design and Build of the National Academy of Sports (NAS) - Phase 2
at New Clark City**

THE PUBLIC IS INFORMED:

This **Contract** is executed between:

BASES CONVERSION AND DEVELOPMENT AUTHORITY, a government instrumentality vested with corporate powers, created by virtue of Republic Act No. 7227, as amended, with principal office address at the BCDA Corporate Center, 2nd Floor Bonifacio Technology Center, 31st Street corner 2nd Avenue, Bonifacio Global City, Taguig City, represented herein by its President and CEO, _____, who is duly authorized for this purpose as evidenced by the Secretary’s Certificate dated _____, a certified true copy of which is hereto attached as **Annex “A”** and made an integral part hereof, hereinafter referred to as "**BCDA**";

- and -

_____, a private corporation duly organized and existing under the laws of the Republic of the Philippines, with office address at _____, represented herein by its _____, _____, who is duly authorized for this purpose as evidenced by a Secretary’s Certificate dated _____, a copy of which is hereto attached as **Annex “B”**, hereinafter referred to as **“Contractor”**.

Individually referred to as “Party” and collectively as “Parties”,

ANTECEDENTS

BCDA is desirous that the Contractor execute the Design and Build of the National Academy of Sports (NAS) - Phase 2 at New Clark City (hereinafter called “the Works”) and BCDA has accepted the Bid for _____ by the Contractor for the execution and completion of such Works and the remedying of any defects therein.

ACCORDINGLY, the Parties agree as follows:

3. In this Contract, words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
4. The following documents as required by the 2016 revised Implementing Rules and Regulations of Republic Act No. 9184 shall be deemed to form and be read and construed as part of this Contract, vis.:
 - a. Philippine Bidding Documents (PBDs);
 - i. Drawings/Plans;

- ii. Specifications;
- iii. Bill of Quantities;
- iv. General and Special Conditions of Contract;
- v. Supplemental or Bid Bulletins, if any;

- b. Winning bidder's bid, including the Eligibility requirements, Technical and Financial Proposals, and all other documents or statements submitted;

Bid form, including all the documents/statements contained in the Bidder's bidding envelopes, as annexes, and all other documents submitted (e.g. Bidder's response to request for clarifications on the bid), including corrections to the bid, if any, resulting from the BCDA's bid evaluation;

- c. Performance Security;
- d. Notice of Award of Contract and the Bidder's conforme thereto; and
- e. Other contract documents that may be required by existing laws and/or the Procuring Entity concerned in the PBDs. **Winning bidder agrees that additional contract documents or information prescribed by the GPPB that are subsequently required for submission after the contract execution such as the Notice to Proceed, Variation Orders, and Warranty Security, shall likewise form part of the Contract.**

- 3. In consideration for the sum of _____ or such other sums as may be ascertained, the Contractor agrees to execute the Design and Build of the National Academy of Sports (NAS) - Phase 2 at New Clark City in accordance with his/her/its Bid.
- 4. The BCDA agrees to pay the above-mentioned sum in accordance with the terms of the Bidding.
- 5. Any amendment, modification or additional terms and conditions to this Contract shall be made in writing and executed with the same formalities hereof.

SIGNED BY THE PARTIES on _____ in Taguig City, Philippines.

BASES CONVERSION AND DEVELOPMENT AUTHORITY

By:

President and CEO

Signed in the presence of:

Executive Vice President and COO

ACKNOWLEDGMENT

Republic of the Philippines)
Taguig City) ss.

BEFORE ME, a Notary Public, for and in Taguig City, personally appeared the following:

Name	Government Issued ID	Date/Place Issued

known to me to be the same persons who executed the foregoing instrument and they acknowledge to me that their signatures confirm their own free acts and the entities they represent.

SIGNED AND SEALED on _____ in Taguig City, Philippines.

Doc. No.
Page No.
Book No.
Series of 2021

BILL OF QUANTITIES

Project Name: **DESIGN AND BUILD FOR THE NATIONAL ACADEMY OF SPORTS (NAS) PHASE 2**Location: **New Clark City, Capas Tarlac**

SUMMARY		
PART	DESCRIPTION	BID AMOUNT in Php
I	Detailed Engineering and Architectural Design	
Sub Total		
II		
A	Facilities for the Engineer	
B	Other General Requirements	
C	Earthworks	
D	Reinforced Concrete	
E	Finishing and Other Civil Works	
F	Electrical	
G	Mechanical	
H	Fire Protection	
I	Drainage/Sanitary	
J	Softscapes / Landscapes	
Sub Total		
Note: The Bidders may include additional pay items not covered by this form		
TOTAL BID AMOUNT		

TOTAL BID AMOUNT:

In Figures: _____

in Words: _____

Name and Signature of Bidder : _____

Name of Company and Official Stamp of Bidder : _____

Date : _____

TOTAL	Php	
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Annex “P-1”

DAYWORKS SCHEDULE

LABOR

Project Name: Design and Build of the National Academy of Sports (NAS) - Phase 2 at New Clark City

NO.	TYPE OF LABOR	UNIT	RATE
1	Foreman	Hour	
2	Skilled Laborer	Hour	
3	Unskilled Laborer	Hour	
4	Driver	Hour	
5	Heavy Equipment Operator	Hour	

DAYWORKS SCHEDULE**MATERIALS**

Project Name: Design and Build of the National Academy of Sports (NAS) - Phase 2 at New Clark City

NO.	TYPE OF MATERIALS	UNIT	RATE
1	Cement	Bag	
2	Fine Aggregate	Cu.m.	
3	Coarse Aggregate	Cu.m.	
4	Reinforcing Steel Bars	Kg.	
5	Coco Lumber	Bd.ft.	
6	Assorted CWN	Kg.	
7	G.I. Tie Wire, Ga. 16	Kg.	
8	Plywood	piece	

DAYWORKS SCHEDULE

EQUIPMENT

Project Name: Design and Build of the National Academy of Sports (NAS) - Phase 2 at New Clark City

NO.	TYPE OF EQUIPMENT	UNIT	RATE
1	Mobile Truck Mounted Crane (50 Tons)	Hour	
3	Back hoe crawler type (1 cu.m.)	Hour	
4	10-Wheeler Truck with Boom (5 Tons)	Hour	
5	Dump Truck (15 cu.m)	Hour	
6	Water Truck (5,000L)	Hour	
7	Generator Set (150 KVA)	Hour	

Cash Flow by Payment Schedule

Particular	% WT.	1 st Payment	2 nd Payment	3 rd Payment	4 th Payment	5 th Payment	6 th Payment	6 th Payment	8 th Payment	Final Payment
Accomplishment										
Cash Flow										
Cumulative Accomplishment										
Cumulative Cash Flow										

Submitted by:

Name of Contractor / Supplier / Distributor / Manufacturer

Name and Signature of Authorized Representative

Date : _____

Section I.

Terms of Reference

TERMS OF REFERENCE

DESIGN AND BUILD OF THE NATIONAL ACADEMY OF SPORTS - PHASE 2 AT NEW CLARK CITY

Section 1. PROJECT BACKGROUND AND DESCRIPTION

A. BACKGROUND

1. The Bases Conversion and Development Authority (BCDA) is implementing the New Clark City Project (NCC), a flagship project of the Government of the Republic of the Philippines. This 9,450-hectare metropolis is a planned city landscape north of Metro Manila that will host businesses, domestic and international trade, schools and hospitals, research and development entities, regional tourism centers, national government offices, and international headquarters.
2. On 09 June 2020, the Republic Act No. 11470 or the National Academy of Sports Act ("NAS Act") was created to establish the National Academy of Sports System (NAS System) for secondary education program integrated with a special curriculum on sports to be offered to natural-born Filipino citizens on a full scholarship basis. The NAS System shall be attached to the Department of Education (DepEd), in close coordination with the Philippine Sports Commission (PSC).
3. The NAS Act mandates the BCDA with critical undertakings towards the establishment of the NAS System by requiring the provision of the project site, undertake the construction and ensure that funding for the construction works is secured:

(Section 5) Construction and Site of the NAS Main Campus

"Provide the land for the site by way of usufruct in perpetuity", and "be in charge of the construction of classrooms, dormitories, and other sports facilities, and related amenities as may be determined by the Board of Trustees at the New Clark City campus".

(Section 21) Appropriations.

"BCDA shall likewise immediately include in its procurement plan the construction of classrooms, dormitories, and other sports facilities and related amenities for the NAS main campus whose funding shall also be included in the General Appropriations Act."

4. The construction program for the infrastructure development of the NAS System is divided into phases to manage the works required. This includes the ongoing construction projects for Phase 1 which are the Administration and Academic Building (AAB) and the Multi-purpose Gym (MGYM) and targeted to be completed in the month of August 2023. Next is this project which covers the Phase 2 construction works, Sport Science and Sports Medicine Building, Additional Sports Facility (Sports Center with Multi-Purpose Covered Courts) and Staff Housing, which are prioritized to provide the facilities that should be present to accommodate the student-athletes. And lastly, Phase 3 Development, which is targeted to commence in 2024, will include the provision of expansion works as well as the provision of a Dormitory with a Dining Hall, (Hostel for Guests and Officials), Expansion of Academic Building (Senior High School Wing), 1000-Seat Auditorium, and a few more sporting facilities/amenities to provide a full-service facility for the campus as both the administrative and the academic population reaches their optimal level.

B. PROJECT DESCRIPTION

The “Project” that is subject of these Terms of Reference is composed of the design and construction of (1) Sport Science and Sports Medicine Building, (2) Additional Sport Facility (Sport Center with Multi-Purpose Covered Courts), (3) Staff Housing, and (4) Site Development and the fit out including required finishes and installations.

Table 1. Project Components and Description

DESCRIPTION	
Building 1	Sports Science and Sports Medicine Building (2 Storey Building) (With minimum GFA of 1,280 sqm)
Building 2	Additional Sport Facility (Sport Center with Multi-Purpose Covered Courts) (2-Storey Building) (With minimum GFA of 2,152 sqm)
Building 3	Staff Housing (3 Storey Building) (With a minimum GFA of 1,500 sqm)
Site Development	Site Development (with minimum Land Area of 10,000 sqm) (Including Building footprint)

The Design and Build Contractor (DBC) shall undertake and complete the project within **four hundred twenty-six (426)** days from the issuance of the Notice to Proceed (NTP) in accordance with the Minimum Performance Standards and Specifications (MPSS). The objective for the construction is to continue the entire NAS facilities project that caters to the basic needs of the student-athletes and the employees.

BCDA intends to apply the sum of **Two Hundred Seventy-Three Million Seven Hundred Forty Thousand Pesos (PHP 273,740,000.00)** inclusive of applicable taxes and fees being the Approved Budget for the Contract (ABC) to payments under the design and build contract.

C. SITE DEVELOPMENT AREA

The National Academy of Sports, which covers an aggregate land area of 43,866.05 square meters, is located in the National Government Administrative Center at New Clark City, Capas, Tarlac and lies within the southeastern portion of the constructed Athletics Stadium and eastern side of Athletes Village.

Phase 1 Infrastructure project will be completed in August 2023 covering an area of 25,000 sqm and the remaining 18,866 sqm is allocated for Phase 2 and Phase 3 works that include the building footprints as provided in Section VII. Technical References of this Bidding Documents.

The site development area proposes indicative shape and placement of the three building developments. The DBC is expected to come up and innovate the proposed floor-wise pattern with the DPWH Standard Specifications for Government Offices along with the requirements as specified in Section II. MPSS.

Fig. 1. Location Map of the National Academy of Sports, (Figure to be replaced)



D. PRELIMINARY INVESTIGATION

1. **Site Condition.** The site is situated within the New Clark City area and is bound by a road to the east, and undeveloped areas to the north, west, and south. The site is currently occupied by the ongoing construction of the NAS Phase 1 Infrastructure which will be completed in August 2023. According to Google Earth, the site has an elevation of about 57-m to 67-m above mean sea level.

With the information on the ground conditions, eleven boreholes were drilled to a depth of 25-m. The boreholes show that the ground is underlain by a 2-m to 7.5-m thick layer of soil followed by weathered sedimentary rock. The soil layer above 2-m appears to be the residual soil layer while the soil deposit between 2-m and 7.5-m appears to be completely weathered rock, i.e., an intermediate geomaterial (IGM).

2. **Land Grading Design.** The final grading scheme for NCC must follow the existing contour, as much as possible, to minimize the total earthquake volume. The backfill materials must be taken within the project site and the hauling distance must be the shortest possible between the cut and fill areas. The cut-and-fill layout plan must consider the overall Land Grading Plan indicated in the Updated Master Plan of the New Clark City.
3. **Foundation Solutions.** The proposed development will consist of multiple low-rise buildings. The presence of the very dense soil and weathered rock within a shallow depth would permit the use of a shallow foundation system to support the proposed structures. If the footings will be embedded such that they will rest on the cemented rock layer, the capacities given may be employed. If the footings will rest on the dense soil layer since embedment to the rock layer would be impractical, such as in the BH-5 and BH-9 areas, then the capacities given may be considered.
4. **Utilities.** The underground utility corridor is still being built by “Others” within the NCC area which will be connected to the NAS property line and the target completion is in August 2023. Consisting of power lines with Shin Clark Power Corporation as the official power distributor within NCC, water and sanitary lines with Prime Water New Clark City Corporation as the official water distributor. Telecommunication companies are still building their temporary lines toward the Project site. Drainage facilities, road infrastructures and trees are also noted.

The plans and drawings for the site development and utilities should consider the provisions of the Master Development Plan of NCC for the

utilities tapping point location (Refer to Section VII. Technical References of this Bidding Documents).

5. **Soil.** Based on the interdisciplinary study between PJIC, Nippon Koei and AECOM, New Clark City (NCC) is encompassing two stratigraphic groups: (1) Stratigraphic Group 5 (Zambales Range) – the rugged mountainous portion of the area, primarily composed of an ophiolite complex, sedimentary carapace, and intrusive and extrusive volcanic and; (2) Stratigraphic Group 1 (Ilocos-Central Luzon Basin) – the flat to undulating area, overlain by a sedimentary sequence of sandstones, shales, and shallow water carbonates and tuffaceous deposits of Upper Miocene to Pliocene age.

6. **Earthquake Hazard.** Among the four general types of ground conditions described by the Earthquake Engineering Committee, 1988, the ground surface in NCC can be categorized under Medium Soil, thickness of diluvial deposit above bedrock is greater than 10m, or thickness of alluvial deposit above bedrock is less than 10m, or thickness of alluvial deposit is less than 25m and thickness of soft deposit is less than 5m. Medium soil attenuates ground acceleration by 13%.

Based on the estimated attenuation and amplification values computed using the Fukushima and Tanaka (1990) formula and the fault model parameters, a M 7.4 earthquake originating from the East Zambales Fault, 4 km away from NCC, may generate an average peak ground acceleration of 0.552 g or 5.41 m/s², with medium soil attenuation of 0.48 g or 0.471 m/s² in the central portion of NCC. Corresponding to rating of VIII (Very Destructive) in the PHIVOLCS Earthquake Intensity Scale.

The Project Area, although located 20-40 km hazard zone due to Volcanic Activity, has low susceptibility to earthquake-triggered landslide during an earthquake with a peak ground acceleration of 0.3 g, and intensity of IX (Modified Mercalli Intensity Scale) or VII (PHIVOLCS Earthquake Intensity Scale).

7. **Liquefaction.** Even after the 1991 eruption filled the entirety of NCC with thick reworked deposits from Mt. Pinatubo, liquefaction was not recorded. As indicated in the PHIVOLCS susceptibility map, areas that are prone to this geohazard occur further to the east at lower elevations and flatter topography, where rivers radiating from the eastern side of the Pinatubo Volcanic Complex and Zambales Range merge and drain southward into Manila Bay, as shown in the Liquefaction Susceptibility of Central Luzon.

8. **Other Hazards.** Based on the Mines and Geosciences Bureau's Landslide and Flood Susceptibility Map of New Clark, the central area

of the NCC Master Plan, has high susceptibility to flooding. However, the location of the Project Area is shown to have a low susceptibility to flooding.

E. CONTRACTUAL FRAMEWORK

The Project shall be procured and implemented under a Design and Build Scheme pursuant to the provisions of RA 9184 and its Revised Implementing Rules and Regulations (RIRR), specifically Annexes “E” and “G” of the said RIRR - Contract Implementation Guidelines for the Procurement of Infrastructure Projects and Guidelines for the Implementation of Contracts for Design and Build Infrastructure Projects, respectively.

Under this scheme, the procuring entity awards a single contract for the detailed architectural/engineering design and construction to a single firm, partnership, corporation, joint venture or consortium.

SECTION 2. SCOPE OF THE CONTRACT - GENERAL REQUIREMENTS

The “Scope of Works” to be carried out includes the following:

1. Design, construction and fit-out works for:
 - a. Sports Science and Sports Medicine Building;
 - b. Additional Sport Facility (Sport Center with Multi-Purpose Covered Court;
 - c. Staff Housing; and
 - d. Site Development Work

The design should contain the minimum number of personnel and occupants and must be in accordance with the functional space requirement intended for each space.

Each minimum area to be provided and be constructed with fit-out is listed in the table of “Functional Space Requirements” in Section II. MPSS. A tentative staff allocation has been indicated for each required space; however, the DBC is encouraged to innovate and propose their own floor-wise layout.

As applicable, relevant standards and minimum measurements shall apply for each functional space requirement including the following:

- NCC Design Standards and Guidelines
- DPWH Standard Specifications for Government Offices - allocation of functional space while ensuring the corresponding number of personnel and occupants indicated below are

- accommodated
- Modified Standard DPWH-DepEd School Buildings (as updated from time to time)
- National Building Code of the Philippines and its Revised Implementing Rules and Regulations
- IRR RA 9266 or Architecture Law and its Latest and Amended IRR
- Batas Pambansa 344 – Accessibility Law and its Latest and Amended IRR
- RA 9514 New Fire Code of the Philippines and its Revised IRR
- Other laws that apply to the Project

The preparation of plans for the site development area should follow requirements based on the review and confirmation of information on the preliminary survey mapping (topographic survey), and the NCC Master Development Plan as per Section VI. Technical References.

2. Conduct of site investigations, surveys, soil testing and other similar activities which are required for finalizing the detailed building design shall be completed by the DBC during the preparatory construction works such that the final design addresses the findings from these activities.
 - a. The Geotechnical Investigation should comply with Section 303 of the National Structural Code of the Philippines 2015 (NSCP-2015). The DBC should secure the services of a Geotechnical Engineer to evaluate the Geotechnical Investigation Report. The Geotechnical Engineer should recommend the foundation system and other information needed for the design of the substructure. Part of the assessment of the Geotechnical Engineer should include the seismic parameters in compliance with Section 208.4.3 to 208.4.4 of the NSCP-2015.
3. Securing of permits required for the conduct of works (Building Permit, Electrical Permit, Electronics Permit, Sanitary Permit, Mechanical Permit, Zoning Permit, Fire Safety Permit (FSEC & FSIC), Occupancy Permit, among others). The Environmental Compliance Certificate is already secured by the BCDA for the construction with the copy provided in Section II. Technical References.
4. **Architectural and Engineering Designs.** The DBC shall design and complete all plans, drawings, specifications, BOQ, DUPA and cost estimation, construction management, progress reports and claims for payments and completion reports.
5. **Site Clearing and Earthworks.** The DBC shall have a site investigation to consider the existing structures and trees in the area, all structure debris and cut trees shall be turned over to BCDA.

6. **Site Civil Works.** The DBC shall design and develop the site civil works with internal roads, walkways, landscaping and paving ensuring efficient circulation, safe and unhampered pedestrian and vehicular flow and outdoor aesthetics. The site development works shall be carried out within the 10,000 sqm including the buildings footprint.
7. **Structural Works.** The DBC shall also undertake the necessary structural studies in consideration of the existing Phase 1 Structures and the planned or projected Phase 3 Structures.
8. **Architectural Interior Design Works.** All masonry, finishing, acoustics, lighting, moisture protection / thermal, glazing, wood / plastics, fenestrations [doors and windows], with pertinent plans and designs prepared by a duly - registered and Licensed Architect.
9. **Internal Fit-out.** The following are examples, without limitation, or areas of internal fit-out that are considered within the scope of works:
 - a. All floor, wall or ceiling finishes
 - b. Above screed floor finishes to electrical rooms
 - c. All partition walls
 - d. Doors, louvers and the like, to all parts of the works and the relevant site development area
 - e. Appropriate Acoustics considerations should be incorporated in the design.
10. **Underground Utilities.** The DBC shall design and construct the underground utility corridor (power, water, wastewater and ICT) and be integrated in the site development area following the Minimum Performance Standards and Specifications and the relevant guidelines and updated requirements. The DBC is responsible for connecting to the tapping points provided by the utility providers on the project site premises, consistent with the master development plan.
11. **Electrical Works.** All electrical systems, including back-up power generator sets and transformers with pertinent plans and designs prepared by a duly registered and licensed Professional Electrical Engineer (“PEE”) as part of the construction cost. The system shall include all aspects of the works in Phase 2.
12. **Electrical Auxiliaries Works.**
13. **Air-conditioning Facilities.** The DBC shall provide brand new and latest models of air- conditioning units wherever required as per the design. The DBC shall propose the most energy-efficient air conditioning system which could be a combination of DX-split type units, window-type AC units, variable refrigerant flow (VRF) systems and among others.

14. **Mechanical Works.** Fire protection, automatic fire suppression system, and fire alarm prepared by a duly registered and licensed Professional Mechanical Engineer (“PME”).

15. Engineered Mechanical Building Utilities and Ventilation Systems

16. Access-way via the main road, if applicable, the DBC shall include the design and construction of a 2-lane access road leading to the main entrance of the Phase 2 Project Site. The accessway shall be connected to the existing road (located at the east side of the project site) where applicable. This, however, must not disrupt the existing operations of the end-user, particularly Phase 1.

17. Electronics and Communication (including communication equipment, ducting and cabling systems, e.g., fiber optics). Design and installation of electronic systems that include, vertical and horizontal LAN cabling, CCTV-ready prepared by a duly registered and licensed professional Electronics and Communications Engineer (“ECE”).

18. The DBC shall design and provide security measures (landscaping elements) as components which shall be part of the construction cost.

19. **Utilities System.** The DBC shall design, supply, install, test and commission various utility connections for Phase 2 only as follows:

- a. The power and distribution system to accommodate the requirements of the construction works and the common areas within the site development area. This shall include the supply and installation of power transformer, switchgear, generator set, pumps (fire pump, jockey pump, centrifugal pumps), distribution/sub-main cables, final sub-circuits, cable support systems and containments, lighting protection system, grounding (earthing) system, luminaires and lighting control system (at Common Areas only), power backup through generator, Telecommunications System;
- b. Water distribution system piping, installation of water piping to sanitary ware and fittings, installation of waste piping to sanitary ware, above ground and underground drainage piping system shall be included in the scope. This shall also include the supply and installation of water pumps (fire pumps, jockey pumps, centrifugal pumps, and among others);
- c. Sanitary and plumbing works;
- d. The sewer system accommodating the requirements of the entire Phase 2 development will be part of the design and build works; and

- e. Water tanks, supply systems, water sewage, sanitary and disposal systems with the pertinent plans and designs prepared by a duly registered and licensed professional Sanitary Engineer (“SE”).
 - f. The DBC shall improve the existing Sewage Treatment Plant (STP) within the NAS Phase 1 area into a Septic Tank and design supply and construct the appropriate civil works, pipeline, pump/s and complete accessories to ensure conveyance of solid and liquid waste of NAS Phase 1 and Phase 2 to the New Clark City (NCC) STP which is Bannow STP (See attached indicative alignment)
20. **PWD Facilities.** Facilities for persons with disabilities such as ramps and stair lifts for movement to and from the raised platforms, tactile tiles/paving, separate toilets/ washrooms, among others, shall be provided as per applicable regulations, and shall be provided and located within each facility constructed.
21. Wayfinding and room signage systems.
22. Warranty. The relevant provisions on warranties under Section 62.2 of the Revised IRR of R.A. No. 9184 shall be applicable in this Project. The DBC shall comply and be liable for its warranties expressly provided under Section 62.2 of the Revised IRR of R.A. No. 9184.
23. The DBC shall hold the responsibility of ensuring that all construction works are carried out by subcontractors, specialty contractors and other concerned parties in a thorough manner.
24. Temporary Facilities and Facilities for the Project Management Team including the operational and maintenance requirements; and
25. All other works, reports, documents, components and requirements that may be needed for the completion of the Project and acceptable to BCDA.
26. Upgrading of Network Infrastructure and Communications System

The project aims to (a) Design and install fiber optic backbone cabling (b) Redesign, enhance, and install NAS’s cabling infrastructure specifically portions of the new buildings, (c) Design and install CCTV cameras & Information Board System, (d) Design upgrade of PABX and (e) Design and renovate the existing Server Room.

The structured cabling system and communication facility shall:

- Provide a user-friendly environment with efficient, less technical support and open to performance upgrade/future expansion and

can accommodate efficiently all data transmission services to the workstations.

- Facilitate efficient communication.
- Provide high-speed network connectivity to admin, academic buildings, sports and medicine buildings, gym, and laboratories.
- Provide PABX system to provide efficient telephone switching system.
- Provide Indoor and Outdoor Close Circuit Television (CCTV).
- Install Information Board System

The contractor shall furnish all labor, materials, tools and equipment, and perform all operations necessary to complete the supply, delivery, installation, testing and commissioning of Fiber Optic Backbone Cabling, Structured Cabling (integrated voice and data) and Network Switches and Renovation of NAS' Server Room. The contractor must provide demonstration and training for IT Personnel for the Network Equipment/switches, CCTV operation, basic troubleshooting for the Structured Cabling for at least five (5) days. The Contractor shall provide warranty service within the warranty period. Provision of upgrades and patches to be installed free of charge during the warranty period. Bidder shall be responsible for all the costs related to the warranty period for hardware products.

Section 3. SCOPE OF SERVICES

- A. The DBC shall undertake the design and construction of the Project based on Section II. MPSS and shall conform to the latest provisions of the National Building Code of the Philippines, National Structural Code of the Philippines, Philippine Electrical Code, Philippine Electronics Code, Philippine Mechanical Engineering Code, Plumbing Code, Fire Code of the Philippines, Accessibility Law and other laws and regulations covering environmental concerns and local ordinances and regulations.
- B. **DBC's Responsibility.** The data and information as part of the competitive documents are for reference only. BCDA does not guarantee that these data are fully correct and up-to-date with the project at hand. The DBC is responsible for the accuracy and applicability of all data that it will use in its design and build proposal and services as stated in Section 7, Annex "G" of IRR RA 9184.
- C. Conduct of Architectural and Engineering Surveys and Investigation
1. Annex "G" of the RIRR of RA No. 9184 specifies that the DBC shall conduct the surveys to confirm assumptions in the submitted technical bid, and present to BCDA the results and findings which would impact the detailed architectural and engineering designs of the Project. The DBC shall include the findings and recommendations and effects based on the site survey,

topographic survey, geotechnical report and all other pertinent data related to the conditions of the project site on the technical components of its bid proposal, and which will be reflected in the Detailed Architecture and Engineering Design.

2. The DBC shall coordinate with the concerned utility providers for the removal/relocation of all existing utilities that will be affected by the Project. The DBC shall also be responsible in coordinating with the utility providers for the tapping points of the necessary utilities for the Project.

D. Design Phase and Preparation of the Detailed Architectural and Engineering Designs (DAED) for the Project Components

1. The DBC shall allot ninety (90) calendar days for the Design Phase, which includes the drafting, review, revision and finalization of the DAED. The DBC shall prepare and submit to BCDA the draft DAED covering the general requirement of the Project, which the BCDA shall coordinate and provide to the National Academy of Sports (NAS) within seven (7) calendar days. BCDA and the NAS representatives shall be allowed to review and propose revisions within the contract to the draft DAED in the Design Phase. Any revisions proposed pursuant to this provision shall be at no cost to BCDA, however, if the proposed revision is not included in this contract the DBC may request additional claim subject to BCDA's approval. The preparation of the DAED, including all aspects of the works, shall be in accordance with Section I. Terms of Reference and Section II. MPSS of this Bidding Document, particularly, the following site-specific Guidelines:

- NCC Master Development Plan
- NCC Design Guidelines
- NGAC Urban Design and Standards
- Updated Master Development Plan of the NCC (March 2020)

2. Pursuant to Section II. MPSS, the design and the overall look and feel shall be adopted in all the spaces in the buildings.

Design should be authentic and have a sense of place and be iconic without competing with the existing surrounding structures. It should be permeable to take advantage of our tropical environment, with abundant use of natural light and cross ventilation. Form should be dynamic to convey the movement, energy and team spirit of our athletic scholars.

3. The DAED shall include the preparation of the following Detailed Design Drawings and Reports including any revisions and refinements as approved and required by the procuring entity:

- a. Detailed Engineering Survey and Investigation Results, Plans/Drawings and Reports;
- b. Detailed Site Development Plan;
- c. Detailed Architectural Plans (exterior and interior);
- d. Detailed Structural Plans;
- e. Detailed Electrical Plans;
- f. Detailed Electronics Plans;
- g. Detailed Mechanical Plans;
- h. Detailed Drainage, Sanitary, Plumbing and Plant Irrigation Plans;
- i. Detailed Fire Protection Plans;
- j. Detailed Utilities and Auxiliary Plans
- k. Detailed Landscape Plans including planting details;
- l. Detailed Plans for the removal/relocation of existing utilities and or structures;
- m. Design Analysis which includes the basis of designs and design calculations;
- n. Detailed Technical Specifications shall include descriptions of work items, material requirements, construction requirements and methods, methods of measurements, and basis of payments. Quality control program, sampling, testing and inspection requirements, material requirements and delivery schedules, shall be included in the specifications on applicable work items;
- o. Detailed Bill of Quantities, Cost Estimates including Detailed Unit Price Analyses;
- p. Cover Sheet, Project Location and Vicinity Map, Drawing Index, Summary of Quantities, General Notes, Legends, Symbols, Definitions and Abbreviations; and
- q. Safety Program and Methodology
- r. Construction Schedules, PERT-CPM, Equipment and Manpower Utilization Schedule
- s. Other necessary plans/drawings, details, documents and reports that may be required by BCDA.

E. Preparation of the Revised Detailed Architectural and Engineering Designs for Approval of the BCDA, as applicable

1. The DBC shall allow the submission of proposed revisions on the DAED. The DBC shall prepare and submit the Revised DAED for each work following the proposed revisions of BCDA and the National Academy of Sports (NAS) to allow review and submission of final revisions. The DBC shall submit a report with all the required documents on the revised DAED to BCDA

and NAS shall be allowed to review and propose final revisions to the revised DAED.

2. After BCDA, NAS, CMS and DBC have agreed on the Revised DAED, the DBC shall prepare and submit the final DAED to BCDA for approval.
3. Changes in Design and Construction Requirements. Section 13.5 provides - "As a rule, changes in design and construction requirements shall be limited only to those that have not been anticipated in the contract documents prior to contract signing and approval."

F. Construction Phase

The contract implementation for the Project shall comply with Annex "E" of IRR of RA 9184 with appropriate modifications to incorporate the following supplemental provisions of Annex "G" - Guidelines for the Implementation of Contracts for Design and Build Infrastructure Projects:

1. No works shall commence unless the DBC has submitted the prescribed detailed design and other documentary requirements and the procuring entity has given written approval. Work execution shall be in accordance with reviewed and approved documents following the BCDA review and recommendations of the CMS.
2. The DBC shall be responsible for obtaining all necessary information as to risks, contingencies and other circumstances which may affect the works and shall prepare and submit all necessary documents specified by the concerned Building Officials to meet all regulatory approvals and permits as specified in the contract documents.
3. The DBC shall submit a detailed program of works within fourteen (14) calendar days after the issuance of the Notice to Proceed for approval by procuring entity that shall include, among others:
 - a. The order in which it intends to carry out the work including anticipated timing for each stage of design/detailed engineering and construction;
 - b. Periods for review of specific outputs and any other submissions and approvals;
 - c. Sequence of timing for inspection and tests as specified in the contract documents;
 - d. General description of the design and construction methods to be adopted;
 - e. Number and names of personnel to be assigned for each

- stage of the work;
 - f. List of equipment required on site for each stage of the work;
and
 - g. Description of the quality control system to be utilized for the project.
4. Any errors, omissions, inconsistencies, inadequacies or failures submitted by the DBC that do not comply with the requirements shall be rectified, resubmitted and reviewed at the DBC's cost. If the DBC wishes to modify and design or document which has been previously submitted, reviewed and approved, the DBC shall notify the procuring entity within a reasonable period of time and shall shoulder the cost of such changes.
5. As a rule, changes in design and construction requirements shall be limited only to those that have not been anticipated in the contract documents prior to contract signing and approval. The following guidelines shall govern approval for change or variation orders:
- a. Change Orders resulting from design errors, omissions or non-conformance with the performance specifications and parameters and the contract documents by the DBC shall be implemented by the DBC at no additional cost to the BCDA.
 - b. Provided that the DBC suffers delay and/or incurs costs due to changes or errors in the procuring entity's performance specifications and parameters, the DBC shall be entitled to either one of the following:
 - An extension of time for any such delays under section 10 of Annex "E" of IRR (RA 9184); or
 - Payment for such costs as specified in the contract documents, provided that the cumulative amount of the variation order does not exceed ten percent (10%) of the original project cost.
6. The DBC shall be entitled to advance payment subject to the provisions of Section 4 of Annex "E", IRR of RA 9184.
7. The DBC shall provide all necessary equipment, personnel, instruments, documents and others to carry out specified tests.
8. These design and build projects shall have a minimum Defects Liability Period of one (1) year after contract completion or as provided for in the contract documents. This is without prejudice to the liabilities imposed upon the engineer/architect who drew up the

plans and specifications for the building sanctioned under Section 1723 of the New Civil Code of the Philippines.

9. The DBC shall be held liable for design and structural defects and/or failure of the completed project within the applicable warranty period as specified in Section 62.2.3.2 of the IRR (RA 9184).

G. The DBC shall prepare and submit a Detailed Construction Management Plan (DCMP) as part of the DAED to BCDA for review and approval. The DCMP shall be based on the preliminary construction plan submitted in the Technical Proposal of the bidding, as updated and detailed to fit the elements of the DAED. The DCMP must identify the procedures, processes and management systems that the DBC will apply to ensure the implementation of the construction works in accordance with the Contract Agreement.

Health, safety, and security programs shall be in accordance with Department Order No. 13, series of 1990, of the Department of Labor and Employment (DOLE). At the minimum, the Inter-Agency Task Force on Emerging Infectious Diseases, and any authorized government body public health protocols, guidelines and issuances against COVID-19 shall be incorporated into the DCMP and shall be implemented.

H. Safety Measures During Construction

1. The DBC shall submit to the Procuring Entity, for approval, a Detailed Safety Management Plan for the construction based on the preliminary Construction Methodology submitted as part of the Technical Proposal in its bid.
2. The DBC shall ensure the safety of its workers and personnel and accidents should be minimized in the Construction Site and its immediate surrounding area.
3. The DBC shall follow the Construction Safety Guidelines for the Implementation of Infrastructure Projects During the COVID-19 Public Health Crisis.

I. Completion of Construction

1. The BCDA shall issue a Certificate of Completion and Preliminary Acceptance of Construction, once it has been determined and certified that the following requirements are fully met:
 - a. All Tests for Construction complies with the pertinent provisions of the Blue Book and other test requirements for Construction.

- b. All parts of the Project have been completed in accordance with the approved DAED including the rectification of all defects and punch list items.
 - c. The DBC's Project Completion Report has been submitted and certified by the BCDA as complying with the requirements.
2. The as-built drawings and other supporting documents such as, but not limited to, manuals, certificates, and warranties of all installed items shall be submitted to and approved by the Procuring Entity or its duly authorized representative before the issuance of the Certificate of Completion;
 3. Obtain Fire Safety Inspection Permit and Occupancy Permit; and
 4. Provide all other necessary documents that BCDA shall require.

Section 4. APPROVED BUDGET FOR THE CONTRACT

1. The Approved Budget for the Contract (ABC) for this Design and Build Project is Pesos: **Two Hundred Seventy-Three Million Seven Hundred Forty Thousand Pesos (PHP 273,740,000.00), inclusive of all taxes and fees**. This is the ceiling for the eligible, acceptable bids for all Works. The Bidder shall submit only one total cost for all Works.
2. Bids received in excess of the ABC shall be automatically rejected.
3. MANNER OF PAYMENT

The Winning Bidder/Contractor may request for an advance payment in an amount not exceeding fifteen percent (15%) of the total contract price which will be divided into two (2) payments:

1. Three percent (3%) of the contract price upon issuance of the Notice to Proceed and submission of the guarantee instrument through a Bank Guarantee or a Surety Bond callable upon demand; and
2. Twelve percent (12%) of the contract price upon issuance of the notice to commence the preparatory and construction works and submission of the guarantee instrument through a Bank Guarantee or a Surety Bond callable upon demand.

Payments are subject to applicable deductions under the IRR of RA 9184.

Payments shall be made through a modified scheme as shown below:

- Advance Payment: Fifteen percent (15%) of the Total Contract Price (subject to recoupment);

- 1st Payment: Shall be at 20% actual accomplishment;
- 2nd Payment: Shall be at 30% actual accomplishment;
- 3rd Payment: Shall be at 40% actual accomplishment;
- 4th Payment: Shall be at 50% actual accomplishment;
- 5th Payment: Shall be at 60% actual accomplishment;
- 6th Payment: Shall be at 70% actual accomplishment;
- 7th Payment: Shall be at 80% actual accomplishment;
- 8th Payment: Shall be at 90% actual accomplishment; and
- Final Payment: Shall be at 100% actual accomplishment.

Notwithstanding the foregoing, the relevant provisions on Advance Payment, Progress Payment and Retention Money based on Annex “E” of the Revised IRR of R.A. No. 9184 shall be applicable in this Project. The DBC shall comply and be bound by the relevant provisions on Advance Payment, Progress Payment and Retention Money based on Annex “E” of the Revised IRR of R.A. No. 9184.

Section 5. CONTRACT DURATION AND IMPLEMENTATION

1. Contract Duration. Considering that this is a flagship, priority and fast track infrastructure project that needs to be completed on a tight schedule, the design and build services under the contract must be completed within **Four Hundred Twenty-Six (426)** Calendar Days, reckoned from the date indicated in the Notice to Proceed.
2. Implementation Schedule. The DBC is required to follow and complete the Project within the indicative time frame as follows:

Fig. 3. NAS Phase 2 Implementation Schedule

Activity	Month													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Design Phase														
Construction Phase														

Section 6. OBLIGATIONS OF BCDA

In general, BCDA shall:

1. Provide available data to the DBC. BCDA informs that the data and information in the Bidding Documents are for reference and does not guarantee that these are fully correct, up to date, and applicable to the project at hand. The DBC is responsible for the accuracy and applicability

of all data, including the above, that it would use in its design and build proposal and services, as provided in Annex "G" which specifies that the data below are for reference only. BCDA shall make available for reference all existing documents pertaining to the Project. Whenever practicable, the BCDA shall provide assistance to the DBC in securing data from concerned government agencies/offices;

2. Arrange with the agencies concerned with the Project for the free and unimpeded access by the DBC's Personnel to all lands and properties in respect of which access is required for the performance of the services;
3. Approve the DBC's design without diminishing its full sole responsibility for the quality and integrity thereof as DBC;
4. Monitor the implementation of the projects in coordination, and review and evaluate the documents submitted by the DBC as required herein;
5. Provide funds required for the engagement of the services of the DBC in the amount of Pesos: **Two Hundred Seventy-Three Million Seven Hundred Forty Thousand Pesos (PHP 273,740,000.00)**, inclusive of all applicable taxes and fees, is made available through the issuance of Certificate of Funds Availability (CFA) for that purpose;
6. Pay the DBC, upon request, based on the manner of payment consistent with the provision under Section 4 of this TOR.
7. Designate an on-site Representative to the Project; and
8. Perform other responsibilities as may be specified in the Contract Agreement.

Section 7. OBLIGATIONS OF THE DBC

The DBC shall:

1. Certify that it has inspected and examined the proposed project site, its surroundings and existing infrastructure and facilities related to the execution of the work and has obtained all the pieces of information that are considered necessary for the proper execution of the work covered in this Bidding Documents;
2. Ensure that all works at the stages of design, construction, restoration of affected areas, and testing and commissioning shall be carried out efficiently and effectively;
3. Provide the BCDA with complete reports, such as technical analysis, maps and details regarding the existing conditions and proposed improvements within the site;

4. Be accountable for accidents that might occur during the execution of the project and install warning signs and barriers in accordance with Department of Labor and Employment (DOLE) guidelines and construction safety procedures in the Negotiated Procurement Documents for the safety of the general public and the avoidance of any accidents;
5. Be professionally liable for the design and shall submit all its basic designs, plans, and as part of its Technical Proposal using Section X Bid Forms and Qualification Information. The DBC shall be liable for design and structural defects and/or failure of completed projects within the period specified in the IRR / RA No. 9184;
6. Implement designs, plans, and drawings in accordance with Section II. Minimum Performance Standards and Specifications [MPSS] approved by BCDA; and submit basic architectural plans as required in its Approach and Methodology, Section X, Bid Forms and Qualification Information.
7. Implement Flood Mitigating Measures as proposed in the Geo-hazard Certifications issued by the DENR.
8. Provide the following documents during contract implementation:
 - a. Detailed Engineering Survey, Detailed Geotechnical Investigation and other necessary field survey and investigation results and reports (6 Sets in A-4 size quality paper)
 - b. Approved Detailed Architectural and Engineering Design Plans and Drawings (1 set Original in A-1 size Mylar Sheet and 5 other copies in Blueprint)
 - c. Approved Technical Specifications, Detailed Cost Estimates and Unit Price Analyses (6 Sets in A-4 size quality paper)
 - d. Design Analysis with detailed calculations/computations (6 Sets in A-4 size quality paper)
 - e. Monthly Progress Report and/or Supporting Documents for Progress Payments (Plans/Drawings in 3 sets of A3 size quality paper and all Reports in 3 sets of A-4 size quality paper)
 - f. Approved As-Built Plans (1 Original in A-1 size Mylar Sheet and 5 other copies in Blueprint)
 - g. Project Final Report (6 Sets in A-4 size quality paper)
 - h. Other necessary plans/drawings and reports that may be required by BCDA.
 - i. Electronic Files of all deliverables (to be stored in 1 Terabyte External Hard Drive) in BIMS platform.

9. Completed to be a turnkey project ready for occupancy upon turn-over.
10. Perform other responsibilities as may be specified in the contract agreement.

Section 8. ELIGIBILITY REQUIREMENTS

The eligibility requirements for the Design and Build Scheme shall comply with the applicable provisions of Section 23-24 of IRR of RA 9184.

A modified set of requirements integrating eligibility documents and criteria for infrastructure projects and consulting services shall be adopted in accordance with Annex “G” – Guidelines for the Procurement and Implementation of Contracts for Design and Build Infrastructure Projects of IRR of RA 9184.

- A. Class “A” Documents (Legal, Technical and Financial Documents) and Class “B” Documents

The prospective bidder shall submit all the required Class “A” Documents and Class “B” Documents for Infrastructure Projects, as enumerated in Section II, Instruction to Bidders, and in general, the following documents:

- a. Relevant statements of all on-going, completed, awarded but not yet started design or design and build related contracts, curriculum vitae of key staff, partners or principal officers; and
- b. Bidder’s valid PCAB “AAA” License and PCAB Large B Size Range for Vertical Buildings, as well as valid licenses issued by the Professional Regulatory Commission (PRC) for design and engineering professionals;
- c. Preliminary Architectural and Conceptual Design; and
- d. Minimum Manning Requirement:

1. Detailed Design Phase

Key Personnel	General Experience	Required Experience	Qty
Project Design Manager	Licensed Engineer or Architect for at least 10 years	At least 5 years of experience as Project Design Manager on Building Projects	1
Structural Engineer	Licensed Civil Engineer for at least 5 years	At least 3 years of experience as Structural Engineer on Building Projects	1
Geodetic Engineer	Licensed Geodetic Engineer for at least 5	At least 3 years of experience as Geodetic	1

	years	Engineer on Building Projects	
Electrical Engineer	Licensed Professional Electrical Engineer for at least 5 years	At least 3 years of experience as Professional Electrical Engineer on Building Projects	1
Mechanical Engineer	Licensed Professional Mechanical Engineer for at least 5 years	At least 3 years of experience as Professional Mechanical Engineer on Building Projects	1
Drainage Engineer	Licensed Civil/Sanitary Engineer for at least 5 years	At least 3 years of experience as Drainage Engineer	1
Materials Engineer II	Licensed Civil Engineer and DPWH accredited Materials Engineer II for at least 5 years	At least 3 years of experience as Materials Engineer II on Building Projects	1
Quantity Surveyor	Licensed Engineer or Architect for at least 5 years	At least 3 years of experience as Quantity Surveyor on Building Projects	1
Architect	Licensed Architect for at least 5 years	At least 3 years of experience as Architect	1
BIM Specialist	Licensed Engineer or Architect for at least 5 years	At least 3 years of experience as BIM Specialist on Building Projects	1

2. Construction Phase

Key Personnel	General Experience	Required Experience	Qty
Project Manager	Licensed Civil Engineer for at least 10 years	At least 5 years of experience as Project Manager on Building Projects	1
Deputy Project Manager	Licensed Civil Engineer for at least 5 years	At least 3 years of experience as Deputy Project Manager on Building Projects	1
Structural Engineer	Licensed Civil Engineer for at least 5 years	At least 3 years of experience as Structural Engineer on Building Projects	1
Geodetic Engineer	Licensed Geodetic Engineer for at least 5	At least 3 years of experience as Geodetic	1

	years	Engineer on Building Projects	
Electrical Engineer	Licensed Electrical Engineer for at least 5 years.	At least 3 years of experience as Electrical Engineer on Building Projects	1
Mechanical Engineer	Licensed Mechanical Engineer for at least 5 years.	At least 3 years of experience as Mechanical Engineer on Building Projects	1
Drainage Engineer	Licensed Civil/Sanitary Engineer for at least 5 years	At least 3 years of experience as Drainage Engineer	1
Materials Engineer II	Licensed Civil Engineer and DPWH accredited Materials Engineer II for at least 5 years	At least 3 years of experience as Materials Engineer II on Building Projects	1
Quantity Surveyor	Licensed Engineer or Architect for at least 5 years	At least 3 years of experience as Quantity Surveyor on Building Projects	1
Architect	Licensed Architect for at least 5 years	At least 3 years of experience as Architect on Building Projects	1
BIM Specialist	Licensed Engineer or Architect for at least 5 years	At least 3 years of experience as BIM Specialist on Building Projects	1
Health and Safety Officer	DOLE accredited safety officer for at least 5 years	At least 3 years of experience as DOLE accredited Health and Safety Officer	1

Section 9. ELIGIBILITY CRITERIA

A. The Construction Experience Requirement may be fulfilled by the bidder, their Affiliate, subcontractor, its Joint Venture Partner, or a Consortium Member. The entity nominated must be able to fulfill the Design and Construction Experience Requirement in the design, construction and development of eligible projects similar to the National Academy of Sports Project.

- a. The bidder should have at least one similar project, both in design and construction, with a contract amount of not less than 50% of the ABC or a combination of one (1) completed similar construction project with a total project

cost of at least 50% of the ABC and one (1) completed similar design project with a total project cost of at least 50% of the ABC.

For this purpose, similar projects shall refer to **Construction of Building Projects**.

- b. The bidder, its Affiliate, its subcontractor, its Joint Venture Partner, or its Consortium Member must have local or international experience in successfully completing the design and construction of the following projects similar to the Project with the following minimum costs:

Table 2. Design and Construction Experience Requirements

Similar Contract of Building Project of at least 2 Storey
1 Completed Design and Build Project for 1 contractor with a contract amount of at least PHP 136,870,000.00; or
Combination of 2 projects for 1 Contractor <ul style="list-style-type: none"> ● 1 Completed Design Project with a BOQ amounting to at least PHP 136,870,000.00 and ● 1 Completed Construction Project with a contract amount of at least PHP 136,870,000.00; or
Combination of 2 Projects for 2 entities forming a JV, Consortium or Subcontract (<i>in case the Design Portion is subcontracted</i>) <ul style="list-style-type: none"> ● 1 Completed Design Project with a BOQ amounting to at least Php 136,870,000.00 and ● 1 Completed Construction Project for 1 Contractor with a contract amount of at least PHP 136,870,000.00.

Section 10. SUBMISSION AND RECEIPT OF BIDS

- A. In the submission of bids, the first envelope (Technical Proposal) shall contain all the required documents for infrastructure projects under Section 25.2(b) of the IRR of RA 9184 and the following additional documents:
- a. Preliminary Site Development Plan for the remaining area of NAS which is equivalent to Eighteen Thousand Eight Hundred Sixty-Six square meters (18,866 sq.m) to consider future expansion areas of the facilities within the entire NAS Block, in reference to Section VI. Technical References (NAS Site Development Plan);
 - b. Architectural Plans for the Phase 2 Facilities, in accordance with the degree of details specified in the Section I. Terms of Reference and Section II. MPSS, such as, but not limited to:
 1. Floor Plans
 2. Elevations
 3. Sections
 4. CAD 3D Rendered Perspective (Architectural Character)
 5. BIM platform (e.g., Autodesk Revit, etc.)
 - c. Design and construction methods;
 - d. List of design and construction personnel, to be assigned to the Project, with their complete qualification and experience data; and
 - e. Value engineering analysis of design and construction methods.
- B. The second envelope (Financial Proposal) shall contain all the required documents for infrastructure projects under Section 25.3 of the IRR of RA 9184 and the following additional documents:
- a. Lump sum bid prices, which shall include the detailed engineering cost, in the prescribed Bid Form;
 - b. Detailed estimates including a summary sheet indicating the unit prices of construction materials, labor rates and equipment rentals used in coming up with the bid; and
 - c. Cash flow by the quarter and payment schedule.

Section 11. BID EVALUATION

For the detailed evaluation of the design and build proposals, a two-step procedure shall be adopted by the Bids and Awards Committee for Infrastructure for the National Academy of Sports Project:

A. First-Step Procedure:

- a. The first step of the evaluation shall involve the review of the preliminary conceptual designs and track record submitted by the DBC as indicated in the Bid Documents using a non-discretionary “pass/fail” criterion that involve compliance with the following requirements:
- Adherence of preliminary design plans to the required performance specifications and parameters and degree of details;
 - Concept of approach and methodology for detailed engineering, design and construction with emphasis on the clarity, feasibility, innovativeness and comprehensiveness of the planned approach, and the quality of the interpretation of project problems, risk, and suggested solutions;
 - Quality of personnel to be assigned to the project which covers the suitability of key staff to perform the duties of the particular assignments and general qualifications and competence including education and training of the key staff;

Table 3. Criteria for Conceptual Design:

	PASSED	FAILED	REMARKS
1. Architectural / Conceptual Design Consideration - In accordance with the degree of details specified in the MPSS of this TOR.			
a. Drawing Requirements (AutoCAD)			
● 3D Rendered Perspective (Architectural Character)			
● Building Information Modelling (BIM) Platform (e.g., Autodesk Revit, etc.)			
b. Site Development Plan			
c. Conceptual Design			
● Floor Plans			
● Front, Rear, Left and Right-Side Elevations			
● Sections			

B. Second-Step Procedure:

- a. Only those bids that passed the above criteria shall be subjected to the second step of evaluation.
- b. The BAC shall open the financial proposal of each “passed” bidder and shall evaluate it using non-discretionary criteria including arithmetical corrections for computational errors as stated in the Bid Documents, and thus determine the correct total calculated bid prices. The BAC shall automatically disqualify any total calculated bid price which exceeds the ABC. The total calculated bid prices (not exceeding the ABC) shall be ranked, in ascending order, from lowest to highest. The bid with the lowest total calculated bid price shall be identified as the Lowest Calculated Bid (LCB).

Section II.

**Minimum Performance
Standards and
Specifications**

**MINIMUM PERFORMANCE STANDARDS AND
SPECIFICATIONS (MPSS)**

**DESIGN AND BUILD OF THE NATIONAL
ACADEMY OF SPORTS PHASE 2
AT NEW CLARK CITY**

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MINIMUM PERFORMANCE STANDARDS AND SPECIFICATIONS (MPSS)

DESIGN AND BUILD OF THE NATIONAL ACADEMY OF SPORTS (NAS) - PHASE 2 AT NEW CLARK CITY

Section 1. PURPOSE AND SCOPE OF THE PROJECT

The purpose of the Minimum Performance Standards and Specifications (“MPSS”), among others, is to:

- 1.1. Establish the minimum compliances that the Design and Build Contractor (“DBC”) must comply with under the Contract Agreement with BCDA for the Design and Build of the National Sports Academy Phase 2 (hereinafter referred to as “the Project”), using the Implementing Rules and Regulations, Republic Act No. 9184 (“IRR/R.A. No. 9184”), especially Annex “G” Guidelines for the Procurement and implementation of Contracts for Design and Build Infrastructure Projects.
- 1.2. Ensure compliance of the DBC in adopting Architectural, Engineering and other Technical Guidelines and define performance standards for the Detailed Architectural and Engineering Design (“DAED”) of the Project; and
- 1.3. Provide a quantifiable and verifiable basis for physical progress as basis for Claims for Payments of the DBC in accordance with the standards accounting and auditing rules and regulations of the Procuring Entity (“BCDA”).
- 1.4. The scope of work of the Project essentially covers the Design and Build of the Infrastructure components of the National Academy of Sports (“NAS”) - Phase 2 based on the Terms of Reference.

Section 2. MINIMUM REQUIREMENTS - DESIGN STANDARDS AND SPECIFICATIONS

The DBC shall consider as reference the conceptual design made by BCDA for the National Academy of Sports, and shall observe the following design standards:

A. Architectural Design Character.

1. **Codes and Standards.** The specifications for the buildings and other structures shall adhere to the following codes and standards:

Codes:

- National Building Code of the Philippines and its Revised Implementing Rules and Regulations
- Batas Pambansa 344 – Accessibility Law
- Fire Code of the Philippines and Its Revised Implementing Rules and Regulations
- IRR RA 9266 or Architectural and its Latest and Amended IRR
- Other Laws that apply to the Project

Standards:

- The design of the building shall also conform, as far as practicable, to the Department of Education Order No. 64, s. 2017, Establishing the Minimum Performance Standards and Specifications for DepEd School Buildings.
- Office spaces, which will be part of the Sports Science/Medicine Building and Additional Sport Facility (Sport Center with Multi-Purpose Covered Courts) as specified in the general requirements in the Terms of Reference must also conform with the Joint Circular 1 issued last 20 October 2016 by the Department of Budget and Management and the Department of Public Works and Highways, hereto attached as Annex “2”.

Site Specific Guidelines:

- New Clark City Comprehensive Master Development Plan (“NCC CMDP”)
- NCC Design Standards and Guidelines (“NCC DSG”)
- NGAC Master Development Plan (“NGAC MDP”)

2. The Site Development Plan for NAS encourages variance in the architectural design of buildings within a zone to evoke an identity that shall be consistent with the NGAC MDP and the NCC DSG. The Sports Science and Sports Medicine Building, Additional Sport Facility (Sport Center with Multi-Purpose Covered Courts) and Staff Housing shall be designed by adopting the principles of a green infrastructure design as in the NCC DSG for individual buildings and should be designed as such to establish a relationship with the design and character of the buildings within the Sports Complex, but without excessive repetition of similar building features.

The design of canopies, cornices, moldings, walls, columns, glazing and other architectural components must contribute to the overall character of the building. The use of Modern Philippine-inspired architecture is encouraged to showcase the local culture. Facades shall be able to create visual and architectural interest. Architectural elements to incorporate should include a variety of the following: bays and recesses, balconies and terraces, inset windows that allow for the

expression of wall thickness, patterns of shade and shadow at facades, changes of material and color use of architectural details such as horizontal and vertical banding, cornices, door and window surrounds, and use of high-quality materials. Cornice lines and canopies should be coordinated across adjacent buildings. Avoid inside gutters and flat concrete deck roofs.

3. Future-Ready Flexibility as a Campus within the “City of the Future”. The design should also take into consideration that NAS will serve the growing needs of the next generation of sports scholars. Expansions are managed with modularity and scalability principles. It should be ready for future horizontal and/or vertical augmentation without compromising its structural integrity and iconic design presence as a whole.
4. The Green Building design principle. It is emphasized that the building design should also utilize eco-friendly materials that will integrate renewable energy strategies and efficient use of natural resources. Where possible, provide and integrate each development with ecosystem services, improve health and livability, provide space for local food production, as well as to mitigate heat. Building design should adopt building forms that ‘look out’ onto the river parks such as deck terraces to enhance visual connection to green open spaces and shall not obstruct by providing walls that can block public access and views of parks. There should be sufficient protection (canopy, covered walkway, large overhang, etc.) for the end user from elements (heavy rains, intense summer, etc.), especially PWDs.

The DBC is highly encouraged but not required to secure any certification issued for Green Building Infrastructure however, the DBC must provide cost-effective solutions and a green building feature, which shall be discussed with the BCDA during the detailed engineering design, investigation and assessment and adopted only with the BCDA’s approval.

5. Functionality and Space Optimization for athletic training and development as well as applied Sports Science. All room requirements listed herewith should be provided for and should be in accordance with the National Building Code of the Philippines. Space Planning should satisfy specific functions and allow efficient circulation in terms of physical movement and proximities, natural and artificial airflow. The DBC should consider the high sweat rates of the end users in the sports and testing facilities and the high environmental humidity and heat stress, and provide adequate ventilation.
6. Safe and Stimulating Holistic Learning Environment. Conducive to the enrichment of education and experiences, the design should take full advantage of site givens, including our tropical environment. Interiors and exteriors should be appropriately oriented to cardinal directions to

maximize natural light and heat gain, breeze and natural landscape. The design should maximize natural light by planning open office areas in the outer perimeter of the building envelope and locating enclosed offices adjacent to the building core. Lighting fixtures wherever required shall have LED lights/lamps. Follow green building provisions for lighting.

Colors should be incorporated into the overall design to stimulate or soothe, depending on the space function. Design should be universal and provide accessibility for para-athletes and differently-abled persons.

7. Safe access points for entry/exit and emergency evacuation should be balanced with the projected security personnel field of vision so as to optimize safety, security, and operating costs.
8. Adherence to World's Best Practices. The design of the facilities must be in compliance with the competition standards of global sports associations and world-class facilities guidelines of international learning institutions. The facilities must also be able to adapt and provide access to integrated technologies and reliable internet connectivity throughout the NAS Complex to support more sophisticated curricula and hone the athletic abilities of the students.

B. Urban Design Requirements. The NAS Site Development Plan covers a wide array of development criteria and standards as reflected in Annex 'B'- Lot Information Plan.

1. **Landscaping.** Landscaping can be utilized to support resiliency efforts, through green infrastructure and stormwater retention. Naturally occurring wetlands, groves, and other existing natural resources and terrains should be maintained to the fullest extent possible. Specifications and limitations on impervious surfaces, stormwater retention, and percent green areas for parcels are indicated below as stated in the NCC DSG:
 - a. Features and landscape materials shall complement the urban character and architecture of the particular neighborhood. Materials used must be safe, durable, easily maintained and aesthetically pleasing.
 - b. Storm water drains shall be covered and flushed with the paving level. Natural drainage systems are strongly encouraged.
2. **Open Space.** Unless otherwise specified, each parcel in NGAC shall provide a minimum 30% of lot coverage as green space and/or public plaza. If hardscaped areas are added within the green space, they must be constructed of permeable paving materials. All public green

and open spaces shall be developed according to the NCC DSG and the design must be compatible with adjacent developments, architecture and urban character of the district.

3. **Circulation and Courtyards within Parcels.** Pavement, roadside railing and landscape materials shall complement the urban character of the district. Paving materials used must be safe, non-slip, durable and easily maintained, and aesthetically pleasing.
4. **“Street-Wall” and street-facing uses.** A street wall is created when individual building frontages are built up to the sidewalk/lot lines in order to define edges and activate urban open space. The building line of any structure must comply with the setback requirements as indicated requirements in the Building Code of the Philippines. Build-to-Line requirements are detailed in the NCC DSG.
5. **Security Requirements.** Perimeter fences and gates should be avoided to the greatest extent possible. Any physical security measures must be incorporated seamlessly into the overall design of the landscape and buildings so as not to draw attention to the measures or detract from the urban context. Fences and walls along the plot frontage, public parks and streets must have a minimum porosity of 50%. Landscape elements such as hedges are encouraged in place of fences or walls. The design, height and materials of such measures are subject to review and approval of the BCDA.
6. **Emergency Access.** Emergency exit doors when open must not project beyond the property line. The design of the exit is subject to building, fire and other relevant codes and guidelines. Exit areas shall be designed with flared or beveled corners, angle inset or with similar details in order to avoid an enclosed and box-like appearance. The doors shall be designed and decorated so as to blend with the overall design and character of the building. Service access points for garbage trucks, etc., must be located away from the emergency exit areas.

C. Mobility Design Requirements

1. **Centralized Parking System.** The NAS Block, through NGAC, will be serviced by an external transportation system that is a mix of public and private transport, and an internal network of public transit, bicycle, and pedestrian circulation. Parking in the area should be concentrated into several centralized parking structures that can service multiple buildings. Surface parking lots shall only be allowed in a temporary capacity; and must be composed of permeable paving materials. Specify the possible number of parking spaces.
2. **Parking Entrances** should be below grade or screened from view

and accessed via secondary streets. It is important to ensure entrances are located and oriented to minimize disruption of the public realm and street.

3. **Drop Offs and Local Access Roads** should be located within the interior of parcels, so as not to disrupt the street wall. They should be located near tower entrances; and adjacent buildings should share the same drop-off area wherever possible. Where internal drop-offs are not possible, street side drop-offs (and their associated curb cuts) should not negatively impact the pedestrian zone of sidewalks or interrupt the street wall.
4. **Pedestrian Circulation.** All streets must prioritize pedestrian circulation, safety, and comfort. Narrow streets and small development blocks where possible will encourage pedestrian activity. Pedestrian walkways forming part of the public pedestrian circulation network must be integrated into the internal circulation system of the individual developments into which it links.
5. **Pedestrian Amenities.** In the planning and layout of buildings within the NAS Block, primary consideration should be given to pedestrians. The use of colonnades, arcades, canopies, and covered walks should be used for all support service facilities and are generally encouraged across all land-uses to improve the pedestrian right-of-way.
 - a. **Canopies** may encroach within the street right of way by a maximum of 3 meters. They should have a consistent size and height established within each given block.
 - b. **Shade Trees.** Street design should allow for the introduction of street trees wherever possible to add additional shading and visual improvement
 - c. **Street Furniture.** All pedestrian sidewalks, paths, and plazas should be populated regularly with seating elements to support comfortable usage.
 - d. **Accessibility.** Primary pedestrian circulation paths and entry ways shall be designed to accommodate wheelchair access.
6. **Bike Lanes.** Bicycles are an integral part of mobility for residents and visitors and should be encouraged as an alternate mode of transport. The design of all local access streets must include a bike path, and all major streets must include a dedicated bike lane protected with a median and illuminated paths during nighttime.
7. **Bike Parking.** Parking for bicycles should be provided near the facility structures with a bike parking rack that can accommodate a minimum of 50 bikes.

D. Building Minimum Design Requirements

1. Sports Science and Sports Medicine Building, Additional Sports Facility (Sport Center with Multi-Purpose Covered Courts), and Staff Housing.

External Architectural Facade (character) of the **Sports Science and Sports Medicine Building** respectful of the existing campus fabric and built environment.

External Architectural Facade (character) of the **Additional Sports Facility (Sport Center with Multi-Purpose Covered Courts)** should be similar to the Phase 1 structures.

The External Architectural Facade of the **Staff Housing** should have a more relaxing and residential character.

Materials should be within acceptable specifications, no volatile organic compound (VOC).

The floor plan for each of the identified spaces shall follow the functional space requirements of Section E. of the MPSS and conceptual floor plan of Section VI. NAS Site Development Plan. The DBC shall conform to the BP 344 or the Accessibility Law requirements standard for Persons with Disabilities (PWD).

Circulation space must be consistent with fire safety regulations and ensure efficient and unobstructed movement inside the building.

Sports Medicine Department, Biomechanics Department and Exercise Physiology Department. Must be located on the ground floor as these will house heavy equipment and should have tempered/safety fixed glass windows facing the testing areas only.

Sport Fitness Parameter / Performance Testing Room. Must be located on the ground floor because of various testing activities and open-plan.

Speed & Agility Area. Is an external area attached to the Bio-mechanics Laboratory adjacent to the Sports Science and Sports Medicine Building. (Please see attached layout)

Identified spaces shall have proper wayfindings and room label signages. All exteriors facing windows must be glazed to prevent too much heat gain in the building.

2. Office Area

The space and configuration of the offices and workstations shall be provided in the design to be proposed by the DBC taking into account the space requirements indicated in Section E. Minimum Specifications and Functional Space Requirements. Modular partitions shall be used in delineating offices.

3. Meeting room or Conference Room

The conference rooms shall have power and network floor-mounted outlets. There shall be ample storage for audio-visual equipment, etc.

Meeting rooms should be flexible in space usage which means that such should be provided approximately to each other and can be converted and combined to form a larger meeting room by incorporating movable partitions, furniture, and equipment.

4. Comfort Rooms

Each floor of the Sports Science and Sports Medicine Building and Additional Sports Facility (Sports Center with Multi-Purpose Covered Courts), and Staff Housing, must-have comfort rooms designed such that a sufficient number of toilets for men and women are provided. Each toilet area must have the following but not limited to urinals and modesty boards (for male toilets), toilet bowl with bidet, countertop lavatory with faucet, mop sink, hand dryer, tissue holder, concealed washroom combination (paper towel, dispenser and waste bin), facial mirror, soap dispenser and toilet and shower partitions in numbers compliant with regulations. A separate comfort room shall be provided for (1) persons with disabilities (PWD), and (2) gender-neutral comfort room per floor

The design shall consider the location of the other toilet areas in the building to consider efficient plumbing installation works.

5. Storage Rooms

The room shall be accessed only by a limited number of staff and can therefore be located accordingly in the design of the building.

6. Lobby / Receiving Area

Shall serve as the receiving area for Sports Science and Sports Medicine Building, Additional Sport Facility (Sport Center with Multi-Purpose Covered Courts), and Staff Housing.

7. Service areas - Electrical/ Electronics / Mechanical/ LAN, etc.

- i. The design shall accommodate areas required for various service components of the buildings such as, but not limited to, electrical, electronics, mechanical, maintenance, LAN, etc. These areas shall be designed based on specific inputs from the sub-consultants designing them such as electrical consultant, air conditioning consultant, etc.
- ii. The design of electricity, plumbing and fire protection shall follow the provisions of the National Building Code, National Electrical Code, Philippine Electronics Code, and National Fire Protection Code (the version of the Building Code applicable will be the latest available on the day of award of the contract) and other Relevant Rules and Procedures.
- iii. There shall be an electrical and auxiliary room where the necessary electrical panel boards, electrical components such as transformers, etc and auxiliary components for data, connectivity, etc, are located.
- iv. The design of service areas shall have access to natural ventilation; else must have exhaust fans. Service areas must be screened off to public view.

8. Pantry/Dining/Kitchen areas;

Shall serve as the area for food preparation, food storage area and dining area. Kitchen shall be properly ventilated. Kitchen fixtures (i.e. cabinets, counter tops) must be in appropriate water proof and low maintenance finish like stainless steel or granite. Kitchen must have space for LPG gas tanks or consider a fuel line system.

E. Minimum Specifications and Functional Space Requirement

a. Sports Science and Sports Medicine Building

The functional spaces required in the Sports Science and Sports Medicine Building and spaces are described as follows:

Table 1. Functional Space Requirements for Sports Science and Sports Medicine Building

BUILDING 1: Sports Science and Sports Medicine Building

1	Sport Fitness Parameters/Performance Testing Room	<ul style="list-style-type: none"> a. Strength and Power Area b. Cardiovascular Endurance Area c. Body Composition Area d. Balance, Coordination, and Flexibility Area e. all above areas are on HDPE Rubber Flooring f. Area of 320 sqm (16m x 20m) with a clear ceiling height of at least 8 meters. g. Air-conditioned h. Spaces must have ventilation fans for good exchange of fresh and air-conditioned air.
2	Exercise Physiology Department (at least 100 sqm with a clear ceiling height of at least 3.5 meters)	<ul style="list-style-type: none"> a. ExPhys Office area (at least 15 sqm) b. ExPhys Lab (with interior enclosed controlled room) c. PVC floor with certified anti-covid19 surface, FIVB Standard (5mm) d. Wash Area (Sterilization and Disinfection) e. Acoustic ceiling finish. f. Air-conditioned g. Spaces must have ventilation fans for good exchange of fresh and air-conditioned air.
3	Biomechanics Department (at least 100 sqm with a clear ceiling height of at least 3.5 meters)	<ul style="list-style-type: none"> a. Biomech Office area (at least 15 sqm) b. Biomech Lab) c. PVC floor made in France with certified anti-covid19 surface, FIVB Standard (7mm) d. Acoustic ceiling finish. e. Air-conditioned f. Spaces must have ventilation fans for good exchange of fresh and air-conditioned air.
4	Sports Medicine Department (at least 100 sqm with a clear ceiling height of at least 3.5 meters)	<ul style="list-style-type: none"> a. Sports Med Office area (at least 15 sqm) b. Sports Med Lab c. PVC floor made in France with certified anti-covid19 surface, FIVB Standard (5mm) d. Acoustic ceiling finish. e. Air-conditioned f. Spaces must have ventilation fans for good exchange of fresh and air-conditioned air.
5	Speed and Agility Area	<ul style="list-style-type: none"> a. 40m long running area. b. With roofing, at least 3m. clear ceiling height. c. Rubber granular finish track & field Flooring poured in place at least 13mm thick with 2 lanes, IAATF Certified material. The linear track should be at least 1.2m from the nearest wall and column. d. Outdoor, but attached to the Sports Science & Sports Med. Bldg. e. Should have a water proofing material base. f. Speed & Agility Area must have supplementary mechanical ventilation for good air quality.

6	Sport Psychology Department (at least 40 sqm with a clear ceiling height of at least 3.5 meters)	<ul style="list-style-type: none"> a. Sport Psych Office area (at least 15 sqm) b. Sport Psych Lab c. Acoustic wall and floor carpet tile finish. d. Acoustic ceiling finish. e. Air-conditioned f. Spaces must have ventilation fans for good exchange of fresh and air-conditioned air.
7	Sport Nutrition Department (at least 40 sqm with a clear ceiling height of at least 3.5 meters)	<ul style="list-style-type: none"> a. Sport Nutrition Office area (at least 15 sqm) b. Sport Nutrition Lab c. Non-glazed tiles flooring. d. Acoustic ceiling finish. e. Air-conditioned f. Spaces must have ventilation fans for good exchange of fresh and air-conditioned air.
8	Meeting/Conference Room	<ul style="list-style-type: none"> a. Medium Meeting Room (Good for 10-15 pax, Sound Proof, Good Internet access and Electrical Outlets). (at least 25 sqm with a clear ceiling height of at least 3.5 meters) b. Acoustic floor finish. c. Acoustic ceiling finish. d. Air-conditioned e. Spaces must have ventilation fans for good exchange of fresh and air-conditioned air.
9	Student-athletes Comfort Room, Shower and Changing/Locker Rooms	<ul style="list-style-type: none"> a. Separate Male and Female comfort rooms, shower and changing/locker rooms should be provided. b. A separate comfort room, shower and changing/locker room must be allocated for PWD (good for 1 person) and a gender-neutral design (good for 1 person) c. PWD friendly; compliant with BP-344 (Male, Female, PWD and all-gender or gender neutral) d. Minimum of 4 toilet cubicles and 4 urinals for Male and 5 toilet cubicles for Female should be provided and shall have adequate partitions. e. Minimum of 4 shower cubicles for Male and 4 shower cubicles for Female should be provided and shall have adequate partitions. f. Must have a lavatory and faucet with soap dispenser (sink mounted) in numbers compliant with regulations and at least one hand dryer, one tissue holder with trash can and among others. g. Each toilet must have toilet bowls with bidet and tissue holder in numbers compliant with regulations. For male toilet rooms, toilets must have urinals with modesty boards:

		<ul style="list-style-type: none"> h. Shall provide space for at least 15 changing lockers and at least 6 benches. i. Must have dry storage with mop sink for male & female. j. The space should consider an arrangement to separate or limit wet floor from dry floor.
10	Staff Comfort Room, Shower and Changing/Locker Rooms	<ul style="list-style-type: none"> a. Separate Male and Female comfort rooms, shower and changing/locker rooms should be provided. b. A separate comfort room, shower and changing/locker room must be allocated for PWD (good for 1 person) and a gender-neutral design (good for 1 person) c. PWD friendly; compliant with BP-344 (Male, Female, PWD and all-gender or gender neutral) d. Minimum of 2 toilet cubicles and 2 urinals for Male and 3 toilet cubicles for Female should be provided and shall Sufficient number of have adequate partitions. e. Minimum of 2 shower cubicles for Male and 2 shower cubicles for Female should be provided and shall Sufficient number of have adequate partitions. f. Must have a lavatory and faucet with soap dispenser (sink mounted) in numbers compliant with regulations and at least one hand dryer, one tissue holder with trash can, mirror and among others. g. Each toilet must have toilet bowls with bidet and tissue holder in numbers compliant with regulations. For male toilet rooms, toilets must have urinals with modesty boards: h. Shall provide space for at least 8 changing lockers and at least 4 benches for each male and female. i. Must have dry storage with mop sink for male & female. j. The space should consider an arrangement to separate or limit wet floor from dry floor.
11	Comfort Rooms	<ul style="list-style-type: none"> a. For male, female, gender neutral and PWD b. Sufficient number of toilets for men and women should be provided compliant with local regulations. Each toilet must have toilet bowls with bidet and tissue holder in numbers compliant with regulations. For male toilet rooms, toilets must have urinals with modesty boards: c. Must have a lavatory and faucet with soap

		<p>dispenser (sink mounted) in numbers compliant with regulations and at least one hand dryer, one tissue holder with trash can, mirror and among others.</p> <p>d. To be provided for each floor of the building (in case of several floors)</p> <p>e. A separate comfort room shall be provided for person with disability (PWD) and a gender-neutral design per floor in accordance with local regulations.</p> <p>f. Each designated comfort rooms must have at least one hand dryer.</p>
12	Shared Storage Room	<p>a. Shared Storage for various equipment.</p> <p>b. Storage room will be provided for each floor and shall be within an area at least 12sqm with a clear ceiling height of at least 3 meters.</p>
13	Shared Pantry/Dining area and Lounge	<p>a. Shall serve as break out space to use during breaks from working or studying.</p> <p>b. Area of at least 30sqm with a clear ceiling height of at least 3 meters.</p> <p>c. Air-conditioned.</p>
14	Common Areas	<p>a. Hallways, stairs, lobby etc.</p>

b. Additional Sports Facilities (Sports Center with Multi-Purposed Covered Court

The functional spaces required in the additional sports facilities area and spaces are described as follows:

Table 2. Functional Space Requirements for Additional Sports Facilities

BUILDING 2: Additional Sports Facilities (Sports Center with Multi-Purposed Covered Court)		
1	Sports Center Training Area	<p>a. Sports Center Training Area with at least 800 sqm and a clear ceiling height of at least 8 meters</p> <p>b. Air-conditioned</p> <p>c. Ceiling mounted lights with minimum of</p>

		<p>1,500 Lux on the floor.</p> <p>d. All rooms must be properly illuminated and should utilize natural daylight</p> <p>e. Should have supplementary mechanical ventilation for good air quality in addition to ACU's.</p> <p>f. Ensure training areas and rooms comply with the International Sports Federations' competition court requirements.</p>
2	Comfort room, Shower and Changing/Locker room at Ground Floor	<p>a. Separate Male and Female comfort rooms, shower and changing/locker rooms should be provided with a clear ceiling height of 3 meters.</p> <p>b. A separate comfort room, shower and changing/locker room must be allocated for PWD (good for 1 person) and a gender-neutral design (good for 1 person)</p> <p>c. PWD friendly; compliant with BP-344 (Male, Female, PWD and all-gender or gender neutral)</p> <p>d. Minimum of 4 toilet cubicles and 4 urinals for Male and 5 toilet cubicles for Female should be provided and shall Sufficient number of have adequate partitions.</p> <p>e. Minimum of 6 shower cubicles for Male and 6 shower cubicles for Female should be provided and shall have adequate partitions.</p> <p>f. Must have a lavatory and faucet with soap dispenser (sink mounted) in numbers compliant with regulations and at least one hand dryer, one tissue holder with trash can and among others.</p> <p>g. Each toilet must have toilet bowls with bidet and tissue holder in numbers compliant with regulations. For male toilet rooms, toilets must have urinals with modesty boards:</p> <p>h. Shall provide space for at least 15 changing lockers and at least 6 benches for each Male and Female.</p> <p>i. Must have dry storage with mop sink for male & female.</p> <p>j. The space should consider an arrangement to separate or limit wet floor from dry floor.</p>
4	Coaches' Office (32 sqm with a clear ceiling height of at least 3 meters)	<p>a. Sports Coaches and Asst. Coaches Office</p> <p>b. air-conditioned</p> <p>c. Spaces must have ventilation fans for good exchange of fresh and air-conditioned air.</p>

5	Coaches' Pantry (12 sqm with a clear ceiling height of at least 3 meters)	<ul style="list-style-type: none"> a. Coaches Common Room and Pantry. b. Must have a lavatory and faucet with soap dispenser (sink mounted) and among others. c. air-conditioned d. Spaces must have ventilation fans for good exchange of fresh and air-conditioned air.
6	Coaches' Comfort room, Shower and Changing/Locker room	<ul style="list-style-type: none"> b. Separate Male and Female comfort rooms, shower and changing/locker rooms should be provided with a clear ceiling height of 3 meters a. A separate comfort room, shower and changing/locker room must be allocated for PWD (good for 1 person) and a gender-neutral design (good for 1 person) b. PWD friendly; compliant with BP-344 (Male, Female, PWD and all-gender or gender neutral) c. Minimum of 2 toilet cubicles and 2 urinals for Male and 3 toilet cubicles for Female should be provided and shall Sufficient number of have adequate partitions. d. Minimum of 2 shower cubicles for Male and 2 shower cubicles for Female should be provided and shall have adequate partitions. e. Must have a lavatory and faucet with soap dispenser (sink mounted) in numbers compliant with regulations and at least one hand dryer, one tissue holder with trash can and among others. f. Each toilet must have toilet bowls with bidet and tissue holder in numbers compliant with regulations. For male toilet rooms, toilets must have urinals with modesty boards: g. Shall provide space for at least 5 changing lockers and at least 2 benches for each Male and Female. h. Must have dry storage with mop sink for male & female. i. The space should consider an arrangement to separate or limit wet floor from dry floor.
7	Storage Area (64 sqm with a clear ceiling height of at least 3 meters)	<ul style="list-style-type: none"> a. Shared Storage for various equipment. b. Storage room will be provided for each floor.
8	Common Areas	<ul style="list-style-type: none"> a. Hallways, stairs, lobby etc.
9	Wall Climbing Wall in One of its Exterior Walls	<ul style="list-style-type: none"> a. At least in accordance with the National Sports Federation Standards for Wall Climbing (Sport Climbing Association of the Philippines,

		Inc.)
10	Multi-Purpose Covered Courts (Outdoor)	<ul style="list-style-type: none"> a. Attached on the west exterior of the building b. Multi-Purpose Covered Court that can be used by different sports with a dimension of 1,024sqm (32m x 32m) with a clear ceiling height of at least 9 meters), including metal viewing seats, built-in furnitures, provision for T&B,etc* a. With Field of Play (FOP) lines for 2 Tennis courts, 2 Basketball, 1 Handball Court and 2 Volleyball Courts. b. Special Coat for hard surface tennis courts (concrete with acrylic top) c. Ceiling mounted lights with minimum of 1.500 Lux on the floor.

c. NAS Staff Housing

The functional space requirements for the NAS Staff Housing can be described as follows:

Table 3. Functional Space Requirements for the NAS Staff Housing

BUILDING 3: STAFF HOUSING		
1	Admin/Staff Office	<ul style="list-style-type: none"> a. Office of the Administrator and Administrator staff (Good for 4 pax) with an area of 12 sqm and a clear ceiling height of at least 3 meters b. Private Toilet preferred c. air-conditioned
2	Cafe/Dining	<ul style="list-style-type: none"> a. Must accommodate simultaneous dining of 60% of total occupants and with a clear ceiling height of at least 3 meters. b. Passive-ventilation preferred
3	Kitchen	<ul style="list-style-type: none"> a. Food preparation area. b. Dishwashing area and dry storage c. An area of at least 18 sqm for each cluster with a clear ceiling height of at least 3 meters d. With Kitchen Exhaust Fan e. Must have a Fire Suppression System f. LPG tanks must be stored separately.

4	Laundry Area	<ul style="list-style-type: none"> a. Good for 8 pax with an area of at least 20 sqm with a clear ceiling height of at least 2.7 meters. b. Dry storage with mop sink. c. Must have at least 2 counter tops with sink for hand washing of clothes.
5	Housekeeping Room (for the entire Staff Housing)	<ul style="list-style-type: none"> a. Workstations (Good for 3 pax), 12 sqm b. Dry storage c. Private Toilet d. 3 Cabinets for clothes
6	Storage (for the entire Staff Housing)	<ul style="list-style-type: none"> a. Shared Storage for various equipment. b. Storage room shall be within an area at least 9 sqm
7	Single Room (Standard)	<ul style="list-style-type: none"> a. Single Bedroom for 1 pax with at least 21 sqm habitable area and a clear ceiling height of at least 2.7 meters. b. 1 Cabinet for Clothes c. Private Toilet and Bath d. Air-conditioned but must employ passive cooling techniques. e. Small balcony w/ ceiling drying rack f. 5 units
8	Small Single Room	<ul style="list-style-type: none"> a. Intended for corner units. b. Single Bedroom for 1 pax with at least 18 sqm habitable area and a clear ceiling height of at least 2.7 meters. c. 1 Cabinet for Clothes d. Private Toilet and Bath e. Air-conditioned but must employ passive cooling techniques. f. Small balcony w/ ceiling drying rack. g. 4 units
9	Large Single Room	<ul style="list-style-type: none"> a. Intended for high-ranking officials. b. Studio Bedroom for 1 pax with at least 24 sqm habitable area and a clear ceiling height of at least 2.7 meters. c. 1 Cabinet for Clothes. d. Space for dinette. e. Private Toilet and Bath f. Air-conditioned but must employ passive cooling techniques. g. Small balcony w/ ceiling drying rack. h. 3 units.

10	Double Sharing Room	<ul style="list-style-type: none"> a. Single Bedroom for 2 pax with at least 21 sqm habitable area and a clear ceiling height of at least 2.7 meters. b. 1 Cabinet for Clothes (divided into 2). c. Private Toilet and Bath d. Air-conditioned but must employ passive cooling techniques. e. Small balcony w/ ceiling drying rack f. 15 units
11	Dormitory Room (4 Bed)	<ul style="list-style-type: none"> a. Single Bedroom for 4 pax with at least 21 sqm habitable area and a clear ceiling height of at least 2.7 meters. b. Space for dressers. c. Separate Toilet and Shower d. Air-conditioned but must employ passive cooling techniques. e. Small balcony w/ ceiling drying rack f. 15 units
12	Dormitory Room (6 Bed)	<ul style="list-style-type: none"> a. Single Bedroom for 6 pax with at least 34 sqm habitable area and a clear ceiling height of at least 2.7 meters. b. Space for dressers. c. Separate Toilet and Shower d. Air-conditioned but must employ passive cooling techniques. e. Small balcony w/ ceiling drying rack f. 3 units
13	Toilet in bedroom	<ul style="list-style-type: none"> a. PWD friendly at Ground Floor b. Toilet with bidet and tissue holder, lavatory with faucet and mirror (of at least 0.4m x 0.6m) c. Shower with hot & cold water
14	Comfort rooms	<ul style="list-style-type: none"> a. For male, female, gender neutral and PWD b. Sufficient number of toilets for men and women should be provided compliant with local regulations. Each toilet must have toilet bowls with bidet and tissue holder in numbers compliant with regulations. For male toilet rooms, toilets must have urinals with modesty boards: c. Must have a lavatory and faucet with soap dispenser (sink mounted) in numbers compliant with regulations and at least one hand dryer, one tissue holder with trash can, mirror and among others. d. To be provided at the ground floor of the

		<p>building.</p> <p>e. A separate comfort room shall be provided for person with disability (PWD) and a gender-neutral design per floor in accordance with local regulations.</p> <p>f. Each designated comfort rooms must have at least one hand dryer.</p>
15	Recreation Room	a. Multipurpose space good for 48 pax at any given time.
16	Common Areas	a. Hallways, stairs, lobby etc.
17	Dryscape / Garden	a. To be put at the lowest elevation of the Staff House site to be used as part of the Rainwater Management System.

d. Site Development Works

The functional spaces required in the site development area and outdoor spaces are described as follows:

Table 4. Functional Space Requirements for Site Development Works

SITE DEVELOPMENT		
1	Parking Spaces (Expansion)	<p>a. Extension from the Motor Pool Area of Phase I.</p> <p>b. Parking area near the staff housing, Sports Science and Sports Medicine Building, and others.</p> <p>c. Dedicated Parking Spaces (sheltered or with trees)</p> <p>d. Open Parking Spaces (non-sheltered but with trees)</p> <p>e. Motorcycle and Bicycle Parking Space</p> <p>f. Consider basement parking.</p> <p>g. Maximum number of parking spaces.</p>
2	Internal Road, Bike Paths/Walk-Jog Lanes, Paths adjoining Buildings	<p>a. Walk Paths (sheltered)/Bike Paths/Walk-Jog Lanes (Sand-wash Finish Texture or other/similar)</p> <p>b. Wayfinding and signages system</p> <p>c. PWD accessible and with tactile guides</p>

3	Landscape	<ul style="list-style-type: none"> a. Trees shall be endemic b. Carabao Grass c. With shrubs d. Hardscape (Benches, Stairs, and among others) e. High Plant Boxes all around the property to function as Perimeter Fence (with Bougainvillea plant, or similar thorny plant).
4	Perimeter Lights/Interior Road lights	<ul style="list-style-type: none"> a. Lights to be provided within the path walks, perimeter (north, south, west property boundaries), parking areas, and others. b. Lights to be provided in the Field event area (Phase 1). c. External lights (solar powered and/or conventional lightings)

1. Site investigations, surveys, soil testing and other similar activities which are required for finalizing the detailed building design shall be completed by the DBC during the preparatory construction works such that the final design addresses the findings from these activities.

A. **Land Grading Plan.** All such plans shall consider the topography and geology of the area with reference to the Updated Master Plan of the NCC provided in Annex “C” (Part 4.2.2 Design Criteria, p 4-17):

“The following are the design criteria for the land grading plan:

- a. Elevation of each lot for industrial, administrative/institutional, and commercial zones were set higher than the road elevation to avoid inundation.
- b. The road alignment and profile were set considering the topographical condition and water discharge direction.
- c. Minimum gradient of 0.50% and maximum gradient of 6% for roads were basically adopted”

2. The DBC shall design and develop the Site Development Area with internal roads (if applicable), covered walkways, bikelane, landscaping and paving ensuring efficient circulation, safe and unhampered pedestrian and vehicular flow and outdoor aesthetics. Premix paving consisting of road lines, channels drainage and curbs designed along with trees and flowering plants which shall be planted around the building, shall be ensured.

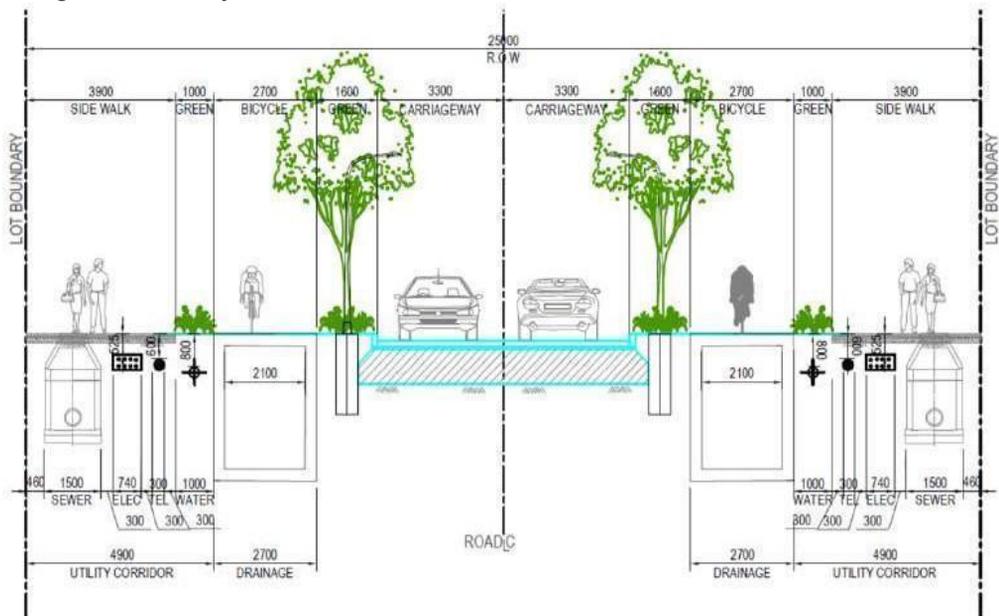
The design should consider adapting the natural placements of the

existing old trees to ensure that the development will capitalize on the preserved natural environment. In case cutting of trees is unavoidable within the site development area, the cost of undertaking such and the securing of necessary permits shall be borne by the DBC.

3. The site development works shall be carried out within the 18,866 sqm including the building footprint of all the buildings.

The design concept for the internal roads within the Property, if applicable, must include bike lanes, sidewalk, underground utility corridor, street lights and linear park, with reference to the Updated Master Plan of the NCC provided in Annex "C" (Part 4.4.10 Typical Cross section, p 4-47).

Fig.1. Road Lay-out for Collector Roads at NCC, 25 meters



4. Hanging Equipment

Height of trusses shall be 9 meters minimum from the finish floor line of the field of play. Height of lights, and other equipment must conform to the design requirements.

5. Walls

- a. Dry walls shall not be embedded with wet utilities.
- b. Layout and work on wall and floor tiles must be aligned, plumb, leveled, and squared.
- c. Painted Plastered CMU wall or drywall
- d. Lahar Finish (Trowel finish in random pattern) similar to Athletics Stadium and Aquatics Center in New Clark City.

- e. Tile color and design shall be approved first by BCDA before installation.
- f. Low Partitions inside rooms/office modular partitions, that are 1.5 m. high and made of light (wooden) materials.

6. Floors

- a. Floors at the openings of toilets for persons with disability shall be sloping and must be indicated in the plans and sections.
- b. Layout and work on wall and floor tiles must be aligned, plumb, leveled, and squared.
- c. Non-skid floor tiles shall be used on wet areas like Comfort Rooms, Changing / Locker Rooms, Laundry Room, etc.
- d. Tile color, size and design shall be approved first by BCDA before installation.
- e. Straight to finish with sealer shall be used on a large scale of the buildings.
- f. Ceiling Works: Acoustic Ceiling with metal frames to meeting rooms and exposed soffit slab in skim coat finish to other areas
- g. Should conform to the BP 344 or the Accessibility Law requirements standard for PWD.
- h. Whenever indicated, adhere to specified floorings.
- i. All slab on grade should have polyethylene barrier sheets.

7. Doors and Windows

- a. Major rooms that require security shall have sturdy doors i.e., metal doors on EE rooms
- b. Major rooms that require natural light shall have glass doors or partitions i.e., Conference room/meeting room
- c. Minor rooms that do not require security shall at least have wood flush doors with laminate; Storage rooms shall have painted wood flush doors
- d. Fire escape doors should be provided with panic hardware and door closers and shall conform to the requirements of the Fire Code of the Philippines.

- e. Number of doors for each classroom shall follow the DepEd requirements for Academic Buildings
- f. Windows shall be laminated 12mm thick (5+2+5), tempered double glazed modern windows.
- g. Door finish and color shall be approved first by BCDA before application
- h. Windowsills shall be slightly sloped outwards to prevent damage to windows and paint due to water slippage
- i. All doors of a high-occupancy room shall be double action swing doors and as required by the Fire Code of the Philippines.
- j. Should conform to the BP 344 or the Accessibility Law requirements standard for PWD.

8. Corridors

- a. Corridors and exit doors shall conform to the requirements of the Fire Code of the Philippines.
- b. Should conform to the BP 344 or the Accessibility Law requirements standard for PWD. The halls, stairs, and doors and facility components of the buildings must be wide and designed in compliance with the Accessibility Law and applied universal design components.

9. Staircases

- a. Stairs shall be constructed where appropriate following the standard specifications
- b. Staircases and fire exits shall be designed in compliance with the Fire Code and other applicable regulations.
- c. Must conform to the requirements under the BP 344 or the Accessibility Law and provide ramps and stair lift for the access of the PWD.

10. Fixtures and Accessories

- a. Three-way electrical light switches shall be provided at both ends of a long corridor

- b. Electrical light switches shall be located by the knob side of the door
- c. Electrical switches and outlets shall be installed plumb and level

11. Painting

- a. Painted ceiling shall be in an exposed ceiling with a skim coat.
- b. Lahar finishes for ordinary rooms, e.g., offices, unless specified to a higher type of paint.
- c. Painted exterior walls shall be lahar finish unless otherwise specified.
- d. Paint color and shade shall be approved first by BCDA before application.

F. Minimum Proposed Schedule of Finishes

All internal finishing and covering shall be free from tears, scoring or any other damage that is unsightly and/or could cause health and safety hazards. Flooring shall facilitate adequate drainage when necessary.

Table 5. Schedule of Finishes per Functional Area

Floor	
Entrance lobby	Straight to finish with sealer
Sports Science and Sports Medicine Building	Straight to finish with sealer/ Rubber Granular Finish Track, 13mm thick with top layer made PU coating and premium EPDM Granules IAAF Class 1 certified material for Speed and Agility Area / Hi-Density Rubber (50mm) for Sport Fitness Parameter & Performance Testing Room / PVC floor with certified anti-covid19 surface, FIVB Technical Partner Standard (5mm) for Exercise Physiology & Sports Medicine / PVC floor with certified anti-covid19 surface, FIVB Technical Partner Standard (7mm) for Biomechanics
Additional Sport Facility (Sport Center)	Straight to finish with sealer
Multi-Purpose Covered Courts	PVC Sport Interlocking Tile Flooring to FIBA 3x3 standard / Special Coated Acrylic Water based Sport Court Finish made from Polymer Dispersion, Filler, and Pigment. Floor finish must cover the whole covered court floor

	<p>area. Superimposed Dimension Lines must conform to each Sport's ISF Standards (to be approved by BCDA).</p> <ul style="list-style-type: none"> • 1 Handball Court • 2 Volleyball Courts • 2 Tennis Courts • 1 Basketball Court
Staff Housing	Admin office and Bedrooms should be Straight to finish with sealer.
Conference/Meeting Rooms	Homogenous Tiles
Pantry/Dining/Kitchen	Homogenous Tiles
Common areas/Storage/Utility rooms (Electro-mechanical)	Straight to finish with sealer
Comfort Rooms, Shower Rooms/Locker Rooms, Laundry Room and other Wet Areas	Non-skid floor tiles

Wall Finishes	
Entrance lobby	Lahar finish / Lahar finish or / Plaster painted Finish / Tempered Glass
Sports Science and Sports Medicine Building	Futuristic Painted finish / Tempered Glass
Gymnastics Gym.	Lahar finish / Painted finish
Multi-Purpose Covered Courts	
Staff Housing	Painted finish
Conference/Meeting Rooms	Glass/Plastered/ Lahar finish
Server rooms	Plain Cement Finish
Pantry	Lahar finish
Utility rooms (Electro-mechanical)	Plain Cement Finish
Comfort Rooms and Shower Rooms/Locker Rooms and other Wet Areas	Matte Finish wall tileswater
Wall Climbing Wall (on the Exterior Wall of Gymnastics gym)	Must be guaranteed for safety by at least the National Sports Federation (Sport Climbing Association of the Philippines, Inc.). Must be located at the South Side Wall of the Additional Facility (Sport Center)
Common areas/Storage/Utility rooms (Electro-mechanical)	Lahar finish / Painted finish

Partition Type	
Entrance lobby	CMU wall/Glass partition (where applicable)
Dry Wall Partition (Offices)	Fiber cement board on metal studs
Wet Wall (Toilets and other similar function areas)	CMU wall with Water-proofing Treatment
Administrative / Staff offices	Glass Partition for the entrance to offices. Floor to Ceiling Glass Partitions must be provided with Frosted Stickers. For interior offices, must provide modular type partition.
Ceiling Finishes	
Sports Science and Sports Medicine Building	Suspended acoustic tile panels for all laboratories. Slab soffit finish for utility rooms, fire exit and stairs. Moisture resistant gypsum for wet areas. Painted steel frame finish with at least 8 meters clear height for Sport Fitness Parameter & Performance Testing Room. Must be all heat insulated.
Additional Sport Facility (Sport Center)	Painted steel frame finish with at least 8 meters clear height. Must be heat insulated. All offices must have Fiber cement panels. Must be all heat insulated.
Multi-Purpose Covered Courts	Painted steel frame finish with at least 9 meters clear height. Must be heat insulated.
Staff Housing	Suspended Fiber cement panels for all areas, fire exit stairs. Moisture resistant gypsum for wet areas. Must be heat insulated for top floor.
Conference/Meeting Rooms	Suspended Fiber cement panels. Must be heat insulated.
Pantry, Common Areas - Utility rooms (Electro-mechanical) &	Slab soffit finish.
Comfort Rooms and Shower Rooms/Locker Rooms and other Wet Areas	Moisture resistant gypsum. Must be all heat insulated.

1. Summary of Materials

- a. Materials to be used shall be fire-resistant, non-toxic, moisture-resistant and termite-resistant, e.g., fiber cement board, light-gauge steel frame.
- b. Wet areas, e.g., toilets, and kitchen shall use non-skid/non-slip

vitrified ceramic floor tiles.

- c. Ramps and stairs shall use non-skid/non-slip floor tiles, materials as specified.
- d. Cement board with metal furring frames; full threaded support with shadow line and hangers.
- e. Metal rod hangers with adjustable clips, and not galvanized iron wires, shall be used to support and suspend the aluminum T-runners and light gauge metal furring
- f. All materials, color and design of walls, exterior finishes and roofing shall be approved first by NAS through BCDA or CMS before installation.

G. Structural Requirements

1. **Codes and Standards.** The specifications for the buildings and other structures shall adhere to the following codes and standards:

Codes:

- National Structural Code of the Philippines, NSCP 2017 7th Edition
- National Building Code of the Philippines
- Accessibility Law

Standards:

- American Institute of Steel Construction (AISC)
- American Concrete Institute (ACI)
- American Society for Testing Materials (ASTM)
- American Welding Society (AWS)
- American Society of Civil Engineers (ASCE)
- American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)

2. Structural Design Criteria:

The site shall be soil investigated to determine the actual soil bearing capacity. In summary, the site suitability, conformity with structural code, shape and form subject to structural evaluation and monitoring shall be in effect.

- a. Building Works

- Levels. Bottom slab of the lowest levels shall be no lower than +0.00m if no basement level is provided or -4.50m if a basement level is required. Peripheral earth retaining walls, elevator shafts and stairwells are to be made of reinforced concrete and shall, where necessary, take account of reasonably expected ground water penetration risk.
- A steel frame structure or reinforced concrete structure should be used for the Sports Science and Sports Medicine Building, Gymnastics Gym, Multi-Purpose Covered Courts, and the Staff Housing.
- The Structures should be classified as Occupancy Category I: Essential Facilities with a Seismic Importance Factor, $I = 1.50$. Structures should be earthquake-proofed.
- The Structures should be designed from wind loading considering basic wind speed corresponding to Figure 207A.5-1C Basic Wind Speeds for Occupancy Category I Buildings and other Structures.

H. Civil Works Design Parameters

1. **Codes and Standards.** The Civil Works Design Requirements and specifications for all buildings and structures shall comply with the following codes and standards:

Codes:

- NSCP 2015: National Structural Code of the Philippines
- ACI 318-2005: American Concrete Institute
- PD1067- The Water Code of the Philippines
- National Plumbing Code of the Philippines
- PD856 - The Code on Sanitation of the Philippines
- RA9514 - Fire Code of the Philippines

Standards:

- American Society for Testing and Materials (ASTM)
- American Association of State Highway and Transportation Official (AASHTO) Policy on Geometric Design of Highways and Streets 2011
- Design Guidelines Criteria and Standards of the Department of Public Works and Highway
- DPWH Design Guidelines, Criteria and Standards, 2015, Volume 4
- DPWH Road Sign and Pavement Markings Manual, May 2012

- DPWH Road Safety Design Manual, May 2012
- AASHTO Roadside Design Guide
- Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) for Rainfall Intensity Duration Frequency Data
- National Mapping and Resources Information Authority (NAMRIA)
- Department of Natural Resources and Environment
- Ordinances of Concerned City or Municipality

I. Sanitary / Building Plumbing Design Parameters

1. **Codes and Standards.** The Plumbing Design Requirements and specifications for all buildings and structures shall comply with the following codes and standards:

Codes:

- National Building Code of the Philippines
- Fire Code of the Philippines
- National Plumbing Code of the Philippines (NPCP)
- Revised Plumbing Code of the Philippines
- International Plumbing Code
- PD 856 Code of Sanitation of the Philippines

Standards:

- National Water Resources Board (NWRB)
- National Plumbers Association of the Philippines (NAMPAP)
- Philippine Society of Sanitary Engineers, Inc. (PSSE)

2. Building Facilities Sanitary / Plumbing System

- a. **Waterline System.** Provide a complete water system sufficient for one (1) day storage. A potable and non-potable supply shall be provided for the development. Non potable water shall be used for flushing and irrigation. Complete with pipes and fittings and necessary accessories. The toilet areas, cleaners sink, and pantry sink at the minimum. Hot water supply will be provided for the and shower rooms only.
- b. **Sanitary, Waste and Vent System.** All toilet areas, pantry, cleaners sink, etc. shall discharge to the centralized Holding tank. A centralized grease interceptor shall be provided for the cafeteria. Kitchen sinks shall have individual grease traps.
- c. **Storm and Drainage System.** A complete storm water drainage

system will be provided for all roofs, setbacks, and area drains. The storm drainage system must be sized in consideration of the rainfall intensities, slope, and roof areas of the school buildings. Lifting stations will be provided if the development's pipe is lower than the utility tapping point. Storm water will be collected thru a central rainwater condensate tank (in accordance with PGBC requirement).

- d. **Fuel Line System.** Provide a fuel line system exclusive to centralized kitchen areas or provide specific LPG Gas tank storage area.

3. Summary of Materials

- a. Cold Waterline pipes; for buildings, Polypropylene Pn16/Pn20 Fusion Weld Pipes including Trims and Fittings (BPS Certified)
- b. Cold Waterline pipes
 - i. For main water riser inside building:
 - ASTM A53
 - ASTM A167
 - ASTM A240
 - ASTM A666
 - ii. For horizontal suspended piping and connection to each fixture inside building,
 - ASTM F2389
 - DIN 8074/ 8075
 - DIN 1988 (Polypropylene Random Copolymer type 3 pipe)
- c. All pipes, fittings, puddle flanges and ladder rungs installed inside the domestic water tank, rainwater tank, and fire tank shall be stainless steel.
 - i. For hot water supply, pipes shall be provided with insulation.
 - ii. Sanitary, waste and vent pipes
 - For above ground soil and waste piping:
 - ASTM 888
 - CISPI 301
 - ASTM D 2665
 - ASTM D-2729
 - ASTM F891

- For buried soil and waste piping inside building:
 - ASTM A74, Service and Extra Heavy class
- For above ground vent piping inside building:
 - ASTM D 2665
 - ASTM D–2729
 - ASTM F891
- For underground soil, vent and waste piping inside building:
 - ASTM A74, Service and Extra Heavy class

iii. Storm and Drainage pipes

- For above ground storm drainage piping inside the building:
 - ASTM A53
 - ASTM 167
 - ASTM 240
 - ASTM 666
- For buried storm drainage piping inside the building:
 - ASTM A74, Service and Extra Heavy class

- d. Plumbing Fixtures including Trims, Fittings and accessories: (BPS Certified)
- e. Water Closet: Tank Button-Type flush
- f. Lavatory: (Pedestal/Counter Type) /semi-pedestal with faucet.
- g. Urinal: Wall hung Flush valve/lever/push button.

J. Electrical Design Parameters

1. **Codes and Standards.** The Electrical Design Requirements and specifications for all buildings and structures shall comply with the following codes and standards:

Codes:

- Philippine Electrical Code
- National Electrical Code of the Philippines
- New Fire Code of the Philippines
- National Building Code and its New IRR
- Illuminating Engineering Society (IES) of North America

Standards:

- Underwriters Laboratory (UL)
- National Fire Protection Association
- International Electro-Mechanical Commission (IEC), including the Heavy-Duty Overhead Fans (Low Velocity High Volume Fan) for the design of environment air circulation.
- Illumination Engineering Society (IES)
- National Electrical Manufacturers Association (NEMA)

2. Site Works. Based on the proposed project plan, complete Electrical Layout shall be provided with the following:

- a. Lighting Layout
- b. Power Layout, Grounding and Lightning Protection Layout
- c. Single Line Diagram and Load Schedule
- d. Miscellaneous Details
- e. Main Electrical Room Layout
- f. Electrical Site Development Plan

3. Building Facilities Electrical System

a. Medium Voltage Switchgear

- i. The medium voltage metal-clad switchgear shall be Indoor NEMA-2 and not less than US gauge 12.
- ii. Each switchgear assembly shall have a minimum 25% spare capacity. Electronic surge protection shall be provided on the incoming supply line.
- iii. Circuit Breakers should be Three-pole, single-throw, electrically operated, draw-out mounting units using three

b. Transformer

- i. Transformer shall be Oil-filled Transformer
- ii. Transformer capacity shall be sufficient to serve the Electrical Load Demand of the proposed building.
- iii. The primary side of the Transformer shall be compatible with the incoming electrical utility supply. While the secondary side of the transformer shall be 400V/230V, 3 Φ , 4-Wire + Ground, 60Hz.

c. Main Distribution Panelboard

- i. Nominal System Voltage shall be 400V/230V, 3Φ, 4-Wire + Ground, 60Hz.
- ii. The Main Distribution Panelboard shall be connected via Automatic Transfer Switch to both the Transformer (Normal Power) and the Stand-by Generator Set (Emergency Power).
- iii. The Main Distribution Panelboard shall utilize Air Circuit Breaker for 1000A and above Circuit Branches and Moulded Case Circuit Breaker for 800A and below.

d. Stand-by Generator Set

- i. The proposed facility shall have 100% standby power and shall use stand-by rated diesel generator sets (silent type). The system should transfer automatically from standby mode.
- ii. The standby generator sets shall be provided with fuel day tanks (24 hours) and bulk storage. Main fuel storage tank shall be sized at 24 hours storage capacity and fabricated in steel complete with sight glass, access manhole, ladder, vent pipe, fill point cabinet and fuel leak detection system. Spill containment shall be provided equivalent to 110% of the fuel volume.

e. Lighting System

- i. Lighting Luminaires shall be LED.
- ii. Lighting Design shall generally follow the illumination level recommendations by the Illuminating Engineering Society (IES).
- iii. Lighting Design shall follow the Philippine Green Building Code, specifically the recommended Lighting Power Densities indicated in the code. Occupancy Sensor and Daylight Sensor for selected areas shall be used to control lighting based on the density per area and exposure to natural lighting respectively. Emergency illumination shall be provided for a minimum of 90 minutes in the event of failure of normal lighting.

f. Wiring Devices

- i. Switches shall be of 15A, 250V or 300V except as otherwise noted and approved. Terminals shall be screw-type or quick-connected type.

- ii. Wiring devices must be of modern type and approved for both location and purpose. General use receptacle shall be 15A, 250V grounding type unless otherwise indicated on the drawings.
- iii. Use of Ground Fault Circuit Interrupter receptacle outlet shall be based on the Philippine Electrical Code.

g. Panel boards and Circuit Breakers

- i. The Panel board enclosure shall be NEMA 250, Type 1 for Indoor type and NEMA 250, Type 3R for Outdoor type.
- ii. Circuit Breakers shall be molded-case circuit breakers (MCCB). Provide MCCB of frame, trip rating and interrupting capacity as shown on the drawings. The circuit breakers shall be quick break and shall have common trip on all multiple breakers with internal trip mechanism.
- iii. The phase, neutral and ground buses shall be of hard-drawn copper with 98 percent conductivity. The equipment ground bus shall be adequate for feeder and branch circuit equipment grounding conductors and shall be bonded to box.
- iv. Must be equipped with TVSS (Transient Voltage Surge Suppression)

h. Electrical Conduits, Boxes and Fittings

All conduits, boxes and fittings shall be standard rigid steel, zinc coated or galvanized

- Rigid Steel Conduits (RSC)
- Rigid Metal Conduits (RMC)
- Intermediate Metal Conduits (IMC)
- Electrical Metallic Tubing (EMT)
- Unplasticized Polyvinyl Chloride (uPVC) if required shall be schedule 40

i. Conductors

- i. Wires shall be properly designed in accordance with Article 3.10 and the grounding system shall conform to Article 2.50 of the PEC.

- ii. The conductors used in the wiring system shall be of soft-annealed copper having a conductivity of not less than 98% of that of pure copper.
- iii. Low Voltage Conductors shall be generally THHN-THWN unless otherwise specified.
- iv. All conduits of convenience outlets and wire ways for lighting branch circuit home runs shall be wired with a minimum of 3.5 mm square in size.
- v. Fire-rated cable shall be rated for 3 hours low acid, low corrosive gas emission and low or zero halogen (low smoke emission and non-toxic)
- vi. Medium Voltage Conductor shall be copper, compact round stranding and uses crosslinked polyethylene as insulation (XLPE)

K. Electronics Design Parameters

1. **Codes and Standards.** The Electronics Supply System of all buildings and structures shall comply with the following codes and standards:

Codes:

- Philippine Electronics Code
- International Life Safety Code (NFPA 101)
- New Fire Code of the Philippines
- National Electrical Code (NFPA 70)
- National Building Code and its New IRR
- Other laws that apply to the Project

Standards:

- Institute of Electrical and Electronics Engineers (IEEE)
- Other standards that apply to the Project

2. Supply and installation of local area network (LAN) wiring and structured cabling and other accessories shall be suited for fiber optic connection based on the minimum requirements of this Project. All the facilities for the Project, such as the Sport Science and Sports Medicine Building, Additional Sports Facility (Sports Center with Multi-Purpose Covered Courts), and Staff Housing shall have ready-provision for voice and data systems.
3. All wirings and accessories must be properly sized suited for the

operation of this Project. The following Auxiliary Services shall be provided for this Project are: (1) Fire Detection and Alarm System, (2) Public Address System, (3) Security Management System (which includes a Card Access & door contacts), (4) Closed Circuit Television System (CCTV), (5) Structured Cabling System (SCS) and (6) Community Antenna System (CATV) including all wiring and wiring devices and other accessories necessary for its function and operation.

4. International standards may be used as reference where local standards do not provide adequate information for the Project's cabling system. These include the following, but not limited to:

- a. ISO 11801 – Specification of Structured Cabling for use within commercial premises.
- b. ANSI/TIA/EIA-606-A –Administration Standard for the Telecommunications Infrastructure of Commercial Buildings.
- c. ANSI/TIA/EIA-568-B.2-1 – Commercial Building Telecommunications Cabling Standard.
- d. ANSI/TIA-568-C.3 - Optical Fiber Cabling Components Standard.
- e. ANSI/TIA-1179 – Healthcare Facility Telecommunications Cabling Standard.
- f. ANSI-J-STD-607-A - Commercial Building Grounding (Earthing) and Bonding Requirements for Telecommunications.

5. Service Entrance (Roughing – ins)

- a. The main communication supply to the building shall be taken from the Telco and CATV utility company available in the area. The incoming supply shall be in underground concrete encasement.
- b. Unless specified/applicable, service entrance conduit shall be made of standard rigid steel, zinc coated, or galvanized. Intermediate Metallic Conduit (IMC) may be used. Underground runs shall be encased in concrete envelope or reinforced concrete envelope when crossing a roadway. Ends of conduits shall be provided with a sealing compound.

6. Fire Detection and Alarm System (FDAS)

- a. Every room and office shall be provided with smoke detectors based on NFPA 72, Detector coverage.
- b. Every exit door and stairs shall be provided with Manual Pull Station and Fire alarm with speaker-strobe lights.
- c. The Main Fire Alarm Control Panel (MFACP) for the building

admin shall be located inside the Security room at Ground Floor Level.

d. Type of system provided shall be a fully addressable system.

7. Public Address System (PAS)

a. Every room, facilities and other rooms shall be provided with ceiling mounted speakers based on NFPA 72, Evacuation System

b. Every exit door and stairs shall be provided with wall-mounted speakers

c. Main headend for PAS shall be located inside the Security room at Ground Floor Level.

d. PAS shall be used only for evacuation systems interfaced to FDAS.

8. Security Monitoring System

a. Access control system– Shall provide the necessary devices including wiring, accessories and equipment.

b. Access Card – shall be provided on specific areas such as Security rooms, Admin room, IT room and other laboratory rooms.

c. Door contacts – shall be provided in all fire exit doors.

d. SMS Workstation/Monitor – Shall provide at least 32-inch television provision to be located at the Security Room at the ground floor

9. Closed Circuit Television System

a. CCTV system– Shall provide the necessary devices including wiring, accessories and equipment.

b. Camera – Shall be provided and strategically located at all public areas such as entrance, exit, hallways, corridors, elevator, driveways, lobby, loading/unloading area.

c. CCTV Workstation/Monitor – Shall provide at least 32-inch television provision to be located at the Security Room at the ground floor

10. Community Antenna Television System

a. The provision of cabled digital television services network shall be undertaken by a cable service provider duly accredited by the National Telecommunications Commission (NTC), and shall be in

accordance with the technical standards and existing regulations

- b. Rooms to be provided with CATV shall be based on the minimum requirements indicated in the Terms of Reference.

11. Structured Cabling System (SCS)

- a. The supply and setup of all materials shall provide support data and voice points for full cabling infrastructure. BCDA reserves the right to revise the number of data and voice points required during the actual implementation. The DBC is required to propose a solution to implement the cabling system with the Structure Cabling System which includes the following sub-systems:

- Work Area
- Horizontal
- Backbone
- Telecommunication Room / Equipment Room / Entrance Facilities Racking

- b. The Structured Cabling System shall comply with the ANSI/EIA/TIA-568-B.2-1 Class E performance requirements, including 'Component Compliance' and 'Channel Compliance'. Independent channel test reports must be produced for the system that is

to be installed for both the channel and verification that the individual components are compliant.

- c. The complete Structured Cabling System shall be suitable to support Analog and Digital Voice Applications, Data, Local Area Networks (LAN), Wide Area Networks (WAN), Video, and Low Voltage devices on common cabling platforms. Fiber optic cable (FOC) shall be provided on Multi-sport, Academic and Administration buildings for main infrastructure going to Server and Data center room from Telco Service entrance utilities and a Cat 6 UTP shall be provided on every horizontal distribution for each building.

L. Mechanical Works Design Parameters

1. **Codes and Standards.** The Mechanical and Fire protection Design Requirements and specifications for all buildings and structures shall comply with the following codes and standards:

Codes:

- Philippine Society of Ventilating, Air Conditioning, and Refrigerating Engineers

- American Society of Ventilating, Refrigerating and Air-Conditioning Engineers
- New Fire Code of the Philippines
- National Fire Protection Association
- Philippine Mechanical Engineering Code

Standards:

- Philippine National Standards (PNS)
- Underwriters Laboratory (UL) and Factory Mutual (FM)
- International Electrotechnical Commission (IEC) 1988
- National Fire Protection Association (NFPA)
- American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE).

M. Ventilation and Air Conditioning System.

1. The Ventilation and Air Conditioning System shall be composed of complete plans and drawings of the following:
 - a. General Notes, Legends and Symbols including Schematic Diagram of the Air Conditioning and Ventilation System.
 - b. Floor layout of the Air Conditioning and Ventilation System indicating the unit designation and location of the air conditioners and fans.
 - c. Duct layout indicating duct sizes, route and location of the dampers, diffusers, and return air register.
 - d. Refrigerant piping layout and condensate drain routing.
 - e. Equipment Schedule and Miscellaneous Details of Air Conditioners and Ventilating System.
 - f. Combination of DX-Split type, window type and VRF AC units shall be used whichever is applicable.
 - g. Ceiling cassette exhaust fans shall be provided in all executive toilets while in-line fans with ducted exhaust branches in all public toilets.
 - h. All offices, meeting/conference room, lecture hall, laboratories, media center and selected indoor sports facilities shall be provided with air-conditioning units using VRF system, DX-split type and Window type whichever is applicable.
 - i. Critical rooms with 24/7 operation such as data center,

security/CCTV room, TELCO rooms, etc. shall have stand-by AC units.

- j. Natural ventilation shall be primarily supplied by the operable windows and vents. Artificial ventilation inside each classroom shall be supplied by two (2) units of oscillating ceiling fans.
- k. Janitorial closets and other spaces with hazardous chemicals shall have a dedicated exhaust air duct and discharged directly to outside.
- l. Mechanical ventilation shall be provided in selected indoor sports facilities.
- m. Mechanical ventilation is required to all electrical and pump rooms to maintain acceptable room temperature.
- n. Outdoor air for ventilation shall be provided in accordance with ASHRAE 62.1-2010 ventilation for acceptable indoor air quality. Consider a fresh air pre-cooler to partially treat outdoor air before supplying to occupiable spaces.
- o. Refrigerant to be used should be R-134a or as recommended by the local green building ordinance.
- p. Cooling load requirements for regularly occupied spaces in the building shall be in accordance with ASHRAE 55-2016: Thermal Environmental Conditions for Human Occupancy.
- q. Consider all life safety provisions such as stairwell & lift shaft pressurization as required by code.
- r. Cooling load calculations shall be provided using e20 Hourly Analysis Program or equivalent.

N. Utility Services and Distribution.

- a. The entirety of New Clark City will be serviced with water supply, sewage, electricity, ICT, drainage, and solid waste management systems. For Phase 2, the various utility service companies (power, water, wastewater treatment, solid waste disposal, ICT) will be responsible for distributing utilities to each parcel and building at the designated tapping points.
- b. The DBC shall design and construct the underground utilities corridor and be integrated in the site development area following

the Terms of Reference and MPSS (this document) and the relevant guidelines and updated requirements for New Clark City. The DBC is responsible for connecting to the tapping points provided by the utility providers on the project site premises, consistent with the NCC CMDP.

O. Stormwater Management

- a. Each building parcel should be designed and developed such to retain or absorb 80% of rainfall on-site. This can be accomplished through a combination of green infrastructure (bioswales), absorptive surfaces (permeable paving and water-retaining landscapes), and retainage basins or tanks.
- b. Best management practices will be provided on all parcels for treatment and management of excess stormwater prior to leaving parcels. The DBC will be responsible for collection of district-wide stormwater discharge from the Phase 2 area to discharge points along the nearest natural waterway.

P. Sustainability Requirements. As far as practicable, the design of the facilities should endeavor to follow general principles for Green Building, such as:

- a. Design “Smart buildings” that strive for optimum energy management and storage systems
- b. District cooling system to minimize use of refrigerants
- c. Maximized use of natural light and ventilation
- d. Use of shading devices and plant strips to minimize solar heat gain
- e. Rainwater harvesting system for irrigation and industrial use
- f. Use of solar panels to supplement electric supply in the daytime
- g. Utilize energy saving lightning fixtures to reduce electric consumption
- h. Specify water efficient fixtures and fittings to reduce water consumption
- i. Use of buffer zones to block solar heat entering the office and other high-traffic spaces
- j. Maximize green areas to soften the grounds surface and reduce heat absorption
- k. Optimize the use of locally sourced materials that are low maintenance and environmentally friendly.

Q. Disaster Resiliency

The design of the facilities with the NAS Phase 2 needs to have a level of resilience to ensure the on-going operations of the NAS, particularly in post-disaster situations. Key aspects of this include:

- a. Base isolation, ground improvements and seismic engineering design commensurate with a building capable to withstand magnitude 8.0 earthquakes;
- b. A 500 mm raised building platform for flood resilience and constructed away from the required easement areas from the river in accordance with the NCC MDP and NCC DSG;
- c. On-site generator and UPS facilities for security of power supply following a disaster; and
- d. Disaster-resilience requirements specified in the NCC CMDP and NCC DSG.

R. GAD (Gender and Development) Requirement

All infrastructure projects involving the construction of facilities, including schools, hospitals, dams, irrigation structures, and transportation systems shall adhere to the GAD Guidelines of the DOTR Department Order No. 2012-09.

In the design and construction of this Project, the DBC must take into consideration a number of gender issues, including the following:

- a. Different groups of users may have divergent requirements based on the seasonality and location of their activities. Projects that are designed without considering the variations may have a great impact on women's workload and access to resources.
- b. Women are rarely considered for employment in construction sites, although there are areas in which women have traditionally been involved in groundbreaking tasks. Most projects do not view women as potential workers. Where women workers need to move close to the worksite, they require secure and safe areas in construction camps.
- c. Gender gaps are often found in women's and men's participation in users' groups that are organized to operate and maintain facilities (health centers, domestic water systems, and irrigation systems)

Section 3. CONSTRUCTION STANDARDS

- A. Construction of the Project shall be implemented according to the DAED prepared by the DBC, as reviewed and approved by the BCDA and CMS.
- B. The Construction of the Project shall also comply with the MPSS for the Construction herein prescribed. The MPSS for Construction includes conformance to the provisions of the New Clark City Design Standards and Guidelines, and building under the DPWH Blue Book, Volume III.
- C. For materials and technologies not covered by the Blue Book and Philippine Design Standards and Codes, or if the DBC intends to use any new material/ technology, the structural properties of the non-conventional materials to be used should be certified by accredited DPWH BRS laboratories and these properties should be used as inputs to structural analysis and designs to prove compliance to the MPSS subject to the approval of BCDA.

The Blue Book prescribes, among other things, the material requirements and construction requirements for different items of work, including the tests to be conducted during Construction by the DBC. The Blue Book incorporates provisions of the ASTM and ACI, among others, pertaining to construction. Attention shall be given to the relevant items of work in the following Parts of the Blue Book:

1. Part A – Facilities for the Engineer

- a. Provision of Living Quarters for the Engineer (Rental Basis)

The DBC shall provide, operate and maintain Living Quarters for the Engineer and his staff on rental basis for at least seven (7) personnel and all utilities therein in good condition throughout the whole period, including all necessary electricity and lighting, water, drainage, sanitary facilities, internet and telephone services.

- b. Provision of Furniture/Fixtures, Equipment and Appliances for the Field Office for the Engineer

The office shall be supplied with complete office supplies, furniture, fixture, appliances, equipment, internet service, electricity and lighting, potable water, drainage and sanitary facilities, consumables and other items. These shall be brand new when initially furnished.

- c. Provision of Furniture/Fixtures, Equipment and Appliances for the Living Quarters for the Engineer

The DBC shall furnish as soon as the Engineer starts his mobilization on site, sufficient furniture, fixtures, equipment, appliances, internet service and necessary supplies for use in the Living Quarters, with the Engineer's prior approval. All furniture, fixtures, appliances and equipment, consumables and other items shall be brand new when initially furnished.

d. Operation and Maintenance of Field Office for the Engineer

The DBC shall pay all bills for water, electricity, internet and other related services. The DBC is also required to maintain and protect the Engineer's field office, living quarters and all utilities therein in good condition throughout the whole period for which the facility is required and to repair and/or replace broken items that become defective in any way.

e. Operation and Maintenance of Living Quarters for the Engineer

The DBC shall pay all bills for water, electricity, internet and other related services. The DBC is also required to maintain and protect the Engineer's field office, living quarters and all utilities therein in good condition throughout the whole period for which the facility is required and to repair and/or replace broken items that become defective in any way.

f. Provision of 4x2 Pick-Up Type Double Cab Service Vehicle for the Engineer (Bare Rental Basis)

- Within fifteen (15) days after the Commencement Date, the DBC shall provide and deliver to the Site, the following brand-new vehicles on rental basis for the exclusive use of the Engineer and his staff:
- 2 units 4x2 Pick-Up Type, Double Crew Cab, Service Vehicle, 2400cc or higher, Diesel Engine with automatic transmission and factory installed air-condition.
- The DBC shall submit catalogues in the English language of the proposed rented vehicles to the Engineer for his approval within seven (7) days after the Commencement Date, and the final consent for the delivery of the rented vehicles on site shall be to the satisfaction of the Engineer.
- Replacement shall be acceptable provided it shall be of equal or better model.

g. Operation and Maintenance of 4x2 Pick-up Type Double Cab Service Vehicle for the Engineer

The DBC shall be solely responsible for all activities and costs related to the operation and maintenance of the vehicles including fuel, oil, drivers' wages including overtime payment, scheduled preventive maintenance services (PMS), its registration, provision of passes, access stickers and the like, and for providing fully comprehensive insurance until and including the date of issue of the Certificate of Completion.

h. Provision of Field Office Staff for the Assistance to the Engineer

The DBC shall provide 1 Secretary, 1 Document Controller/Encoder (IT Expert), 1 Utilityman, and 1 Security Guard who shall be under the direction of the Engineer for the entire project duration.

i. Provision of Progress Photographs

The DBC shall provide a photographic record of the construction activities. Such photographs shall be taken before, during and after construction on the same angle of reference of sufficient number and as directed by the Engineer

j. Provision of Communication Facility for the Engineer

Within fifteen (15) days from the commencement of the Works, the DBC shall provide and maintain 4 cellular phones with at least 16GB RAM for the exclusive use of the Engineer and his staff.

k. Operation and Maintenance of Communication Facility for the Engineer

The 4 cellular phones with at least 16GB RAM shall be of good quality, brand new, ready for use, complete with accessories including provision for pre-paid cards worth one thousand pesos (P1,000) per unit. In order to have continuous operation and efficient maintenance of the equipment, the DBC shall also provide servicing and minor repairs, if needed.

2. Part B – Other General Requirements

- Refer to the DPWH Standard Specification.

3. Part C – Earthworks

- Refer to the DPWH Standard Specification.

4. Part D – Subbase and Base Course

- Refer to the DPWH Standard Specification

5. Part E – Surface Course

- Refer to the DPWH Standard Specification

6. Part F – Structural

- Refer to the DPWH Standard Specification
- Refer to the Structural Works Design Parameters

7. Part G – Mechanical

- Refer to the DPWH Standard Specification
- Refer to the Mechanical Works Design Parameters

8. Part H – Electrical

- Refer to the DPWH Standard Specification
- Refer to the Electrical Works Design Parameters and Shin Clark Power Design Standards and Specifications

9. Part I – Sanitary/Plumbing Works

- Refer to the DPWH Standard Specification.
- Refer to the Sanitary/Plumbing Works Design Parameters and Prime water Design Standards and Specifications

10. Part J – Miscellaneous

- Refer to the DPWH Standard Specification.

11. Part K – Water and Sewer System

- Refer to the DPWH Standard Specification and Prime Water Standard Specifications.
- The Winning Bidder/DBC shall provide pipelines and materials to cater the Facilities of the project. It shall also provide the necessary tapping points for future developments. These systems shall be connected to the nearest Prime Water system.

12. Part L – Street Lights and Path walk Lights

- Refer to the DPWH Standard Specification, Philippine Electrical Code and Shin Clark Power Design Standards and

Specifications

13. Part M – Power Distribution Line;
 - Refer to the DPWH Standard Specification and Shin Clark Power Design Standards and Specifications.
14. Part N – Communication Line;
 - Refer to the DPWH Standard Specification and Philippine Electrical Code.
15. Part O – Softscape and Landscape;
 - Refer to the DPWH Standard Specification.
16. Part P – Demolition / removal of existing Utilities
 - Refer to the DPWH Standard Specification (if applicable).
17. Include additional Item/s when necessary

Section 4. CONSTRUCTION SAFETY AND HEALTH PROGRAM

Pursuant to the provisions of the Revised Implementing Rules and Regulations of RA 9184 and in accordance with the provisions of Section 5 of Department Order No. 13, series of 1998, of the Department of Labor and Employment (DOLE), the DBC shall submit to BCDA and DOLE the

Construction Safety and Health Program stating among others, and the IATF, DPWH protocols against COVID-19 as updated from time to time:

- A. Construction Safety and Health Committee: The DBC to create the composition of the Construction Safety and Health Committee.
- B. Specific Safety Policies: The DBC is responsible to undertake, observe and maintain in its construction site, including the frequency of and persons responsible for conducting toolbox, safety orientations and gang meetings.
- C. Penalties and Sanctions: In violation of the approved Construction Safety and Health Program, DBC will be penalized pursuant to the laws under DOLE-Bureau of Working Conditions.
- D. Information and Training: The DBC to submit the frequency, content and persons responsible for orienting, instructing, and training all workers at the site with regard to the Construction Safety and Health Program under which they operate.

- E. Waste Disposal: The DBC is responsible for disposing waste arising from the construction and temporary facilities, and to be disposed to the accredited Sanitary Landfill.
- F. Safety Provisions: PPE, Safety Personnel and Facilities, Workers' Welfare Facilities and Construction Safety Signage.
- G. Safety on Construction Heavy Equipment: It must be ensured that appropriate certification is obtained, and conditions are met or complied with as stated in Section 10 of the Guidelines Governing Occupational Safety and Health in the Construction Industry, DOLE, D.O. No. 13, series of 1998.
- H. The Construction Safety and Health Program shall be executed and verified by the DBC's Project Manager and shall be submitted to the Bureau of Working Conditions of the DOLE which may approve, disapprove or modify the same according to the existing laws, rules and regulations and other issuances of the DOLE.
- I. The Construction Safety and Health Program shall be approved by the DOLE or the Department of Health and shall be implemented for the said contract.

Section 5. ENVIRONMENTAL MONITORING & MANAGEMENT PROCESS DURING CONSTRUCTION

Guidelines must be prepared for environmental monitoring and management such that the conditions on all environmental aspects to be taken care of by the DBC are carried out, that is to avoid, minimize, and mitigate any adverse environmental impacts during the construction stage. Main items for the environmental and management process are shown below.

Table 7. Environmental Monitoring

TYPE OF CONCEIVABLE IMPACT	ENVIRONMENTAL ITEMS TO BE MONITORED AND MANAGED
Increase of dust pollution	Air quality
Emission from construction machinery	Air quality
Noise and vibration from construction machinery	Noise and vibration level
Disposal of construction waste	Disposal method of the waste
Disposal of hazardous waste	Disposal and treatment method of the waste
Discharge of wastewater	Discharge method and water quality of the wastewater
Increase of land erosion	Land erosion

Damage on existing road by heavy equipment mobility and material transportation	Physical condition on road
Interference of traffic	Traffic management
Increase of population inflow with workforce mobilization	Public health and safety
Work accident	Safety

Section 6. TEST REQUIREMENTS –

1. The DBC shall undertake tests during Construction in accordance with the schedule of minimum testing requirements for items of work and materials covered by the Blue Book.
2. If any new Construction materials proposed by the DBC are not covered by the Blue Book, these materials shall first pass the evaluation and accreditation system of the DPWH BRS, certified by the CMS, and approved by the BCDA, before the new materials are used in the Project.
3. If the Bidding Proponent is able to submit as part of its Technical Proposal a certification from the institutions listed in Schedule 2 of the Instructions to Bidders (ITB) (Schedule 1 of the Design- Build Arrangement) in lieu of a DPWH BRS certification, there is no need to submit a DPWH BRS certification as a Post-Award Requirement.
4. The DBC is required to provide certified on-site testing for concrete mixes at every Project Component site i.e., slump test, particularly for site-mixed or hand-mixed concrete. Other duly certified off-site tests such as rebar strength may be on a province-wide basis.

Section 7. COMPLETION OF CONSTRUCTION

The DBC shall fully comply with the following requirements for the completion of Construction:

1. All Tests for Construction comply with the pertinent provisions of the Blue Book and other test requirements of the MPSS for Construction.
2. All parts of the Project Component have been completed in accordance with the DAED, as certified by the CMS, and with the MPSS for Construction, including the rectification of all defects.
3. The completed Project Component can be safely and reliably placed into normal use and occupancy by the school authorities and students.
4. The DBC must deliver all the Project Components to the BCDA no later than the Construction Completion Deadline (CCD). As evidence of delivery, the DBC shall send the BCDA a Construction Completion Notice

(CCN) for the Project Component when the DBC has finished Construction on such Project Component. For Project Components for which the DBC has sent the BCDA a CCN by the CCD, the CMS and a representative from the BCDA shall jointly conduct and finish the Punchlist Inspection (PI) of the Project Component and monitor the recording of the results within fifteen (15) days from the receipt of the CCN. For Project Components which are not Excluded Project Components as defined in the BT Agreement, and for which the DBC sends the BCDA a CCN after the CCD, the IC and a representative from the BCDA shall jointly conduct and finish the PI of the Project Component and monitor recording of the results, within twenty- five (25) days from the receipt of the CCN.

5. The CMS shall notify the DBC and the BCDA at least three (3) days before the conduct of the PI of the Project Component. The DBC shall have the right to be present during the conduct of the PI; provided that the PI shall continue even if the DBC fails to be present on the date of the PI, as set by the CMS in the notice provided.
6. If the CMS and the representative from the BCDA determine after the PI that no items need to be rectified, the BCDA shall accept the Project Component and issue the Certificate of Completion (CoC) no later than the last day of the month following the month when the Project Component successfully passed the PI. If the CMS and the representative from the DepEd determine after the PI that there are items that need to be rectified, the CMS shall generate and send to the DBC, on the day following the end of the PI, a punch list of the items that need to be rectified in the Project Component before the Project Component will be acceptable to the BCDA.
7. Upon completion of its rectification works the DBC shall notify the CMS and the BCDA by sending a Rectification Completion Notice (RCN) in writing, stating that a Rectification Inspection (RI) may be conducted. The CMS and a representative from the BCDA shall jointly conduct and finish the RI of the Project Component within fifteen (15) days from receipt of the RCN. If the CMS and the BCDA have determined that all the items stated in the punch list have been rectified, the BCDA shall accept the Project Component and issue the CoC for such Project Component no later than the last day of the month following the month when the Project Component successfully passed the RI. If there are still defects discovered after the first RI, the process shall be repeated until all the items in the punch list have been rectified by the DBC as determined by the CMS and the representative from the BCDA; provided, that rectification must be completed, and RCN must be sent to the BCDA, no later than the Final Rectification Deadline (FRD). The FRD with respect to a Project Component is the date which is sixty (60) days from the relevant Construction Completion Deadline (CCD).
8. The (1) the As-Built Drawings, (2) an Asset Register to include a

description of all assets constructed, and (3) the Construction Completion Report for each Project Component under the Contract Package, shall be submitted to and approved by the Procuring Entity or its duly authorized representative before the issuance of the Certificate of Completion;