



SCOPE OF WORK

CONSTRUCTION OF TRACK AND FIELD (REBID)

of

Philippine Science High School-Zamboanga Peninsula Region Campus in Brgy. Cogon, Dipolog City (DESIGN AND BUILD SCHEME)

I. BACKGROUND

The proposed Construction of Track and Field (Rebid) supports the PSHS-ZRC goal of enhancing the well-being of its scholars, employees and stakeholders through sports and recreation. This project will showcase and promote physical and recreational activities and spur camaraderie, linkages and sportsmanship among enthusiasts.

II. PROJECT DESCRIPTION AND LOCATION

The development of a 300-meter track and field shall be designed as a multi-purpose facility. It will feature a running track and a field for soccer/football, softball/baseball, jumping and throwing events. The oval shall be constructed with six-lane running track, including a race track for 100-meter dash. The area inside the track will accommodate a standard soccer/football field.

The PHILIPPINE SCIENCE HIGH SCHOOL-ZAMBOANGA PENINSULA REGION CAMPUS (PSHS-ZRC), through the GAA for FY 2021, intends to apply the sum of FORTY MILLION (P40,000,000.00) being the Approved Budget for the Contract (ABC) for the Construction of Track and Field (Rebid). A maximum of 2% of the contract cost shall be allocated for the design, and the balance shall be for the construction, including all taxes and applicable permits, licenses and clearances.

This track and field project will be constructed at the rear portion of the Philippine Science High School - Zamboanga Peninsula Region Campus perimeter in Brgy. Cogon, Dipolog City for a duration of 310 calendar days. See Annex A (Campus Master Plan).

III. SCOPE OF WORK

A. DESIGN

The 300-meter track shall be designed with synthetic rubber surface all throughout.

The area inside the track, which shall accommodate standard soccer/football and other ball games and throwing events, shall be made with natural grass surface.

B. CONSTRUCTION

1. General Requirements

- a. Detailed Engineering Fees
- b. Mobilization/Demobilization



- c. Temporary Facilities
 - i. The Contractor shall provide adequate and complete facilities for male and female employees.
 - d. Construction Safety and Health
 - i. Includes Safety Guidelines for the Implementation of Infrastructure Projects During the COVID-19 Public Health Crisis and Construction Safety and Health Program Certificate from the DOLE
 - ii. Provision of personal protective equipment and work uniform
 - e. Permits and Clearances
 - f. Project Identification and Sign
 - g. Survey
 - h. Hauling
2. Earthworks
- a. Soil Investigation
 - i. Conduct Geotechnical Investigation to determine the ground conditions at the site.
 - ii. Submit investigation report reflecting the load bearing capacity, permeability, and shear strength of the soil.
 - b. Clearing and Grubbing
 - i. Rear portion of the campus measured property line 87.0m x 152.0m where the track and field will be located.
 - ii. Proper disposal of unnecessary materials.
 - c. Excavation
 - i. Area coverage shall be the same as in the Clearing and Grubbing works.
 - ii. Excavation and grading of the road going to the site. See Annex C
 - iii. Excavation of areas with higher elevation in contrast to the designed track and field ground elevation. Attached Annex B-Topographic Map as reference.
 - iv. Excavation of unsuitable materials (e.g., soft or mucky soil) present at the construction site. Should conduct a site inspection and review the topographic map to establish an approximate costing of this work.
 - v. Proper disposal of unnecessary excavated materials.
 - d. Backfilling, Embankment and Compaction
 - i. Backfilling with approved granular materials of the excavated areas referred to in c.iv above. This fill shall be compacted in 150mm layers up to designed ground level.
 - ii. Embankment with suitable materials as per lines and grades shown in the approved plans.
 - iii. 95% density compaction
 - e. Subgrade Preparation and Base Course
 - i. Subgrade preparation of the track and field, and long and triple jump facility.
 - ii. Subgrade and base should have 95% density compaction.
 - f. Soil Treatment
 - i. Soil treatment of areas that serve as foundation for the track oval and other sports facilities.

Note: If the quantities to excavate, backfill and embank in the approved plans are found lesser than the actual amount excavated, backfilled and embanked, the deficiencies shall be on the account of the Contractor.

3. Concrete Works
- a. Construction of Line Canal (Internal Drainage)
 - i. Drainage system should be installed inside the track oval to remove all water drainage from track surface. Cross drain/drain and a main drain (Reinforced Concrete Pipe Drainage) shall be constructed to convey drainage to the nearest outfall through gravity.
 - ii. Include fabrication and installation of concrete drainage cover
 - iii. See Annex E

- b. Construction of External Drainage
 - i. Additional exterior drainage system should be constructed to collect and remove any water before it reaches the track surface.
 - ii. Include construction/fabrication of steel grating
 - iii. Shall connect to the RCP installation mentioned in 3.a.i.
 - iv. See Annex E
 - c. Construction of Concrete Retainers (See Annex E)
 - d. Construction of Concrete Slab
 - i. 100mm thk. concrete slab on running track
 - ii. Construction of concrete slab for both ends of the 100-meter dash track
 - e. Construction of 6 units - 0.20m x 0.20m x 0.20m basins with checkered plate cover. Include installation of 1 pc. faucet with hose bib per basin
 - f. Construction of 1 unit - 0.25m x 0.25m x 0.60m basin with checkered plate cover for photo finish. Include installation of 3-inch electrical pipe (See Annex D)
 - g. Other concreting items including masonry works necessary to complete the works
4. Specialty Works
- a. Construction of 300-meter Track and Field
 - i. Installation of specialized synthetic rubber IAAF-approved Sandwich System - 13mm for the 300-meter running track, long and triple jump runway and areas highlighted in Annex F.
 - ii. Synthetic Rubber Warranty - at least 8 years from project completion
 - iii. It shall be constructed with a six-lane running track, with the 100-meter dash track on a straight line
 - iv. The track shall have an inner radius of about $\pm 30.74\text{m}$ and running track width of 1.22m.
 - v. Installation of line markings and letterings compliant with IAAF standards.
 - vi. Installation of (PSHS-ZRC) lettering and logo
 - vii. Supply and installation of Aluminum curving
 - viii. Supply of 6 units hurdles
 - ix. Supply of 2 units standard running track protector (See Annex G)
 - b. Construction of Standard Football (Soccer) Field
 - i. Shall be constructed to 45m x 90m field dimension
 - ii. Construction of Standard Soccer Goals
 - > Goal has two (2) goal posts and a crossbar made of metal and round in shape. Goal posts and crossbar shall be painted white.
 - > Goal nets shall use IAAF approved materials.
 - iii. Supply and installation of 6 units flag pole of not less than 1.5m high each and with non-pointed tops.
 - iv. Markings shall be done by placing stakes inside the track that mark the layout and lines of the field. These stakes shall be driven into the ground to prevent displacement or dislocation and shall be marked for easy identification and notification of their presence in certain areas.
 - c. Construction of Long and Triple Jump
 - i. Construction of runway, take-off board and a landing area, placed outside the track.
 - ii. The placement of take-off board shall consider the combined facilities for long and triple jump.
 - d. Setting up of Softball/Baseball Field, High Jump, Discus and Hammer Throw Facility and Shot Put Facility
 - i. Markings shall be done by placing stakes inside or outside the track that mark the layout and lines of the field. These stakes shall be driven into the ground to prevent displacement or dislocation and shall be marked for easy identification and notification of their presence in certain areas.
5. Other Works
- a. Asphalt Works (Over Concrete Slab)
 - i. Lower Layer - 30mm thk. Dense Bitumen Wearing Course

- ii. Upper Layer - 40mm thk. Dense Bitumen Base Course
- b. Construction of Other Drainage System
 - i. A perforated pipe drainage system beneath the surface at some facilities and the area inside the track oval should be constructed to remove excess groundwater. See Annex F for an example system to be applied inside the track oval.
 - ii. Gravel bedding for perforated pipes
 - iii. Supply and installation of perforated pipe drains
- c. Planting of Natural Grass in Football Field
 - i. Frog grass
 - ii. Supply of sand and garden soil, mix ratio (1:2)
- d. Ground Improvement and Landscape for Surrounding Areas
 - i. Planting of grass, shrubs and trees to its ideal location.
 - ii. Supply of garden soil for vegetation

C. BILL OF QUANTITIES

BILL OF QUANTITIES AND ESTIMATE GUIDE

Enumerated under "Remarks" are items that should also be include aside from the requirements mentioned under Section III.1 Design and Section III.2 Construction. Should there be items that are required but are not found hereunder, such items should be covered and included in the Bid.

ITEM NO.	DESCRIPTION	UNIT	REMARKS
I.	GENERAL REQUIREMENTS		
1.0	Detailed Design Fees	lot	
2.0	Mobilization/Demobilization	lot	
3.0	Temporary Facilities, Office and Warehouse	lot	
4.0	Construction Safety and Health	lot	
5.0	Permits and Clearances	lot	
6.0	Project Identification and Sign	lot	
7.0	Survey	lot	
II.	EARTHWORKS		
1.0	Clearing and Grubbing	sq.m.	
2.0	Soil Investigation	lot	Conduct Geotechnical Investigation
3.0	Excavation	cu.m.	
4.0	Embankment, Backfill and Compaction	cu.m.	
5.0	Subgrade Preparation	sq.m.	
6.0	Aggregate Base Course	cu.m.	
7.0	Soil Poisoning	sq.m.	Running track, and long & triple jump areas
III.	CONCRETE WORKS		
1.0	Construction of Line Canal	ln.m.	Internal drainage including concrete cover (painted)
2.0	Construction of External Drainage	ln.m.	Includes fabrication of steel grating (painted)
3.0	Construction of Concrete Retainers	cu.m.	

4.0	Construction of Concrete Slab Running Track - 100mm thk.	cu.m.	Must include concrete slab at both ends of the race track for 100-meter dash. See Annex D
5.0	Other concreting works	lot	1. six (6) units- 0.20m x 0.20m x 0.20m 2. one (1) unit - 0.25 x 0.25 x 0.60m 3. other works related to concreting that is necessary to complete the project
IV.	SPECIALTY WORKS		
1.0	Supply and Installation of IAAF Approved Sandwich System - 13mm	sq.m.	1. Installation synthetic rubber surface at running track, and long & triple jump surfaces. 2. Installation of lines, markings and (PSHS-ZRC) lettering and logo 3. Top Layer – 3mm thickness; Polyurethane and EPDM (not spray coating) Base Layer – 10mm thickness; Polyurethane and black SBR granule (See Annex H.IV for full specifications)
2.0	Setting up of Sports Facilities	lot	Refer to Section III.B.4.(b-d)
3.0	Supply and Installation of Track Equipment		
	a. 6 units hurdles	units	Hurdle used in the National Competition
	b. Aluminum Track Curving	lot	
	c. Running Track Protector	units	2 units, color blue
	d. Soccer Goals	units	2 units goals with net
	e. Flag Poles	units	6 units, not less than 1.5 high
V.	OTHER WORKS		
1.0	Asphalt Works	sq.m.	Lower - 30mm thk Dense Bitumen Wearing Course Upper - 40mm thk Dense Bitumen Base Course
2.0	Drainage System	lot	Drainage system for synthetic surface and a perforated drainage system inside the running track
3.0	Planting of Natural Grass in Football Field	lot	1. Frog Grass 2. Sand and Garden Soil, mix ratio (1:2)
4.0	Ground Improvement and Landscape for Surrounding Areas	lot	Frog grass, shrubs, trees and garden soil

The Contractor is responsible for completing the project in accordance with the approved Plans and the *Specifications (attached in Annex F)*. No excuses shall be entertained for misinterpretation of the plans and specifications after the award of contract and that all work deemed required under this Scope of Work shall be carried out properly by the Contractor.

IV. SELECTION OF DESIGN AND BUILD CONTRACTOR

The procurement and implementation of the project using the “Design and Build” scheme shall be in accordance with the provisions of RA 9184, specifically, its Annex G. Bidding shall be conducted by the Bids and Awards Committee (BAC) constituted to conduct the procurement of the project. The TWG on infrastructure shall prepare the design brief and performance specifications and parameters, review the detailed engineering design, and assist the BAC in the evaluation of technical proposals in accordance with the criteria set.

A. Eligibility Requirements

The eligibility requirements for Design and Build infrastructure projects shall comply with the applicable provisions of Section 23-25 of the IRR of RA9184.

a. Eligibility Documents

Class "A" Documents

- i. PhilGEPS Certificate of Registration and Membership (Platinum)
- ii. Mayor's/Business permit issued by the city or municipality where the principal place of business of the prospective bidders is located;
- iii. Registration Certificate from the Securities and Exchange Commission (SEC), Department of Trade and Industry (DTI) for sole proprietorship, or Cooperative Development Authority (CDA) for cooperatives;
- iv. Tax clearance per E.O. 398, s. 2005, as finally reviewed and approved by the Bureau of Internal Revenue (BIR)
- v. Statement of all on-going, completed, awarded but not yet started design/design and build-related contracts;
- vi. Single Largest Completed Contracts (SLCCs) similar to the project to be bid that must be at least fifty percent (50%) of the ABC to be bid (in a joint venture/consortia, one should have at least one similar project, both in design and construction, with at least 50% of the cost.
SLCC for the following are acceptable:
 1. Design - Design of track and field, track oval, sports complex with track oval, park, playground or recreational work
 2. Construction/Build - earthworks/civil works for road construction is acceptableSLCC must be supported by any of the following documents:
 - Owner's Certificate of Final Acceptance issued by the project owner other than the contractor
 - Final rating of at least Satisfactory in the Constructors Performance Evaluation System (CPES). *In case of contracts with the private sector, an equivalent document shall be submitted.*
- vii. PCAB licenses and registration for the type and cost of the contract for this project; **(PCAB License: General Building Category B; Medium A)**
- viii. Audited financial statements, showing, among others, the prospective bidder's total and current assets and liabilities, stamped "received" by the BIR for the preceding calendar year which should not be earlier than two (2) years from the date of bid submission;
- ix. NFCC computation
NFCC = [(Current assets minus current liabilities) (15)] minus the value of all outstanding or uncompleted portions of the projects under ongoing contracts, including awarded contracts yet to be started, coinciding with the contract to be bid.

Class "B" Documents

- i. Joint Venture agreement, if applicable.
- ii. Special PCAB license in case of a Joint Venture.

b. Technical Documents

- i. Bid Security (in any form)
- ii. Project Requirements
 - ii1. Organizational Chart

- ii5. List of Contractor's Personnel (design and construction) with complete qualification and experience data (with valid licenses issued by the PRC)
- ii6. 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 equipment lessor/vendor for the duration of the project.
- iii. Omnibus Sworn Statement
- iv. Preliminary Conceptual Design Plan (Schematic Documents) in accordance with the degree of details specified under Section III SCOPE OF WORK -DESIGN
Schematic documents shall be scaled presentation drawings comprising, but not limited to the following:
 - iv.1. 300m Track Oval Layout
 - Including layout of Soccer Field, Softball/Baseball, and Facilities for Jumping and Throwing Events
 - Includes the drainage layout for internal and external drainage
 - iv.2. Perspective
 - iv.3. Site Development Plan
 - iv.4. Section of Track and Drainage
 - complete details including blow up details of the track, line canal and external drainage
 - shows the different layers and its corresponding thickness as mentioned in Section III. Scope of Work
 - iv.5. Plan and Section Details of All Sports Facilities including drainage and other necessary drawings to illustrate the size and character of the project.
 - iv.6. Perforated Pipe Plan/Layout Inside the Track
 - iv.7. Submit a synthetic running track (system image) with IAAF Certification and product warranty according to the required specifications in the Scope of Work, Annex H and Bill of Quantities. This product shall already be the one to be provided if awarded of contract for this project.

Above drawings shall be drawn/printed on 20" x 30" sheets using appropriate scale and inserted (bound or not) in the technical documents.

Another complete set of these same drawings should be printed on A4-size sheets and bound and submitted together with the other technical documents.

- v. Design and Construction Methods - civil works (subgrade preparation), synthetic rubber installation
- vi. Value Engineering analysis of design and construction method
Prospective bidders shall prepare a value engineering analysis report of their proposed design and construction method to be applied for the project. Importance shall be made on the following criteria:
 - Cost-saving, measured on a per square meter average figure
 - Time-saving in design and construction duration, measured using the HOPE and approved PERT-CPM of the project
 - Operational efficiency

c. Financial Documents

- i. Financial Bid Form
- ii. Bill of Quantities
 - Indirect Cost (OCM, Contractor's Profit and VAT) should follow the standard costing

- Units in Lump sum/Lots shall be provided with itemized breakdown of materials and their corresponding unit cost in Detailed Cost Estimates
- iii. Detailed Cost Estimates
- iv. Summary Sheet indicating the unit prices of materials, labor rates and equipment rental
- v. Payment schedule

Three (3) sets of documents [i.e., one (1) original and two (2) photocopies] - each set containing the eligibility, technical and financial components -- shall be submitted. These sets of documents should be hard-bound or soft-bound or ring-bound.

B. Eligibility Criteria

- a) The eligibility of design and build contractors shall be based on the legal, technical and financial requirements above-mentioned. In the technical requirements, the design and build contractor (as solo or in joint venture/consortia) should be able to comply with the experience requirements under the IRR of RA 9184, where itself or one of the parties in a joint venture/consortia should have at least one similar type of project that involves BOTH design and build/construction, and with a project cost of at least 50% of the ABC of this (PSHS-ZRC's) project.
- b) If the bidder has no experience in design and build projects on its own, it may enter into subcontracting, partnerships or joint venture with design or engineering firms for the design portion of the contract.
- c) The relevant provisions under Section 23.5.2 of the IRR of RA 9184 on eligibility requirements shall be observed.

C. Design Personnel

The key professionals and the respective qualifications of the DESIGN PERSONNEL shall be as follows:

a. Civil Engineer/Design Architect

The Civil Engineer/Design Architect must be duly-licensed with at least five (5) years of experience in the design of sports facilities and the like.

b. Sanitary/Master Plumber

The Master Plumber must be duly-licensed with at least five (5) years of experience in the design of sports facilities and the like.

The key professionals listed are required. The DESIGN & BUILD CONTRACTOR may, as needed and at its own expense, add additional professionals and/or support personnel for the optimal performance of all Architectural and Engineering Design Services, as stipulated in this Scope of Work for the PROJECT. Prospective bidders shall attach each individual's resume and PRC license of the (professional) staff.

D. Construction Personnel

The key professionals and the respective qualifications of the CONSTRUCTION PERSONNEL shall be as follows:

a. Project Manager

The Project Manager shall be a licensed civil engineer with at least five (5) years of relevant experience on similar and comparable projects. The Project Manager should have a proven record of managerial capability through the directing/managing of major civil engineering works.

b. Project Engineer

The Project Engineer shall be a licensed civil engineer with at least five (5) years of experience in construction of track oval/sport facilities and the like.

c. Sanitary/Master Plumber

The Sanitary Engineer/Master Plumber must be duly-licensed with at least five (5) years of experience in construction of track oval/sport facilities and the like.

d. Materials Engineer

The Materials Engineer must be duly-licensed Civil Engineer and an accredited Materials Engineer by the Department of Public Works and Highways (DPWH) that has undergone the prescribed examinations and passed the Accreditation of Contractor's and Consultant's Materials Engineers.

e. Foreman

The Foreman must have at least five (5) years of experience in similar and comparable projects and shall preferably be knowledgeable in the application of Green Building technologies.

f. Safety Officer

The safety officer must be an accredited safety practitioner by the Department of Labor and Employment (DOLE) and has undergone the prescribed 40-hour Construction Safety and Health Training (COSH).

The above key personnel listed are required. The **DESIGN & BUILD CONTRACTOR** may, as needed and at its own expense, add additional professionals and/or support personnel for the optimal performance of all Construction Services, as stipulated in this Scope of Work for the PROJECT. Prospective bidders shall attach each individual's resume and PRC license of the (professional) staff, proof of qualifications, and related documents as necessary.

V. DETAILED ENGINEERING REQUIREMENT

1. Upon award of the design and build contract, the winning bidder shall be responsible for the preparation and submission of all necessary detailed engineering investigations, surveys and designs in accordance with the provisions of Annex "A" of this IRR (with the exception of the Bidding Documents and the ABC).
2. The procuring entity shall ensure that all the necessary schedules with regard to the submission, confirmation and approval of the detailed engineering design and the details of the construction methods and procedures shall be included in the contract documents.
3. The procuring entity shall review, order rectification, and approve or disapprove - for implementation only - the submitted plans within these schedules. All instructions for rectification shall be in writing stating the reasons for such rectification. The design and build contractor shall be solely responsible for the integrity of the detailed engineering design and the performance of the structure irrespective of the approval/confirmation by the procuring entity.

VI. PROJECT IMPLEMENTATION

As a rule, contract implementation guidelines for the procurement of infrastructure projects shall comply with Annex "E" of the IRR of RA 9184.

In compliance with the design and build Scope of Work, the **DESIGN AND BUILD CONTRACTOR** shall **SUBMIT A DETAILED PROGRAM OF WORK WITHIN THIRTY (30) CALENDAR DAYS AFTER THE RECEIPT OF THE NOTICE TO PROCEED** for approval by the procuring entity that shall include, among other things:

- a. Final Plan for Procuring Entity's approval



- b. PERT/CPM
- c. Updated Bill of Quantities and Cost Estimates
- d. Manpower and Equipment Schedule
- e. General description of the design and construction methods to be adopted
- f. Coordinate with all offices and agencies concerned, within and outside the Campus regarding utility connections, permits and other requirements needed.

The DESIGN & BUILD CONTRACTOR may only proceed with the CONSTRUCTION PHASE after the approval by the Procuring Entity of the drawings, specifications and bill of estimates as recommended by the Technical Working Group (TWG).

a. Pre-Construction

- a) Secure all necessary building permits prior to construction. All incidental fees shall be included in the cost estimate of the project.
- b) Attend Pre-Construction Conference
- c) Provide all other necessary documents that shall be required by TWG on Infrastructure.

b. Construction Phase

- a) Implement all works indicated in the approved construction drawings and specifications. All revisions and deviations from the approved plans, especially if these shall impact the overall cost of the project, shall be subject for approval.
- b) Provide protection or relocation of existing trees indigenous to the area, and proper removal and replacement of all introduced trees and vegetation affected by the construction, if necessary.
- c) Layout piping, conduits, manholes, boxes and other lines for utilities including tapping to existing utility lines. Facilitate the connection of all utilities (power and water) with their corresponding utility companies. All application fees shall be included in the project cost.
- d) Preparation of shop-drawings for construction guide.
- e) Report and coordinate with the TWG on Infrastructure regarding the scheduling of inspection, mock-ups and construction issues.
- f) Conduct all necessary tests (to be required by TWG on Infrastructure) and issue reports of the test results.
- g) Rectification of punch-listing works issued by the TWG/Inspectorate Team.
- h) Comply with the DOLE-OSH requirements and submit periodic reports concerning occupational safety and health.
- i) Provide all other necessary documents that shall be required by the TWG on Infrastructure.
- j) For major materials, products or work items, large volume or quantity items or other expensive items mentioned in the specifications or plan, shall require submission of samples, product tests, mock-up models, and selection, or approval prior to their installation or application in the project.
- k) All materials and equipment shall be delivered to the site at designated locations within the project premises.
- l) Procuring entity or its representative reserves the right to reject any materials or workmanship that may be found defective or not in conformity with the approved Construction Plans/Drawings and the Technical Specifications. In case where conflicts between the Construction Plans/Drawings and the Technical Specifications arise, these should immediately be brought to the attention of the Procuring Entity or its representative for appropriate actions.
- m) Submit construction photographs regularly.

c. Post Construction Phase

- a) Preparation of as-built plans
- b) Turn-over of all necessary manuals and certificates and warranties of installed items, if necessary.



d. Variation Orders

Any errors, omissions, inconsistencies, inadequacies or failure submitted by the contractor that do not comply with the requirements shall be rectified, resubmitted and reviewed at the contractor's cost. If the Contractor wishes to modify any design or document which has been previously submitted, reviewed and approved, the contractor shall notify the procuring entity within a reasonable period of time and shall shoulder the cost of such changes.

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:

i. Change Orders resulting from design errors, omissions or non-conformance with the performance specifications and parameters and the contract documents by the contractor shall be implemented by the contractor at no additional cost to the procuring entity.

ii. Provided that the contractor suffers delay and/or incurs costs due to changes or errors in the procuring entity's performance specifications and parameters, he shall be entitled to either one of the following:

a. an extension of time for any such delays under Section 10 of Annex "E"; or

b. 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 contract.

e. Defects and Liability

a. All design and build projects shall have a minimum Defects Liability Period of one (1) year after contract completion as provided for in Section 62.2.2 of the IRR of RA 9184. This is without prejudice, however, to the liabilities imposed upon the engineer/architect who drew up the plans and specification for a building sanctioned under Section 1723 of the New Civil Code of the Philippines.

b. The contractor shall be held liable for design and structural defects and/or failure of the completed project within the warranty periods specified in Section 62.2.3.2 of the IRR of RA 9184.

VII. OVERALL PROJECT TIME SCHEDULE

The DESIGN & BUILD CONTRACTOR shall propose the most reasonable time schedule for the completion of the project. It is expected that this period will not exceed (310) calendar days from the date of the receipt of the Notice to Proceed (NTP): thirty (30) calendar days for the Design Phase, and two hundred eighty (280) calendar days for the Construction Phase.

VIII. THE IMPLEMENTING AGENCY'S GENERAL RESPONSIBILITY

The implementing agency for the project is the PSHS-ZRC with final approval for all decisions and actions from the Campus Director through FAD Chief and the TWG on Infrastructure. The TWG on Infrastructure shall:

- a) Prepare the design brief for the project in accordance with PSHS Systems' policies, existing codes, traditions, standards, and the conditions and design criteria enumerated in the SCOPE OF WORK and Technical Specifications.
- b) Coordinate with DESIGN & BUILD CONTRACTOR with regard to the design and pertaining to issues during the construction.
- c) Assist in the coordination of the DESIGN & BUILD CONTRACTOR with various utility agencies during the detailed design and implementation phases of the project.
- d) Conduct regular coordination meetings between the DESIGN & BUILD CONTRACTOR and the end-user to facilitate the implementation of the project.

IX. THE DESIGN & BUILD CONTRACTOR'S GENERAL RESPONSIBILITY

- a) The DESIGN & BUILD CONTRACTOR shall certify that he has, at his own expense, 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 under these Scope of Work.
- b) The DESIGN & BUILD CONTRACTOR shall 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.
- c) The DESIGN & BUILD CONTRACTOR shall provide the school with complete reports such as technical analysis and details regarding the existing conditions and proposed improvements within the site.
- d) The DESIGN & BUILD CONTRACTOR shall consider the academic calendar and critical dates and occasions within the School, in order to align his work schedule with the academic calendar of the school to avoid unnecessary disruption of school activities due to construction activities such as closure of water and power supply and non-usage of the existing roads.
- e) The DESIGN & BUILD CONTRACTOR shall inform the school of critical events during construction, especially when such events can potentially disrupt school activities.
- f) The DESIGN & BUILD CONTRACTOR shall be PCAB-accredited and shall have a Construction Safety and Health Program approved by DOLE and designed specifically for the CONSTRUCTION OF TRACK OVAL.
- g) The DESIGN & BUILD CONTRACTOR shall be held accountable for accidents that might occur during the execution of the project. The DESIGN & BUILD CONTRACTOR is required to install warning signs and barriers for the safety of the general public and the avoidance of any accidents and provide appropriate and approved type personal protective equipment for their construction personnel.
- h) The DESIGN & BUILD CONTRACTOR shall provide all reasonable protection to prevent damage, injury or loss to workers, materials and equipment and other property at the site. Likewise, shall bear all risk of loss to the work, or materials or equipment for the work due to fire, theft or other cause, until the project is fully completed and accepted by the Procuring Entity.
- i) The DESIGN & BUILD CONTRACTOR shall be professionally liable for the design and shall submit a signed and sealed copy of the approved construction documents to form part of the Contract Documents.
- j) Only the plans approved by the Head of Procuring Entity (HOPE) shall be signed and sealed by the DESIGN & BUILD CONTRACTOR, and thereafter shall be the plans used for construction.
- k) All works designed and constructed should be compliant with the regulatory requirements and in conformity with the standards set in Section XI.
- l) Shall provide full-time supervision of the works.

X. PROJECTED SUBMITTALS DURING THE PROJECT

The following submittals and accomplished documents shall be duly completed and turned-over by the DESIGN & BUILD CONTRACTOR for the project:

- A. For the Design Phase (7 sets hard copy; and a soft copy)
 - a) Construction plans (signed and sealed)
 - b) Technical specifications
 - Synthetic Running Track
 - Civil Works
 - c) Product Data and Samples
 - d) Detailed Cost Estimate
 - e) Bill of Quantities
 - f) Survey and pertinent data related to the conditions of the project site
 - g) All necessary permits (Fees shall be included in the contract cost)

B. For the Construction Phase

- a) As-built plans (signed and sealed) Soft copy - PDF and an electronic copy shall also be submitted in native files Autodesk software. (7 sets hard copy; and a soft copy)
- b) Shop drawings (2 sets hard copy and a soft copy)
- c) Samples for Verification
 - Type, color and pattern of synthetic surfacing indicated, 6-inch-square samples of same thickness and material
 - Game-Line and Marker-Paint Samples
- d) Product Certification (original copy)
 - Manufacturer's certification that products and materials comply with requirements of the specifications.
- e) Warranties (original copy)
- f) Test results (including original copy ; no soft copy)
- g) All necessary permits (Fees shall be included in the contract)
- h) Fire and Life Safety Assessment Report 2 and 3 (FALAR 2 and 3)

C. For the Post-Construction Phase (7 sets hard copy; and a soft copy)

- a) Certificate of Occupancy, if applicable (including original copy)
- b) Fire Safety Inspection Certificate (including original copy)
- c) Operation and Maintenance Manual
 - All necessary instructions for the proper care and preventive maintenance of the track system, including painting and markings

XI. CODES AND STANDARDS

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The project shall be designed, engineered, installed, tested, commissioned and handed over in compliance and conformity with:

A. Regulatory Requirements

- 1. National Building Code of the Philippines
- 2. National Plumbing and Sanitary Code of the Philippines
- 3. Philippine Electrical Code
- 4. National Fire Code of the Philippines

B. Standards

- 1. International Association of Athletics Federations (IAAF)

XII. INSTALLATION AND WORKMANSHIP

Personnel of the DESIGN & BUILD CONTRACTOR should be specialists highly skilled in their respective trades, performing all labor according to first-class standards. A full time Project Engineer/Civil Engineer and Construction Safety Engineer shall be assigned by the DESIGN & BUILD CONTRACTOR at the job site during the construction of the project.

All works to be subcontracted shall be declared by the DESIGN & BUILD CONTRACTOR and shall be approved by the Campus Director of PSHS-ZRC and its respective technical offices.

Any errors, omissions, inconsistencies, inadequacies or failure submitted by the DESIGN & BUILD CONTRACTOR that do not comply with the requirements shall be rectified, resubmitted and reviewed at the DESIGN & BUILD CONTRACTOR'S cost. If the DESIGN & BUILD CONTRACTOR wishes to modify any design or document which has been previously submitted, reviewed and approved, the DESIGN & BUILD CONTRACTOR shall notify the procuring entity within a reasonable period of time and shall shoulder the cost of such changes.

XIII. MATERIALS

All materials and equipment shall be standard products of manufacturers engaged in the production of such materials and equipment and shall be the manufacturer's latest standard design.



The materials and workmanship supplied shall be of the best grade and constructed and/or installed in a practical and first class manner. It will be completed in operation, nothing being omitted in the way of labor and materials required and it will be delivered and turned over in good condition, complete and perfect in every respect.

All materials shall be in conformance with the latest standards and with inspection and approval from B&D Committee.

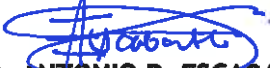
XIV. MODE OF PAYMENT

- a) The PSHS-ZRC shall pay the winning DESIGN & BUILD CONTRACTOR progress payments based on billings for actual works accomplished. In no case shall progress billing be made more than once every thirty (30) calendar days. Materials or equipment delivered on the site but not completely put in place or used in the project shall not be included for payment.
- b) All progress payment shall be subject to retention of ten percent (10%) based on the amount due to the winning DESIGN & BUILD CONTRACTOR prior to any deduction. The total retention money shall be released only upon Final Acceptance of the Project. The winning DESIGN & BUILD CONTRACTOR may, however, request for its release prior to Final Acceptance subject to the guidelines set forth in R.A. 9184 and its implementing Rules and Regulations.
- c) The DESIGN & BUILD CONTRACTOR may request in writing which must be submitted to form part of the Contract Documents, for an advance payment equivalent to fifteen percent (15%) of the total Contract Price. The advance payment shall be made once the DESIGN & BUILD CONTRACTOR issues its irrevocable standby letter of credit from a reputable bank acceptable to the PSHS System, or GSIS Surety Bond of equivalent value, within fifteen (15) days from the signing of the Contract Agreement to cover said advance payment. An amortization of this advance payment shall be deducted from every billing based on the corresponding percentage of completion in that particular billing.
- d) First Payment/Billing shall have an accomplishment of at least 20%.
- e) The following documents must be submitted to the B&D Committee before processing of payments to the DESIGN & BUILD CONTRACTOR can be made:
 - i. Progress Billing
 - ii. Request for payment by the DESIGN & BUILD CONTRACTOR
 - iii. Detailed Statement of Work Accomplishment (SWA)
 - iv. Pictures of original site conditions (for First Billing only)
 - v. Pictures of work accomplished during the billing period
 - vi. Material Testing Results
 - vii. Payment of utilities (power and water consumption)
 - viii. DESIGN & BUILD CONTRACTOR's affidavit (if accomplishment is more than 60%)

Prepared by:

THE TECHNICAL WORKING GROUP:


ENGR. ANGELIE M. MOROSCALLO
Chairperson, SST-II


ENGR. ANTONIO P. ESCABARTE JR.
Member, Resident Engineer


ENGR. SHARON T. PARAGUYA
Member, Resident Engineer


ENGR. JUNE CARLO F. REYES
Member, SST-II


ENGR. DEBBIE P. MUCHILLAS
Member, Resident Engineer

Recommending Approval:


LEE CASTOR I. CANONO
Chief, CID


HAZEL R. LAGAPA
Chief, SSD


MILO S. SALDON
Chief, FAD

Approved by:


ENGR. LOUIE C. JAMORA
Campus Director