

# **PHILIPPINE BIDDING DOCUMENTS**

## **PROCUREMENT OF CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT**

Government of the Republic of the Philippines

**BID NO. \_\_\_\_\_**

**Sixth Edition  
July 2020**

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# ***Glossary of Terms, Abbreviations, and Acronyms***

**ABC** – Approved Budget for the Contract.

**ARCC** – Allowable Range of Contract Cost.

**BAC** – 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])

**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 project 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 CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT Bid No. \_\_\_\_\_**

1. The Civil Aviation Authority of the Philippines, through the DOTr GAA CY 2024 intends to apply the sum of **Seventy-Five Million Ninety Four Thousand One Hundred Ninety Two Pesos and 36/100 Centavos only (Php 75,094,192.36)** being the Approved Budget for the Contract (ABC) to payments under the contract for **CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT (Bid No. \_\_\_\_\_)**. Bids received in excess of the ABC shall be automatically rejected at bid opening.
2. The Civil Aviation Authority of the Philippines now invites bids for the above Procurement Project. Completion of the Works requires **One Hundred Eighty (180) CALENDAR DAYS (INCLUSIVE OF TWENTY-SIX (26) RAINY/UNWORKABLE DAYS)**. 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. Interested bidders may obtain further information from the Civil Aviation Authority of the Philippines, BAC Office and inspect the Bidding Documents at the address given below from 08:00 AM to 05:00 PM from Monday to Friday.
5. A complete set of Bidding Documents may be acquired by interested bidders on **Insert date until deadline of submission of bid** from given address and website/s below *and* upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of **PHP 50,000 (exclusive of any/or taxes imposed by relevant government agencies)**. The Procuring Entity shall allow the bidder to present its proof of payment for the fees by presenting the official receipt in person.
6. Upon payment of the bid documents, bidders must provide their respective email addresses to the BAC Secretariat. All communications, including but not limited to Notices, Resolutions, and Replies, among others, will be sent to the email address provided by the bidder/s. The date when such email was sent shall be considered the date of receipt of the bidder/s for purposes of complying with the requirements under RA 9184.
7. Bidders must also check the PhilGEPS website, CAAP website, and BAC Secretariat for any bid bulletins and announcements related to the bidding.
8. The Civil Aviation Authority of the Philippines will hold a Pre-Bid Conference<sup>1</sup> on **April 15, 2025 @ 9:30 AM** through videoconferencing/webcasting via Jitsi/Zoom/Google Meet, which shall be open to prospective bidders.

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<sup>1</sup> May be deleted in case the ABC is less than One Million Pesos (PhP1,000,000) where the Procuring Entity may not hold a pre-bid conference.



9. Bids must be duly received by the BAC Secretariat through manual submission at the office address as indicated below on or before **April 15, 2025 @ 9:30 AM**. Late bids shall not be accepted.
10. All bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 15.
11. Bid opening shall be on **April 15, 2025 @ 9:30 AM** at the given address below and/or Jitsi/Zoom/Google Meet. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.
12. The Civil Aviation Authority of the Philippines 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 the 2016 revised Implementing Rules and Regulations (IRR) of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.
13. For further information, please refer to:  
  
**ENGR. LEANDRO R. VARQUEZ**  
Head, BAC Secretariat  
BAC Office  
3rd Floor Supply, Procurement Building  
Civil Aviation Authority of the Philippines  
MIA Road corner Ninoy Aquino Avenue  
1300 Pasay City, Metro Manila  
Telephone number – (02) 8246-4988 loc. 2236  
Email: [bac@caap.gov.ph](mailto:bac@caap.gov.ph)
14. You may visit the following websites:  
For downloading of Bidding Documents: [www.caap.gov.ph](http://www.caap.gov.ph)

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**ATTY. DANJUN G. LUCAS**  
Chairperson, BAC-ALPHA

## ***Section II. Instructions to Bidders***



## 1. **Scope of Bid**

The Procuring Entity, Civil Aviation Authority of the Philippines invites Bids for the **CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT**, with Project Identification Number: **Bid No. \_\_\_\_\_**.

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 CAAP APP CY 2024 in the amount of **Seventy-Five Million Ninety-Four Thousand One Hundred Ninety-Two Pesos and 36/100 Centavos only (Php 75,094,192.36)**.

2.2. The source of funding is GOCC and GFIs, the Corporate Operating Budget.

## 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 BAC 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**.

- 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 Procuring Entity has prescribed that subcontracting is not allowed.

## **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 and/or through videoconferencing/webcasting as indicated in paragraph 8 of the **IB**.

## **9. Clarification and Amendment of Bidding Documents**

Prospective bidders may request 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 BAC 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 special PCAB License in case of Joint Ventures, 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 until *[indicate date]*. 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 9 of the **IB**.

## **18. Opening and Preliminary Examination of Bids**

- 18.1. The BAC shall open the Bids in public at the time, on the date, and at the place specified in paragraph 11 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 BAC 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 BAC shall immediately conduct a detailed evaluation of all Bids rated "*passed*" using non-discretionary pass/fail criteria. The BAC 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 15 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 BAC 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	<p>A. For this purpose, contracts similar to the Project refer to contracts which have the same major categories of work, which shall be:</p> <table border="1" data-bbox="327 425 1393 555"> <tr> <th data-bbox="327 425 956 465">Category</th><th data-bbox="956 425 1393 465">ABC,</th></tr> <tr> <td data-bbox="327 465 956 555"><b>CONCRETING OF ROADS AND/OR OTHER HORIZONTAL STRUCTURES</b></td><td data-bbox="956 465 1393 555"><b>Php 75,094,192.36</b></td></tr> </table> <p>B. The statement of SLCC shall be accompanied by a Certificate of Final Acceptance issued by the owner, or a final rating of at least "Satisfactory in the Constructors Performance Evaluation System (CPES). In the case of contracts with the private sector, an equivalent document shall be submitted. (Section 23.4.2.5 of the Revised IRR of Republic Act No. 9184)</p>	Category	ABC,	<b>CONCRETING OF ROADS AND/OR OTHER HORIZONTAL STRUCTURES</b>	<b>Php 75,094,192.36</b>
Category	ABC,				
<b>CONCRETING OF ROADS AND/OR OTHER HORIZONTAL STRUCTURES</b>	<b>Php 75,094,192.36</b>				
7.1	Subcontracting is not allowed.				
10.1	<p>Bidder shall submit all eligibility and technical documents as specified in <b>Section IX. Checklist of Technical and Financial Documents:</b></p> <p><b>Class "A" Documents</b></p> <p><u>Legal Documents</u></p> <p>a. Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages) in accordance with Section 8.5.2 of the IRR;</p> <p><u>Technical Documents</u></p> <p>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. (<i>Annex "A" Form 1</i>); and</p> <p>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>Annex "A" Form 2</i>); and</p> <p>1. The statement of SLCC shall be accompanied by a Certificate of Final Acceptance issued by the owner, or a final rating of at least Satisfactory in the Constructors Performance Evaluation System (CPES). In the case of contracts with the private sector, an equivalent document shall be submitted. (Section 23.4.2.5 of the Revised IRR of Republic Act No. 9184).; <b>and</b></p> <p>d. Special PCAB License in case of Joint Ventures <b>and</b> registration for the type and cost of the contract to be bid;</p> <p>e. Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission <b>or</b> original copy of Notarized Bid Securing Declaration (<i>Annex "B" Form 1</i>); and</p> <p>f. Project Requirements, which shall include the following:</p> <p>1. Organizational chart for the contract to be bid (<i>Annex "B" Form 2</i>); and</p>				

	<p>2. List of contractor's key personnel (e.g., Project Manager, Project Engineers, Materials Engineers, and Foremen), to be assigned to the contract to be bid, with their complete qualification and experience data (<i>Annex "B" Form 3</i>); and</p> <p>3. List of contractor's major equipment units, which are owned, leased, and/or 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 (<i>Annex "B" Form 5</i>); and</p> <p>g. Original duly signed Omnibus Sworn Statement (OSS) <b>and</b> 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 giving full power and authority to its officer to sign the OSS and do acts to represent the Bidder (<i>Annex "B" Form 6</i>)</p> <p>This shall include all of the following documents as attachment to the Omnibus Sworn Statement:</p> <p>1. Certification, under oath, attesting that they have no pending case(s) against the Government, in addition to the eligibility requirements as prescribe under the 2016 Revised Implementing Rules and Regulation (R-IRR) of RA No. 9184; and</p> <p>2. Legal Clearance to be issued by the CAAP Enforcement and Legal Service with respect to the non-pending cases of the prospective bidders against this Authority; and</p> <p>3. Bid Bulletins (if applicable); and</p> <p><u>Financial Documents</u></p> <p>h. The prospective bidder's computation of Net Financial Contracting Capacity (NFCC).</p> <p style="text-align: center;"><b>Class "B" Documents</b></p> <p>i. If applicable, duly signed joint venture agreement (JVA) in accordance with RA No. 4566 and its IRR in case the joint venture is already in existence; <b>or</b> duly notarized statements from all the potential joint venture partners stating that they will enter into and abide by the provisions of the JVA in the instance that the bid is successful.</p> <p>II. FINANCIAL COMPONENT ENVELOPE</p> <p>j. Original of duly signed and accomplished Financial Bid Form; and</p> <p><u>Other documentary requirements under RA No. 9184</u></p> <p>k. Original of duly signed Bid Prices in the Bill of Quantities (<i>Annex "C" Form 1</i>);</p>
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	<p>l. Summary of Bid Proposal (<i>Annex “C” Form 2</i>);</p> <p>m. Bill of Materials &amp; Cost Estimates (<i>Annex “C” Form 3</i>);</p> <p>n. Summary Sheet indicating the Unit Prices of Construction Materials (<i>Annex “C” Form 4</i>);</p> <p>o. Summary Sheet indicating Unit Prices of Labor (<i>Annex “C” Form 5</i>);</p> <p>p. Summary Sheet indicating the Unit Prices of Equipment (<i>Annex “C” Form 6</i>); and</p> <p>q. Cash Flow by Quarter and Payment Schedule (<i>Annex “C” Form 7</i>).</p> <p>Bids not complying with the above instruction shall be disqualified.</p>																					
10.3	<p>Valid PCAB License or a valid special PCAB License in case of Joint Ventures, and registration for the type and cost of the contract for this Project.</p> <p><b>Medium A - License Category B</b> (<i>Road, Highway Pavement, Railways, Airport Horizontal Structures and Bridges</i>)</p> <p>No other contractor license or permit is required.</p>																					
10.4	<p>The key personnel must meet the required minimum years of experience set below:</p> <table><tr><td><u>Key Personnel</u></td><td><u>General Experience</u></td><td><u>Relevant Experience</u></td></tr><tr><td>Project (Civil) Engineer</td><td>Five (5)</td><td>Three (3) years in</td></tr><tr><td>Materials Engineer</td><td>years in</td><td>Road, Highway</td></tr><tr><td>Geodetic Engineer</td><td>General</td><td>Pavement,</td></tr><tr><td>Construction Safety and Health Officer</td><td>Engineering</td><td>Railways, Airport</td></tr><tr><td>Construction Foreman</td><td></td><td>Horizontal</td></tr><tr><td>Surveyor</td><td></td><td>Structures &amp; Bridges</td></tr></table> <p><b>Use Annex “B” Forms 3, 4a, 4b &amp; 4c</b></p>	<u>Key Personnel</u>	<u>General Experience</u>	<u>Relevant Experience</u>	Project (Civil) Engineer	Five (5)	Three (3) years in	Materials Engineer	years in	Road, Highway	Geodetic Engineer	General	Pavement,	Construction Safety and Health Officer	Engineering	Railways, Airport	Construction Foreman		Horizontal	Surveyor		Structures & Bridges
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Geodetic Engineer	General	Pavement,																				
Construction Safety and Health Officer	Engineering	Railways, Airport																				
Construction Foreman		Horizontal																				
Surveyor		Structures & Bridges																				
10.5	<p>The minimum major equipment requirements are the following:</p> <table><tr><td><u>Equipment</u></td><td><u>Capacity</u></td><td><u>Number of Units</u></td></tr><tr><td>Dump Truck</td><td>12 cu.yd</td><td>Three (3)</td></tr><tr><td>Payloader</td><td>1.50 cu.m.</td><td>One (1)</td></tr><tr><td>Bulldozer</td><td>165Hp</td><td>One (1)</td></tr><tr><td>Motorized Road Grader</td><td>(140 hp), G710A</td><td>One (1)</td></tr><tr><td>Vibratory Single Smooth Drum Roller</td><td>10 MT</td><td>One (1)</td></tr><tr><td>Water Truck/Pump</td><td>16000 L/ 4000 Gals</td><td>One (1)</td></tr></table>	<u>Equipment</u>	<u>Capacity</u>	<u>Number of Units</u>	Dump Truck	12 cu.yd	Three (3)	Payloader	1.50 cu.m.	One (1)	Bulldozer	165Hp	One (1)	Motorized Road Grader	(140 hp), G710A	One (1)	Vibratory Single Smooth Drum Roller	10 MT	One (1)	Water Truck/Pump	16000 L/ 4000 Gals	One (1)
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	Concrete Vibrator		Two (2)
	Concrete Screeder	5.5hp	One (1)
	Concrete Saw	7.5hp (14" Blade diameter)	One (1)
	Bar Cutter, Single Phase	0.80 cu.m	One (1)
	Power Broom and Blower		One (1)
	Stake Truck		One (1)
	Asphalt Distributor/ Sprayer Pen		One (1)
	Generator Set	51-100kW with lighting assembly	One (1)
	Asphalt Pave Finisher		One (1)
	Vibratory Tandem Steel Roller	10.10MT	One (1)
	Pneumatic Tire Roller	20MT	One (1)
	Blow Torch with gauge and regulator		One (1)
	Pavement Milling Machine	(0-280 mmD, 1000mmW), 15T, 180Kw	One (1)
	Diesel Type Air Compressor		One (1)
	Concrete Diamond Saw	Blade 14" diameter	One (1)
	<b>Use Annex "B" Form 5</b>		
12	No further instructions.		
15.1	<p>The bid security shall be in the form of a Bid Securing Declaration or any of the following forms and amounts:</p> <p>a. The amount of not less than two percent (2%) of ABC, if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit;</p> <p>b. The amount of not less than five percent (5%) of ABC if bid security is in Surety Bond.</p>		
16	<p>1. Each and every page thereof shall be initialed/signed by the duly authorized representative/s of the Bidder.</p> <p>Submitted Eligibility, Technical and Financial documents shall be properly marked with index tabs (ear tab) and must be sequentially paginated in accurate order in the form i.e. "page 3 of 100". Page number of last page of the document (per envelope basis).</p> <p>Pagination should be sequential based on the entire span of the whole documents inside the envelope.</p> <p>Bids not complying with the above instructions shall be automatically disqualified.</p> <p>2. Each Bidder shall submit <b>one copy of the first and second components</b> of its bid.</p>		
19.2	Partial bid is not allowed. The infrastructure project is packaged in a single lot and the lot shall not be divided into sub-lots for the purpose of bidding, evaluation, and contract award.		

20	<p>The Bidder with the Lowest Calculated Bid (LCB) that complies with and is responsive to all the requirements and conditions shall submit its</p> <ul style="list-style-type: none"> <li>a) Updated Valid PhilGEPS Certificate of Registration;</li> <li>b) Latest income and business tax returns filed through the Electronic Filing and Payment System (EFPS);</li> <li>c) Key personnel licenses;</li> <li>d) Updated status of all ongoing contracts, including contracts awarded but not yet started, issued by the government agency or private concerned;</li> </ul> <p>Failure to submit any of the post-qualification requirements on time, or a finding against the veracity thereof, shall disqualify the bidder for award. Provided, that in the event that a finding against the veracity of any of the documents submitted is made, it shall cause the forfeiture of the Bid Security in accordance with Section 69 of the IRR of RA 9184.</p>
21	<p>The following relevant project documents are required to be submitted by the successful bidder who submitted the LCRB as part of the Contract Agreement during its signing:</p> <ul style="list-style-type: none"> <li>a) Construction schedule</li> <li>b) Bar Chart &amp; S-curve</li> <li>c) PERT/CPM Network Diagram</li> <li>d) Manpower schedule</li> <li>e) Construction methods</li> <li>f) Equipment utilization schedule</li> </ul> <p>Construction safety &amp; health programs approved by the Department of Labor &amp; Employment <b>(CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT)</b></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 10.4 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

<b>GCC Clause</b>	
2	Not applicable.
3.1	The <b>CIVIL AVIATION AUTHORITY OF THE PHILIPPINES</b> shall give possession of all parts of the Site to the Contractor upon receipt of the Notice to Proceed.
5	In addition to the Performance Security, winning bidder shall submit Contractor's All Risks Insurance (CARI) upon release of Notice to Proceed.
6	None.
7.2	Fifteen (15) years.
10	No dayworks are applicable to the contract.
11.1	Not applicable.
11.2	Not applicable.
13	The amount of the advance payment shall not exceed 15% of the total contract price.
14	No further instructions.
15.1	<p>The date by which operating and maintenance manuals are required is upon completion of the project</p> <p>The date by which "as built" drawings are required is upon completion of the project.</p> <p>PDF/AutoCAD File of the "as built" plans shall include as attachment to the required hard copy of the same upon completion of the project.</p>
15.2	The amount to be withheld for failing to produce "as built" drawings and/or operating and maintenance manuals by the date required is percent (2.00%) of the Contract price.

## ***Section VI. Specifications and Scopes of Work***



Name of Project : **CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT**

Name of Project : Completion of Widening of Runway, Provision of Runway End Safety Area (RESA), Stopway and Strip Width Correction, Asphalt Overlay of Stopway and Provision of Furniture at Landside Building Facilities

Project Location : Antique Airport, Funda Dalipe, San Jose de Buenavista, Antique

Project Duration : One Hundred Eighty (180) Calendar Days  
Inclusive of 26 rainy/unworkable days

Source of Fund : DOTr Downloaded Project C.Y. 2024

### **SCOPE OF WORK**

The project covers the supply of labor, materials and equipment necessary for the CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT. The details of work are at best enumerated below; however, it is understood that the contract includes all works and services though not specifically mentioned herein, but are needed to fully complete the project shall be undertaken by the Contractor.

The following scopes of work shall be done in accordance with the approved plans, specifications and provisions of contract.

#### **SPL-1 MOBILIZATION & DEMOBILIZATION**

This work includes mobilization and demobilization of the contractor's personnel and equipment necessary for performing the work required under the contract.

a. Mobilization shall include all activities and associated costs for transportation of contractor's personnel, equipment, and establishment of offices, and other necessary facilities for the contractor's operations at the site.

b. Demobilization shall include the disassembly of offices and other facilities on the site, as well as the removal and hauling of debris and rubbish materials.

The following provisions must be delivered within seven (7) days upon receipt of the Notice to Proceed (NTP).

#### **SPL-2 CONSTRUCTION SAFETY AND HEALTH PROGRAM**

This item covers the provision of personnel protective equipment and devices intended for CAAP-Project Management Office (PMO) and resident engineer(s). The Contractor shall further take all necessary precautions against damage to the property of the airport and other facilities located at or adjacent to the worksite.

The Contractor shall at all times comply with any accident prevention, regulations and any safety regulations of local or national authorities or that are prescribed by CAAP.

The Contractor shall appoint a Safety Officer and Safety Aide to hold periodical safety meetings with the workers and with his own supervisors and foreman. In addition, the Contractor shall report in writing within twenty-four (24) hours to the PMO all the accidents involving the death of and/or injury to any person, resulting from the Contractor's operation.

#### **SPL-3 PROVISION OF LIVING QUARTERS FOR THE ENGINEER (RENTAL BASIS)**

The Contractor shall provide a living quarter for the use of the CAAP PMO and resident engineer(s) by renting suitable accommodation with complete sanitary facilities and shall have at least a parking space for one (1) vehicle. The building shall be located within the vicinity of the project to be approved by the CAAP PMO.

Outside lighting around the building and parking area shall be installed to the satisfaction of the CAAP PMO.

The maintenance and protection of the facility to be provided during the duration of the contract shall be the responsibility of the Contractor, including providing adequate stock of all expendable items, such as light bulbs and tubes, and at all times ensuring the proper functioning of all components and parts of the Engineer's facilities.

The Contractor shall also pay for all the bills for electricity, water, telephone, janitorial and security services, and the like until the completion of the project.

#### **SPL-4PROVISION OF ONE (1) UNIT MPV SERVICE VEHICLE FOR THE ENGINEER**

This item covers the provision of one (1) unit MPV service vehicle, brand new, latest model, with air conditioning system, manual transmission, power windows and locks, 2.5L diesel engine, for the exclusive use of CAAP Engineers supervising the project. Moreover, driver, fuel, maintenance and Land Transportation Office (LTO) registration for the service vehicle will also be provided by the Contractor that are incorporated in the Contractor's overhead cost throughout the duration of the project but will not be considered as pay item.

The service vehicle including the Certificate of Registration and Official Receipt will be registered in the name of Civil Aviation Authority of the Philippines (CAAP) and will be turned over to the Aerodrome Development and Management Service (ADMS) in good running condition after the completion of the Project.

#### **SPL-5 PROJECT BILLBOARD/SIGN BOARD**

This covers the provision of a project billboard to be installed in front of the project site, visible to the public. The standard measure shall be 1,220mm x 2,440mm (4ft. x 8ft.) using a tarpaulin of the same size posted on marine plywood and supported by sturdy materials, visible to public, and if possible, near the construction site.

### **A. COMPLETION OF WIDENING OF RUNWAY**

#### **P-154-5.1 AGGREGATE SUBBASE COURSE**

This item covers the furnishing, placing and compacting of aggregate subbase course in accordance with specifications and shall conform to the lines, grade and cross section shown on the approved plans. The aggregate subbase course shall be composed of Crushed Aggregate Base Course bonded with either soil of fine aggregates or both. Whereas, any miscellaneous cost shall be the full responsibility of the Contractor. This item covers the volume of 2,338.98 cu.m.

#### **P-208-5.1 AGGREGATE BASE COURSE**

This covers the supply of materials, labor and equipment required for the provision of compacted aggregate base coarse for widening of runway and runway shoulder in accordance with the

design grade, dimensions, cross-sections as shown on the approved plans. It covers a total volume of 1,753.53 cu.m. excluding shrinkage factor. (see attached plans for reference)

#### **P-501 PORTLAND CEMENT CONCRETE PAVEMENT**

This item covers the placement of rebars, steel forms and concrete paving constructed on a prepared Subbase course in accordance with the specifications and shall conform to the lines, grade, thickness and typical cross section shown on the approved plans. The rebars shall be painted and lightly coated with lubricants such as grease to prevent bonding with PCC. Whereas, any miscellaneous cost shall be the full responsibility of the Contractor. This item covers the area of 8,767.64sq.m.

### **B. PROVISION OF STOPWAY, RESA & STRIP WIDTH CORRECTION**

#### **P-152-1 EXCAVATION & DISPOSAL**

This item covers the labor and equipment required for the excavation and disposal at the area of stopway, RESA and turnaround pad as shown on the approved plans and in accordance with specifications and in conformity with the lines, grades and dimensions. Place of disposal of excavated materials shall be directed by the CAAP Project-in-Charge. Whereas, any miscellaneous cost shall be the full responsibility of the Contractor. This item covers a total volume excavation of 5,898.36 cubic meters and a total volume disposal of 4,877.17 cubic meters.

#### **P-152-2 EMBANKMENT**

This item covers the material, labor and equipment necessary for the embankment works at area of Stopway, RESA and Runway Strip Width as shown on the approved plans and in accordance with specifications and in conformity with the lines, grades and dimensions. The embankment materials shall be composed of the excavated suitable materials. This item covers the volume of 850.99 cubic meters.

#### **P-154-5.1 AGGREGATE SUBBASE COURSE**

This item covers the materials, labor and equipment necessary for furnishing, placing and compacting of aggregate subbase course for stopway 36 & 18 and RESA as shown on the approved plans in accordance with specifications and shall conform to the lines, grade and cross section. The aggregate subbase course shall be composed of Crushed Aggregate Subbase Course bonded with either soil or fine aggregates or both. This item covers the volume of 2,272.05 cubic meters excluding shrinkage factor.

#### **P-208-5.1 AGGREGATE BASE COURSE**

This covers the supply of materials, labor and equipment required for the provision of compacted aggregate base course for stopway and RESA in accordance with the design grade, dimensions, cross-sections as shown on the approved plans. It covers a total volume of 729.00cu.m. excluding shrinkage factor.

#### **P-501 PORTLAND CEMENT CONCRETE PAVEMENT**

This item covers the materials, labor and equipment necessary for the placement of rebars, steel forms and concrete paving (300mm thk.) on stopway 36 & 18 constructed on a prepared base course in accordance with the specifications and shall conform to the lines, grade, thickness and typical cross section shown on the approved plans. The rebars shall be painted and lightly coated with lubricants such as grease to prevent bonding with PCC. This item covers the area of 3,645 square meters.

## **C. ASPHALT OVERLAY OF STOPWAY**

### **P-603-5.1 EMULSIFIED ASPHALT TACK COAT**

This item includes the supply of labor, materials and equipment necessary in the application of emulsified tack coat (Cationic CRS-1) materials in preparation for the laying of asphalt on the runway, permanent transition and temporary transitions in accordance with specifications and shall conform to the lines, grade and cross section as shown on the approved plans.

The Contractor shall seal joints and cracks with oxidized bitumen 115-15 or an approved equivalent. Prior to sealing, the Contractor shall ensure that the bonding surface is free of contamination. Contractor shall provide submittals for all materials associated with this scope of work for approval prior to performance. Expenses for sealing of cracks shall be incorporated in the contractor's overhead cost and shall not be considered as pay item.

This item shall comply with the provisions of Asphalts Institute Specifications as stated on the approved plans. This item covers a total area of 8,066.00 square meters and a total weight of 4.90 M.T. including fixed-end transitions and temporary transitions.

### **P-403-8.1a ASPHALT MIX PAVEMENT SURFACE (BITUMINOUS HOT LAID)**

This item includes the supply of labor, materials and equipment necessary in laying of two (2) layers of conventional asphalt hot mix (50mm thk/layer or 100mm thk) including asphalt for temporary transitions on the prepared tack coat material in accordance with specifications and shall conform to the lines, grade and cross section shown on the approved plans. This item covers a total volume of 3,795.45 cubic meters and a total weight of 753.00 M.T.

### **P-101-5.1b PAVEMENT REMOVAL (ASPHALT TEMPORARY TRANSITIONS)**

This item includes the supply of labor, materials and equipment required in the removal and disposal of temporary asphalt transitions (stopway) as shown on the approved plans. It covers a total area of 1,080.00sq.m.

## **D. PROVISION OF TURNAROUND PAD**

### **P-154-5.1 AGGREGATE SUBBASE COURSE**

This item covers the supply of materials, labor and equipment necessary for furnishing, placing and compacting of aggregate subbase course in accordance with specifications and shall conform to the lines, grade and cross section shown on the approved plans. The aggregate subbase course shall be composed of Crushed Aggregate Subbase Course bonded with either soil of fine aggregates or both. This item covers the volume of 501.38 cubic meters excluding shrinkage factor.

### **P-208-5.1 AGGREGATE BASE COURSE**



This item covers the supply of materials, labor and equipment necessary for the provision of compacted aggregate base coarse for widening of runway and runway shoulder in accordance with the design grade, dimensions, cross-sections as shown on the approved plans. It covers a total volume of 668.50 cubic meters excluding shrinkage factor.

## **P-501 PORTLAND CEMENT CONCRETE PAVEMENT**

This item covers the materials, labor and equipment necessary for the placement of rebars, steel forms and concrete paving (300mm thk.) on turnaround pad, constructed on a prepared base course in accordance with the specifications and shall conform to the lines, grade, thickness and typical cross section shown on the approved plans. The rebars shall be painted and lightly coated with lubricants such as grease to prevent bonding with PCC.. This item covers the area of 3,342.50 square meters.

## **E. PROVISION OF FURNITURE FOR LANDSIDE BUILDING FACILITIES**

### **1.00 FURNITURE FOR CONTROL TOWER BUILDING**

This item covers the supply of materials for the provision of furniture for Control Tower Building with complete accessories as indicated on the approved plans and must be delivered on site. Materials must be approved by the Project In-Charge.

### **2.00 FURNITURE FOR STAFF HOUSE**

This item covers the supply of materials and labor to finish the provision of furniture for Staff House with complete accessories as indicated on the approved plans and must be delivered on site. Materials must be approved by the Project In-Charge.

### **3.00 FURNITURE FOR CFR BUILDING**

This item covers the supply of materials and labor to finish the provision of furniture for CFR Building with complete accessories as indicated on the approved plans and must be delivered on site. Materials must be approved by the Project In-Charge.

### **4.00 FURNITURE FOR PASSENGER TERMINAL BUILDING**

This item covers the supply of materials and labor to finish the provision of furniture for Passenger Terminal Building with complete accessories as indicated on the approved plans and must be delivered on site. Materials must be approved by the Project In-Charge.

### **5.00 FURNITURE FOR ADMINISTRATION BUILDING**

This item covers the supply of materials and labor to finish the provision of furniture for the Administration Building with complete accessories as indicated on the approved plans and must be delivered on site. Materials must be approved by the Project In-Charge.

All scopes of work for this item must be in accordance with the approved plans and specifications. Quality and types of materials must conform to specifications and must be approved by the project in-charge of the CAAP.

The contractor shall be responsible for all laboratory, material testing, environmental compliance certificate (ECC), safety permits and survey instruments necessary in the project implementation. All expenses shall be incorporated in the contractor's overhead cost and shall not be considered as pay item.

## **GENERAL PROVISIONS**

Provisions for staff house, service vehicles, laptops, printers, cameras, plotters, furniture and other materials, devices and equipment under Special Item or Temporary Facilities shall not include OCM & CP.

The contractor shall be responsible for providing safety perimeter fence or security fences, personal protective equipment (PPE) for staff and workers on site while construction is ongoing. Safety reports should be prepared regularly.

The contractor shall be responsible for all laboratory, material testing, environmental compliance certificate (ECC), safety permits and survey instruments necessary in the project implementation. All expenses shall be incorporated in the contractor's overhead cost and shall not be considered as pay item.

## **SPECIFICATIONS**

### **Section 105 Mobilization**

**105-1 Description.** This item shall consist of work and operations, but is not limited to, work and operations necessary for the movement of personnel, equipment, material and supplies to and from the project site for work on the project except as provided in the contract as separate pay items.

**105-1.1 Posted notices.** Prior to commencement of construction activities the Contractor must post the following documents in a prominent and accessible place where they may be easily viewed by all employees of the prime Contractor and by all employees of subcontractors engaged by the prime Contractor: Equal Employment Opportunity (EEO) Poster "Equal Employment Opportunity is the Law" in accordance with the Office of Federal Contract Compliance Programs Executive Order 11246, as amended; Davis Bacon Wage Poster (WH 1321) - DOL "Notice to All Employees" Poster; and Applicable Davis-Bacon Wage Rate Determination. These notices must remain posted until final acceptance of the work by the Owner.

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**The Owner may include additional posted notices as required by local and State law.**

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**105-2 Basis of measurement and payment.** Based upon the contract lump sum price for "Mobilization" partial payments will be allowed as follows:

- a. With first pay request, 25%.
- b. When 25% or more of the original contract is earned, an additional 25%.
- c. When 50% or more of the original contract is earned, an additional 40%.
- d. After Final Inspection, Staging area clean-up and delivery of all Project Closeout materials as required by 90-11, the final 10%.

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**Item Mobilization may be added to project at Owner's discretion. Rather than paying Contractor 100% of mobilization on first pay request, many Sponsors have found a payment schedule to be an effective way to reimburse Contractor for mobilization and demobilization. It is not required but it is recommended that the final 10% of this bid item not be paid until the Contractor has cleaned up the project staging area. The payment schedule can be altered, e.g., on small projects may not be appropriate to have more than two (2) payments.**

\*\*\*\*\*

**END OF SECTION 105**

**Item P-101 Preparation/Removal of Existing Pavements**

\*\*\*\*\*

**The Engineer may add or edit this item as necessary to address project requirements.**

**Coordinate modifications in accordance with Order 5300.1.**

\*\*\*\*\*

**DESCRIPTION**

**101-1** This item shall consist of preparation of existing pavement surfaces for overlay, surface treatments, removal of existing pavement, and other miscellaneous items. The work shall be accomplished in accordance with these specifications and the applicable plans.

## EQUIPMENT AND MATERIALS

**101-2** All equipment and materials shall be specified here and in the following paragraphs or approved by the Resident Project Representative (RPR). The equipment shall not cause damage to the pavement to remain in place.

## CONSTRUCTION

### **101-3.1 Removal of existing pavement.**

The Contractor's removal operation shall be controlled to not damage adjacent pavement structure, and base material, cables, utility ducts, pipelines, or drainage structures which are to remain under the pavement.

**a. Concrete pavement removal.** Full depth saw cuts shall be made perpendicular to the slab surface. The Contractor shall saw through the full depth of the slab including any dowels at the joint, removing the pavement and installing new dowels as shown on the plans and per the specifications. Where the perimeter of the removal limits is not located on the joint and there are no dowels present, the perimeter shall be saw cut the full depth of the pavement. The pavement inside the saw cut shall be removed by methods which will not cause distress in the pavement which is to remain in place. If the material is to be wasted on the airport site, it shall be reduced to a maximum size of [\_\_\_\_]. Concrete slabs that are damaged by under breaking shall be repaired or removed and replaced as directed by the RPR.

The edge of existing concrete pavement against which new pavement abuts shall be protected from damage at all times. Spall and underbreak repair shall be in accordance with the plans. Any underlaying material that is to remain in place, shall be recompacted and/or replaced as shown on the plans. Adjacent areas damaged during repair shall be repaired or replaced at the Contractor's expense.

\*\*\*\*\*

**Indicate repair details for spalls, underbreaks, and remaining underlaying materials on the plans.**

**Select the maximum size for materials wasted on the airport site.**

\*\*\*\*\*

**b. Asphalt pavement removal.** Asphalt pavement to be removed shall be cut to the full depth of the asphalt pavement around the perimeter of the area to be removed. If the material is to be [ ] wasted on the airport site [ ] incorporated into embankment [ ], it shall be [ ] broken to a maximum size of [\_\_\_\_] inches (mm). [ ] [ ] meet the following gradation: [\_\_\_\_].

\*\*\*\*\*

**The pavement shall be removed so the joint for each layer of pavement replacement is offset 1 foot (30 cm) from the joint in the preceding layer. This does not apply if the removed pavement is to be replaced with concrete or soil.**

**The Engineer shall designate the maximum size or insert the gradation required.**

\*\*\*\*\*

**c. Repair or removal of Base, Subbase, and/or Subgrade.** All failed material including surface, base course, subbase course, and subgrade shall be removed and repaired as shown on the plans or as directed by the RPR. Materials and methods of construction shall comply with the applicable sections of these specifications. Any damage caused by Contractor's removal process shall be repaired at the Contractor's expense.

**101-3.2 Preparation of joints and cracks prior to overlay/surface treatment.** Remove all vegetation and debris from cracks to a minimum depth of 1 inch (25 mm). If extensive vegetation exists, treat the specific area with a concentrated solution of a water-based herbicide approved by the RPR. Fill all cracks greater than 1/4 inch (6 mm) wide) with a crack sealant [ per ASTM D6690 ]. The crack sealant, preparation, and application shall be compatible with the surface treatment/overlay to be used. To minimize contamination of the asphalt with the crack sealant, underfill the crack sealant a minimum of 1/8 inch (3 mm), not to exceed 1/4 inch (6 mm). Any excess joint or crack sealer shall be removed from the pavement surface.

[ Wider cracks (over 1-1/2 inch wide (38 mm)), along with soft or sunken spots, indicate that the pavement or the pavement base should be repaired or replaced as stated below.

Cracks and joints may be filled with a mixture of emulsified asphalt and aggregate. The aggregate shall consist of limestone, volcanic ash, sand, or other material that will cure to form a hard substance. The combined gradation shall be as shown in the following table.

**Gradation**

<b>Sieve Size</b>	<b>Percent Passing</b>
No. 4 (4.75 mm)	100
No. 8 (2.36 mm)	90-100
No. 16 (1.18 mm)	65-90
No. 30 (600 µm)	40-60
No. 50 (300 µm)	25-42
No. 100 (150 µm)	15-30
No. 200 (75 µm)	10-20

Up to 3% cement can be added to accelerate the set time. The mixture shall not contain more than 20% natural sand without approval in writing from the RPR.

The proportions of asphalt emulsion and aggregate shall be determined in the field and may be varied to facilitate construction requirements. Normally, these proportions will be approximately one part asphalt emulsion to five parts aggregate by volume. The material shall be poured or placed into the joints or cracks and compacted to form a voidless mass. The joint or crack shall be filled to within +0 to -1/8 inches (+0 to -3 mm) of the surface. Any material spilled outside the width of the joint shall be removed from the pavement surface prior to constructing the overlay. Where concrete overlays are to be constructed, only the excess joint material on the pavement surface and vegetation in the joints need to be removed. ]

\*\*\*\*\*

**Then Engineer may also include the option for the emulsified asphalt and aggregate and allow the Contractor to use either option.**

**Guidance on crack repair materials and procedures is available in advisory circular (AC) 150/5380-6, Guidelines and Procedures for Maintenance of Airport Pavements.**

\*\*\*\*\*

**101-3.3 Removal of Foreign Substances/contaminates prior to [ overlay ] [ seal-coat ] [ remarking ].** Removal of foreign substances/contaminates from existing pavement that will affect the bond of the new treatment shall consist of removal of rubber, fuel spills, oil, crack sealer, at least 90% of paint, and other foreign substances from the surface of the pavement. Areas that require removal are designated on the plans and as directed by the RPR in the field during construction.

[ Chemicals ] [ high-pressure water ] [ heater scarifier (asphaltic concrete only) ] [ cold milling ] [ rotary grinding ] [ sandblasting ] may be used. If chemicals are used, they shall comply with the state's environmental protection regulations. Removal methods used shall not cause major damage to the pavement, or to any structure or utility within or adjacent to the work area. Major damage is defined as changing the properties of the pavement, removal of asphalt causing the aggregate to ravel, or removing pavement over 1/8 inch (3 mm) deep. If it is deemed by the RPR that damage to the existing pavement is caused by operational error, such as permitting the application method to dwell in one location for too long, the Contractor shall repair the damaged area without compensation and as directed by the RPR.

Removal of foreign substances shall not proceed until approved by the RPR. Water used for high-pressure water equipment shall be provided by the Contractor at the Contractor's expense. No material shall be deposited on the pavement shoulders. All wastes shall be disposed of in areas indicated in this specification or shown on the plans.

\*\*\*\*\*

**Designate the areas and methods for removal of foreign substances/contaminates on the project plans.**

**Select the method of paint and rubber removal and designate where the wastes will be disposed.**

**This specification shall not be used for removal of rubber deposits to improve skid resistance or obliterate traffic markings where a new overlay is not constructed.**

**Refer to AC 150/5320-12, Measurement, Construction, and Maintenance of Skid-Resistant Airport Pavement Surfaces, for guidance on removing contaminants.**

\*\*\*\*\*



#### **101-3.4 Concrete spall or failed asphaltic concrete pavement repair.**

**a. Repair of concrete spalls in areas to be overlaid with asphalt.** The Contractor shall repair all spalled concrete as shown on the plans or as directed by the RPR. The perimeter of the repair shall be saw cut a minimum of 2 inches (50 mm) outside the affected area and 2 inches (50 mm) deep. The deteriorated material shall be removed to a depth where the existing material is firm or cannot be easily removed with a geologist pick. The removed area shall be filled with asphalt mixture with aggregate sized appropriately for the depth of the patch. The material shall be compacted with equipment approved by the RPR until the material is dense and no movement or marks are visible. The material shall not be placed in lifts over 4 inches (100 mm) in depth. This method of repair applies only to pavement to be overlaid.

\*\*\*\*\*

**Asphalt mix pavement repair of concrete pavement should only be allowed to depths less than 1/3 of the PCC pavement thickness.**

\*\*\*\*\*

**b. Asphalt pavement repair.** The Contractor shall repair all spalled concrete as shown on the plans or as directed by the RPR. The failed areas shall be removed as specified in paragraph 101-3.1b. All failed material including surface, base course, subbase course, and subgrade shall be removed. Materials and methods of construction shall comply with the applicable sections of these specifications.

\*\*\*\*\*

**Designate the areas and methods for asphalt pavement repair on the project plans.**

\*\*\*\*\*

**101-3.5 Cold milling.** Milling shall be performed with a power-operated milling machine or grinder, capable of producing a uniform finished surface. The milling machine or grinder shall operate without tearing or gouging the underlying surface. The milling machine or grinder shall be equipped with grade and slope controls, and a positive means of dust control. All millings shall be removed and disposed [ off Airport property ] [ in areas designated on the plans ]. If the Contractor mills or grinds deeper or wider than the plans specify, the Contractor shall replace the material removed with new material at the Contractor's Expense.

\*\*\*\*\*

**The Engineer must consider the overall weight of milling equipment proposed by the Contractor to ensure there is no damage to the existing pavements and pavement remaining after milling due to the weight of the equipment.**

**Sufficient information must be obtained to determine available pavement structure and prior construction lift thickness. The limits of milling must consider leaving or taking sufficient material to minimize the potential for delamination or the entire layer may require removal or consider full depth reclamation in lieu of cold milling. Delamination**

**potential exist anytime cold milling depth is approximately equal to the layer placed.**

\*\*\*\*\*

**a. Patching.** The milling machine shall be capable of cutting a vertical edge without chipping or spalling the edges of the remaining pavement and it shall have a positive method of controlling the depth of cut. The RPR shall layout the area to be milled with a straightedge in increments of 1-foot (30 cm) widths. The area to be milled shall cover only the failed area. Any excessive area that is milled because the Contractor doesn't have the appropriate milling machine, or areas that are damaged because of his negligence, shall be repaired by the Contractor at the Contractor's Expense.

**b. Profiling, grade correction, or surface correction.** The milling machine shall have a minimum width of [ 7 ] feet ([ 2 ] m) and it shall be equipped with electronic grade control devices that will cut the surface to the grade specified. The tolerances shall be maintained within +0 inch and -1/4 inch (+0 mm and -6mm) of the specified grade. The machine must cut vertical edges and have a positive method of dust control. The machine must have the ability to [ windrow the millings or cuttings ] [ remove the millings or cuttings from the pavement and load them into a truck ]. All millings shall be removed and disposed of [ off the airport ] [ in areas designated on the plans ].

**c. Clean-up.** The Contractor shall sweep the milled surface daily and immediately after the milling until all residual materials are removed from the pavement surface. Prior to paving, the Contractor shall wet down the milled pavement and thoroughly sweep and/or blow the surface to remove loose residual material. Waste materials shall be collected and removed from the pavement surface and adjacent areas by sweeping or vacuuming. Waste materials shall be removed and disposed [ off Airport property ] [ in areas designated on the plans ].

**101-3.6. Preparation of asphalt pavement surfaces prior to surface treatment.** Existing asphalt pavements to be treated with a surface treatment shall be prepared as follows:

**a.** Patch asphalt pavement surfaces that have been softened by petroleum derivatives or have failed due to any other cause. Remove damaged pavement to the full depth of the damage and replace with new asphalt pavement similar to that of the existing pavement in accordance with paragraph 101-3.4b.

**b.** Repair joints and cracks in accordance with paragraph 101-3.2.

**c.** Remove oil or grease that has not penetrated the asphalt pavement by scrubbing with a detergent and washing thoroughly with clean water. After cleaning, treat these areas with an oil spot primer. [ ]

\*\*\*\*\*

**Provide primer requirements if required.**

\*\*\*\*\*

**d.** Clean pavement surface immediately prior to placing the surface treatment so that it is free of dust, dirt, grease, vegetation, oil or any type of objectionable surface film.

**101-3.7 Maintenance.** The Contractor shall perform all maintenance work necessary to keep the pavement in a satisfactory condition until the full section is complete and accepted by the RPR. The surface shall be kept clean and free from foreign material. The pavement

shall be properly drained at all times. If cleaning is necessary or if the pavement becomes disturbed, any work repairs necessary shall be performed at the Contractor's expense.

**101-3.8 Preparation of Joints in Rigid Pavement prior to resealing.** Prior to application of sealant material, clean and dry the joints of all scale, dirt, dust, old sealant, curing compound, moisture and other foreign matter. The Contractor shall demonstrate, in the presence of the RPR, that the method used cleans the joint and does not damage the joint.

**101-3.8.1 Removal of Existing Joint Sealant.** All existing joint sealants will be removed by plowing or use of hand tools. Any remaining sealant and or debris will be removed by use of wire brushes or other tools as necessary. Resaw joints removing no more than 1/16 inch (2 mm) from each joint face. Immediately after sawing, flush out joint with water and other tools as necessary to completely remove the slurry.

**101-3.8.2 Cleaning prior to sealing.** Immediately before sealing, joints shall be cleaned by removing any remaining laitance and other foreign material. Allow sufficient time to dry out joints prior to sealing. Joint surfaces will be surface-dry prior to installation of sealant.

**101-3.8.3 Joint sealant.** Joint material and installation will be in accordance with [ Item P-605 ] [ Item P-604 ].

**101-3.9 Preparation of Cracks in Flexible Pavement prior to sealing.** Prior to application of sealant material, clean and dry the joints of all scale, dirt, dust, old sealant, curing compound, moisture and other foreign matter. The Contractor shall demonstrate, in the presence of the RPR, that the method used cleans the cracks and does not damage the pavement.

**101-3.9.1 Preparation of Crack.** Widen crack with [ router ] [ random crack saw ] by removing a minimum of 1/16 inch (2 mm) from each side of crack. Immediately before sealing, cracks will be blown out with a hot air lance combined with oil and water-free compressed air.

**101-3.9.2 Removal of Existing Crack Sealant.** Existing sealants will be removed by [ routing ] [ random crack saw ]. Following [ routing ] [ sawing ] any remaining debris will be removed by use of a hot lance combined with oil and water-free compressed air.

**101-3.9.3 Crack Sealant.** Crack sealant material and installation will be in accordance with [ Item P-605 ].

**101-3.9.4 Removal of Pipe and other Buried Structures.**

**a. Removal of Existing Pipe Material.** [ Remove the types of pipe as indicated on the plans. The pipe material shall be legally disposed of off-site in a timely manner following removal. Trenches shall be backfilled with material equal to or better in quality than adjacent embankment. Trenches under paved areas must be compacted to [ 95% ] of ASTM [ D1557 ] [ D698 ]. [ Not used. ] ]

**b. Removal of Inlets/Manholes.** [ Where indicated on the plans or as directed by the RPR, inlets and/or manholes shall be removed and legally disposed of off-site in a timely fashion after removal. Excavations after removal shall be backfilled with material equal or better in quality than adjacent embankment. When under paved areas must be compacted to [ 95% ] of ASTM [ D1557 ] [ D698 ], when outside of paved areas must be compacted to [ 95% ] of ASTM D698. [ Not used. ] ]

**c. Removal of [ ].**

## METHOD OF MEASUREMENT

[ 101-4.1 Lump sum. No separate measurement for payment will be made. The work covered by this section shall be considered as a subsidiary obligation of the Contractor and covered under the other contract items. ]

[ 101-4.1 Pavement removal. The unit of measurement for pavement removal shall be the number of square yards (square meters) removed by the Contractor. Any pavement removed outside the limits of removal because the pavement was damaged by negligence on the part of the Contractor shall not be included in the measurement for payment. No direct measurement or payment shall be made for saw cutting. Saw cutting shall be incidental to pavement removal. Dowel bar installation shall be incidental to pavement removal.

101-4.2 Joint and crack repair. The unit of measurement for joint and crack repair shall be the linear foot (meter) of joint.

101-4.3 Removal of Foreign Substances/contaminates. The unit of measurement for foreign Substances/contaminates removal shall be the square foot (meter).

101-4.4 Spalled and failed asphalt pavement repair. The unit of measure for failed asphalt pavement repair shall be square foot (square meter).

101-4.5 Concrete Spall Repair. The unit of measure for concrete spall repair shall be the number of square feet (square meter). The location and average depth of the patch shall be determined and agreed upon by the RPR and the Contractor.

101-4.6 Cold milling. The unit of measure for cold milling shall be [ ] inches of milling per square yard (square meter). The location and average depth of the cold milling shall be as shown on the plans. If the initial cut does not correct the condition, the Contractor shall re-mill the area and will be paid for the total depth of milling. ]

**101-4.7 Removal of Pipe and other Buried Structures.** [ Not require. ] [ The unit of measurement for removal of pipe and other buried structures will be [ lump sum. No separate measurement for payment will be made. The work covered by this section shall be considered as a subsidiary obligation of the Contractor and covered under the other contract items. ] [ made at the contract unit price for each completed and accepted item. This price shall be full compensation for all labor, equipment, tools, and incidentals necessary to complete this item in accordance with paragraph 101-3.9.4. ] ]

\*\*\*\*\*

**The Engineer shall select the applicable items above for each project and delete the others. Items such as cold milling may be specified multiple times.**

\*\*\*\*\*

## BASIS OF PAYMENT

**101-5.1 Payment.** Payment shall be made at contract unit price for the unit of measurement as specified above. This price shall be full compensation for furnishing all materials and for all preparation, hauling, and placing of the material and for all labor, equipment, tools, and incidentals necessary to complete this item.

[ Item P 101-5.1	Pavement Removal - [ Lump sum ] [ per square yard (square meter) ]
Item P 101-5.2	Joint and Crack Repair – per linear foot (meter)
Item P 101-5.3	Removal of Foreign Substances/contaminates – per square foot (square meter)
Item P-101-5.4	Spalled and Failed Asphalt Pavement Repair - per square foot (square meter)
Item P-101-5.5	Concrete Spall Repair - per square foot (square meter)
Item P-101-5.6	Cold Milling – per square yard (square meter) ]
Item P-101-5.7	Removal of Pipe and other Buried Structures – [ Lump sum ] [ per each ] [ Not required. ]

\*\*\*\*\*

**The Engineer shall coordinate paragraphs 101-4.1 and 101-5.1 for each project.**

**For a lump sum contract, replace paragraph 101-5.1 Payment with the following:**

**101-5.1 Payment. The work covered by this section shall be considered as a subsidiary obligation of the Contractor covered under the other contract items. No separate payment will be made. This shall be full compensation for furnishing all materials and for all preparation, hauling, and placing of the material and for all labor, equipment, tools, and incidentals necessary to complete this item.**

\*\*\*\*\*

## REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

### Advisory Circulars (AC)

AC 150/5380-6	Guidelines and Procedures for Maintenance of Airport Pavements.
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### ASTM International (ASTM)

ASTM D6690	Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements
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END OF ITEM P-101

## Item P-620 Runway and Taxiway Marking

### 7.1. DESCRIPTION

**620-1.1** This item shall consist of the preparation and painting of numbers, markings, and stripes on the surface of runways, taxiways, and aprons, in accordance with these specifications and at the locations shown on the plans, or as directed by the Resident Project Representative (RPR). The terms “paint” and “marking material” as well as “painting” and “application of markings” are interchangeable throughout this specification.

### 7.2. MATERIALS

**620-2.1 Materials acceptance.** The Contractor shall furnish manufacturer’s certified test reports, for materials shipped to the project. The certified test reports shall include a statement that the materials meet the specification requirements. This certification along with a copy of the paint manufacturer’s surface preparation; marking materials, including adhesion, flow promoting and/or floatation additive; and application requirements must be submitted and approved by the Resident Project Representative (RPR) prior to the initial application of markings. The reports can be used for material acceptance or the RPR may perform verification testing. The reports shall not be interpreted as a basis for payment. The Contractor shall notify the RPR upon arrival of a shipment of materials to the site. All material shall arrive in sealed containers that are easily quantifiable for inspection by the RPR.

#### **620-2.2 Marking materials.**

**Table 1. Marking Materials**

• Paint <sup>1</sup>				• Glass Beads <sup>2</sup>	
Type	Color	Fed Std. 595 Number	Application Rate Maximum	Type	Application Rate Minimum
• *	• *	• *	• *	• *	• *
• *	• *	• *	• *	• *	• *

<sup>1</sup> See paragraph 620-2.2a

<sup>2</sup> See paragraph 620-2.2b

\*\*\*\*\*

**Make the appropriate selections for paint type, color, Fed Std 595 number, application rates, and glass bead type and application rates and inserted into Table 1. Asterisks denote insert points.**

\*\*\*\*\*

**a. Paint.** Paint shall be [ waterborne ] [ epoxy ] [ methacrylate ] [ solvent-base ] [ and ] [ preformed thermoplastic ] in accordance with the requirements of this paragraph. Paint colors shall comply with Federal Standard No. 595. [ ]

\*\*\*\*\*

**The Engineer must specify paint type (s), colors and glass beads to be used for the project and populate that information above in Table 1. When**

more than one paint type is specified, the plans should clearly indicate paint type, paint color and bead type required for each marking.

Select type of paint.

Types: Waterborne, Epoxy, Methacrylate, solvent-base, or preformed Thermoplastic

For waterborne or solvent based paints, specify Type I, II, or III:

- Type I intended for locations where slower tracking is not a problem.
- Type II intended for locations where faster curing is desirable.
- Type III intended for locations that require a thicker, more durable coating.

1. Select paint color(s) from the following Table:

<b>• Paint Color</b>	<b>• Fed Std. No 595 Color Number</b>
• White	• 37925
• Red	• 31136
• Yellow	• 33538 or 33655
• Black	• 37038
• Pink	• 1 part 31136 to 2 parts 37925
• Green	• 34108

Waterborne or solvent base black paint should be used to outline a border at least 6 inches (150 mm) wide around markings on all light-colored pavements. Preformed thermoplastic markings shall have a non-reflectorized black border integral to the marking.

**Select appropriate application rates for type of paint and bead selected:**

**Application Rates for Paint and Glass Beads for Table 1**

Paint		Glass Beads		
Type	Application Rate Maximum	Type I, Gradation A <sup>1</sup> Minimum	Type III Minimum	Type IV <sup>1</sup> Minimum
Waterborne Type I or II	115 ft <sup>2</sup> /gal (2.8 m <sup>2</sup> /l)	7 lb/gal (0.85 kg/l)	10 lb/gal (1.2 kg/l)	--
Waterborne Type III	90 ft <sup>2</sup> /gal (2.2 m <sup>2</sup> /l)	7 lb/gal (0.85 kg/l)	8 lb/gal (1.0 kg/l)	
Waterborne Type III	55 ft <sup>2</sup> /gal (1.4 m <sup>2</sup> /l)		6 lb/gal (.8 kg/l)	5 lb/gal (.7 kg/l)
Solvent Base	115 ft <sup>2</sup> /gal (2.8 m <sup>2</sup> /l)	7 lb/gal (0.85 kg/l)	10 lb/gal (1.2 kg/l)	--
Solvent Base	55 ft <sup>2</sup> /gal (2.2 m <sup>2</sup> /l)	--	--	5 lb/gal (.7 kg/l)
Epoxy	90 ft <sup>2</sup> /gal (2.2 m <sup>2</sup> /l)	15 lb/gal (1.8 kg/l)	20 lb/gal (2.4 kg/l)	16 lb/gal (1.9 kg/l)
Methacrylate	45 ft <sup>2</sup> /gal (1.1 m <sup>2</sup> /l)	15 lb/gal (1.8 kg/l)	20 lb/gal (2.4 kg/l)	16 lb/gal (1.9 kg/l)
Methacrylate Splatter-Profile	24ft <sup>2</sup> /gal. (0.6 m <sup>2</sup> /l)	8 lb/gal. (0.1 kg/l)	10 lb/gal. (1.2 kg/l)	10 lb/gal (1.2 kg/l)
Temporary Marking Waterborne Type I or II	230 ft <sup>2</sup> /gal (5.6 m <sup>2</sup> /l)	No beads	No beads	No beads

- <sup>1</sup>Glass bead application rate for Red and Pink paint shall be reduced by 2 lb/gal (0.24 kg/l) for Type I and Type IV beads.

The Engineer shall specify the time period in paragraph 620-3.5 in order to allow adequate curing of the pavement surface. The Engineer should contact the paint manufacturer to determine the wait period. A 24- to 30-day waiting period is recommended for all types of paint used for pavement marking. The final application should occur after the waiting period has passed. The final marking application must be at a rate equal to 100% of the full application rate with glass beads.

Markings may be required before paving operations are complete. The Engineer may wish to specify waterborne or solvent-based materials for temporary markings at 30% to 50% of the specified application rates. Glass beads will not adhere well at the low application rates for temporary markings.



**CAUTION:** Prior to reopening pavements at Part 139 airports verify that all markings comply with Part 139 requirements. Temporary markings not in compliance with AC 150/5340-1 will require a NOTAM regarding any non-standard marking be issued. For example, temporary markings without beads.

When painting Porous Friction Course, the paint should be applied to the pavement in two coats from opposite directions. The first coat should be applied at a rate equal to 50% of the full application rate with no glass beads. The second coat should be applied from the opposite direction at a rate equal to 100% of the full application rate with glass beads.

Preformed thermoplastic pavement markings shall yield at least 225 mcd/m<sup>2</sup>/lux on white markings at installation and at least 100 mcd/m<sup>2</sup>/lux on yellow markings at installation.

Retroreflectivity shall be measured by a portable retroreflectometer according to ASTM E1710 and the practices in ASTM D7585 shall be followed for taking retroreflectivity readings with a portable retroreflectometer and computing measurement averages. A vehicle-mounted retroreflectometer may also be used.

\*\*\*\*\*

[ **Waterborne.** Paint shall meet the requirements of Federal Specification TT-P-1952F, [ Type I ] [ Type II ] [ Type III ]. The non-volatile portion of the vehicle for all paint types shall be composed of a 100% acrylic polymer as determined by infrared spectral analysis. [ The acrylic resin used for Type III shall be 100% cross linking acrylic as evidenced by infrared peaks at wavelengths 1568, 1624, and 1672 cm<sup>-1</sup> with intensities equal to those produced by an acrylic resin known to be 100% cross linking. ]

[ **Epoxy.** Paint shall be a two component, minimum 99% solids type system conforming to the following:

(1) **Pigments.** Component A. Percent by weight.

(a) **White:**

- Titanium Dioxide, ASTM D476, type II shall be 18% minimum (16.5% minimum at 100% purity).

(b) **Yellow and Colors:**

- Titanium Dioxide, ASTM D476, type II shall be 14 to 17%.
- Epoxy resin shall be 75 to 79%.
- Organic yellow, other colors, and tinting as required to meet color standard.

(2) **Epoxy content.** Component A. The weight per epoxy equivalent, when tested in accordance with ASTM D1652 shall be the manufacturer's target  $\pm 50$ .

(3) **Amine number.** Component B. When tested in accordance with ASTM D2074 shall be the manufacturer's target  $\pm 50$ .

**(4) Prohibited materials.** The manufacturer shall certify that the product does not contain mercury, lead, hexavalent chromium, halogenated solvents, nor any carcinogen as defined in 29 CFR 1910.1200 in amounts exceeding permissible limits as specified in relevant federal regulations.

**(5) Daylight directional reflectance.**

**(a) White:** The daylight directional reflectance of the white paint shall not be less than 75% (relative to magnesium oxide), when tested in accordance with ASTM E2302.

**(b) Yellow:** The daylight directional reflectance of the yellow paint shall not be less than 55% (relative to magnesium oxide), when tested in accordance with ASTM E2302. The x and y values shall be consistent with the federal Hegman yellow color standard chart for traffic yellow standard 33538, or shall be consistent with the tolerance listed below:

x .462	x .470	x .479	x .501
y .438	y .455	y .428	y .452

**(6) Accelerated weathering.**

**(a) Sample preparation.** Apply the paint at a wet film thickness of 0.013-inch (0.33 mm) to four 3 × 6-inch (8 × 15 cm) aluminum panels prepared as described in ASTM E2302. Air dry the sample 48 hours under standard conditions.

**(b) Testing conditions.** Test in accordance with ASTM G154 using both Ultra Violet (UV-B) Light and condensate exposure, 72 hours total, alternating four (4) hour UV exposure at 140°F (60°C), and four (4) hours condensate exposure at 104°F (40°C).

**(c) Evaluation.** Remove the samples and condition for 24 hours under standard conditions. Determine the directional reflectance and color match using the procedures in paragraph 5 above. Evaluate for conformance with the color requirements.

**(7) Volatile organic content.** Determine the volatile organic content in accordance with 40 CFR Part 60 Appendix A, Method 24.

**(8) Dry opacity.** Use ASTM E2302. The wet film thickness shall be 0.015 inch (0.38 mm). The minimum opacity for white and colors shall be 0.92.

**(9) Abrasion resistance.** Subject the panels prepared in paragraph 620-2.2b(6) to the abrasion test in accordance with ASTM D968, Method A, except that the inside diameter of the metal guide tube shall be from 0.747 to 0.750 inch (18.97 to 19.05 mm). Five liters (17.5 lb (7.94 kg)) of unused sand shall be used for each test panel. The test shall be run on two test panels Both baked and weathered paint films shall require not less than 150 liters (525 lbs (239 kg)) of sand for the removal of the paint films.

**(10) Hardness, shore.** Hardness shall be at least 80 when tested in accordance with ASTM D2240. ]

[ **Methacrylate.** Paint shall be a two component, minimum 99% solids-type system conforming to the following:

**(1) Pigments.** Component A. Percent by weight.

**(a) White:**

- Titanium Dioxide, ASTM D476, type II shall be 10% minimum.
- Methacrylate resin shall be 18% minimum.

**(b) Yellow and Colors:**

- Titanium Dioxide, ASTM D476, type II shall be 1% minimum.

Organic yellow, other colors, and tinting as required to meet color standard.

- Methacrylate resin shall be 18% minimum.

**(2) Prohibited materials.** The manufacturer shall certify that the product does not contain mercury, lead, hexavalent chromium, halogenated solvents, nor any carcinogen as defined in 29 CFR 1910.1200 in amounts exceeding permissible limits as specified in relevant federal regulations.

**(3) Daylight directional reflectance:**

**(a) White:** The daylight directional reflectance of the white paint shall not be less than 80% (relative to magnesium oxide), when tested in accordance with ASTM E2302.

**(b) Yellow:** The daylight directional reflectance of the yellow paint shall not be less than 55% (relative to magnesium oxide), when tested in accordance with ASTM E2302. The x and y values shall be consistent with the federal Hegman yellow color standard chart for traffic yellow standard 33538, or shall be consistent with the tolerance listed below:

x .462	x .470	x .479	x .501
y .438	y .455	y .428	y .452

**(4) Accelerated weathering.**

**(a) Sample preparation.** Apply the paint at a wet film thickness of 0.013-inch (0.33 mm) to four 3 × 6-inch (8 × 15 cm) aluminum panels prepared as described in ASTM E2302. Air dry the sample 48 hours under standard conditions.

**(b) Testing conditions.** Test in accordance with ASTM G154 using both Ultra Violet (UV-B) Light and condensate exposure, 72 hours total, alternating four (4) hour UV exposure at 140°F (60°C), and four (4) hours condensate exposure at 104°F (40°C).

**(c) Evaluation.** Remove the samples and condition for 24 hours under standard conditions. Determine the directional reflectance and color match using the procedures in paragraph 3 above. Evaluate for conformance with the color requirements.

**(5) Volatile organic content.** Determine the volatile organic content in accordance with 40 CFR Part 60 Appendix A, Method 24.

**(6) Dry opacity.** Use ASTM E2302. The wet film thickness shall be 0.015 inch (0.38 mm). The minimum opacity for white and colors shall be 0.92.

**(7) Abrasion resistance.** Subject the panels prepared in paragraph 620-2.2c(4) to the abrasion test in accordance with ASTM D968, Method A, except that the inside diameter of the metal guide tube shall be from 0.747 to 0.750 inch (18.97 to 19.05 mm). Five liters (17.5 lb (7.94 kg)) of unused sand shall be used for each test panel. The test shall be run on two test panels Both baked and weathered paint films shall require not less than 150 liters (525 lbs (239 kg)) of sand for the removal of the paint films.

**(8) Hardness, shore.** Hardness shall be at least 60 when tested in accordance with ASTM D2240.

**(9) Additional requirements for methacrylate splatter profiled pavement marking.** Pavement markings of this type shall comply with all above requirements for methacrylate paint, except as noted below:

**(a)** The thickness of the marking will be irregular ranging from 0.000 to 0.250 inches (0.00 to 6.4 mm), applied in a splatter pattern which comprises a minimum of 80% of the visible line (when traveling at 5 mph the line appears to be solid.).

**(b)** The hardness shall be 48 Shore D minimum. ]

[ **Solvent-Base.** Paint shall meet the requirements of Commercial Item Description [ A-A-2886B Type I, Type II, and Type III ]. ]

[ **Preformed Thermoplastic Airport Pavement Markings.** Markings must be composed of ester modified resins in conjunction with aggregates, pigments, and binders that have been factory produced as a finished product. The material must be impervious to degradation by aviation fuels, motor fuels, and lubricants.

(1) The markings must be able to be applied in temperatures as low as 35°F without any special storage, preheating, or treatment of the material before application.

(a) The markings must be supplied with an integral, non-reflectorized black border.

**(2) Graded glass beads.**

(a) The material must contain a minimum of 30% intermixed graded glass beads by weight. The intermixed beads shall conform to Federal Specification TT-B-1325D, Type I, gradation A and Federal Specification TT-B-1325D, Type IV.

(b) The material must have factory applied coated surface beads in addition to the intermixed beads at a rate of one (1) lb (0.45 kg) ( $\pm 10\%$ ) per 10 square feet (1 sq m). These factory-applied coated surface beads shall have a minimum of 90% true spheres, minimum refractive index of 1.50, and meet the following gradation.

**Preformed Thermoplastic Bead Gradation**

Size Gradation		Retained, %	Passing, %
U.S. Mesh	$\mu\text{m}$		
12	1700	0 - 2	98 - 100
14	1400	0 - 3.5	96.5 - 100
16	1180	2 - 25	75 - 98
18	1000	28 - 63	37 - 72
20	850	63 - 72	28 - 37
30	600	67 - 77	23 - 33
50	300	89 - 95	5 - 11
80	200	97 - 100	0 - 3

(3) **Heating indicators.** The material manufacturer shall provide a method to indicate that the material has achieved satisfactory adhesion and proper bead embedment during application and that the installation procedures have been followed.

**(4) Pigments.** Percent by weight.

(a) White:

- Titanium Dioxide, ASTM D476, type II shall be 10% minimum.

(b) Yellow and Colors:

- Titanium Dioxide, ASTM D476, type II shall be 1% minimum.
- Organic yellow, other colors, and tinting as required to meet color standard.

**(5) Prohibited materials.** The manufacturer shall certify that the product does not contain mercury, lead, hexavalent chromium, halogenated solvents, nor any carcinogen as defined in 29 CFR 1910.1200 in amounts exceeding permissible limits as specified in relevant federal regulations.

**(6) Daylight directional reflectance.**

**(a) White:** The daylight directional reflectance of the white paint shall not be less than 75% (relative to magnesium oxide), when tested in accordance with ASTM E2302.

**(b) Yellow:** The daylight directional reflectance of the yellow paint shall not be less than 45% (relative to magnesium oxide), when tested in accordance with ASTM E2302. The x and y values shall be consistent with the federal Hegman yellow color standard chart for traffic yellow standard 33538, or shall be consistent with the tolerance listed below:

x .462	x .470	x .479	x .501
y .438	y .455	y .428	y .452

**(7) Skid resistance.** The surface, with properly applied and embedded surface beads, must provide a minimum resistance value of 45 BPN when tested according to ASTM E303.

**(8) Thickness.** The material must be supplied at a nominal thickness of 65 mil (1.7 mm).

**(9) Environmental resistance.** The material must be resistant to deterioration due to exposure to sunlight, water, salt, or adverse weather conditions and impervious to aviation fuels, gasoline, and oil.

**(10) Retroreflectivity.** The material, when applied in accordance with manufacturer's guidelines, must demonstrate a uniform level of nighttime retroreflection when tested in accordance to ASTM E1710.

**(11) Packaging.** Packaging shall protect the material from environmental conditions until installation.

**(12) Preformed thermoplastic airport pavement marking requirements.**

**(a)** The markings must be a resilient thermoplastic product with uniformly distributed glass beads throughout the entire cross-sectional area. The markings must be resistant to the detrimental effects of aviation fuels, motor fuels and lubricants, hydraulic fluids, deicers, anti-icers, protective coatings, etc. Lines, legends, and symbols must be capable of being affixed to asphalt and/or Portland cement concrete pavements by the use of a large radiant heater. Colors shall be available as required.

**(b)** The markings must be capable of conforming to pavement contours, breaks, and faults through the action of airport traffic at normal pavement temperatures. The markings must be capable of fully conforming to grooved pavements, including pavement grooving per advisory circular (AC) 150/5320-12, current version. The markings shall have resealing characteristics, such that it is capable of fusing with itself and previously applied thermoplastics when heated with a heat source per manufacturer's recommendation.

**(c)** Multicolored markings must consist of interconnected individual pieces of preformed thermoplastic pavement marking material, which through a variety of colors and patterns, make up the desired design. The individual pieces in each large marking segment (typically more than 20 feet (6 m) long) must be factory assembled with a compatible material and interconnected so that in the field it is not necessary to assemble the individual pieces within a marking segment. Obtaining multicolored effect by overlaying materials of different colors is not acceptable due to resulting inconsistent marking thickness and inconsistent application temperature in the marking/substrate interface.

(d) The marking material must set up rapidly, permitting the access route to be re-opened to traffic after application.

(e) The marking material shall have an integral color throughout the thickness of the marking material. ]

]

\*\*\*\*\*

**Thermoplastic airport markings will be subject to an Engineering life-cycle cost analysis prior to inclusion in specifications.**

\*\*\*\*\*

**b. Reflective media.** Glass beads for white and yellow paint shall meet the requirements for Federal Specification TT-B-1325D [ Type I, Gradation A ] [ Type III ] [ Type IV, Gradation A ].

Glass beads for red and pink paint shall meet the requirements for [ Type I, Gradation A ] [ Type IV, Gradation A ].

Glass beads shall be treated with all compatible coupling agents recommended by the manufacturers of the paint and reflective media to ensure adhesion and embedment.

Glass beads shall not be used in black and green paint.

Type III glass beads shall not be used in red and pink paint.

\*\*\*\*\*

**The Engineer should insert all that will be used in the project. When more than one bead type is specified, the plans should indicate the bead type for each marking.**

**Federal Specification TT-B-1325D, Type I, gradation A shall be used when remarking on a frequent basis (at least every six months), and typically yield 300 mcd/m<sup>2</sup>/lux on white markings at installation and 175 mcd/m<sup>2</sup>/lux on yellow markings at installation.**

**Federal Specification TT-B-1325D, Type III. Initial readings typically yield 600 mcd/m<sup>2</sup>/lux on white markings and 300 mcd/m<sup>2</sup>/lux on yellow markings at installation and once in service, the reflectance values are approximately the same as Type I beads.**

**Federal Specification TT-B-1325D, Type IV, gradation A shall be used with TT-P-1952F, Type III paint. The glass beads are larger than either Type I or Type III, thus requiring more of the coating material to properly anchor. The Engineer should consult with the paint and bead manufacturer on the use of adhesion, flow promoting, and/or flotation additives.**

**Preformed thermoplastic pavement markings should yield at least 225 mcd/m<sup>2</sup>/lux on white markings at installation and at least 100 mcd/m<sup>2</sup>/lux on yellow markings at installation.**

\*\*\*\*\*

### 7.3. CONSTRUCTION METHODS

**620-3.1 Weather limitations.** Painting shall only be performed when the surface is dry, and the ambient temperature and the pavement surface temperature meet the manufacturer's recommendations in accordance with paragraph 620-2.1. Painting operations shall be discontinued when the ambient or surface temperatures does not meet the manufacturer's recommendations. Markings shall not be applied when the wind speed exceeds 10 mph unless windscreens are used to shroud the material guns. Markings shall not be applied when weather conditions are forecasts to not be within the manufacturers' recommendations for application and dry time.

**620-3.2 Equipment.** Equipment shall include the apparatus necessary to properly clean the existing surface, a mechanical marking machine, a bead dispensing machine, and such auxiliary hand-painting equipment as may be necessary to satisfactorily complete the job.

The mechanical marker shall be an atomizing spray-type or airless type marking machine with automatic glass bead dispensers suitable for application of traffic paint. It shall produce an even and uniform film thickness and appearance of both paint and glass beads at the required coverage and shall apply markings of uniform cross-sections and clear-cut edges without running or spattering and without over spray. The marking equipment for both paint and beads shall be calibrated daily.

**620-3.3 Preparation of surfaces.** Immediately before application of the paint, the surface shall be dry and free from dirt, grease, oil, laitance, or other contaminants that would reduce the bond between the paint and the pavement. Use of any chemicals or impact abrasives during surface preparation shall be approved in advance by the RPR. After the cleaning operations, sweeping, blowing, or rinsing with pressurized water shall be performed to ensure the surface is clean and free of grit or other debris left from the cleaning process.

**a. Preparation of new pavement surfaces.** The area to be painted shall be cleaned by broom, blower, water blasting, or by other methods approved by the RPR to remove all contaminants, including PCC curing compounds, minimizing damage to the pavement surface.

**b. Preparation of pavement to remove existing markings.** Existing pavement markings shall be removed by rotary grinding, water blasting, or by other methods approved by the RPR minimizing damage to the pavement surface. The removal area may need to be larger than the area of the markings to eliminate ghost markings. After removal of markings on asphalt pavements, apply a fog seal or seal coat to 'block out' the removal area to eliminate 'ghost' markings.

**c. Preparation of pavement markings prior to remarking.** Prior to remarking existing markings, loose existing markings must be removed minimizing damage to the pavement surface, with a method approved by the RPR. After removal, the surface shall be cleaned of all residue or debris.

Prior to the application of markings, the Contractor shall certify in writing that the surface is dry and free from dirt, grease, oil, laitance, or other foreign material that would prevent the bond of the paint to the pavement or existing markings. This certification along with a copy of the paint manufactures application and surface preparation requirements must be submitted to the RPR prior to the initial application of markings.

\*\*\*\*\*

**Loose markings should always be removed prior to remarking, whether or not existing markings need to be removed is up to the Engineer and the Airport Operator. The type of removal method used depends upon whether you need to remove loose markings or all existing markings.**

\*\*\*\*\*

**620-3.4 Layout of markings.** The proposed markings shall be laid out in advance of the paint application. The locations of markings to receive glass beads shall be shown on the plans. [ The locations of markings to receive silica sand shall be shown on the plans. ]

\*\*\*\*\*

**Glass beads improve conspicuity and the friction characteristics of markings. At a minimum, the Engineer shall indicate the locations to receive glass beads per AC 150/5340-1, Standards for Airport Markings.**

\*\*\*\*\*

**620-3.5 Application.** A period of [ ] days shall elapse between placement of surface course or seal coat and application of the permanent paint markings. Paint shall be applied at the locations and to the dimensions and spacing shown on the plans. Paint shall not be applied until the layout and condition of the surface has been approved by the RPR.

\*\*\*\*\*

**Select timeframe between placement of surface course or seal coat and application of the paint based on type of surface course or seal coat in the project and environment at the project location. The typical timeframe is 30-days for volatiles and moisture vapor to dissipate.**

\*\*\*\*\*

The edges of the markings shall not vary from a straight line more than 1/2 inch (12 mm) in 50 feet (15 m), and marking dimensions and spacing shall be within the following tolerances:

#### **Marking Dimensions and Spacing Tolerance**

<b>Dimension and Spacing</b>	<b>Tolerance</b>
36 inch (910 mm) or less	±1/2 inch (12 mm)
greater than 36 inch to 6 feet (910 mm to 1.85 m)	±1 inch (25 mm)
greater than 6 feet to 60 feet (1.85 m to 18.3 m)	±2 inch (50 mm)
greater than 60 feet (18.3 m)	±3 inch (76 mm)

The paint shall be mixed in accordance with the manufacturer's instructions and applied to the pavement with a marking machine at the rate shown in Table 1. The addition of thinner will not be permitted.



Glass beads shall be distributed upon the marked areas at the locations shown on the plans to receive glass beads immediately after application of the paint. A dispenser shall be furnished that is properly designed for attachment to the marking machine and suitable for dispensing glass beads. Glass beads shall be applied at the rate shown in Table 1. Glass beads shall not be applied to black paint or green paint. Glass beads shall adhere to the cured paint or all marking operations shall cease until corrections are made. Different bead types shall not be mixed. Regular monitoring of glass bead embedment and distribution should be performed.

### **620-3.6 Application--preformed thermoplastic airport pavement markings.**

[ Preformed thermoplastic pavement markings not used. ]

[ To ensure minimum single-pass application time and optimum bond in the marking/substrate interface, the materials must be applied using a variable speed self-propelled mobile heater with an effective heating width of no less than 16 feet (5 m) and a free span between supporting wheels of no less than 18 feet (5.5 m). The heater must emit thermal radiation to the marking material in such a manner that the difference in temperature of 2 inches (50 mm) wide linear segments in the direction of heater travel must be within 5% of the overall average temperature of the heated thermoplastic material as it exits the heater. The material must be able to be applied at ambient and pavement temperatures down to 35°F (2°C) without any preheating of the pavement to a specific temperature. The material must be able to be applied without the use of a thermometer. The pavement shall be clean, dry, and free of debris. A non-volatile organic content (non-VOC) sealer with a maximum applied viscosity of 250 centiPoise must be applied to the pavement shortly before the markings are applied. The supplier must enclose application instructions with each box/package. ]

\*\*\*\*\*

**The Engineer will make the appropriate selection for thermoplastic markings.**

\*\*\*\*\*

**620-3.7 Control strip.** Prior to the full application of airfield markings, the Contractor shall prepare a control strip in the presence of the RPR. The Contractor shall demonstrate the surface preparation method and all striping equipment to be used on the project. The marking equipment must achieve the prescribed application rate of paint and population of glass beads (per Table 1) that are properly embedded and evenly distributed across the full width of the marking. Prior to acceptance of the control strip, markings must be evaluated during darkness to ensure a uniform appearance.

**620-3.8 Retro-reflectance.** [Reflectance shall be measured with a portable retro-reflectometer meeting ASTM E1710 (or equivalent). A total of 6 readings shall be taken over a 6 square foot area with 3 readings taken from each direction. The average shall be equal to or above the minimum levels of all readings which are within 30% of each other.

## Minimum Retro-Reflectance Values

Material	Retro-reflectance mcd/m <sup>2</sup> /lux		
	White	Yellow	Red
Initial Type I	300	175	35
Initial Type III	600	300	35
Initial Thermoplastic	225	100	35
All materials, remark when less than <sup>1</sup>	100	75	10

<sup>1</sup> 'Prior to remarking determine if removal of contaminants on markings will restore retro-reflectance][not used]

\*\*\*\*\*

**Include tests of retro-reflectance at Part 139 airports, recommend testing at least 2 times per day. Enter Not Used at all other locations.**

\*\*\*\*\*

**620-3.9 Protection and cleanup.** After application of the markings, all markings shall be protected from damage until dry. All surfaces shall be protected from excess moisture and/or rain and from disfiguration by spatter, splashes, spillage, or drippings. The Contractor shall remove from the work area all debris, waste, loose reflective media, and by-products generated by the surface preparation and application operations to the satisfaction of the RPR. The Contractor shall dispose of these wastes in strict compliance with all applicable state, local, and federal environmental statutes and regulations.

## 7.4. METHOD OF MEASUREMENT

**620-4.1a** The quantity of surface preparation shall be measured by [ the number of square feet (square meters) for each type of surface preparation specified in paragraph 620-3.3 ] [ lump sum ].

**620-4.1b** The quantity of markings shall be paid for shall be measured [ by the number of square feet (square meters) of painting ] [ by lump sum ].

**620-4.1c** The quantity of reflective media shall be paid for by [ the number of pounds (km) ] [ lump sum ] of reflective media.

**620-4.1d** [ The quantity of temporary markings to be paid for shall be [ the number of square feet (square meters) of painting ] [ lump sum price ] performed in accordance with the specifications and accepted by the RPR. Temporary marking includes surface preparation,

application and complete removal of the temporary marking. ] [ Temporary markings not required. ]

[ **620-4.1e** The quantity of preformed markings to be paid for shall be [ the number of square feet (square meters) of preformed markings ] [ lump sum ] ].

\*\*\*\*\*

**Separate pay items for surface preparation, marking, and reflective media is recommended, however on small jobs, lump sum pay items is acceptable.**

\*\*\*\*\*

## **7.5. BASIS OF PAYMENT**

**620-5.1** This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete the item complete in place and accepted by the RPR in accordance with these specifications.

**620-5.1a** Payment for surface preparation shall be made at the contract price for [ the number of square feet (square meters) for each type of surface preparation specified in paragraph 620-3.3 ] [ lump sum ].

**620-5.2b** Payment for markings shall be made at the contract price for [ the number of square feet (square meters) of painting and the number of pounds (km) of reflective media ] [ by the number of square feet (square meters) of painting ] [ by lump sum ].

**620-5.3c** Payment for reflective media shall be made at the contract unit price for [ the number of pounds (km) of reflective media ] [ lump sum ].

**620-5.4d** Payment for temporary markings shall be made at the contract price for [ the number of square feet (square meters) of painting ] [ lump sum price ]. This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete the item. [ Temporary markings are not required. ]

[ **620-5.5e** Payment for preformed markings shall be made at the contract price for [ the number of square feet (square meters) of preformed markings ] [ lump sum price ]. ]

Payment will be made under:

Item P-620-5.1a Surface Preparation [ per square foot (square meter) ] [ lump sum ]

Item P-620-5.2b Marking [ per square foot (square meter) ] [ lump sum ]

Item P-620-5.3c Reflective Media [ per pound (km) ] [ lump sum ]

Item P-620-5.4d Temporary runway and taxiway marking [ per square foot ] [ per square meter ] [ lump sum ].

[ Item 620-5.5e Preformed markings per [ the number of square feet (square meters) of preformed markings ] [ lump sum price ]. ]

## ***Section VII. Drawings***

*[Insert here a list of Drawings. The actual Drawings, including site plans, should be attached to this section, or annexed in a separate folder.]*

## ***Section VIII. Bill of Quantities***

***Bill of Quantities, Summary of Bid Proposal & Detailed Estimate should be submitted together with the Annex “C” Form 4 to 7.***

***Non-attachment of Annex “C” Form 1 to 7 shall be automatically disqualified.***

{ATTACH COMPANY LETTERHEAD/LOGO}

**BILL OF QUANTITIES**

PROJECT: CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT

Completion of Widening of Runway, Provision of Runway End Safety Area (RESA), Stopway and Strip Width Correction, Asphalt Overlay of Stopway and Provision of Furniture at Landside Building Facilities

LOCATION: Funda Dalipe, San Jose de Buenavista, Antique

ITEM NO.	DESCRIPTION OF WORK	QUANTITY	UNIT	TOTAL COST	UNIT COST
SPL-1	MOBILIZATION & DEMOBILIZATION	1.00	lot		
	Pesos _____ Amount in Words _____ and _____ centavos				
SPL-2	CONSTRUCTION SAFETY AND HEALTH PROGRAM	1.00	lot		
	Pesos _____ Amount in Words _____ and _____ centavos				
SPL-3	PROVISION OF LIVING QUARTERS FOR THE ENGINEER (RENTAL BASIS)	6.00	mos.		
	Pesos _____ Amount in Words _____ and _____ centavos				
SPL-4	PROVISION OF ONE (1) UNIT MPV SERVICE VEHICLE FOR THE ENGINEER	1.00	unit		
	Pesos _____ Amount in Words _____ and _____ centavos				
SPL-5	PROJECT BILLBOARD/SIGN BOARD	1.00	ea.		
	Pesos _____ Amount in Words _____ and _____ centavos				

<b>A</b>	<b>COMPLETION OF WIDENING OF RUNWAY</b>				
P-154-5.1	AGGREGATE SUBBASE COURSE	2,338.98	cu.m.		
	Pesos _____ Amount in Words _____ and _____ _____ centavos				
P-208-5.1	AGGREGATE BASE COURSE	1,753.57	cu.m.		
	Pesos _____ Amount in Words _____ and _____ _____ centavos				
P-501	PORTLAND CEMENT CONCRETE PAVEMENT	8,767.86	sq.m.		
	Pesos _____ Amount in Words _____ and _____ _____ centavos				
<b>B</b>	<b>PROVISION OF STOPWAY, RESA &amp; STRIP WIDTH CORRECTION</b>				
P-152-1	EXCAVATION & DISPOSAL	5,898.36	cu.m		
	Pesos _____ Amount in Words _____ and _____ _____ centavos				
P-152-2	EMBANKMENT	850.99	cu.m		
	Pesos _____ Amount in Words _____ and _____ _____ centavos				

P-154-5.1	AGGREGATE SUBBASE COURSE	2,272.05	cu.m.		
	Pesos _____ Amount in Words _____ and _____ _____ centavos				
P-208-5.1	AGGREGATE BASE COURSE	729.00	cu.m.		
	Pesos _____ Amount in Words _____ and _____ _____ centavos				
P-501	PORTLAND CEMENT CONCRETE PAVEMENT	3,645.00	sq.m.		
	Pesos _____ Amount in Words _____ and _____ _____ centavos				
<b>C</b>	<b>ASPHALT OVERLAY OF STOPWAY</b>				
P-603-5.1	EMULSIFIED ASPHALT TACK COAT	5.00	M.T.		
	Pesos _____ Amount in Words _____ and _____ _____ centavos				
P-403-8.1a	ASPHALT MIX PAVEMENT SURFACE (BITUMINOUS HOT LAID)	753.00	M.T.		
	Pesos _____ Amount in Words _____ and _____ _____ centavos				
P-101-5.1b	PAVEMENT REMOVAL	1080.00	sq.m.		
	Pesos _____ Amount in Words _____ and _____ _____ centavos				



<b>D</b>	<b>PROVISION OF TURNAROUND PAD</b>				
P-154-5.1	AGGREGATE SUBBASE COURSE	501.38	cu.m.		
	Pesos _____ Amount in Words _____ and _____ centavos				
P-208-5.1	AGGREGATE BASE COURSE	668.50	cu.m.		
	Pesos _____ Amount in Words _____ and _____ centavos				
P-501	PORTLAND CEMENT CONCRETE PAVEMENT	3342.50	sq.m.		
	Pesos _____ Amount in Words _____ and _____ centavos				
<b>E</b>	<b>PROVISION OF FURNITURE FOR LANDSIDE BUILDING FACILITIES</b>				
1.00	Furniture for Control Tower Building	1.00	lot		
	Pesos _____ Amount in Words _____ and _____ centavos				
2.00	Furniture for Staff House	1.00	lot		
	Pesos _____ Amount in Words _____ and _____ centavos				
3.00	Furniture for CFR Building	1.00	lot		
	Pesos _____ Amount in Words _____ and _____ centavos				

4.00	Furniture for Passenger Terminal Building	1.00	lot		
	Pesos _____ Amount in Words _____ and _____ centavos				
5.00	Furniture for Administration Building	1.00	lot		
	Pesos _____ Amount in Words _____ and _____ centavos				
TOTAL AMOUNT					

TOTAL BID AMOUNT (Php)

\_\_\_\_\_

TOTAL BID AMOUNT IN WORDS

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signature: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Position: \_\_\_\_\_  
Name Company: \_\_\_\_\_  
Date: \_\_\_\_\_

{ATTACH COMPANY LETTERHEAD/LOGO}

SUMMARY OF BID PROPOSAL

PROJECT: CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT  
Completion of Widening of Runway, Provision of Runway End Safety Area (RESA), Stopway and Strip Width Correction, Asphalt Overlay of Stopway and Provision of Furniture at Landside Building Facilities  
LOCATION: Funda Dalipe, San Jose de Buenavista, Antique

ITEM NO.	DESCRIPTION OF WORK	QUANTITY	UNIT	MATERIAL COST	LABOR COST	EQUIPMENT COST	ESTIMATED DIRECT COST	MARK-UPS/IN PERCENT		TOTAL MARK-UP		VAT	TOTAL INDIRECT COST	TOTAL COST	UNIT COST
								OCM	Profit	%	VALUE				
SPL 1	MOBILIZATION & DEMOBILIZATION	1.00	lot												
SPL-2	CONSTRUCTION SAFETY AND HEALTH PROGRAM	1.00	lot												
SPL-3	PROVISION OF LIVING QUARTERS FOR THE ENGINEER (REN	6.00	mos.												
SPL-4	PROVISION OF ONE (1) UNIT MPV SERVICE VEHICLE FOR THE ENGINEER	1.00	unit												
SPL-5	PROJECT BILLBOARD/SIGN BOARD	1.00	ea.												
A	COMPLETION OF WIDENING OF RUNWAY														
P-154-5.1	AGGREGATE SUBBASE COURSE	2,338.98	cu.m.												
P-208-5.1	AGGREGATE BASE COURSE	1,753.57	cu.m.												
P-501	PORTLAND CEMENT CONCRETE PAVEMENT	8,767.86	sq.m.												
B	PROVISION OF STOPWAY, RESA & STRIP WIDTH CORRECTION														
P-152-1	EXCAVATION & DISPOSAL	5,898.36	cu.m												
P-152-2	EMBANKMENT	850.99	cu.m												
P-154-5.1	AGGREGATE SUBBASE COURSE	2,272.05	cu.m.												
P-208-5.1	AGGREGATE BASE COURSE	729.00	cu.m.												
P-501	PORTLAND CEMENT CONCRETE PAVEMENT	3,645.00	sq.m.												
C	ASPHALT OVERLAY OF STOPWAY														
P-603-5.1	EMULSIFIED ASPHALT TACK COAT	5.00	M.T.												
P-403-8.1a	ASPHALT MIX PAVEMENT SURFACE (BITUMINOUS HOT LAID)	753.00	M.T.												
P-101-5.1b	PAVEMENT REMOVAL	1080.00	sq.m.												
D	PROVISION OF TURNAROUND PAD														
P-154-5.1	AGGREGATE SUBBASE COURSE	501.38	cu.m.												
P-208-5.1	AGGREGATE BASE COURSE	668.50	cu.m.												
P-501	PORTLAND CEMENT CONCRETE PAVEMENT	3342.50	sq.m.												
E	PROVISION OF FURNITURE FOR LANDSIDE BUILDING FACILITIES														
1.00	Furniture for Control Tower Building	1.00	lot												
2.00	Furniture for Staff House	1.00	lot												
3.00	Furniture for GRR Building	1.00	lot												
4.00	Furniture for Passenger Terminal Building	1.00	lot												
5.00	Furniture for Administration Building	1.00	lot												
TOTAL AMOUNT															

Signature: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Position: \_\_\_\_\_  
Name Company: \_\_\_\_\_

<b>NAME OF PROJECT</b>		: CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE			
<b>PROJECT DESCRIPTION</b>		: Completion of Widening of Runway, Provision of Runway End Safety Area (RESA), Stopway and Strip Width Correction, Asphalt Overlay of Stopway and Provision of Furniture at Landside Building Facilities			
<b>LOCATION</b>		: Funda Dalipe, San Jose de Buenavista, Antique			
<b>SUBJECT</b>		: Bill of Quantities & Cost Estimates		1.00	lot
ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
SPL-1	MOBILIZATION & DEMOBILIZATION				
C	Equipment				
	VARIOUS EQUIPMENT NEEDED FOR THE PROJECT	1.00	lot		
			Equipment Cost	.....	
C	TOTAL EQUIPMENT				
D	TOTAL DIRECT COST				
INDIRECT COSTS					
1. OCM (0% of TDC)					
2. CONTRACTOR'S PROFIT (0% of TDC)					
E. TOTAL OCM & CONTRACTOR'S PROFIT					
F. VALUE ADDED TAX, (VAT) 5.0% of (D + E)					
G. TOTAL ESTIMATED INDIRECT COST ( E + F ), P					
H. TOTAL ESTIMATED UNIT INDIRECT COST ( G / Quantity), P/Unit					
TOTAL ESTIMATED COST ( D + G ), P					
TOTAL ESTIMATED UNIT COST (Total Estimated Cost / Quantity), P/Unit					

**SUBMITTED BY:**

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

Name Company: \_\_\_\_\_

Date: \_\_\_\_\_

NAME OF PROJECT		: CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT				
PROJECT DESCRIPTION		: Completion of Widening of Runway, Provision of Runway End Safety Area (RESA), Stopway and Strip Width Correction, Asphalt Overlay of Stopway and Provision of Furniture at Landside				
LOCATION		: Antique Airport				
		: Funda Dalipe, San Jose de Buenavista, Antique				
SUBJECT		: Bill of Quantities & Cost Estimates		1.00	lot	
ITEM	DESCRIPTION		QUANTITY	UNIT	UNIT COST	AMOUNT
SPL-2	CONSTRUCTION SAFETY AND HEALTH PROGRAM					
A	Materials					
	Safety Shoes	4.00	pairs			
	Working Gloves	4.00	pairs			
	Rain Coats	4.00	pcs.			
	Safety Hats	4.00	pcs.			
	Reflectorized Safety Vest	4.00	pcs.			
	First-aid Kit	1.00	pc.			
			Material Cost		.....	
B.	Labor		# of Manpower	DUR. (DAYS)	RATE/DAY	
	Part-time Safety Practitioner	1.00		48.00		
	First Aider	1.00		180.00		
			Labor Cost		.....	
A	TOTAL MATERIAL COST					
B	TOTAL LABOR COST					
D	TOTAL DIRECT COST					
INDIRECT COSTS						
1. OCM (0% of TDC)						
2. CONTRACTOR's PROFIT (0% of TDC)						
E TOTAL OCM & CONTRACTOR's PROFIT						
F. VALUE ADDED TAX, (VAT)						5.0% of (D + E)
G. TOTAL ESTIMATED INDIRECT COST ( E + F ), P						
H. TOTAL ESTIMATED UNIT INDIRECT COST ( G / Quantity), P/Unit						
TOTAL ESTIMATED COST ( D + G ), P						
TOTAL ESTIMATED UNIT COST (Total Estimated Cost / Quantity), P/Unit						

### SUBMITTED BY:

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

Name Company: \_\_\_\_\_

Date: \_\_\_\_\_

<b>NAME OF PROJECT</b>		<b>: CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT</b>			
<b>PROJECT DESCRIPTION</b>		: Completion of Widening of Runway, Provision of Runway End Safety Area (RESA), Stopway and Strip Width Correction, Asphalt Overlay of Stopway and Provision of Furniture at Landside Building Facilities			
<b>LOCATION</b>		: Funda Dalipe, San Jose de Buenavista, Antique		<b>QUANTITY</b>	<b>UNIT</b>
<b>SUBJECT</b>		: <b>Bill of Materials &amp; Cost Estimate</b>		6.00	mos.
<b>ITEM</b>	<b>DESCRIPTION</b>	<b>QUANTITY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>AMOUNT</b>
<b>SPL-3 A</b>	<b>PROVISION OF LIVING QUARTERS FOR THE ENGINEER (RENTAL BASIS)</b> <b>Materials</b> Living Quarters for the Engineer (Minimum of 150sq.m. on Rental Basis) (Please refer to Scope of Work and Specification)	6.00	mos.		
			Material Cost	.....	
<b>A TOTAL MATERIAL COST</b>					
<b>D TOTAL DIRECT COST</b>					
<b>I N D I R E C T   C O S T S</b>					
1. OCM (0% of TDC)					
2. CONTRACTOR's PROFIT (0% of TDC)					
<b>E TOTAL OCM &amp; CONTRACTOR's PROFIT</b>					
<b>F. VALUE ADDED TAX, (VAT)</b> 5.0% of (D + E)					
<b>G. TOTAL ESTIMATED INDIRECT COST ( E + F ), P</b>					
<b>H. TOTAL ESTIMATED UNIT INDIRECT COST ( G / Quantity), P/Unit</b>					
<b>TOTAL ESTIMATED COST ( D + G ), P</b>					
<b>TOTAL ESTIMATED UNIT COST (Total Estimated Cost / Quantity), P/Unit</b>					

**SUBMITTED BY:**

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

Name Company: \_\_\_\_\_

Date: \_\_\_\_\_

NAME OF PROJECT		: CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT			
PROJECT DESCRIPTION		: Completion of Widening of Runway, Provision of Runway End Safety Area (RESA), Stopway and Strip Width Correction, Asphalt Overlay of Stopway and Provision of Furniture at Landside Building Facilities			
LOCATION		: Funda Dalipe, San Jose de Buenavista, Antique		QUANTITY	UNIT
SUBJECT		: Bill of Quantities & Cost Estimates		1.00	unit
ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
SPL-4	PROVISION OF ONE (1) UNIT MPV SERVICE VEHICLE FOR THE ENGINEER				
C	Equipment	# of EQPT	Duration	Unit Cost	
	Service Vehicle (MPV latest model, 2.5 liter diesel, manual transmission)	1.00	unit		
	(Please refer to Scope of Work and Specification)		Equipment Cost	.....	
C	TOTAL EQUIPMENT COST				
D	TOTAL DIRECT COST				
INDIRECT COSTS					
1. OCM (0% of TDC)		of Estimated Direct Cost			
2. CONTRACTOR's PROFIT (0% of TDC)		of Estimated Direct Cost			
E. TOTAL OCM & CONTRACTOR's PROFIT		of D			
F. VALUE ADDED TAX, (VAT)		5.0%	of (D + E)		
G. TOTAL ESTIMATED INDIRECT COST ( E + F), P					
H. TOTAL ESTIMATED UNIT INDIRECT COST ( G / Quantity), P/Unit					
TOTAL ESTIMATED COST ( D + G), P					
TOTAL ESTIMATED UNIT COST (Total Estimated Cost / Quantity), P/Unit					

### SUBMITTED BY:

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

Name Company: \_\_\_\_\_

Date: \_\_\_\_\_

<b>NAME OF PROJECT</b>		: CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT			
<b>PROJECT DESCRIPTION</b>		: Completion of Widening of Runway, Provision of Runway End Safety Area (RESA), Stopway and Strip Width Correction, Asphalt Overlay of Stopway and Provision of Furniture at Landside Building Facilities			
<b>LOCATION</b>		: Funda Dalipe, San Jose de Buenavista, Antique		<b>QUANTITY</b>	<b>UNIT</b>
<b>SUBJECT</b>		: Bill of Quantities & Cost Estimates		1.00	ea.
<b>ITEM</b>	<b>DESCRIPTION</b>	<b>QUANTITY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>AMOUNT</b>
<b>SPL-5</b>	<b>PROJECT BILLBOARD/SIGN BOARD</b>				
<b>A</b>	<b>Materials</b>				
	1/2 x 4 x 8' Marine Plywood		pc.		
	Lumber, KD S2S		bd.ft.		
	Project Sign (Tarpaulin 4' x 8')		sq.ft.		
	Common Nails Assorted		kg.		
			Material Cost	.....	
<b>B</b>	<b>Labor</b>	# of Manpower	DUR. (DAYS)	RATE/DAY	
	Construction Foreman				
	Skilled Laborer				
	Common Laborer				
			Labor Cost	.....	
<b>A</b>	<b>TOTAL MATERIAL COST</b>				
<b>B</b>	<b>TOTAL LABOR COST</b>				
<b>D</b>	<b>TOTAL DIRECT COST</b>				
<b>INDIRECT COSTS</b>					
1. OCM (0% - 10% of TDC)		of Estimated Direct Cost			
2. CONTRACTOR'S PROFIT (0% - 8% of TDC)		of Estimated Direct Cost			
<b>E. TOTAL OCM &amp; CONTRACTOR'S PROFIT</b>		of D			
<b>F. VALUE ADDED TAX, (VAT)</b>		5.0% of (D + E)			
<b>G. TOTAL ESTIMATED INDIRECT COST ( E + F ), P</b>					
<b>H. TOTAL ESTIMATED UNIT INDIRECT COST ( G / Quantity), P/Unit</b>					
<b>TOTAL ESTIMATED COST ( D + G ), P</b>					
<b>TOTAL ESTIMATED UNIT COST (Total Estimated Cost / Quantity), P/Unit</b>					

**SUBMITTED BY:**

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

Name Company: \_\_\_\_\_

Date: \_\_\_\_\_



NAME OF PROJECT :		CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT			
DESCRIPTION :		COMPLETION OF WIDENING OF RUNWAY			
LOCATION :		Funda Dalipe, San Jse de Buenavista, Antique			
SUBJECT :		Bill of Quantities and Cost Estimate		2,338.98	cu.m.
ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
P-154-5.1	AGGREGATE SUBBASE COURSE				
A	Materials				
	Aggregate Subbase Coarse (to be delivered on site)		cu.m.		
			Material Cost	.....	
B	Labor	# of Manpower	DUR. (DAYS)	RATE/DAY	
	Construction Foreman				
	Skilled Laborer				
	Common Laborer				
			Labor Cost	.....	
C	Equipment	# of EQPT	DUR. (DAYS)	RATE/DAY	
	Motorized Road Grader, 140HP				
	Vibratory Single Smooth Drum Roller, 10MT				
	Water Truck/ Pump (16000 L)				
			Equipment Cost	.....	
A	TOTAL MATERIAL COST				
B	TOTAL LABOR COST				
C	TOTAL EQUIPMENT COST				
D	TOTAL DIRECT COST				
INDIRECT COSTS					
1. OCM (0% - 10% of TDC)		of Estimated Direct Cost			
2. CONTRACTOR's PROFIT (0% - 8% of TDC)		of Estimated Direct Cost			
E. TOTAL OCM & CONTRACTOR's PROFIT		of D			
F. VALUE ADDED TAX, (VAT)		5.0%	of (D + E)		
G. TOTAL ESTIMATED INDIRECT COST ( E+ F ), P					
H. TOTAL ESTIMATED UNIT INDIRECT COST ( G / Quantity), P/Unit					
TOTAL ESTIMATED COST ( D + G ), P					
TOTAL ESTIMATED UNIT COST (Total Estimated Cost / Quantity), P/Unit					

### SUBMITTED BY:

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

Name Company: \_\_\_\_\_

Date: \_\_\_\_\_

NAME OF PROJECT :		CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT			
DESCRIPTION :		COMPLETION OF WIDENING OF RUNWAY			
LOCATION :		Funda Dalipe, San Jose de Buenavista, Antique			
SUBJECT :		Bill of Quantities and Cost Estimate		1,753.57	cu.m.
ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
P-208-5.1	AGGREGATE BASE COURSE				
A	Materials				
	Aggregate Base Coarse (to be delivered on site)		cu.m.		
			Material Cost	.....	
B	Labor	# of Manpower	DUR. (DAYS)	RATE/DAY	
	Construction Foreman				
	Skilled Laborer				
	Common Laborer				
			Labor Cost	.....	
C	Equipment	# of EQPT	DUR. (DAYS)	RATE/DAY	
	Motorized Road Grader, 140HP				
	Vibratory Single Smooth Drum Roller, 10MT				
	Water Truck/Pump (16000 L)				
			Equipment Cost	.....	
A	TOTAL MATERIAL COST				
B	TOTAL LABOR COST				
C	TOTAL EQUIPMENT COST				
D	TOTAL DIRECT COST				
INDIRECT COSTS					
1. OCM (0% - 10% of TDC)		of Estimated Direct Cost			
2. CONTRACTOR's PROFIT (0% - 8% of TDC)		of Estimated Direct Cost			
E. TOTAL OCM & CONTRACTOR's PROFIT		of D			
F. VALUE ADDED TAX, (VAT)		5.0%	of (D + E)		
G. TOTAL ESTIMATED INDIRECT COST ( E + F ), P					
H. TOTAL ESTIMATED UNIT INDIRECT COST ( G / Quantity), P/Unit					
TOTAL ESTIMATED COST ( D + G ), P					
TOTAL ESTIMATED UNIT COST (Total Estimated Cost / Quantity), P/Unit					

**SUBMITTED BY:**

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

Name Company: \_\_\_\_\_

Date: \_\_\_\_\_

NAME OF PROJECT :		CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT			
DESCRIPTION :		COMPLETION OF WIDENING OF RUNWAY			
LOCATION :		Funda Dalipe, San Jose de Buenavista, Antique			
SUBJECT :		Bill of Quantities and Cost Estimate		8,767.86	sq.m.
ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
P-501	PORTLAND CEMENT CONCRETE PAVEMENT				
A	Materials				
	Ready Mix Concrete, 4500 psi @ 28 days		cu.m.		
	25mm dia. Round Steel Bar, Gr.60		pcs.		
	10mm dia. DRSB, Gr.40		pcs.		
	#16 G.I. Tie Wires		kgs.		
	Steel Form (rental)		li.m.		
	Curing Compound		L		
	Joint Sealer		tins		
	25mm Polyethylene Backer Rod, 3.50m		pcs.		
	Form Oil		L		
	Grease/Tar		L		
	Red Oxide		L		
	2" Paint Brush		pcs.		
	Diamond Blade Cutter 14"Ø		pcs		
			Material Cost	.....	
B	Labor	# of Manpower	DUR. (DAYS)	RATE/DAY	
	Construction Foreman				
	Skilled Laborer				
	Common Laborer				
			Labor Cost	.....	
C	Equipment	# of EQPT	DUR.(DAYS)/ UNIT	RATE/DAY	
	Concrete Vibrator				
	Concrete Screeder((5.5hp)				
	Concrete Saw, 7.5hp (14" Blade diameter)				
	Bar Cutter, Single Phase				
	Water Truck/Pump (16000 L)				
			Equipment Cost	.....	
A	TOTAL MATERIAL COST				
B	TOTAL LABOR COST				
C	TOTAL EQUIPMENT COST				
D	TOTAL DIRECT COST				
INDIRECT COSTS					
1. OCM (0% - 10% of TDC)		of Estimated Direct Cost			
2. CONTRACTOR's PROFIT (0% - 8% of TDC)		of Estimated Direct Cost			
E TOTAL OCM & CONTRACTOR's PROFIT		of D			
F. VALUE ADDED TAX, (VAT)		5.0%	of (D + E)		
G. TOTAL ESTIMATED INDIRECT COST ( E + F ), P					
H. TOTAL ESTIMATED UNIT INDIRECT COST ( G / Quantity), P/Unit					
TOTAL ESTIMATED COST ( D + G ), P					
TOTAL ESTIMATED UNIT COST (Total Estimated Cost / Quantity), P/Unit					

**SUBMITTED BY:**

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

Name Company: \_\_\_\_\_

Date: \_\_\_\_\_

<b>NAME OF PROJECT</b>		<b>: CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT</b>			
<b>DESCRIPTION</b>		<b>: PROVISION OF STOPWAY, RESA &amp; STRIP WIDTH CORRECTION</b>			
<b>LOCATION</b>		<b>: Funda Dalipe, San Jose de Buenavista, Antique</b>			
<b>SUBJECT</b>		<b>: Bill of Quantities and Cost Estimate</b>		5,898.36	cu.m
ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
<b>P-152-1</b>	<b>EXCAVATION &amp; DISPOSAL</b>				
<b>B</b>	<b>Labor</b>	# of Manpower	DUR. (DAYS)	RATE/DAY	
	Construction Foreman				
	Skilled Laborer				
	Common Laborer				
			Labor Cost	.....	
<b>C</b>	<b>Equipment</b>	# of EQPT	DUR. (DAYS)	RATE/DAY	
	Bulldozer, 165 HP				
	Payloader, 1.50 cu.m.				
	Dump Truck, 12 cu.yd.				
			Equipment Cost	.....	
<b>B</b>	<b>TOTAL LABOR COST</b>				
<b>C</b>	<b>TOTAL EQUIPMENT COST</b>				
<b>D</b>	<b>TOTAL DIRECT COST</b>				
<b>INDIRECT COSTS</b>					
1. OCM (0% - 10% of TDC)		of Estimated Direct Cost			
2. CONTRACTOR's PROFIT (0% - 8% of TDC)		of Estimated Direct Cost			
<b>E. TOTAL OCM &amp; CONTRACTOR's PRC</b>		of D			
<b>F. VALUE ADDED TAX, (VAT)</b>		5.0%	of (D + E)		
<b>G. TOTAL ESTIMATED INDIRECT COST ( E + F ), P</b>					
<b>H. TOTAL ESTIMATED UNIT INDIRECT COST ( G / Quantity), P/Unit</b>					
<b>TOTAL ESTIMATED COST ( D + G ), P</b>					
<b>TOTAL ESTIMATED UNIT COST (Total Estimated Cost / Quantity), P/Unit</b>					

**SUBMITTED BY:**

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

Name Company: \_\_\_\_\_

Date: \_\_\_\_\_

NAME OF PROJECT		:	CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT			
DESCRIPTION		:	PROVISION OF STOPWAY, RESA & STRIP WIDTH CORRECTION			
LOCATION		:	Funda Dalipe, San Jose de Buenavista, Antique			
SUBJECT		:	Bill of Quantities & Cost Estimates		850.99	cu.m
ITEM	DESCRIPTION		QUANTITY	UNIT	UNIT COST	AMOUNT
P-152-2	EMBANKMENT					
A	Materials Common Borrow (including 20% compaction) (use excavated suitable materials)					
B	Labor Construction Foreman Skilled Laborer Common Laborer		# of Manpower	DUR. (DAYS)	RATE/DAY	
				Labor Cost	.....	
C	Equipment Payloader, 1.50 cu.m. Dump Truck, 12 cu.yd. Motorized Road Grader, 140HP Vibratory Single Smooth Drum Roller, 10MT Water Truck/Pump, 4,000 gals/16,000 L		# of EQPT	DUR. (DAYS)	RATE/DAY	
				Equipment Cost	.....	
A	TOTAL MATERIAL COST					
B	TOTAL LABOR COST					
C	TOTAL EQUIPMENT COST					
D	TOTAL DIRECT COST					
INDIRECT COSTS						
1. OCM (0% - 10% of TDC)			of Estimated Direct Cost			
2. CONTRACTOR's PROFIT (0% - 8% of TDC)			of Estimated Direct Cost			
E TOTAL OCM & CONTRACTOR's PROFIT			of D			
F. VALUE ADDED TAX, (VAT)			5.0%	of (D + E)		
G. TOTAL ESTIMATED INDIRECT COST ( E + F ), P						
H. TOTAL ESTIMATED UNIT INDIRECT COST ( G / Quantity), P/Unit						
TOTAL ESTIMATED COST ( D + G ), P						
TOTAL ESTIMATED UNIT COST (Total Estimated Cost / Quantity), P/Unit						

**SUBMITTED BY:**

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

Name Company: \_\_\_\_\_

Date: \_\_\_\_\_

NAME OF PROJECT		:	CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT			
			ANTIQUE AIRPORT			
DESCRIPTION		:	PROVISION OF STOPWAY, RESA & STRIP WIDTH CORRECTION			
LOCATION		:	Funda Dalipe, San Jose de Buenavista, Antique			
SUBJECT		:	Bill of Quantities and Cost Estimate		2,272.05	cu.m.
ITEM	DESCRIPTION		QUANTITY	UNIT	UNIT COST	AMOUNT
P-154-5.1	AGGREGATE SUBBASE COURSE					
A	Materials					
	Aggregate Subbase Coarse (delivered on site)			cu.m.		
				Material Cost	.....	
B	Labor		# of Manpower	DUR. (DAYS)	RATE/DAY	
	Construction Foreman					
	Skilled Laborer					
	Common Laborer					
				Labor Cost	.....	
C	Equipment		# of EQPT	DUR. (DAYS)	RATE/DAY	
	Motorized Road Grader, 140HP					
	Vibratory Single Smooth Drum Roller, 10MT					
	Water Truck/Pump, 4,000 gals/16,000 L					
				Equipment Cost	.....	
A	TOTAL MATERIAL COST					
B	TOTAL LABOR COST					
C	TOTAL EQUIPMENT COST					
D	TOTAL DIRECT COST					
INDIRECT COSTS						
1. OCM (0% - 10% of TDC)			of Estimated Direct Cost			
2. CONTRACTOR's PROFIT (0% - 8% of TDC)			of Estimated Direct Cost			
E TOTAL OCM & CONTRACTOR's PROFIT			of D			
F. VALUE ADDED TAX, (VAT)			5.0%	of (D + E)		
G. TOTAL ESTIMATED INDIRECT COST ( E + F ), P						
H. TOTAL ESTIMATED UNIT INDIRECT COST ( G / Quantity), P/Unit						
TOTAL ESTIMATED COST ( D + G ), P						
TOTAL ESTIMATED UNIT COST (Total Estimated Cost / Quantity), P/Unit						

**SUBMITTED BY:**

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

Name Company: \_\_\_\_\_

Date: \_\_\_\_\_

NAME OF PROJECT		:	CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT			
DESCRIPTION		:	PROVISION OF STOPWAY, RESA & STRIP WIDTH CORRECTION			
LOCATION		:	Funda Dalipe, San Jose de Buenavista, Antique			
SUBJECT		:	Bill of Quantities and Cost Estimate		1,753.57	cu.m.
ITEM	DESCRIPTION		QUANTITY	UNIT	UNIT COST	AMOUNT
P-208-5.1	AGGREGATE BASE COURSE					
A	Materials					
	Aggregate Base Coarse (delivered on site)			Material Cost	.....	
B	Labor		# of Manpower	DUR. (DAYS)	RATE/DAY	
	Construction Foreman					
	Skilled Laborer					
	Common Laborer			Labor Cost	.....	
C	Equipment		# of EQPT	DUR. (DAYS)	RATE/DAY	
	Motorized Road Grader, 140HP					
	Vibratory Single Smooth Drum Roller, 10MT					
	Water Truck/Pump (16000 L)			Equipment Cost	.....	
A	TOTAL MATERIAL COST					
B	TOTAL LABOR COST					
C	TOTAL EQUIPMENT COST					
D	TOTAL DIRECT COST					
INDIRECT COSTS						
1. OCM (0% - 10% of TDC)			of Estimated Direct Cost			
2. CONTRACTOR's PROFIT (0% - 8% of TDC)			of Estimated Direct Cost			
E TOTAL OCM & CONTRACTOR's PROFIT			of D			
F. VALUE ADDED TAX, (VAT)			5.0%	of (D + E)		
G. TOTAL ESTIMATED INDIRECT COST ( E + F ), P						
H. TOTAL ESTIMATED UNIT INDIRECT COST ( G / Quantity), P/Unit						
TOTAL ESTIMATED COST ( D + G ), P						
TOTAL ESTIMATED UNIT COST (Total Estimated Cost / Quantity), P/Unit						

**SUBMITTED BY:**

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

Name Company: \_\_\_\_\_

Date: \_\_\_\_\_

NAME OF PROJECT :		CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT			
DESCRIPTION :		ANTIQUÉ AIRPORT			
LOCATION :		Funda Dalipe, San Jbse de Buenavista, Antique			
SUBJECT :		Bill of Quantities and Cost Estimate		3,645.00	sq.m.
ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
P-501	PORTLAND CEMENT CONCRETE PAVEMENT				
A	Materials				
	Ready Mix Concrete, 4500 psi @ 28 days		cu.m.		
	25mm dia. Round Steel Bar, Gr.60		pcs.		
	10mm dia. DRSB, Gr.40		pcs.		
	# 16 G.I. Tie Wires		kgs.		
	Steel Form (rental)		li.m.		
	Curing Compound		L		
	.bint Sealer		tins		
	25mm Polyethylene Backer Rod, 3.50m		pcs.		
	Form Oil		L		
	Grease/Tar		L		
	Red Oxide		L		
	2" Paint Brush		pcs.		
	Diamond Blade Cutter 14"Ø		pcs		
			Material Cost	.....	
B	Labor	# of Manpower	DUR. (DAYS)	RATE/DAY	
	Construction Foreman				
	Skilled Laborer				
	Common Laborer				
			Labor Cost	.....	
C	Equipment	# of EQPT	DUR.(DAYS)/ UNIT	RATE/DAY	
	Concrete Vibrator				
	Concrete Screeder((5.5hp)				
	Concrete Saw,Blade 14"(7.5hp)				
	Bar Cutter, Single Phase				
	Water Truck/Pump (16000 L)				
			Equipment Cost	.....	
A	TOTAL MATERIAL COST				
B	TOTAL LABOR COST				
C	TOTAL EQUIPMENT COST				
D	TOTAL DIRECT COST				
INDIRECT COSTS					
1. OCM (0% - 10% of TDC)		of Estimated Direct Cost			
2. CONTRACTOR's PROFIT (0% - 8% of TDC)		of Estimated Direct Cost			
E TOTAL OCM & CONTRACTOR's PROFIT		of D			
F. VALUE ADDED TAX, (VAT)		5.0%	of (D + E)		
G. TOTAL ESTIMATED INDIRECT COST ( E + F ), P					
H. TOTAL ESTIMATED UNIT INDIRECT COST ( G / Quantity), P/Unit					
TOTAL ESTIMATED COST ( D + G ), P					
TOTAL ESTIMATED UNIT COST (Total Estimated Cost / Quantity), P/Unit					

**SUBMITTED BY:**

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

Name Company: \_\_\_\_\_

Date: \_\_\_\_\_



<b>NAME OF PROJECT :</b>		<b>CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT</b>			
<b>DESCRIPTION :</b>		<b>ASPHALT OVERLAY OF STOPWAY</b>			
<b>LOCATION :</b>		Funda Dalipe, San Jose de Buenavista, Antique		<b>QUANTITY</b>	<b>UNIT</b>
<b>SUBJECT :</b>		<b>Bill of Quantities and Cost Estimate</b>		5.00	M.T.
<b>ITEM</b>	<b>DESCRIPTION</b>	<b>QUANTITY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>AMOUNT</b>
<b>III</b>	<b>ASPHALT OVERLAY OF RUNWAY</b>				
<b>P-603-5.1</b>	<b>EMULSIFIED ASPHALT TACK COAT</b>				
<b>A</b>	<b>Materials</b> Asphalt Emulsified Cationic, CRS-1		M.T.		
			Material Cost	.....	
<b>B</b>	<b>Labor</b> Construction Foreman Skilled Laborer Common Laborer	QTY.	DUR. (days)	RATE/DAY	
			Labor Cost	.....	
<b>C</b>	<b>Equipment</b> Asphalt Distributor/Sprayer Pen Power Broom & Blower Stake Truck Generator Set 51-100kW (with lighting assembly)	# of EQPT	DUR. (days)	RATE/DAY	
			Equipment Cost	.....	
<b>A</b>	<b>TOTAL MATERIAL COST</b>				
<b>B</b>	<b>TOTAL LABOR COST</b>				
<b>C</b>	<b>TOTAL EQUIPMENT COST</b>				
<b>D</b>	<b>TOTAL DIRECT COST</b>				
<b>INDIRECT COSTS</b>					
1. OCM (0% - 10% of TDC)		of Estimated Direct Cost			
2. CONTRACTOR'S PROFIT (0% - 8% of TDC)		of Estimated Direct Cost			
<b>E. TOTAL OCM &amp; CONTRACTOR'S PROFIT</b>		of D			
<b>F. VALUE ADDED TAX, (VAT)</b> 5.0%		of (D + E)			
<b>G. TOTAL ESTIMATED INDIRECT COST ( E + F ), P</b>					
<b>H. TOTAL ESTIMATED UNIT INDIRECT COST ( G / Quantity), P/Unit</b>					
<b>TOTAL ESTIMATED COST ( D + G ), P</b>					
<b>TOTAL ESTIMATED UNIT COST (Total Estimated Cost / Quantity), P/Unit</b>					

**SUBMITTED BY:**

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

Name Company: \_\_\_\_\_

Date: \_\_\_\_\_

NAME OF PROJECT :		CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT			
DESCRIPTION :		ASPHALT OVERLAY OF STOPWAY			
LOCATION :		Funda Dalipe, San Jbse de Buenavista, Antique			
SUBJECT :		Bill of Quantities and Cost Estimate		753.00	M.T.
ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
III	ASPHALT OVERLAY OF RUNWAY				
P-403-8.1a	ASPHALT MIX PAVEMENT SURFACE (BITUMINOUSHOT LAID)				
A	Materials Asphalt Concrete Mix (delivered on site) 11 kgs. Gas		M.T.		
			pcs. Material Cost	.....	
B	Labor Construction Foreman Skilled Laborer Common Laborer	QTY.	DUR. (DAYS)	RATE/DAY	
			Labor Cost	.....	
C	Equipment Asphalt Paver Finisher Vibratory Tandem Steel Roller, 10.10MT Pneumatic Tire Roller, 20 MT Generator Set (with lighting assembly) Blow Torch with gauge and regulator	# of EQPT	DUR. (DAYS)	RATE/DAY	
			Equipment Cost	.....	
A	TOTAL MATERIAL COST				
B	TOTAL LABOR COST				
C	TOTAL EQUIPMENT COST				
D	TOTAL DIRECT COST				
INDIRECT COSTS					
1. OCM (0% - 10% of TDC)		of Estimated Direct Cost			
2. CONTRACTOR's PROFIT (0% - 8% of TDC)		of Estimated Direct Cost			
E. TOTAL OCM & CONTRACTOR's PROFIT		of D			
F. VALUE ADDED TAX, (VAT)		5.0%	of (D + E)		
G. TOTAL ESTIMATED INDIRECT COST ( E + F ), P					
H. TOTAL ESTIMATED UNIT INDIRECT COST ( G / Quantity), P/Unit					
TOTAL ESTIMATED COST ( D + G ), P					
TOTAL ESTIMATED UNIT COST (Total Estimated Cost / Quantity), P/Unit					

**SUBMITTED BY:**

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

Name Company: \_\_\_\_\_

Date: \_\_\_\_\_

<b>NAME OF PROJECT :</b>		<b>CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT</b>			
<b>DESCRIPTION :</b>		<b>ASPHALT OVERLAY OF STOPWAY</b>			
<b>LOCATION :</b>		Funda Dalipe, San Jose de Buenavista, Antique		<b>QUANTITY</b>	<b>UNIT</b>
<b>SUBJECT :</b>		<b>Bill of Quantities and Cost Estimate</b>		1,080.00	sq.m.
<b>ITEM</b>	<b>DESCRIPTION</b>	<b>QUANTITY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>AMOUNT</b>
<b>III</b>	<b>ASPHALT OVERLAY OF RUNWAY</b>				
<b>P-101-5.1b</b>	<b>PAVEMENT REMOVAL</b>				
<b>A</b>	<b>Materials</b>				
	Diamond Blade Cutter 14" Ø		pcs.	Material Cost .....	
<b>B</b>	<b>Labor</b>	QTY.	DUR. (DAYS)	RATE/DAY	
	Construction Foreman				
	Skilled Laborer				
	Common Laborer				
				Labor Cost .....	
<b>C</b>	<b>Equipment</b>	# of EQPT	DUR. (DAYS)	RATE/DAY	
	Pavement Milling Machine (0-280mmD,1000mmW), 15T 180KW				
	Diesel Type Air Compressor				
	Concrete Diamond Saw, Blade 14" diameter				
	Payloader (1.5cu.m.)				
	Dumptruck, 10cu.m.				
				Equipment Cost .....	
<b>A</b>	<b>TOTAL MATERIAL COST</b>				
<b>B</b>	<b>TOTAL LABOR COST</b>				
<b>C</b>	<b>TOTAL EQUIPMENT COST</b>				
<b>D</b>	<b>TOTAL DIRECT COST</b>				
<b>INDIRECT COSTS</b>					
1. OCM (0% - 10% of TDC)		of Estimated Direct Cost			
2. CONTRACTOR'S PROFIT (0% - 8% of TDC)		of Estimated Direct Cost			
<b>E. TOTAL OCM &amp; CONTRACTOR'S PROFIT</b>		of D			
<b>F. VALUE ADDED TAX, (VAT)</b>		5.0%	of (D + E)		
<b>G. TOTAL ESTIMATED INDIRECT COST ( E + F ), P</b>					
<b>H. TOTAL ESTIMATED UNIT INDIRECT COST ( G / Quantity), P/Unit</b>					
<b>TOTAL ESTIMATED COST ( D + G ), P</b>					
<b>TOTAL ESTIMATED UNIT COST (Total Estimated Cost / Quantity), P/Unit</b>					

**SUBMITTED BY:**

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

Name Company: \_\_\_\_\_

Date: \_\_\_\_\_

NAME OF PROJECT :		CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT			
DESCRIPTION :		PROVISION OF TURNAROUND PAD			
LOCATION :		Funda Dalipe, San Jose de Buenavista, Antique			
SUBJECT :		Bill of Quantities and Cost Estimate		501.38	cu.m.
ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
P-154-5.1	AGGREGATE SUBBASE COURSE				
A	Materials				
	Aggregate Subbase Coarse (delivered on site)		cu.m.		
			Material Cost	.....	
B	Labor	# of Manpower	DUR. (DAYS)	RATE/DAY	
	Construction Foreman				
	Skilled Laborer				
	Common Laborer				
			Labor Cost	.....	
C	Equipment	# of EQPT	DUR. (DAYS)	RATE/DAY	
	Motorized Road Grader, 140HP				
	Vibratory Single Smooth Drum Roller, 10MT				
	Water Truck/Pump (16000 L)				
			Equipment Cost	.....	
A	TOTAL MATERIAL COST				
B	TOTAL LABOR COST				
C	TOTAL EQUIPMENT COST				
D	TOTAL DIRECT COST				
INDIRECT COSTS					
1. OCM (0% - 10% of TDC)		of Estimated Direct Cost			
2. CONTRACTOR's PROFIT (0% - 8% of TDC)		of Estimated Direct Cost			
E TOTAL OCM & CONTRACTOR's PROFIT		of D			
F. VALUE ADDED TAX, (VAT)		5.0%	of (D + E)		
G. TOTAL ESTIMATED INDIRECT COST ( E + F ), P					
H. TOTAL ESTIMATED UNIT INDIRECT COST ( G / Quantity), P/Unit					
TOTAL ESTIMATED COST ( D + G ), P					
TOTAL ESTIMATED UNIT COST (Total Estimated Cost / Quantity), P/Unit					

### SUBMITTED BY:

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

Name Company: \_\_\_\_\_

Date: \_\_\_\_\_

NAME OF PROJECT :		CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT			
DESCRIPTION :		PROVISION OF TURNAROUND PAD			
LOCATION :		Funda Dalipe, San Jose de Buenavista, Antique			
SUBJECT :		Bill of Quantities and Cost Estimate		668.50	cu.m.
ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
P-208-5.1	AGGREGATE BASE COURSE				
A	Materials Aggregate Base Coarse (delivered on site)		cu.m.		
			Material Cost	.....	
B	Labor Construction Foreman Skilled Laborer Common Laborer	# of Manpower	DUR. (DAYS)	RATE/DAY	
			Labor Cost	.....	
C	Equipment Motorized Road Grader, 140HP Vibratory Single Smooth Drum Roller, 10MT Water Truck/Pump (16000 L)	# of EQPT	DUR. (DAYS)	RATE/DAY	
			Equipment Cost	.....	
A	TOTAL MATERIAL COST				
B	TOTAL LABOR COST				
C	TOTAL EQUIPMENT COST				
D	TOTAL DIRECT COST				
INDIRECT COSTS					
1. OCM (0% - 10% of TDC)		of Estimated Direct Cost			
2. CONTRACTOR's PROFIT (0% - 8% of TDC)		of Estimated Direct Cost			
E TOTAL OCM & CONTRACTOR's PROFIT		of D			
F. VALUE ADDED TAX, (VAT)		5.0%	of (D + E)		
G. TOTAL ESTIMATED INDIRECT COST ( E + F ), P					
H. TOTAL ESTIMATED UNIT INDIRECT COST ( G / Quantity), P/Unit					
TOTAL ESTIMATED COST ( D + G ), P					
TOTAL ESTIMATED UNIT COST (Total Estimated Cost / Quantity), P/Unit					

**SUBMITTED BY:**

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

Name Company: \_\_\_\_\_

Date: \_\_\_\_\_

<b>NAME OF PROJECT :</b>		<b>CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT</b>			
<b>DESCRIPTION :</b>		<b>ANTIQUÉ AIRPORT</b>			
<b>LOCATION :</b>		<b>Funda Dalipe, San José de Buenavista, Antique</b>			
<b>SUBJECT :</b>		<b>Bill of Quantities and Cost Estimate</b>		3,342.50	sq.m.
ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
<b>P-501</b>	<b>PORTLAND CEMENT CONCRETE PAVEMENT</b>				
<b>A</b>	<b>Materials</b>				
	Ready Mix Concrete, 4500 psi @ 28 days		cu.m.		
	25mm dia. Round Steel Bar, Gr.60		pcs.		
	10mm dia. DRSB, Gr.40		pcs.		
	#16 G.I. Tie Wires		kgs.		
	Steel Form (rental)		li.m.		
	Curing Compound		L		
	Joint Sealer		tins		
	25mm Polyethylene Backer Rod, 3.50m		pcs.		
	Form Oil		L		
	Grease/Tar		L		
	Red Oxide		L		
	2" Paint Brush		pcs.		
	Diamond Blade Cutter 14"Ø		pcs		
			Material Cost	.....	
<b>B</b>	<b>Labor</b>	# of Manpower	DUR. (DAYS)	RATE/DAY	
	Construction Foreman				
	Skilled Laborer				
	Common Laborer				
			Labor Cost	.....	
<b>C</b>	<b>Equipment</b>	# of EQPT	DUR.(DAYS)/ UNIT	RATE/DAY	
	Concrete Vibrator				
	Concrete Screeder((5.5hp)				
	Concrete Saw, 7.5hp (14" Blade diameter)				
	Bar Cutter, Single Phase				
	Water Truck/Pump (16000 L)				
			Equipment Cost	.....	
<b>A</b>	<b>TOTAL MATERIAL COST</b>				
<b>B</b>	<b>TOTAL LABOR COST</b>				
<b>C</b>	<b>TOTAL EQUIPMENT COST</b>				
<b>D</b>	<b>TOTAL DIRECT COST</b>				
<b>INDIRECT COSTS</b>					
1. OCM (0% - 10% of TDC)		of Estimated Direct Cost			
2. CONTRACTOR's PROFIT (0% - 8% of TDC)		of Estimated Direct Cost			
<b>E. TOTAL OCM &amp; CONTRACTOR's PROFIT</b>		of D			
<b>F. VALUE ADDED TAX, (VAT)</b>		5.0%	of (D + E)		
<b>G. TOTAL ESTIMATED INDIRECT COST ( E + F ), P</b>					
<b>H. TOTAL ESTIMATED UNIT INDIRECT COST ( G / Quantity), P/Unit</b>					
<b>TOTAL ESTIMATED COST ( D + G ), P</b>					
<b>TOTAL ESTIMATED UNIT COST (Total Estimated Cost / Quantity), P/Unit</b>					

**SUBMITTED BY:**

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

Name Company: \_\_\_\_\_

Date: \_\_\_\_\_

<b>NAME OF PROJECT :</b>		<b>CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT PROVISION OF FURNITURE FOR LANDSIDE BUILDING FACILITIES</b>			
<b>LOCATION :</b>		Funda Dalipe, San Jose de Buenavista, Antique			
<b>SUBJECT :</b>		<b>Bill of Quantities and Cost Estimates</b>		1.00	lot
ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
<b>E</b>	<b>PROVISION OF FURNITURE FOR LANDSIDE STRUCTURE FACILITIES</b>				
<b>1.00</b>	<b>Furniture for Control Tower Building</b>				
<b>A</b>	<b>Materials</b>				
	<i>Office Furniture - 120 sets</i>				
	Executive Office Chair (Polished Aluminum Based High Back Rest in Leather Upholstery with Casters, Tilt Swivel Mechanism, Seat Height Adjustment and Tilt Lock Feature, with Head & Arm Rest.	6.00	sets		
	Staff Office Chair w/ armrest Mesh upholstery back and Seat in Mesh Fabric Upholstery with Casters, Tilt Swivel Mechanism, Seat Height, Height Adjustment, Tilt Lock Feature & Arm Rest)	32.00	sets		
	3-seater Sofa (Hardwood framed Lowback Rest Sofa)	1.00	sets		
	1.6m x 0.9m x 0.75m Dining Table	3.00	sets		
	0.45m x 0.5m x 1.2m Dining Chair	18.00	sets		
	Single Bunk Bed 1.9m x 0.8m x 1.5m	2.00	sets		
	<i>Modular Partitions</i>				
	1300mm x 1200mm Modular Partition Aluminum Frame w/ Two-tone Fabric Panel covering & Glass Panel w/ Frosted film (complete with accessories, hardware, outlet & communication outlet hole)	18.00	sets		
	800mm x 1200mm Modular Partition Aluminum Frame w/ Two-tone Fabric Panel covering & Glass Panel w/ Frosted film (complete with accessories, hardware, outlet & communication outlet hole)	40.00	sets		
			Material Cost	.....	
<b>A</b>	<b>TOTAL MATERIAL COST</b>				
<b>D</b>	<b>TOTAL DIRECT COST</b>				
<b>INDIRECT COSTS</b>					
1. OCM (0% of TDC)					
2. CONTRACTOR'S PROFIT (0% of TDC)					
<b>E. TOTAL OCM &amp; PROFIT</b>					
<b>F. VALUE ADDED TAX, (VAT)</b>					
				of (D + E)	
<b>G. TOTAL ESTIMATED INDIRECT COST ( F + E ), P</b>					
<b>H. TOTAL ESTIMATED UNIT INDIRECT COST ( G / Quantity), P/Unit</b>					
<b>TOTAL ESTIMATED COST ( D + G ), P</b>					
<b>TOTAL ESTIMATED UNIT COST (Total Estimated Cost / Quantity), P/Unit</b>					

**SUBMITTED BY:**

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

Name Company: \_\_\_\_\_

Date: \_\_\_\_\_

<b>NAME OF PROJECT :</b>		<b>CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT</b>			
<b>LOCATION :</b>		<b>PROVISION OF FURNITURE FOR LANDSIDE BUILDING FACILITIES</b>			
<b>SUBJECT :</b>		<b>Bill of Quantities and Cost Estimates</b>		1.00	lot
ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
<b>E</b>	<b>PROVISION OF FURNITURE FOR LANDSIDE STRUCTURE FACILITIES</b>				
<b>2.00</b>	<b>Furniture for Staff House</b>				
<b>A</b>	<b>Materials</b>				
	Office Furniture - 25 sets				
	Executive Office Chair (Polished Aluminum Based High Back Rest in Leather Upholstery with Casters, Tilt Swivel Mechanism, Seat Height Adjustment and Tilt Lock Feature, with Head & Arm Rest.	1.00	set		
	Staff Office Chair w/ armrest Mesh upholstery back and Seat in Mesh Fabric Upholstery with Casters, Tilt Swivel Mechanism, Seat Height, Height Adjustment, Tilt Lock Feature & Arm Rest)	4.00	sets		
	Office Table (Hardwood framed with 3/4" MDF Board Top & Side Cover in Woodgrain-like Laminate)	5.00	sets		
	2-Layer Wooden Cabinet (Hardwood framed 3/4" Marine Plywood in Woodgrain-Like Laminate Finish	3.00	sets		
	1.6m x 0.9m x 0.75m Dining Table	1.00	sets		
	0.45m x 0.5m x 1.2m Dining Chair	6.00	sets		
	Single Bed 1.87m x 0.91m x 0.55m	5.00	sets		
			Material Cost	.....	
<b>A</b>	<b>TOTAL MATERIAL COST</b>				
<b>D</b>	<b>TOTAL DIRECT COST</b>				
<b>INDIRECT COSTS</b>					
1. OCM (0% of TDC)					
2. CONTRACTOR'S PROFIT (0% of TDC)					
<b>E. TOTAL OCM &amp; PROFIT</b>					
<b>F. VALUE ADDED TAX, (VAT)</b>					
				of (D + E)	
<b>G. TOTAL ESTIMATED INDIRECT COST ( F + E ), P</b>					
<b>H. TOTAL ESTIMATED UNIT INDIRECT COST ( G / Quantity), P/Unit</b>					
<b>TOTAL ESTIMATED COST ( D + G ), P</b>					
<b>TOTAL ESTIMATED UNIT COST (Total Estimated Cost / Quantity), P/Unit</b>					

### SUBMITTED BY:

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

Name Company: \_\_\_\_\_

Date: \_\_\_\_\_



<b>NAME OF PROJECT :</b>		<b>CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT</b>			
<b>LOCATION :</b>		Funda Dalipe, San Jose de Buenavista, Antique			
<b>SUBJECT :</b>		<b>Bill of Quantities and Cost Estimates</b>		1.00	lot
ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
<b>E</b>	<b>PROVISION OF FURNITURE FOR LANDSIDE STRUCTURE FACILITIES</b>				
<b>3.00</b>	<b>Furniture for CFR Building</b>				
<b>A</b>	<b>Materials</b>				
	<i>Office Furniture - 66 sets</i>				
	1.6m x 0.9m x 0.75m Dining Table HARD WOOD FRAMED MDF 25mm THK. BOARD TOP IN WOODGRAIN-LIKE LAMINATE FINISH.	2.00	sets		
	0.45m x 0.5m x 1.2m Dining Chair WOODEN HIGH BACK CHAIR WOODGRAIN-LIKE LAMINATE FINISH.	16.00	sets		
	Lockers Steel Casing Lockers	20.00	sets		
	3-seater Sofa Hardwood framed Lowback Rest Sofa	2.00	sets		
	2-seater Sofa Hardwood framed Low Back Rest Sofa	1.00	set		
	Oval Coffee Table 3/4" Marine Plywood Table Top with Solid Wood Frame	2.00	sets		
	Single Bunk Bed 2.1m x .91m x 1.5m	10.00	sets		
	Single Bed 2.1m x .91m x .55m	1.00	set		
	Office Table Hardwood framed with 3/4" MDF Board Top & Side Cover in Woodgrain-like Laminated	2.00	sets		
	Staff Office Chair w/ armrest Mesh upholstery back and Seat in Mesh Fabric Upholstery with Casters, Tilt Swivel Mechanism, Seat Height, Height Adjustment, Tilt Lock Feature & Arm Rest)	4.00	sets		
	<i>Modular Partitions</i>				
	1300mm x 1200mm Modular Partition Aluminum Frame w/ Two-tone Fabric Panel covering & Glass Panel w/ Frosted film (complete with accessories, hardware, outlet & communication outlet hole)	2.00	sets		
	800mm x 1200mm Modular Partition Aluminum Frame w/ Two-tone Fabric Panel covering & Glass Panel w/ Frosted film (complete with accessories, hardware, outlet & communication outlet hole)	4.00	sets		
			Material Cost	.....	
<b>A</b>	<b>TOTAL MATERIAL COST</b>				
<b>D</b>	<b>TOTAL DIRECT COST</b>				
<b>INDIRECT COSTS</b>					
1. OCM (0% of TDC)					
2. CONTRACTOR'S PROFIT (0% of TDC)					
<b>E TOTAL OCM &amp; PROFIT</b>					
<b>F. VALUE ADDED TAX, (VAT)</b>				of (D + E)	
<b>G. TOTAL ESTIMATED INDIRECT COST ( F + E ), P</b>					
<b>H. TOTAL ESTIMATED UNIT INDIRECT COST ( G / Quantity), P/Unit</b>					
<b>TOTAL ESTIMATED COST ( D + G ), P</b>					
<b>TOTAL ESTIMATED UNIT COST (Total Estimated Cost / Quantity), P/Unit</b>					

**SUBMITTED BY:**

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

Name Company: \_\_\_\_\_

Date: \_\_\_\_\_

<b>NAME OF PROJECT :</b>		<b>CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT</b>			
<b>LOCATION :</b>		<b>PROVISION OF FURNITURE FOR LANDSIDE BUILDING FACILITIES</b>			
<b>SUBJECT :</b>		<b>Bill of Quantities and Cost Estimates</b>		1.00	lot
ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
<b>E</b>	<b>PROVISION OF FURNITURE FOR LANDSIDE STRUCTURE FACILITIES</b>				
<b>4.00</b>	<b>Furniture for Passenger Terminal Building</b>				
<b>A</b>	<b>Materials</b>				
	<i>Office Furniture - 149 sets</i>				
	4-Seater Moulded Polyurethane Gang Chair	40.00	sets		
	Moulded Foam Seat and Back in Self-healing Polyurethane Upholstery, Cast Aluminum Armrest & Leg				
	0.76m x 0.76m x 0.75m Dining Table	6.00	sets		
	HARD WOOD FRAMED MDF 25mm THK. BOARD TOP IN WOODGRAIN-LIKE LAMINATE FINISH.				
	0.45m x 0.5m x 1.2m Dining Chair	24.00	sets		
	WOODEN HIGH BACK CHAIR				
	WOODGRAIN-LIKE LAMINATE FINISH.				
	Bar Stool	7.00	sets		
	Bar Stool with Backrest Steel Frame in Epoxy Powder Coating With Polypropylene Plastic Seat				
	4-seater Sofa	1.00	set		
	Hardwood framed Lowback Rest Sofa				
	3-seater Sofa	5.00	sets		
	Hardwood framed Lowback Rest Sofa				
	2-seater Sofa	1.00	set		
	Hardwood framed Low Back Rest Sofa				
	1-seater Sofa	12.00	sets		
	Hardwood framed Low Back Rest Sofa				
	Oval Coffee Table 1200mm x 700mm x 450mm	2.00	sets		
	3/4" Marine Plywood Table Top with Solid Wood Frame				
	Square Coffee Table 450mm x 450mm x 450mm	7.00	sets		
	3/4" Marine Plywood Table Top with Solid Wood Frame				
	Staff Office Chair w/ armrest Mesh upholstery back and Seat in Mesh Fabric Upholstery with Casters, Tilt Swivel Mechanism, Seat Height, Height Adjustment, Tilt Lock Feature & Arm Rest)	27.00	sets		
	0.90m x 2.80 x 0.75m Conference Table	1.00	set		
	Executive Office Chair (Polished Aluminum Based High Back Rest in Leather Upholstery with Casters, Tilt Swivel Mechanism, Seat Height Adjustment and Tilt Lock Feature, with Head & Arm Rest.	1.00	set		
	Executive Table 180x60x75 w/ side cabinet Veneer finish	1.00	set		
	Visitor Office Chair	2.00	sets		
	Stainless steel framed Low Back Rest in Mesh Fabric Upholstery with Arm rest				

	<i>Modular Partitions</i> 1300mm x 1200mm Modular Partition Aluminum Frame w/ Two-tone Fabric Panel covering & Glass Panel w/ Frosted film (complete with accessories, hardwares, outlet & communication outlet hole)  800mm x 1200mm Modular Partition Aluminum Frame w/ Two-tone Fabric Panel covering & Glass Panel w/ Frosted film (complete with accessories, hardwares, outlet & communication outlet hole)	4.00	sets		
		8.00	sets		
			Material Cost	.....	
A	TOTAL MATERIAL COST				
D	TOTAL DIRECT COST				
INDIRECT COSTS					
1. OCM (0% of TDC)					
2. CONTRACTORs PROFIT (0% of TDC)					
E TOTAL OCM & PROFIT					
F. VALUE ADDED TAX, (VAT)		of (D + E)			
G. TOTAL ESTIMATED INDIRECT COST ( F + E ), P					
H. TOTAL ESTIMATED UNIT INDIRECT COST ( G / Quantity), P/Unit					
TOTAL ESTIMATED COST ( D + G ), P					
TOTAL ESTIMATED UNIT COST (Total Estimated Cost / Quantity), P/Unit					

### SUBMITTED BY:

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

Name Company: \_\_\_\_\_

Date: \_\_\_\_\_

NAME OF PROJECT :		CONTINUATION OF THE CONSTRUCTION OF AIRPORT FACILITIES AT ANTIQUE AIRPORT			
LOCATION :		PROVISION OF FURNITURE FOR LANDSIDE BUILDING FACILITIES			
SUBJECT :		Funda Dalipe, San Jose de Buenavista, Antique		1.00	lot
		Bill of Quantities and Cost Estimates			
ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
<b>E</b>	<b>PROVISION OF FURNITURE FOR LANDSIDE STRUCTURE FACILITIES</b>				
<b>5.00</b>	<b>Furniture for Administration Building</b>				
<b>A</b>	<b>Materials</b>				
	<b>Office Furniture - 55 sets</b>				
	Executive Office Chair (Polished Aluminum Based High Back Rest in Leather Upholstery with Casters, Tilt Swivel Mechanism, Seat Height Adjustment and Tilt Lock Feature, with Head & Arm Rest.	4.00	set		
	Staff Office Chair w/ armrest Mesh upholstery back and Seat in Mesh Fabric Upholstery with Casters, Tilt Swivel Mechanism, Seat Height, Height Adjustment, Tilt Lock Feature & Arm Rest)	21.00	sets		
	Office Table (Hardwood framed with 3/4" MDF Board Top & Side Cover in Woodgrain-like Laminate)	17.00	sets		
	Visitor Office Chair - (Stainless steel framed Low Back Rest in Mesh Fabric Upholstery with Arm rest)	4.00	sets		
	2.1m x 1.1m x 0.75m Conference Table	1.00	set		
	0.76m x 0.76m x 0.75m Dining Table	1.00	sets		
	0.45m x 0.5m x 1.2m Dining Chair	4.00	sets		
	3-seater Sofa (Hardwood framed Lowback Rest Sofa)	1.00	sets		
	0.5m x 0.5m x 0.45m Side Table	2.00	sets		
			Material Cost	.....	
<b>A</b>	<b>TOTAL MATERIAL COST</b>				
<b>D</b>	<b>TOTAL DIRECT COST</b>				
<b>INDIRECT COSTS</b>					
1. OCM (0% of TDC)					
2. CONTRACTOR'S PROFIT (0% of TDC)					
<b>E. TOTAL OCM &amp; PROFIT</b>					
<b>F. VALUE ADDED TAX, (VAT)</b>				of (D + E)	
<b>G. TOTAL ESTIMATED INDIRECT COST ( F + E ), P</b>					
<b>H. TOTAL ESTIMATED UNIT INDIRECT COST ( G / Quantity), P/Unit</b>					
<b>TOTAL ESTIMATED COST ( D + G ), P</b>					
<b>TOTAL ESTIMATED UNIT COST (Total Estimated Cost / Quantity), P/Unit</b>					

#### SUBMITTED BY:

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

Name Company: \_\_\_\_\_

Date: \_\_\_\_\_

## Section IX. Checklist of Technical and Financial Documents



# Checklist of Technical and Financial Documents

## I. TECHNICAL COMPONENT ENVELOPE

### *Class “A” Documents*

#### Legal Documents

- ☐ (a) Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages) in accordance with Section 8.5.2 of the IRR;

#### Technical Documents

- ☐ (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 (*Annex “A” Form 1*); **and**
- ☐ (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 (*Annex “A” Form 2*);
  - ☐ a. The statement of SLCC shall be accompanied by a Certificate of Final Acceptance issued by the owner, or a final rating of at least Satisfactory in the Constructors Performance Evaluation System (CPES). In the case of contracts with the private sector, an equivalent document shall be submitted. (Section 23.4.2.5 of the Revised IRR of Republic Act No. 9184).; **and**
- ☐ (d) Special PCAB License in case of Joint Ventures **and** registration for the type and cost of the contract to be bid; **and**
- ☐ (e) 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 (*Annex “B” Form 1*); **and**
- ☐ (f) Project Requirements, which shall include the following:
  - ☐ a. Organizational chart for the contract to be bid (*Annex “B” Form 2*);
  - ☐ b. List of contractor’s key personnel (e.g., Project Manager, Project Engineers, Materials Engineers, and Foremen), to be assigned to the contract to be bid, with their complete qualification and experience data (*Annex “B” Form 3*);
  - ☐ c. List of contractor’s major equipment units, which are owned, leased, and/or 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 (*Annex “B” Form 5*); **and**
- ☐ (g) 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 giving full power and authority to its officer to sign the OSS and do acts to represent the Bidder (*Annex “B” Form 6*).

This shall include all of the following documents as attachment to the Omnibus Sworn Statement:

1. Certification, under oath, attesting that they have no pending case(s) against the Government, in addition to the eligibility requirements as prescribe under the 2016 Revised Implementing Rules and Regulation (R-IRR) of RA No. 9184; and
2. Legal Clearance to be issued by the CAAP Enforcement and Legal Service with respect to the non-pending cases of the prospective bidders against this Authority; and
3. Bid Bulletins (if applicable); and

Financial Documents

- ☐ (h) The prospective bidder's computation of Net Financial Contracting Capacity (NFCC).

**Class "B" Documents**

- ☐ (i) If applicable, duly signed joint venture agreement (JVA) 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 partners stating that they will enter into and abide by the provisions of the JVA in the instance that the bid is successful.

**II. FINANCIAL COMPONENT ENVELOPE**

- ☐ (j) Original of duly signed and accomplished Financial Bid Form; **and**

Other documentary requirements under RA No. 9184

- ☐ (k) Original of duly signed Bid Prices in the Bill of Quantities (*Annex "C" Form 1*); **and**
- ☐ (l) Summary of Bid Proposal (*Annex "C" Form 2*); **and**
- ☐ (m) Bill of Materials & Cost Estimates (*Annex "C" Form 3*); **and**
- ☐ (n) Summary Sheet indicating the Unit Prices of Construction Materials (*Annex "C" Form 4*); **and**
- ☐ (o) Summary Sheet indicating the Unit Prices of Labor (*Annex "C" Form 5*); **and**
- ☐ (p) Summary Sheet indicating the Unit Prices of Equipment (*Annex "C" Form 6*); **and**
- ☐ (q) Cash Flow by Quarter and Payment Schedule (*Annex "C" Form 7*).

## ***Bidding Forms***



## *Other Bidding Forms*

### (ANNEX “A”)

ANNEX “A” FORM 1 .....STATEMENT OF ALL ON-GOING CONTRACTS

ANNEX “A” FORM 2 .....STATEMENT OF SINGLE LARGEST COMPLETED CONTRACT

{ATTACH COMPANY LETTERHEAD/LOGO}

Statement of all its ON-GOING 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

Name of Project: \_\_\_\_\_

Location of Project: \_\_\_\_\_

Name of Company : \_\_\_\_\_  
Address of Company: \_\_\_\_\_

[illegible]

Submitted by: \_\_\_\_\_  
(Print Name & Signature)

Designation: \_\_\_\_\_

Date: \_\_\_\_\_

{ ATTACH COMPANY LETTERHEAD/LOGO }

Statement of single largest COMPLETED contract similar to the contract to be bid

Name of Project: \_\_\_\_\_  
Location of Project: \_\_\_\_\_  
  
Name of Company : \_\_\_\_\_  
Address of Company: \_\_\_\_\_

Name of Contract	a. Owner's Name b. Address c. Telephone No.	Nature of Work	Contractor's Role		Contract Amount at Award	a. Date Awarded b. Date of Contract c. Contract Duration d. Date Started e. Date Completed
			Description	%		

Submitted by: \_\_\_\_\_  
(Print Name & Signature)  
  
Designation: \_\_\_\_\_  
  
Date: \_\_\_\_\_

-----

**Important Notice:** This statement shall be accompanied by a Certificate of Final Acceptance issued by the owner, or a final rating of at least Satisfactory in the Constructors Performance Evaluation System (CPES). In the case of contracts with the private sector, an equivalent document shall be submitted.  
(Section 23.4.2.5 of the Revised IRR of Republic Act No. 9184)

## *Other Bidding Forms*

### (ANNEX “B”)

Annex “B” Form 1 .....	Bid Securing Declaration
Annex “B” Form 2 .....	Organizational Chart of Contract to be Bid
Annex “B” Form 3 .....	Qualification of Key Personnel Proposed to be Assigned in the Project
Annex “B” Form 4a .....	Contractor’s Letter-Certificate to Procuring Entity
Annex “B” Form 4b .....	Key Personnel’s Certificate of Employment
Annex “B” Form 4c .....	Key Personnel (Format of Bio-Data)
Annex “B” Form 6 .....	List of Equipment Owned or Leased and/or under Purchased
Annex “B” Form 7 .....	Omnibus Sworn Statement
Annex “B” Form 8 .....	Performance Securing Declaration (Revised)

**Bid Securing Declaration Form**

*[shall be submitted with the Bid if bidder opts to provide this form of bid security]*

REPUBLIC OF THE PHILIPPINES)  
CITY OF \_\_\_\_\_) S.S.

**BID SECURING DECLARATION**  
**Project Identification No.: *[Insert number]***

To: *[Insert name and address of the Procuring Entity]*

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 procurement 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 the 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 No. 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; and
  - c. I am/we are declared 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 OR ITS AUTHORIZED  
REPRESENTATIVE]*

*[Insert signatory's legal capacity]*

Affiant

**[Jurat]**

*[Format shall be based on the latest Rules on Notarial Practice]*

## CAAP-BAC-SF Annex “B” Form 2

### Contractor’s Organizational Chart for the Project

Submit Copy of the Organizational Chart that the Contractor intends to use to execute the contract if awarded to him. Indicate in the chart the names of the Key Engineering Personnel who will be assigned in the Project.

{ATTACH COMPANY LETTERHEAD/LOGO}

Attach the required Proposed Organizational Chart for the Contract as stated above.

Submitted by: \_\_\_\_\_

Designation : \_\_\_\_\_

Date : \_\_\_\_\_

{ATTACH COMPANY LETTERHEAD/LOGO}

Qualification of Key Personnel Proposed to be Assigned to the Project

Name of Project: \_\_\_\_\_  
Location of Project: \_\_\_\_\_

Name of Company: \_\_\_\_\_  
Address of Company: \_\_\_\_\_

	Project Manager/Engineer	Material Engineer	Foreman	Construction Safety and Health Personnel	Other Position deemed required by the Applicant for this project
1. Name					
2. Address					
3. Date of Birth					
4. Employed Since					
5. Experience					
6. Previous Employment					
7. Education					
8. PRC License					

Note: Attached individual PRC License of the (professional) personnel.

Submitted by : \_\_\_\_\_  
Designation : \_\_\_\_\_  
Date : \_\_\_\_\_  
(Signature over Printed Name)

{ATTACH COMPANY LETTERHEAD/LOGO}

Date: \_\_\_\_\_

CAPTAIN EDGARDO G. DIAZ  
Chairman, Bids and Awards Committee  
Civil Aviation Authority of the Philippines  
Mia Road, Pasay City, M.M. 1300  
Tel: 944-2358

Subject: Contractor's Letter-Certificate to Procuring Entity

Dear Sir:

Supplementing our Organizational Chart for the Contract, we have the honor to submit herewith, and to certify as true and correct, the following pertinent information:

That I/we have engaged the service of (Name of Employee), to be the (Designation) of the (Name of Project), who is a (Profession) with Professional License Certificate No. \_\_\_\_\_ issued on \_\_\_\_\_ and who has performed the duties in the construction of the project enumerated in the filled Annex "B" Form 5b.

That (Name of Employee) shall personally perform the duties of the said position in the above-mentioned project, if and when the same is awarded in our favor.

That (Name of Employee) shall employ the best care, skill and ability in performing his duties in accordance with the Contract Agreement, Conditions of Contract, Plans, Specifications, Special Provisions, and other provisions embodied in the proposed contract.

That (Name of Employee) shall be personally present at the jobsite all the time to supervise the phase of the construction work pertaining to his assignment as (Designation).

That (Name of Employee) is aware that he shall be authorized to handle only one contract at a time.

That in order to guarantee that (Name of Employee) shall perform his duties properly and be personally present in the Job Site, he is hereby required to secure a certificate of appearance for the Procuring Entity's Engineer at the end of every month.

That in the event that I/we elect or choose to replace (Name of Employee) with another Engineer, the Procuring Entity will be accordingly notified by us in writing at least twenty one (21) days before making replacement. We will submit to the Procuring Entity, for prior



approval, the name of the proposed new (Designation), his qualification, experience, list of projects undertaken and other relevant information.

That any willful violation on my/our part of the herein conditions may prejudice my/our standing as a reliable contractor in future bidding of the Procuring Entity.

Very truly yours,

---

(Authorized Representative of Bidder)

CONCURRED BY:

---

(Name of Engineer)

{ATTACH COMPANY LETTERHEAD/LOGO}

Date: \_\_\_\_\_

CAPTAIN EDGARDO G. DIAZ  
 Chairman, Bids and Awards Committee  
 Civil Aviation Authority of the Philippines  
 Mia Road, Pasay City, M.M. 1300  
 Tel: 944-2358

Subject: Key Personnel's Certificate of Employment

Dear Sir:

I am (Name of Employee) a License \_\_\_\_\_ Engineer with Professional License No. \_\_\_\_\_  
 issued on (Date of Issuance) at (Place of Issuance).

I hereby certify that (Name of Bidder) has engaged my services as (Designation) for (Name of the Project), if awarded in their favor.

As (Designation), I know I will have to stay in the job site all the time to supervise and managed the Contract works to the best of my ability, and aware that I am authorized to handle only one (1) contract at a time.

I do not allow the use of my name for the purpose of enabling the above-mentioned Contractor to qualify for the Contract without any firm commitment on my part to assume the post of (Designation).

As (Designation), I supervised the following completed projects similar to the contract under bidding:

NAME OF PROJECT	OWNER	COST	DATE COMPLETED
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

At present, I am supervising the following project:

NAME OF PROJECT	OWNER	COST	DATE COMPLETION
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

In case of my separation for any reason whatsoever from the above-mentioned Contractor, I shall notify the \_\_\_\_\_ (*Name of the Procuring Entity*) at least twenty one (21) days before the effective date of my separation.

\_\_\_\_\_  
(Signature of Engineer)

SUBSCRIBED AND SWORN to before me this \_\_ day of \_\_\_\_\_, 20\_\_ affiant exhibiting to me his/her Residence Certificate No. \_\_\_\_\_ issued on \_\_\_\_\_ at \_\_\_\_\_, Philippines.

\_\_\_\_\_  
Notary Public

Until 31 December 20\_\_  
PRT No.: \_\_\_\_\_  
Issued at: \_\_\_\_\_  
Issued on: \_\_\_\_\_  
TIN No.: \_\_\_\_\_

Doc. No. \_\_\_\_\_  
Page No. \_\_\_\_\_  
Book No. \_\_\_\_\_  
Series of \_\_\_\_\_

## CAAP-BAC-SF Annex "B" Form 4c

### KEY PERSONNEL

(FORMAT OF BIO-DATA)

Give the detailed information of the following personnel who are scheduled to be assigned as full-time field staff for the project. Fill up a form for each person.

1. Authorized Managing Officer / Representative: \_\_\_\_\_
2. Sustained Technical Employee:

Name: \_\_\_\_\_

Date of Birth: \_\_\_\_\_

Nationality: \_\_\_\_\_

Education and Degrees: \_\_\_\_\_

Specialty: \_\_\_\_\_

Registration: \_\_\_\_\_

Length of Service with the Firm:

\_\_\_\_\_ Year      From \_\_\_\_\_ (months) \_\_\_\_\_ (year)

   To \_\_\_\_\_ (months) \_\_\_\_\_ (year)

Years of Experience:

If Item 7 is less than ten (10) years, give name and length of service with previous employers for a ten (10) year period (attached additional sheet/s, if necessary):

Name and Address of Employer	Length of Service
_____	_____ year(s) from _____ to _____
_____	_____ year(s) from _____ to _____
_____	_____ year(s) from _____ to _____

Experience:

This should cover the past ten (10) years of experience. (Attached as many pages as necessary to show involvement of personnel in projects using the format below).

- a. Name: \_\_\_\_\_
- b. Name and Address of Owner: \_\_\_\_\_
- c. Name and Address of the Owner's Engineer (Consultant): \_\_\_\_\_
- d. Indicate the Features of Project (particulars of the project components and any other particular interest connected with the project): \_\_\_\_\_
- e. Contract Amount Expressed in Philippine Currency: \_\_\_\_\_
- f. Position: \_\_\_\_\_
- g. Structures for which the employee was responsible: \_\_\_\_\_
- h. Assignment Period: from \_\_\_\_\_ (months) \_\_\_\_\_ (years)  
   to \_\_\_\_\_ (months) \_\_\_\_\_ (years)

---

Name and Signature of Employee

It is hereby certified that the above personnel can be assigned to the \_\_\_\_\_ Project, if the contract is awarded to our company.

\_\_\_\_\_  
(Place and Date)

\_\_\_\_\_  
(The Authorized Representative)

List of Equipment, Owned or Leased and/or under Purchased Agreements, Pledge to the Proposed Project

Name of Project: \_\_\_\_\_  
Location of Project: \_\_\_\_\_

Name of Company: \_\_\_\_\_  
Address of Company: \_\_\_\_\_

Description	Model/Year	Capacity/ Performance/ Size	Plate No.	Motor No./ Body No.	Location	Condition	Proof of Ownership/ Lessor or Vendor
<u>A. Owned</u>							
I.							
II.							
III.							
IV.							
V.							
<u>B. Leased</u>							
I.							
II.							
III.							
IV.							
V.							
<u>C. Under Purchased Agreement</u>							
I.							
II.							
III.							
IV.							
V.							

Submitted by : \_\_\_\_\_  
Designation : \_\_\_\_\_  
Date : \_\_\_\_\_  
(Signature over Printed Name)

Omnibus Sworn Statement (Revised)

*[shall be submitted with the Bid]*

---

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], as shown in the attached duly notarized Special Power of Attorney;

*[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], as shown in the attached [state title of attached document showing proof of authorization (e.g., duly notarized Secretary's Certificate, Board/Partnership Resolution, or Special Power of Attorney, 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, **by itself or by relation, membership, association, affiliation, or controlling interest with another blacklisted person or entity as defined and provided for in the Uniform Guidelines on Blacklisting;**

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, Procurement Agent if engaged, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC 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, Procurement Agent if engaged, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC 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, Procurement Agent if engaged, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC 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 responsibilities as a Bidder in compliance with the Philippine Bidding Documents, which includes:
- Carefully examining all of the Bidding Documents;
  - Acknowledging all conditions, local or otherwise, affecting the implementation of the Contract;
  - Making an estimate of the facilities available and needed for the contract to be bid, if any; and
  - Inquiring or securing 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.

*[Insert NAME OF BIDDER OR ITS AUTHORIZED REPRESENTATIVE]*

*[Insert signatory's legal capacity]*

Affiant

**[Jurat]**

*[Format shall be based on the latest Rules on Notarial Practice]*

**Bid Form for the Procurement of Infrastructure Projects**

***[shall be submitted with the Bid]***

---

**BID FORM**

Date : \_\_\_\_\_

Project Identification No. : \_\_\_\_\_

To: *[name and address of Procuring Entity]*

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: *[insert name of contract]*;
- 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: *[insert information]*;
- d. The discounts offered and the methodology for their application are: *[insert information]*;
- e. The total bid price includes the cost of all taxes, such as, but not limited to: *[specify the applicable taxes, e.g. (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 a 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 *[insert percentage amount]* percent of the Contract Price for the due performance of the Contract, or a Performance Securing Declaration in lieu of the the allowable forms of Performance Security, subject to the terms and conditions of issued GPPB guidelines<sup>2</sup> for this purpose;

- 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 [Name of Project] of the [Name of the Procuring Entity].
- 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: \_\_\_\_\_

\_\_\_\_\_

<sup>2</sup> currently based on GPPB Resolution No. 09-2020

## *Other Bidding Forms*

### (ANNEX “C”)

Annex “C” Form 1 .....	Bill of Quantities
Annex “C” Form 2 .....	Summary of Bid Proposal
Annex “C” Form 3 .....	Bill of Materials & Cost Estimates
Annex “C” Form 4 .....	Summary of Unit Prices of Materials
Annex “C” Form 5 .....	Summary of Unit Prices of Labor
Annex “C” Form 6 .....	Summary of Unit Prices of Equipment
Annex “C” Form 7 .....	Cash Flow by Quarter and Payment Schedule

# CAAP-BAC-SF Annex "C" Form 1

{ATTACH COMPANY LETTERHEAD/LOGO}

## BILL OF QUANTITIES

PROJECT: \_\_\_\_\_  
LOCATION: \_\_\_\_\_

ITEM NO.	DESCRIPTION	QTY	UNIT	UNIT PRICE (Pesos)	AMOUNT (Pesos)
	Pesos_____ Amount in Words _____ _____ _____ _____and_____ _____ _____centavos				
	Pesos_____ Amount in Words _____ _____ _____ _____and_____ _____ _____centavos				
	Pesos_____ Amount in Words _____ _____ _____ _____and_____ _____ _____centavos				
	Pesos_____ Amount in Words _____ _____ _____ _____and_____ _____ _____centavos				

TOTAL BID AMOUNT (Php) \_\_\_\_\_

TOTAL BID AMOUNT IN WORDS \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signature: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Position: \_\_\_\_\_  
Name Company: \_\_\_\_\_  
Date: \_\_\_\_\_

{ATTACH COMPANY LETTERHEAD/LOGO}

SUMMARY OF BID PROPOSAL

PROJECT:  
LOCATION:

ITEM NO.	DESCRIPTION OF WORK	QTY	UNIT	ESTIMATED DIRECT COST	MARK-UPS IN PERCENT		TOTAL MARK-UP		V.A.T.	TOTAL INDIRECT COST	TOTAL COST	UNIT COST
					OCM	PROFIT	%	VALUE				
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9] [5] x [8]	[10] 5%([5] +[9])	[11] [9] +[10]	[12] [5] + [11]	[13] [12] / [3]

SUBMITTED BY:

Signature: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Position: \_\_\_\_\_  
Name Company: \_\_\_\_\_  
Date: \_\_\_\_\_

## CAAP-BAC-SF Annex “C” Form 3

{ATTACH COMPANY LETTERHEAD/LOGO}

BILL OF MATERIALS & COST ESTIMATES					
NAME OF PROJECT		:			
DESCRIPTION		:			
LOCATION		:			
				QUANTITY	UNIT
ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
<b>A</b>	TOTAL MATERIAL COST				
<b>B</b>	TOTAL LABOR COST				
<b>C</b>	TOTAL EQUIPMENT COST				
<b>D</b>	TOTAL DIRECT COST				
<b>INDIRECT COSTS</b>					
1. OCM (0% of TDC)					
2. CONTRACTOR's PROFIT (0% of TDC)					
<b>E. TOTAL OCM &amp; CONTRACTOR's PROFIT</b>					
<b>F. VALUE ADDED TAX, (VAT)</b> 5.0%					
<b>G. TOTAL ESTIMATED INDIRECT COST ( E + F ), P</b>					
<b>H. TOTAL ESTIMATED UNIT INDIRECT COST ( G / Quantity), P/Unit</b>					
<b>TOTAL ESTIMATED COST ( D + G ), P</b>					
<b>TOTAL ESTIMATED UNIT COST (Total Estimated Cost / Quantity), P/Unit</b>					

SUBMITTED BY:

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

Name Company: \_\_\_\_\_

Date: \_\_\_\_\_

{ATTACH COMPANY LETTERHEAD/LOGO}

**SUMMARY FOR UNIT PRICES OF MATERIALS**

PROJECT: \_\_\_\_\_

LOCATION: \_\_\_\_\_

DESCRIPTION	UNIT PRICE	UNIT

SUBMITTED BY:

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

Name Company: \_\_\_\_\_

Date: \_\_\_\_\_

{ATTACH COMPANY LETTERHEAD/LOGO}

**SUMMARY FOR UNIT PRICES OF LABOR**

PROJECT: \_\_\_\_\_

LOCATION: \_\_\_\_\_

DESCRIPTION	UNIT PRICE	UNIT

SUBMITTED BY:

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

Name Company: \_\_\_\_\_

Date: \_\_\_\_\_

**CAAP-BAC-SF Annex “C” Form 6**

{ATTACH COMPANY LETTERHEAD/LOGO}

**SUMMARY FOR UNIT PRICES OF EQUIPMENT**



PROJECT: \_\_\_\_\_

LOCATION: \_\_\_\_\_

DESCRIPTION	UNIT PRICE	UNIT

SUBMITTED BY:

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Position: \_\_\_\_\_

Name Company: \_\_\_\_\_

Date: \_\_\_\_\_

{ATTACH COMPANY LETTERHEAD/LOGO}

Name of Project : \_\_\_\_\_

Location of Project : \_\_\_\_\_

CASH FLOW BY QUARTER AND PAYMENY SCHEDULE

PARTICULAR	% W	1ST QUARTER	2ND QUARTER	3RD QUARTER	4TH QUARTER
ACCOMPLISHMENT					
CASH FLOW					
CUMULATIVE ACCOMPLISHMENT					
CUMULATIVE CASH FLOW					

Submitted by:

\_\_\_\_\_  
Name of the Representative of the Bidder

\_\_\_\_\_  
Position

\_\_\_\_\_  
Name of the Company

\_\_\_\_\_  
Date

## *Other Bidding Forms*

### (ANNEX “D”)

**Annex “D” Form 1 ..... Authority of Signatory (Secretary's Certificate)**

**CAAP-BAC-SF Annex “D” Form 1**

**AUTHORITY OF SIGNATORY  
(SECRETARY’S CERTIFICATE)**

I,, a duly elected and qualified Corporate Secretary of (Name of the Bidder), a corporation duly organized and existing under and by virtue of the law of the, DO HEREBY CERTIFY, that:

I am familiar with the facts herein certified and duly authorized to certify the same;

At the regular meeting of the Board of Directors of the said Corporation duly convened and held on at which meeting a quorum was present and acting throughout, the following resolutions were approve, and the same have been annulled, revoked and amended in any way whatever and are in full force and effect on the date hereof:

RESOLVED, that (Name of Bidder) be, as it hereby is, authorized to participate in the bidding of (Name of the Project) by the (Name of the Procuring Entity); and in that if awarded the project shall enter into a contract with the (Name of the Procuring Entity) and in connection therewith hereby appoints (Name of Representative), acting as duly authorized and designated representatives of (Name of the Bidder), and granted full power and authority to do, execute and perform any and all acts necessary and/or to represent (Name of the Bidder) in the bidding as fully and effectively as the (Name of the Bidder) might do if personally present with full power of substitution and revocation and hereby satisfying and confirming all that my said representative shall lawfully do or cause to be done by virtue hereof;

RESOLVED FERTHER THAT, the Board hereby authorized its President to:

- a. execute a waiver of jurisdiction whereby the (Name of the Bidder) hereby submits itself to the jurisdiction of the Philippine government and hereby waives its right to question the jurisdiction of the Philippine court;
- b. execute a waiver that the (Name of the Bidder) shall not seek and obtain writ of injunctions or prohibition or restraining order against the CAAP or any other agency in connection with this Project to prevent and restrain the bidding procedures related thereto, the negotiating and award of a contract to a successful bidder, and the carrying out of the awarded project.

WITNESS the signature of the undersigned as such officer of the said this.

—

(Corporate Secretary)

SUBSCRIBED AND SWORN to before me this day of, 20affiant exhibited to me his/her Community Tax Certificate No. \_\_\_\_\_ issued on \_\_\_\_\_  
\_\_\_\_\_, at, Philippines.

Notary Public

Until 31 December 20\_\_\_\_\_

PRT No.: \_\_\_\_\_

Issued at: \_\_\_\_\_

Issued on: \_\_\_\_\_

TIN No.: \_\_\_\_\_

Doc. No. \_\_\_\_\_

Page No.: \_\_\_\_\_

Book No.: \_\_\_\_\_

Series of \_\_\_\_\_

