



INVITATION TO BID

FOR

PROCUREMENT OF COMPUTERIZED CONCRETE PIPE TESTING MACHINE (1000KN) FOR THE USE OF DPWH-ASDEO LABORATORY

The Department of Public Works and Highways **Apayao 2nd District Engineering Office**, through its Bids and Awards Committee, through the **FY 2025 RA 12116 REGULAR 2025 CURRENT** intends to apply the sum of **SEVEN MILLION TWO HUNDRED EIGHTY THOUSAND PESOS ONLY (Php7,280,000.00)** being the ABC to payments under the contract for **Contract ID No. 25GPC0006- PROCUREMENT OF COMPUTERIZED CONCRETE PIPE TESTING MACHINE (1000KN) FOR THE USE OF DPWH-ASDEO LABORATORY**.

1. Bids received in excess of the ABC shall be automatically rejected at bid opening.
2. **The DPWH-Apayao 2nd District Engineering Office** now invites bids for the above Procurement Project. Delivery of the Goods is required **SIXTY (60) calendar days**. Bidders should have completed, within **five (5) years** from the date of submission and receipt of bids, 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 a non-discretionary **"pass/fail"** criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.
 - a. Bidding is restricted to Filipino citizens/sole proprietorships, partnerships, or organizations with at least sixty percent (60%) interest or outstanding capital stock belonging to citizens of the Philippines, and to citizens or organizations of a country the laws or regulations of which grant similar rights or privileges to Filipino citizens pursuant to RA No. 5183.
4. Prospective Bidders may obtain further information from Department of Public Works and Highways **Apayao 2nd District Engineering Office** and inspect the Bidding Documents at the address given below during **8:00 AM to 5:00 PM (Monday-Friday)**.
5. A complete set of Bidding Documents may be acquired by interested Bidders on **June 4, 2025-June 25, 2025** from the given address or 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 **TEN THOUSAND PESOS (Php 10,000.00)**. The procuring Entity shall allow the bidder to present its proof of payment for the fees in person.
6. The **DPWH-Apayao 2nd District Engineering Office** will hold a Pre-Bid Conference on **June 13, 2025, (10:00 am)** at the **Procurement Office, DPWH-Apayao 2nd District Engineering Office, San Isidro Sur, Luna, Apayao** and/or through video conferencing or webcasting via any available video conferencing services website/applications, which shall be open to prospective bidders.



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
APAYAO 2ND DISTRICT ENGINEERING OFFICE
Luna, Apayao



Contract ID: **25GPC0006**

Contract Name: **PROCUREMENT OF COMPUTERIZED CONCRETE PIPE TESTING MACHINE (1000KN) FOR THE USE OF DPWH-ASDEO LABORATORY**

7. Bids must be duly received by the BAC Secretariat through manual submission at the office address indicated below, on or before **June 25, 2025 at 9:00 AM**. Late bids shall not be accepted.
8. All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 14.
9. Bid opening shall be on **June 25, 2025 at 2:00 P.M.** at the given address below and/or via any available video conferencing services website/applications. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.
10. Bids shall address to:

JERRY A. RAGOJOS

BAC Chairperson
DPWH-Apayao 2nd DEO
San Isidro Sur, Luna, Apayao

11. The DPWH-Apayao 2nd District Engineering Office reserves the right to reject any and all bids, declare a failure bidding, or not award the contract at any time prior to contract award in accordance with Section 35.6 and 41 of the 2016 revised IRR of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.
12. For further information, please refer to:

BENJAMIN V. DOMINGO

Head, BAC Secretariat
Procurement Unit Office, Apayao 2nd DEO
apayaosecondprocurement@yahoo.com
CP No: 09280494899

13. You may visit the following websites:

For downloading of Bidding Documents:

DPWH Website: June 4-June 11, 2025

PhilGEPS Website: June 4-June 25, 2025

Approved By:

JERRY A. RAGOJOS

Chief, Construction Section
Chairperson, Bids and Awards Committee

(Handwritten signature and initials)

BILL OF QUANTITIES
Department of Public Works and Highways (DPWH)

Project ID No. 25GPC0006

PROCUREMENT OF COMPUTERIZED CONCRETE PIPE TESTING MACHINE (1000KN) FOR THE USE OF DPWH-ASDEO LABORATORY

ABC: P7,280,000.00

CONTRACT DURATION: 60CD

Part No.: _____

Procuring Entity	Description	Quantity	Unit	Column (5) and (6) are to be filled in by the Bidder Unit Price (Pesos)	Amount (Pesos)
Pay item No.					
1	2	3	4	5	6
1	<p>COMPUTERIZED CONCRETE PIPE TESTING MACHINE 1000KN</p> <p>Specifications: Conforms to AASHTO T280 or ASTM C497</p> <p>Used for concrete pipes, rainwater pipes, sewage pipes, farm irrigation pipes, gravity flow pipes, slotting and jacking construction pipes and other pipes for other application, for some pipes produced by adopting centrifuge, vertical extrusion and other technology.</p> <p>Test space can be adjusted by motor drive system.</p> <p>The testing machine shall be of any type of sufficient capacity and shall be capable of providing the rate of loading prescribed.</p> <p>For reinforced concrete pipe, any rate of load application up to a maximum of 7500 lbf/linear foot of pipe per minute shall be used up to 75 % of the specified design strength, at which time the rate of loading shall be reduced to a maximum uniform rate of 1 /3 of the specified design strength of the pipe per minute. This rate of loading shall be continuous until the specified acceptance design strength is reached. If both the design strength and the ultimate strength are being determined, a specified rate of loading need not be maintained after the acceptance design strength has been reached. For non-reinforced concrete pipe, any rate of load application up to a maximum of 7500 lbf/linear foot of pipe per minute shall be used up to 75 % of the specified ultimate strength, at which time the rate of loading shall be reduced to the maximum uniform rate of 3000 lbf/linear foot of pipe per minute. At the manufacturer's option, the rates of loading in this paragraph shall be any rates that do not exceed the specified maximums.</p> <p>The testing machine shall be substantial and rigid throughout, so that the distribution of the load will not be affected appreciably by the deformation or yielding of any part.</p> <p>The three-edge-bearing method of loading shall be used. The test specimen shall be supported on a lower bearing of two parallel longitudinal strips and the load applied through an upper bearing. At the option of the manufacturer, either or both the lower bearing and the upper bearing shall extend the full length or any portion of the length of the specimen.</p>	1.00	unit	<p>In Words: Pesos</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>In Figures: _____</p>	<p>In Words: Pesos</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>In Figures: _____</p>

The lower bearings shall consist of wood or hard rubber strips. Wooden strips shall be straight, have a cross section of not less than 2 in. in width and not less than 1 in. nor more than 1 1/2 in. in height and shall have the top inside corners rounded to a radius of 1/2 in. Hard rubber strips shall have a durometer hardness of not less than 45 nor more than 60. They shall be rectangular in cross section, having a width of not less than 2 in., a thickness of not less than 1 in. nor more than 1 1/2 in., and shall have the top inside corner rounded to a radius of 1/2 in.

The lower bearing strips shall be fastened to a wooden or steel beam or directly to a concrete base, any of which shall provide sufficient rigidity so that deflection is not greater than 1/720 of the specimen length when the maximum load is applied. The rigid base shall be at least 6 in. wide. The interior vertical sides of the strips shall be parallel and spaced a distance apart of not more than 1 in./ft of specimen diameter, but in no case less than 1 in. The bearing faces of the lower strips shall not vary from a straight line vertically or horizontally by more than 1/32 in./ft of length under no load.

The upper bearing shall be a rigid wood beam with or without an attached hard rubber strip. The wood shall be sound, free of knots, and straight and true from end to end. It shall be fastened to a steel or wood-faced steel beam of such dimensions that deflections under maximum load will not be greater than 1/720 of the specimen length. The bearing face of the upper bearing shall not deviate from a straight line by more than 1/32 in. /ft of length. When a hard rubber strip is used on the bearing face it shall have a durometer hardness of not less than 45 nor more than 60, and shall have a width of not less than 2 in. and a thickness of not less than 1 in. nor more than 1 1/2 in. and shall be secured to a wood beam meeting the above requirements.

If mutually agreed upon by the manufacturer and the owner prior to the test, before the specimen is placed, a fillet of plaster of paris not exceeding 1 in. in thickness shall be cast on the surface of the upper and lower bearings. The width of the fillet cap, upper or lower, shall be not more than 1 in./ft of the specimen diameter, but in no case less than 1 in.

The equipment shall be so designed that the load will be distributed about the center of the overall length of the specimen. At the option of the manufacturer, the center of the load shall be applied at any point of the overall length of the specimen. The load shall be applied either at a single point or at multiple points dependent on the length of the specimen being tested and the rigidity of the test frame.

Features

1. The crossbeam is raised and lowered by a double winch remote control button, which can be moved alone or simultaneously, which is convenient for testing drainage pipes of different diameters.
2. The lower support beam is segmented and combined, which is convenient for testing drainage pipes of different lengths.
3. The machine base is cast in concrete and flush with the ground, which is convenient for the placement of drainage pipes of various shapes.
4. The loading is hydraulically loaded by microcomputer control, which saves time and effort, loads smoothly, and resets the test space quickly.
5. The loading speed is constant, and the whole process is automatically controlled by microcomputer, which meets the loading speed and pressure control time requirements stipulated by the national standard, and the load control level can be arbitrarily programmed by the customer.
6. The force value is directly displayed in KN value, eliminating the trouble of force value calculation.
7. The software has peak hold function, automatic data storage, report editing and printing and other functions.
8. The report can save and print the test curve and force value and other information at the same time, so that the test process can be truly reproduced.
9. The travel of the crossbeam and the piston are both set with limit protection to ensure the safety of the test process.
10. The control cabinet adopts universal wheel movable type, which is convenient for test personnel to operate the test from different parts and observe cracks
11. The data and report processing function provides users with a special report editing tool for graphic typesetting, which is flexible in operation and easy to learn, and can conveniently print test curves and test values
12. The software is equipped with an automatic zeroing system for force value, which eliminates factors such as different errors caused by manual zeroing.
13. Microcomputer fully automatic system control, that is, computer automatic control system.
14. The test speed, holding point, and holding time can be written during programming, and the operation is fully automatically controlled by the microcomputer.
15. The holding point can be set at any number of points, the speed of each stage can be set arbitrarily, and the holding time can be set arbitrarily. It will automatically switch to the next stage after reaching the preset conditions.

Technical Specification

1. Maximum pressure: 1000KN
2. Net spacing between columns: 1500mm
3. Beam adjustment method: electric winch (electric control button, fixed by manual column pin)
4. Beam adjustment range: 200mm~1500mm
5. Beam moving speed: double electric winch.
6. Force value accuracy (better than $\pm 1\%$ of the indicated value)
7. Test force display method: computer automatic control, real-time display of current holding time, speed, force value, and other parameters.
8. The force measurement system is a microcomputer fully automatic control system with dual-screen display function, loading speed, force value digital display, automatic storage, query at any time, report printing, test process saving and other functions. It is also equipped with an HP color printer to print test reports.
9. Crack load is automatically identified and recorded, and the failure load is automatically recorded.
10. The percentage of reaching the national standard is automatically calculated and the data is issued.
11. It has an overload protection function, that is, the force value exceeds the full range by 2% and the machine automatically stops and powers off.
12. Loading method: electric hydraulic.
13. Load control method: computer fully automatic control system.
14. Power supply: 380V $\pm 10\%$, 220V $\pm 10\%$, 60HZ
15. Due to the large size of the equipment, the foundation needs to be prepared in advance on site, and the equipment needs to be assembled, repainted or repainted on site (user installation and hoisting are required).

Main Configuration

1. Column pin bearing column 2 sets
2. Safety auxiliary manual ladder 2 sets
3. Bearing double row columns 2 sets
4. Upper beam 1 set
5. Locking upper and lower connecting plates 1 set
6. Ground anchor screw 1 set
7. Pressure bar and ball joint mechanism 1 set
8. Hardwood support 1 set
9. Control oil source (including servo control valve) 1 set
10. Software and controller (software with independent intellectual property rights) 1 set
11. 1000KN force spoke sensor 1 set
12. Computer host, LCD monitor 1 set

	Inclusion: 1. Foundation and Installation must be customized based on laboratory at site 2. Installation of power supply from main panel 3. One year warranty on parts due to factory defects, Two years on service 4. Three years calibration				
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Project to be completed within _____CD.

Submitted By:

(Name and Signature of the Duly Authorized Bidders Representative) (Date)

(Position)

(Name of Bidder)