

Terms of Reference

**For the Installation of the Second-Class Water System at St. Joseph Junior School, Sliema,
Malta**

**In the framework of
the “ALTER AQUA – Phase IV” project**

**Funded by
The Coca-Cola Foundation
and the Energy and Water Agency of Malta**

1. Background

1.1. The ALTER AQUA Project

Alter Aqua, the Non-Conventional Water Resources (NCWR) Programme in Malta, implemented in the Maltese Islands since 2011, is heading towards the completion of its Fourth Phase (which started in 2022). The Programme is designed by the regional organization Global Water Partnership – Mediterranean (GWP-Med), one of the thirteen regional offices of the inter-governmental organization Global Water Partnership (GWP), in partnership with the Energy and Water Agency (EWA) and the Coca-Cola in Malta (General Soft Drinks Ltd. and the Coca-Cola Company), supported primarily by The Coca-Cola Foundation and co-funded by EWA.

Alter Aqua commenced in the Maltese Islands in 2011, first focusing on the island of Gozo, in partnership with the Ministry for Gozo and the Eco Gozo project. Since 2014, the Programme started focusing in Malta, in partnership with the Ministry for Energy and Water Management and the Energy and Water Agency, aiming to promote the use of non-conventional water resources as a sustainable practice for local water security and climate change adaptation. Since 2011, the Programme has applied 21 NCWR systems, yielding 19 million liters of water annually, including the installation or reinstatement of rainwater harvesting systems and greywater recycling systems, alongside educational and awareness raising activities and capacity building workshops for professionals.

As water security is among the top priorities in the Maltese Islands, applying integrated and innovative approaches in water management, mobilizing non-conventional water resources and engaging stakeholders are pivotal in improving water efficiency and management and contributing to climate change adaptation and sustainable development.

1.2. The ALTER AQUA Project – Phase IV

Leveraging the legacy of the previous phases, Alter Aqua - Phase IV seeks to mainstream NCWR applications and water saving in Malta. It will achieve this through a 3-pillar approach: Technical applications, Capacity Building & Youth Engagement, and Community Awareness Raising & Communication, while demonstrating the cultural and social value of water.

The Programme activities include:

Technical Intervention: Reinstatement or improvement of a total number of 2 – 3 existing abandoned underground rainwater harvesting reservoirs, in line with national priorities as set by the Energy and Water Agency (EWA) of Malta under the Ministry for Energy, Enterprise and Sustainable Development. Such applications will be demonstrated in public buildings and spaces. The reservoirs will be selected according to specific technical (e.g. size, accessibility, etc.) and cultural (e.g. historical value, architectural design) features. Options for innovation, including through a Water-Energy-Food-Ecosystem (WEFE) Nexus approach, will be encouraged within capacity and budget, aligned with the water authorities' priorities. The technical interventions will also promote the agenda of the Ministry for Public Works and Planning on the mainstreaming of the Green Stormwater Infrastructure.

Capacity Building and Youth Engagement: A workshop for young participants of technical and non-technical background will be organized for the participants to learn:

- About technically sound and socially acceptable NCWR applications by a team of recognized experts, tapping into the experience of the technical portfolio of 120+ works in the 14 year course of the NCWR Programme in the Mediterranean.
- To promote NCWR and the revival of Malta's water conservation culture, through featuring the country's rich water heritage.

The existing applications in Malta will serve as an onsite example of feasibility, design and implementation, as well as an inspiration for replication.

In this regard, the close collaboration with EWA, and potentially with the Institute of Earth Systems at the University of Malta, is envisaged.

Awareness Raising and Communication: Building upon GWP-Med's experience in Malta, and upon the long-term collaboration with EWA, awareness raising activities will be hosted in the new Water Conservation Awareness Center and at the University of Malta, increasing visibility to young crowds and locals. Activities may include, but are not limited to:

- a) The development of a "reservoir trail", with QR codes strategically placed in areas where there are reservoirs giving access to the subterranean structure, providing information about the structures and the project to visitors
- b) The design and printing of promotional leaflets. The leaflets will display a touristic component promoting both the project objectives as well as the policy priorities of Malta's Tourism Authority.
- c) Media promotion with press releases and features about the Programme's works and the reservoir's historical role in Malta's water saving culture, using original material and previously unpublished professional photographs. This component will build on the existing collaboration of Alter Aqua with local photographer Steve Mallia, who is developing a photographic database and related publication of historical reservoirs in Malta.
- d) A social media campaign which will focus on general public awareness (children and adults, locals and visitors) on water scarcity and wise daily water use/saving.

2. Description of the Assignment

2.1. Objective

- I. The scope of this work is to carry out the installation of the Second-Class Water System at St. Joseph Junior School, Sliema, Malta, for the students to use the collected rainwater (existing reservoir) for secondary uses.

The tasks envisaged to be undertaken as part of this work package consist of supplying and installing the necessary materials and equipment in compliance with the provided drawings.

- II. The Contractor is required to:
 - Receive approval of all the equipment to be used within this contract prior to delivery to site.
 - Set up at the site whatever is necessary to undertake the works (including storage facilities, sanitary facilities, temporary site office, etc.).
 - Provide insurance cover in the joint names of the Supervising Authority and the Contractor to insure the works against loss or damage by fire, storm, tempest, lightning, flood, earthquake, aircraft or anything dropped there from, aerial objects, riot and civil commotion for the full reinstatement value thereof plus 15% of all the works executed and all unfixed materials and goods so insured until the completion of the works.
 - Affect a policy of insurance against third party risks to cover an amount of not less than Euro 100,000 (One hundred thousand Euros) for any accident. The policy shall be in joint names of the Contracting Authority (GWP-Med), the Energy and Water Agency of Malta, the Supervising Authority St. Joseph School Sliema) and the Contractor and shall include cross liability clauses. In respect of liability for the death or injury to any person employed by the Contractor and arising out of and in the course of such person's employment by the Contractor the amount insured by the Contractor shall be such as to indemnify the Contracting Authority against all damages as compensation payable. The Contractor shall comply with and be subject to the terms, exclusions, exceptions, conditions and limitations of the insurance policies and shall bear the amount of the retained liabilities stated therein The Contractor shall deposit with the Contracting Authority copies of the policy or policies and a copy of the receipt in respect of premiums paid before starting the works.
 - Implement health and safety measures on site including personal safety (e.g. safety shoes, helmets scaffolding, harnesses etc.) as well as those to render the site safe for employees (e.g. staircase handrails, closing of lift shaft openings etc.).
 - Prepare a risk assessment report outlining all risks involved and measures to be taken to minimize or eliminate potential risks. The report is to be prepared and signed by a competent person and to be submitted within three weeks from commencement of works.
 - Allow for carrying out all surveys, setting out of works unless included elsewhere in the Bills of Quantities.

- Attend the site to take all relevant measurements in order to ascertain the exact quantities of the individual and measured items to be procured as well as keeping of all relevant records of personnel attendance, stock control etc.
- Provide security measures on site both as regards the storage facilities as well as safeguarding the materials installed during the latter stages of the project.
- Ready to provide samples to the site, if requested by the Supervising Authority of the installation area.
- Allow for continuously keeping the site and building clean and in a workman type condition free from debris, surplus materials and any other type of loose matter arising from works, which will disturb the proper conditions of any internal and external areas, roads and/or adjoining structures. Site Cleaning is to take place during the whole duration of the works.
- Provide for hauling of equipment on site, including crantage, permits and all necessary fees.
- The Contractor is required to furnish all labour, materials, tools, equipment, services, and certificates necessary for carrying out the tasks assigned accordingly.
- The Contractor is also required to ensure that all the works executed under this contract, are carried out in strict adherence with all current health and safety regulations, as stipulated by Maltese law.

2.2. Bill of Quantities

Item	Description	Unit	Quantity
SECOND CLASS WATER SYSTEM INSTALLATION			
	<i>Supply and install the following Polypropylene PN 6, installed at roof level and shafts in vertical runs and internal horizontal main runs, inclusive of all accessories, fittings sleeves in walls, brackets fixing, vents and all necessary to provide a complete system. External pipework shall be c/w weatherproof covering. Pipes to have the following Internal Ø in mm</i>		
1.001	50mm dia. - Second class water pipework (External runs)	m	15
1.002	40mm dia. - Second class water pipework (External runs)	m	10
1.003	32mm dia. - Second class water pipework (External runs)	m	10
1.004	50mm dia. - Second class water pipework	m	85
1.005	40mm dia. - Second class water pipework	m	10
1.006	32mm dia. - Second class water pipework	m	20
1.007	25mm dia. - Second class water pipework	m	70
1.008	20mm dia. - Second class water pipework	m	75
1.009	15mm dia. - Second class water pipework	m	20
	<i>Supply, install and connect the following valves on main runs as per schematic.</i>		
1.010	50mm dia. - Isolating Valves	No.	9
1.011	40mm dia. - Isolating Valves	No.	1
1.012	32mm dia. - Isolating Valves	No.	1
1.013	25mm dia. - Isolating Valves	No.	10
1.014	20mm dia. - Isolating Valves	No.	1
1.015	15mm dia. - Isolating Valves	No.	8

	<i>Plumbing using PPR pipework chased in wall from connection in shaft / main distribution pipework to sanitary fittings, etc including the supply of all pipes and fittings, brackets etc. for a complete installation as per drawing.</i>		
	Car Park Level		
1.016	Bib tap - For irrigation purposes	No.	1
	Ground Floor		
1.017	Water Closet	No.	7
1.018	Bib tap	No.	1
	First Floor		
1.019	Water Closet	No.	7
1.020	Bib tap	No.	1
	Second Floor		
1.021	Water Closet	No.	7
1.022	Bib tap	No.	1
	Third Floor		
1.023	Water Closet	No.	7
1.024	Bib tap	No.	1
	Fourth Floor		
1.025	Water Closet	No.	7
1.026	Bib tap	No.	1
	Roof Level		
1.027	Bib tap - For irrigation purposes	No.	1
1.028	1000 ltr Storage tank complete with all necessary fittings	No.	2
	<i>Supply, Install and connect of the following pumps c/w flexible bellows, non-return valve, strainer etc and all necessary fittings required as per drawing and specifications:</i>		
1.029	85 L/min @ 15m head (Second Class Water Pump) - Roof Level	No.	1
1.030	150 L/min @ 35m head (Second Class Water Submersible Pump) - Car Park Level	No.	1
1.031	Provision to connect up the second-class water storage tank with the first-class water system	L.S.	1
1.032	Supply, installation and commissioning of reservoir level gauge system complete with all necessary fittings and components as per specifications.	No.	1
1.033	Provision to supply working drawings for the second-class water system. Working drawings shall be coordinated with other services and building structural elements.	Set	1
1.034	Test, commission, and handing over of second-class water system installation	L.S.	1
1.035	Supply one full set of as fitted drawings (including 1 hard copy and 2 digital copies)	Set	1

This tender is not divided into lots, and tenders must be for the whole quantities indicated. Tenders will not be accepted for incomplete quantities.

Tenderers should consult the attachments of subject tender document which outline the technical criteria that must be adhered to by the contractor.

List of Attachments:

- Annex 4- Second Class Water System, St. Joseph School Sliema – SCW Tender Drawing
- Annex 5 - Second Class Water System Schematic, St. Joseph School Sliema – SCW Tender Drawing
- Annex 6- Technical Requirements

2.3. Other Matters

Any other work not specified, mentioned and not quoted for by the contractor that may crop up during the carrying out of work assigned, deemed necessary by the contractor for the success of this project must be presented to the Contracting Authority, through the Supervising Authority, for discussion and review prior to execution. The decision of the contracting authority is final.

2.4. Health and Safety Precautions

Responsibility for all aspects concerning health and safety issues for the duration of this project is vested entirely in the contractor entrusted to do this job, who will exercise all control over operations, materials, employees, and all other factors respecting health and safety norms.

2.5. Key Experts

A. The Contractor shall appoint the following Key Experts. Rates submitted by the Contractor in the form Financial Offer shall be inclusive with cost covering the engagement by the Contractor of these Key Expert.

- Key Expert No.1 – Mechanical Engineer
A person holding the warrant to practice as a Mechanical Engineer.
- Key Expert No.2 – Occupational Health and Safety Officer
This expert is to be recognized as a competent person by the OHS of Malta.

The Key Experts and any of his staff shall be bound by all the provisions, the general conditions and the special conditions governing this tender and the Contract.

B. Mechanical Engineer's responsibilities shall as amongst other things be as follows:

The expert must present a detailed CV including the warrant number issued by the Engineering Warranting board. The warranted Mechanical Engineer is to prepare the detailed mechanical design calculations and drawings. Other duties include supervision of all the Mechanical Installation drawings and works including the preparation of technical/commissioning reports as necessary to certify that the works have been carried out in compliance with the tender technical specifications and any other interim communication and/or site instructions, issued by the Supervising Authority, during the progress of works.

C. OHS Officer responsibilities shall amongst other things be as follows:

The OHS Officer shall prepare safe work method statements and ensure that all works, including temporary and provisional works, comply to all safety requirements as spelled out in this tender and contract and as required by all statutory Local and National Authorities.

2.6. Job Completion

The Contractor shall provide a warranty for a period of 24 months on works carried. The warranty period shall commence when all water fixtures associated with the second-class water system are installed and put in service. The Contractor shall be responsible for making good any defect in, or damage to, any part of the works which may appear or occur during this warranty period, and which arises either from the use of defective plant or materials or faulty workmanship or design of the Contractor.

The completion of the works will be verified by the Supervising Authority on behalf of the Contracting Authority.

2.7. Reporting line

The contractor will work under the direct supervision of / and communicate directly with the technical representatives of St. Joseph School Sliema, herewith referred to as the Supervising Authority.

The supervising authority will be in direct communication with the Contracting Authority (GWP-Med).

2.8. Monitoring and Progress Controls

The Supervising Authority will be providing oversight and guidance from the side of the Project Team. Coordination calls between the consultant and the Project Team will be held at weekly basis, to monitor the progress of the assigned services.

3. Duration of the Contract

Delivery of the works should be completed by 09/12/2024.

The overall duration of the contract will be maximum by 31/12/2024.

The date of the commencement of the contract execution shall be the last signing of the contract.

The INCOTERM2010 applicable shall be Delivery Duty Paid (DDP).

4. Contract Price, Schedule of Payments and Performance Guarantee

4.1. Contract Price and Schedule of Payments

The maximum fee for this assignment is **30,000 EUR (including VAT)**. This amount includes all costs, income taxes and any other amount payable or cost that may be required for the completion of the work/service.

The schedule of payments is as follows:

- 20% payment in advance upon Contract Signature and submission of performance guarantees
- 80% payment upon satisfactory completion of the works

The final payment will be issued upon measuring of the total works performed.

The method for measuring completed works for payment must be in accordance with the Contract.

The provisional sums in the bill of quantities must be used in whole or in part at the discretion of the Supervising Engineer or as otherwise set out in the contract.

Each item in the bill of quantities for which payment is to be made in a lump sum, and for which no payment schedule is provided, must be paid after the work covered by the lump sum has been completed to the satisfaction of the Supervising Engineer.

In the event that there are delays in the execution of the contract the contractor shall be liable to pay compensation in the form of a penalty. The amount of the flat rate compensation per day of delay (penalty) shall be of 1% of the net contract value per week up to a limit of 10% of the total contract value. For the calculation of penalties, the number of days of delays shall be converted into weeks by rounding down to the nearest week.

4.2. Performance Guarantee

The successful participant agrees to submit to the Contracting Authority two Performance Guarantees each of them accounting to 2% of the net contract value.

The successful participant shall, within 10 calendar days of the receipt of the contract, sign and date the contract and return it together with a copy of the Performance Guarantees. The copies of the Performance Guarantees forwarded to the Central Government Authority are to be endorsed by the Contracting Authority prior to submission. The successful participant is therefore obliged to forward the original Performance Guarantees to the Contracting Authority. Any Performance Guarantees issuance expenses bear's the successful participant.

The 1st Performance Guarantee shall be released within 30 days of the completion of works to the satisfaction of the Supervising Authority and the 2nd performance Guarantee shall be released on the completion of the 24-month warranty period.

The Contracting Authority will not affect any payment to the Contractor until the Performance Guarantees have been submitted.

The Performance Guarantees will be issued to the Supervising Authority St. Joseph School Sliema, in line with the Memorandum of Understanding signed on the 3rd of May 2024.

5. Selection Criteria (Pass / Fail)

Successful participants must provide the following documents:

A. Technical Offer:

- Graphic Works Schedule - Program of Works in the form of a Gantt Chart
- Key Experts Form

- The Statement of Availability Form
- Professionals Declaration Form
- Preliminary Risk Assessment
- Health and Safety Plan
- Signed declaration of payment of Taxes
- Signed declaration of payment of Social Insurance contributions
- A list of at least three (3) projects of similar nature and / or budget size in the last five (5) years (Provide information in the following form).

Title of the Project / Assignment	
Date & duration of the Project / Assignment	
Geographical area of the intervention	
Contents of intervention (mention briefly key elements like type of works and key metrics)	
Cost of the Project / Assignment	
Funding authority and end-client (if different), contact details for reference cross-checking*. <ul style="list-style-type: none"> • Name of the client • Email of the client * The participants provide consent to the Contracting Authority to contact the listed clients. In case of confidentiality matters, please indicate.	

B. Financial Offer (Annex 2)

Failure to provide the minimum required qualifications is considered ground for disqualification.

5.1. Awarding Criterion and Evaluation Process

Award criterion is the Most Economically Advantageous offer with criterion the lowest price for the offers satisfying the selection criteria.

5.2. Submission of Offers

Please refer to the Call for Offers Document for the proper submission of the Technical and Financial Offer.

5.3 Clarification meeting/ Site visit

If needed, all the interested contractors may contact Ms. Ruth Calleja (head@sjjs.edu.mt), on behalf of St. Joseph School Sliema. Upon that communication, the decided date of the site visit will be announced on GWP-Med's website.

INSTRUCTIONS REGARDING THE FINANCIAL OFFER FOR WORKS TENDER

Unit-Price Contract

1. PREAMBLE

Tenderers must price each item in the Financial Offer form separately and follow the instructions regarding the transfer of various totals in the summary.

The Financial Offer form must be read with all the other contract documents and the Contractor shall be deemed to have thoroughly acquainted himself with the detailed descriptions of the works to be done and the way in which they are to be carried out. All the works must be executed to the satisfaction of the EWA Engineer.

1.1. Quantity of Items

The quantities set forth against the items in the Financial Offer form are an estimate of the quantity of each kind of the work likely to be carried out under the contract and are given to provide a common basis for bids. There is no guarantee to the Contractor that he will be required to carry out the quantities of work indicated under any one particular item in the Financial Offer Form or that the quantities will not differ in magnitude from those stated.

When pricing items, reference should be made to the conditions of contract, the specifications and relevant drawings for directions and descriptions of work and materials involved.

The quantities given in the Financial Offer form are provisional and reflect the estimates made at the time of approval to provide a basis for this document and tenders. Tenderers must consider every aspect of the tender document carefully.

Any comments concerning the quantities must be made in the form of an attachment, following the system of itemisation, quoting the codes and brief descriptions, as in the present documents, including the rates and prices.

Save where the technical specifications or the Financial Offer form specifically and expressly state otherwise, only permanent works are to be measured. Works will be measured net to the dimensions shown on the drawings or ordered in writing by the EWA Engineer, save where described or prescribed elsewhere in the contract.

In adjusting extras or variations on the contract, works will be measured on the same basis as that on which the quantities were prepared. All works not specifically mentioned in the Financial Offer form will be taken as included in the prices of various items.

Where, in the opinion of the Engineer, extra works cannot be properly measured or valued, the Contractor may, if so directed by the EWA Engineer, carry out the work at the day work rates shown in the schedule of day work. All completed day work sheets must be signed by the EWA Engineer on or before the end of the week in which the works are executed.

No allowance will be made for loss of materials or volume thereof during transport or compaction.

1.2. Units of Measurement

The units of measurement used in the annexed technical documentation are those of the International System of Units (SI). No other units may be used for measurements, pricing, detail drawings etc. (Any units not mentioned in the technical documentation must also be expressed in terms of the SI.)

Abbreviations used in the bill of quantities are to be interpreted as follows:

mm = millimetre	h = hour
m = metre	L.s. = Lump sum
mm ² = square millimetre	Km = kilometre
m ² = square metre	l = litre
m ³ = cubic metre	% = per cent
Kg = kilogram	N.d = nominal diameter
To = tonne (1000 kg)	m/m = man-month
pcs = pieces	m/d = man-day

II. PRICING

The prices and rates inserted in the Financial Offer form are to be the full inclusive values of the works described under the items, including all costs and expenses which may be required in and for the construction of the works described together with any temporary works and installations which may be necessary and all general risks, liabilities and obligations set forth or implied in the documents on which the tender is based. It will be assumed that establishment charges, profit and allowances for all obligations are spread evenly over all the unit rates.

The rates and prices tendered in the priced Financial Offer form will be quoted at the current rates on the date of submission.

Rates and prices must be entered against each item in the Financial Offer form. If any item in the form is left unpriced, then it shall be deemed that the Contractor is taking provision for the price of this item in the rest of the rates.

The rates will cover all tax, duty or other liabilities which are not stated separately in the Financial Offer form and the tender.

III. COMPLETING THE FINANCIAL OFFER FORM

In form, rates and prices will be entered in the appropriate columns in Euro **inclusive** of VAT.

Errors will be corrected as follows:

- Where there is a discrepancy between amounts in figures and in words, the amount in words will prevail; and
- Where there is a discrepancy between the unit rate and the total amount derived from the multiplication of the unit price and the quantity, the unit rate as quoted will prevail.