

Terms of Reference – Emergency conservation works at the church of Agios Charalambos

I. Brief description and Condition assessment**Name:** Agios Charalambos church**Building Period:** Estimated 1830s**Church Typology:** single-story with women's gallery towards the west, single-nave with a cross-vaulted roof system and semi-open narthex towards the west.**Construction Materials:**

- Church Walls: Ashlar/Rubble stone masonry
- Church Roof: A Stone cross-vault structure covered on top by lime mortar and tiles (French-tiles with some remnants of Byzantine tiles from previous phases of the church)
- Bell tower: The bell tower constitutes a later addition to the church and it is constructed in sandstone.

The following main issues have been identified regarding the current structural condition of the church:

- **Roof:** Extensive loss of material, deterioration and damage on roof tiles, as well as deterioration of the roof mortar and severe vegetation growth have been identified on the roof. The drainage system of the roof is damaged and blocked. Remains of the original roof gutters and original roof tiles have been observed on site. The heavily deteriorated state of the church roof allows for water ingress and there is need for urgent interventions in order to protect the structural capacity of the building fabric.
- **Bell-tower:** Furthermore, the bell-tower is in poor condition. The bell tower constitutes a later addition to the church, constructed by ashlar sandstone masonry with carved elements. There are missing carved stone elements on the bell tower and some deteriorated stone areas. Metal elements are introduced in the stone structure by inappropriate workmanship, materials and technique and present extensive rusting. In addition to the above inappropriate cement repairs exist on the bell tower.
- The encroachment of vehicles to the church and unsympathetic uses of its **surrounding area** is also considered as a risk factor for the church.
- **Metal tie rods** previously installed for the structural support of the church are present extensive rusting.
- The **timber iconostasis** presents severe deterioration and loss of material.

- The timber elements of the **women's gallery** (ceiling and floor) present severe deterioration created also by insect's infestation. The concrete elements of the women's gallery are also in poor condition.
- **Doors and windows** are broken and/or have missing parts. Metal elements of doors and windows are rusted.
- Structural cracks are observed on **wall and roof masonry**.

II. Interventions

The interventions described below aim to the mitigation of the risk of collapse in the church of Agios Charalambos:

1.1 General cleaning of the site and the building

1.2 Fencing around the church area

1.3 Support of the women's gallery

1.4 Wall Repair works - interior

~~1.4.1 Removal of Plaster from the interior (Supervision of Conservator is required)~~

1.4.2 – 1.4.3. Repairing of the severe cracks on the east wall

~~1.4.3 Removal of Plaster (Supervision of Conservator is required)~~

1.4.3 Minor cracks on the walls that are less than 2cm and all the cracks on the domes/vaults

1.5 Treatment of the walls of the church – exterior

~~1.6 Restoration of the damaged stones and replacement of the missing carved stones of cornices, lintels, shelves, keystones, decorations~~

1.7 Roof interventions

1.8 Strengthening and restore of belfry

1.9 Interventions for openings – doors and windows

1.10 Treatment of existing metal rods

1.11 Work on the iconostasis

~~1.12 Provisional sum for removal of plaster if considered necessary (Supervision of Conservator is required)~~ restoration of the damaged stones and replacement of the missing carved stones of cornices, lintels, shelves, keystones, decorations

III. Technical Specifications

Please see Technical Specifications attached

IV. Bill of Quantities

Please see Bill of Quantities attached

V. Photographic Documentation



Photo 1: Roof photo: Extensive vegetation, deterioration of the roof mortar and loss of tiles is visible.



Photos 2, 3 and 4: Roof photos: Extensive vegetation, deterioration of the roof mortar and loss of tiles.



Photos 5 and 6: Roof photos



Photos 7 and 8: Roof photos existing drainage system channels are indicated



Photo 9: Original 'Byzantine Style' tiles of the roof identified on site



Photo 10: Existing waterspouts/ South facade



Photo 11: Existing waterspouts/ South facade



Photo 12: Existing waterspouts/ East facade



Photos 13 and 14: Roof ceiling: water ingress due to the issues of the roof





Photos 15 and 16: Women's gallery



Photos 17, 18 and 19: Exterior walls condition and roof detail



Photos 20 and 21: Exterior walls condition and view of the roof from the ground level



Photos 22,23 and 24 Bell tower: suffering from vegetation, deterioration and loss of materials, erosion of metal elements and inappropriate repairs.

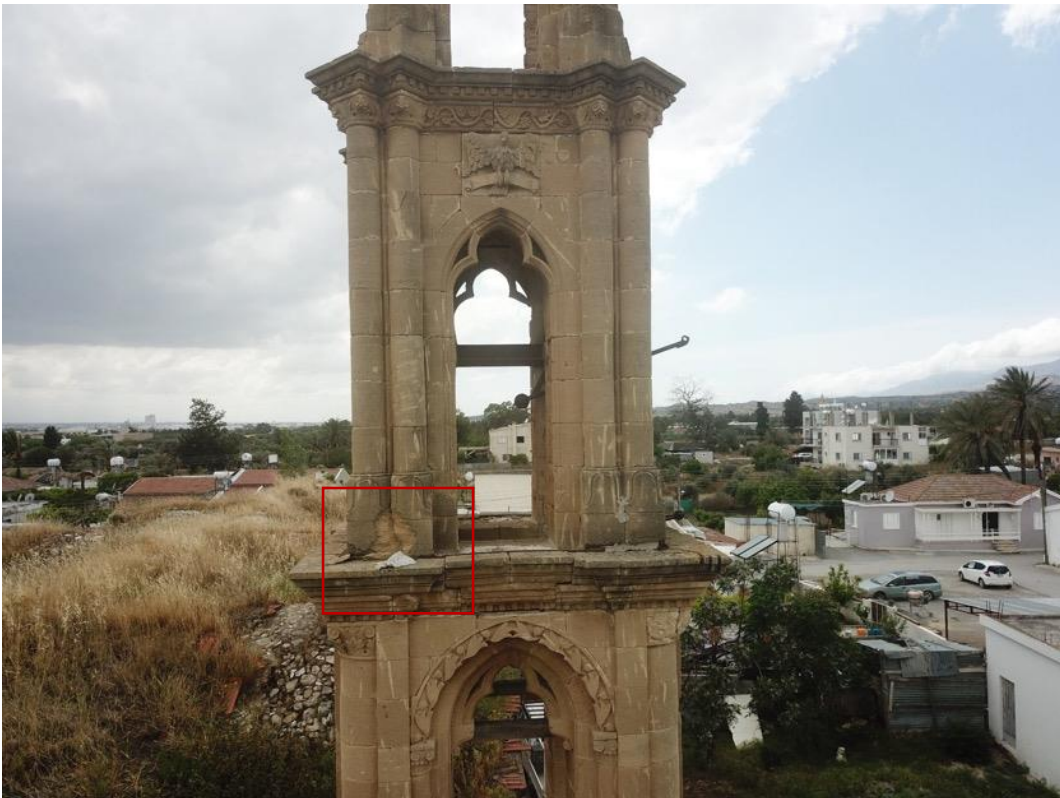


Photos 25 and 26 Bell tower: suffering from vegetation, deterioration and loss of materials, erosion of metal elements and inappropriate repairs.



Photos 28 and 29 Bell tower: suffering from vegetation, deterioration and loss of materials, erosion of metal elements and inappropriate repairs.





Photos 30,31,32 and 33 Bell tower: suffering from vegetation, deterioration and loss of materials, erosion of metal elements and inappropriate repairs.

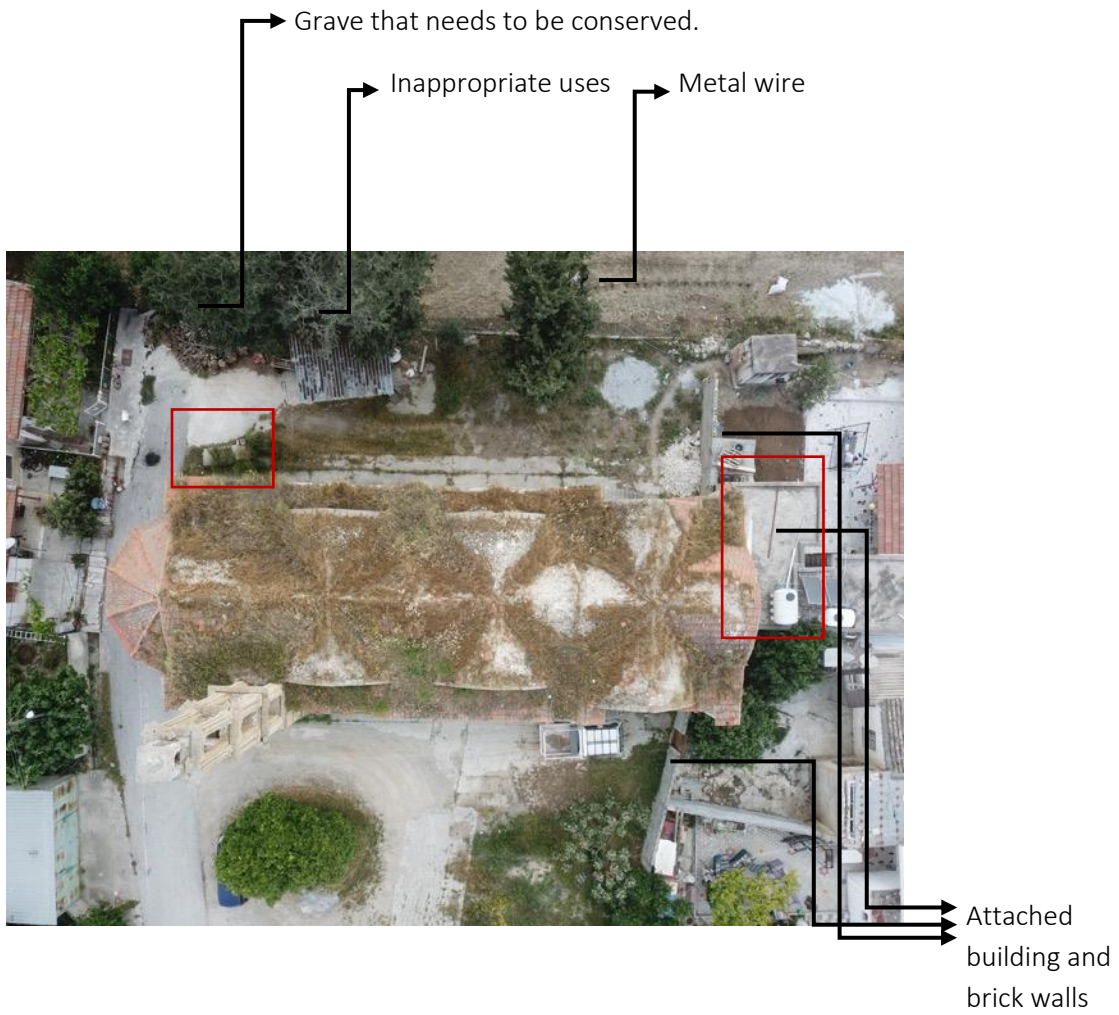


Photo 34: Site overview



Photo 36: Grave in the church courtyard



Photo 37 and 38: Grave in the church courtyard



Photo 39: Metal tie rods / All metal elements should be treated.



Photos 40,41 and 42: Metal tie rods / All metal elements should be treated.



Photos 43 and 44: Metal tie rods / All metal elements should be treated.



Photo 45: Iconostasis and altar



Photo 46 and 47: External concrete floors to be repaired: Narthex area flooring is made of gravel and very thin cement layer on top. Rest of the courtyard is concrete



Photo 49: Semi open area from north to south



Photo 50: The floor condition of the semi open space area.



Photo 51: Entrance



Photo 52: Women Gallery





Photo 52.1, 52.2, 52.3, 52.4: Women's Gallery



Photo 53.1, 53.2, 53.3, 53.4: Women's Gallery



Photo 54.1: North Façade/2nd Entrance and upper part door is the access to roof.

Photo 54.2: Semi open area/ West entrance to the Church/closed with OSB



Photo 54.3 : North Façade/ upper part door(from women gallery to roof)



Photo 54.4 : North Façade Entrance closure



Photo 54.5: North Façade Entrance closure





Photo 55.1, 55.2, 55.3, 55.4: Windows





Photo 55.5., 55.6, 55.7: Windows

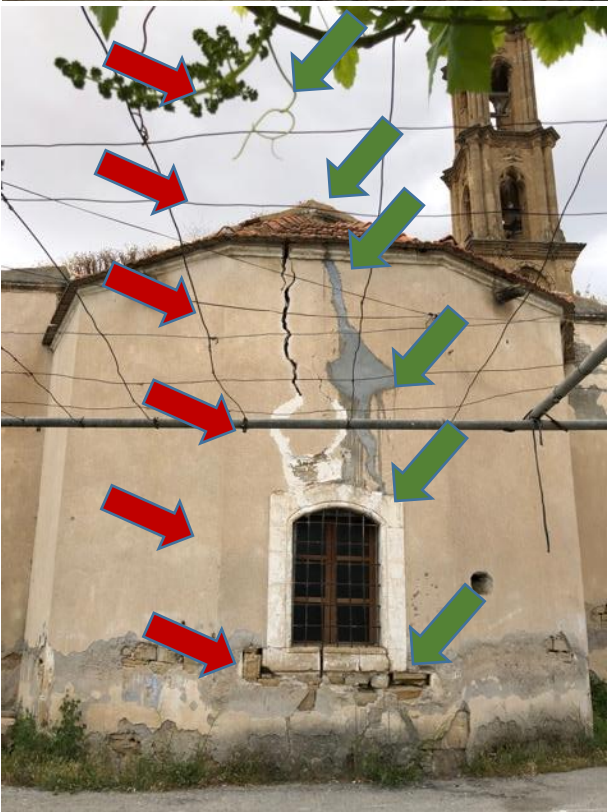




Photo 56.1, 56.2, 56.3, 56.4: Structural cracks to be treated



Photo 56.5,56.6, 56.7, 56.8: Cracks / indoor



Photo 56.7 and 56.8: Cracks / Indoor

VI. List of Project drawings

Survey (releve) drawings:

1. Site Plan (A-Ex 01)
2. [Ground Floor] Plan (A-Ex 02)
3. Mezzanine Floor Plan (A-Ex 03)
4. Ceiling Plan (A-Ex 04)
5. Roof Plan (A-Ex 05)
6. Section A-A (A-Ex 06)
7. Section B-B (A-Ex 07)
8. Section C-C (A-Ex 08)
9. Section D-D (A-Ex 09)
10. North Elevation (A-Ex 11)
11. South Elevation (A-Ex 12)
12. East Elevation (A-Ex 13)
13. West Elevation (A-Ex 14)
14. Windows Catalogue (A-Ex 15)
15. Doors Catalogue (A-Ex 16)

Condition Assessment Drawings:

1. Condition Assessment - Site Plan (A-Ex 01)
2. Condition Assessment - Ceiling Plan (A-Ex 04)
3. Condition Assessment - Roof Plan (A-Ex 05)
4. Condition Assessment - Sections (A-Ex 06)
5. Condition Assessment – Sections (A-Ex 07)
6. Condition Assessment – Sections (A-Ex 08)
7. Condition Assessment – North Elevation (A-Ex 10)
8. Condition Assessment – South Elevation (A-Ex 11)
9. Condition Assessment – East and West Elevations (A-Ex 12)

Proposed Intervention Drawings:

1. Proposed Interventions – Site Plan (A-Pr 01)

2. Proposed Interventions – Ground Floor Plan (A-Pr 02)
3. Proposed Interventions – Mezzanine Floor Plan (A-Pr 03)
4. Proposed Interventions – Ceiling Plan (A-Pr 04)
5. Proposed Interventions – Roof Plan (A-Pr 05)
6. Proposed Interventions – Sections A-A and B-B (A-Pr 06)
7. Proposed Interventions – Sections C-C (A-Pr 07)
8. Proposed Interventions – Sections D-D (A-Pr 08)
9. Proposed Interventions – North Elevation (A-Pr 10)
10. Proposed Interventions – South Elevation (A-Pr 11)
11. Proposed Interventions – East and West Elevations (A-Pr 12)
12. Proposed Interventions – Windows Catalogue (A-Pr 13)
13. Proposed Interventions – Doors Catalogue (A-Pr 14)
14. Proposed Interventions - Details (A-Pr 15)
15. Proposed Interventions Final appearance – Roof Plan (A-Pr 20)
16. Proposed Interventions – Belltower
17. Detail drawing regarding support for two arches