

Fig. 11. West Church 3D Rendering (Graphics by Mais al-Hadad and Dana al-Farraj)

## UMM EL-JIMAL

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This report presents the field project results of the Umm el-Jimal Archaeological Project (UJAP) between 2016 and 2017. This work was conducted in partnership with USAID SCHEP; the Pax Foundation and Gerda Henkel Stiftung; NORAD – Birzeit and Bergen Universities; and the Clean Water Institute of Calvin College.

The Interpretive Trail, a continuous loop linking the West Entry Park to the Interpretive Center, was completed. 20 of 33 point-of-interest signs were designed, locally produced, and installed.

The West Entry Park, located between the Commodus Gate and the village business center, planned as a bridge between community and antiquities, was prepared by preliminary archaeological study and clearing of collapse debris. Khammash Architects created the design using green space to integrate archaeological elements into a peaceful retreat for residents and tourists.

The UJAP began preliminary work on comparative study, conservation, and presentation of three churches—West, Southwest, and Julianos—including C14 analysis of mortars, documentation of stratigraphy, and stone-for-stone 3D rendering of the West Church (Fig. 11). Through a Memorandum of Understanding, UJAP also advised the Department of Antiquities in its conservation activities in the Cathedral.

Preparations for the Interpretive and Hospitality Center at House 119 included planning the museum, design by Khammash Architects, and agreeing on division of responsibility between the Ministry of Tourism and Antiquities (structural repairs) and the UJAP (build-out

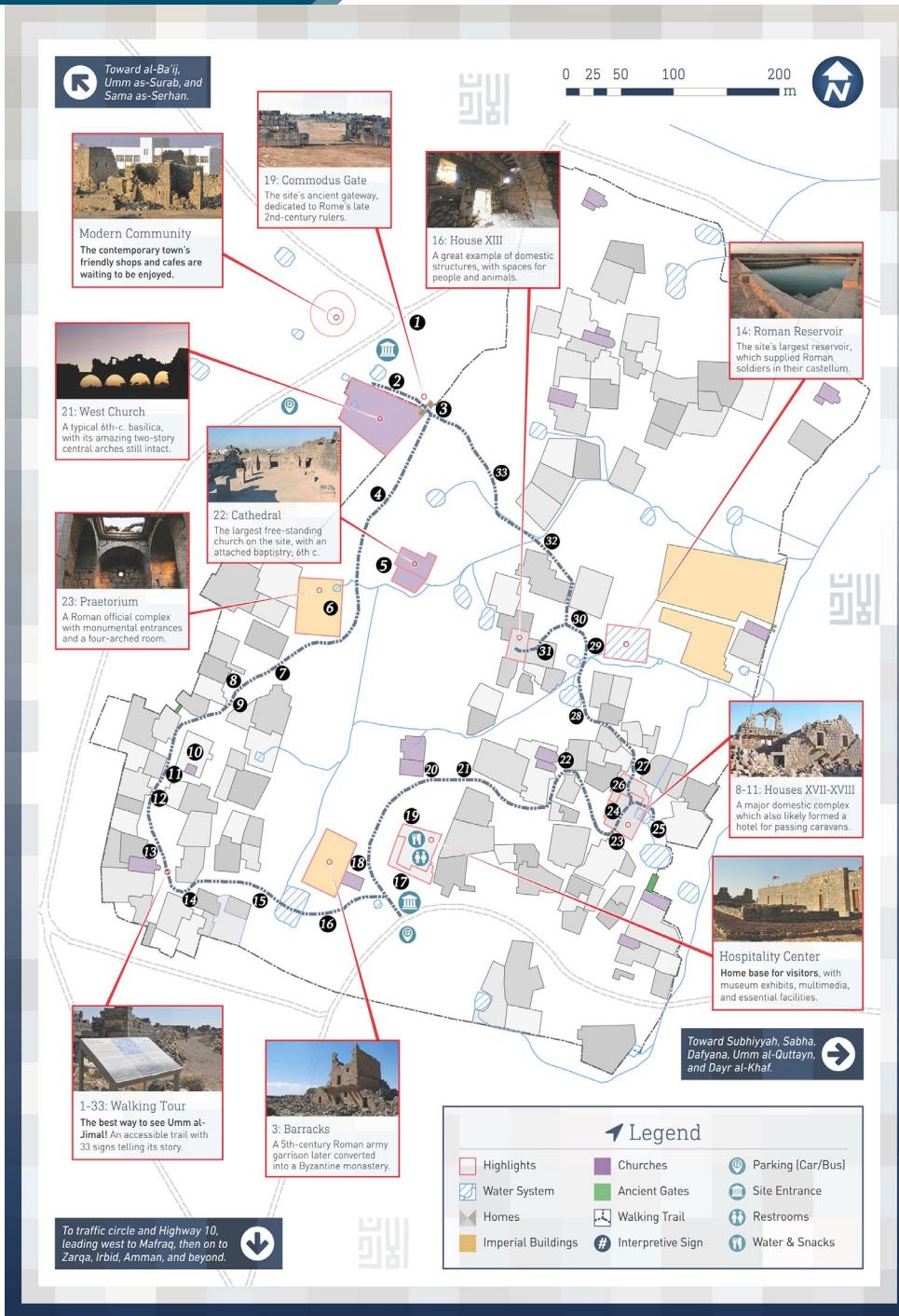


Fig. 12. Umm el-Jimal foldout Brochure Map (map created by R. Linnaea Cahill)

of museum and hospitality facilities). A replication of the Anastasios Decree, reproduced from originals at Qasr Hallabat and Umm el-Jimal by technicians working with Thomas Weber, was installed on a purpose-built wall in the museum inscription garden.

For the Ancient Water System Reactivation Project, begun in 2014 to supplement municipal water, five reservoirs were cleared and prepared for reuse. Complete hydrological field studies and hydraulic design were launched in partnership with the Clean Water Institute of Calvin College, and a Digital Elevation Model was created from drone photographs by Mars Robotics of Jordan. Preliminary activation included the irrigation of municipal green spaces.

Conservation, as part of the USAID SCHEP Project, included training of local employees as site managers whose certification enabled continued employment by the Department of Antiquities. Production of signs included training in content writing and graphic layout; comprehensive design that meets display, durability, and vandalism-resistant standards; and printing, manufacture, and installation—all done locally.

Three Jordanians with architecture degrees were trained in archaeological and heritage work, including documentation of ancient structures, graphic and facility design, and construction oversight. They continued to assist after their training and now have extensive professional dossiers.

The UJAP held community interest meetings to plan the incorporation of Hand by Hand Heritage, a local company for the performance of site management, tourism services, and heritage-themed microbusinesses. For that and water reactivation, the UJAP administered a community interest survey in the fall-winter of 2017–2018.

UJAP tourism promotion for Ministry of Tourism and Antiquities included preparation of the main Umm el-Jimal Site Visit Brochure in English and Arabic (Fig. 12). The UJAP also participated in after-school heritage teaching for Jordanian and Syrian refugee school children. Initial workshops were held to prepare for the writing of a Site Management Plan and assembly of a World Heritage Monument Inscription Dossier. Articles on plaster analysis by Dr. Khaled al-Bashaireh appeared in technical journals (Al-Bashaireh 2016), and Elizabeth Osinga defended her University of Southampton Ph.D. thesis on the ceramics and stratigraphy of the House XVII–XVIII Complex (Osinga 2017).

#### **REFERENCES:**

Al-Bashaireh, K. 2016. "Use of Lightweight Lime Mortar in the Construction of the West Church of Umm el-Jimal, Jordan: Radiocarbon Dating and Characterization." *Radiocarbon*, 58(3): 583–598.

Osinga, Elizabeth A. 2016. *The countryside in context: stratigraphic and ceramic analysis at Umm el-Jimal and environs in northeastern Jordan (1st to 20th centuries AD)*. Ph. D. Thesis, University of Southampton.

Project website: <http://www.ummeljimal.org/>