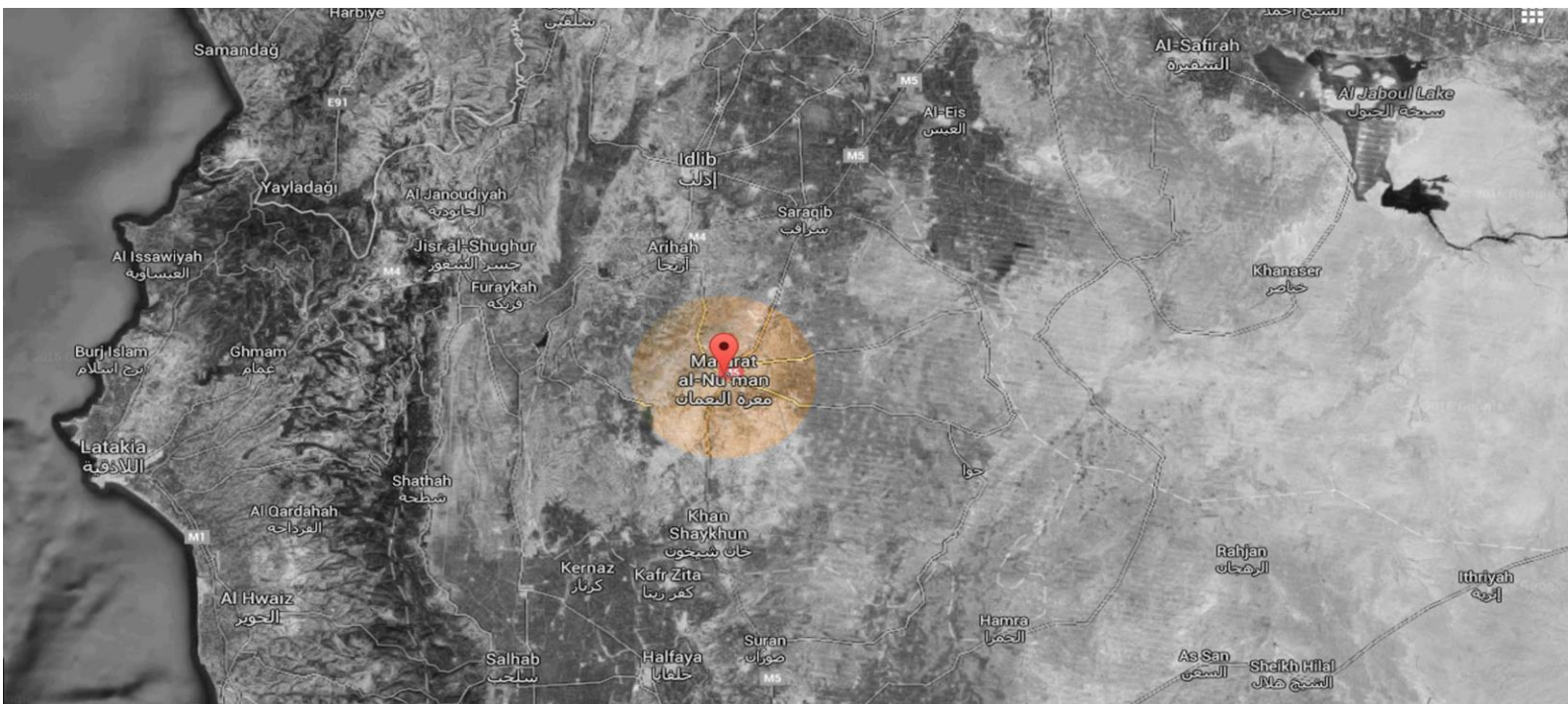


The Day After Heritage Protection Initiative

Site Monitors Project

Progress Report on Damage Assessment, Stabilization and Preservation Work in Ma'arra Museum Following the Third Airstrike January 2018.



Progress Report Damage Assessment, Stabilization and Preservation work at Ma'arra museum (Murad Pasha caravansary. The museum was targeted by an airstrike for the third time January 2, 2018. The building currently serves as a specialized museum for mosaics and archeological artifacts from the UNESCO designated world heritage sites of the Dead cities. The museum includes over 2000 sq. meters of mosaics of which 1700 sq. meters are on display (currently protected with sandbags).

The airstrike inflicted following damage:

1- Both the north hallway of the third wing and the west hallway are destroyed. Both had cusped arches.

2- Destruction of four stone columns, two on the north side and two on the west.

3- Partial destruction of a sarcophagus transported from an area north of Ma'arrat Al-Numan in 1982 and placed on display in the courtyard.

4- Destruction of the west wall in the hallway leading to the restrooms on the east side.

5- Destruction in the north side of the third section.

6- Several large storage jars that had been moved into the third wing were destroyed.

7- Damage to some displayed mosaics in the northeastern hallway across from the third section's north entrance. A wall mosaic also fell off the west side near the west entrance.

Project name: Rapid Intervention at the Ma'arra Museum - Phase I

Location: Ma'arrat Al-Numan Museum in the city of Ma'arrat Al-Numan in Idlib governorate.

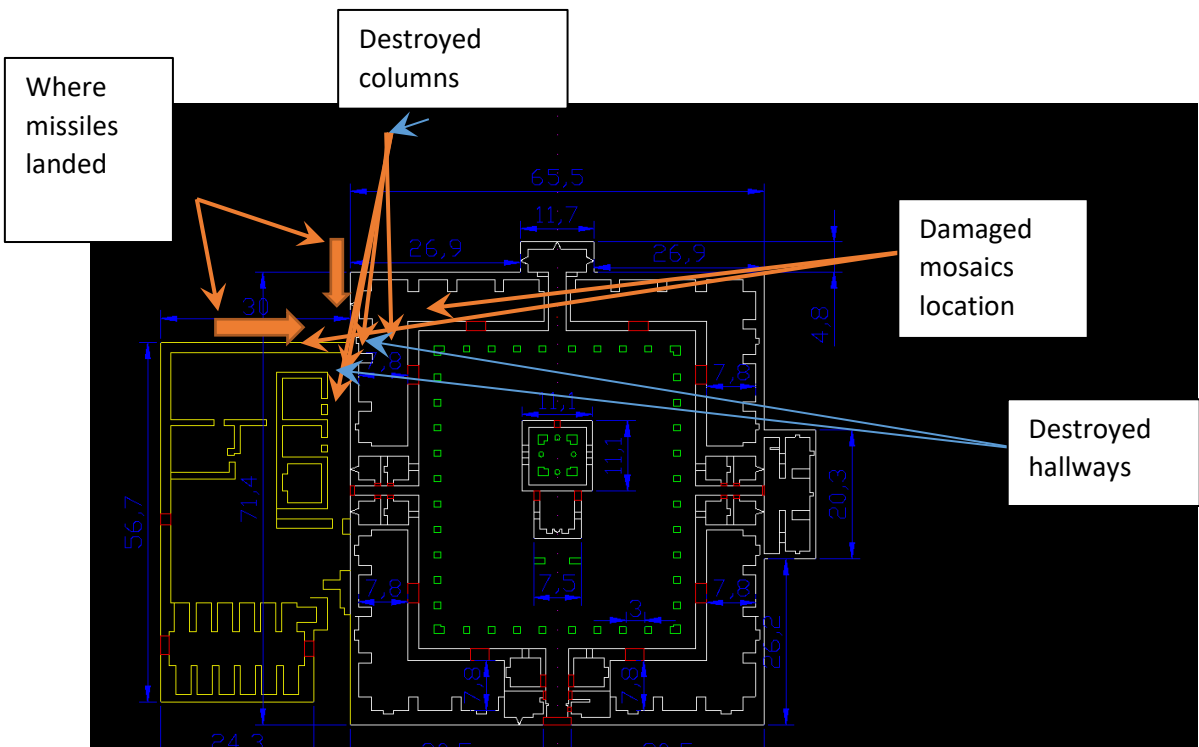
Executing entity: Syrian Heritage Center

Start date: 1/3/2018

End date: 2/3/2018

Project duration: 4 weeks (Four weeks only).





Pre-strike image showing where the museum was struck by the missiles (indicated by orange arrows)



Pre-strike image showing where the museum was struck by the missiles (indicated by blue arrows)

WORK PLAN:

I. Recover and sort any historic/archaeological artifacts, gather fallen/collapsed masonry, and remove the rubble:

1. Document the structure and historic/archaeological artifacts with photos and videos.
2. Create a grid and proceed to work with manual labor tools.
3. Appoint a crew of archaeologists to oversee sorting the rubble.
4. Prepare a secure area to store the damaged mosaics and artifacts.
5. Move any damaged mosaics and artifacts and document the process.
6. Gather collapsed masonry in designated areas.
7. Coordinate with the local council to move the rubble to a location outside the city as approved by the council.





Damage to the northwest corner of the museum



Prestrike image showing corner undamaged



Prestrike image



Digging out the rubble and collecting fallen masonry



Digging out the rubble and collecting fallen masonry



The facade of a tomb preserved in the first wing





Digging out the rubble and collecting fallen masonry





Gathering collapsed masonry





The previously dismantled wall and rebuilding was not affected by missile targeting



Gathering and sorting collapsed masonry

II. Reinforce and stabilize damaged and vulnerable areas:

1. Carefully document the [condition of the] walls.
2. Create topographic maps of heavily damaged areas.
3. Identify areas in need of urgent intervention and reinforcement.
4. Conduct structural analysis on the building and the damaged areas and document with topographic maps, photos, and videos.
5. Determine whether metal or wood would be used for reinforcement.
6. Plaster and reinforce parts exposed to the elements using 350kg/m³ grade cement.
7. Document the reinforcement and plastering work.
8. Document reinforced sites (Topographic maps, photos, videos).
9. All work is to be supervised by archaeologists and specialized engineers.





Damage assesment and taking measurements





Stabilizing damaged areas using wooden beams and scaffolding





Stabilizing damaged areas using wooden beams and scaffolding





Stabilizing damaged wall area supporting arch

Work commenced on 1/3/2018 to document damage, remove collapsed rubble and masonry. All collapsed masonry and artifacts were gathered and sorted. Work began in the northern section, establishing a grid and working through it to sort rocks and artifacts and separate them from rubble. Any recovered artifacts were removed and stored in the first and fourth wings. The collapsed masonry was collected in designated areas based on their location at the time of recovery. Rubble was removed from the site in coordination with Ma'arrat Al-Numan local council using Bobcats, tractors, and dump trucks and dumped in a location approved by the local council .





Clearing rubble from gallery entrance





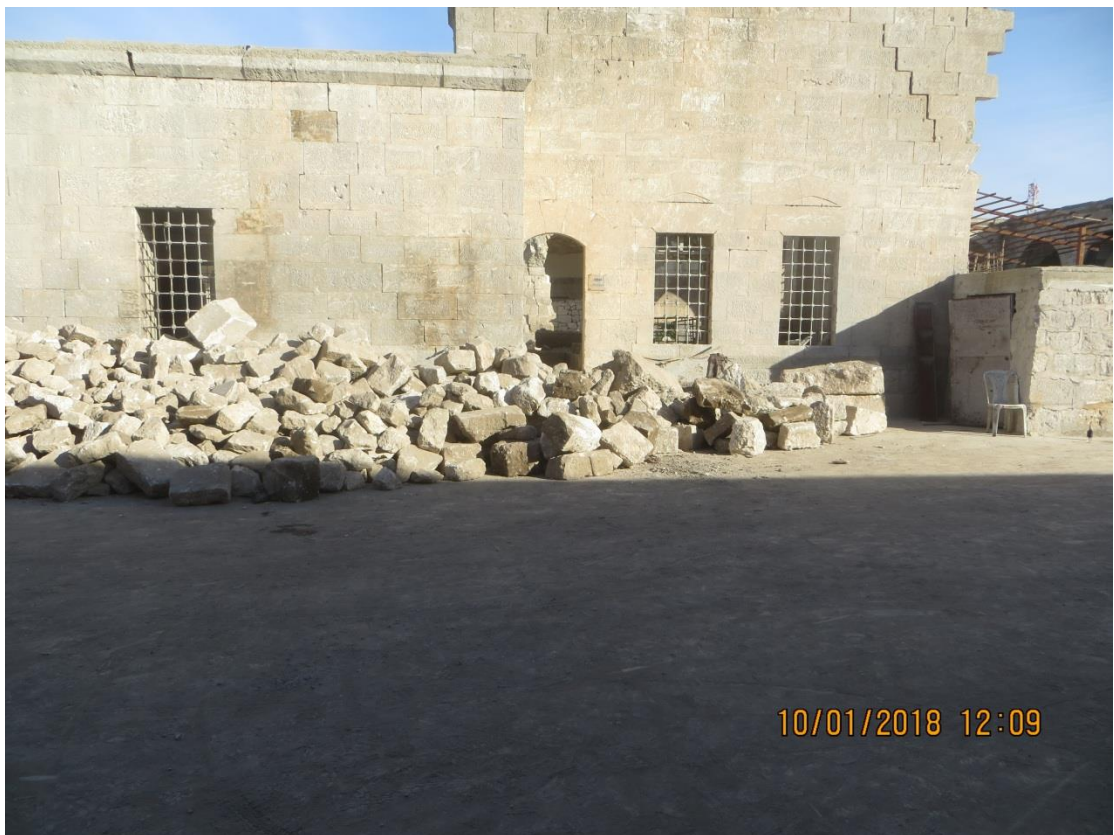
Collapsed roof rubble prior to commencement of work



After collapsed rubble removal



Collecting damaged sarcophagus pieces





Masonry from the damaged tomb facade



Gathered masonry from the north and west façade

After the completion of the process of sorting the masonry and rubble removal, the exposed parts of the damaged areas were covered/plastered with 350 kg / m³ grade cement to prevent the penetration of water and protect from further deterioration due to environmental conditions.





Preparing cement mix and applying it to damaged areas



Cracks filled with 400 kg / m³ grade cement. The surface of the cracks was then plastered over and treated with acrylic to prevent water seepage.





Assembling pottery fragments for later restoration



Ongoing repair to prevent deterioration of damaged areas from environmental conditions



Collection of masonry after completion of sorting

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