



Web Figure 23. East Tomb at Side, Turkey. Detail of niche showing the decorative pitched brick in the semidome.



Web Figure 24. Baths of Julia Memmia at Bulla Regia, Tunisia (c. 230 CE). Detail of the radially-laid *caementa* over a shell of vaulting tubes. Arrows indicate remains of tubes







Web Figure 25 (=Figure 77). House of Dionysus and Ulysses at Dougga, Tunisia (second half of third century CE). Remains of cross vaulted portico built on shell of vaulting tubes.





Web Figure 26 (=Figure 78). "Licinian" Baths at Dougga, Tunisia (third century CE). Two substructure galleries built using different techniques. A. Vault with impressions of reed mats along intrados. Centering holes visible at left. B: Vault with remains of vaulting tubes along intrados visible at left (Photo: Miles Lewis).





Web Figure 27. House of Ducks and Seasons at Dougga, Tunisia. View of composite sail vault constructed on vaulting tubes (a few tube fragments remain in the grooves along the intrados).





Web Figure 28 (=Figure 96A). Baths at Sanctuary of Sulis Minerva at Bath, England. Piece of fallen hollow voussoir vaulting from crown of a vault with a spine made of pieces of *tegulae*. Voussoirs are 31 cm tall. Mortar is made with crushed terracotta.





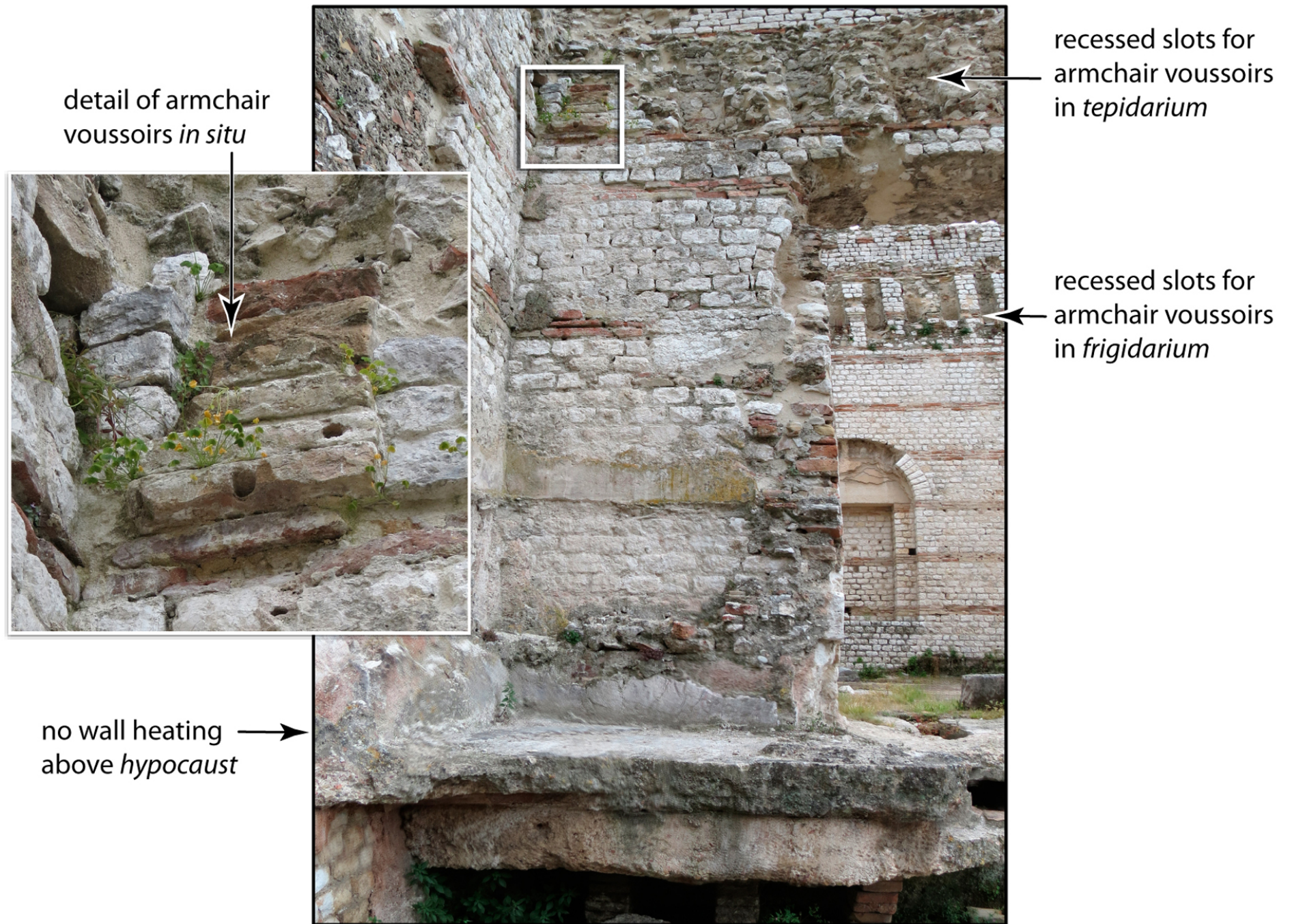
Web Figure 29 (=Figure 96B). Baths at Sanctuary of Sulis Minerva at Bath, England. Piece of fallen hollow voussoir vaulting lying with intrados up. Voussoirs are 31 cm tall. The extrados has long thin rectangular box-tiles attached with crushed terracotta mortar (far left). Box-tiles have interior width of 13.5 cm and are 44 cm long on exterior.





Web Figure 30 (=Figure 96C). Baths at Sanctuary of Sulis Minerva at Bath, England. Piece of hollow voussoir vaulting from York Street storeroom with intrados up and crushed brick mortar still attached to extrados. Voussoirs are 22.5 cm tall.





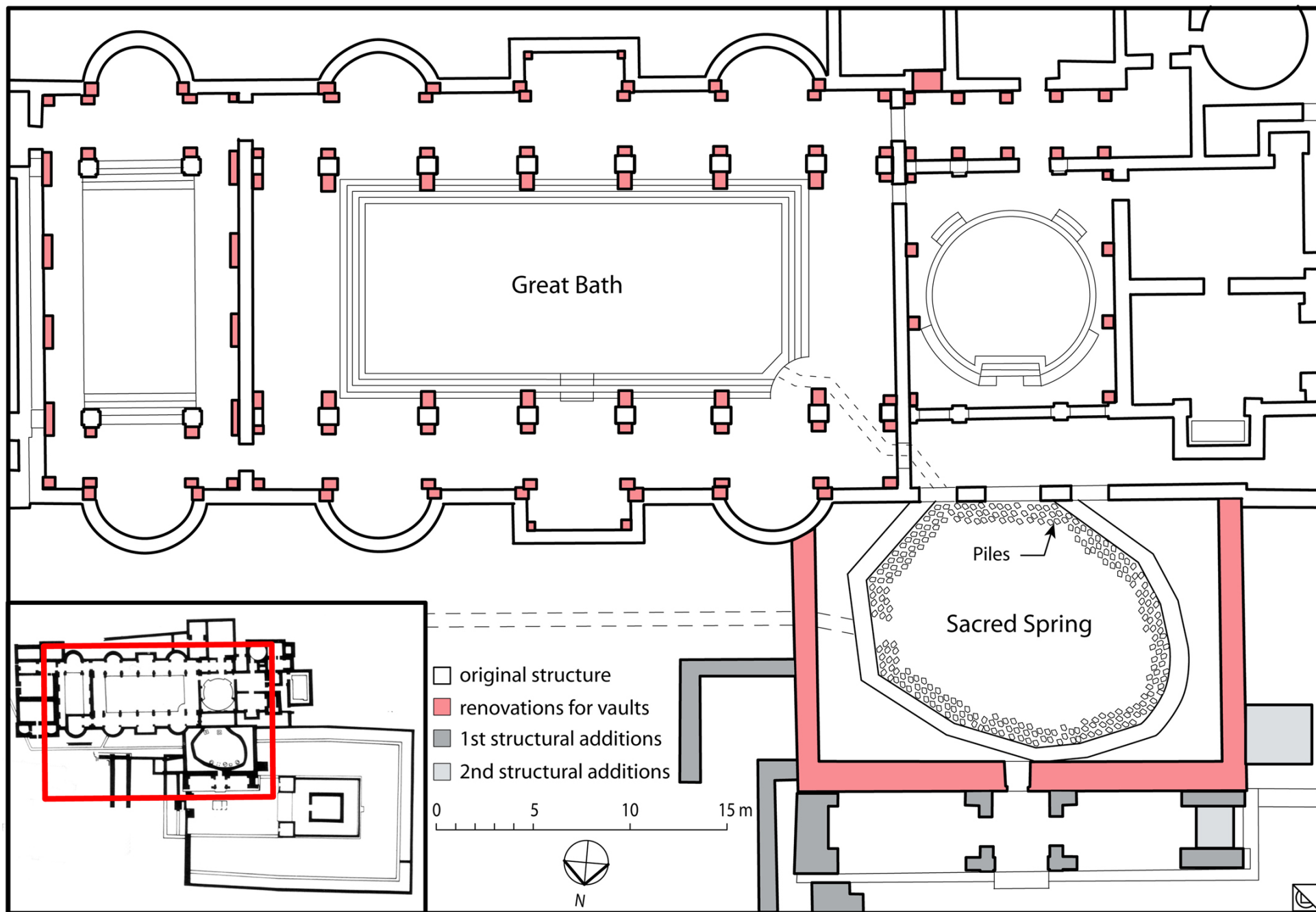
Web Figure 31 (=Figure 109). North Baths at Cimiez (Nice), France. View of *tepidarium* looking into *frigidarium* in background. Inset shows detail of armchair voussoirs remaining in situ. Slots for similar armchair voussoirs visible in vertical slots in *frigidarium* wall. Note that there was no wall heating in *tepidarium*, so the vaults could not have been heated.





Web Figure 32. Theater at Orange, France. Lintel arch with joggle joints (marked in dashed lines).





Web Figure 33. Plan of the baths at the Sanctuary of Sulis Minerva at Bath, England showing phases.