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UNIVERSITY OF SOUTHAMPTON

FACULTY OF HUMANITIES

Department of Archaeology

Volume 2 of 2

**Reconstructing Pozzuoli:
Textual and visual reconstructions of a Roman port town
by**

Elizabeth De Gaetano

Thesis for the degree of Doctor of Philosophy

September 2013

UNIVERSITY OF SOUTHAMPTON

ABSTRACT

FACULTY OF HUMANITIES

Department of Archaeology

Thesis for the degree of Doctor of Philosophy

VISUALISING POZZUOLI: TEXTUAL AND VISUAL RECONSTRUCTIONS OF A ROMAN PORT TOWN

Elizabeth De Gaetano

With its long tradition of trade contacts with the eastern Mediterranean, coupled with the productivity of Campania, Pozzuoli rapidly became a centre for technical and commercial expertise. It soon became the principal port of the Capital in the late 3rd and 2nd Centuries BC and maintained its function as a port of Rome at least till the 3rd Century AD. Pozzuoli was also a 'packet port' for travellers to the east and the principal place of arrivals and departures for officials, embassies and ordinary travellers making the port very cosmopolitan in nature. Its richness in archaeological remains coupled with its unique geological setting has resulted in plenty of scholarly research, particularly on the individual public monuments of the port. There has however been little attempt to understand the urban development of the port and when compared to other Campanian towns such as Pompeii and Herculaneum, thematic research in the area is still in its infancy.

The context within which the study will take place is the idea of knowledge representation and the use of visualisation as a tool for understanding complex datasets. Pozzuoli has been represented in many ways through various periods in time and a digital visualisation, together with the process with which the vast documentation is selected gathered, transformed and ultimately aims to provide a legitimate synthesis of all the complex information that has accumulated over time. The methodology adopted will be that which adheres to the principles of the London Charter with a particular a focus on the documentation of process known as 'Paradata' and attempts to provide a new critical example of its implementation.

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DECLARATION OF AUTHORSHIP

I, Elizabeth De Gaetano

declare that the thesis entitled

Reconstructing Pozzuoli: Textual and visual reconstructions of a Roman port town

and the work presented in the thesis are both my own, and have been generated by me as the result of my own original research. I confirm that:

- this work was done wholly or mainly while in candidature for a research degree at this University;
- where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
- where I have consulted the published work of others, this is always clearly attributed;
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- none of this work has been published before submission, or [delete as appropriate] parts of this work have been published as: [please list references]

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Figure 1: Map of Italy and the Islands (after Rosenstein and Morstein-Marx: 2010)



Figure 2: Map of Italy highlighting the mountain ranges (after LaFleur and Elliot: 2000-2001)



Figure 3: Map of the Latium and Campanian regions (after Richard A. LaFleur and Tom Elliot: 2000-2001)

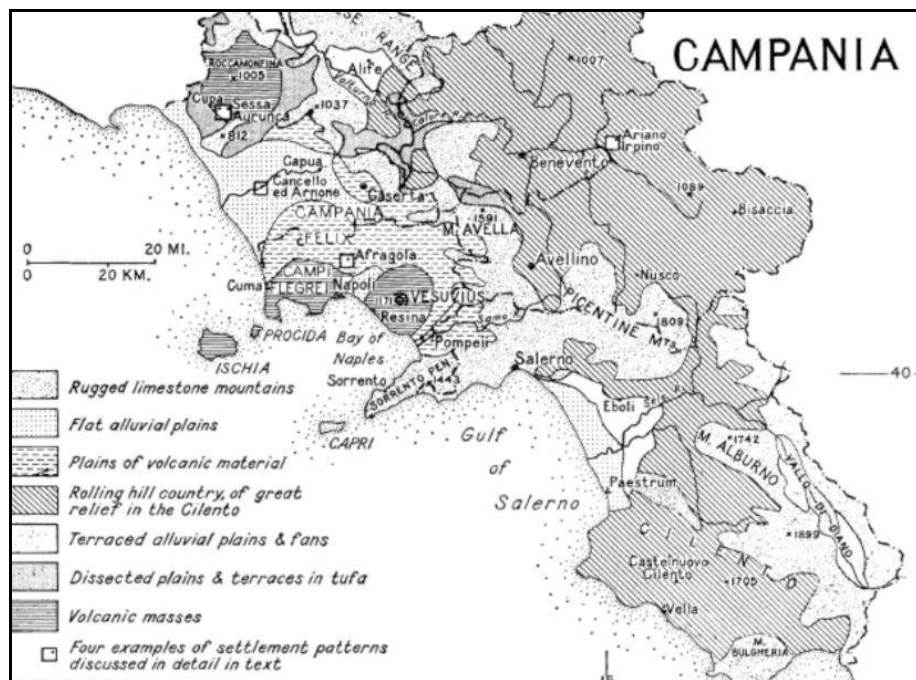


Figure 4: Orientation map of Campania showing landforms (after Dainelli 1913)



Figure 5: Photo highlighting the contrasting elements of the campanian landscape (Photo by Elizabeth De Gaetano)

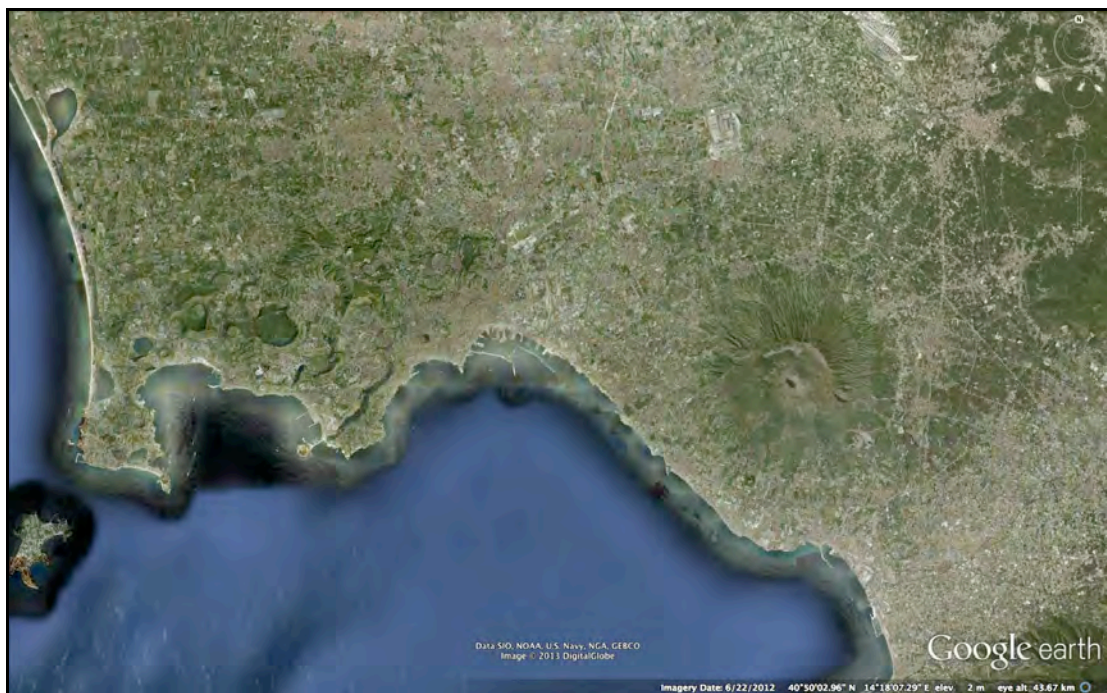


Figure 6: Map showing the volcanic areas in the campanian region (copyright: Google Earth)



Figure 7: Map with the ancient names for the various parts of the campanian region (Barrington Atlas: 2000)

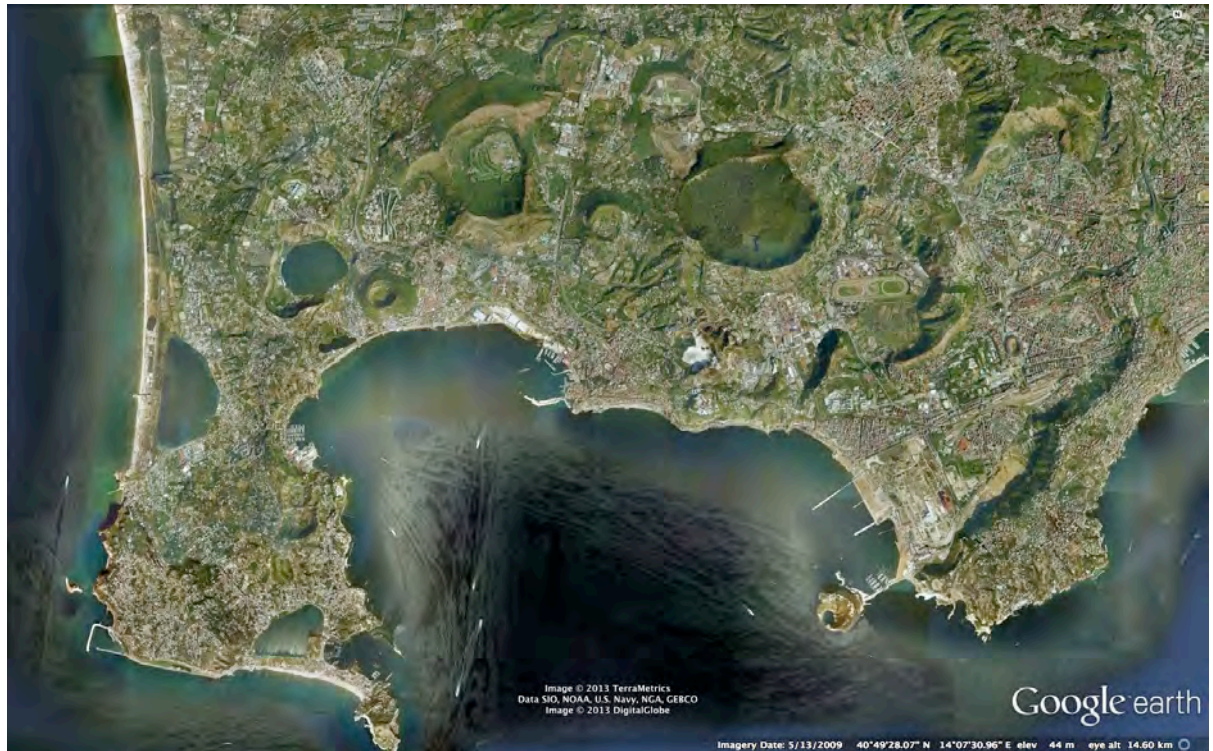


Figure 8: Map showing the volcanic craters in the area of the Campi Flegrei (copyright: Google Earth)

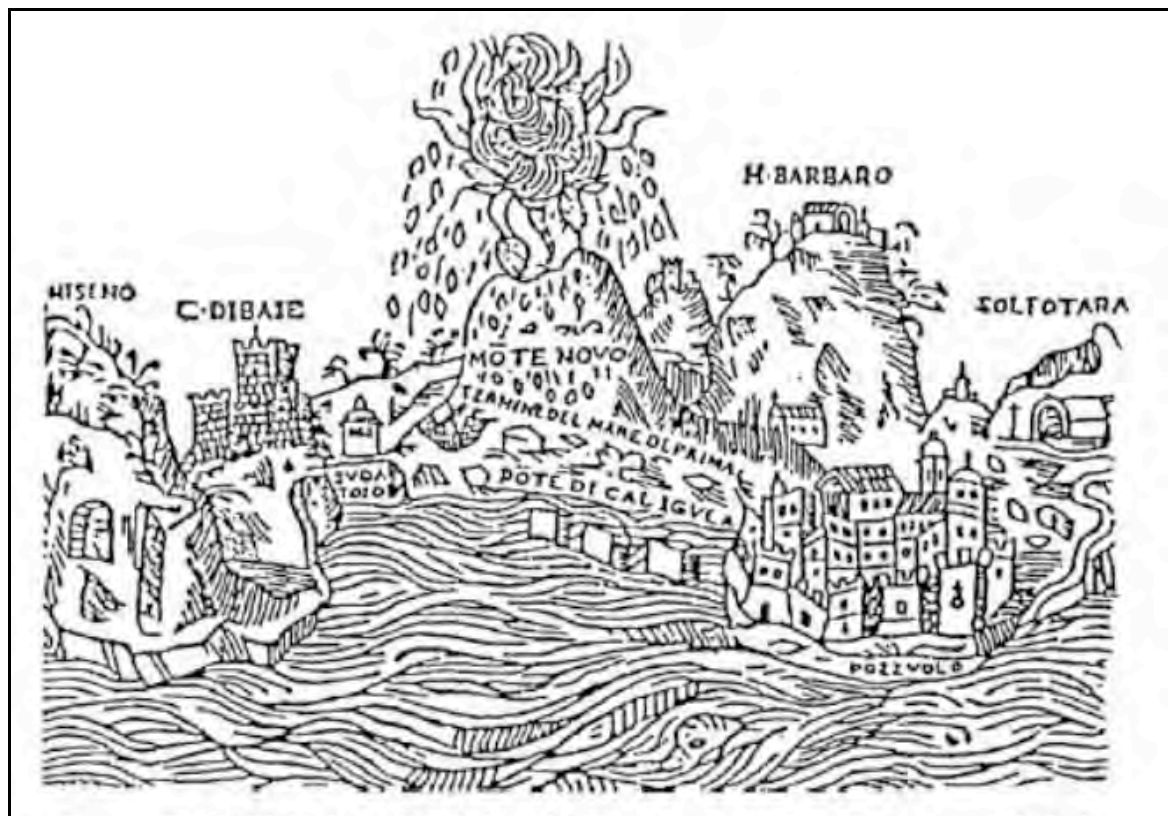


Figure 9: Delli Falconi's A.D. 1539 gravure showing crustal deformation of Pozzuoli Bay in connection with 1538 volcanic eruption of Monte Nuovo (After Mohrange and Mariner 2006)



Figure 10: Photo of the Macellum also commonly known as the Serapeum with the stained columns due to immersion (photo Elizabeth De Gaetano)



Figure 11: The columns of the Macellum as features on Charles Lyell's "Principles of Geology" first published in 1830

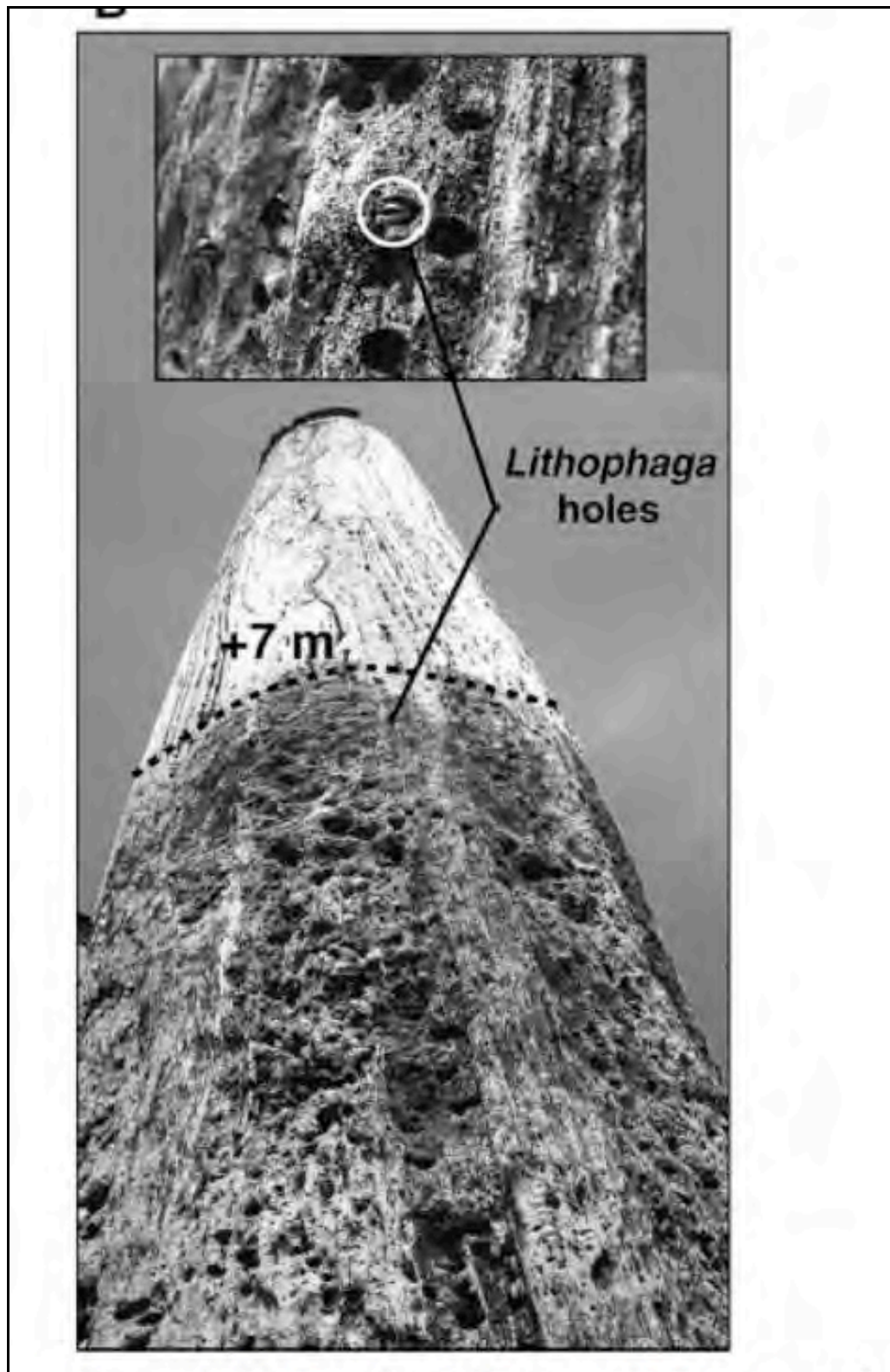


Figure 12: Remains of Pozzuoli's Roman market, showing biological perforations up to height of 7 + 10m above present biological sea level (After Mohrange and Mariner 2006)



Figure 13a: Figure showing the local winds. Winds from the N/NW most common in the summer, are not shown (After Heikell 2011)



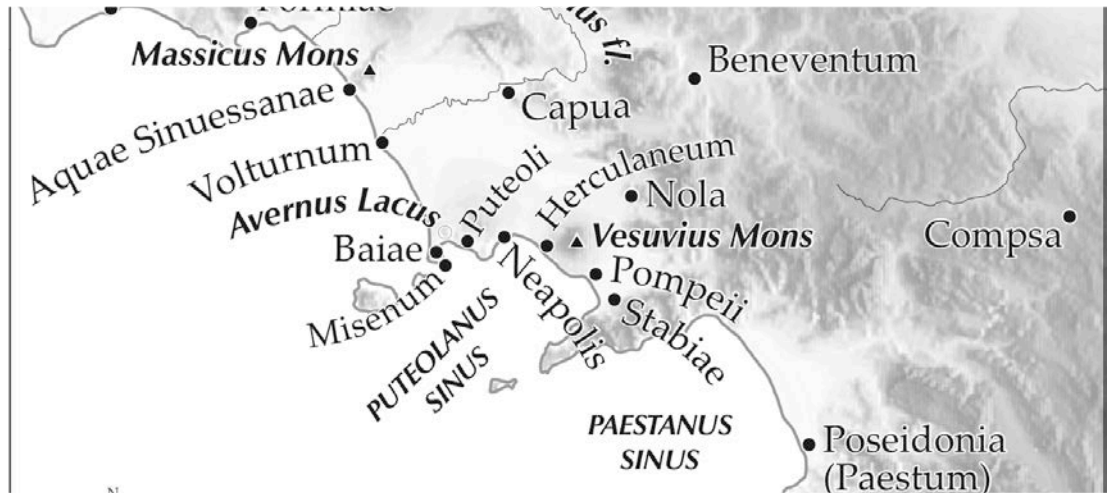
CURRENTS: MAY - JUNE



CURRENTS: AUGUST - OCTOBER

Figure 13b: Figures showing the predominant currents in the Mediterranean sea (After Heikell 2011)

Map for Wheelock's Latin Reader, 2nd. Ed. (ISBN: 0060935065)



and Joyce Uy.
 This map may be used for educational purposes only. For all other uses, you must obtain permission from the publisher. This map is not to be used for any other purpose.

Figure 14a: Map of the Puteolan region (after Richard A. LaFleur and T. Elliot, N. Feldl, A. Retzleff, J. Uy : 2000-2001)

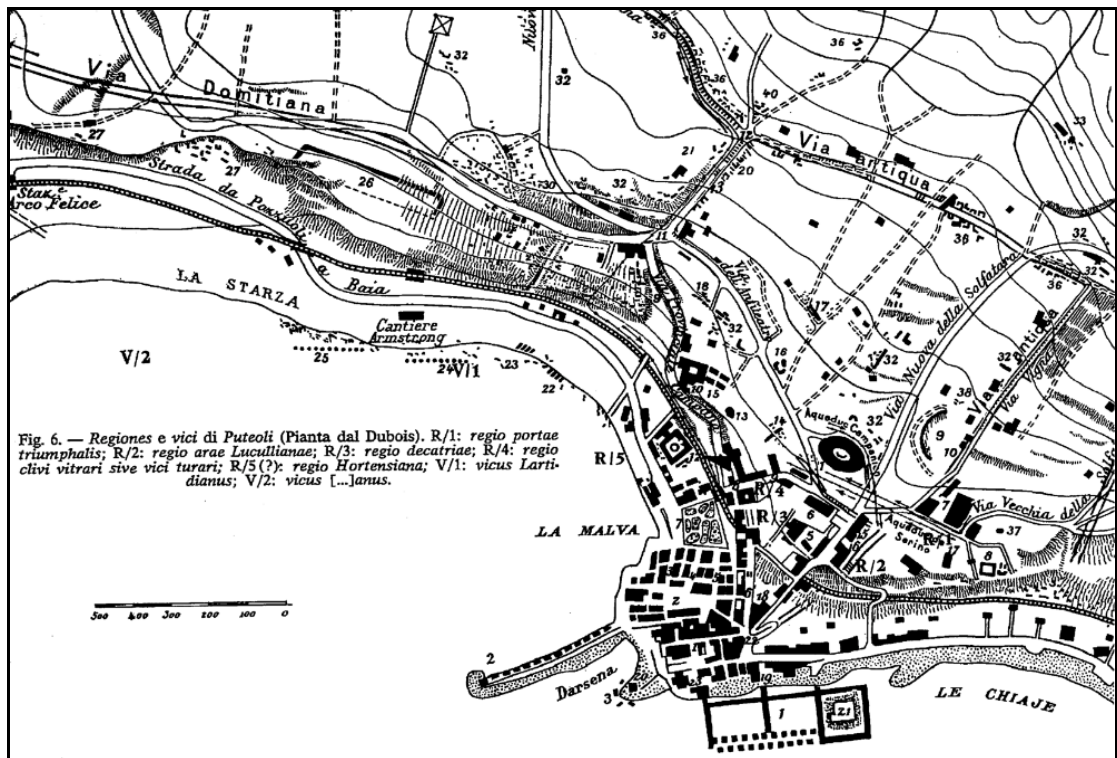


Figure 14b: Map of Puteoli with the various *regiones* as outlined by Camodeca (after Camodeca 1977)

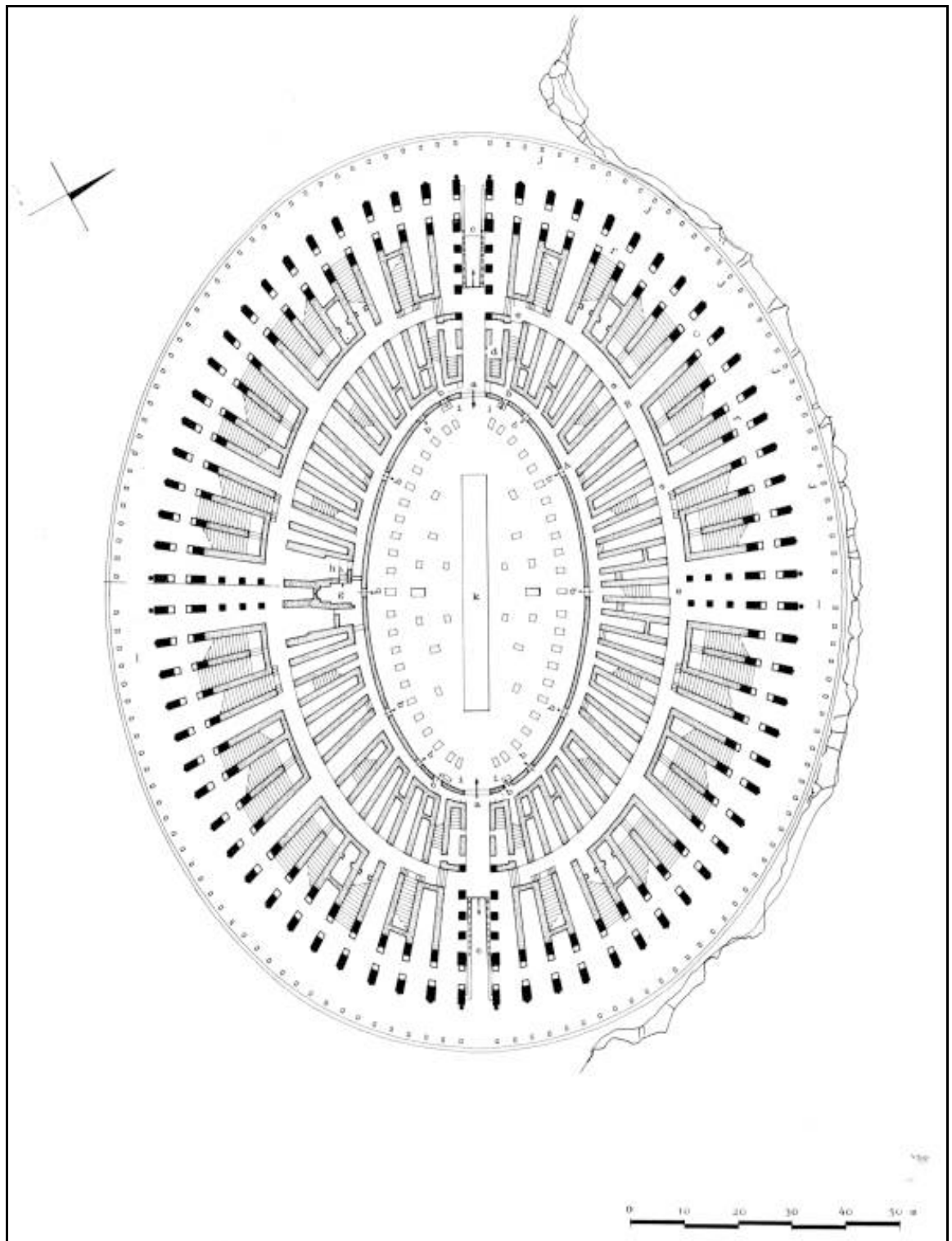


Figure 15 - Plan of the *Puteoli* amphitheatre (after Golvin: 1988)

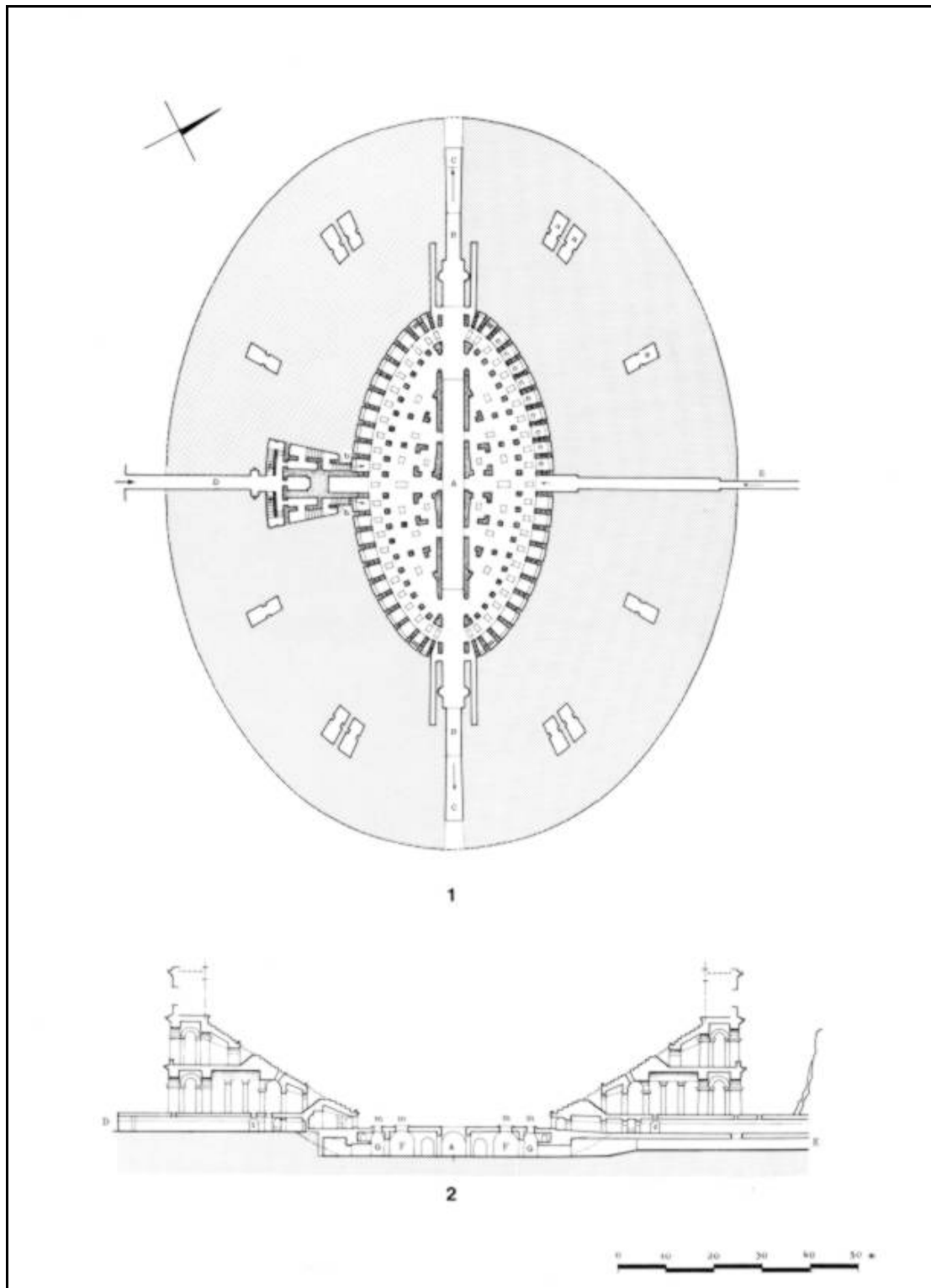


Figure 16: Plan of the subterranean area and section of the *Puteoli* amphitheatre (after Golvin 1988)

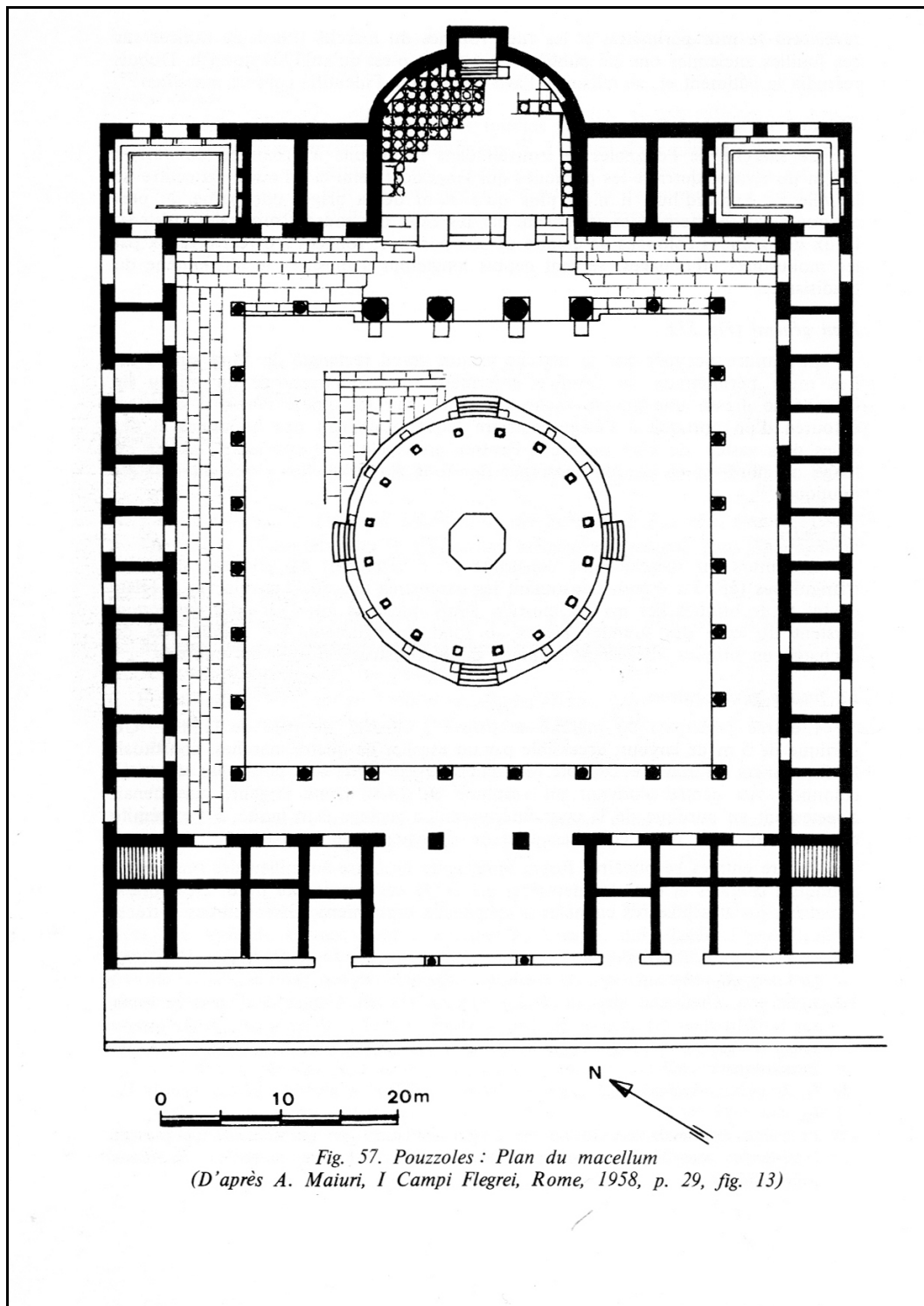


Figure 18: Plan of the *Macellum* of *Puteoli* (after De Ruyt: 1983)

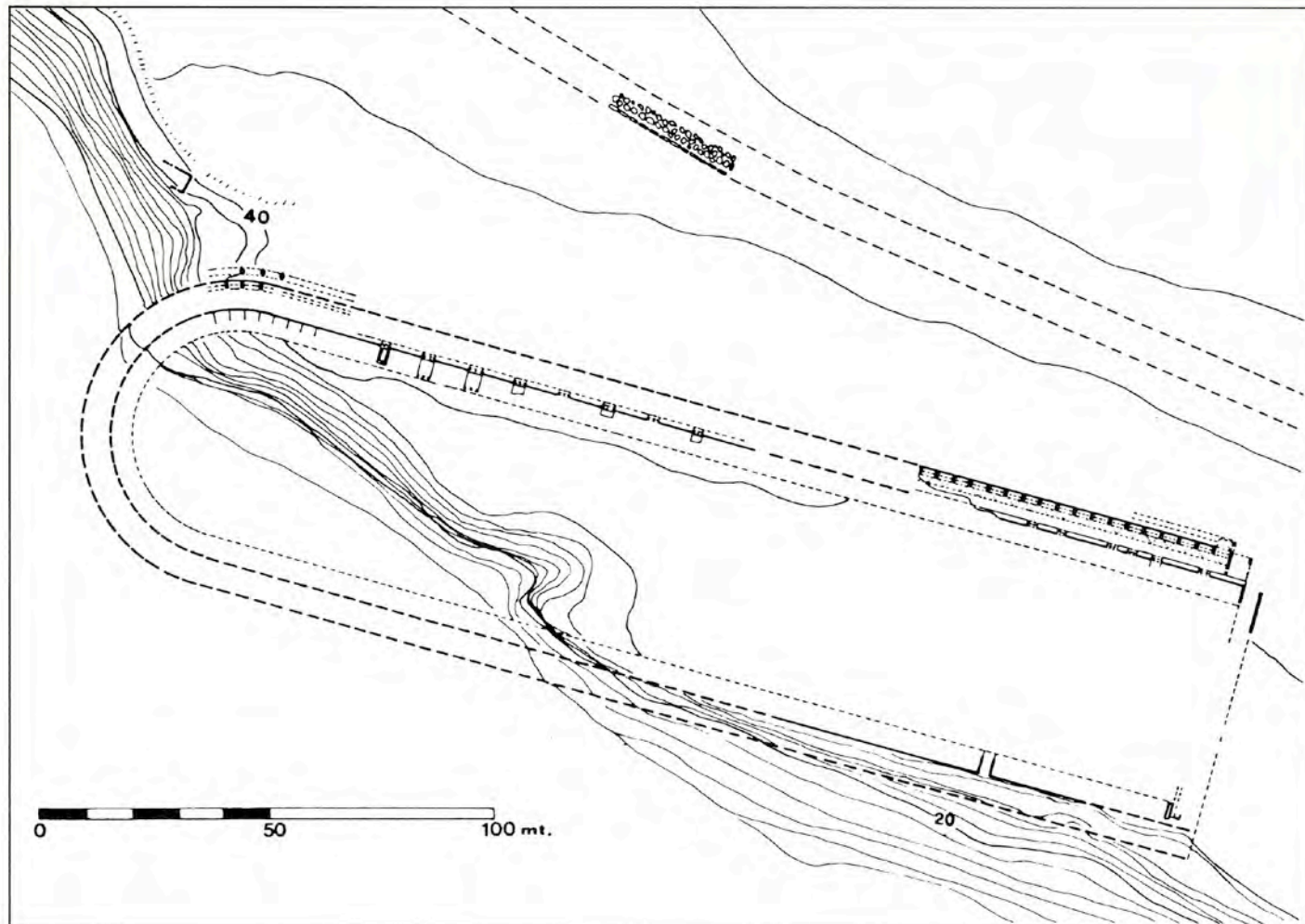


Figure 19: Plan of Pozzuoli's stadium (after Zevi:1993)

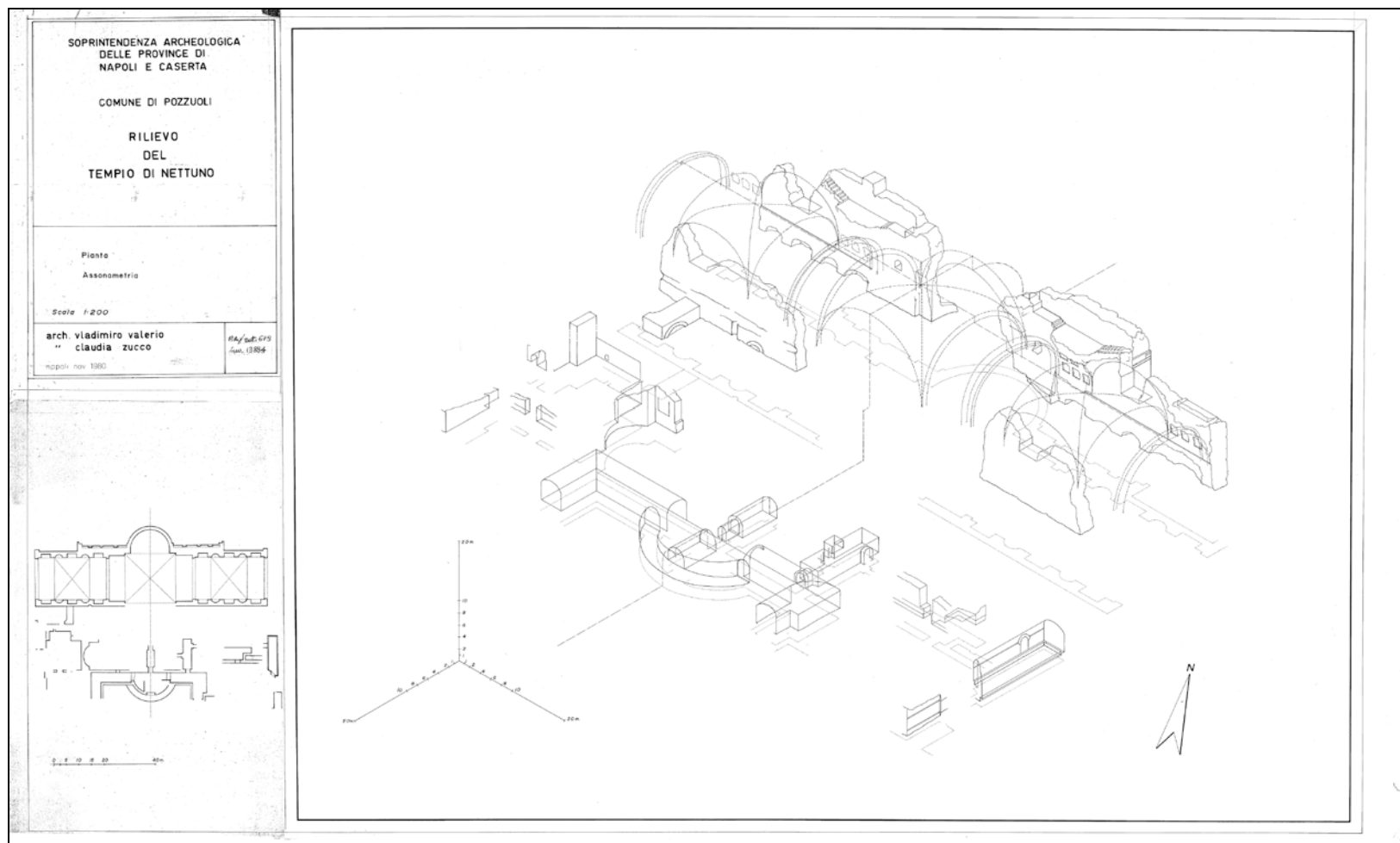


Figure 20: Isometric drawing of the surviving remains of the Roman baths in *Puteoli* Soprintendenza Napoli e Caserta (SANC)



Figure 21: Plan of *Puteoli* with archaeological remains noted (after Zevi:1993)

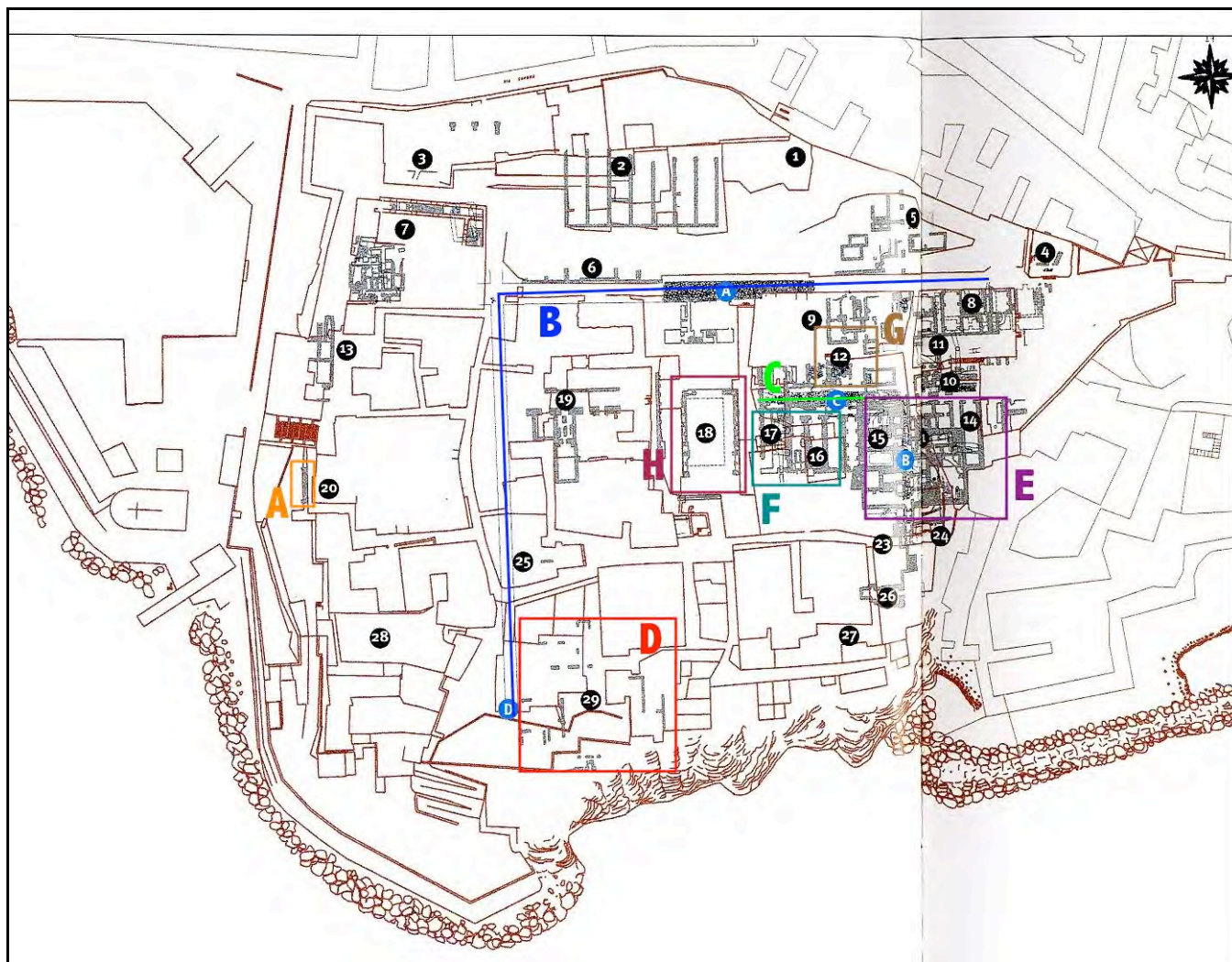


Figure 22: Plan of the Rione Terra promontory with areas marked for digitization (after Crimaco *et al.* 2001)

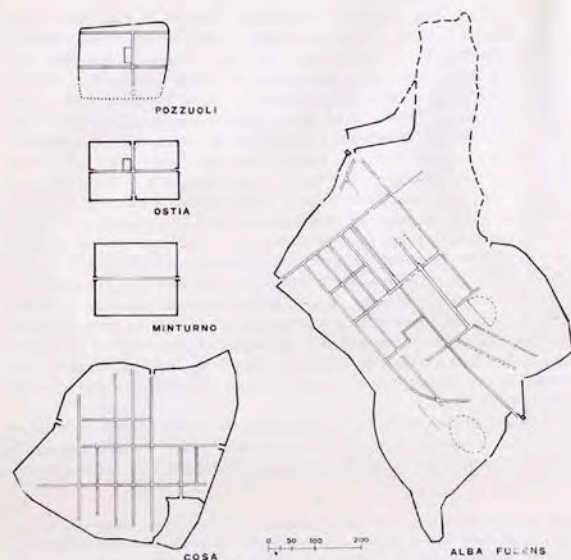


Fig. 8 - Superficie di alcune colonie romane (Ostia, Minturno) e latine (Alba Fucens, Cosa).

assiale, dove poteva aprirsi una piccola piazza, davanti alla facciata del tempio che è volto a sud (una situazione molto simile a quella del Capitolium di Ostia, cfr. fig. 8).

Il tempio di Augusto, già ben noto fino al '500 e documentato nei disegni di Giuliano da Sangallo (fig. 9), scomparve sotto le strutture della Cattedrale, sino a quando nel 1963 un incendio distrusse le strutture moderne e fece riemergere i resti del tempio che oggi si stanno restaurando ⁽⁴⁹⁾.

L'edificio si presenta come uno dei più corretti esempi del classicismo augusteo. Pseudoperiptero (come a Roma, per esempio, i contemporanei Apollo Palatino e Apollo Sosiano), con scala laterale (come Apollo Sosiano), le pareti

ortogonale, Roma 1956, p. 90), non sappiamo se anche della colonia greca (come pensano il Beloch e il Dubois).

(49) V. A. D'AMBROSIO, *Il duomo di Pozzuoli*, Pozzuoli 1973.

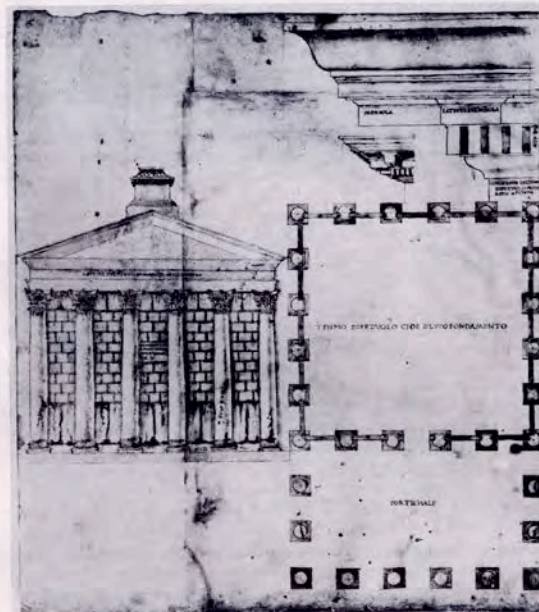


Fig. 9 - Pozzuoli, tempio di Augusto (Giul. da Sangallo).

di finta opera quadrata, ordine corinzio ⁽⁵⁰⁾. La datazione augustea è resa certa dal nome dell'architetto L. Cocceius Auctus (lo stesso che costruì la crypta Neapolitana e la galleria dell'Averno) inciso sulla parete postica del tempio (C.I.L. X, 1614).

L'identificazione come tempio di Augusto si basa su un'iscrizione (C.I.L. X, 1613) esistente sulla fronte fino al secolo XVI. Il testo, così come è riportato dal Mommsen nel Corpus, in base ad antiche trascrizioni, è il seguente:

L. CIALPVRNVS L. F. TEMPLVM AVGVSTO CVM ORNAMENTIS DE SVO F.

(50) Per i capitelli v. W. D. HEILMEYER, *Korinthische Normalkapitelle*, «Röm. Mitt.» XVI Ergh., 1970, pp. 110 n. 445, 130.

Figure 23: Plan and sketch of the *Capitolium* of Rione Terra (drawn by Sangallo reproduced in Crimaco *et al*: 2001)

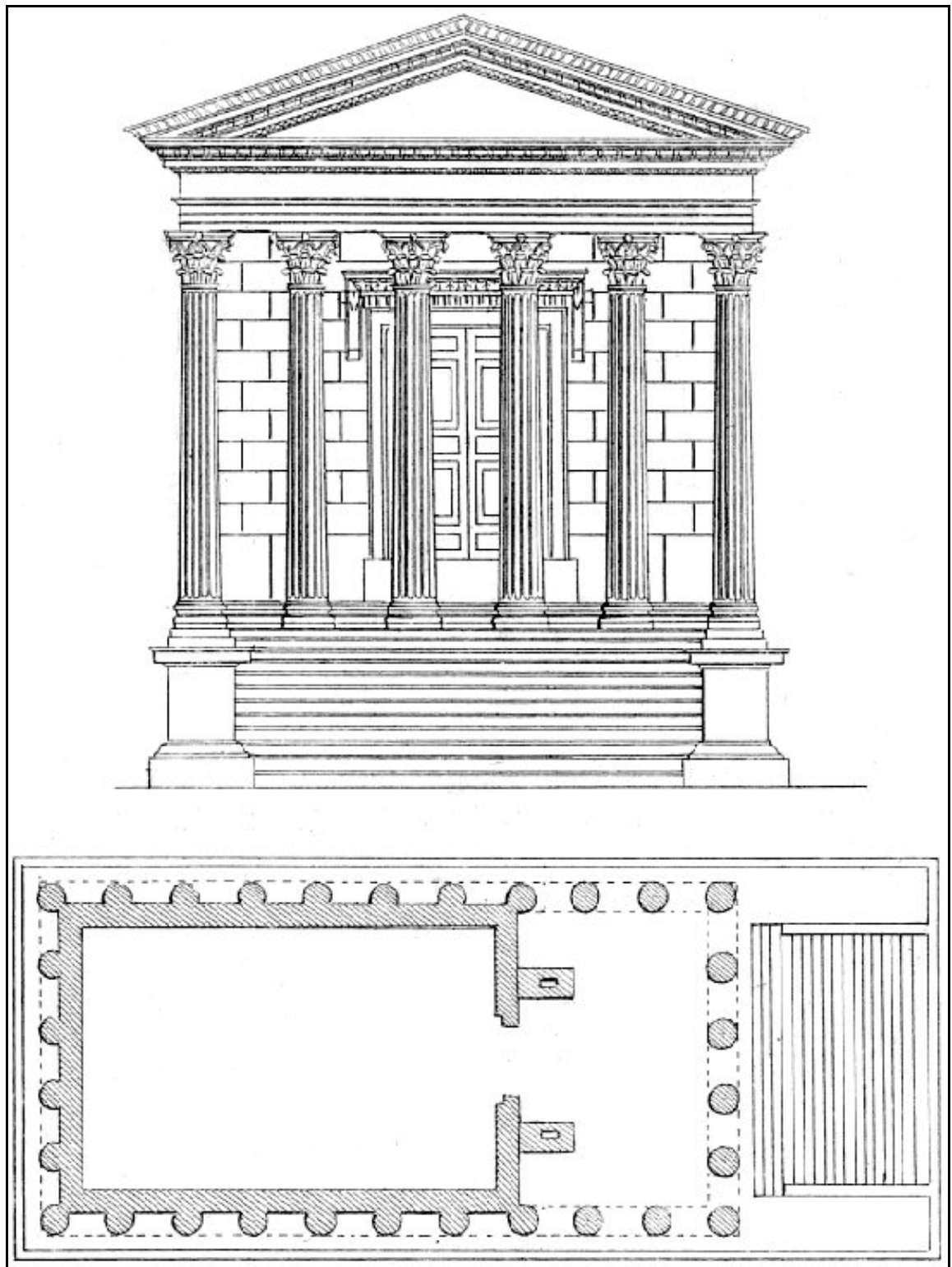


Figure 24: Plan and drawing of the façade of the *Maison Carrée* at Nîmes (after Jean Baptiste d'Agincourt: 1823)

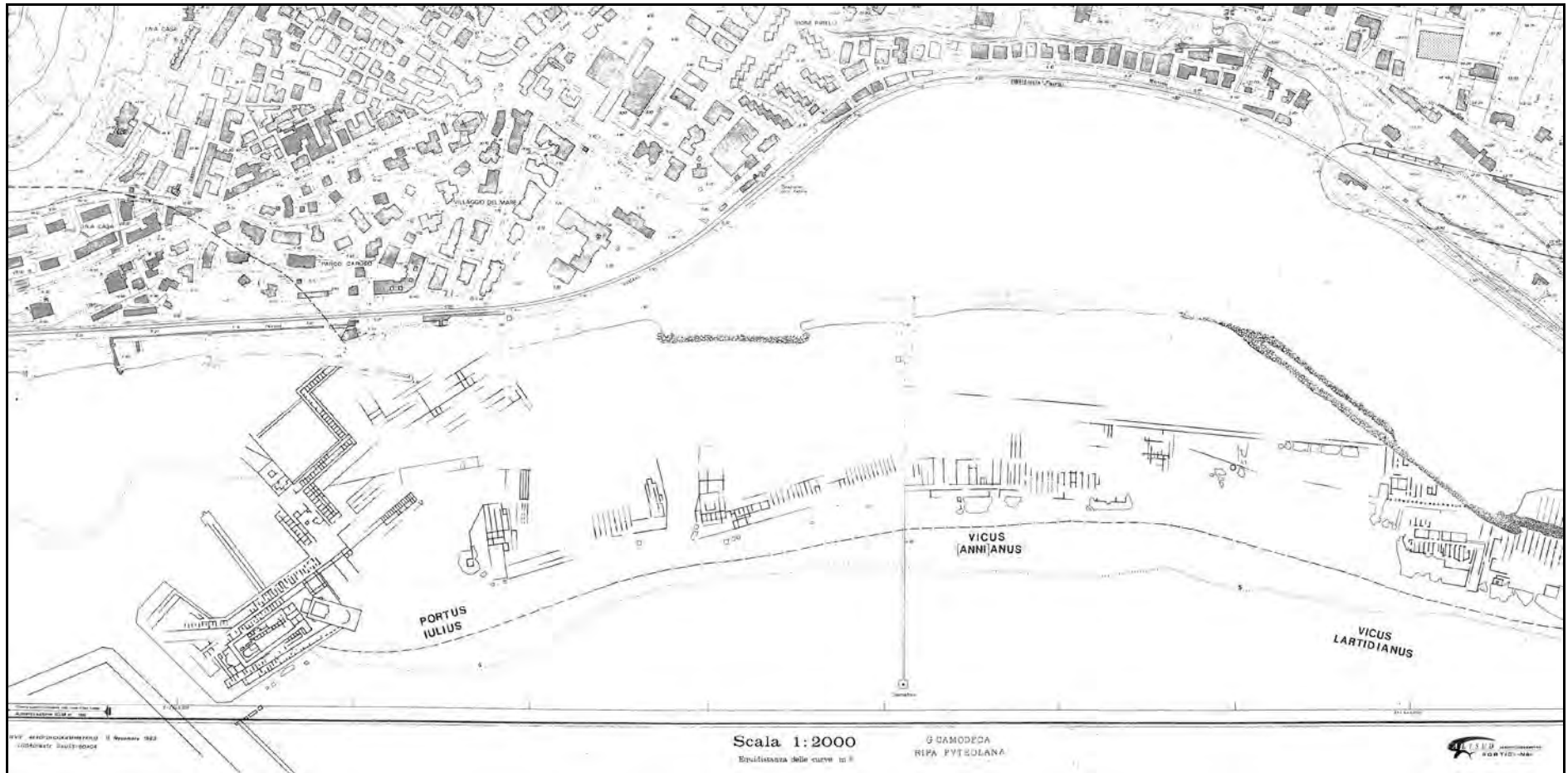


Figure 25: Plan of the underwater remains in the Pozzuoli harbor (by SANC)

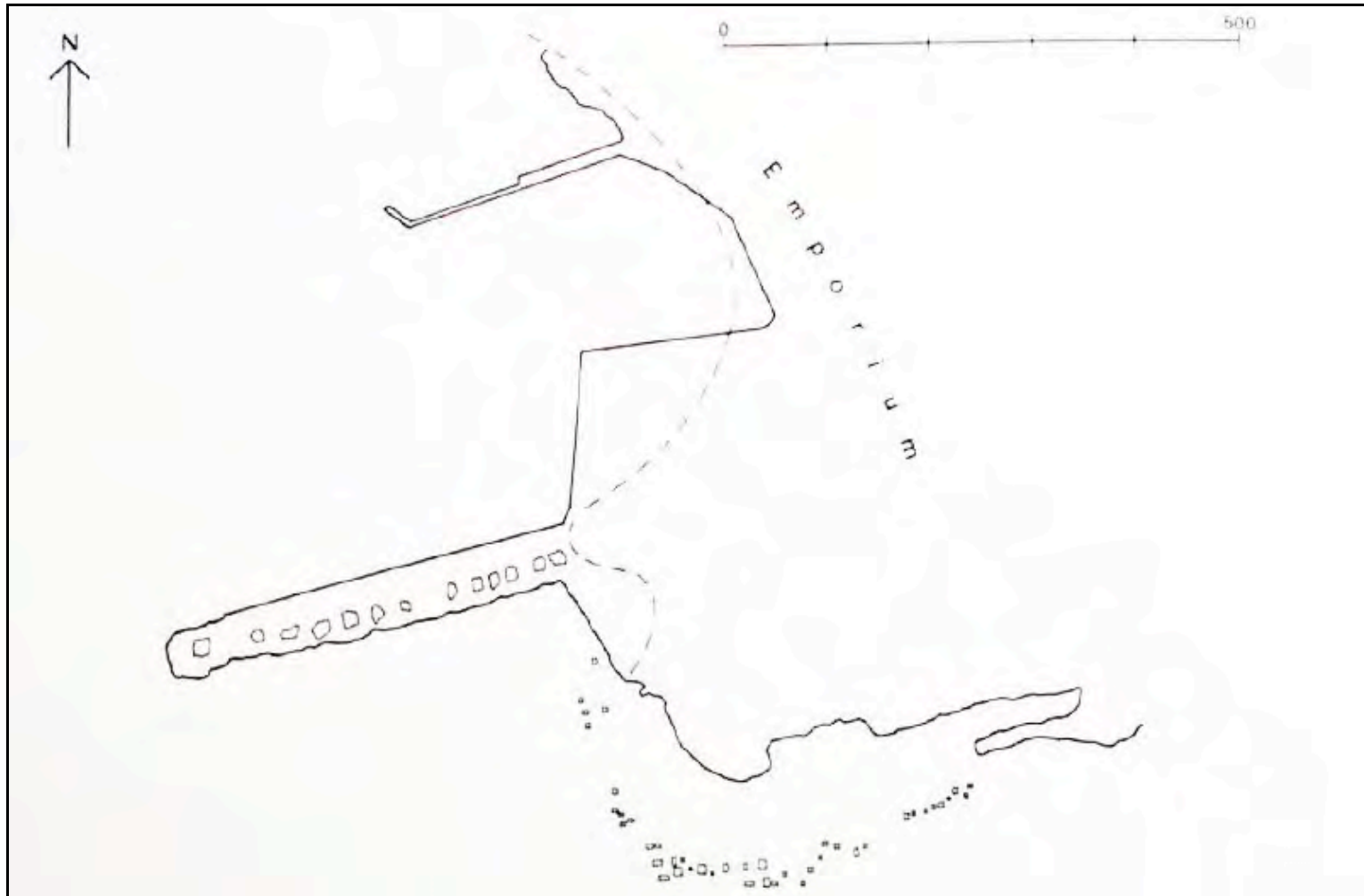


Figure 26: Outline of Rione Terra with hypothesized location of the *Emporium* (Crimaco in Zevi 1993 - elaborated by F. Esposito)

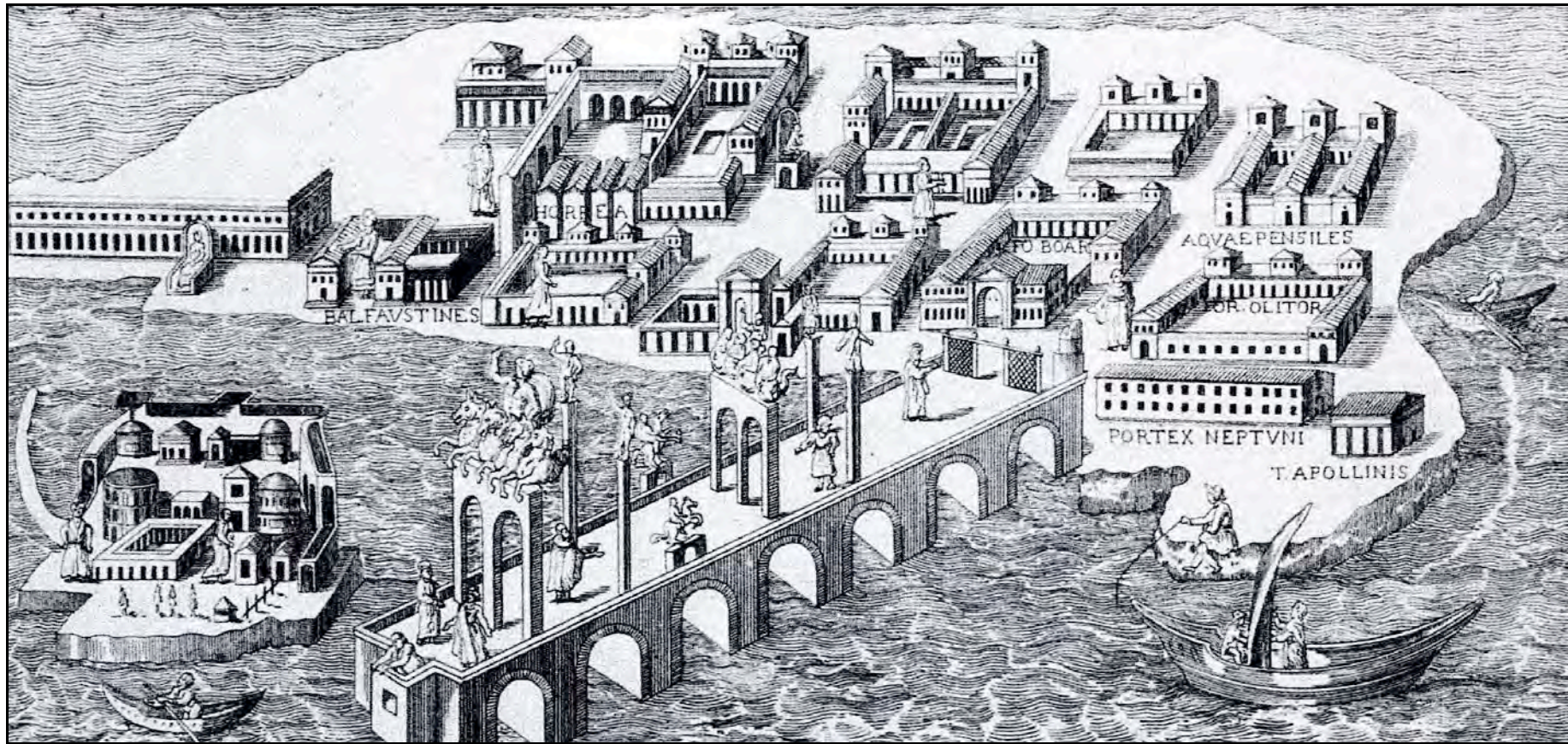


Figure 27: The *Bellori* drawing reproduced in DeCaro 2002

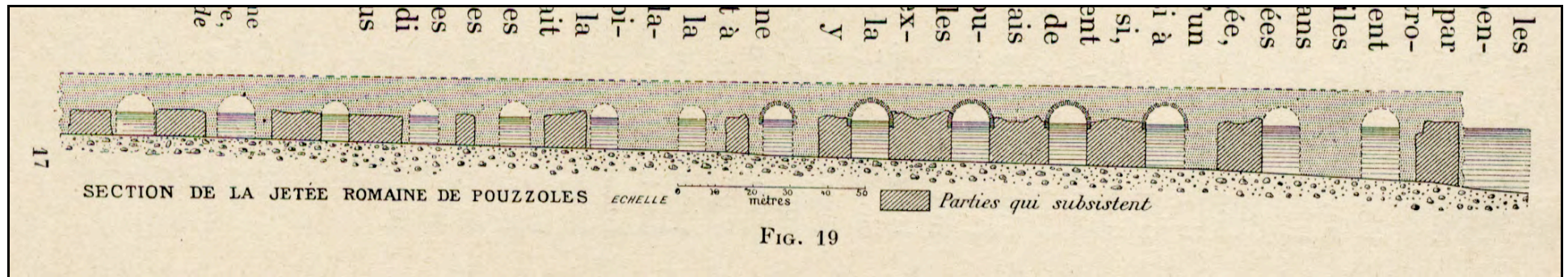


Figure 28: Dubois' drawing of the remains of the ancient pier of Pozzuoli (Dubois: 1907)

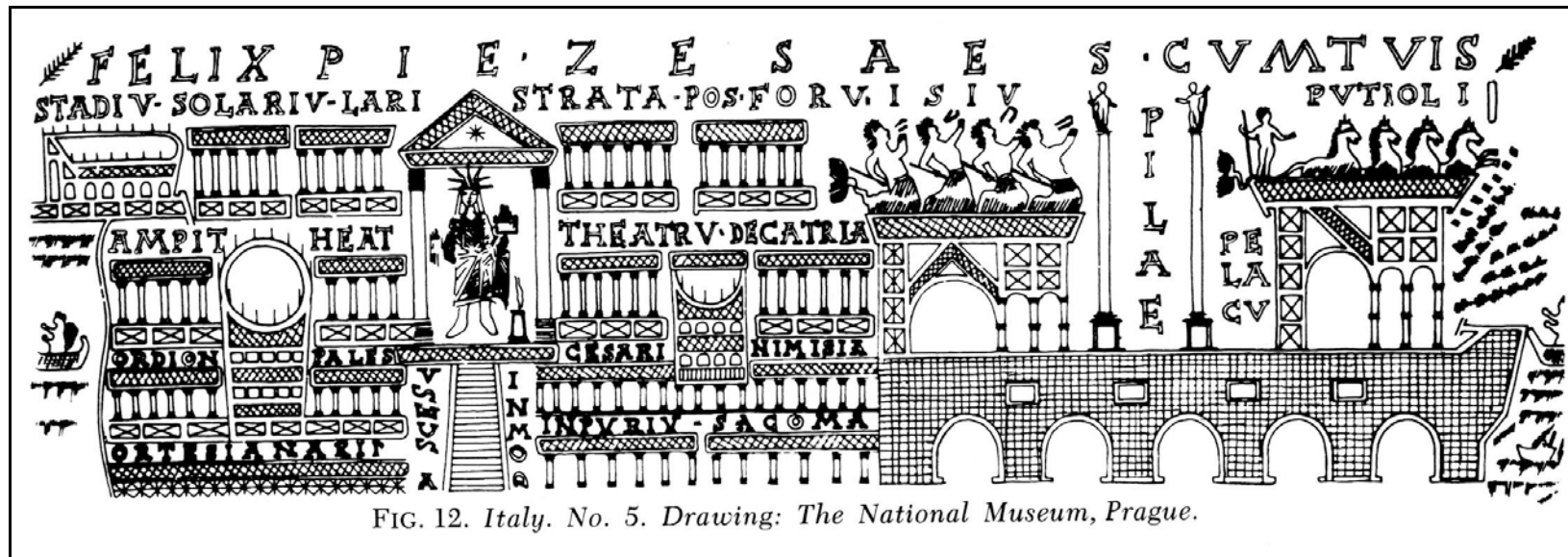


Figure 29: Detail of the Prague flask (after Pianter: 1975)

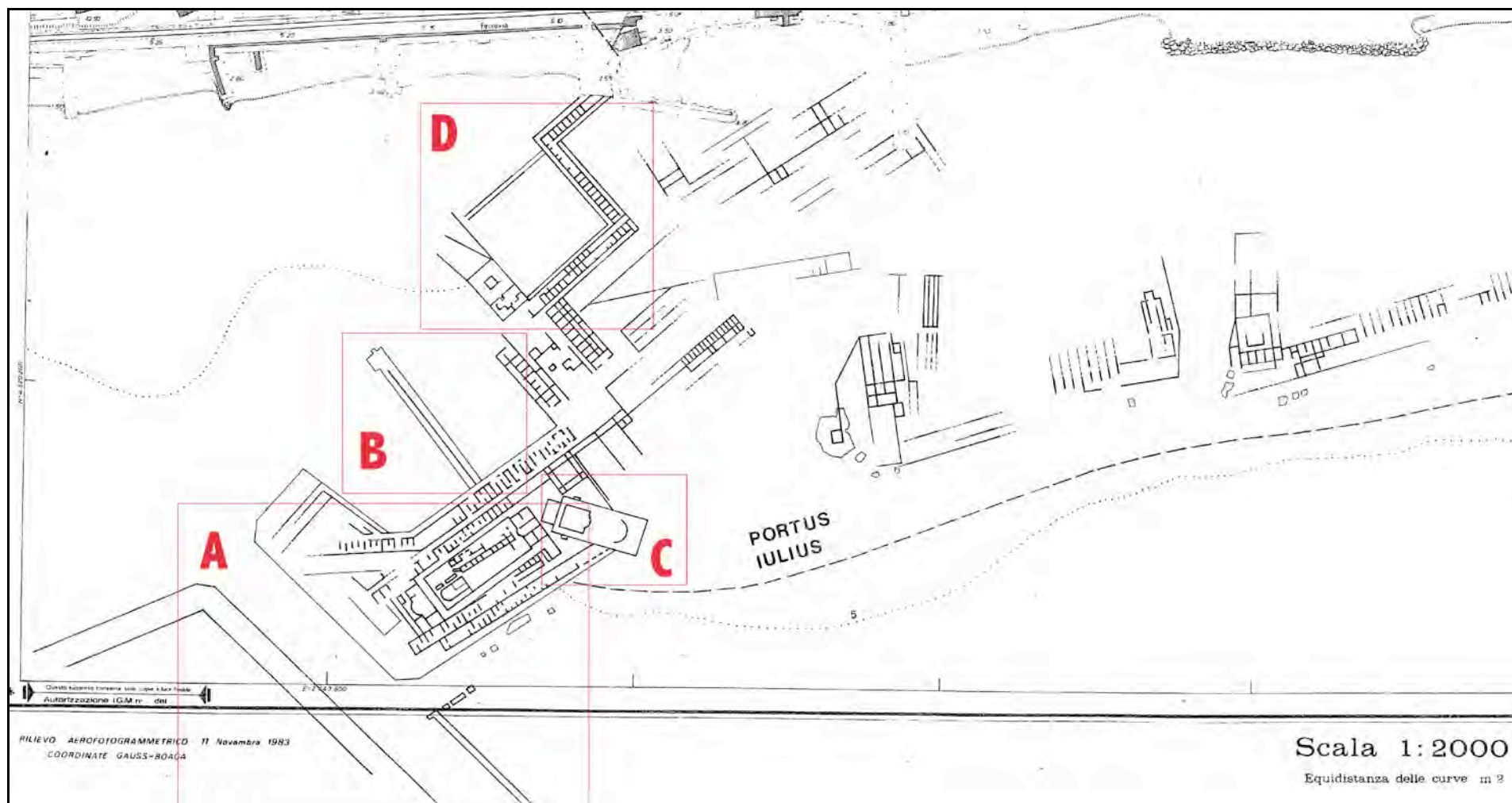


Figure 30: Detail of *Porto Julius* underground remains with highlighted sections used for digitization (SANC)

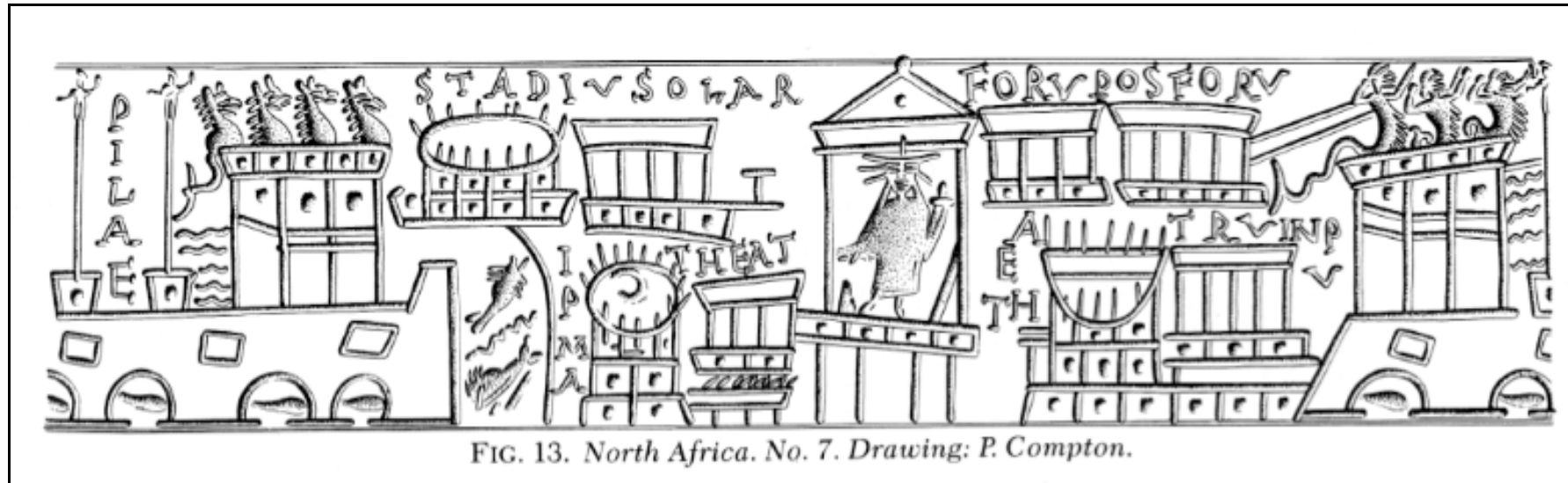


Figure 31: Detail of the Pilkington glass flask (after Painter: 1975)

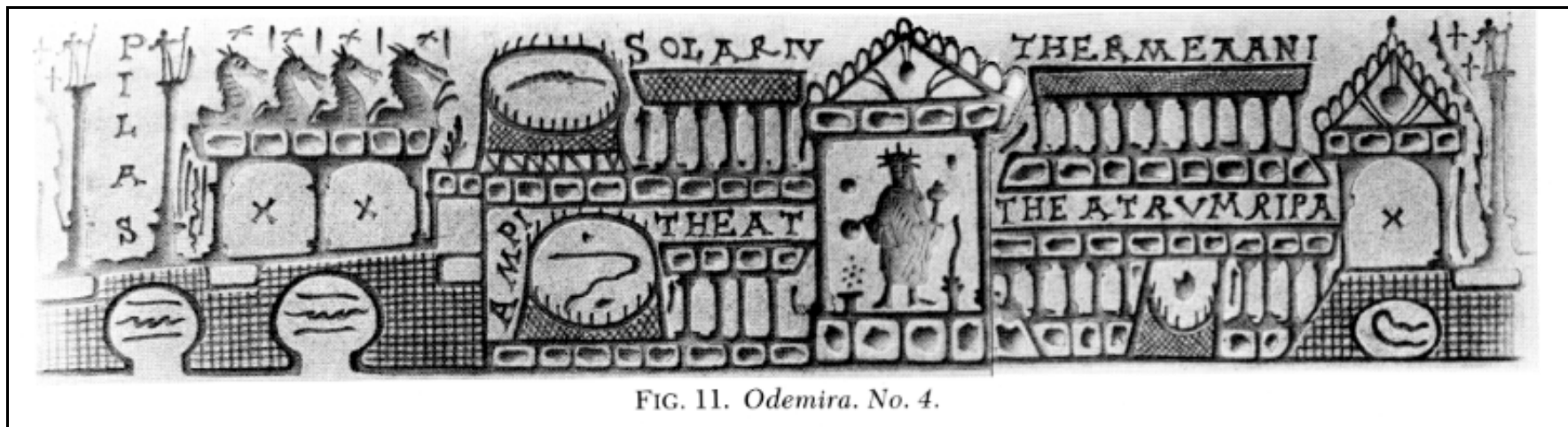


Figure 32: Detail of the Odemira flask (after Painter: 1975)



Figure 33: Detail of the Populonia flask (after Painter: 1975)

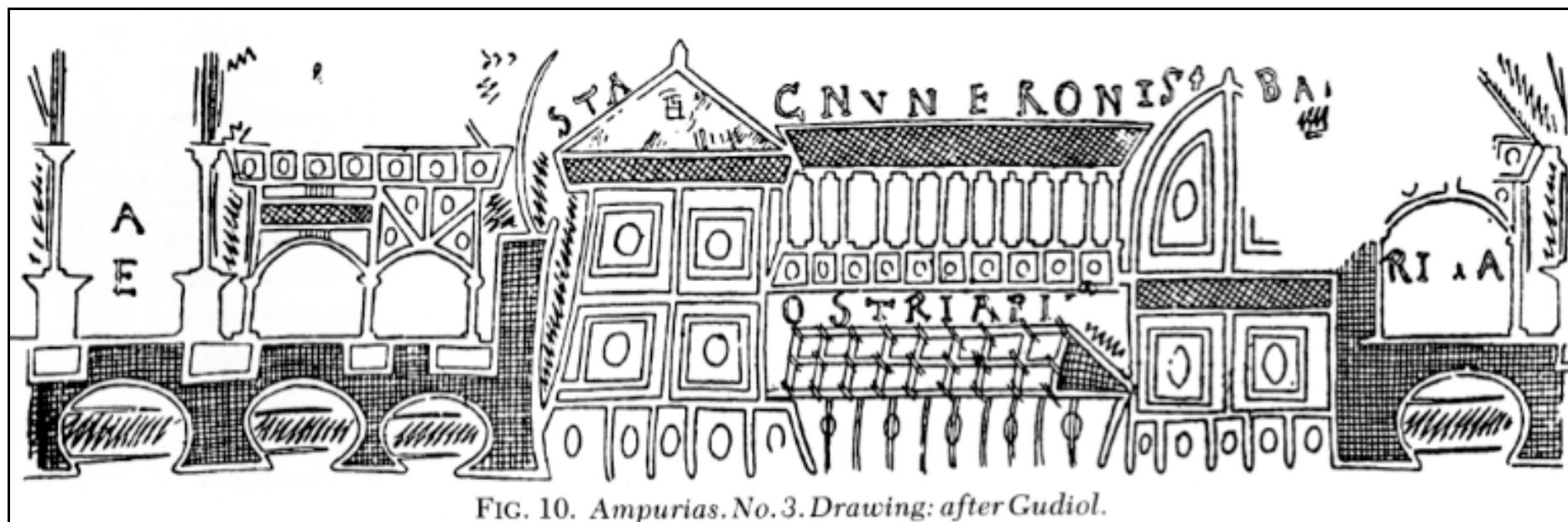


Figure 34: Detail of the Ampurias flask (after Painter: 1975)

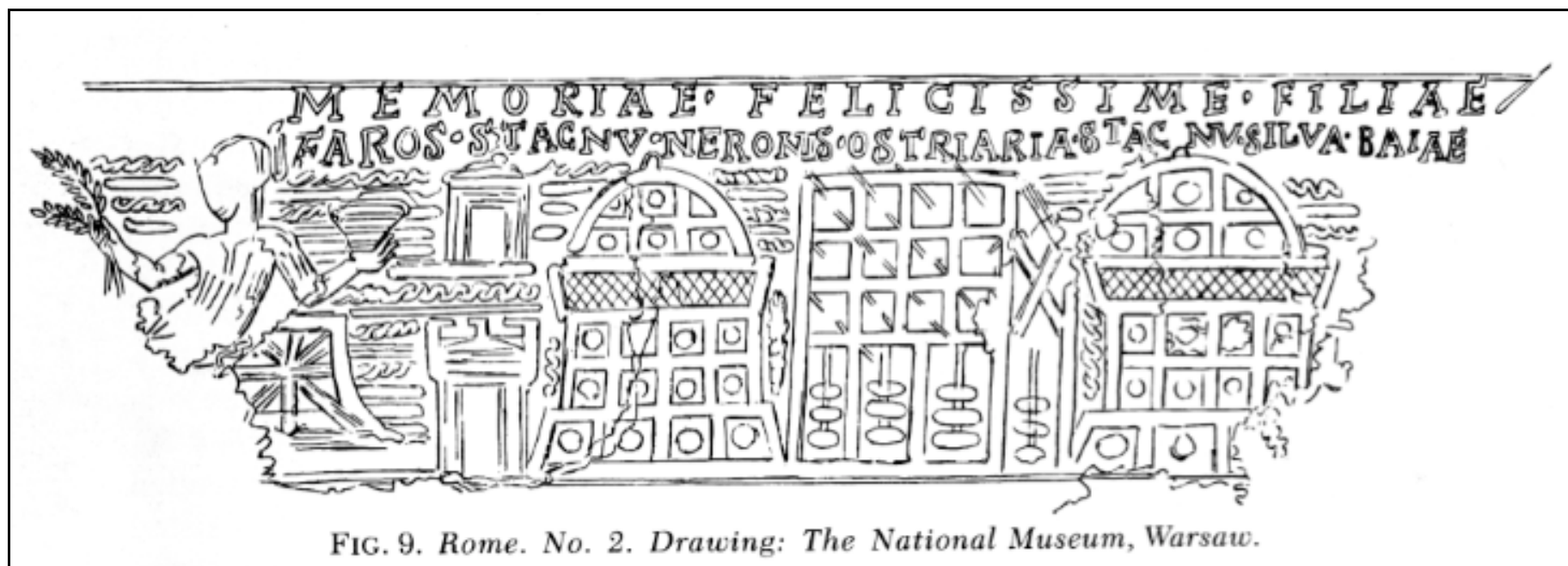


Figure 35: Detail of the Rome flask (after Painter: 1975)

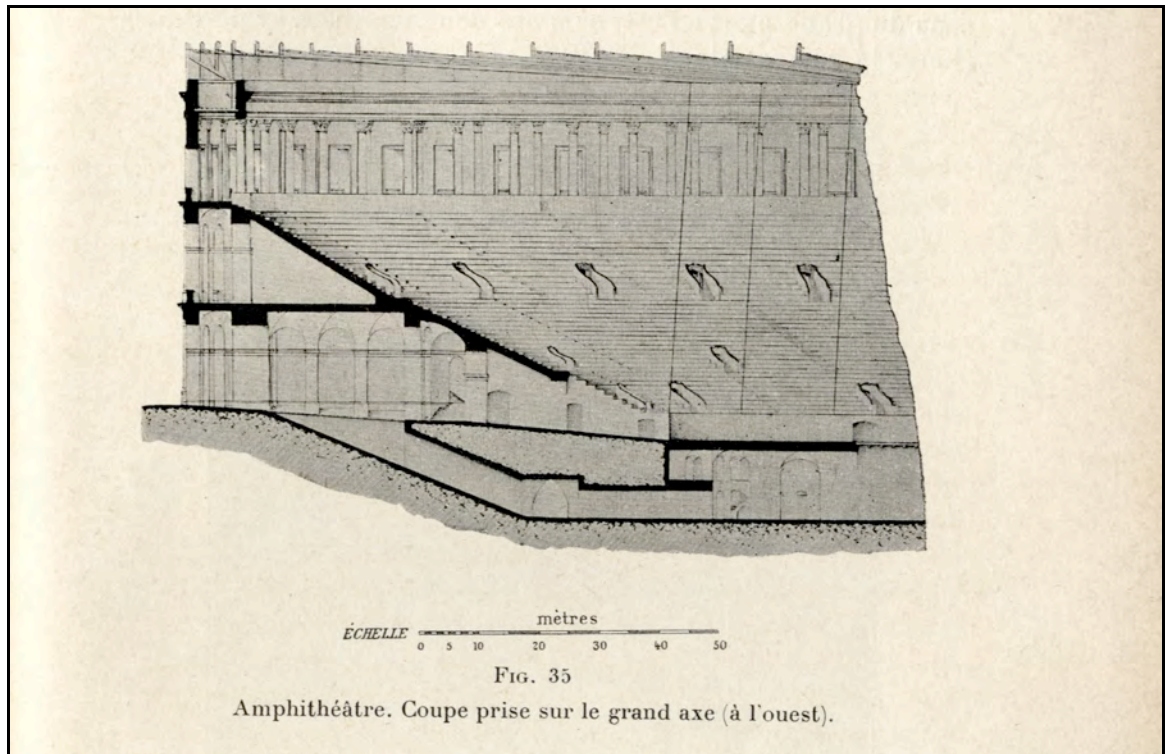


Figure 36: Isometric reconstruction of the *Puteoli* amphitheatre (after Dubois 1907)

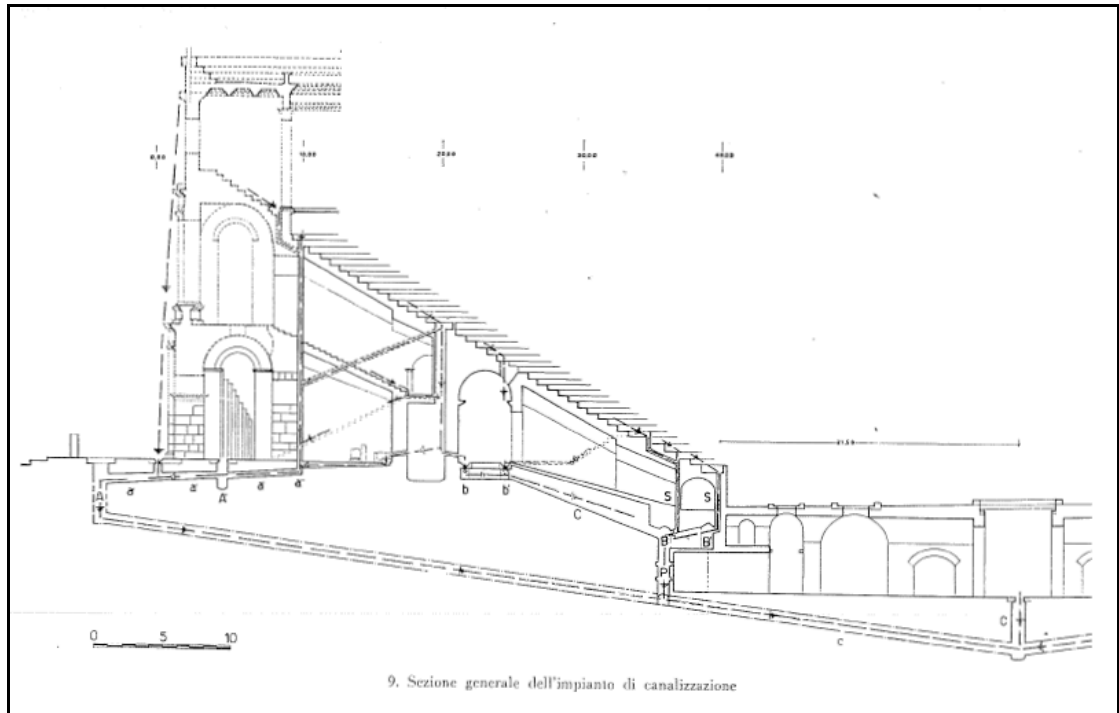
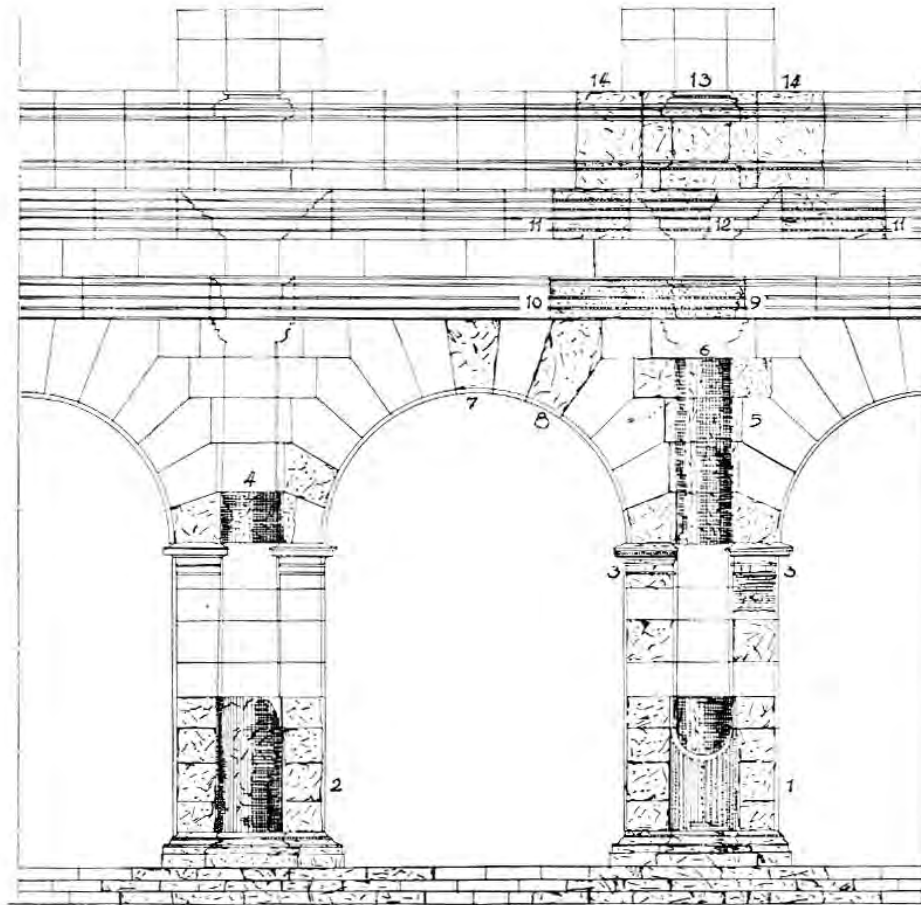


Figure 37: Section drawing of the *Puteoli* amphitheatre (after Maiuri: 1955)

PORTICO ESTERNO

Del portico esterno, andato interamente distrutto, i soli elementi superstiti sono le basi di tre pilastri con semi-



28. Ricomposizione del portico esterno

Figure 38: Detail of the exterior portico of the *Puteoli* amphitheatre (after Maiuri: 1955)

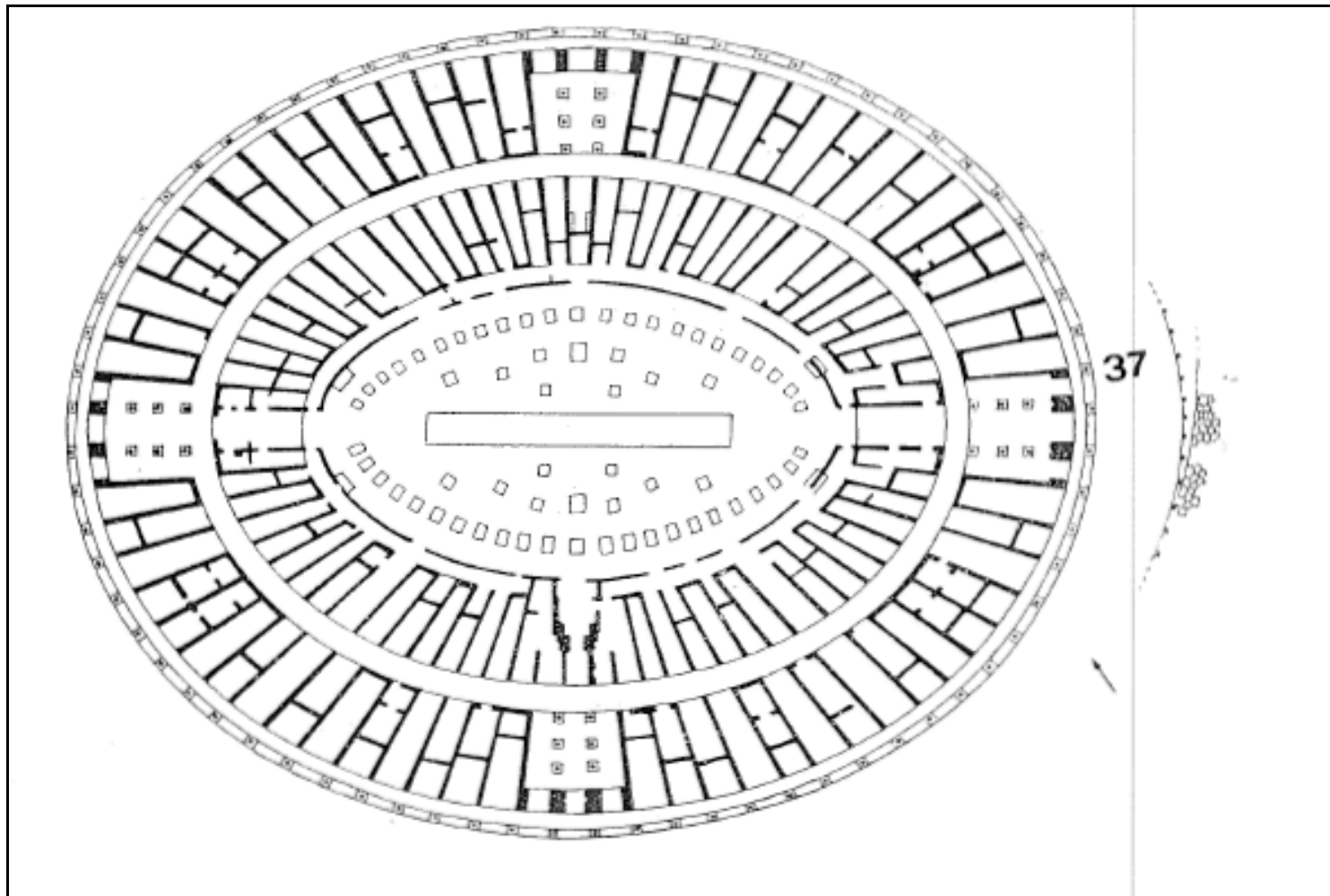


Figure 39: Plan of the *Puteoli* amphitheatre (after Maiuri 1955)

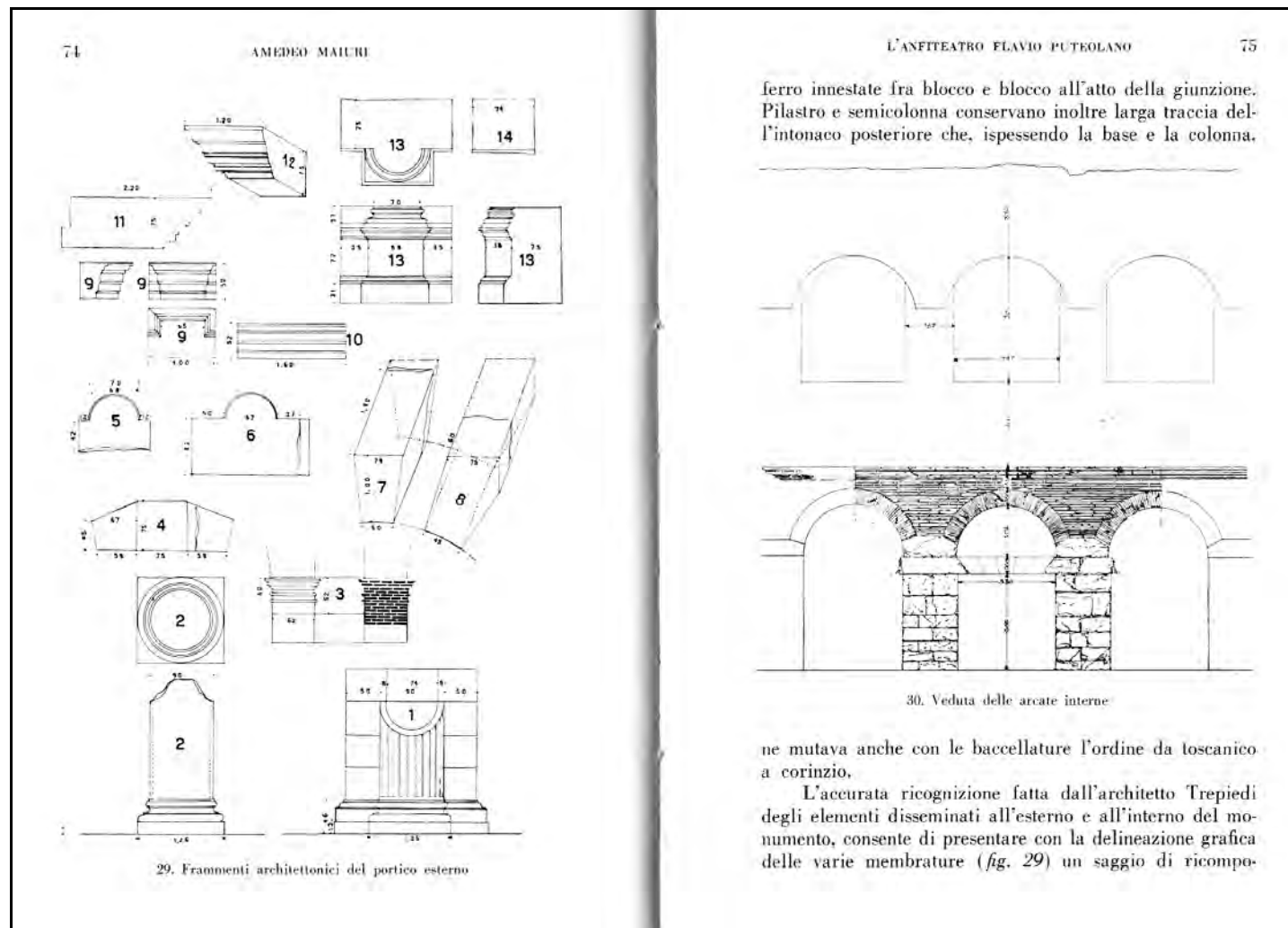


Figure 40: Drawings of architectural details of the *Puteoli* amphitheatre (after Maiuri: 1955)

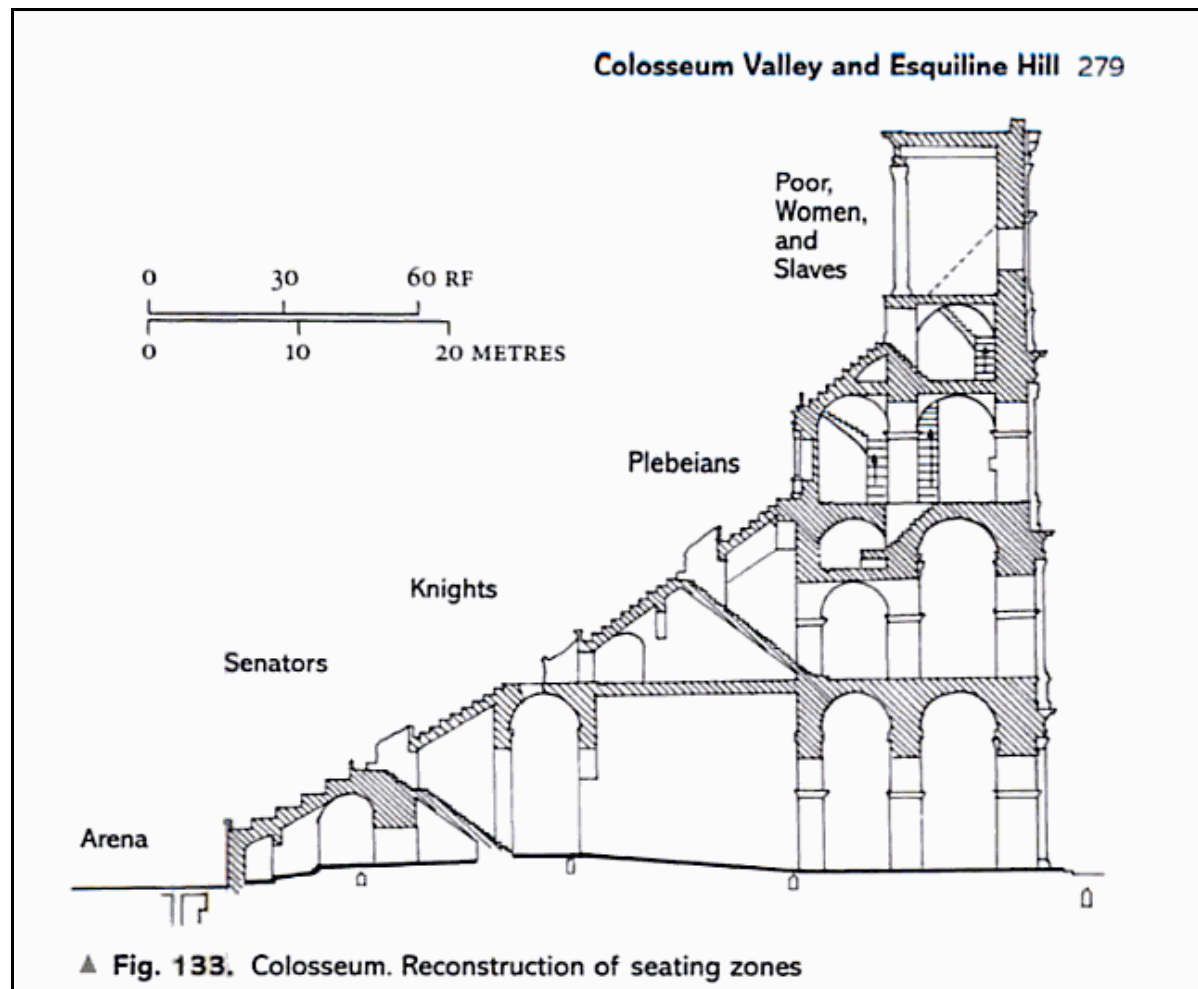
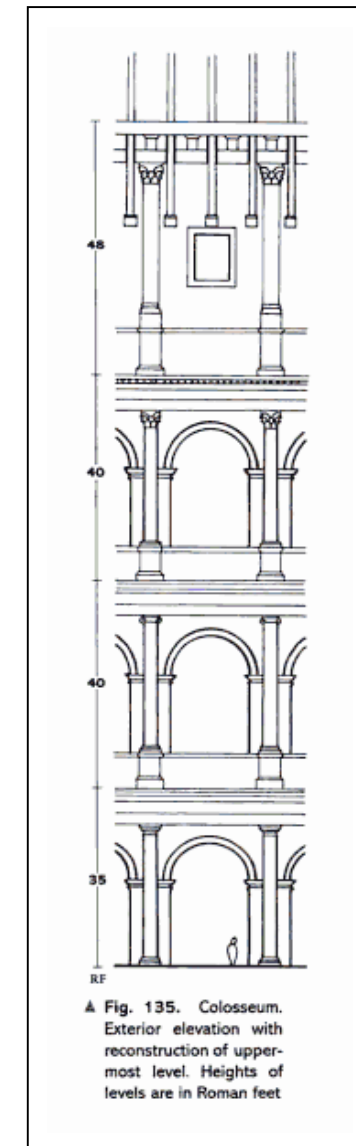


Figure 41: Section and exterior drawings of the Colosseum, Rome
(after Claridge: 1998)



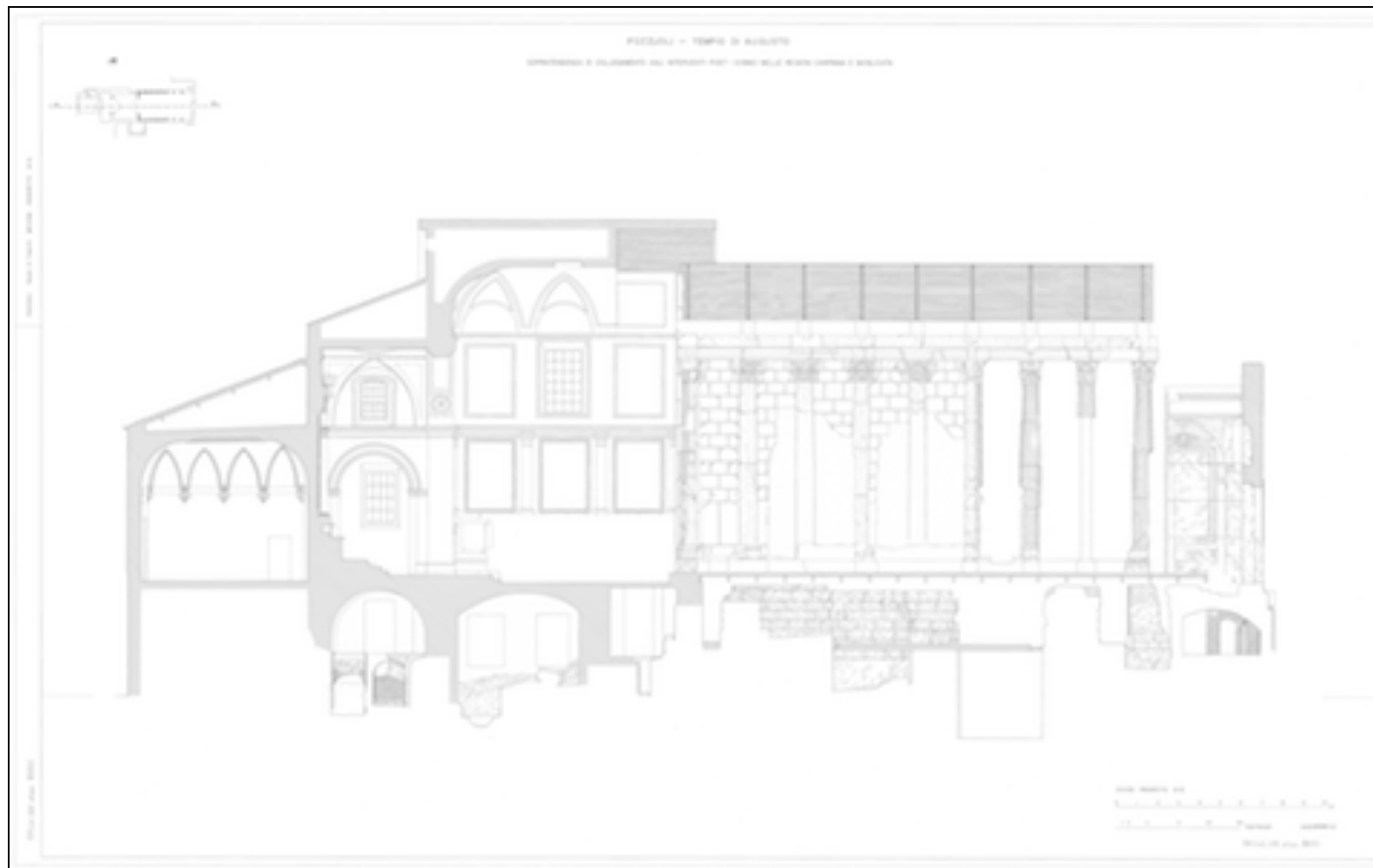


Figure 42: Section drawing of the *Capitolium* (incorporated within the church) (SANC)

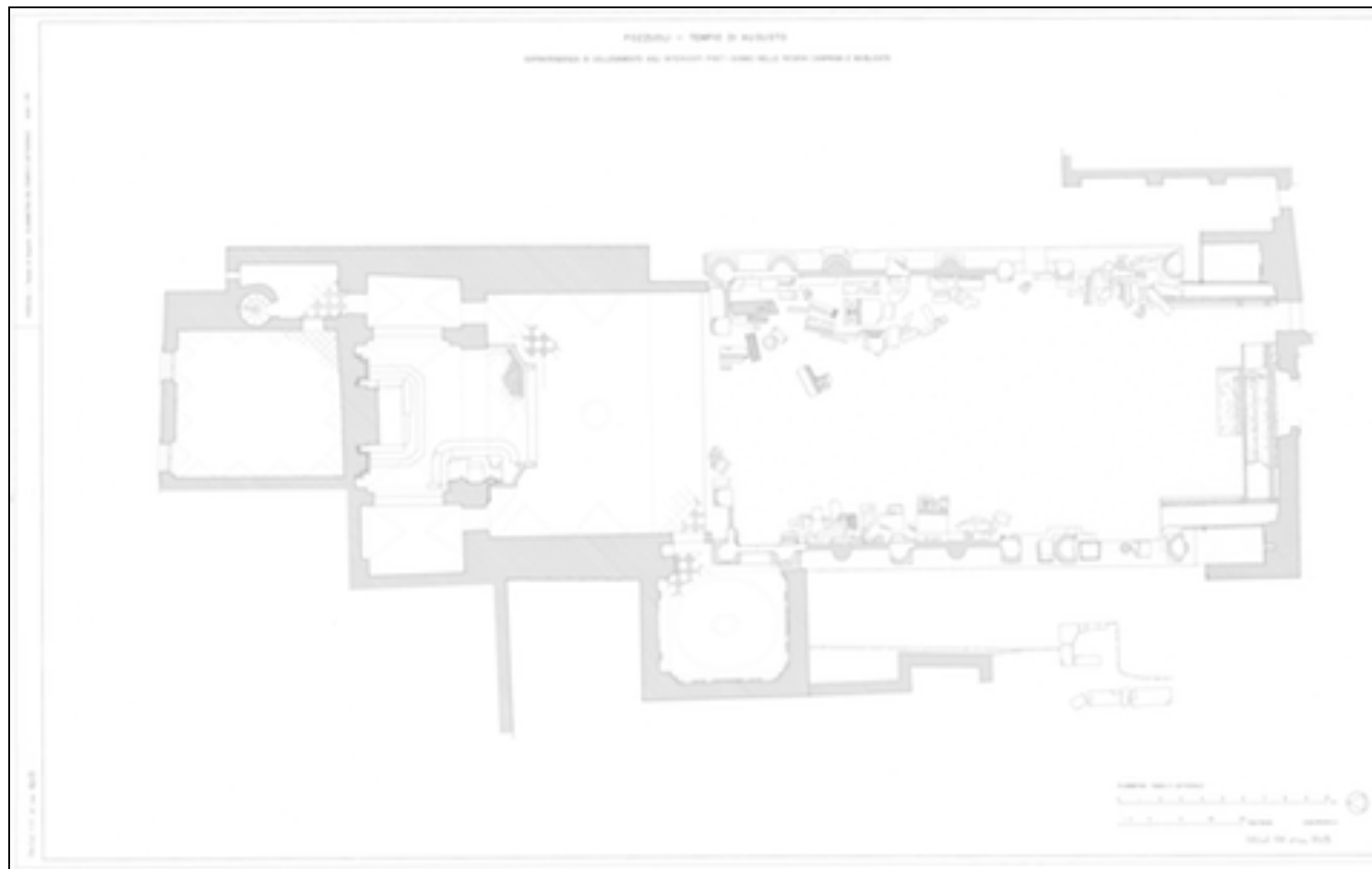


Figure 43: Plan of the *Capitolium* (incorporated within the church) (SANC)

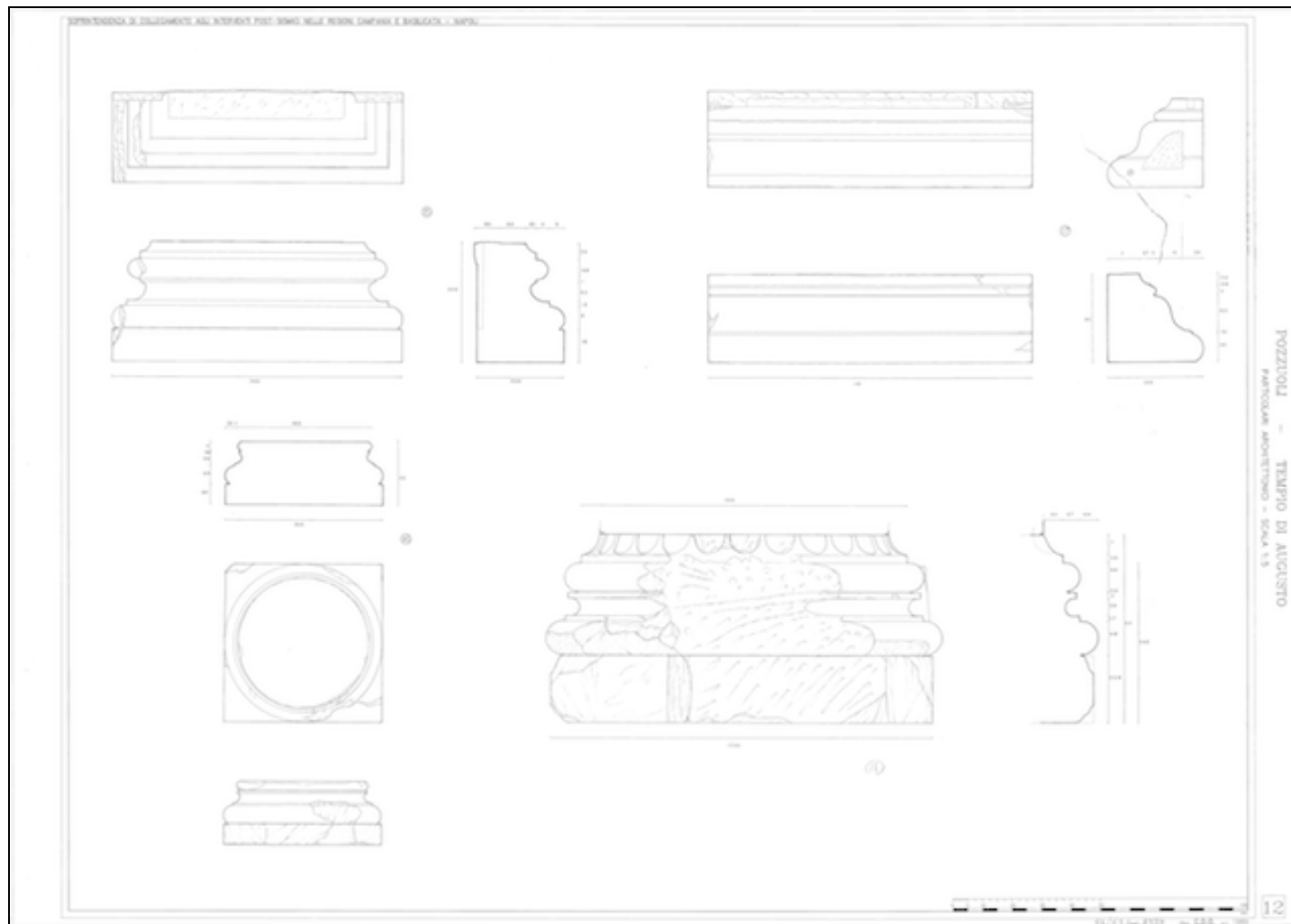


Figure 45: Column base details of the *Capitolium* in Pozzuoli (SANC)

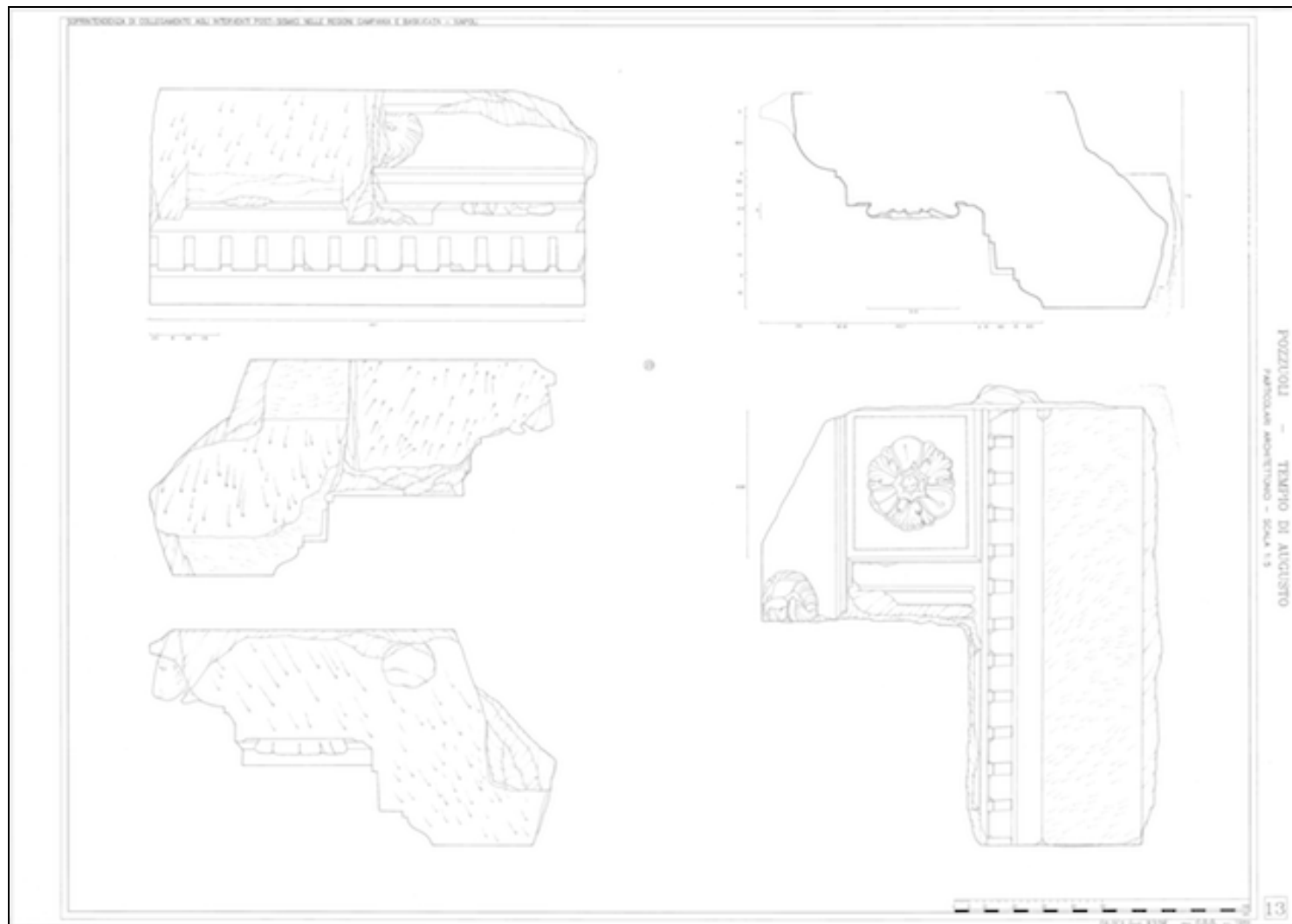


Figure 46: Marble details of the *Capitolium* in Pozzuoli (SANC)

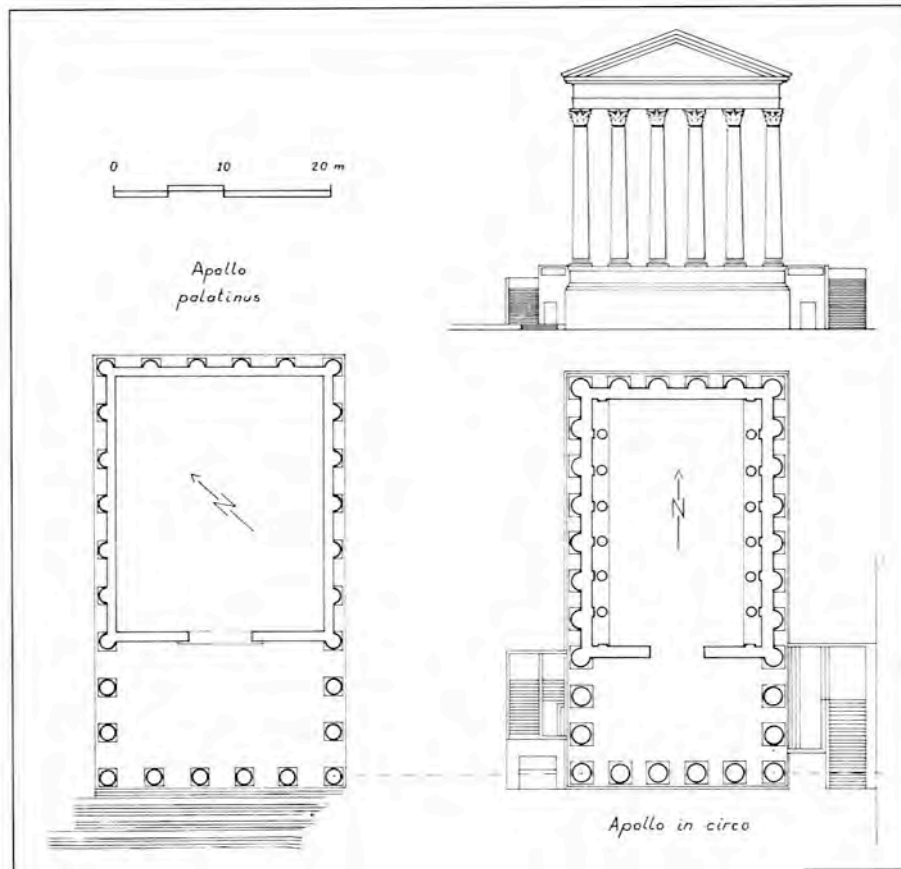


Figure 47: Drawings of the Temple of *Apollo Palatinus* and *Apollo in circo* (after Gros: 1996)

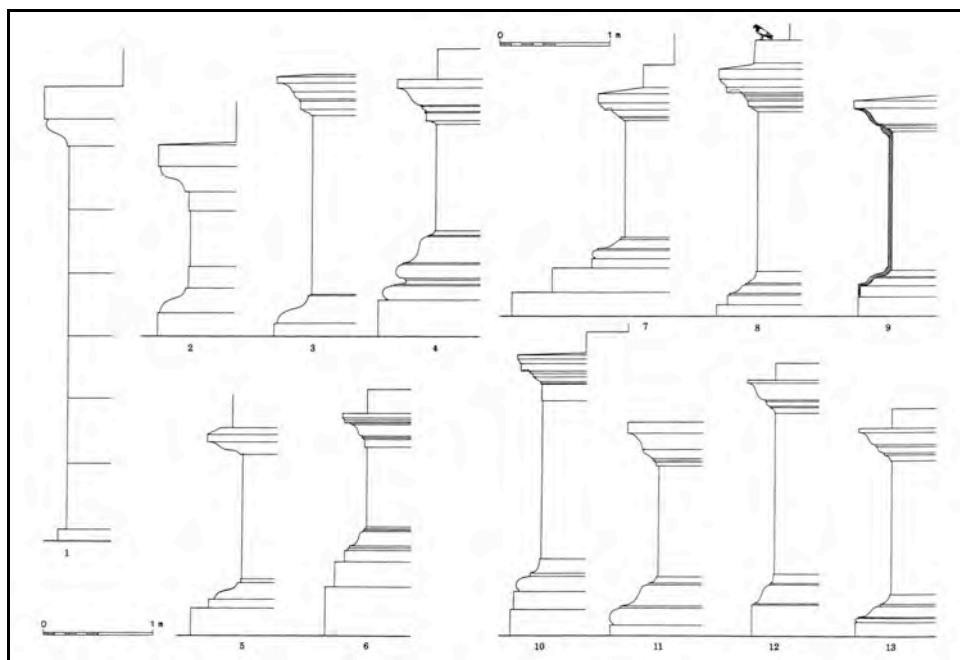


Figure 48: Drawings of types of podium bases (after Gros: 1996)

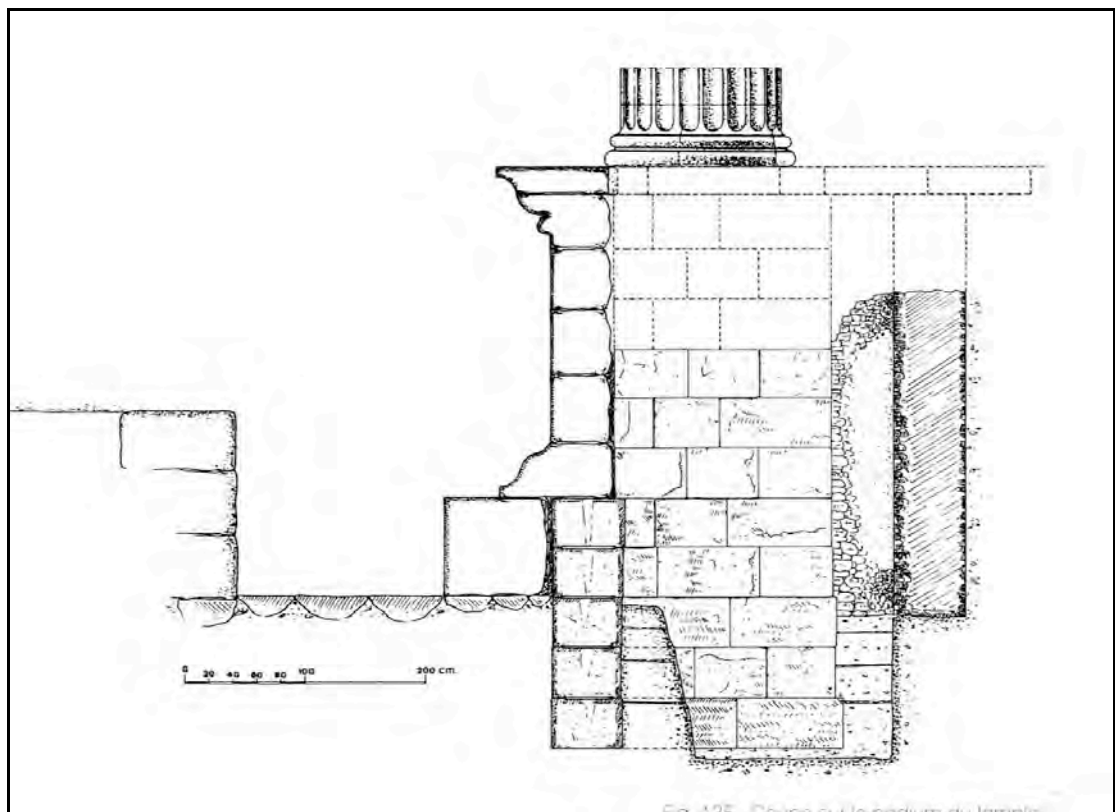


Figure 49: Section drawing of a temple podium construction (after Gros: 1996)

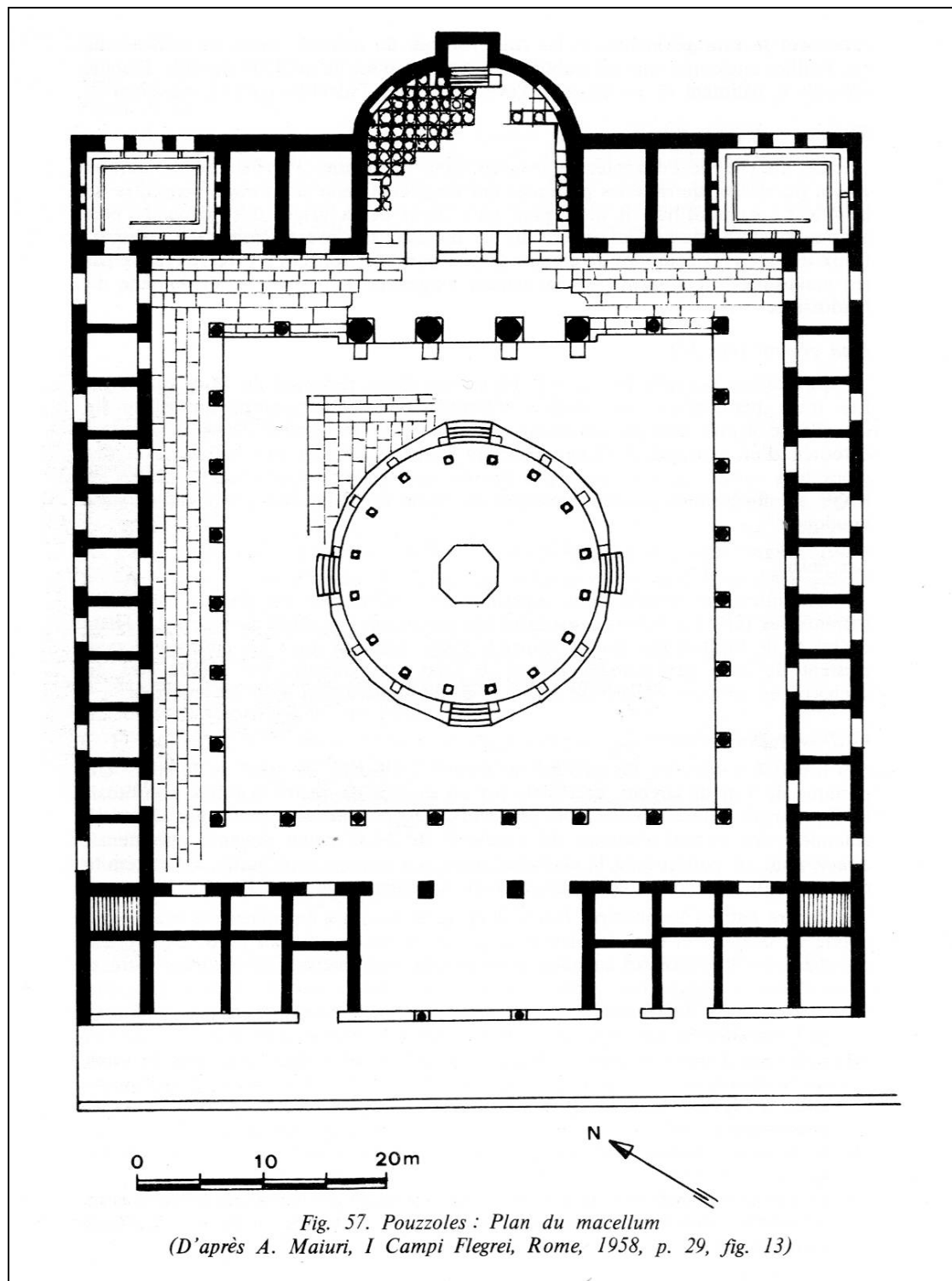


Figure 50: Plan of the *Macellum* in Pozzuoli (after Maiuri 1958, De Ruyt: 1983)

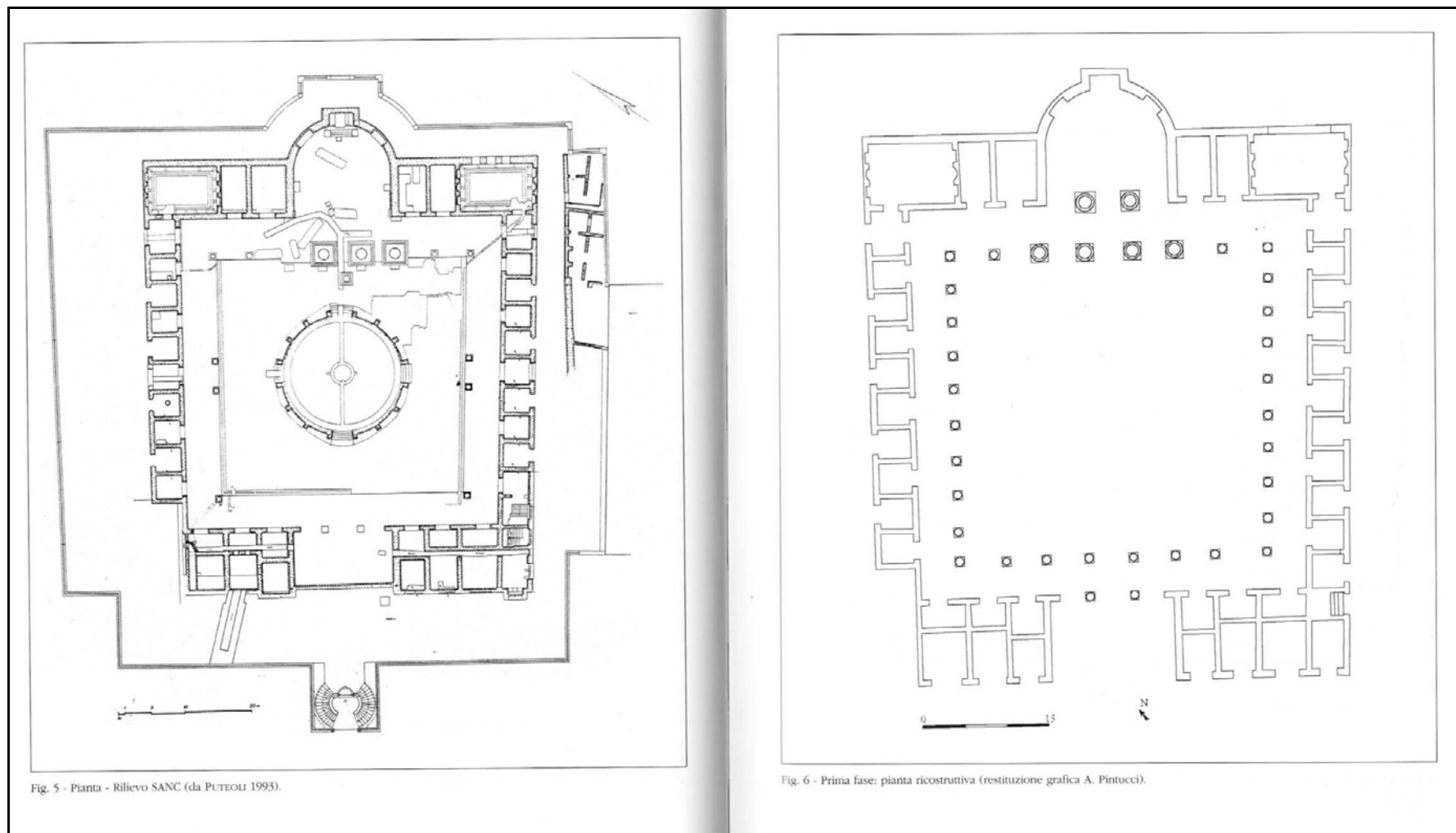


Figure 51: Plans of the *Macellum* in Pozzuoli (SANC)

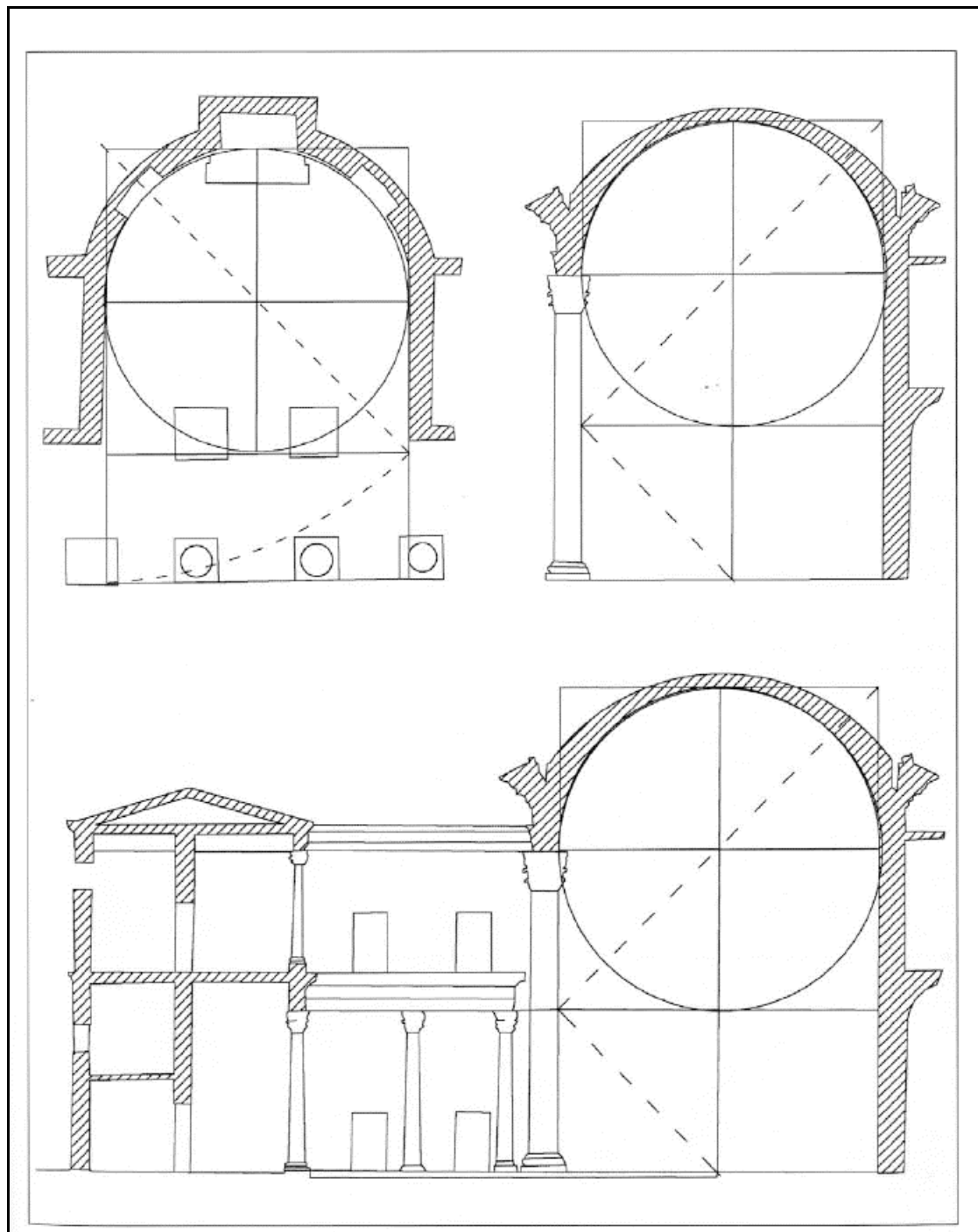


Figure 52: Section drawings of the vestibule in the *Macellum* (after Demma: 2007)

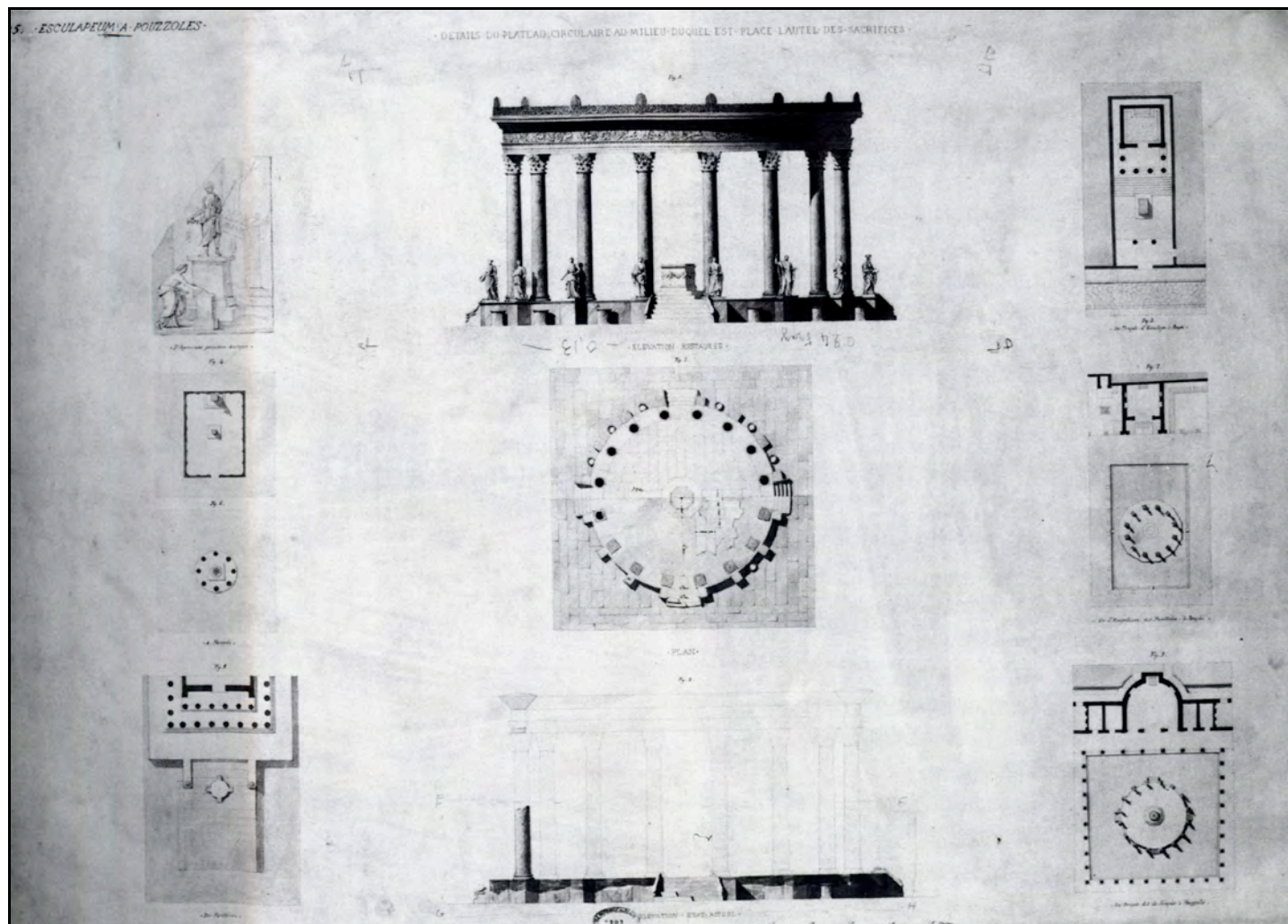


Figure 53: Drawings of the *Macellum* by Christie (as reproduced in *Italia Antiqua*: 2002)



Figure 54: Watercolour reconstruction of Roman *Puteoli* by Golvin (Golvin in Reddé: 2008)

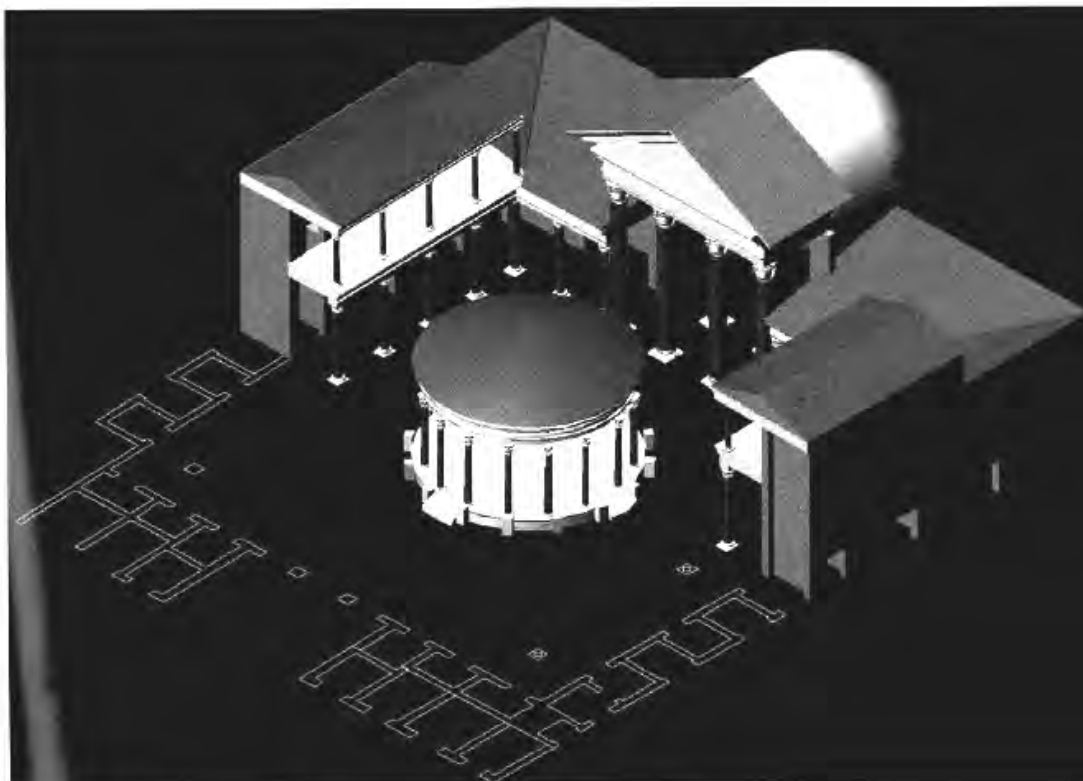


Fig. 30 Assonometria ricostruttiva (elaborazione grafica A. Pintucci).

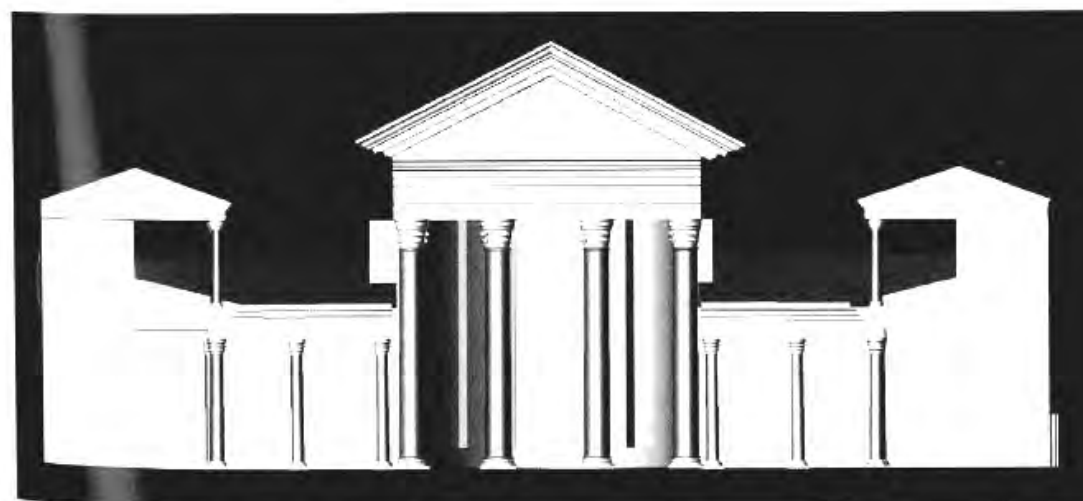


Fig. 31 Prospetto del lato di fondo e sezione dei portici laterali: disegno ricostruttivo (elaborazione grafica A. Pintucci).

Figure 55: Volumetric reconstructions of the *Macellum* by Demma (after Demma: 2007)

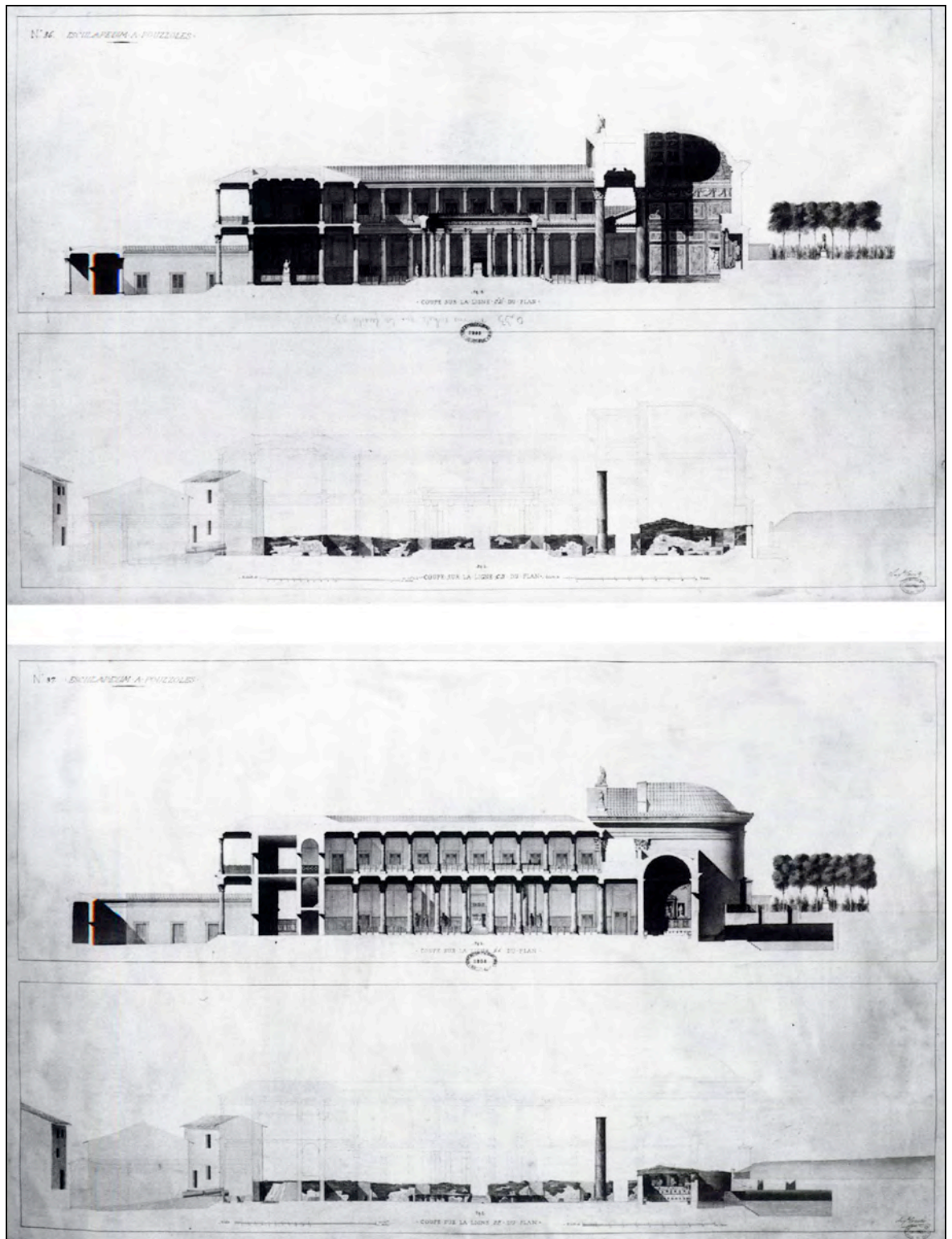


Figure 56: Watercolour reconstructions of the *Macellum* by Christie (as reproduced in *Italia Antiqua*: 2002)

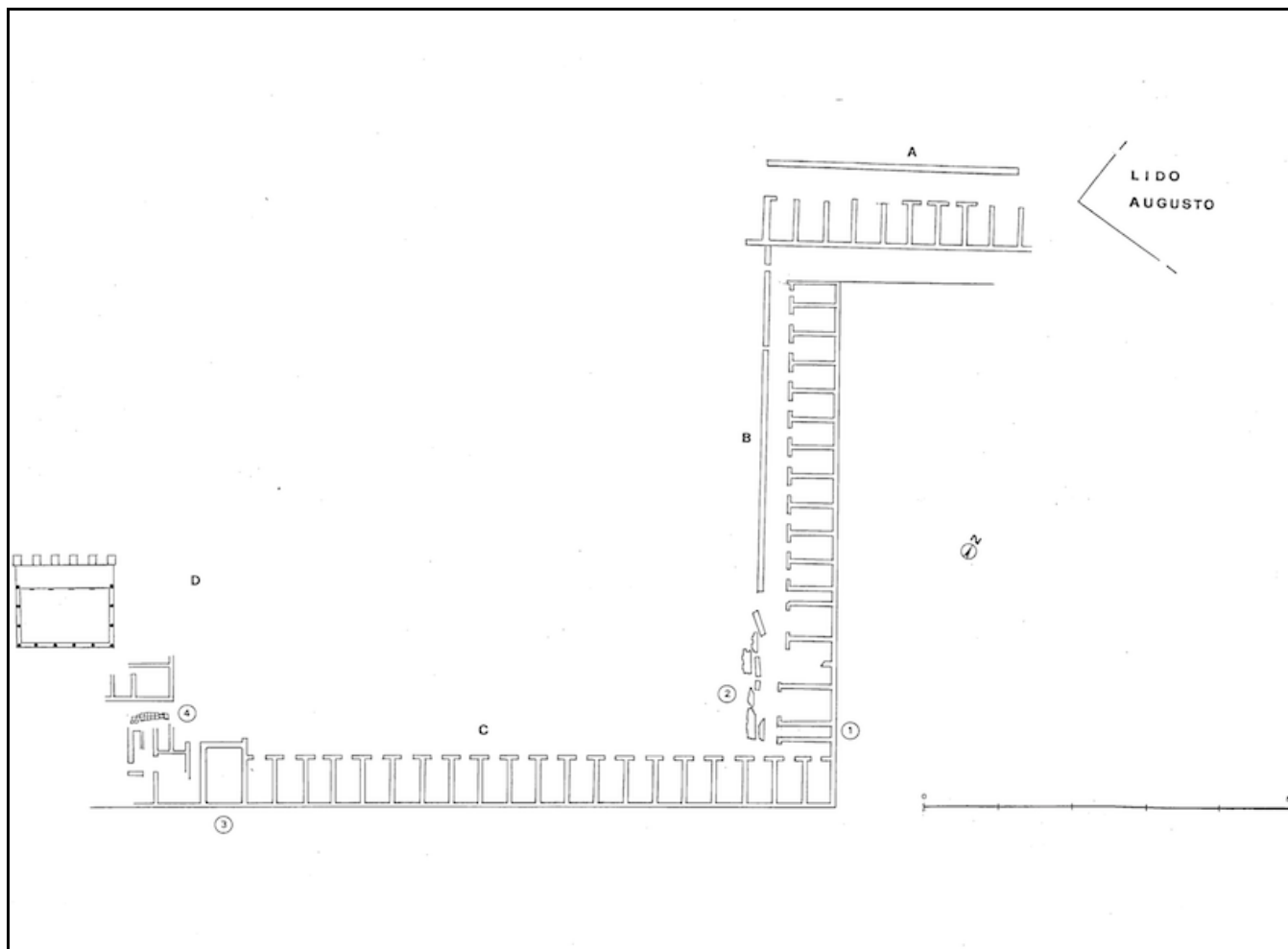


Figure 57: Plan of some of the warehouses in the area of *Porto Julio* (SANC)

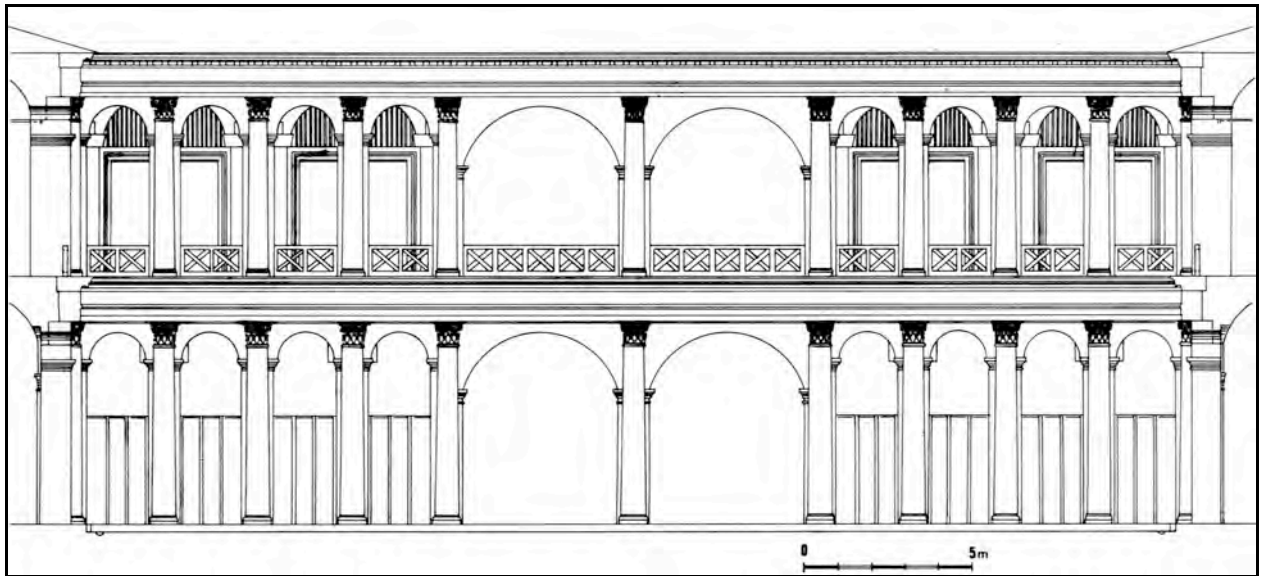


Figure 58: Section drawing of the *Horea Aggrippiana* (after Gros: 1996)

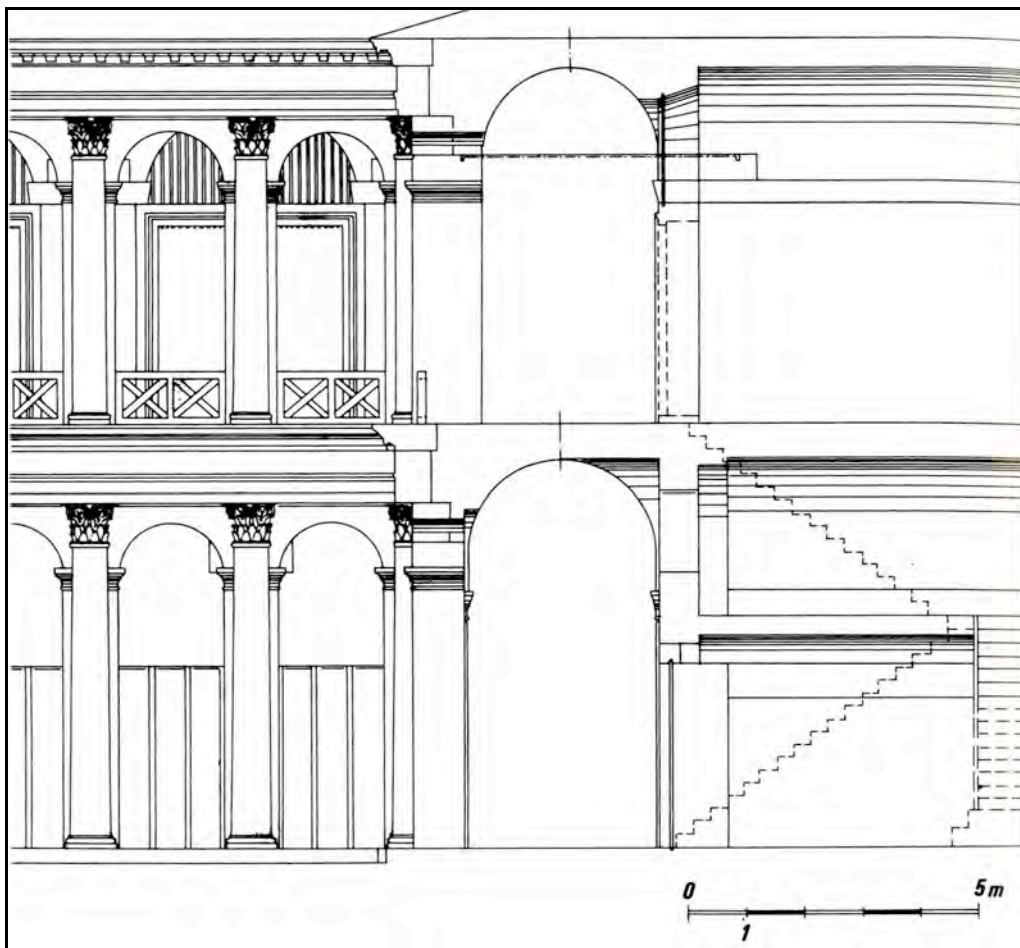


Figure 59: Section drawing of the *Horea Aggrippiana* (after Gros: 1996)



Figure 60: Watercolour reconstruction of Roman Puteoli by Golvin (Golvin in Reddé: 2008)

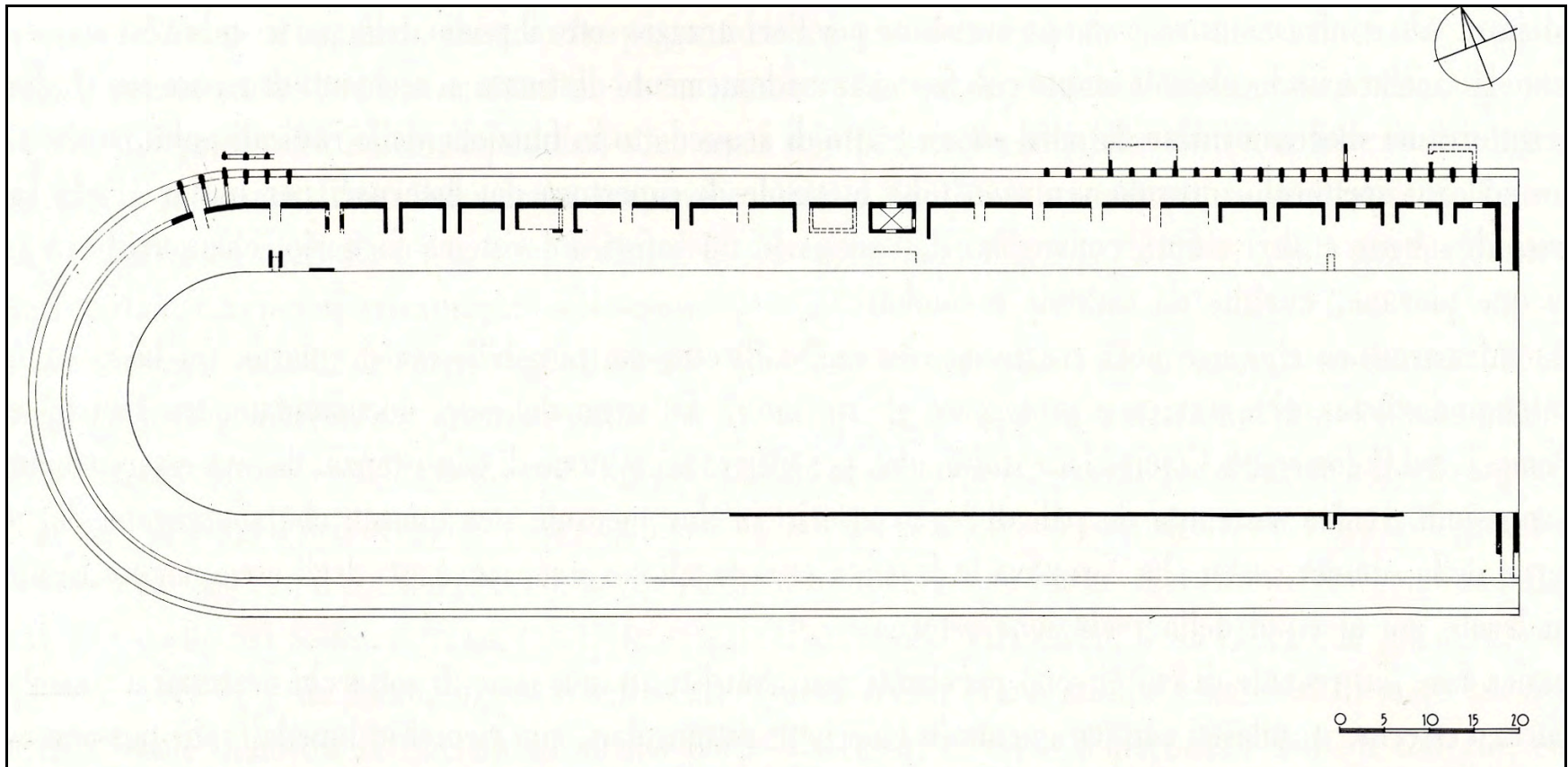


Figure 61: Plan of the stadium in Pozzuoli (SANC reproduced in Zevi: 1993)

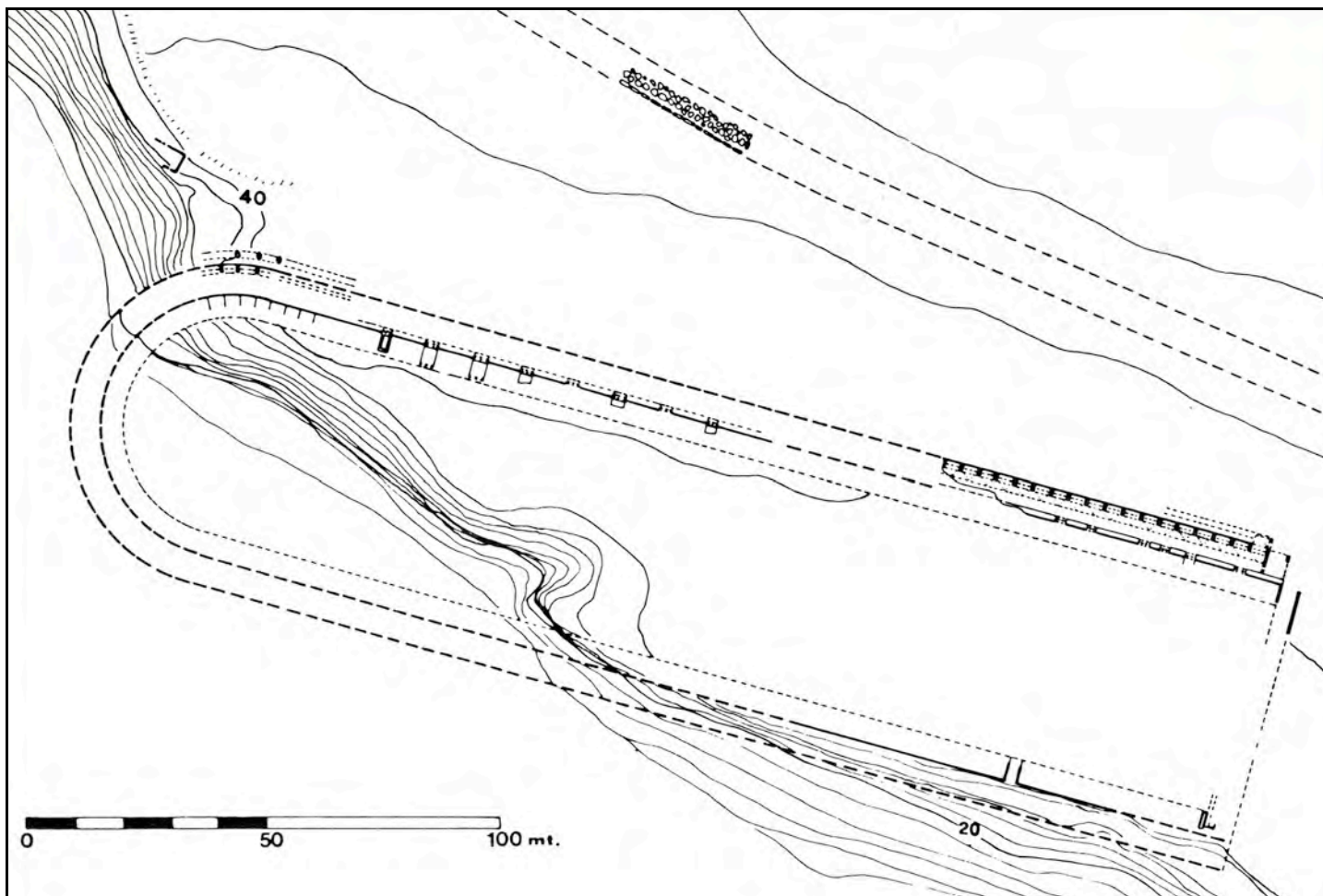


Figure 62: Plan of the stadium in Pozzuoli (SANC reproduced in Gialanella: 2009)

Page 111 The figure printed as fig. 45 correctly belongs as fig. 44 (on page 109) which it supersedes. The correct fig. 45 should be:

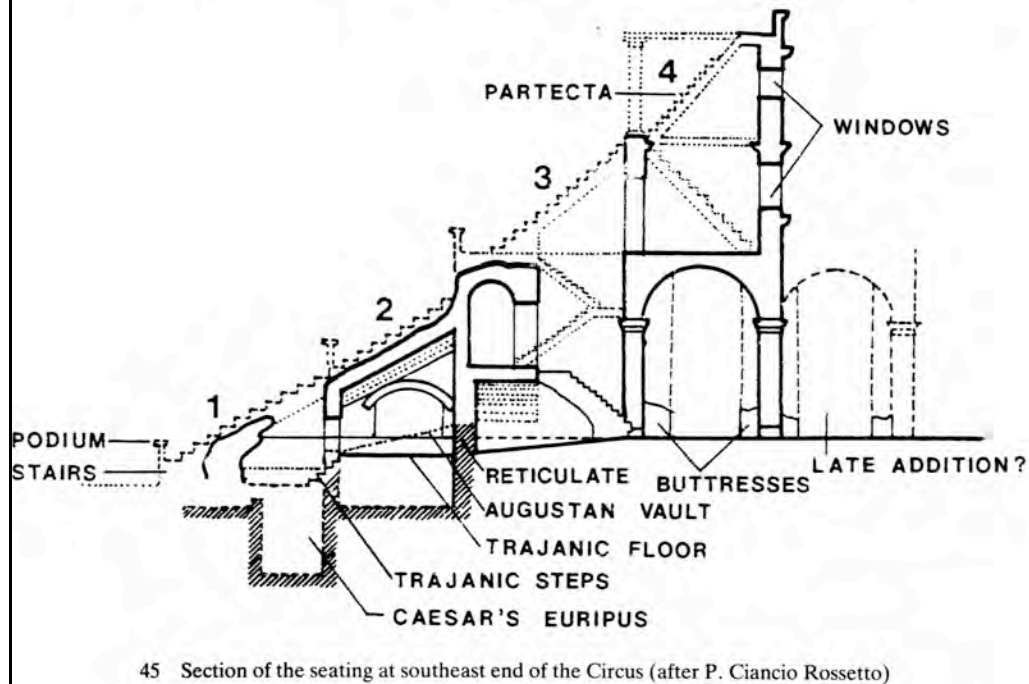


Figure 63: Section of the *Circus Maximus* in Rome (reproduced in Humphrey: 1986)

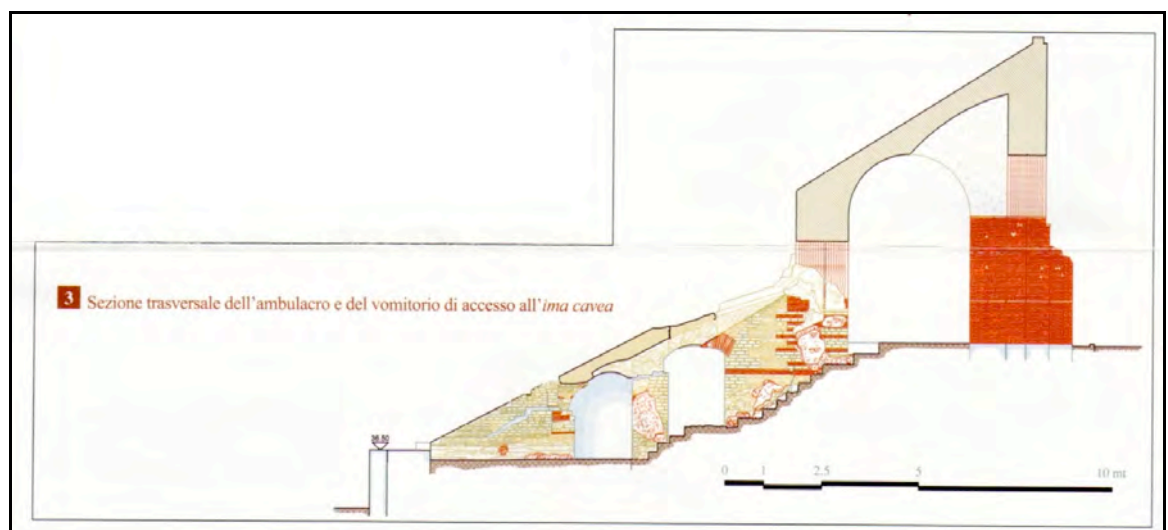
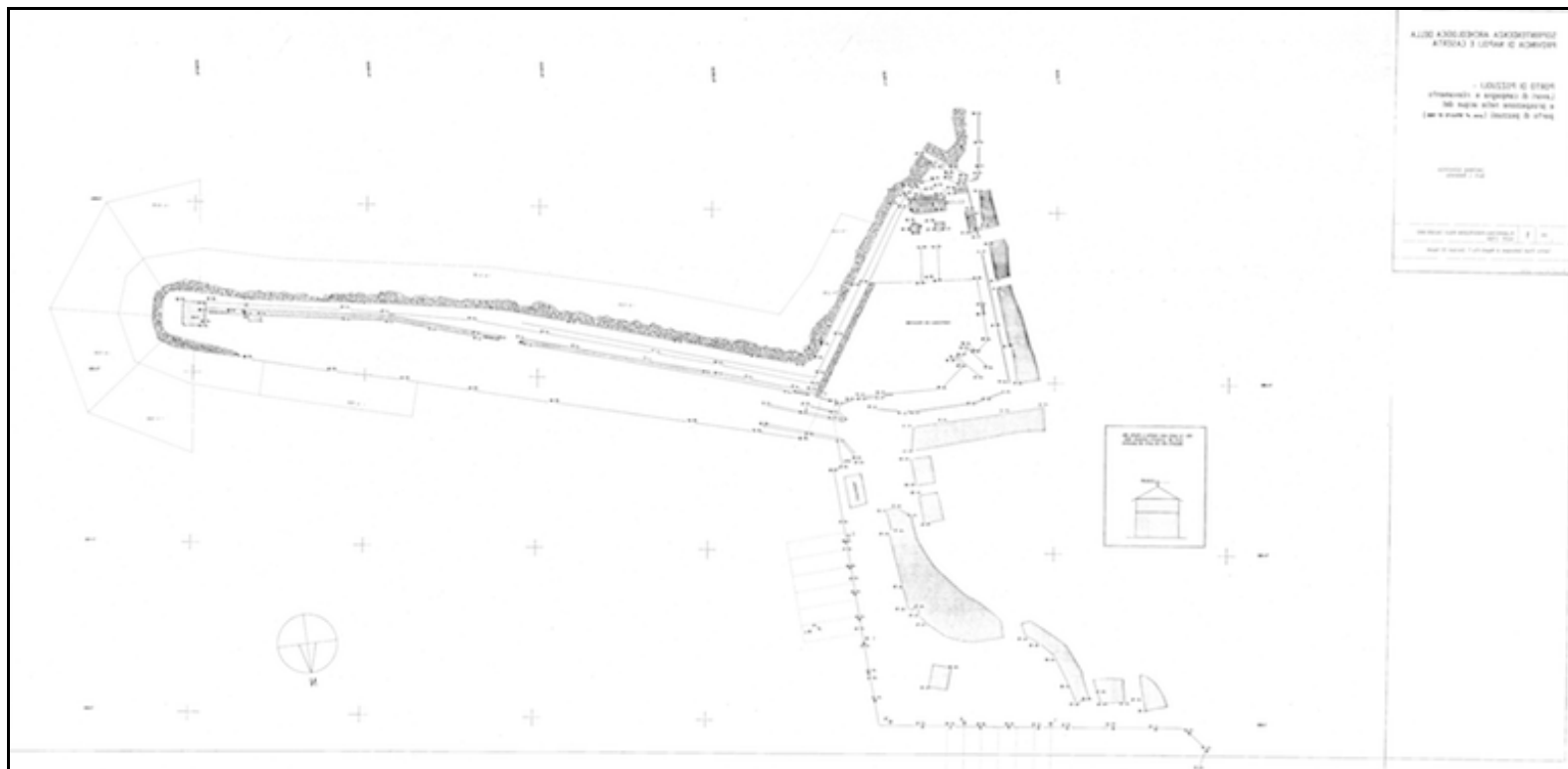


Figure 64: Section drawing of the *ambulacro* and the *vomitaria* of the Stadium in Pozzuoli (SANC)



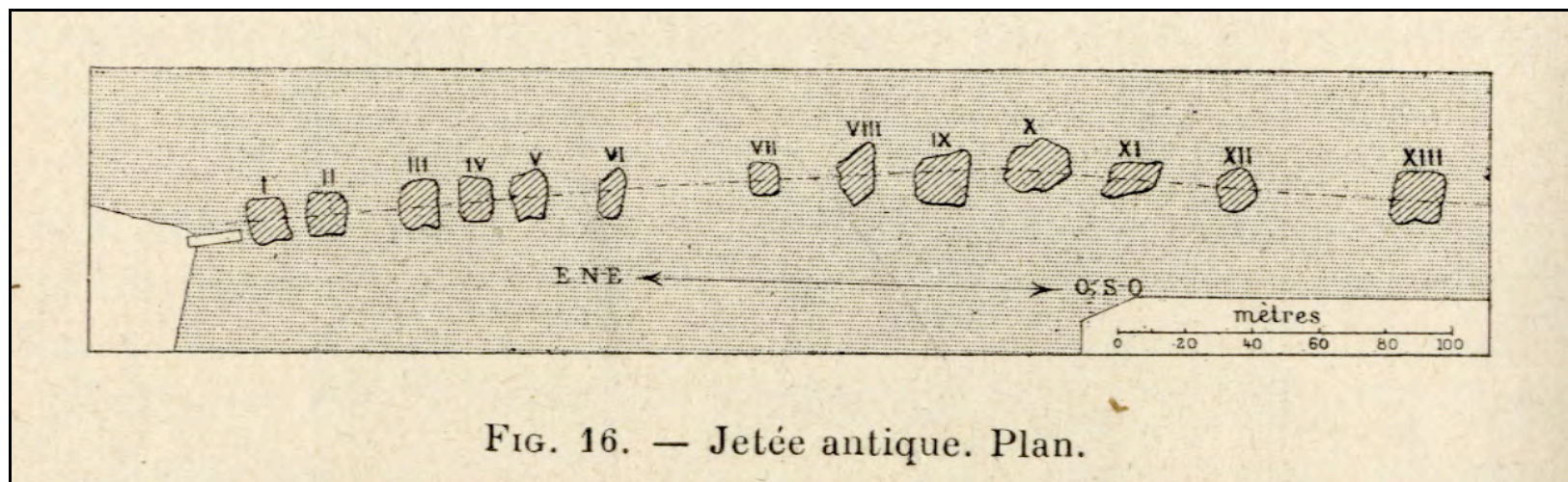


Figure 66: Plan of the roman remains of the Pozzuoli mole as recorded by Dubois (1907)

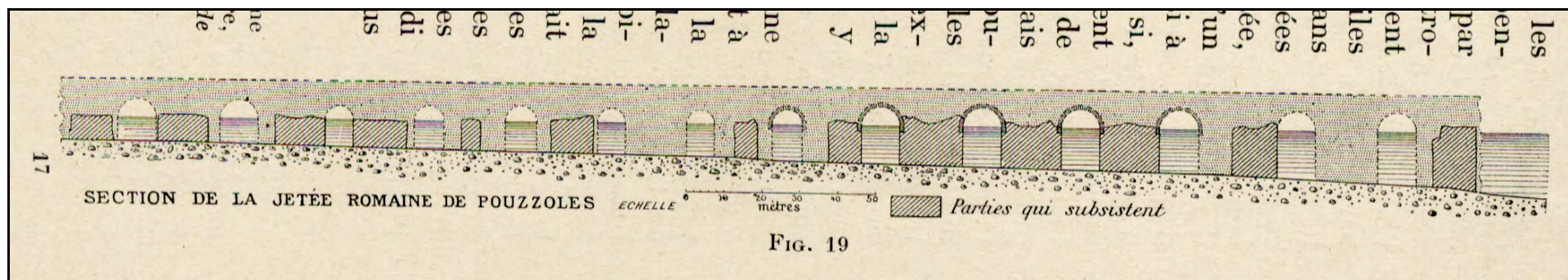


Figure 67: Section of the roman remains of the Pozzuoli mole as recorded by Dubois (1907)

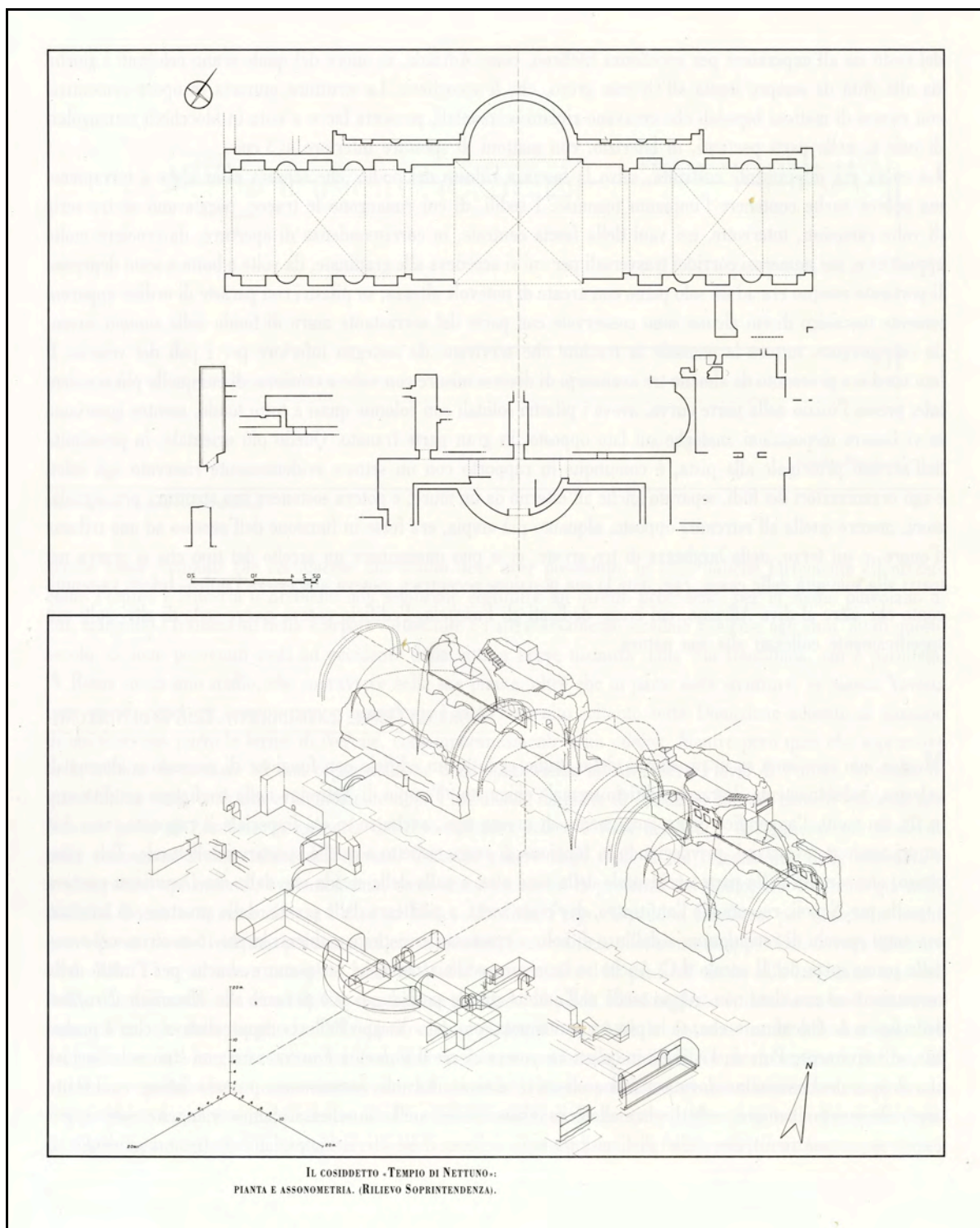


Figure 68: Plan and isometric drawings of the visible remains of the Roman baths in Pozzuoli (SANC)

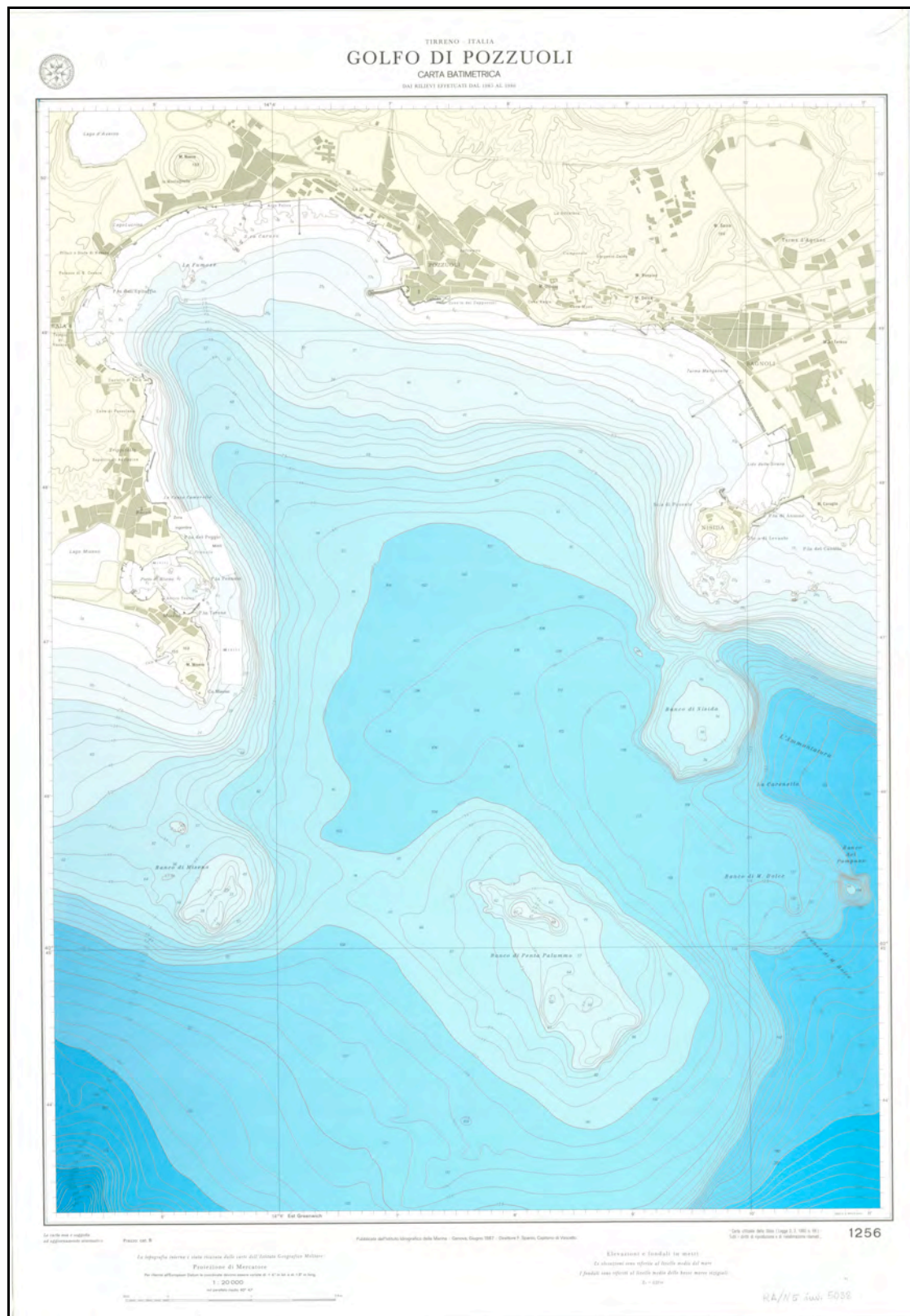


Figure 69: Map of the underwater contour data of Pozzuoli (Istituto Idrografico della Marina, Italy: 1987)



Figure 70: Map of the underwater contours of Pozzuoli including the underwater remains of the *Portus Julius* (SANC)

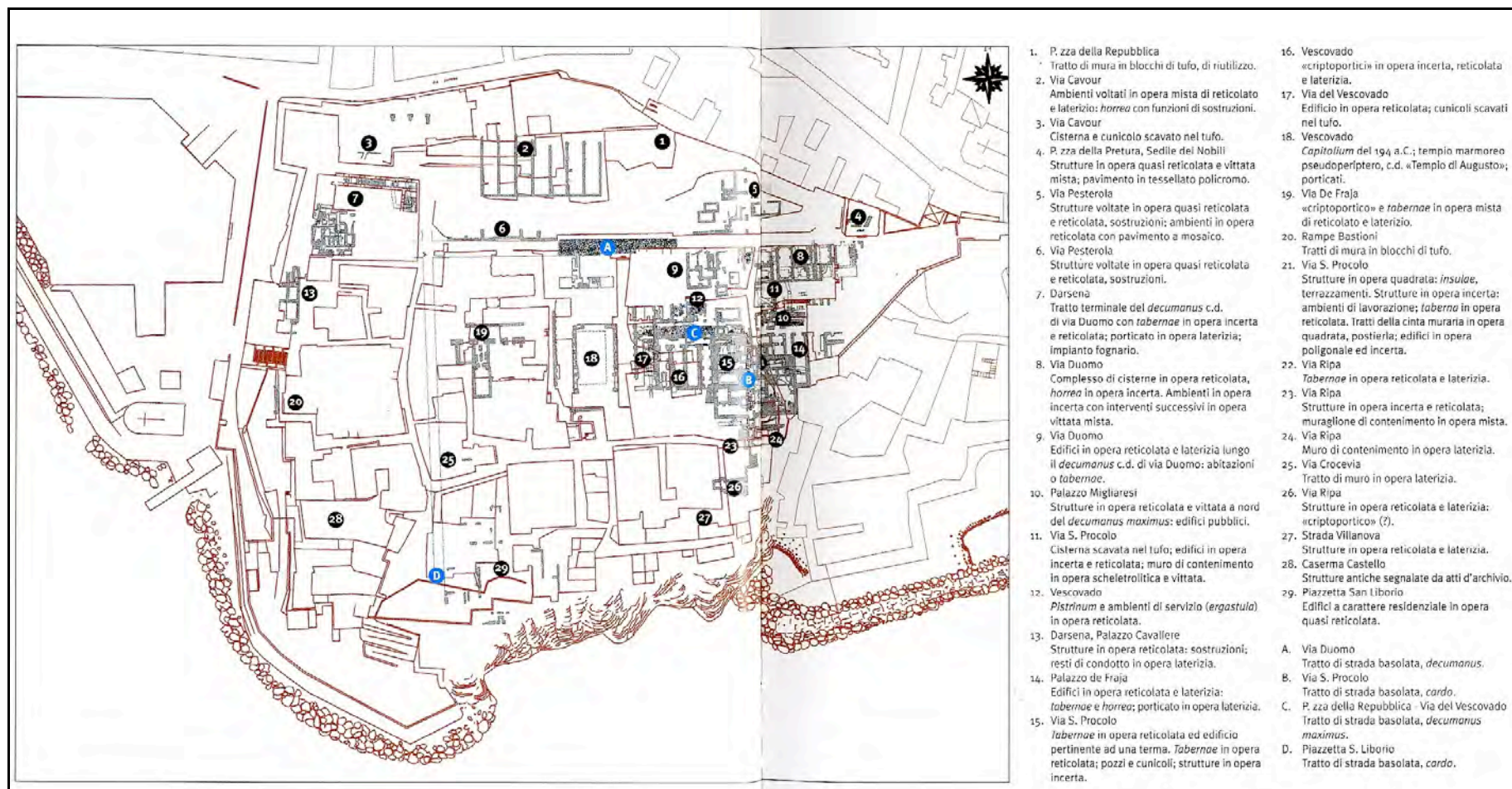


Figure 71: Plan of the Rione Terra promontory in Pozzuoli with the annotated archaeological remains (after De Caro: 2002)



Figure 72: Plan of the Rione Terra promontory in Pozzuoli with the annotated archaeological remains (after Valeri: 2005)

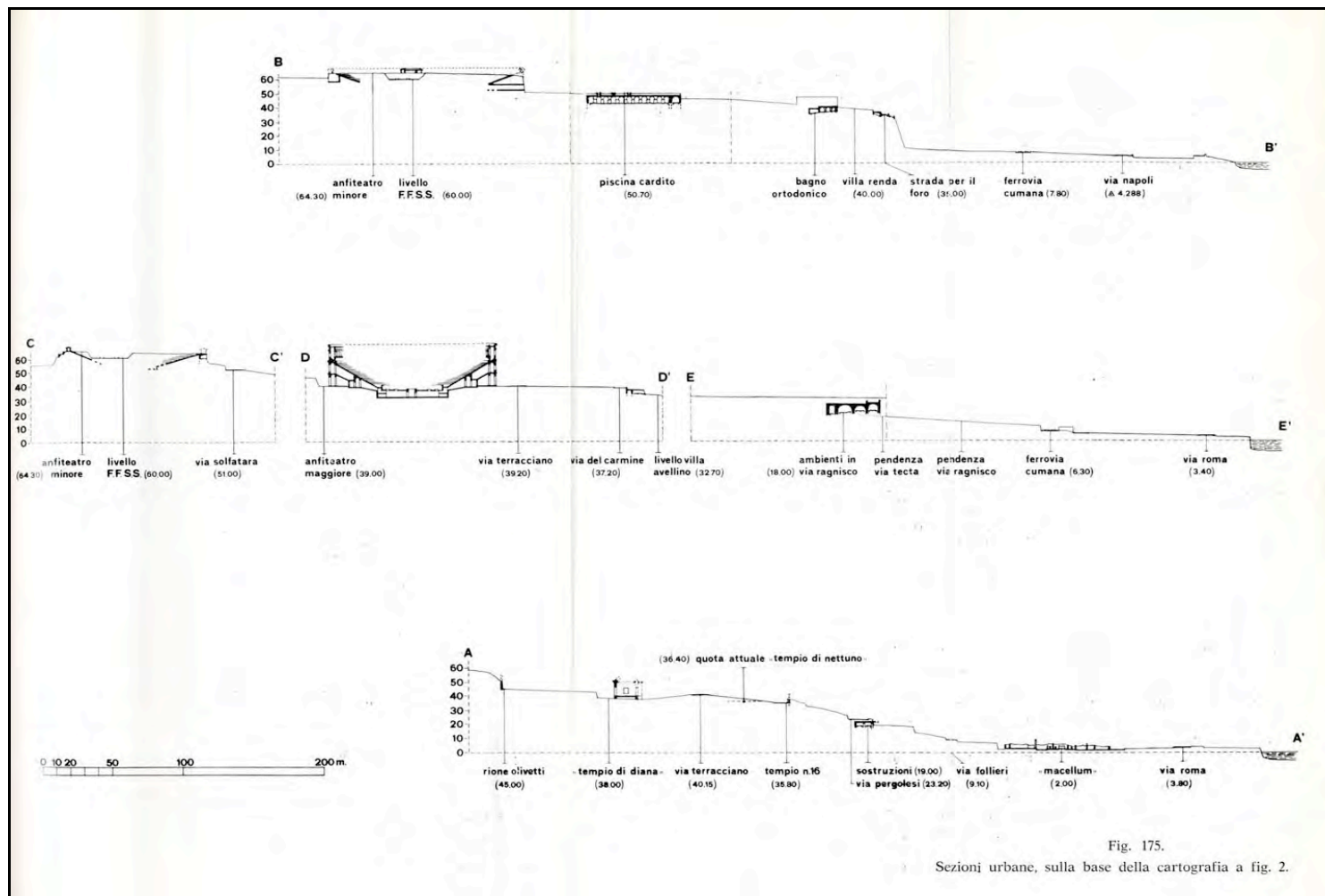


Fig. 175.
Sezioni urbane, sulla base della cartografia a fig. 2.

Figure 73: Cross-section drawings with the positions of the major archaeological remains of Rione Terra (after Sommella 1978)

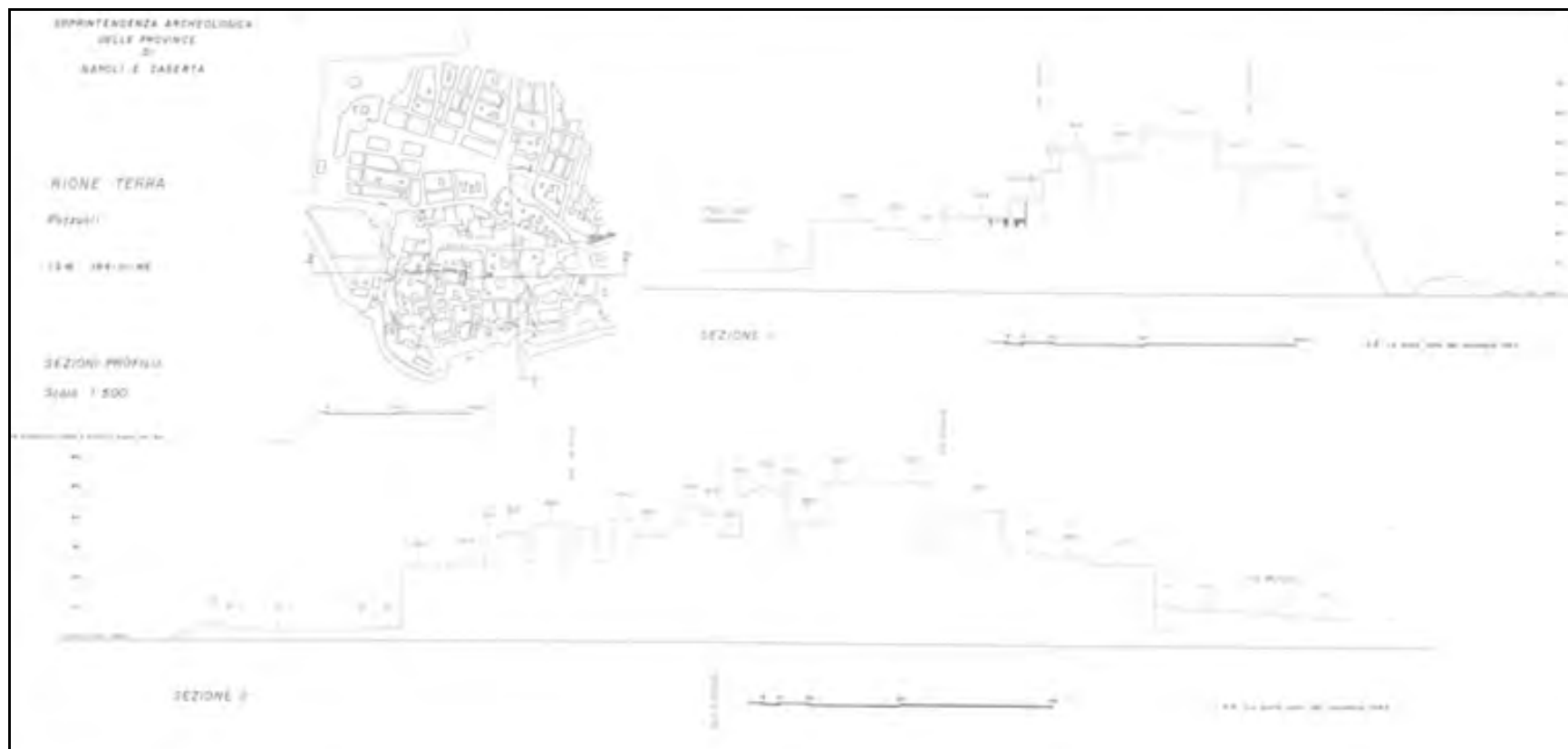


Figure 74: Plan and sections of the Rione Terra promontory with annotated spot heights above sea-level (SANC)

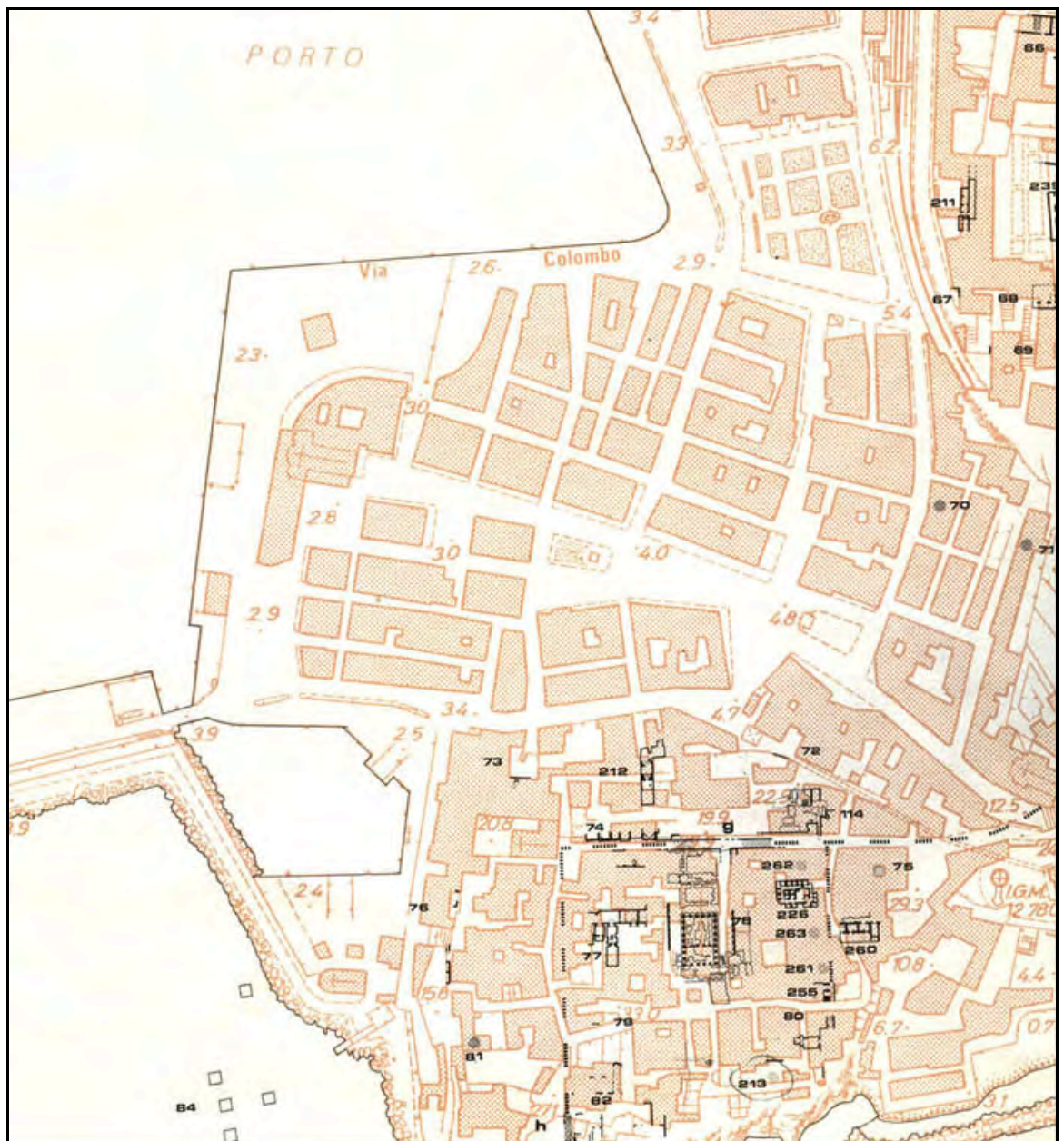


Figure 75: Detail of map from Zevi's 1999 gazetteer with outlines of the larger archaeological remains and stars used for the less recognisable remains (SANC as reproduced in Zevi 1999)

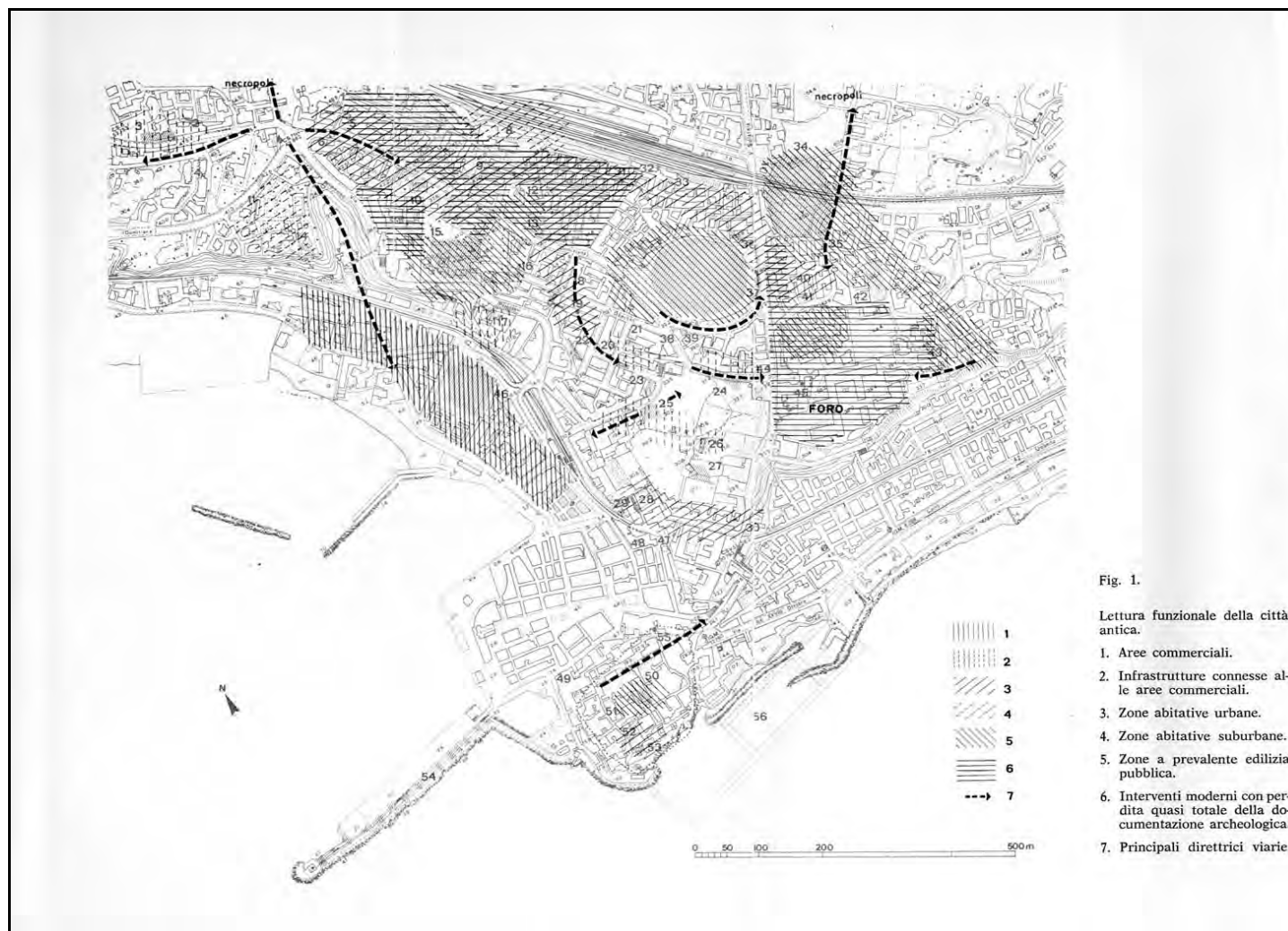


Figure 76: Plan of Pozzuoli highlighting the various areas as interpreted by Paolo Sommella (1978)

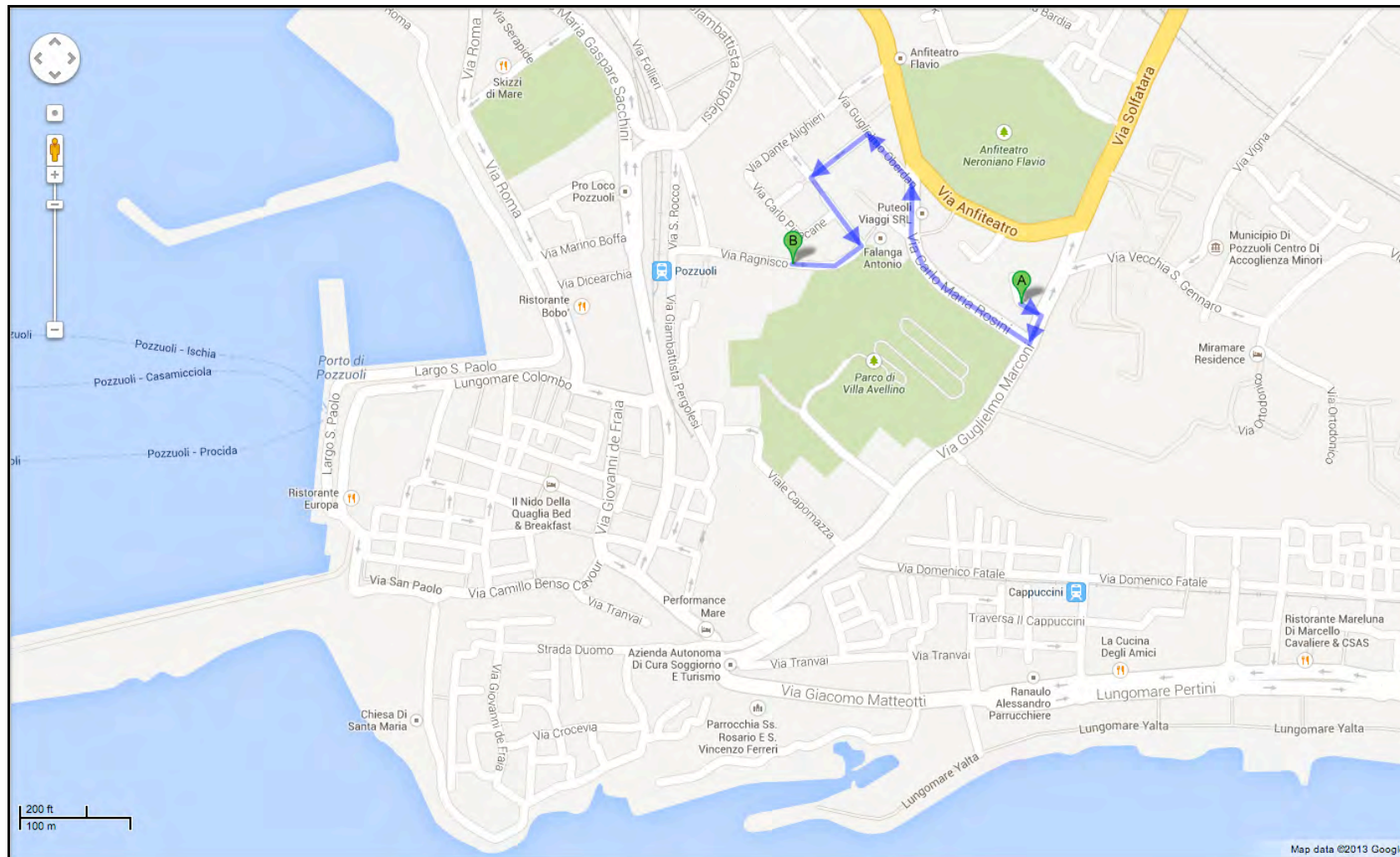


Figure 77: Modern plan of Pozzuoli showing the areas of Via Carlo Maria Rosini (A) and Via Ragnisco (B) (Google Maps)

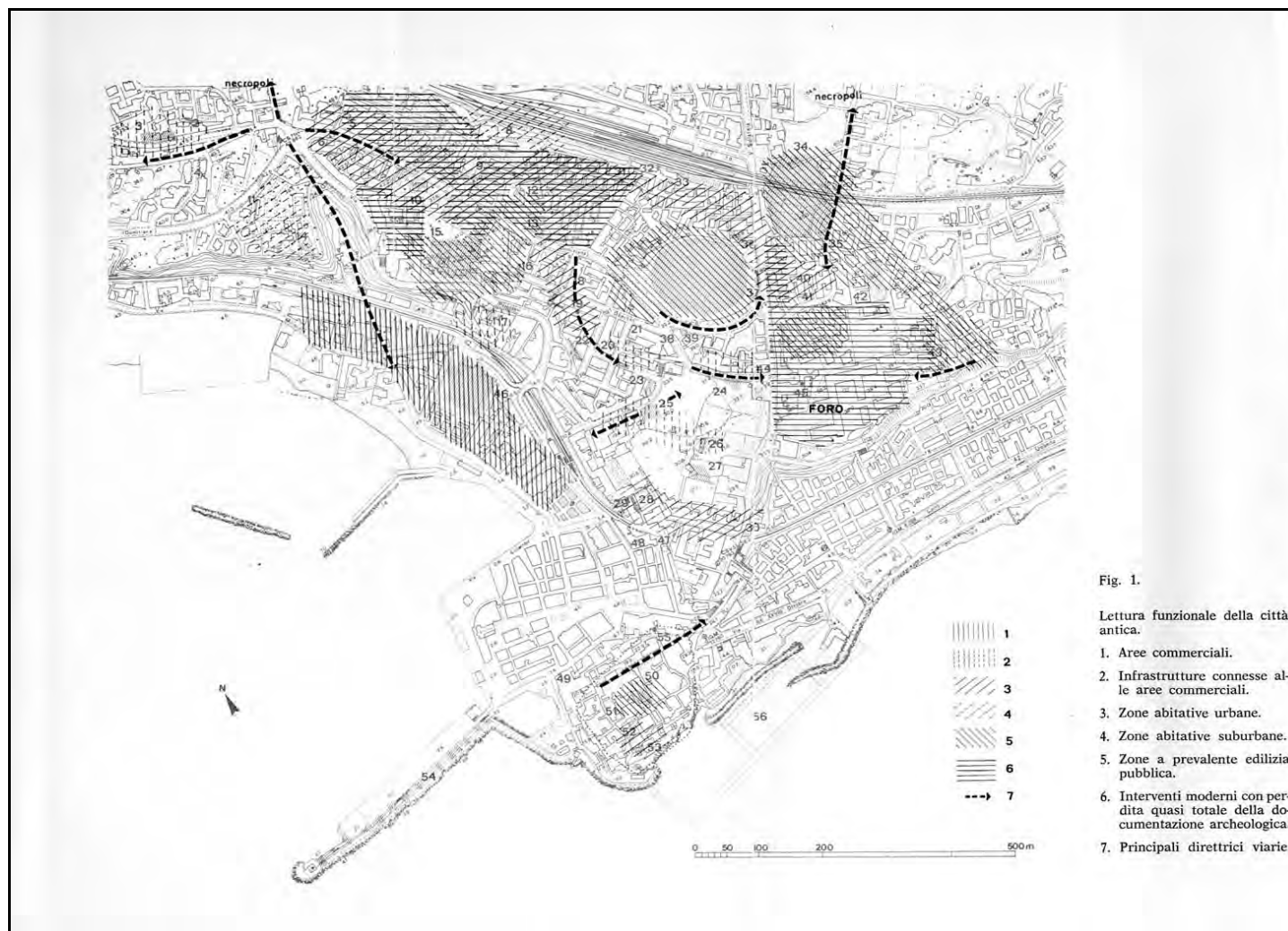


Figure 78: Plan of Pozzuoli highlighting the various areas as interpreted by Paolo Sommella (1978)

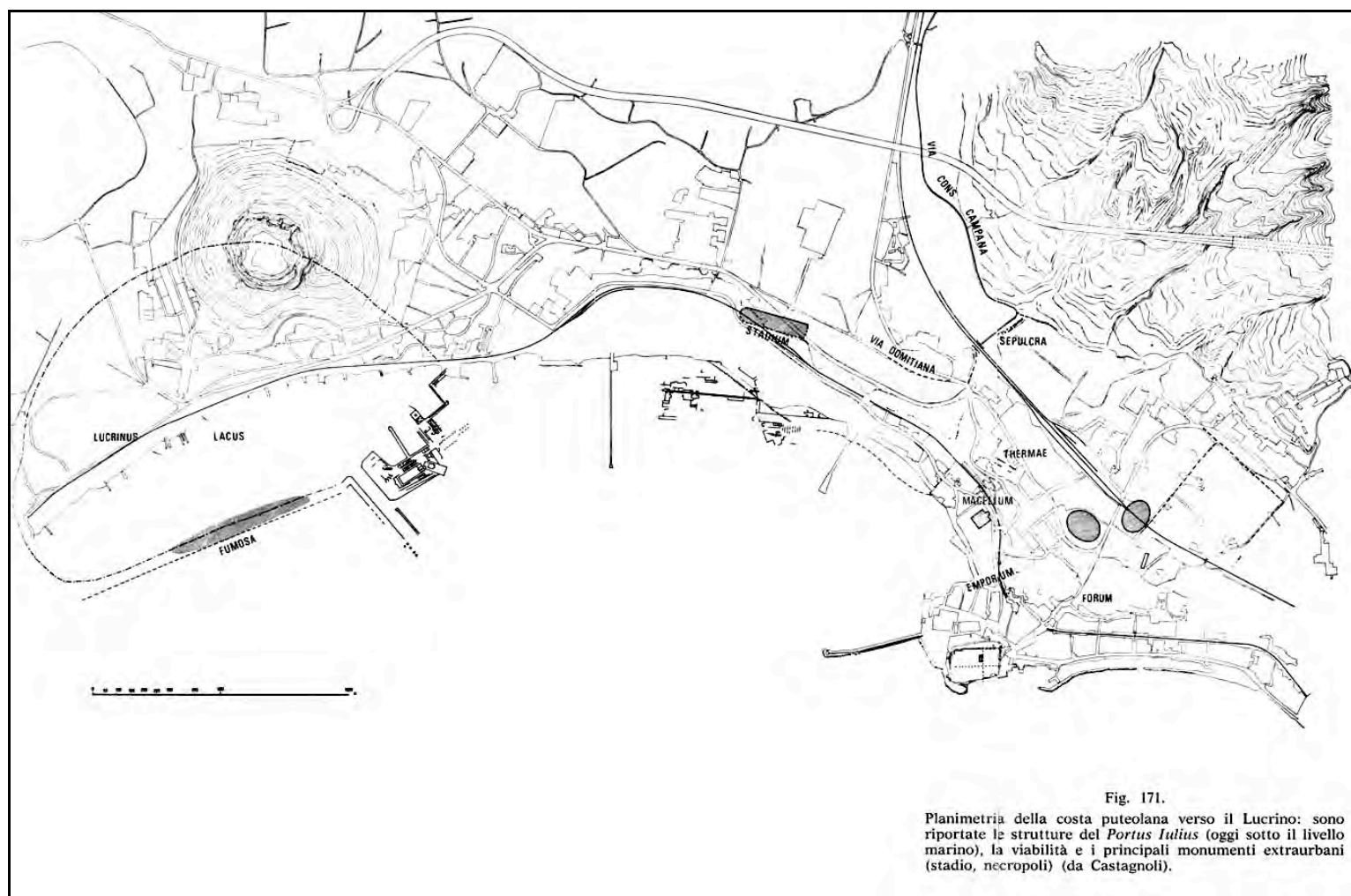


Figure 79: Plan of Pozzuoli showing the hypothesised location of the town's *Forum* (after Camodeca 1977)



Figure 80: Golvin's watercolour reconstruction placing the forum of Pozzuoli as suggested by Camodeca, circled in red (Golvin in Reddè: 2008)

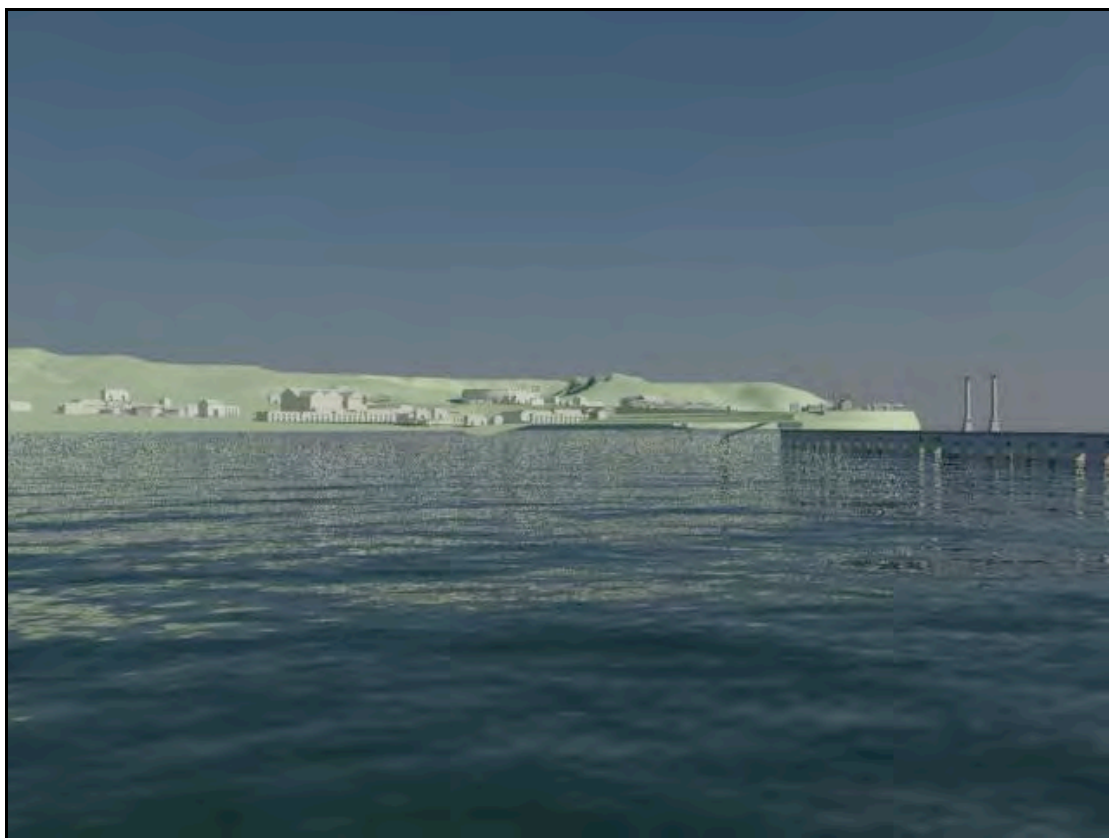


Figure 81: Rendered image of the camera labelled Ostrow_1 (EDG)



Figure 82: Rendered image of the camera labelled Ostrow_2 (EDG)



Figure 83: Rendered image of the camera labelled Ostrow_3 (EDG)

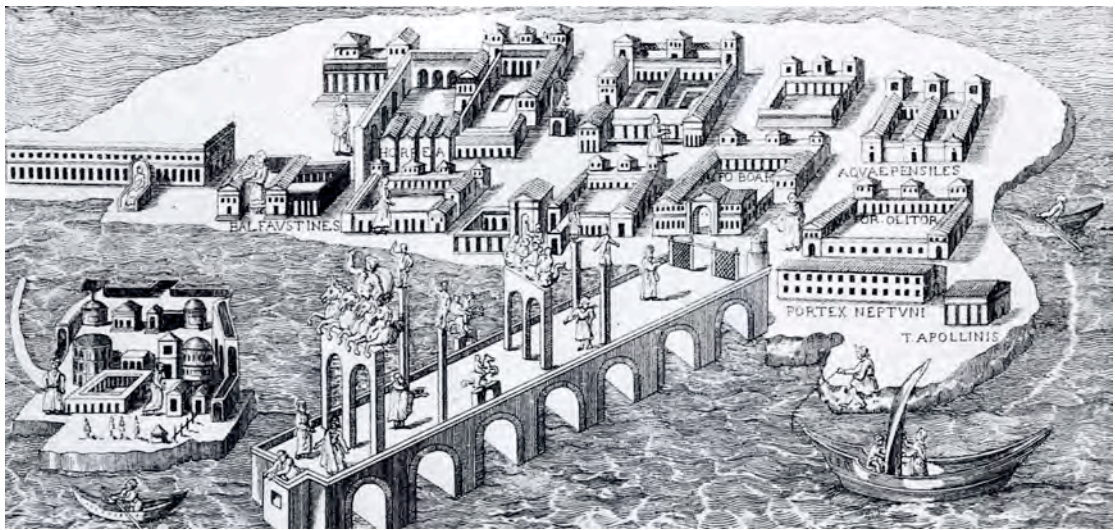


Figure 84: Buildings represented in the Bellori drawing compared with the conceptual buildings reconstructed digitally (EDG)

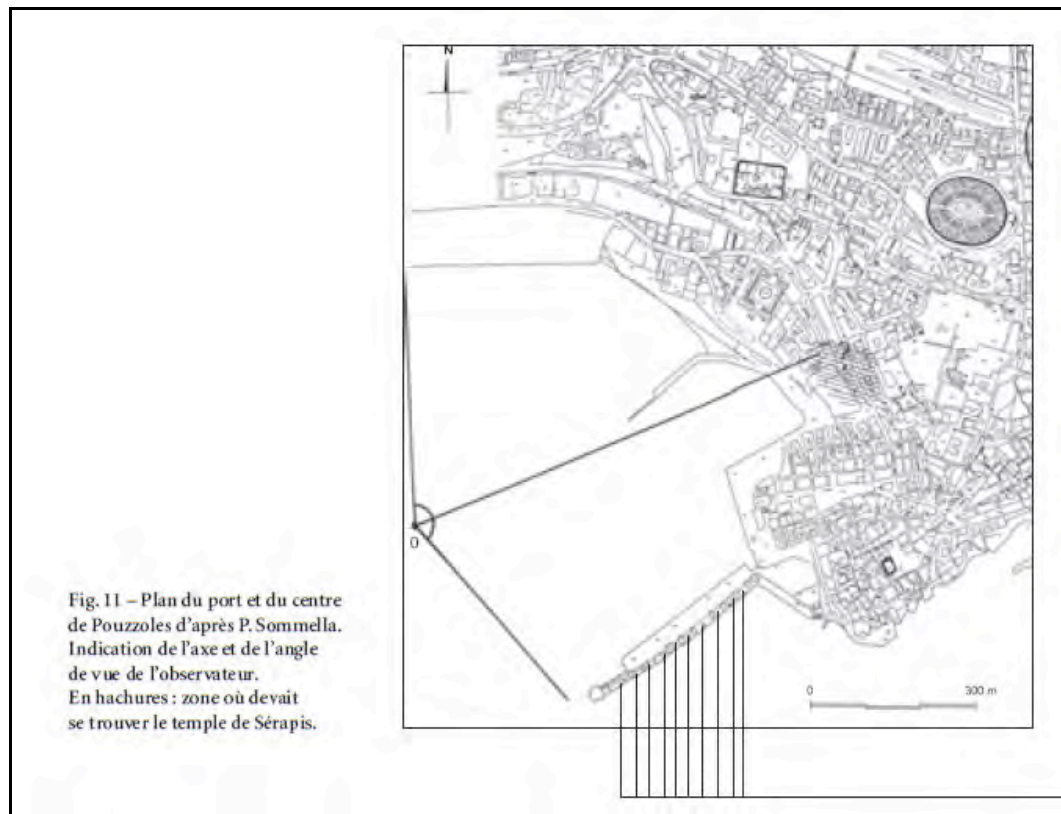


Figure 85: Suggested viewer by Golvin (2008)



Figure 86: Rendered image of the camera labelled Golvin_1 (EDG)



Figure 87: Rendered image of the camera labelled Golvin_2 (EDG)

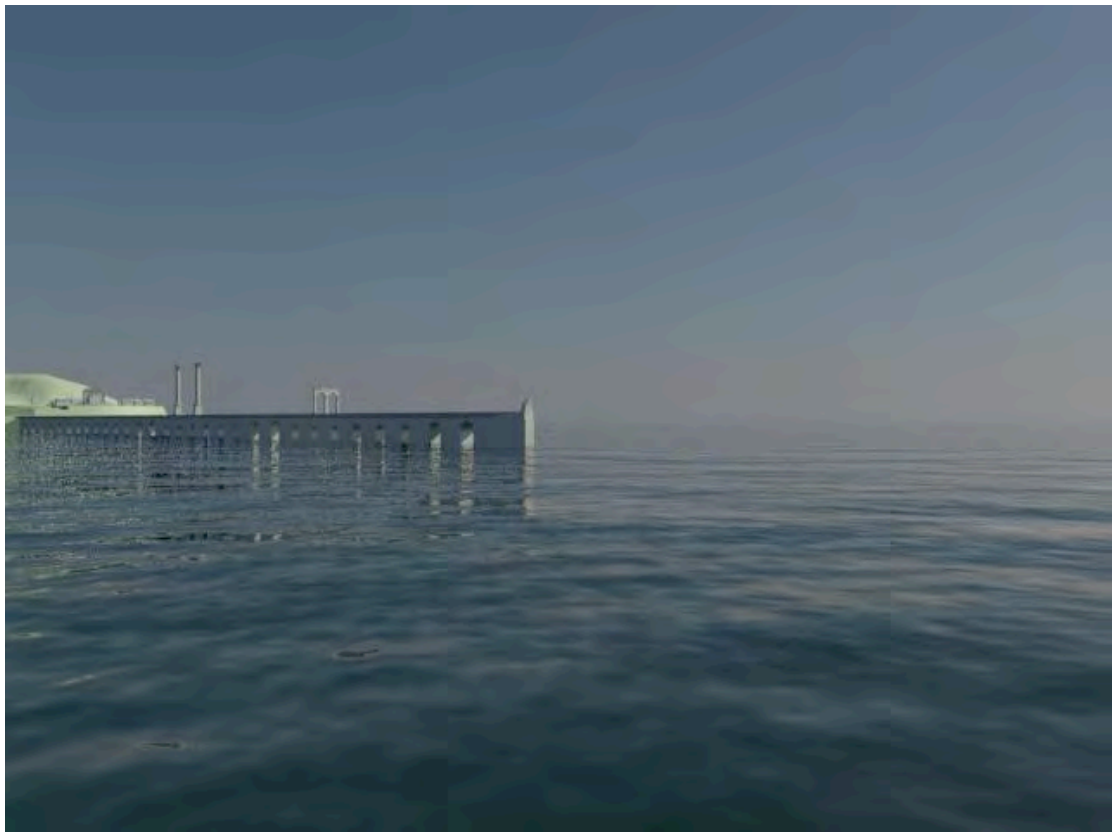


Figure 88: Rendered image of the camera labelled Golvin_3 (EDG)

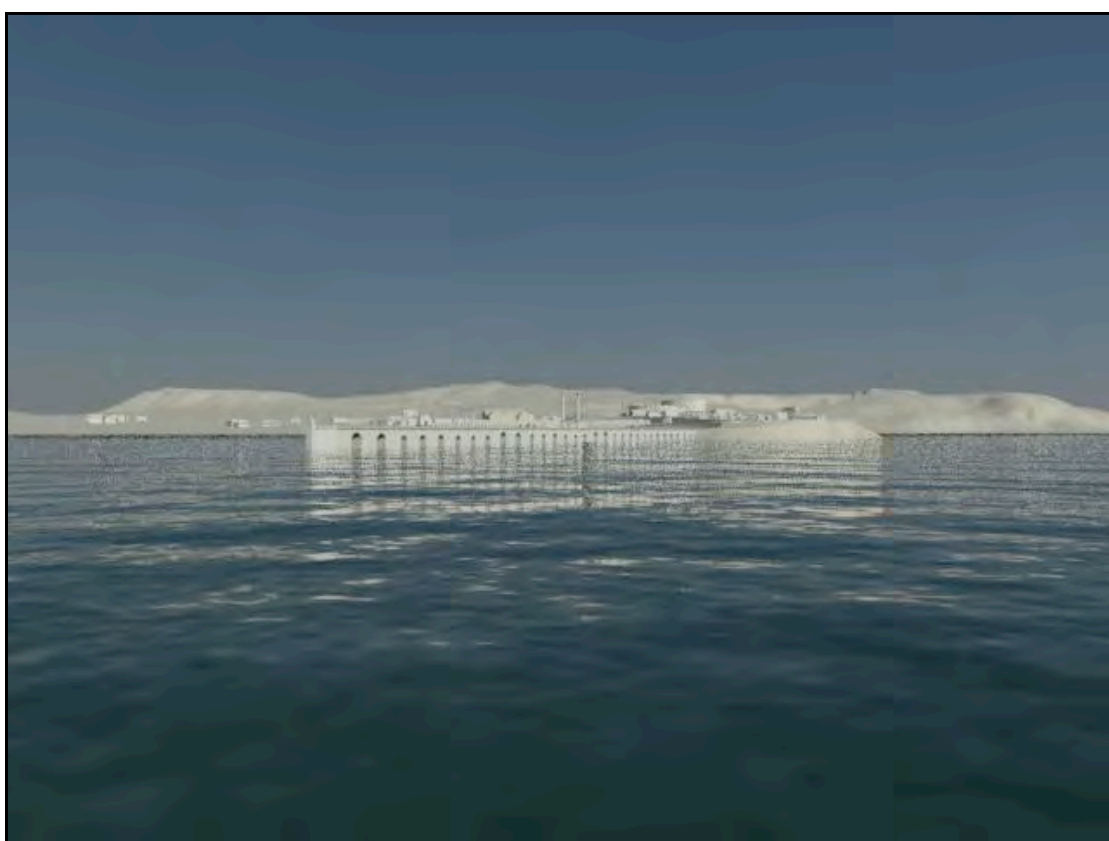


Figure 89: Comparison of reconstructed image (EDG)



Figure 90: Comparison of reconstructed image highlighting Rione Terra (EDG)



Figure 91: Comparison of reconstructed image of the central area of the port (EDG)



Figure 92: Comparison of reconstructed image of Rione Terra (EDG)



Figure 93: Comparison of reconstructed image with camera facing the mole (EDG)



Figure 94: Digital image with camera lens at 20mm (EDG)



Figure 95: Digital image with camera lens at 35mm (EDG)



Figure 96: Digital image with camera lens at 135mm (EDG)



Figure 97: Digital image with lighting set to 07.00h (EDG)



Figure 98: Digital image with lighting set to 08.00h (EDG)



Figure 99: Digital image with lighting set to 14.00h (EDG)



Figure 100: Digital image with lighting set to 19.00h (EDG)

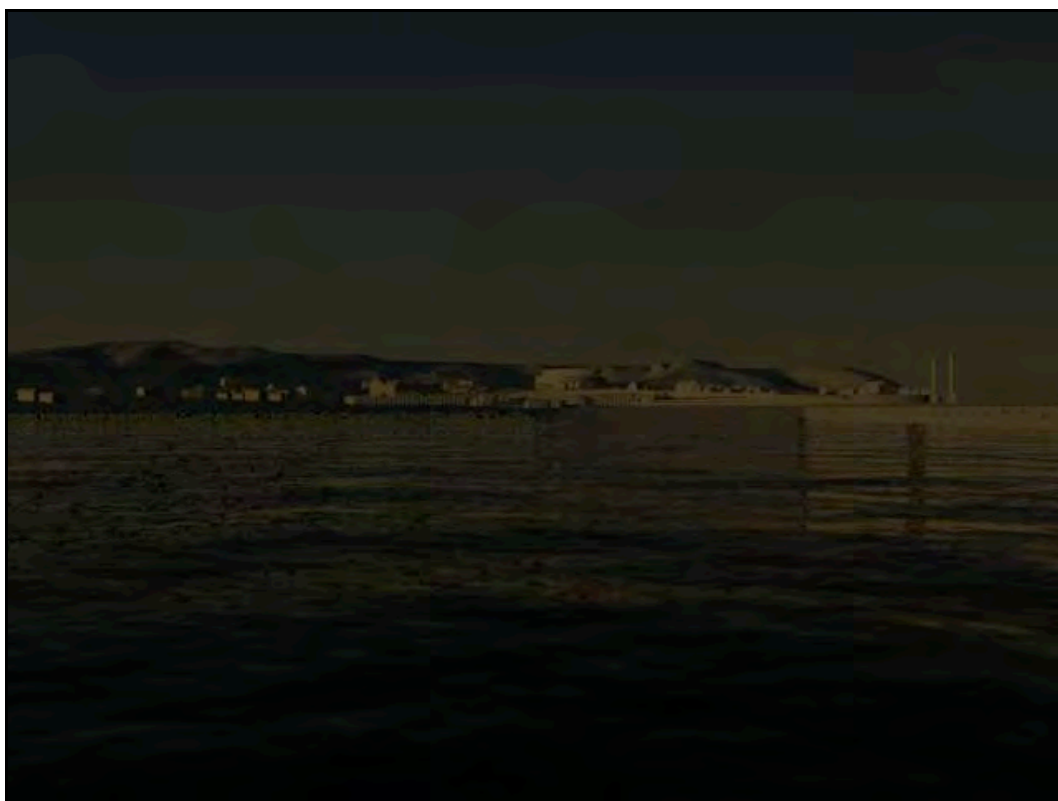


Figure 101: Digital image with lighting set to 20.00h (EDG)



Figure 102: Hypothetical view of camera looking out towards the sea from the columns of the *Capitolium* (EDG)



Plate 1: Photograph of the promontory of Rione Terra at dusk
(Photographgrapher looking north) (copyright Panoramio)



Plate 2: Photograph of the promontory of Rione Terra during the day
(Photographgrapher looking north) (copyright Panoramio)



Plate 3: Photograph of the promontory of Rione Terra at dusk
(Photographgrapher looking north east) (copyright Panoramio)



Plate 4: Photograph of the promontory of Rione Terra at dusk
(Photographgrapher looking north east) (copyright Panoramio)



Plate 5: Photograph of the promontory of Rione Terra (Photographer looking north east but from further afield) (Copyright Panoramio)



Plate 6: Photograph taken directly in front of the seaward tip of the harbour mole (Copyright Panoramio)



Plate 7: Photograph taken from the right-hand side again at the extremity of the modern mole (Copyright Panoramio)

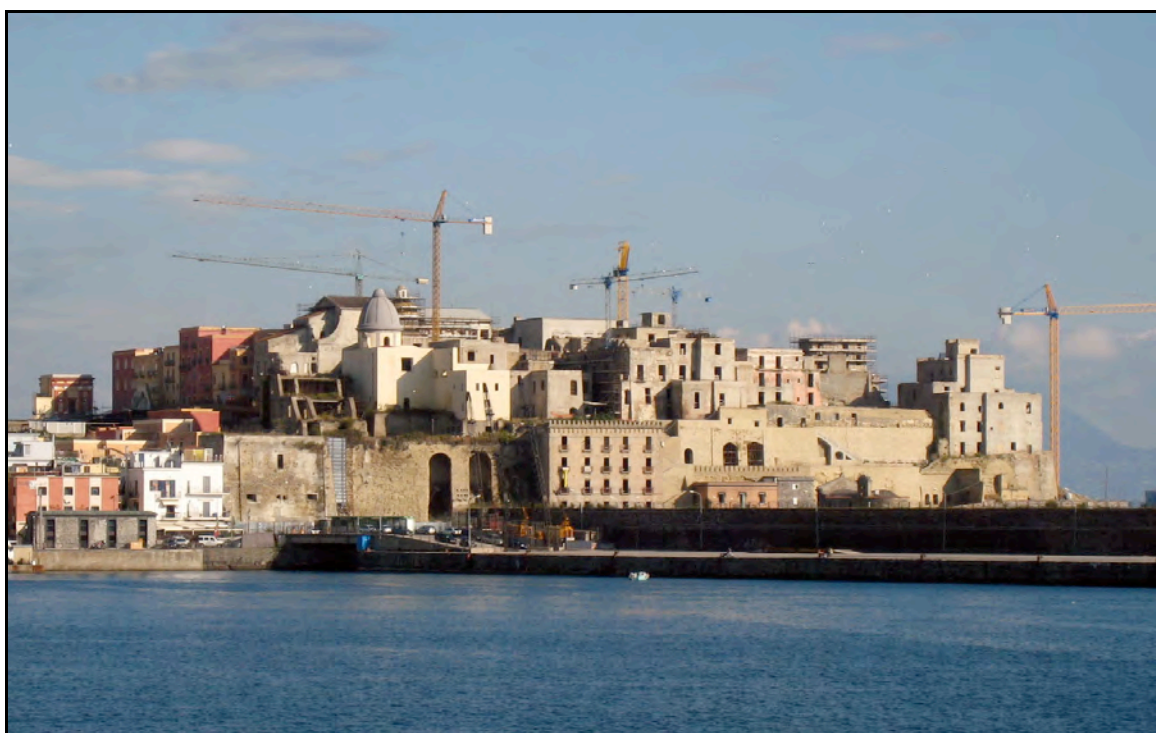


Plate 8: Close up Photograph of the Rione Terra taken southwest (left of) the harbour mole (Copyright Panoramio)



Plate 9: Photograph taken just in front of the bay of Pozzuoli (Copyright Panoramio)



Plate 10: Photograph taken from the sea showing a considerable portion (but not all) of the town and gulf of Pozzuoli (Copyright Panoramio)



Plate 11: Photograph taken from the SE (Photographgrapher looking NW) of Rione Terra (Copyright Panoramio)



Plate 12: Photograph taken from more or less the same distance (if perhaps a little further away) but SW of Rione Terra (Photographgrapher looking NE) (Copyright Panoramio)



Plate 13a: Possibly a Photograph of Monte Nuovo which dominates the coastline from this viewpoint as is evidenced by how dwarfed the buildings below it are (Copyright Panoramio)

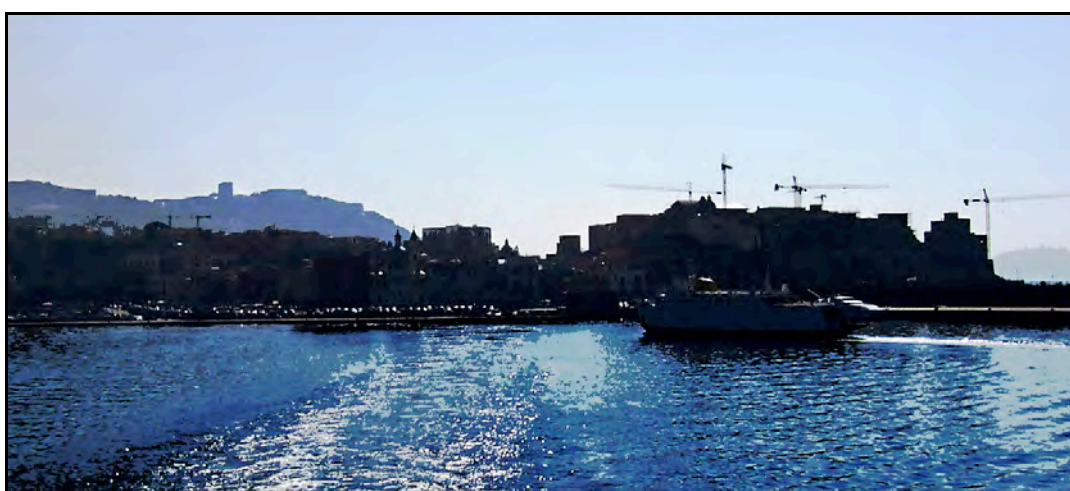


Plate 13b: image taken from a SW (Photographgrapher looking NE) direction left of the harbour mole with contrast digitally enhanced (Copyright Panoramio)

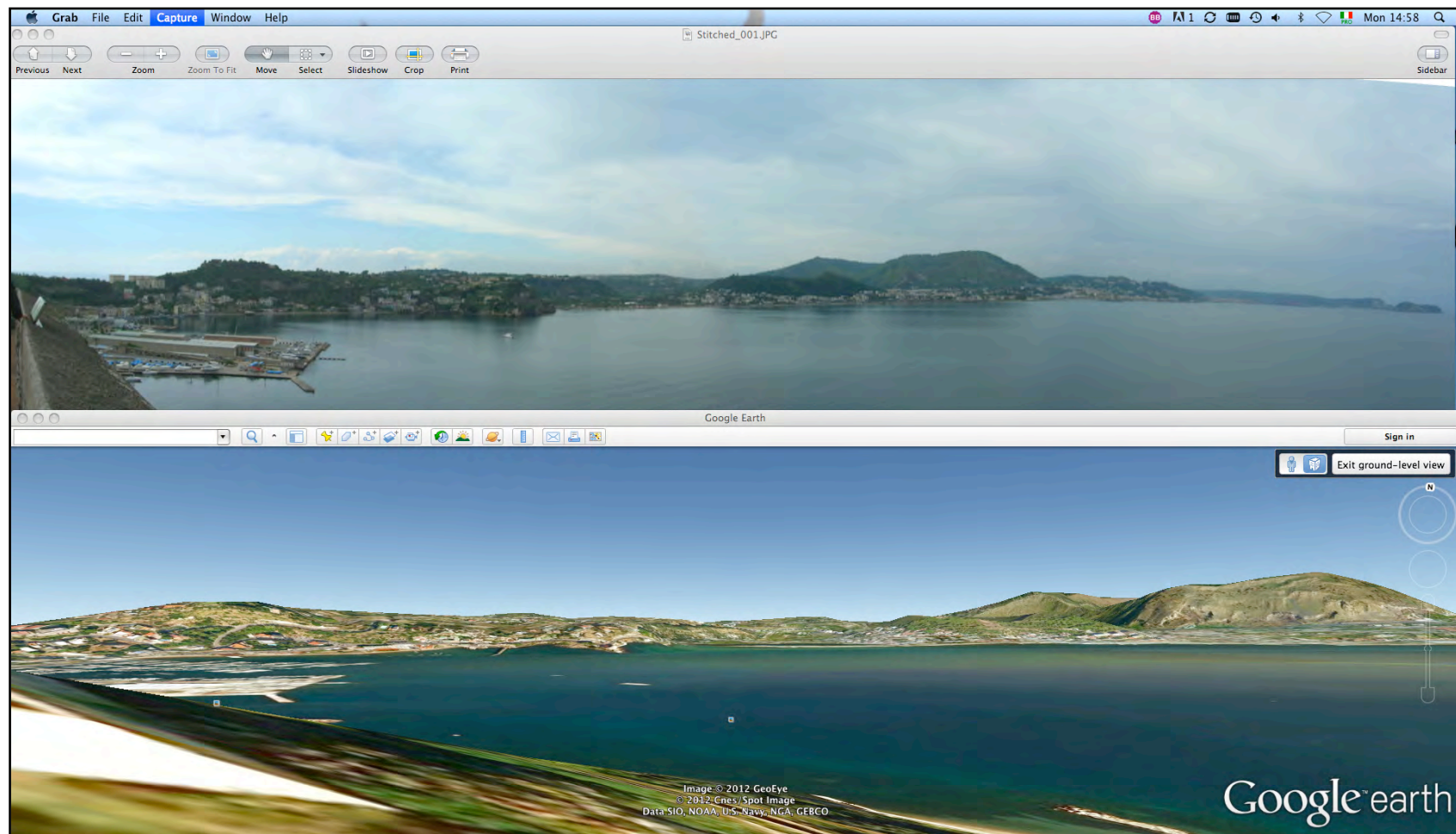


Plate 14: Comparison of Google Earth (copyright Google Earth) image compared with Photograph taken from Castello di Baia (EDG)

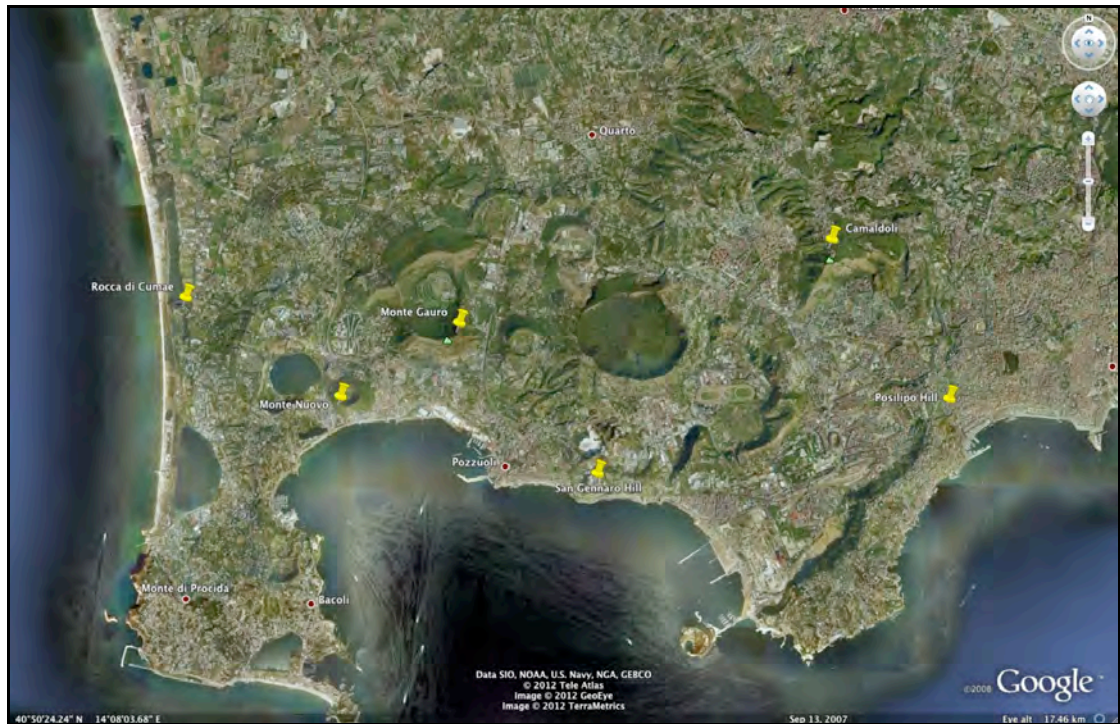


Plate 15: Google image with the viewing locations as mentioned by Miniero

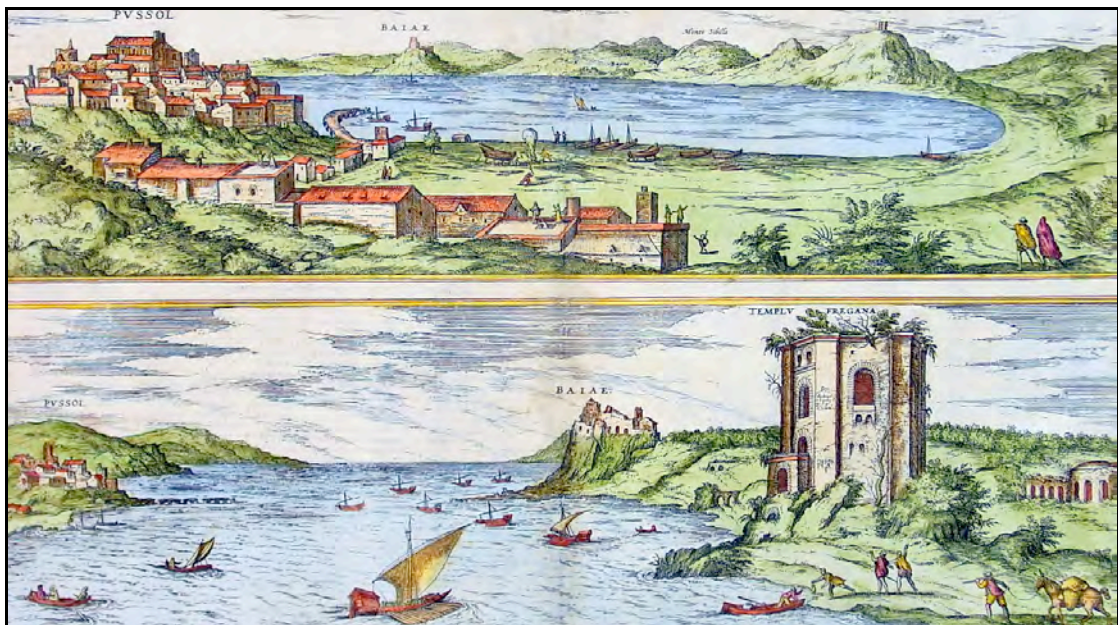
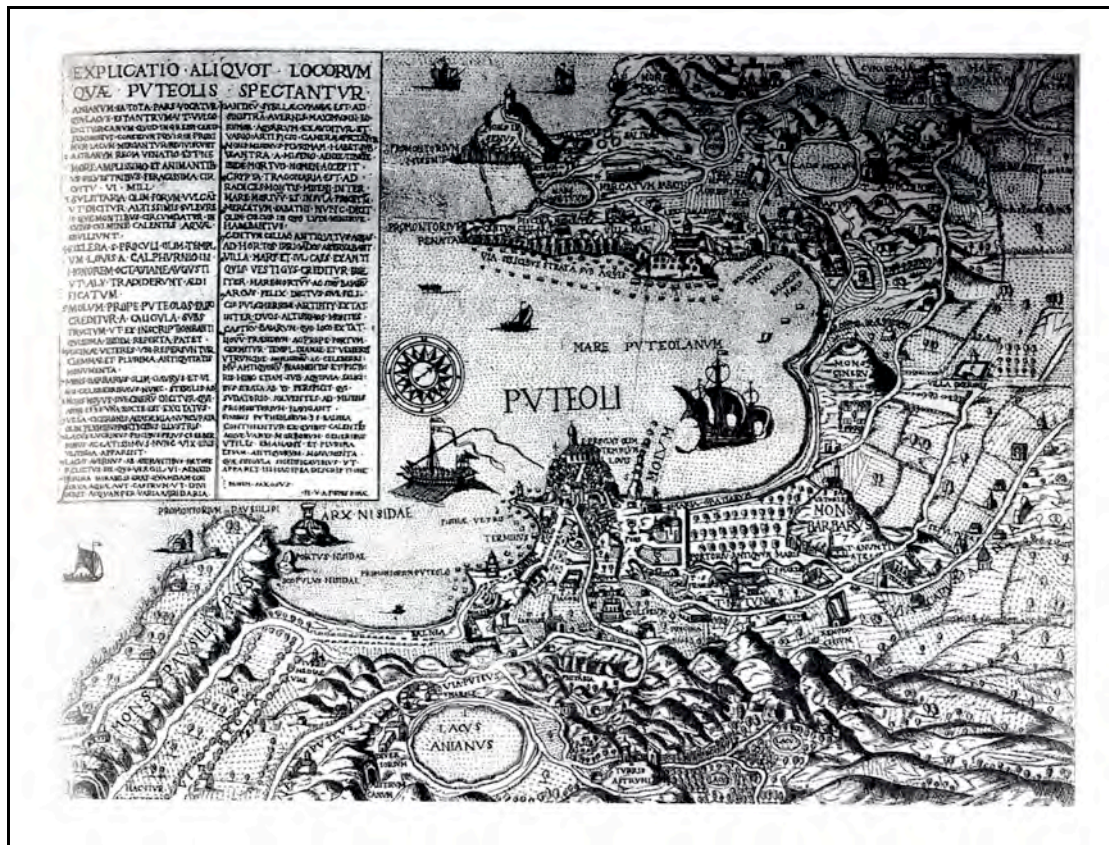


Plate 16: G Hoefnagel (Cologne 1572-1598) for the *Civitates Orbis Terrarum* by G. Braun



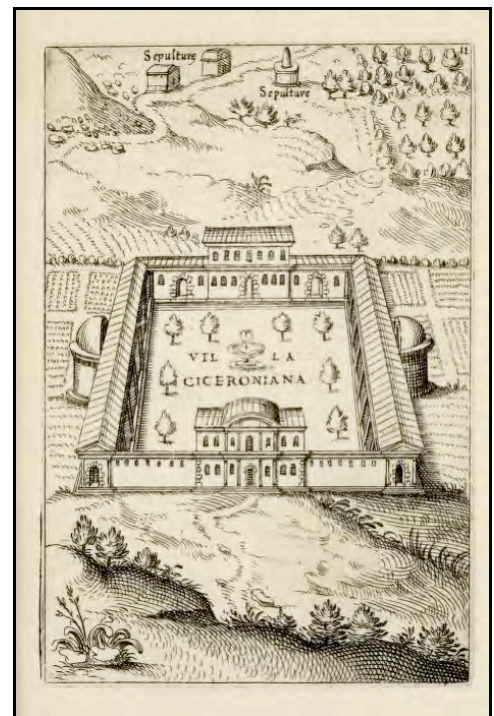
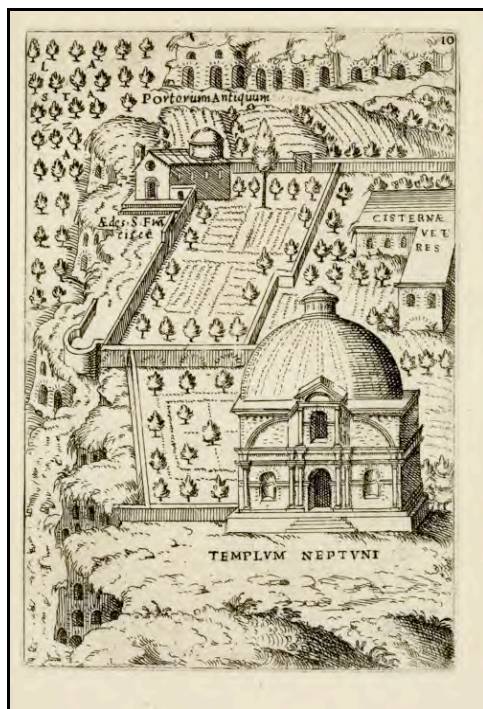


Plate 19: Francesco Villamena's *Ager Puteolanus* (1584)

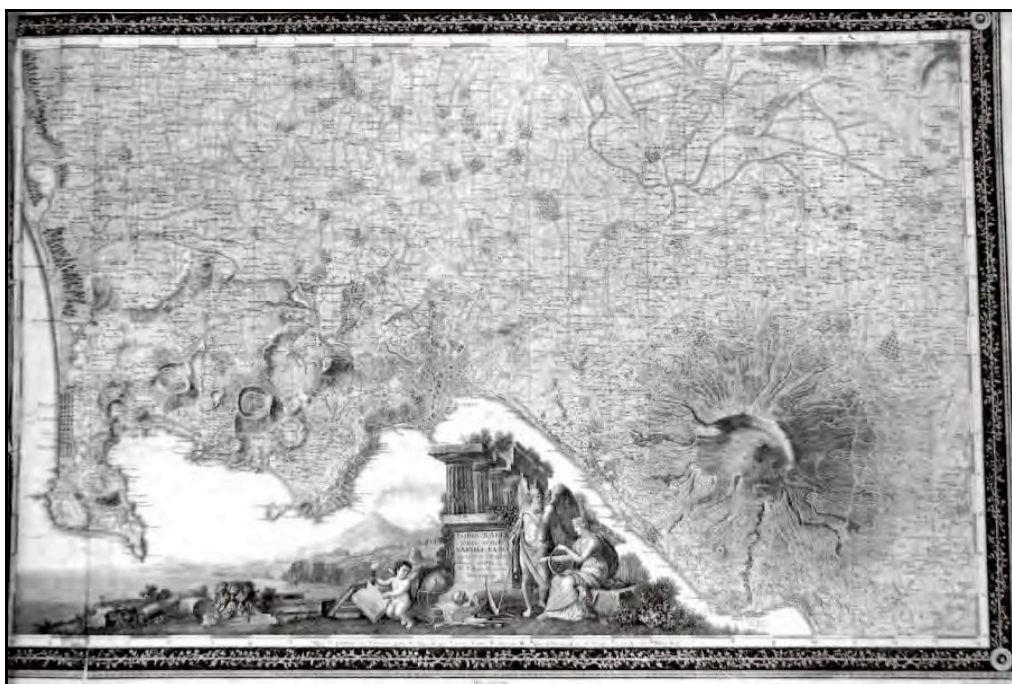


Plate 20: *Agro Neapolitano* published in 1793



Plate 23: Jacobo Lauro *Topographia Puteolorum* (1626)



Plate 24: *Carte du Golf de Pouzzol avec une partie des Champs Plégréens dans la Terre de Labour*, F.e Pietro de la Vega (drawing) Perrier e Drouet (engraving) (1782)



Plate 25 : *Amphithéâtre de Pozzuol* , Des Moulin (engraving), Varin (drawing) (1782)

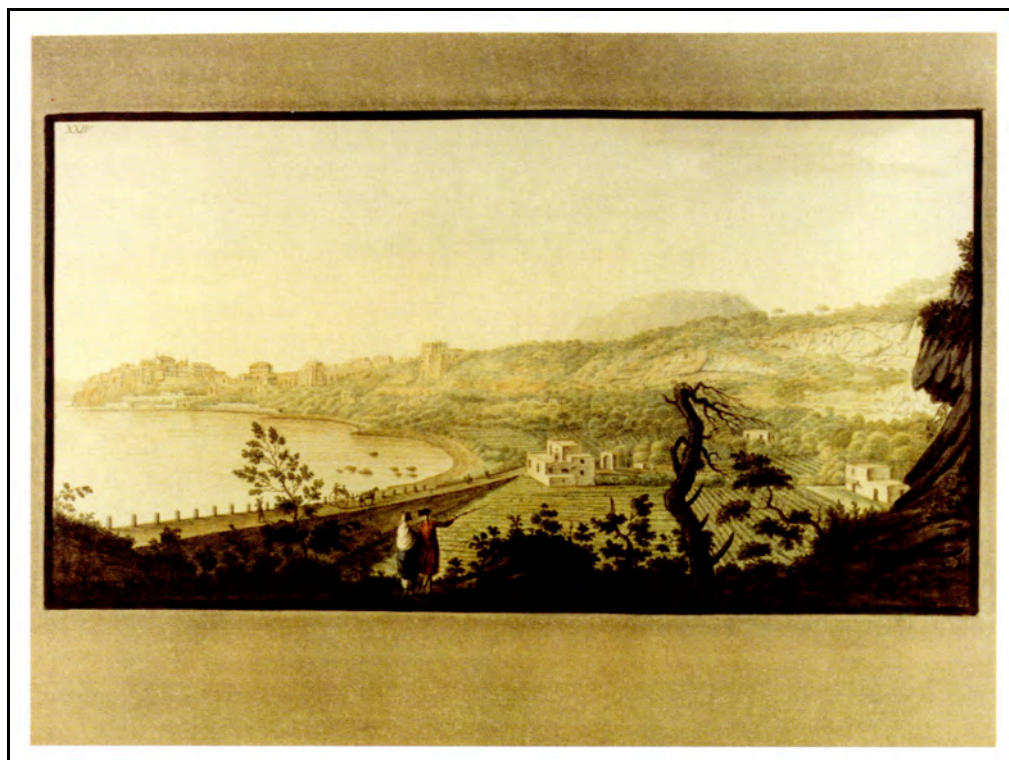


Plate 26: *Veduta di Pozzuoli da oriente*, P. Fabris (copper outline and watercolour) (1776)



Plate 27: *Veduta presa da sopra Pozzuoli*, P. Fabris (copper outline and watercolour)



Plate 28: *Veduta degli avanzi di tredici pile dell'antico porto di Pozzuoli* - Ph. Morghen (engraving)

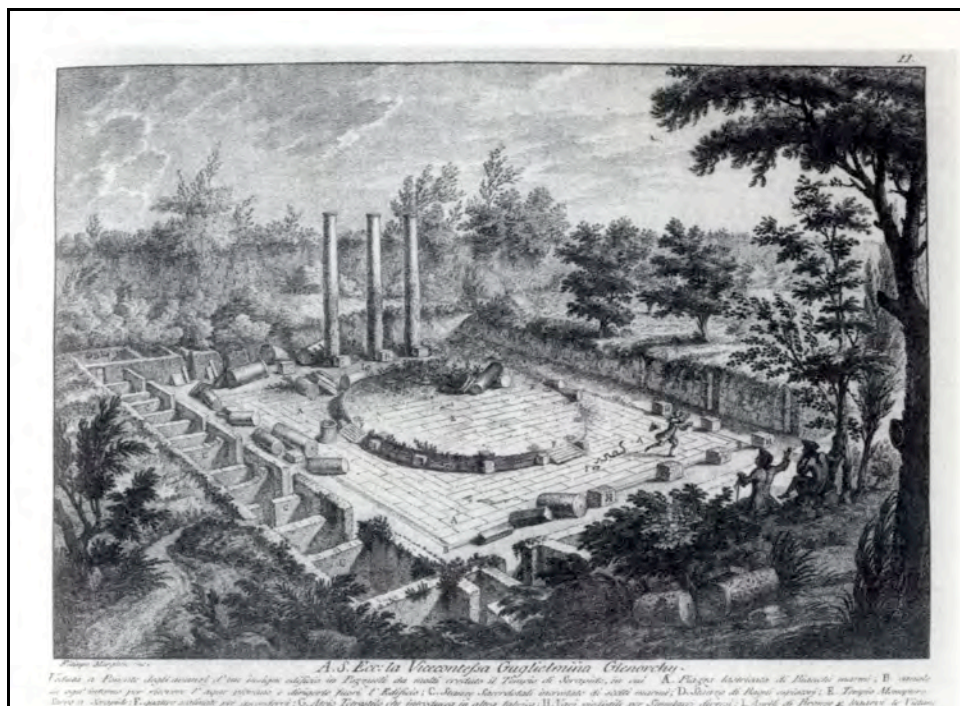




Plate 31: *Veduta di Pozzuoli presa dal monte nuovo* - Ph. Hackert, W.F. Gmelin (engraving) 1787



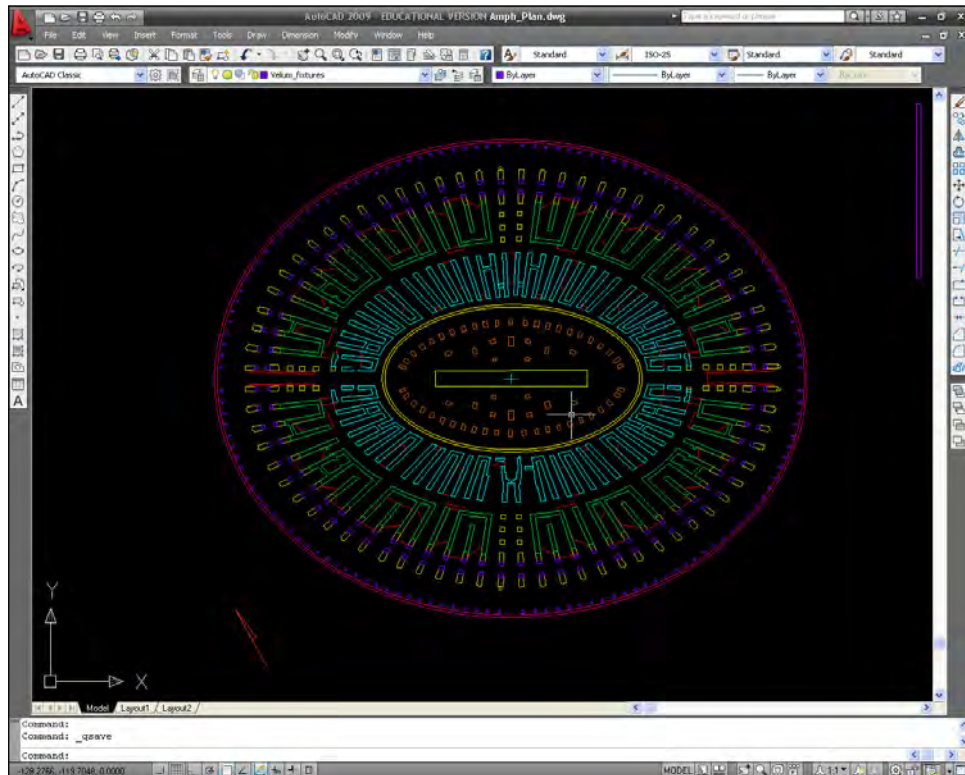
Plate 32: Cross-section of the *Plastico* model reconstruction of the *Macellum* housed in the Castello di Baia Museum (Based on Christie's watercolour) (EDG)



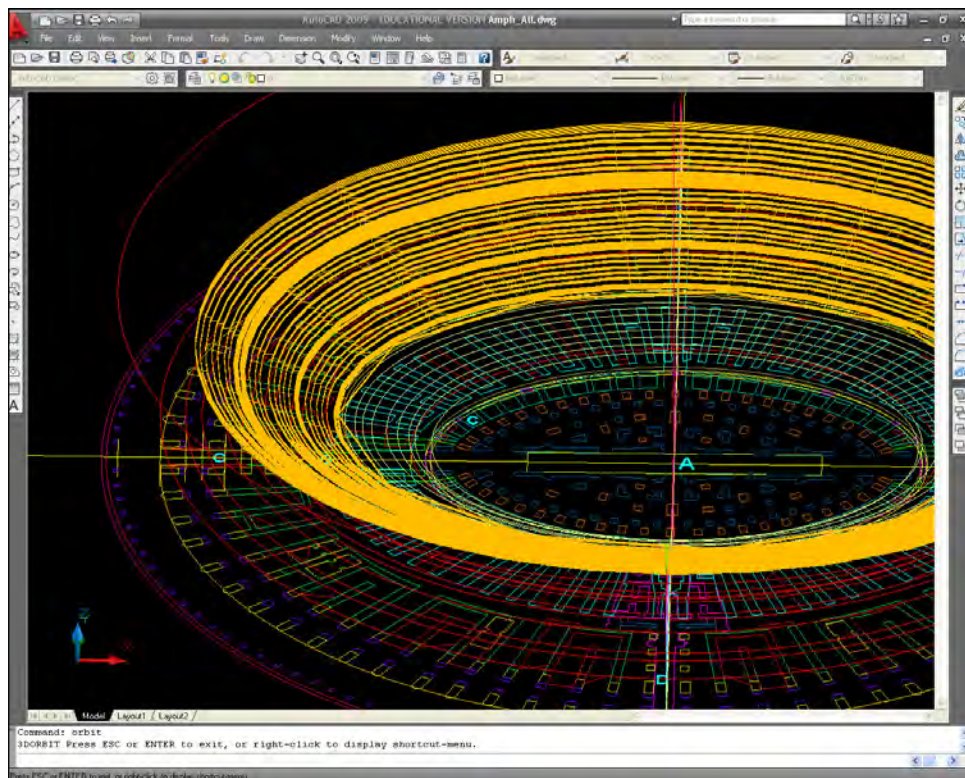
Plate 33: Photo of the rooftop details of the *Plastico* model reconstruction of the *Macellum* housed in the Castello di Baia Museum (Based on Christie's watercolour) (EDG)



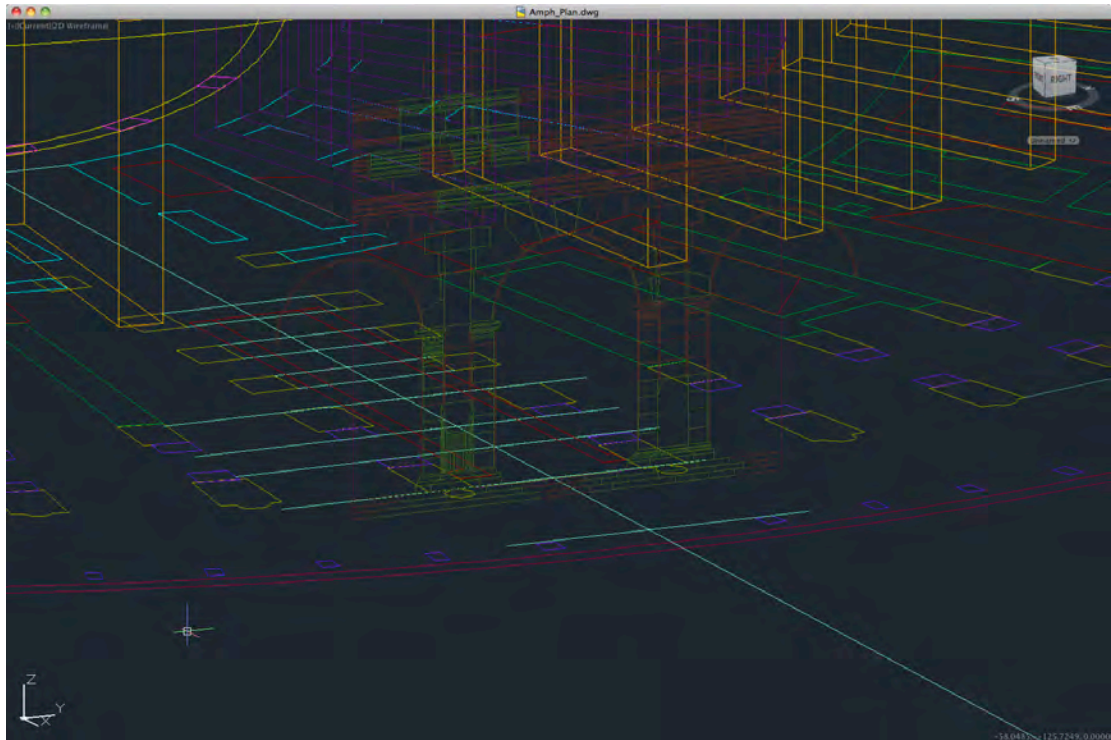
Plate 34: Cross-section of the *Plastico* model reconstruction of the *Macellum* housed in the Castello di Baia Museum (Based on Christie's watercolour) (EDG)



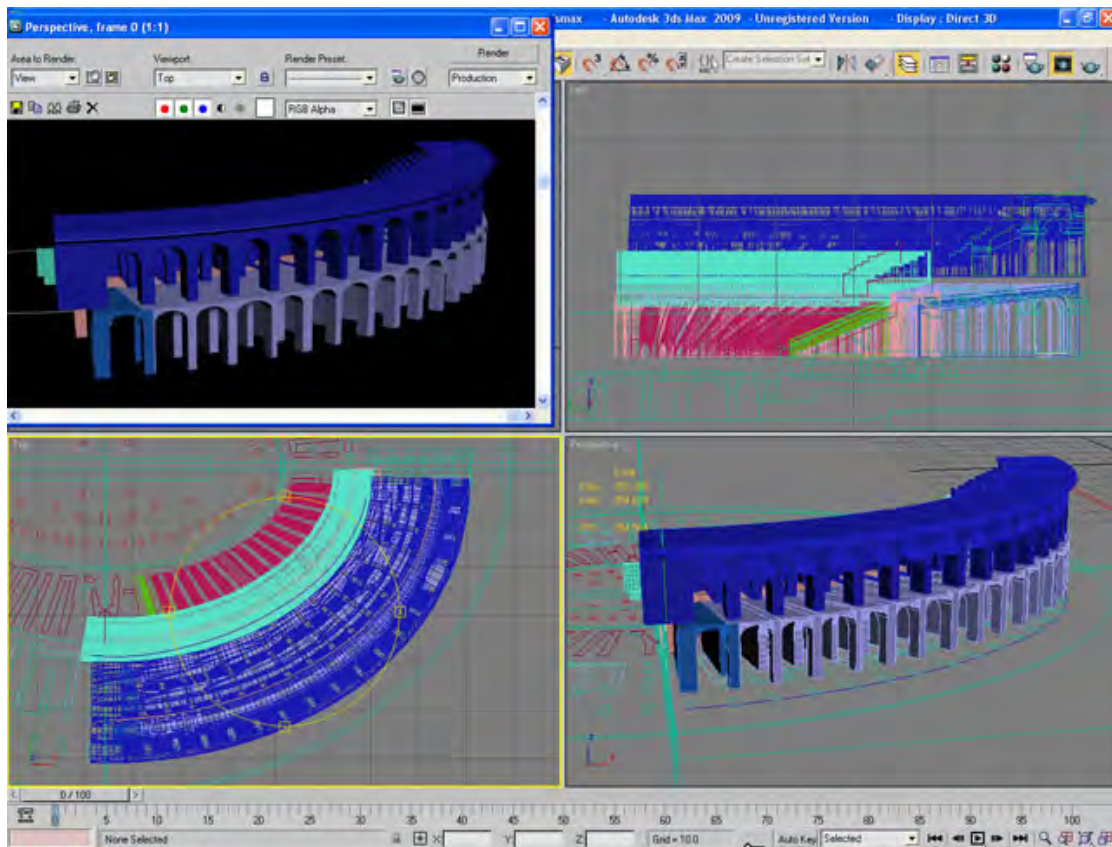
Amphitheatre screenshot 1: Plan of the amphitheatre in Pozzuoli digitised in AutoCAD (EDG)



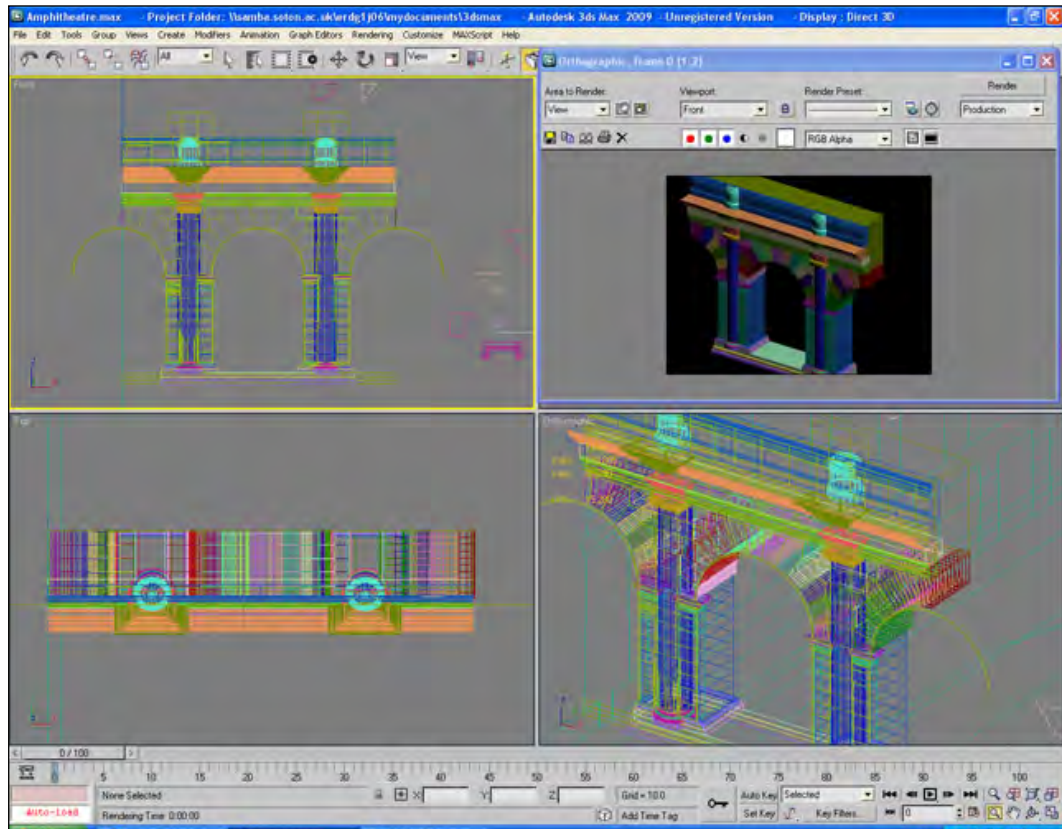
Amphitheatre screenshot 2: Plan of the amphitheatre in Pozzuoli with addition of seating in AutoCAD (EDG)



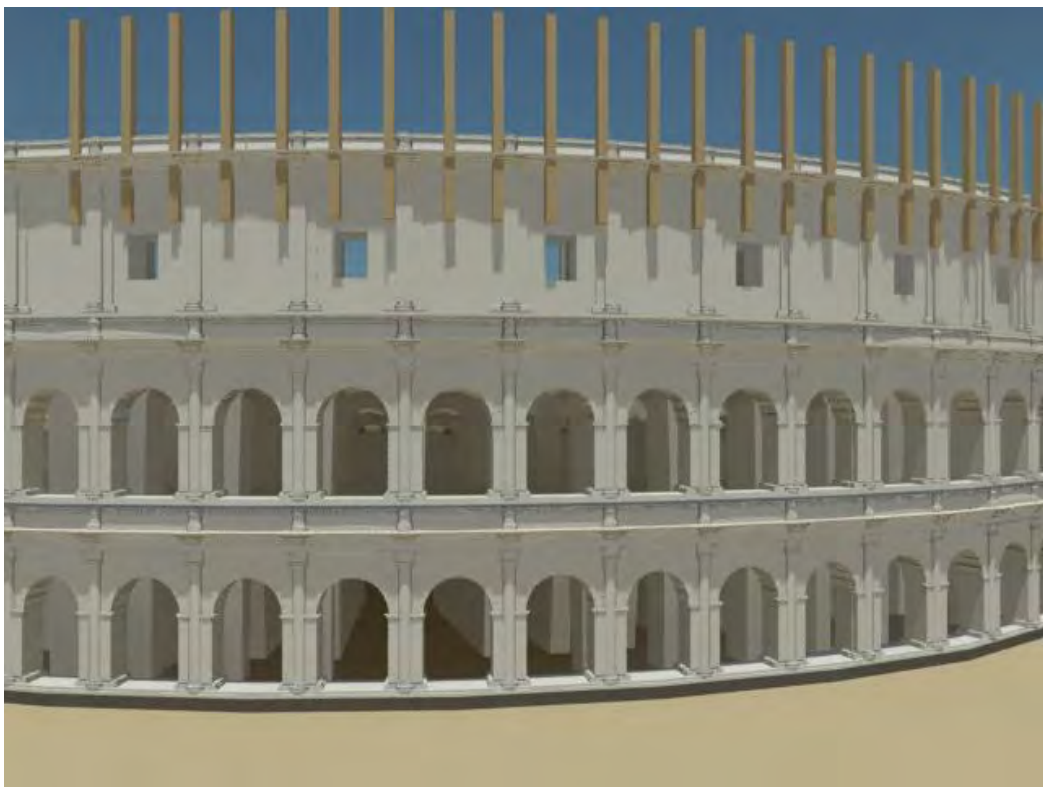
Amphitheatre screenshot 3: Addition of portico elevation drawing in AutoCAD (EDG)



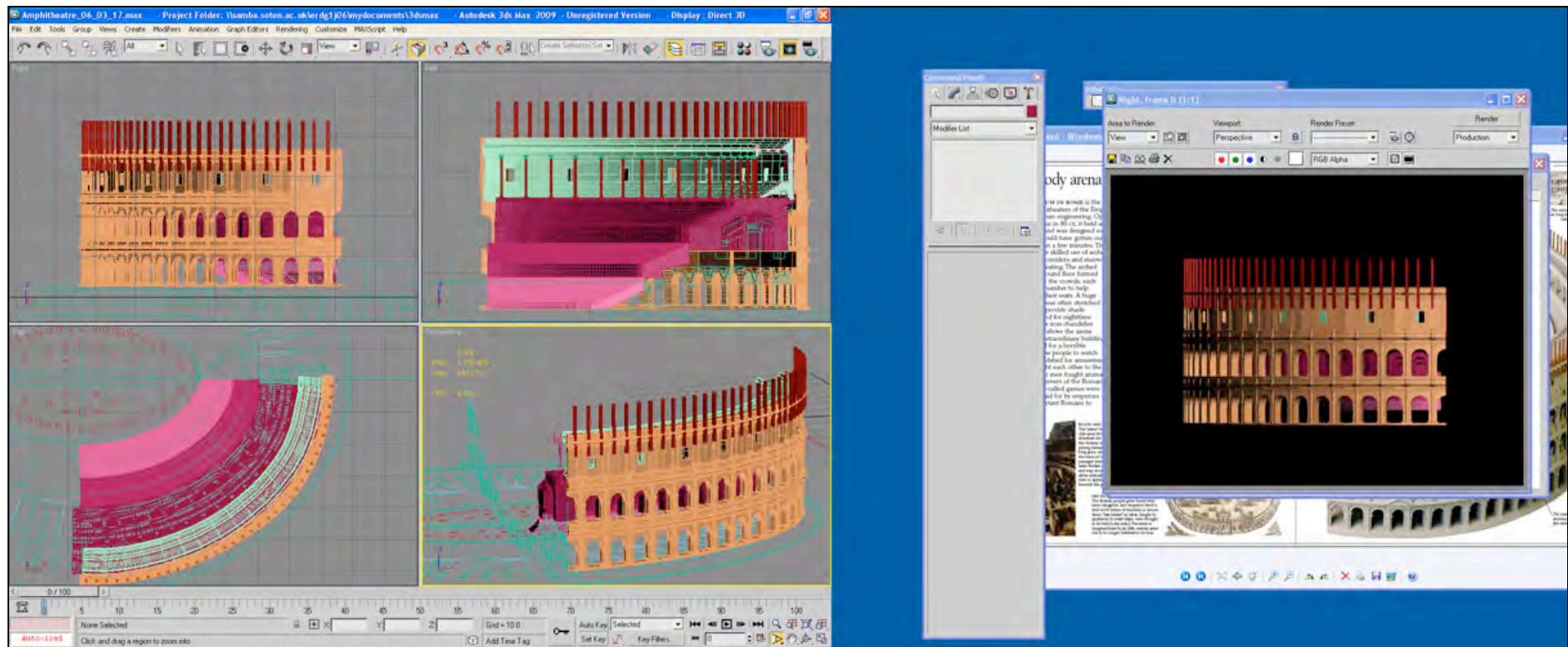
Amphitheatre screenshot 4: Creation of underground vaults in 3ds Max (EDG)



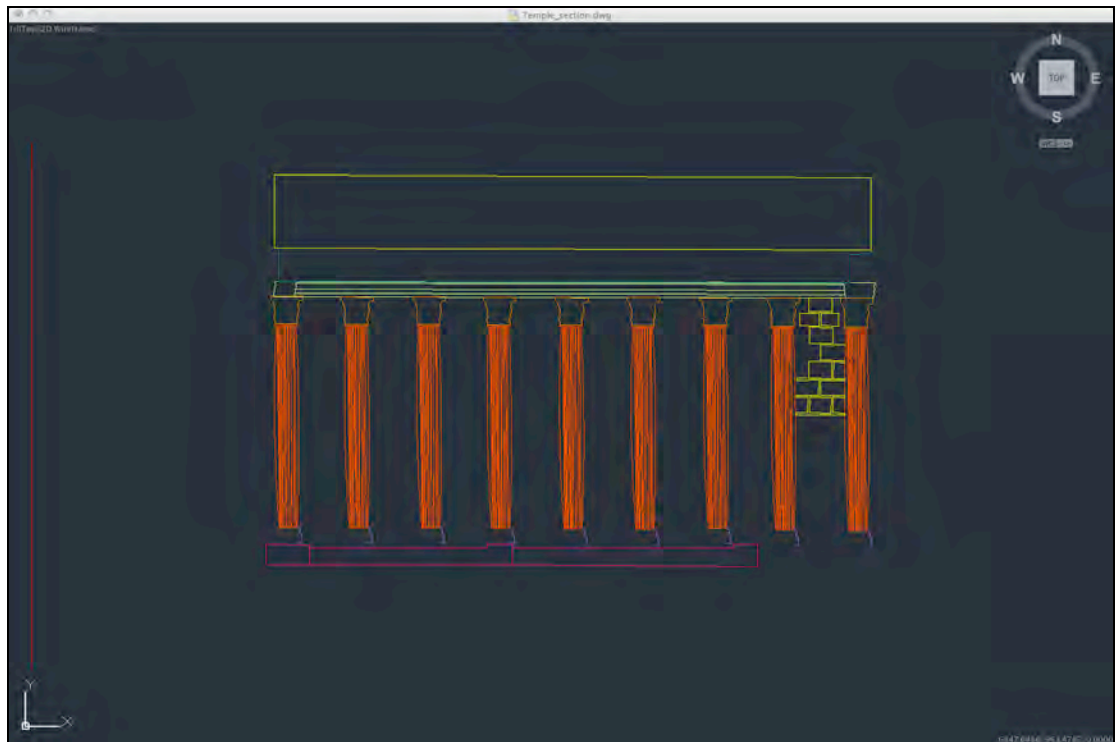
Amphitheatre screenshot 5: Building of amphitheatre portico in 3ds Max (EDG)



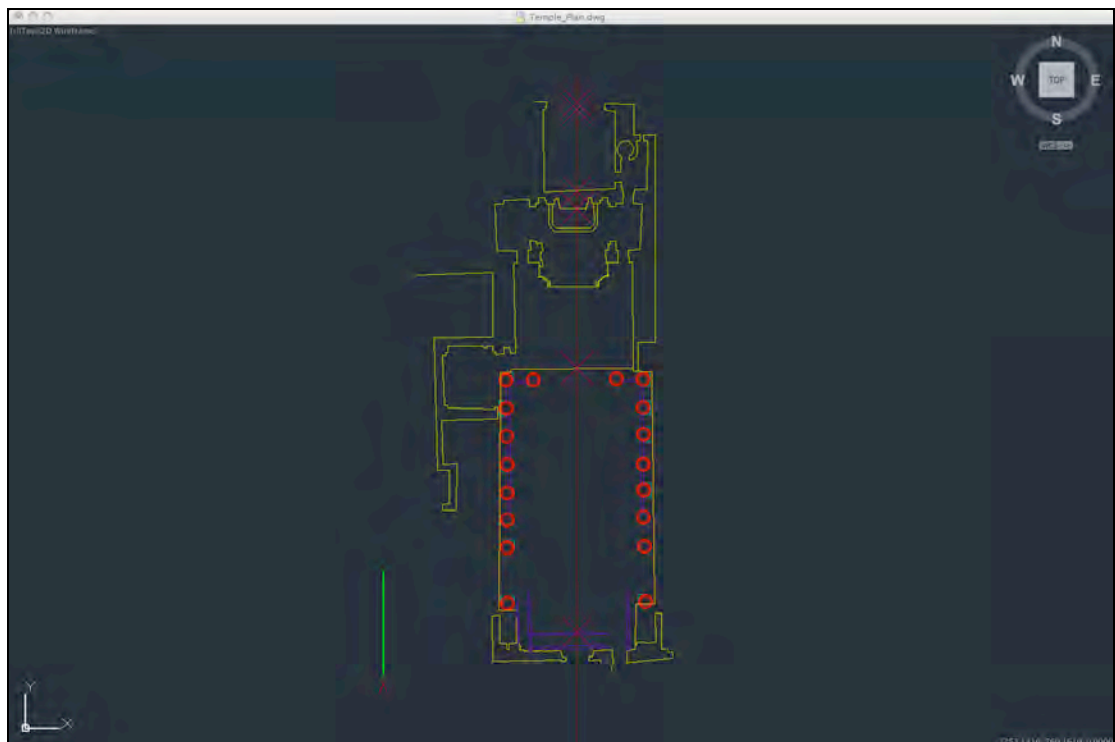
Amphitheatre screenshot 6: Exterior of amphitheatre with mental ray lighting in 3ds Max (EDG)



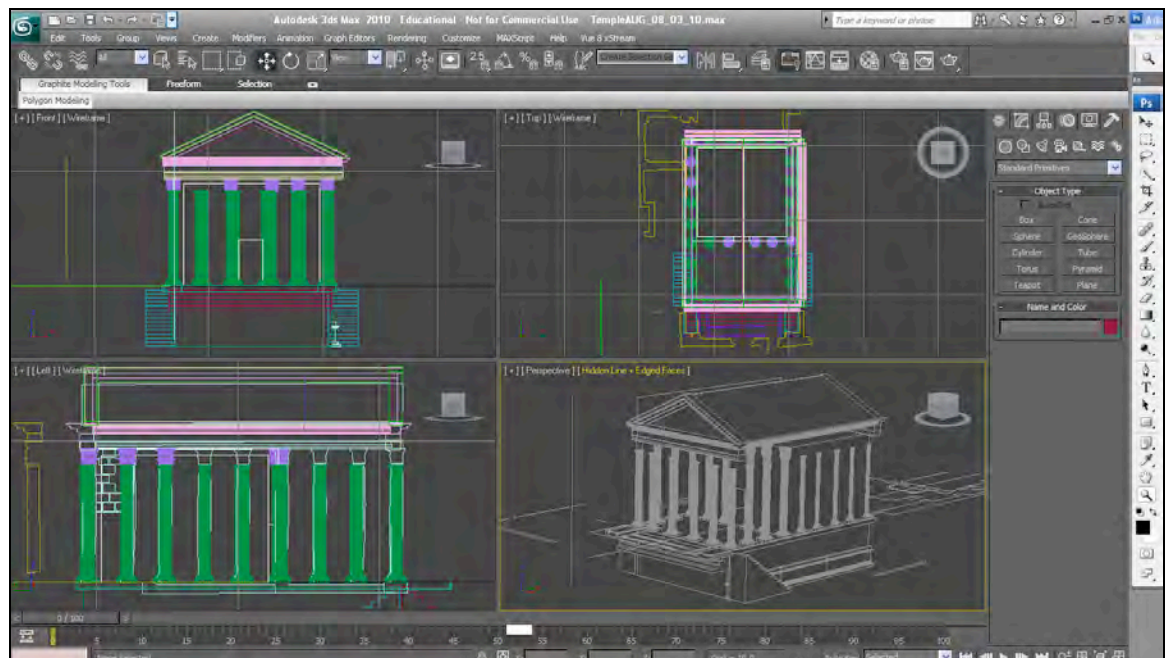
Amphitheatre screenshot 7: Cross-section of the amphitheatre showing the columns on the upper tier of the seating (EDG)



Capitolium screenshot 1: Digitised section of the *Capitolium* in AutoCAD (EDG)



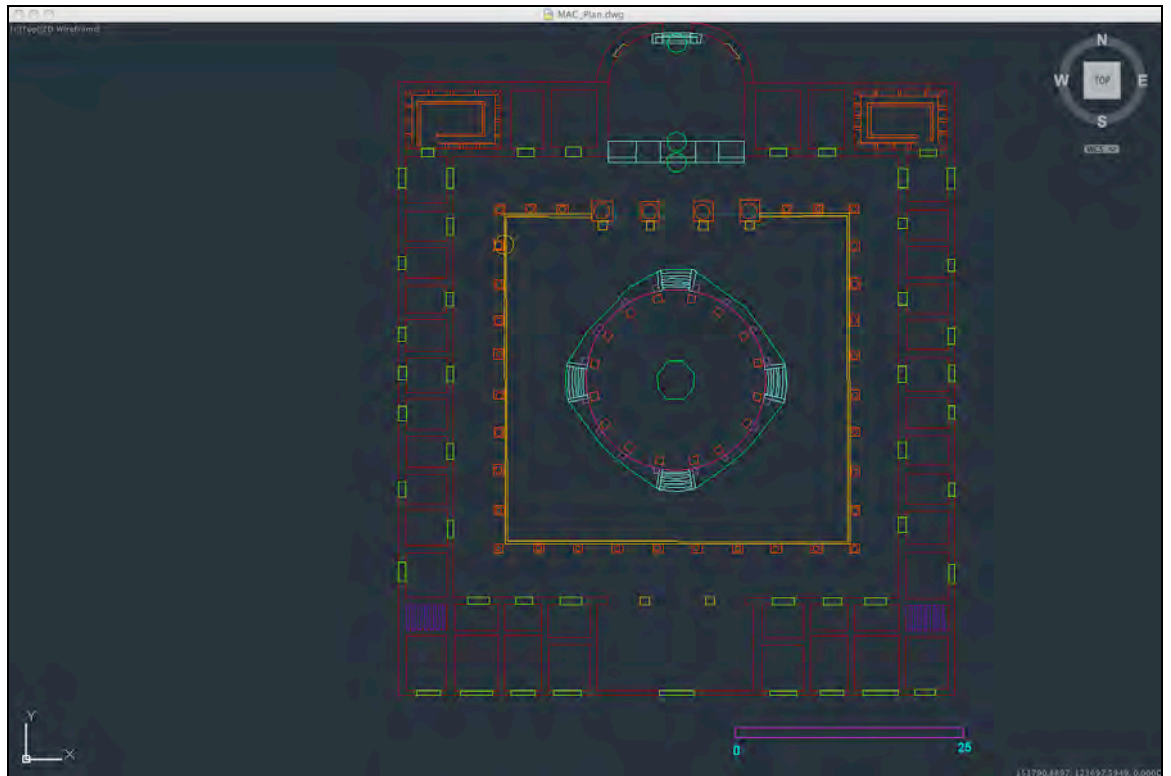
Capitolium screenshot 2: Digitised plan of the *Capitolium* in AutoCAD (EDG)



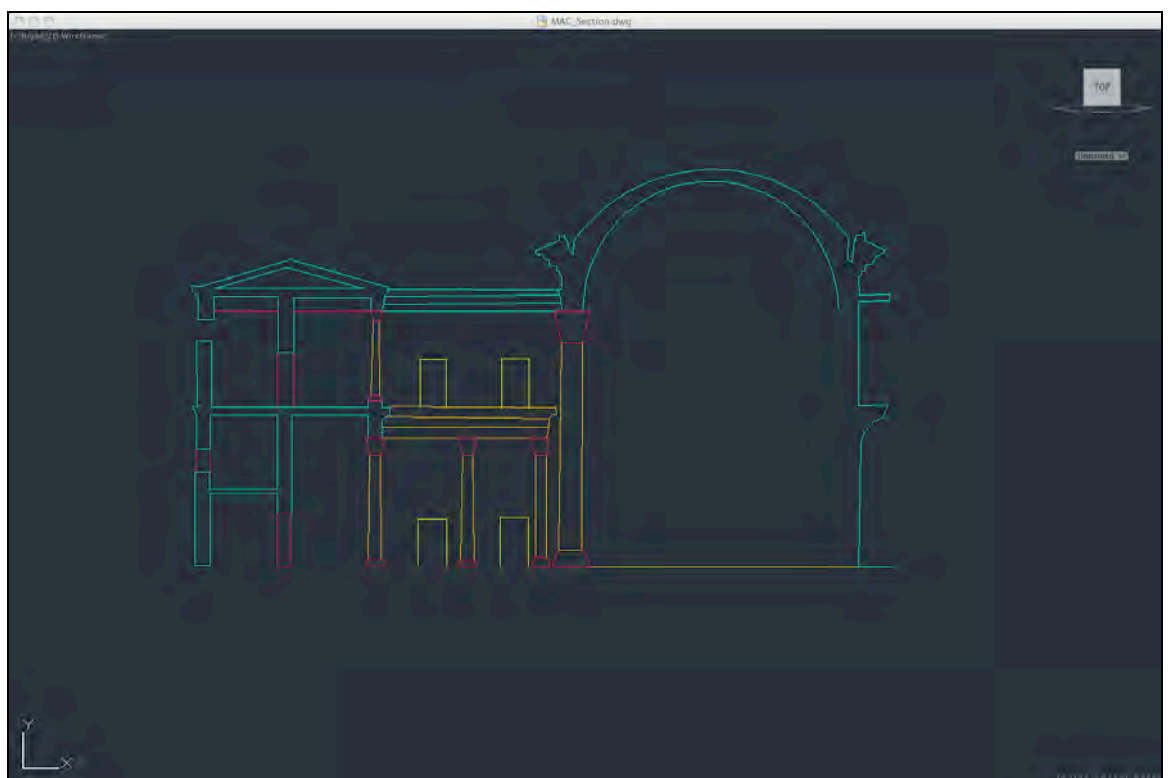
Capitolium screenshot 3: Volumetric model of the *Capitolium* in 3ds Max (EDG)



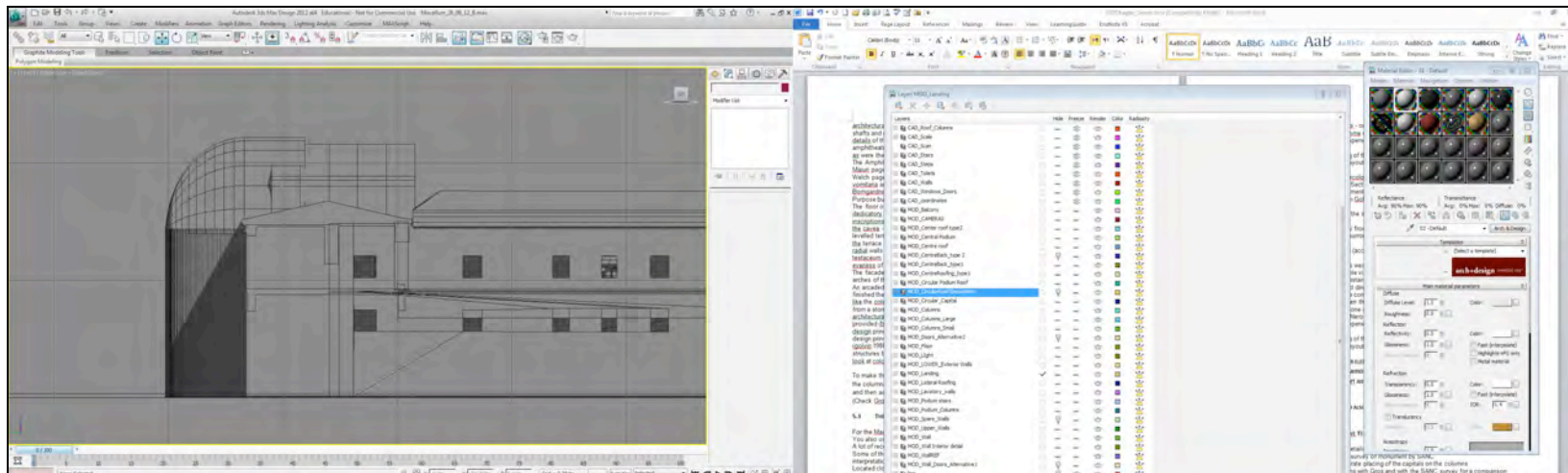
Capitolium screenshot 4: Simple colours used in the render of the *Capitolium* of Pozzuoli (EDG)



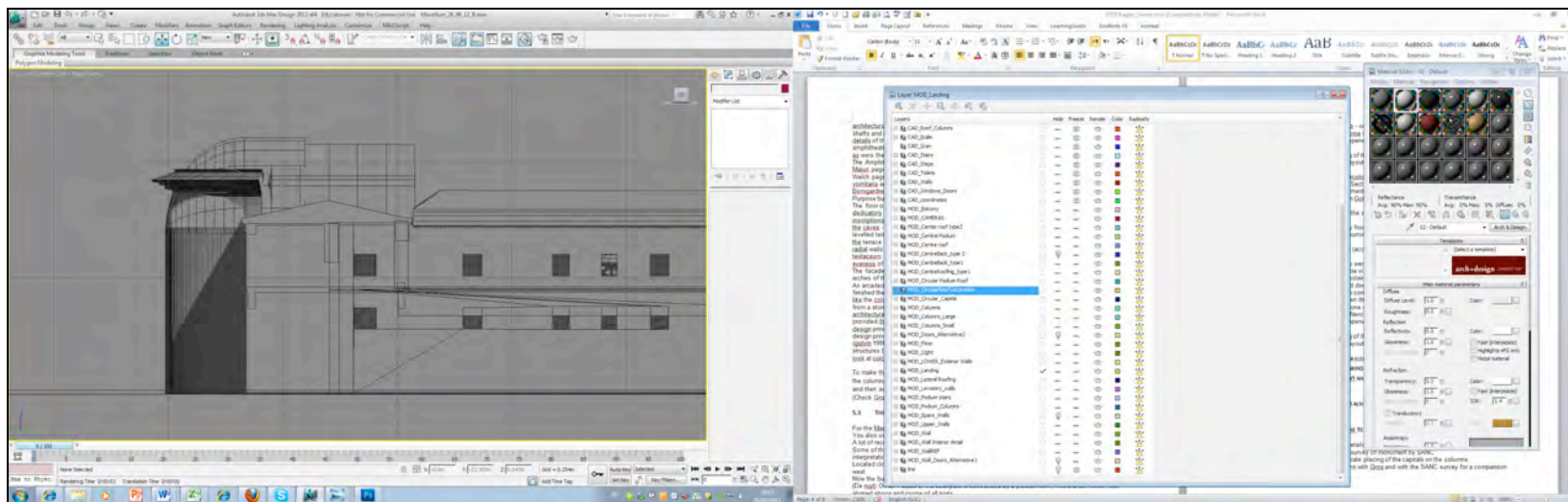
Macellum screenshot 1: Digitised plan of the *Macellum* in AutoCAD (EDG)



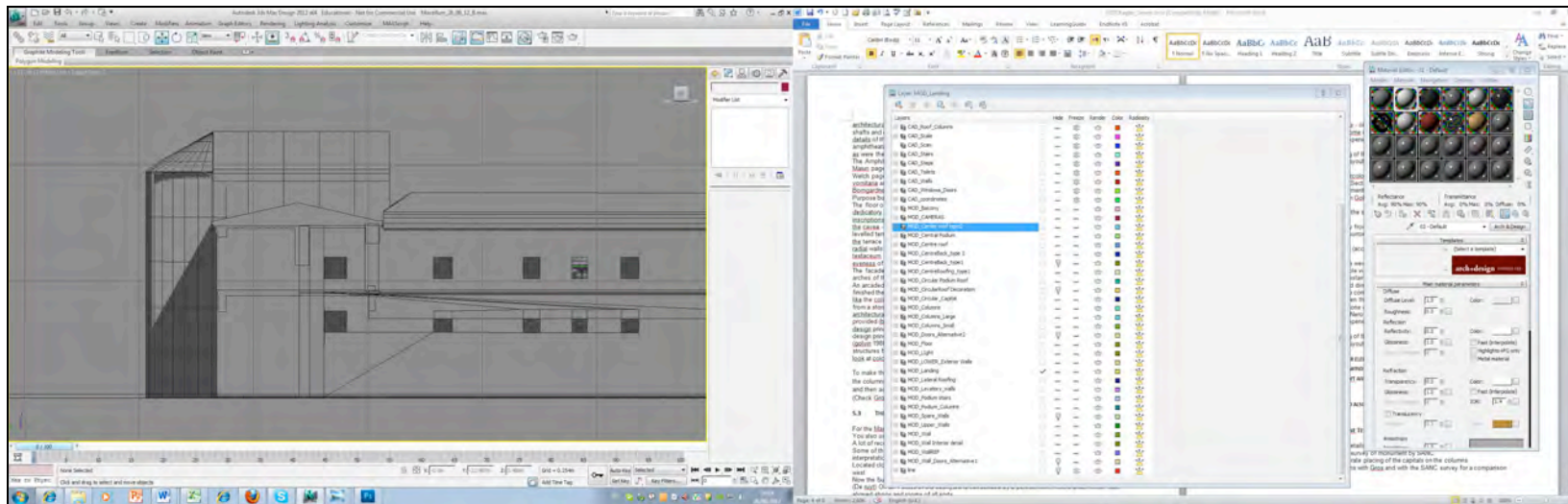
Macellum screenshot 2: Digitised section of the *Macellum* in AutoCAD (EDG)



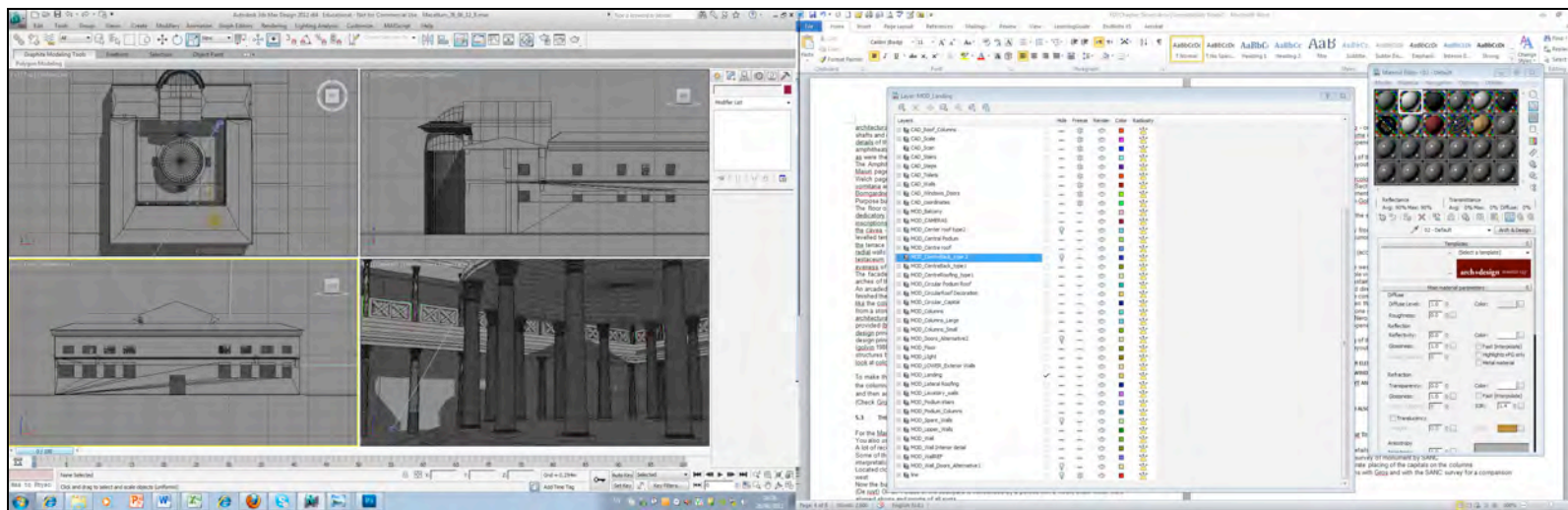
Macellum screenshot 3: Volumetric reconstruction of the vestibule of the *Macellum* In 3ds Max (EDG)



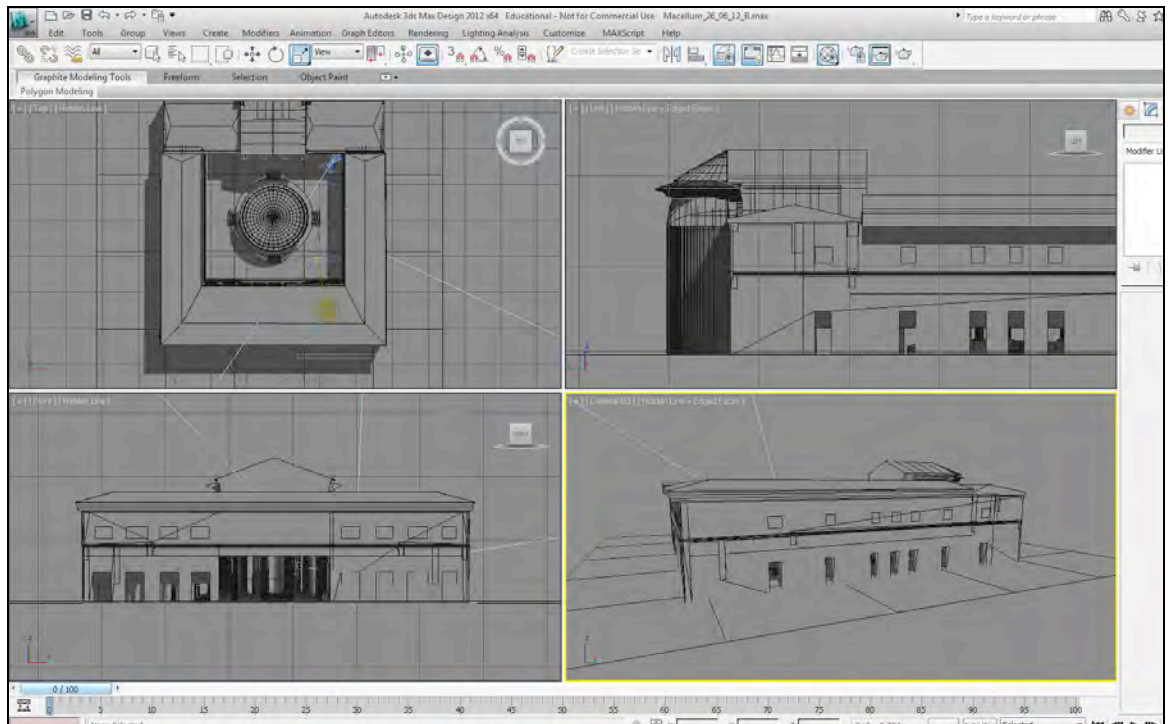
Macellum screenshot 4: Volumetric reconstruction of the vestibule of the *Macellum* In 3ds Max with addition interpretive element by Christie (EDG)



Macellum screenshot 5: Volumetric reconstruction of the vestibule of the *Macellum* In 3ds Max (EDG)



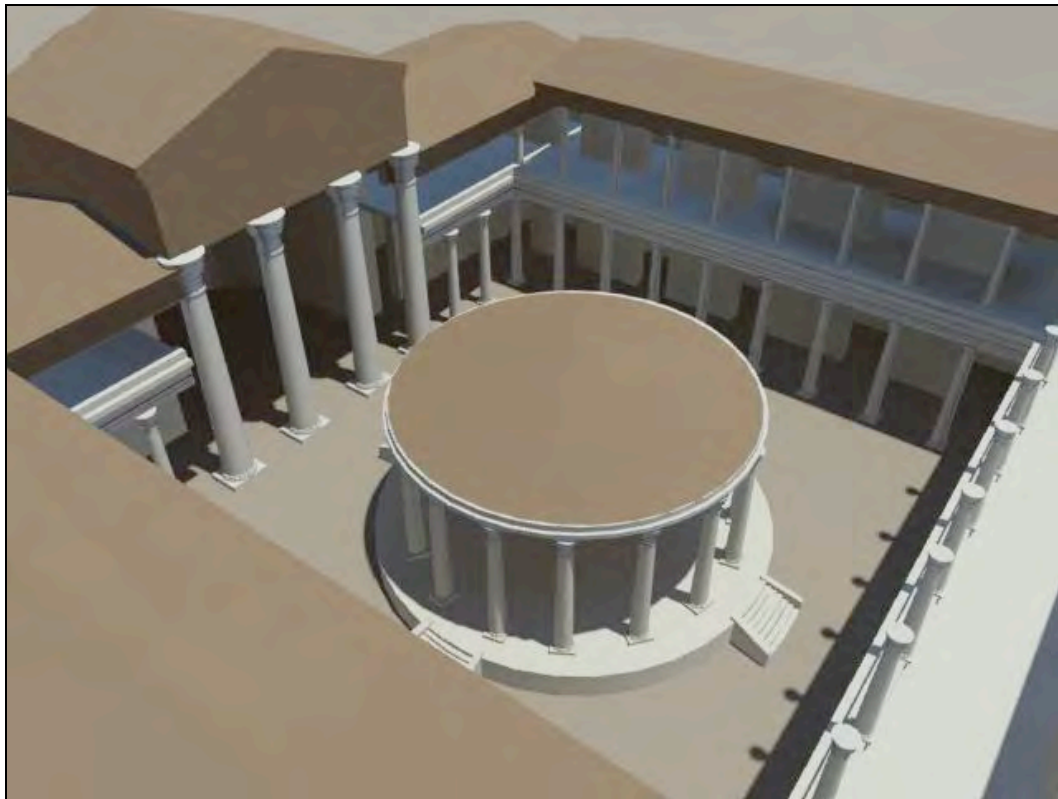
Macellum screenshot 6: Conjectural volumetric interpretations of the exterior of the *Macellum* (EDG)



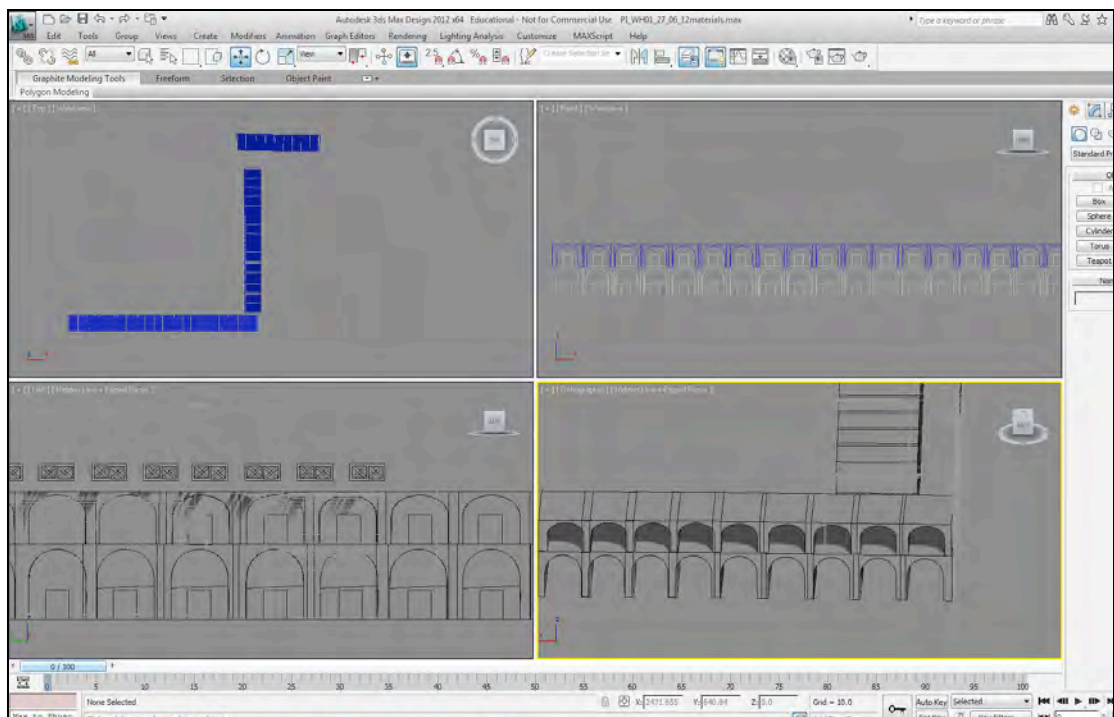
Macellum screenshot 7: Conjectural volumetric interpretations of the exterior of the *Macellum* (EDG)



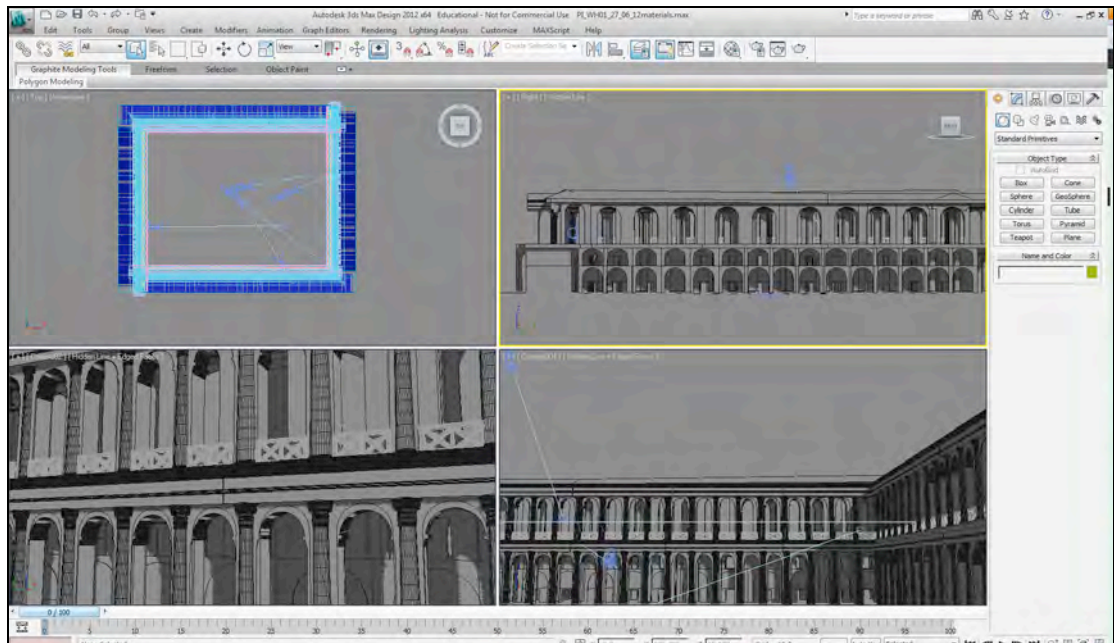
Macellum screenshot 8: Render of the central *tholos* of the *Macellum* using simple white colours (EDG)



Macellum screenshot 9: Render of the central *tholos* of the *Macellum* using simple white and terracotta colours (EDG)



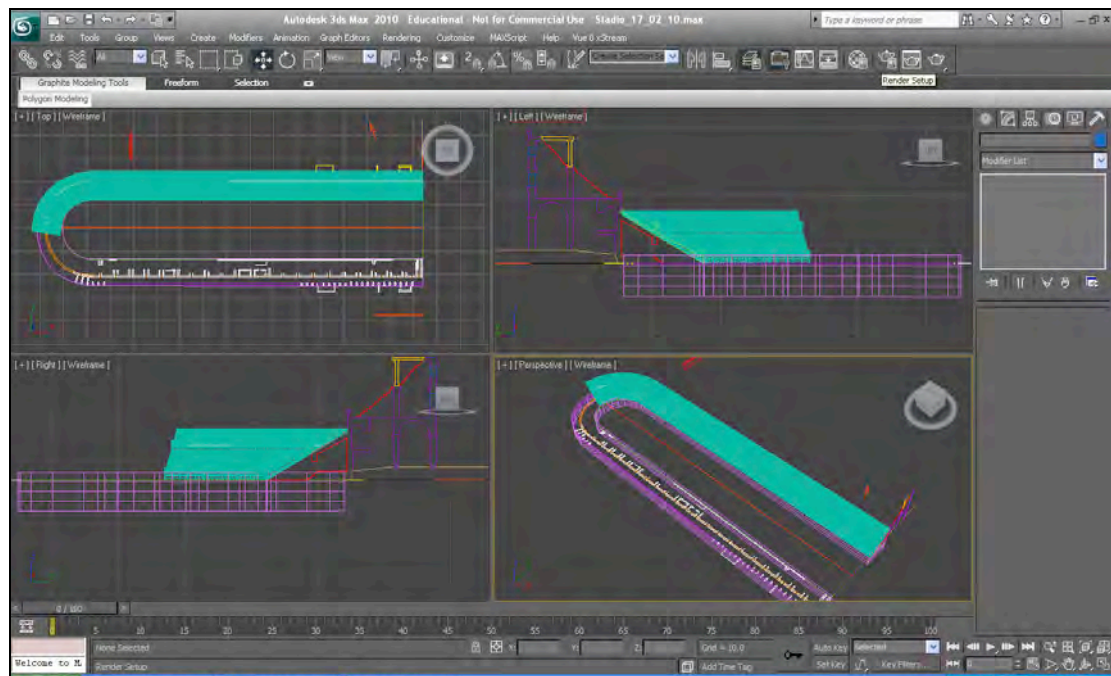
Porto Julio screenshot 1: Volumetric reconstruction of warehouse rooms in 3ds Max (EDG)



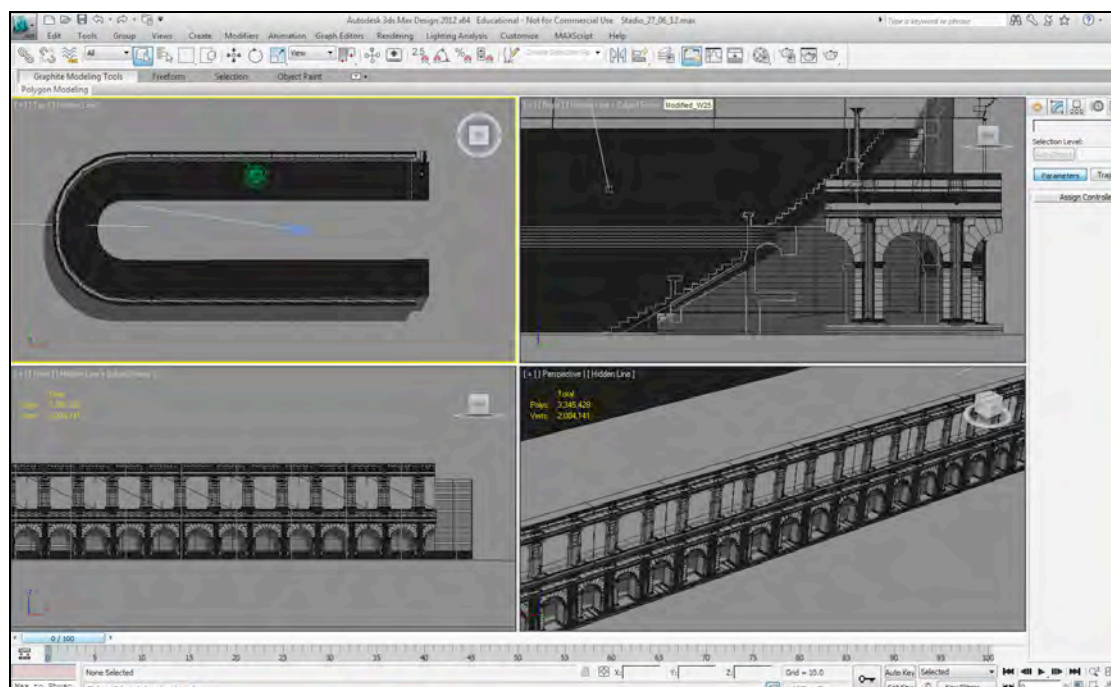
Porto Julio screenshot 2: Volumetric reconstruction of the hypothetical balcony elements in 3ds Max (EDG)



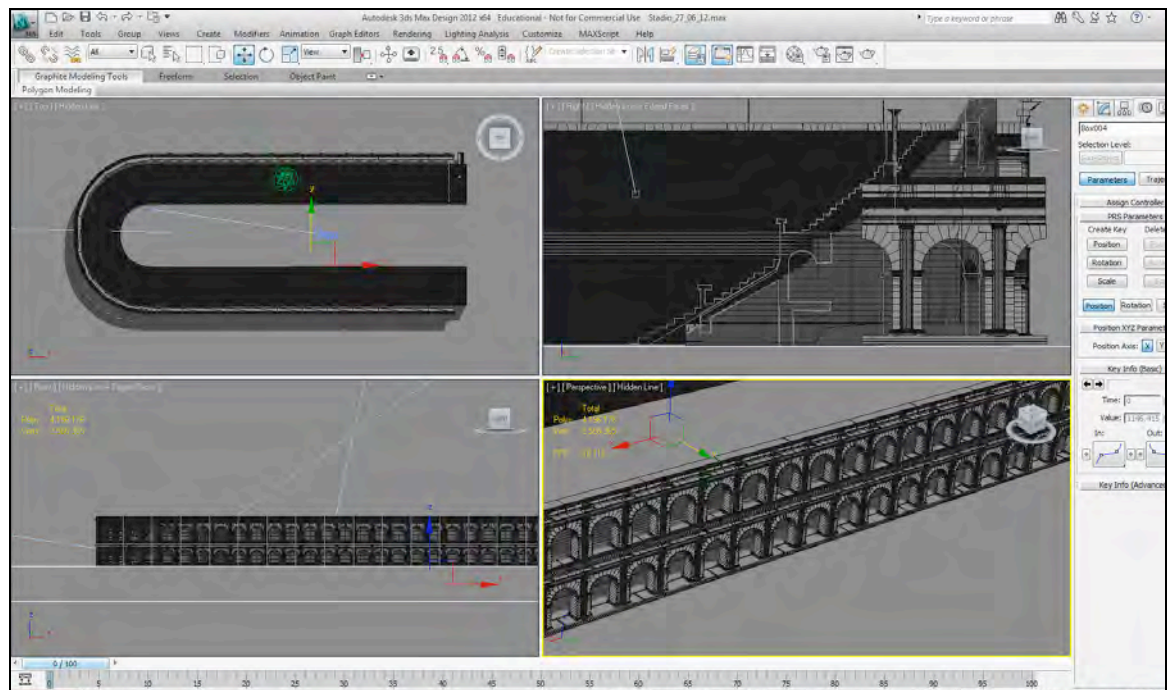
Porto Julio screenshot 3: Render of the *Porto Julio* hypothetical façade using simple colours in 3ds Max (EDG)



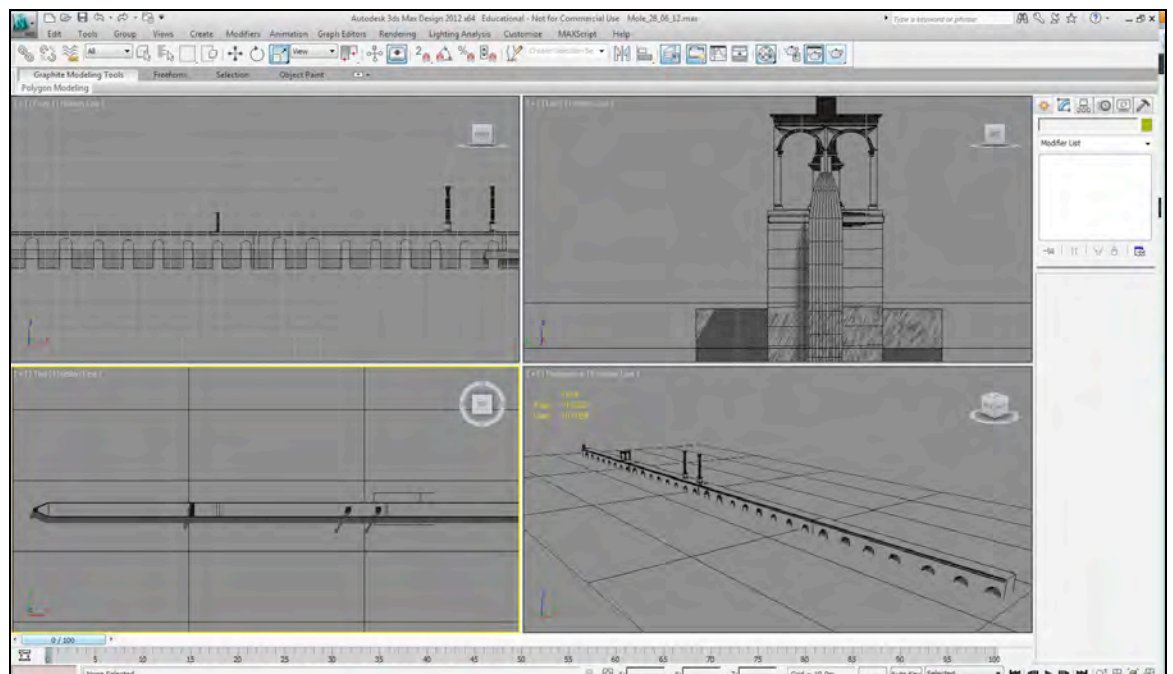
Stadium screenshot 1: Volumetric reconstruction of the Stadium of Pozzuoli in 3ds Max (EDG)



Stadium screenshot 2: Volumetric reconstruction of the Stadium of Pozzuoli in 3ds Max (EDG)



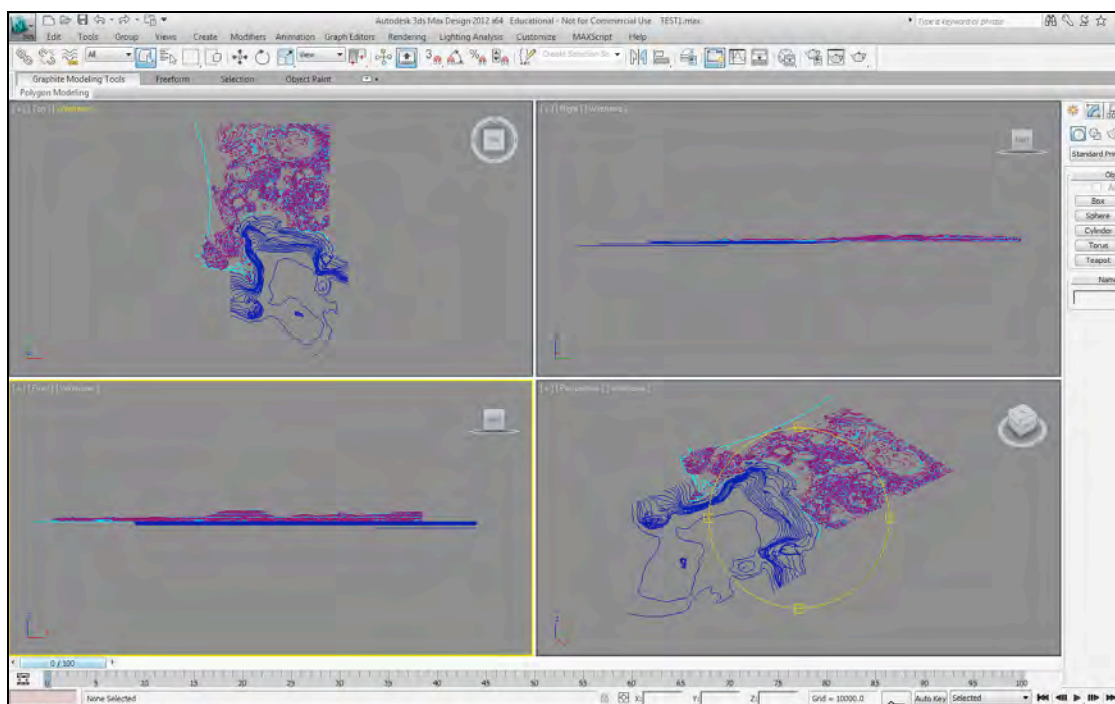
Stadium screenshot 3: Hypothesized exterior of the stadium compared to screenshot 2 (EDG)



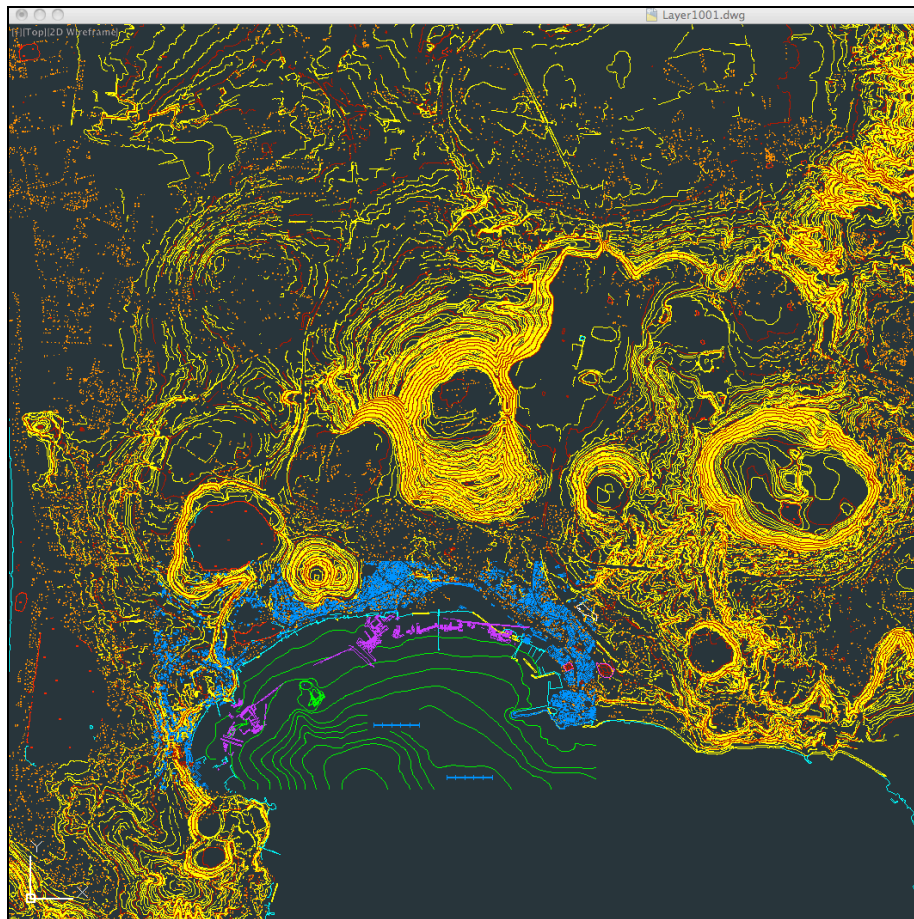
Harbour mole screenshot 1: Volumetric reconstruction of the harbour mole in 3ds Max (EDG)



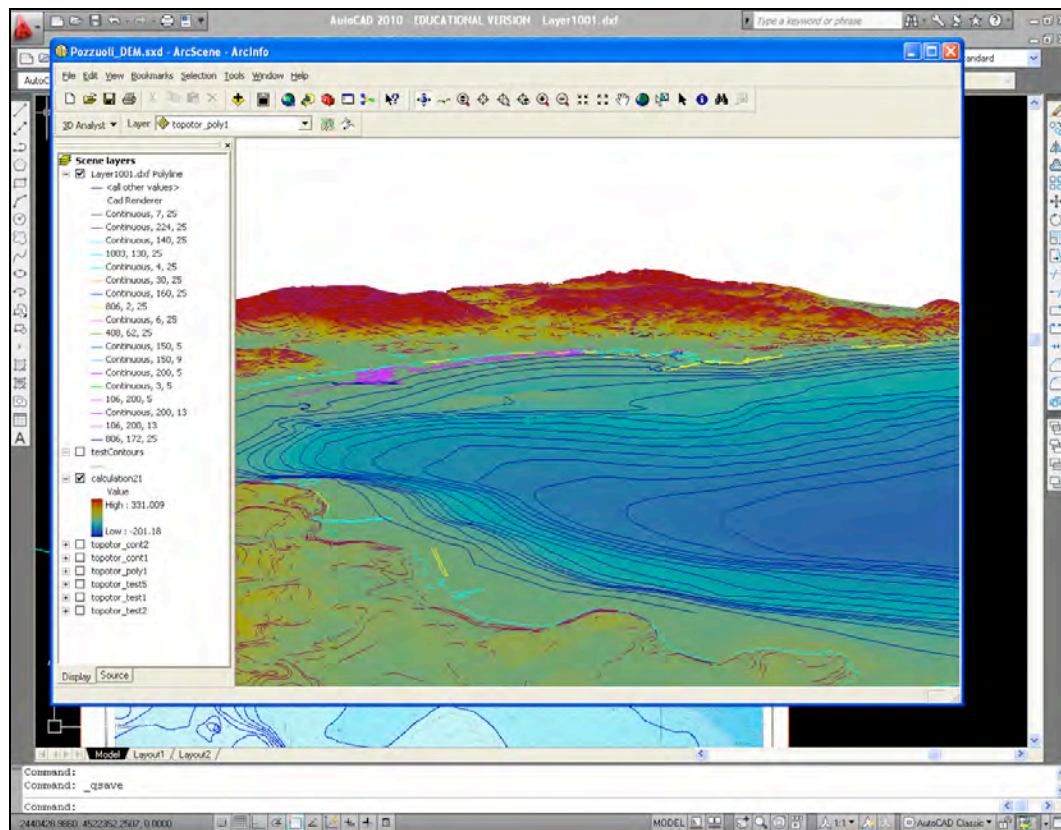
Harbour mole screenshot 2: Render with simple colours of the harbour mole in 3ds Max (EDG)



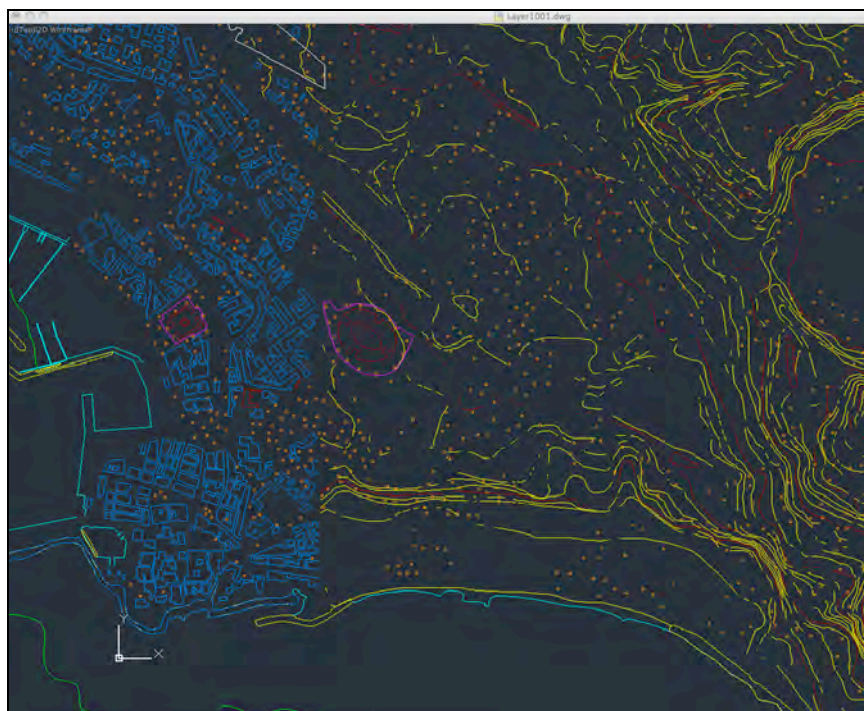
Landscape screenshot 1: Contour data imported into 3ds Max (EDG)



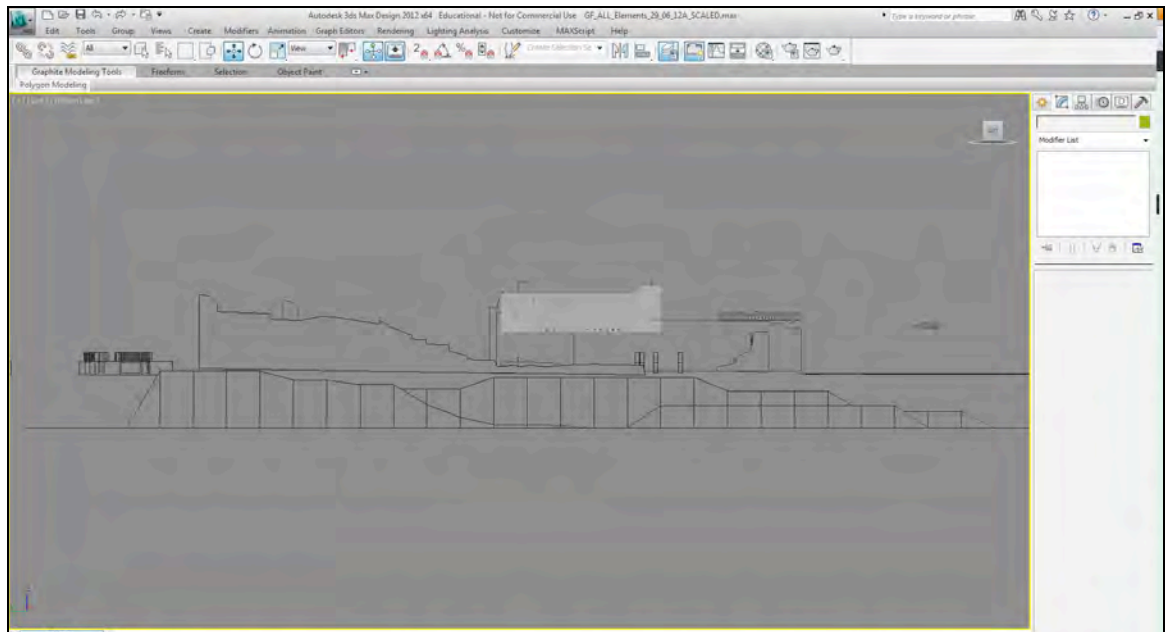
Landscape screenshot 2: Screenshot showing contour data in AutoCAD (SANC)



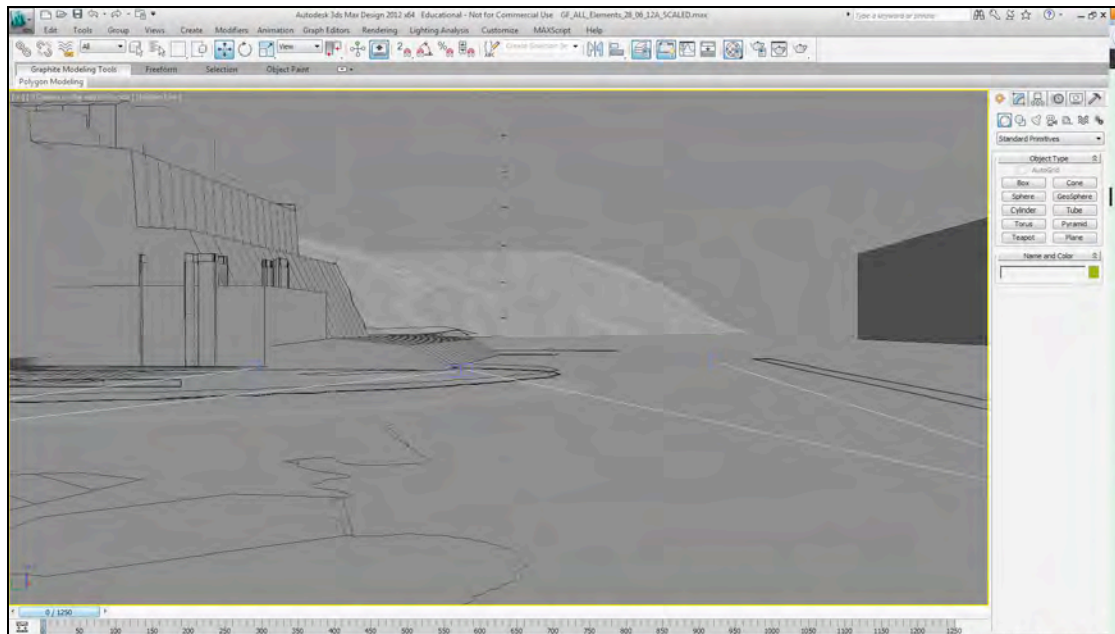
Landscape screenshot 3: Contour data as evidenced in GIS showing missing contour data such as breaks in red lines (EDG)



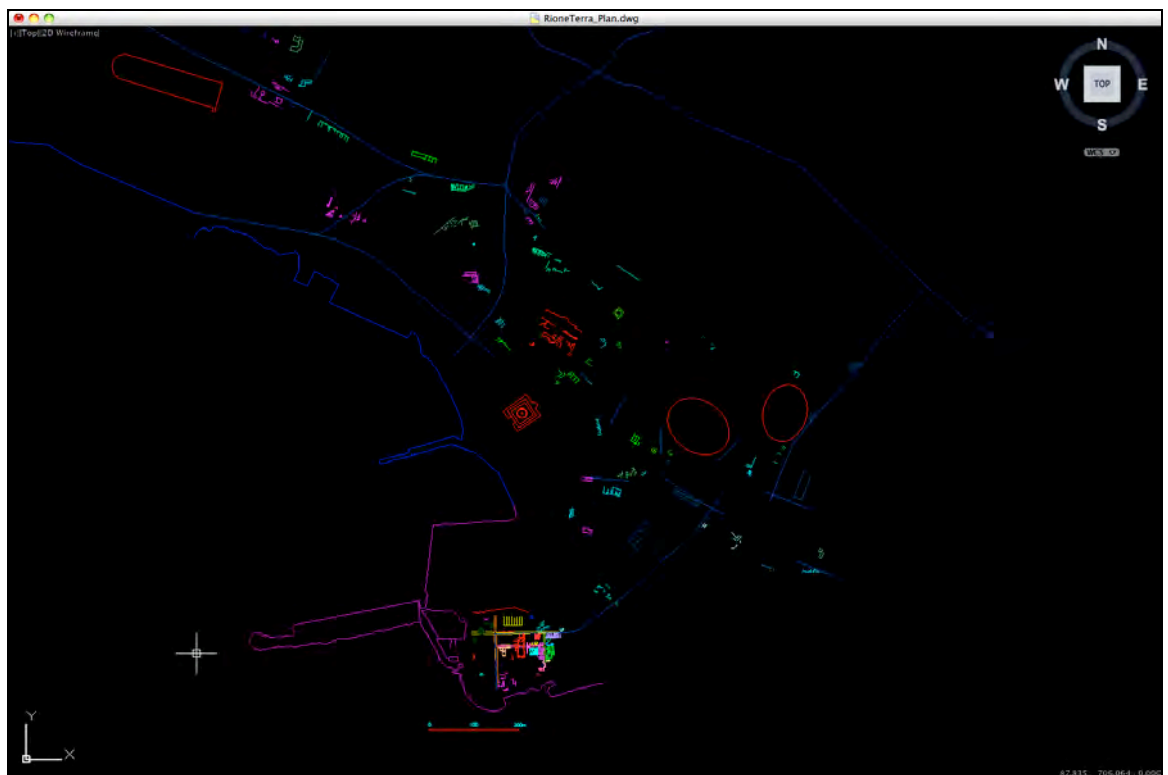
Landscape screenshot 4: AutoCAD contour map showing missing contour areas such as breaks in yellow lines (SANC)



Landscape screenshot 5: Sommella's cross-sections being inserted into 3ds Max to help with the addition of missing terrain information (EDG)



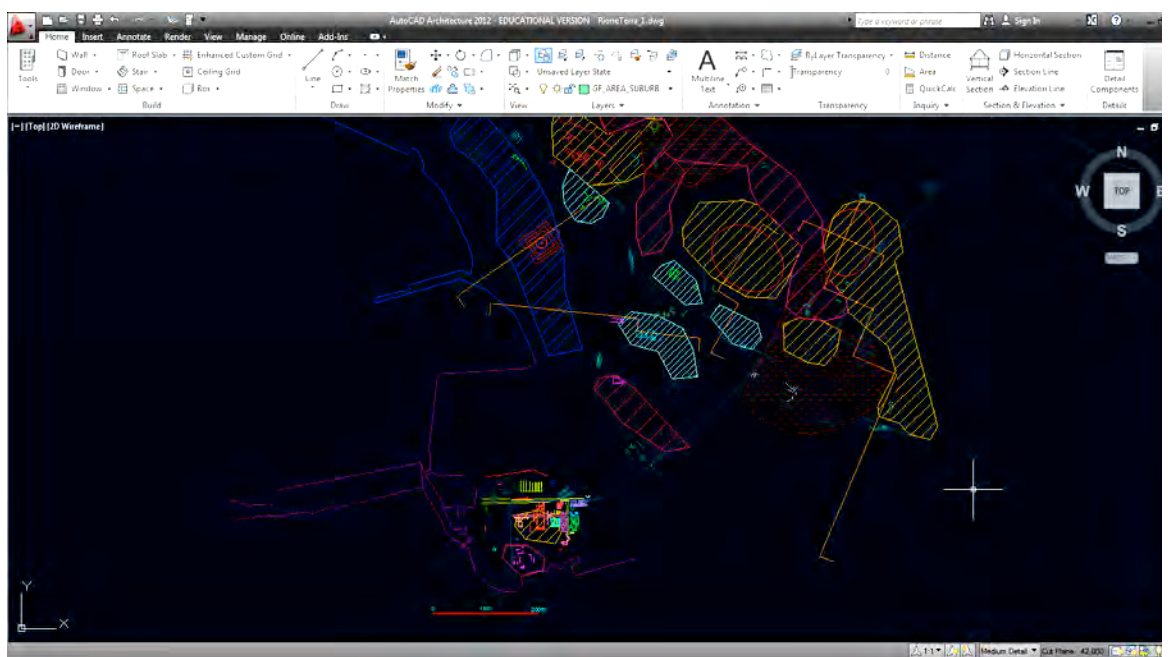
Landscape screenshot 6: Volumetric reconstruction of the (hypothetical) Rione Terra promontory in 3ds Max (EDG)



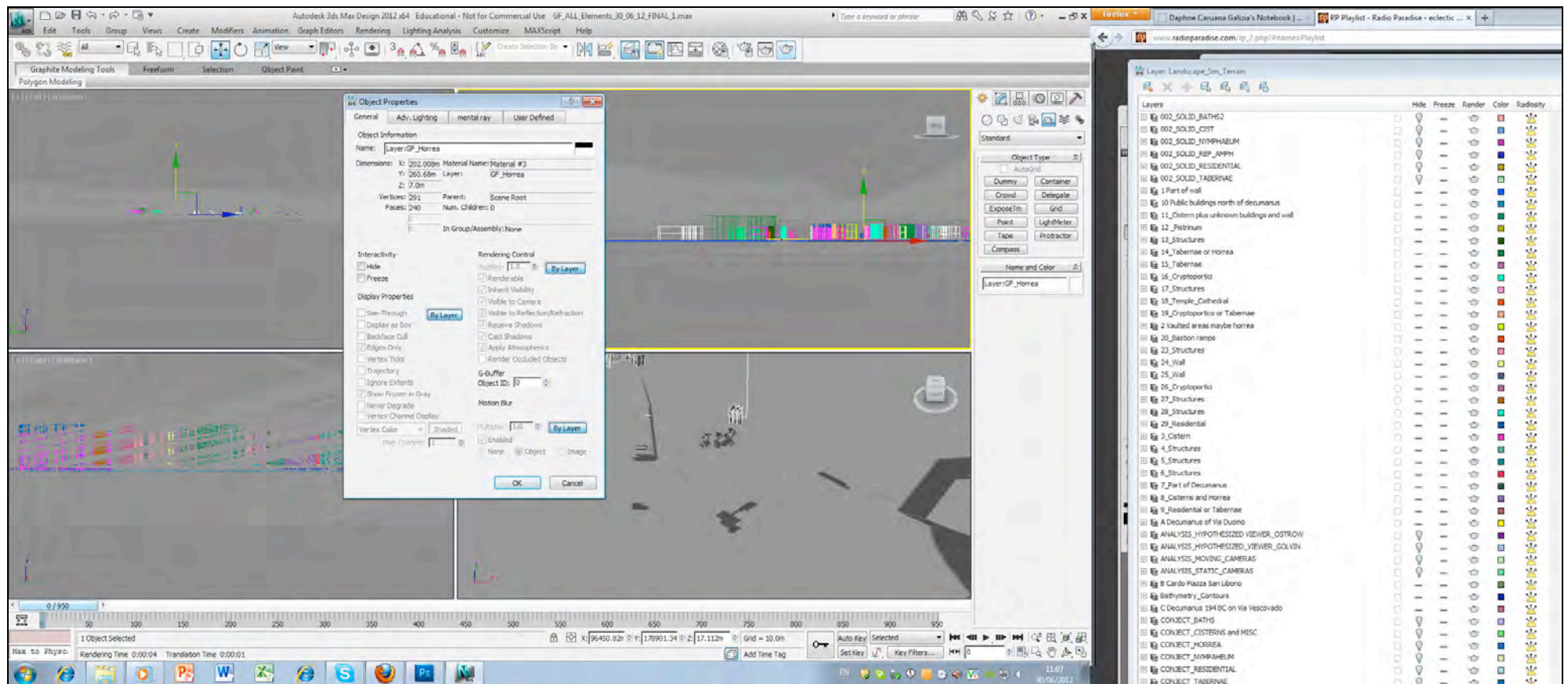
Landscape screenshot 7: AutoCAD map with digitised archaeological remains added to the Rione Terra in addition to Zevi's gazetteer (1993) (EDG)



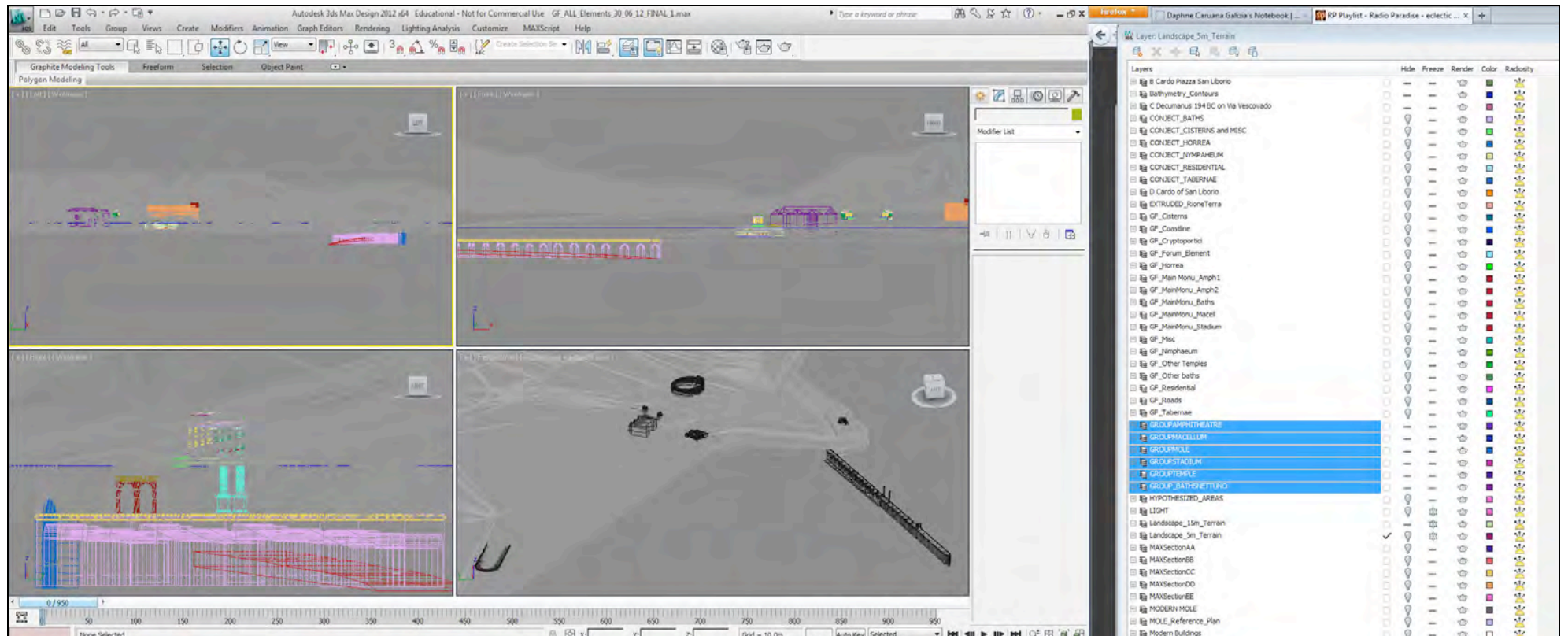
Landscape screenshot 8: AutoCAD map with digitised archaeological remains as noted in Zevi's gazetteer (1993) (EDG)



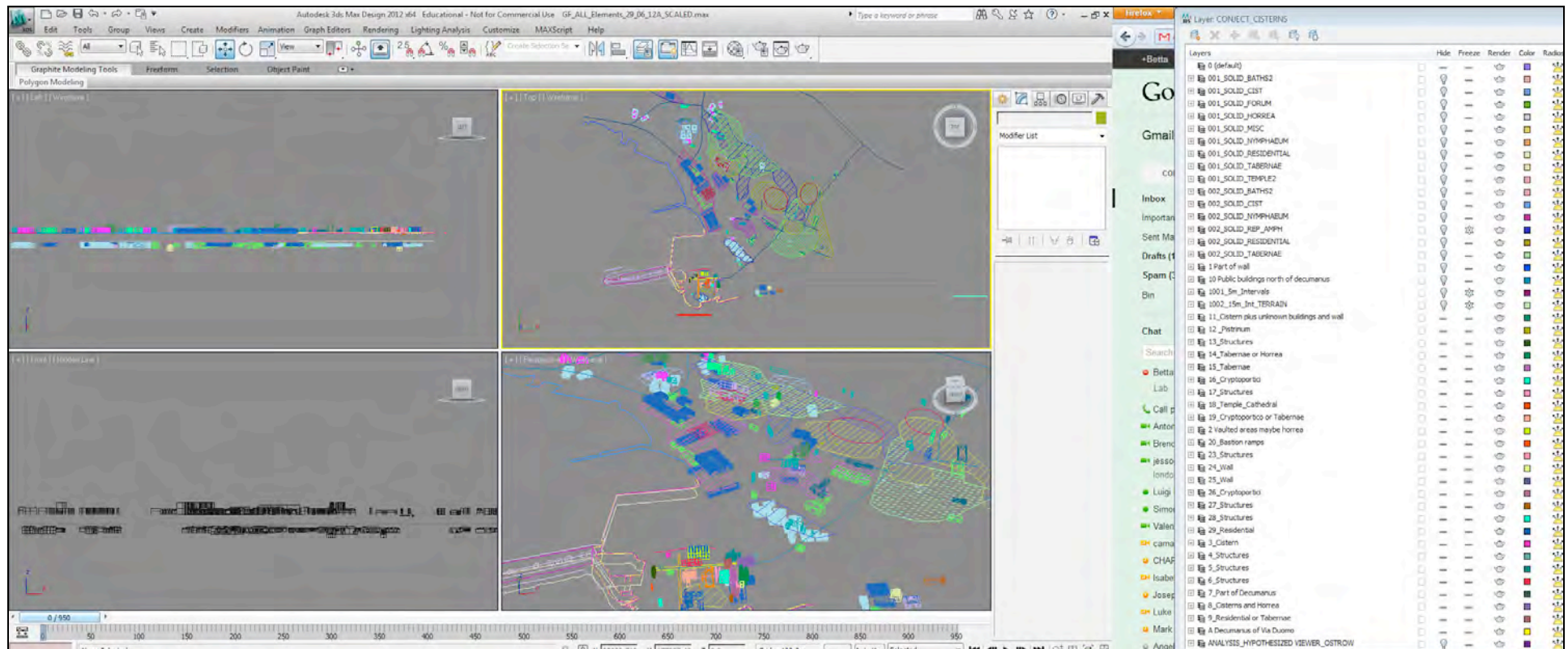
Landscape screenshot 9: AutoCAD map of Pozzuoli with various commercial areas as hypothesized by Sommella (1978) (EDG)



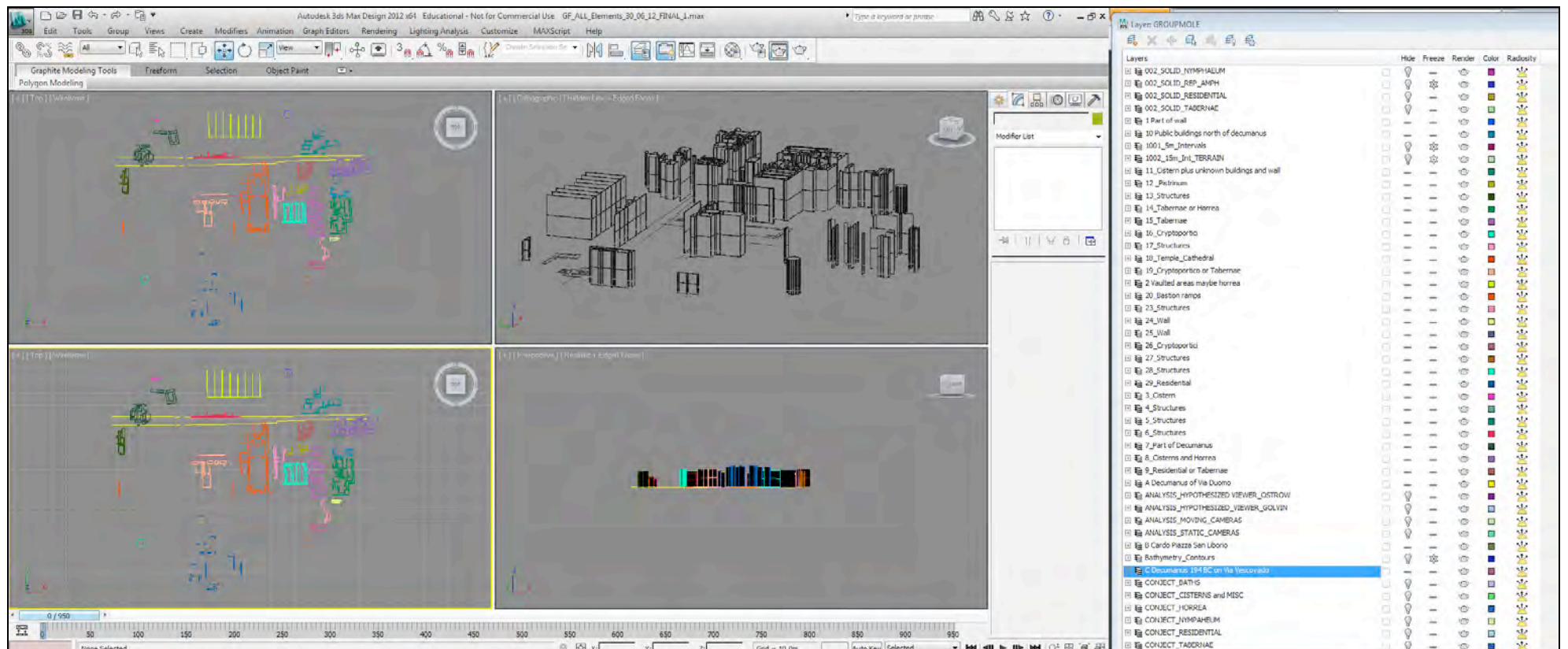
Landscape screenshot 10: Data attached to volumetric models in 3ds Max (EDG)



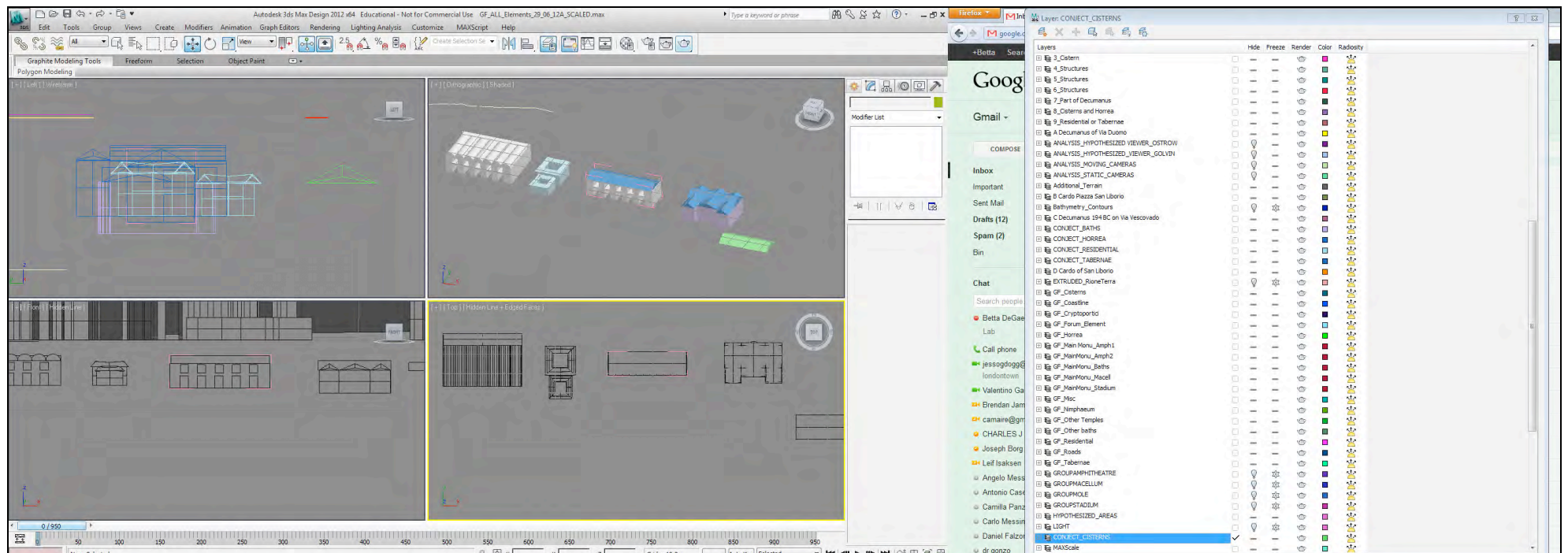
Landscape screenshot 11: Imported main monuments in the overall landscape (EDG)



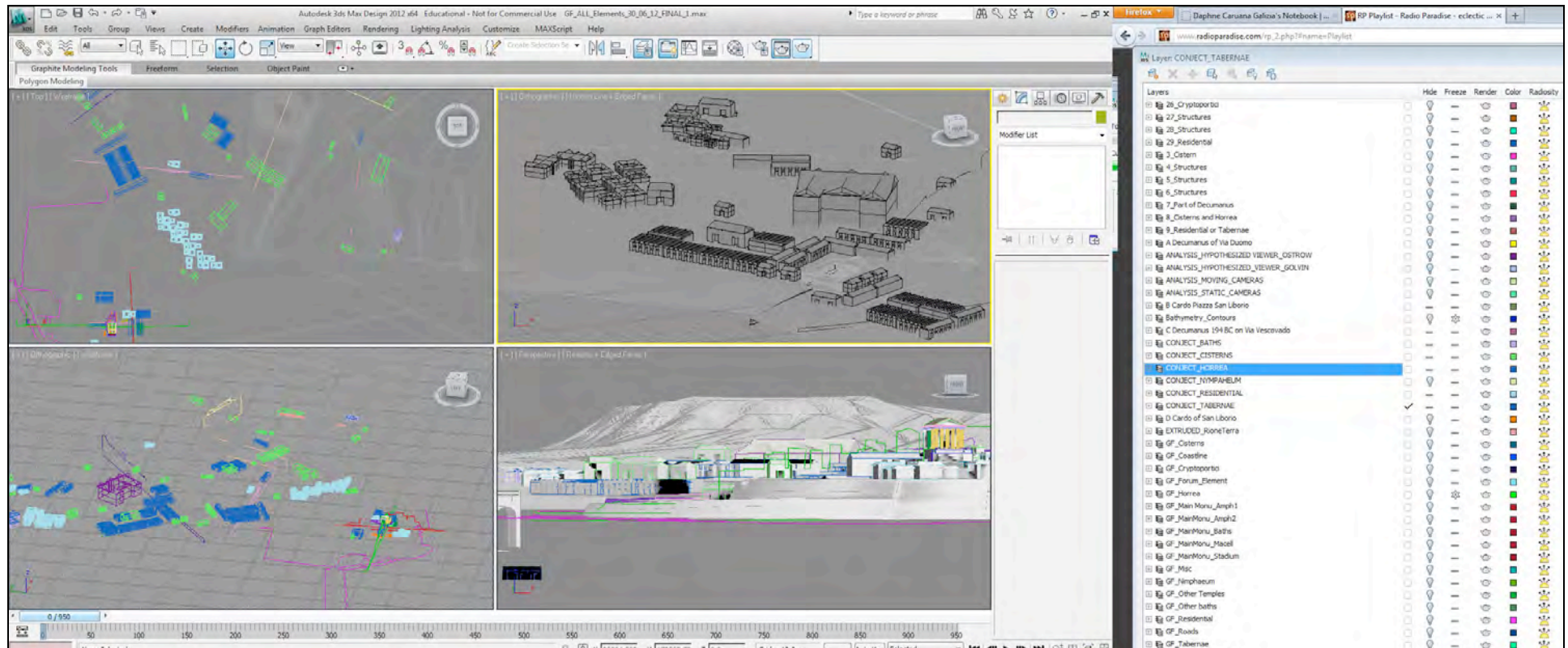
Landscape screenshot 12: Simple conceptual extrusion of the imported AutoCAD lines in 3ds Max (EDG)



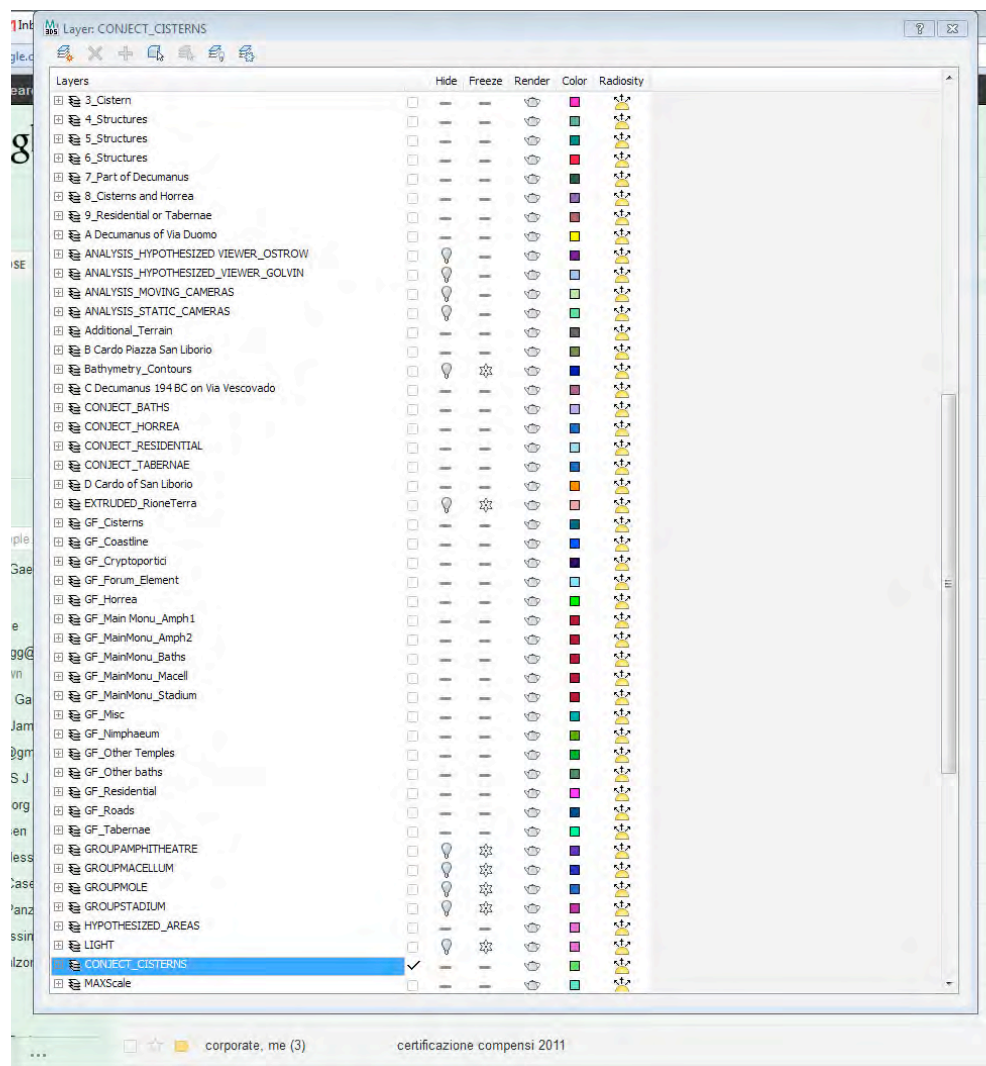
Landscape screenshot 13: Simple conceptual extrusion of the imported AutoCAD lines in 3ds Max (EDG)



Landscape screenshot 14: Hypothetical volumetric models used in the gap filling process with simple colours and layers attached (EDG)



Landscape screenshot 15: Hypothetical volumetric models used in the gap filling process with simple colours and layers attached (EDG)



Landscape screenshot 16: Screenshot showing the various layers used during the volumetric modelling of hypothetical gap-filling buildings in 3ds Max (EDG)

Appendix 1 – Ancient primary sources

Seneca *Naturales Quaestiones*

Book 5: 15

1 [...] But to return to the matter in hand; there are four winds, divided, according to the cardinal points, into east, west, south, and north. The rest of the winds, which are called by different names, are attached to these:

*Eurus has gone toward the dawn and the realms of Nebaioth
And Persia and the peaks that lie beneath the rays of morn.
Evening and the coasts that are warmed by the setting sun
Are close to Zephyrus. Scythia and the Great Bear
Are under the sway of dread Boreas. The land that faces these
Is bathed in unbroken cloud and rainy Auster.*

2 Or if you prefer a briefer enumeration you may gather them in one great storm—a physical impossibility, by the way: Eurus and Notus (south) rush together, and with squall upon squall Africus (south-west).

And we may add Aquilo (north), which has no place in the famous battle of the winds to which Virgil refers. Some make the number of the winds twelve [...].

[...] I do not approve of the identification ; Corus is a vehement wind, rushing in one uniform direction, while Argestes is, as a rule, a gentle wind, and blows impartially on travellers coming and going along the same road (i.e. is constantly

shifting). From sunset in midwinter comes the rushing furious Africus (African wind), named by the Greeks the Libyan (Xn/r). In the northern quarter the highest (i.e. most easterly) is Aquilo, the central one is Septemtrio, the lowest Thracias, 1 for which there is no corresponding word in Latin. In the southern region there is Euronotus, then Notus, or in Latin Auster, then Libonotus, which has no Latin name. [...]

Seneca's Moral Letters to Lucilius

Letter 53: On the faults of the spirit.

1. "You can persuade me into almost anything now, for I was recently persuaded to travel by water. We cast off when the sea was lazily smooth; the sky, to be sure, was heavy with nasty clouds, such as usually break into rain or squalls. Still, I thought that the few miles between Puteoli and your dear Parthenope might be run off in quick time, despite the uncertain and lowering sky. So, in order to get away more quickly, I made straight out to sea for Nesis, with the purpose of cutting across all the inlets. 2. But when we were so far out that it made little difference to me whether I returned or kept on, the calm weather, which had enticed me, came to naught. The storm had not yet begun, but the ground-swell was on, and the waves kept steadily coming faster. I began to ask the pilot to put me ashore somewhere; he replied that the coast was rough and a bad place to land, and that in a storm he feared a lee shore more than anything else. 3. But I was suffering too grievously to think of the danger, since a sluggish seasickness which brought no relief was racking me, the sort that upsets the liver without clearing it. Therefore I laid down the law to my pilot, forcing him to make for the shore, willy-nilly. When we drew near, I did not wait for things to be done in accordance with Vergil's orders, until

Prow faced seawards

or

Anchor plunged from bow;

I remembered my profession as a veteran devotee of cold water, and, clad as I was in my cloak, let myself down into the sea, just as a cold-water bather should. 4. What do you think my feelings were, scrambling over the rocks, searching out the path, or making one for myself? I understood that sailors have good reason to fear the land. It is hard to believe what I endured when I could not endure myself; you may be sure that the reason why Ulysses was shipwrecked on every possible occasion was not so much because the sea-god was angry with him from his birth; he was simply subject to seasickness."

The second most widely quoted text from Seneca in relation to *Puteoli* is the arrival of the Alexandrian grain fleet, greeted with joy by the population of *Puteoli*.

Seneca's Moral Letters to Lucilius

Letter 77: On Taking One's own life.

1. "Suddenly there came into our view to-day the "Alexandrian" ships, - I mean those which are usually sent ahead to announce the coming of the fleet; they are called "mail-boats." The Campanians are glad to see them; all the rabble of Puteoli stand on the docks, and can recognize the "Alexandrian" boats, no matter how great the crowd of vessels, by the very trim of their sails. For they alone may keep spread their topsails, which all ships use when out at sea, 2. because nothing sends a ship along so well as its upper canvas; that is where most of the speed is obtained. So when the breeze has stiffened and becomes stronger than is comfortable, they set their yards lower; for the wind has less force near the surface of the water. Accordingly, when they have made Capreae and the headland whence

Tall Pallas watches on the stormy peak,

all other vessels are bidden to be content with the mainsail, and the topsail stands out conspicuously on the "Alexandrian" mail-boats.

3. While everybody was bustling about and hurrying to the water-front, I felt great pleasure in my laziness, because, although I was soon to receive letters from my friends, I was in no hurry to know how my affairs were progressing abroad, or what news the letters were bringing; for some time now I have had no losses, nor gains either."

Rutilius Namatianus: A Voyage Home to Gaul - Book 1 (Published in the Loeb Classical Library, 1922)

In the half-dawn we weigh anchor, at the hour of day when colour is first restored and lets the fields grow visible. In little boats we make way along the nearest shores, so that a beach might always lie open as a refuge for them. Let cargo-ships 'neath canvas plough through the summer waves: safer is autumn if we have quickness to escape. The Alsian land is skirted, and Pyrgi fades into the distance — to-day large country-houses, in earlier days small towns. Now the sailor points out the bounds of Caere: the ancient Agylla has lost its name through time.⁴³ Next we coast by Castrum, shattered both by wave and time:

To Centumcellae we changed our tack before a strong South wind: our ships find mooring in the calm roadstead. An amphitheatre of water is there enclosed by piers, and an artificial island shelters the narrow entrances; it rears twin towers and extends in both directions so as to leave a double approach with narrow channels. Nor was it enough to construct docks of wide harbourage; to keep the vagrant breeze from rocking the craft even when safe in port, an inner basin has been coaxed into the very midst of the buildings, and so, with its surface at rest, it knows naught of wayward wind, like the water imprisoned in Cumae's baths⁴⁷ which buoys up the unhurried arms plied by the swimmer in alternate sweep.

(p783)

The shades of night as yet are undispeled when we entrust ourselves to the sea. Born of the neighbouring hill-crest, a breeze befriends us.

(p793)

We touch at Umbro's mouth:^c no inconsiderable stream, it welcomes panic-stricken barques at a safe entrance: such easy approach does

the river-bed with its descending current ever offer, as often as a cruel tempest bursts upon the deep. Here I was minded to land upon the peaceful shore; but, as the mariners were greedy for further progress, I e'en follow: so, speeding on, I find that with daylight the breeze has failed: neither forward nor backward can we make way. So on the sand of the beach we mark out⁶⁷ our resting-place for the night: a myrtle wood provides our evening fires.

(P795)

Day came: though pushing on with oars, we seem to be at a standstill, and yet the receding land proves the movement of the bow. Across our course lies Elba, famous for its iron mines:⁶⁸ than it Norican⁶⁹ soil has produced no richer yield; nor is the wrought metal of the Bituriges preferable, though smelted in great furnaces;⁷⁰ nor the molten mass which pours from the Sardinian ore.⁷¹

(p797)

Against us rises a North wind; but we too strive with oars to rise, while daylight shrouds the stars. Close at hand Populonia opens up her safe coast, where she draws her natural bay well inland. No

(p801)

Pharos,⁸² conspicuous with nightly light, has piers built there which rise in order to sky; but men long ago, finding a mighty cliff to serve as a look-out where the towering hill-crest overhangs the conquered waves, laid the foundations of a castle for twin services to man — a defence on land and signal-post for sea.

(p801)

When the North wind veered, we took pains to run with sails before the breeze, as soon as the Morning-star gleamed on his rosy steed. Corsica begins to show her dim mountains, and, matched in colour, the mass of shadow makes the cloud-capped crest look higher still: so 'tis the

moon's way with splendid horn to fade leaving us puzzled,⁸⁹ and e'en though found she yet lies hid for straining eyes.

(p803)

A clear South-east wind had brought again the moment for sailing; but I was eager to pay a visit to Protadius:¹⁰⁹ whoever perchance may wish to recognise him by sure signs should think in his heart that he is looking upon a model of goodness:

(p813)

And now returning from Pisa's city to Triturrita, I was setting the hanging sails to a clear Southern wind, when the sky turned foul under a sudden pall of rain-clouds; the cloven rack scattered its vagrant lightnings. We stopped; who 'neath a spiteful storm would dare to go on seas which threatened madness?

(p819)

Meanwhile the South-west wind on dripping wings fails not by means of pitch-black clouds to deny us day after day. 'Tis now the season¹³³ when the watery Hyades are at their morning setting, and now the Hare is buried and hidden by the winter's rain — a constellation of scanty beams but cause of mighty waves: no sailor puts out from the land which it has soaked; for it is closely linked to stormy Orion, and the dew-drenched prey flees from the heat-fraught Dog-star. We saw the sea yellowing with the disturbance of the sands and pastures covered with the scum it has belched forth, even as the Ocean pours into the midst of fields, when under errant brine it whelms the lands from which it must ebb; whether the truth be that back-flowing from another world¹³⁴ it dashes against this world of ours, or that with its own waters it feeds the twinkling stars.

(p821)

Pliny the Elder

Book 2 Chap. 46. (47) - The different kinds of winds

“The ancients reckoned only four winds (nor indeed does Homer mention more) corresponding to the four parts of the world; a very poor reason, as we now consider it. The next generation added eight others, but this was too refined and minute a division; the moderns have taken a middle course, and, out of this great number, have added four to the original set. There are, therefore, two in each of the four quarters of the heavens. From the equinoctial rising of the sun proceeds Subsolanus⁴, and, from his brumal rising, Vulturnus; the former is named by the Greeks Apeliotes, the latter Eurus. From the south we have Auster, and from the brumal setting of the sun, Africus; these were named Notos and Libs. From the equinoctial setting proceeds Favonius, and from the solstitial setting, Corus⁸; these were named Zephyrus and Argestes. From the seven stars comes Septemtrio, between which and the solstitial rising we have Aquilo, named Aparctias and Boreas. By a more minute subdivision we interpose four others, Thrascias, between Septemtrio and the solstitial setting; Cæcias, between Aquilo and the equinoctial rising; and Phœnices, between the brumal rising and the south. And also, at an equal distance from the south and the winter setting, between Libs and Notos, and compounded of the two, is Libonotos. Nor is this all. For some persons have added a wind, which they have named Meses, between Boreas and Cæcias, and one between Eurus and Notos, named Euronotus.

Pliny the Elder *Naturalis Historia*

Book 2 Chap. 81.(79.) - Of Earthquakes

According to the doctrine of the Babylonians, earthquakes and clefts of the earth, and occurrences of this kind, are supposed to be produced by the influence of the stars, especially of the three to which they ascribe thunder;

[...] But I leave every one to judge of these matters as he pleases. I certainly conceive the winds to be the cause of earthquakes; for the earth never trembles except when the sea is quite calm, and when the heavens are so tranquil that the birds cannot maintain their flight, all the air which should support them being withdrawn^e; nor does it ever happen until after great winds, the gust being pent up, as it were, in the fissures and concealed hollows. For the trembling of the earth resembles thunder in the clouds; nor does the yawning of the earth differ from the bursting of the lightning; the enclosed air struggling and striving to escape.

Appendix 2: Excel Sheets (used for data distribution and recording of reconstruction process)

LANDSCAPE ELEMENT(S)	Vector data (Layers) used	Raster data used for element	Provenance	Notes
Contours	1001_5m_Intervals	None	SANC - Dr Gialanella	
Vincoli archeologici GENERALE + vincoli comune.dwg	1002_15m_Intervals	None	SANC - Dr Gialanella	Many unknown layers badly labelled (mostly just using numbers). Missing .shx file caused autocad to crash in some versions and file could not be opened. Point data that has x, y but no z data.
layer 1001.dwg				File created by EDG by extracting relevant contour data from vincoli.dwg
Contours for Rione Terra (extracted to be used of Rione Terra)	Added Contours	Used Sommella's Map (Somella093.jpg)	Scanned Publication	Rione Terra has no contours - compensated by using Sommella detailed map that has some contours - these too are however incomplete.
		Zevi (1993)	Naples Archives	Only partial as the map of Somella is but a detail of Rione Terra and not the whole of the Bay.
Bathymetry	Bathymetry_old	Tavola 10	Naples archives	The few bathymetry contours on this map are grossly outdated (taken from tav002.tif)
planimetria strutture sommerse 2000.dwg		Tavola002.tif	Naples archives	Grossly outdated so Bathymetry contours used on this map have been ignored and new set have been digitised.
	Bathymetry_Contours	Istituto idrografico della marina (1987)	Naples archives	
	Map_Bathymetry	Istituto idrografico della marina (1987)	Naples archives	Definatelly a more reliable source for the bathymetry contours - Have chosen to use this map instead of the archives ones.
Underwater remains of the Portus Iulius	401_underwater_rem			
Planimetria strutture somemrse 2000.dwg				The underwater remains on this map do not match the position of any of the remains as decpicted on the raster maps
Layer 1001.dwg				When imported this autoCAD map matched the spatial references of vincoli.dwg perfectly.
Detailed structures represented in the following rasters:		tavola_002.tif	Naples archives	
		tavola_008.tif	Naples archives	
		tavola_009.tif	Naples archives	
		tavola_014.tif	Naples archives	
		tavola_016.tif	Naples archives	
		tavola_020.tif	Naples archives	
		tavola_027.tif	Naples archives	
Original Coastline				
Planimetria strutture somemrse 2000.dwg		based on	Naples Archives	
Layer 1001.dwg				
Original extent of lake lucrinus	Pres_Orig_size of Lucrinus	digitised from Castagnoli map	Scanned publication	One of the few maps that tries to interpret what the original size of Lake Lucrinus was. Matched well with a large portion of the CAD
Archaeology	Map_Castangoli	digitised from Castagnoli map	Scanned publication	Has highlighted the major monuments, the main acnient roads, the area designated as the forum
	Map_detail somm_RioneTerra	sommella093.jpg		and an attempted interpretation of the possible street plan of Rione Terra (which is also found in Sommella)
	Map_Zevi	unione_copy.jpg	SANC Dr Gialanella	A comprehensive map with a gazzetteer of all the remains documented. This is now also dataed but nothing has been published.

	Zevi Arch Cisterns	unione_copy.jpg		
Horrea and Tabernae	Zevi Arch Horrea Tabernae	unione_copy.jpg		
Public Buildings	Zevi Arch Public	unione_copy.jpg		
Residential building elements	Zevi Arch Residential	unione_copy.jpg		
General archaeology (perhaps without description)	Zevi Archaeology	unione_copy.jpg		
Roads interpreted by Zevi	Zevi Roads	unione_copy.jpg		
Area interpreted by Sommella	Map Somm aread	sommella009.jpg	scanned publication	
	Interp area Commerc	sommella009.jpg	scanned publication	This is a plan with Sommella's hypothetical areas with the concentration of various building types (a bit old now)
	Interp area demolished	sommella009.jpg	scanned publication	Areas where archaeological remains are believed to have existed but can not longer be found due to modern development
	Interp area Public	sommella009.jpg	scanned publication	concentration of public building types
	Interp area Resident	sommella009.jpg	scanned publication	concentration of public building types
Architectural development as interpreted by Sommella	Map Sommella Dev	sommella075.jpg	scanned publication	
	Development ColM Augustan	sommella075.jpg	scanned publication	From the time of the colonia marittima to the augustan period
	Development Hadrianic	sommella075.jpg	scanned publication	Hadrianic additions
	Development Severan	sommella075.jpg	scanned publication	Severan additions
Other Landscape elements				
Modern buildings	401 Modern Building	none		But seems to be based primarily on Zevi's Map of the area (Find out which Catastale map he based it on)
Current coastline		801 none		
Modern port-related structures		713 none		
Current lake delimitations		805 none		
Additional port structures		806 none		
Unknown Elements (archaeology?)		408 None	SANC Dr Gialanella	
		804 None		These are what I believe to be spot heights
General landscape information	Map General Cartography	Carta 'Italia (Foglio 447 sezIII)	Scan	Not very accuratae but used it just to check that all main landscape elements had been included.
General landscape information	Map Generic Landscape	porto di baia.tif	Naples Archives	Also used for general rererences purposes - underwater remains on this map do not match the AutoCAD drawing
General landscape information	Map google	Portus iuliusWcoast.jpg	Internet downloads	
General landscape information	Map Tav24 IGM	file0030.jpg	Internet downloads	
		macellum.jpg	Internet downloads	
Designated archaeological areas	Map Sectors	10000 VINCOL reduced.jpg	Naples Archives	A good reference map with information on the designated arcaeological areas of the entire region of Pozzuoli
				Matches quite accurately with the CAD file.

GIS OUPUT (ArcMap)	Notes on:
PUTEOLI_TOPO.mxd	
Layer1001.dxf Group Layer	This layer is based on the edited AutoCAD file (1001.dwg) that had to be saved in version 2004 in order to import correctly into ArcGis 9.3 It includes points, polylines, polygons and annotations.
Layer1001.dxf Polyline	This is the layer that was exported in GIS in order to create the exported .shp file
Export Contours	Generated contours that were then used to create the raster DEM needed of the terrain
ClippingMask	A shape file created to reduce the area of Pozzuoli and it's associated raster DEM
Calc3	The generated clipped dem with its corresponding height data
TopoContours	Is the full DEM as generated using the topo to raster tool in arctoolbox
PUTEOLI_POINT.mxd	
Extracted Points	This layer was created by first importing the points from the dwg file (SANC). These were then exported to a shp file and any points without elevations were removed.
New Shapefile	This is the same clipping shape used in puteoli. Mxd
PointData	DEM created of the whole area using point data
Calculation	Reduced area with relevant data as extrapolated from the points. The height data in the raster was represented using classified instead of the stretched data. For some reason the stretched data was clipping parts of the bitmap and assigning 1 colour to what was clearly a series of spot heights.
GIS OUPUT (ArcScene)	Notes on:
Puteoli_Topo.sxd	This file was created by importing the relevant raster dem and contour data that could then be visualised in axonometric views and allows for navigation.
Export_contours.shp	This layer was imported from Puteoli_TOPO.mxd and the base heights were set from the file in order to obtain the three-dimensional view.
Layer1001_MoreContours.dxf	This file too was imported from Puteoli_TOPO.mxd and it includes the added contours that were digitised for the area of Rione Terra but does not include the Bathymetry data.
pointdata	This raster was created in ArcMap using the extracted point data in the PUTEOLI_POINT.mxd file. It was then imported into ArcScene and a colour ramp and base heights were added to give it its 3d form. It also includes the whole region of Pozzuoli
calc3	This raster was created in ArcMap using the exported contour data (layer Export_Contours). It also includes the bathymetry data but not the point data. This is also a cropped raster specifically to the port area of Pozzuoli and the lakes.

MONUMENT	Length (m)	Width (m)	Hieght (m)	Notes	Work to do on the model
Stadium dimensions Vaulted porticoe windows in the exterior face between Piers (ref Humphrey 1986: 571-573) Arena dimensions (ref Humphrey 1986: 571-573) Plan of the Stadium based on Soprintendenza Survey plan Calculated total height (based on conjectural section) Depth of seating (based on Circo Massimo) Conjectural Section chosen (based on Circo Massimo) Conjectural linear side (based on Gismond's Domitian's Stadium)	370 1.9 318 165 0.5	50 2.15 47 48	17	Stadium dimensions Don't forget to reference Humphrey Humphrey: 571 - the building lies west of the town near and parallel to the via Domitiana Its location in relation to the town is plausible enough for a circus - dimensions however do not settle the issue dubois plan shows the arena as being approximately 370m in length and a little over 50m wide, although it is not clear which was the circular end and there is no trace of any central barrier the plan by andrea de jorio in the early 19th c suggests a structure which had 2 rounded ends and certainly one existed on the west side the width would suit better a stadium the reported length however would suit better a circus since Domitians stadium was only 275m in l the building was constructed of brick reticulata-faced concrete. Still visible during Dubois' s time : Humphrey describes a vaulted portico 3.2m wide with large windows 2 - 3m wide in the exterior face between piers which measured 1.9 x 2.15m - there were rings to attach the masts to the awnings the inner sides were pierced by openings which led to seats that were supported by sloping vaults the remains described could belong equally to a circus or a stadium although it is noted that no circus is known to have had provisions for awnings it may be possible that this building was made deliberately larger than most stadia so as to hous ecertain equestrian events that this building was called a stadium is strongly suggested by the prague and oinkilton vases the masts and windows on the flasks match the description of the remains if the building at Puteoli functioned as a combination of stadium/hippodrome it may have been built for the naples' greek style games Amalfitano pg 129 - placed in a panoramic position on a terrace overlooking the sea it was the largest in antiquity (260 x 65) slightly smaller than that of Domitian (285m) the exterior of the building faced the via Domitiana and was made out of laterizia and decorated with partial columns that supported the arches of the vomitaria of which only scant traces remain See Gros See also Gialanella's pamphlet of the stadium particularly for recent description	Finish by mirroring the stadium. Done! You have to add the windows of the upper balcony You have to add the exits of the seating You have to add the linear end of the stadium You have to add the main entrance of the curved area You need to smooth it Texture etc. You need to check the actual psible height and readjust
Porto Julio Warehouses Individual rooms (interior) based on Sop. Survey plan Doorway?	5.5 1.34	3.25		Porto Julio Warehouses What are you basing the elevation on and why? Reference Rickman and that the only evidence for the Horrea of Puteoli are found in the image Picard but very questionable as data source, see also Rickman Page 132. You also got the elevation from Gros of the Horrea Agrippiana Very similar to the Horrea of Portus which is why you have chosen the elevation of Agrippina You need to finish the upper store rooms of the horrea but you will need to check how you are going to do these as the fist system of archways does not really match with the outer façade.	look at the horrea grandi at Ostia for comparison you need to figure out what the front looked like, where were the entrances/exits need to figure out what happens with the corner You need to look for the publication on the research that has been done for the Grandi Horrea at Ostia
Temple of Augustus				Temple of Augustus Remember to find references for the roof details (see gros to start) Measurments all possible through detailed survey of monument by SANC Things you need to remember are the accurate placing of the capitals on the columns Make sure you double check the decorations with Gros and with the SANC survey for a comparison	Need to finish the roof elements, joining corners of lintels etc and details (no need it's neat as it is) the front portico needs completion the capitals need defining accurately (you can now used recon cd elements that you have copied!) texture align columns properly! columns also need to be radially squeezed, using the centre of the gizmo with an axial buldge of 0.82 or more (no need)
The Macellum Plan Section De Ruyt says it measures 58m x 75	74.94	60.74	22.45	The Macellum For the Macellum you used Christie's watercolors You also used the plan of De Ruyt and the Section of Demma A lot of reconstructions of the individual elements are based on christie's work Some of the elements were also taken from Golvin but these were to act as an alternative interpretation Located close to the port about 100m from the shores behind the porticoes that bordered it to the west Now the building is no more than 30m away from the shore (check in acad) (De ruyt) On all 4 sides of the courtyard is surrounded by a portico with 2 floors under which were aligned shops and rooms of all sorts the outside of the building was also flanked (according to de ruyt) on the NE and SE by roads which also house shops de ruyt pg 151 - the main entrance is on the west close to the sea de ruyt pg 151 - a portico 5m wide accessible via 4 steps was the entrance on the road facing the sea de ruyt pg 151 - it was covered by a roof sustained by 14 columns at the centre a vestibule 14.40m in width led directly to the portico of the interior courtyard the passage was delimited at the end of the coridor by two columns of which only the bases survive 4 secondary entrances were located between the shops the macellum as described by amalfitano - one of the largest buildings known (58x75) that resembles the macellum magnum built in on the west side of the courtyard 6 shops opened towards the interior courtyard and the remaining 7 opened onto the exterior dating is uncertain end of the 1st to the beg of the 1st c AD w/ restructuring in the severan period urban context of pozzuoli conditioned the layout of the macellum June 2012: You have created alternative layers for elements you are unsure of such as the back of the central apse and the nu	Need to finish the lavatory front room (not enough evidence so best left empty) Fix and finish roofs Done! Finish balcony elements Done! Check if any windows need to go on the front (lavatory walls) - no evidence as Christie is purely conjectural Must fix geometry of the walls and roofs as they are highlighted by the texturing rome under Nero Also you should replace for the close up the various columns (check which corinthian ones you need) You need to finish the wall decorations of (possibly) marble slabs on the upper balcony (see plastico)
Bathing Complex Tempio di Nettuno					
Molo Galligolano	372.88	16		The width is based on the remains as recorded by Dubois and the widest remain in the set of pillars	
Amphitheatre (flavian) dimensions based on DL Bomgardner arena area of arena area of cavea total area (unspecified) estimated perimeter percentage devoted to seating estimated seating capacity plans and sections based on Golvin's survey detailed seating section based on the closseneum as published by coarelli and welch	149 74.8	116 42	82% 35,700	The Amphitheatre Other authors who have recorded the amphitheatre in detail are Golvin, Maiuri, Dubois, Zevi Golvin's plan and section were used to digitise into AutoCAD Maiuri's detailed sections and isometric sketches were used for elements such as the external portico architectural drawings in maiuri were also used to reconstruct the portico detail such as column bases, shafts and capitals details of the seating for the upper tiers of the cavea were extrapolated from diagrams of the flavian amphitheatre in Rome as were the additions of the awning system to the facade The Amphitheatre is perhaps the most well researched monument in Pozzuoli. Maiuri page 60/61/62 Welch page 137 (detailed isometric reconstruction of the colosseum and possible interpretation of the vomitaria and stairs to the cavea Bomgardner page 76 Purpose built according to Bomgardner for "Venationes"(shows with animals) The floor of the arena had 46 trapdoors dedicatory inscriptions - 4 were recorded by Maiuri - each positioned on the main axial entrances inscriptions indicate that the monument was built after AD69 the cavea - groups of seating in the amphitheatre and in this case they sprang from a deliberately levelled terrace the terrace rested on 72 radial walls radial walls built out of roman concrete, fine outer skin or reticulata, outer ends finished with testaceum eveness of these walls ensured by two brick levelling courses within each of these walls The facade - the outer ends of the walls terminated in 72 stone piers - these formed the basis for the arches of the facade An arcaded gallery (c. 4m wide) comprised the ground floor and the first floor and the attic storey finished the facade like the colosseum on the stone piers we find engaged columns that adorned the facade constructed from a stone core with applied stucco decoration architectural fragments have been recovered that indicate that purpose built awning system was provided (bomgardner and maiuri) design principles - pozzuoli amphitheatre is remarkably similar to the verona amphitheatre in its design principles (golvin 1988: pg 182) all the reconstructions of the profile for the cavea are hypothetical however the structures below are well known look at colosseum plastico model for an idea of possible entrance way arch	Check in the lab if you have missed out any of the images you used for the reconstruction process ... (welch and Coarelli) themselves and balcony area)

Images used for the Model	Sourced from	Used for:	Output
Zevi_scan.jpg plan_stad_Zevi.jpg Section_Humphrey.jpg STADIO.bmp stadium_domitian_plastico.jpg axon_stad_gros.jpg	Zevi 1993 Zevi 1993 Humphrey: Internet download Internet download Gros:	Digitising the plan of the Stadium Checking scaling of the stadium. Digitising the section of the Stadium Trying to understand the ends of the stadium through comparison Since the puteoli stadium is most of quotes as resembling that of Domitian for comparison Another stadium that Puteoli is compared to (reference)	Stadium.dwg ScaleRef.dwg sectiontest.dwg
lucido_01.tiff tavola_009.tiff tavola_0016.tiff img001.jpg + img002.jpg	SANC SANC SANC Gros	Digitising the plan of part of the horrea (here labelled) Warehouses 1 Digitising the plan of part of the horrea (here labelled) Warehouse 2 Digitising the plan of part of the horrea (here labelled) Warehouse 3 For the digitising of the elevation (based on the Horrea Aggrippiana These were stiched together in CAD	Warehouses1.dwg Warehouses2.dwg Warehouses3.dwg WH_Sec_Aggri_Divided.dwg + WH_Sec_Aggrippina.dwg WH_Sec_Partial.dwg

Monument type	CrossRef No. Zevi	Ref No. Sommella	Dimensions	Sommella gazetteer References (pages)	Other references	Notes on:
Cistern	36	11		16, 17		So far composed of 4 areas of which there is an isometric drawing that can be used for the reconstruction.
	38	11			19	
	43	14		27, 28		
	96	24		41, 42		The plan is most definitely more updated in Zevi's plan. In Sommella's map they are identified as uncertain structures but in Zevi's they are clearly linked to the piscina di Lusciano
	98	26			48	
	98	27		48, 49		
	95	36			58	
	97	38			60	
	94	42		61-64		Famous Piscina Cardito
	87					
	219					
	70	48			72	
	75					
	260					
	262					
	155					
	245					
	73	49			72	
	110					
	193					
	65					
Horrea	28	3		18, 21		
	48	17			34	
	85	31		37, 38		
	112					
Tabernae	40	6			19 i campi flegrei 1990: 126	
	42	10		21, 22	i campi flegrei 1990: 125	
	89	35			54	not really worth digitising
	253				unpublished report	
	261				unpublished report	
	34				palatino 1826:35, pozzi 1982:382-383, gialanella 1989:511, i campi flegrei 1990: 127	
	246				unpublished report	
Residential	39	8			19 gialanella sampaoio 1980-1:148	
	58	28			59	pdf pg 45
	57	31			53 ASANC P. 19/14	Quite outside the reconstruction area. Pdf pg47
	82	82			73	pdf pg67
	156				patroni 1898:238-289	
	224				patroni 1898:238-289	
	194				i campi flegrei 1990:126	
	37	4			19 gialanella sampaoio 1980-1:154	
	202					So called Villa di cicerone
Walls	73	2			19	
		4			19	
		7				
	50	8			20	
	51	9			20	
	60	18			36	
	67	25			51	
	100	30			51	
		32				
		33				
	80	40			60	
	93	41			60	
					73	
	79	52			73	Walls that are now in Zevi listed as a cryptoportico
	117					
	223					
	257					
	259					
	89					
	72	55			74	
	76					
	157					
	160					
	244					
	41					
	111					
	192					
	206					
	210					
Roads	r	19			36	
	r	20			36	
	r	45			68	
	i					
	i					
	k					
	i					
	g					
	h					
	z					
	a					
	b					
	e					
	d					
	e					
	t					
Bathing Complexes	44	15		29, 32		Tempio do Nettuno
	91	23			40	
	99	43		65, 66, 67		Known as Bagno Orthodontico pdf pg 65
	197					possibly related to the tempio di nettuno
Temples	56	13			27	
	46	16			33	
	78	50			72	the capitolium
Nimphaeum	54	12			26	
	88	39			60	pdf page 60
	218					
Vaulted Areas	64	22			39	
	95	25		43, 44, 45, 46, 47		
	85	21			37	
	222					
	74					
	114					
	211					
Republican Amph	212					
	239					
Macellum	49	46		70, 71		
Molo	83	54			74	

	45					
	237					
	247					
	248					
	52					
	113					
	200					
	207					
Republican Amph	52	34		54, 55, 56, 57		See sommella for some good isometric reconstructions and detailed description.
Macellum	49	46		70, 71		
Molo	83	54			74	

Sector 1	Sector 2	Sector 3	Sector 4
Eastern Quarters?	Central Area	Amphitheatres and (area forense)	The Rione Terra and Port Buildings
1 - Cisterns (X4)	18 - Wall	31 - Residential buidings	46 - Macellum
2 - Walls	19 - Roads	32 - Walls	47 - Colonnade
3 - Horrea	20 - Roads	33 - Walls	48 - Cistern and fountain
4 - Walls	21 - Vaulted rooms	34 - Amphitheatre (minor)	49 - Cistern and Cuniculum
5 - Tabernae	22 - Walls of unknown use	35 - Tabernae?	50 - Temple
6 - Referred to as habitations	23 - Thermal installation	36 - Cistern	51 - Walls
7 - Wall	24 - Vaulted walls and terraced areas	37 - Amphitheatre (Major)	52 - Walls
8 - Wall (Unknown function)	25 - Via Tecta and Vaulted areas	38 - Cistern	53 - Residential area and road
9 - Walls	26 - Unknown areas	39 - Nimphaeum	54 - Mole
10 - Tabernae	27 - Cistern Piscina di Lusciano	40 - Walls	55 - Walls of the acropolis
11 - Cistern	28 - Residential areas	41 - Walls	56 - Basins
12 - Ninphaeum	29 - Wall	42 - Cistern (Piscina Cardito)	
13 - Temple	30 - Wall	43 - Thermal complex	
14 - Areas and Cisterns		44 - Tomb	
15 - Bath complex		45 - Roads	
16 - Temple			
17 - Horrea			

Tablet No.	Arch No.	Road	Type of remains	Initial Description or Identification	Association	Described Quantity/ Surviving remains	Material and/ or (opera type)	Material and/ or (opera type)	Material and/ or (opera type)	Commonly known as:	Date assigned							
1	1	Via Campana	Colombari	Group		approx 100m	2 reticolata reticolata cement(?) reticolata tufo laterizium reticolata cement cement											
	2	Via Campana	Mausolea	Large														
	3	Via San Vito	Colombari?															
	4	Via San Vito	Wall	Resembling colombarium														
	118	Area Selva di Camiglione	Structures	Related to a sanctuary?														
	119	Via Campana	Colombarium															
	120	Area Selva di Camiglione	Walls	A villa?														
	121	Via Campana	Walls	A colombarium?														
	122	Via Campana	Structures															
	123	Via Pietrarsa	Area	A funerary building?														
	124	Via Pietrarsa	Area															
	125	Via San Vito	Mausoleum															
	126	Via San Vito	Wall	Belonging to a Mausoleum														
	127	Via Campiglione	Area	A building?														
128	Via Campana	Colombari		Group		reticolata reticolata reticolata reticolata	vitatum vitatum											
129	Via Pietrarsa	Area	Colombarium?															
266	Via Campana	Colombarium																
2	5	Via San Vito	Structures	Colombari?		Stretch	cement reticolata reticolata reticolata reticolata reticolata laterizium reticolata reticolata reticolata reticolata reticolata	laterizia		Necropoli of San Vito								
	6	Via San Vito	Mausoleum	With rectangular base														
	7	Via San Vito	Areas	Basis Villae?														
	8	Via San Vito	Necropoli	Along the via Puteolis-Capuum														
	9	Via San Vito	Area	Building funerary in nature														
	10	Area Croce Campana	Area	Colombarium?														
	130	Via Pietrarsa	Mausoleum	of the gens calpurnia														
	131	Via San Vito	Cistern															
	132	Via San Vito	Areas															
	133	Via San Vito	Mausoleum	With rectangular base														
	134	Via San Vito	Tabernae															
	135	Via Campana	Walls	Terraced														
	136	Via San Vito	Colombarium															
	137	Via San Vito	area	Vaulted, colombari?														
	138	Via San Vito	Areas	Colombari ?														
	139	Area Croce Campana	Areas	Vaulted, colombari?														
	140	Area Croce Campana	Areas	Tabernae?														
	141	Area Croce Campana	Colombari	Cut by the railway line														
	243	Via Campana	Strcutures	Colombari?								Group		reticolata reticolata	vitatum vitatum			
267	Via San Vito	Mausoleum																
3	142	Via Vecchia Luciano	Structures		abutting the Via Domitiana	Partially interred	reticolata	cementata										
	229	Via Vecchia Luciano	Structures	abutting the Via Domitiana		Partially interred	reticolata											
	230	Via Vecchia Luciano	Structures	abutting the Via Domitiana		Partially interred	cementata											
4	11	Via Vecchia Campana	Colombari	Hypogea	decorated		stucco reticolata reticolata stucco reticolata reticolata reticolata	laterizia vittata painting		Del fondo Caiazzo	Vespasian date							
	12	Via Vecchia Campana	Cistern															
	13	Via Campana	Area	Unknown function														
	143	Via Vecchia Campana	Colombari	Hypogea														
	144	Via Fascione	Structures	Possibly belonging to a villa														
	145	Via Vecchia Campana	Structure	colombari?														
	146	Via Vicinale M.te Barbaro	Colombarium															
	147	Via Vicinale M.te Barbaro	Strcutures	Cisterns (?)														
	148	Via Vecchia Campana	Areas	Funerary, Underground														
	149	Via Vecchia Campana	Colombarium	Circular														
	150	Via Vecchia Campana	Walls															
	151	Strada Vicinale Cigliano	Area	A well														
	152	Via Vecchia Campana	Mausolea															
	153	Via Vecchia Campana	Walls	Colombarium?														
	154	Strada Vicinale Cigliano	Wall															
	231	Via Vecchia Campana	Areas	Underground: Hypogea or cisterns														
	240	Strada Vicinale Cigliano	Structures															
	241	Via Vecchia Campana	Area	Colombarium?														
	242	Via Vecchia Campana	Colombari	Underground														
	268	Via Vecchia Campana	Structures	Resembling funerary remains														
	269	Via San Vito	Buildings									traces of decorations diversion of the Via Puetolis-Capuum	Stretch	painted basalt				
		Loc. Via Vecchia Campana	Road															
5	14	Via Domitiana	Stadium			Large	vittata reticolata reticolata	stucco decoration reticolata	stucco decoation		Antonine age							
	155	Via Domitiana	Cistern															
	156	Via Domitiana	Building (1)			Length	reticolata reticolata											
	157	Via Domitiana	Wall (1)															
	158	Via Domitiana	Colombari	Undergound		Short stretch	3 vittata reticolata reticolata											
	159	Via Domitiana	Colombari (1)															
	160	Via Domitiana	Wall															
	224	Via Domitiana	Areas	Residential nature?		Complex	reticolata mixed building styles reticolata vittatum vittata											
	232	Via Domitiana	Area															
	233	Via Luciano	Area															
	234	Via Domitiana	Area	Colombarium?		Stretch	3 vittata reticolata basalt											
	244	Via Domitiana	Wall (1)															
	245	Loc. Via Luciano	Cisterns			Stretch	3 basalt basalt											
	245a	Via Luciano	Road	of the Via Domitiana														
	245b	Via Luciano	Road	of the Via Domitiana														
	6	14	Via Domitiana	Stadium			belonging to basis of a suburban villa belonging to villa in n. 15 belonging to villa n.15						2 quasi reticolata reticolata quasi reticolata				Antonine age	
		15	Via Luciano	Cryptoportici		Paralell												
16		Via Luciano	Cryptoportico															
17		Via Luciano	Area															
18		Via Luciano	Areas	Thermal function														
19		Via Luciano	Area															
20		Via Luciano	Areas															
21		Prima Traversa Luciano	Vaulted areas															
22		Prima Traversa Luciano	Series of areas	No longer accessible														
23		Via Luciano	Mausoleum	With cruciform vaulting														
24		Via Luciano	Area	No longer accessible														
25		Via Celle	Mausoleum	With vault (padiglione) (1)														
					Complex (1)			reticolata laterizia	vittata stucco decoration									

	26	Via Celle	Necropolis	Monumental	along the via puteolis-capuam	Part	reticolata			Necropolis of Via Celle	
	27	Via Luciano	Areas	Tabernae?			reticolata				
	28	Via Campana	Horrea				reticolata				
	29	Via Campana	Walls				quasi reticolata				
	101	Via Campi Flegrei	Tombs	*alla cappuccina* and *enchytrismos* .							2nd C AD
	102	Via Luciano	Wall				reticolata	laterizia	mista		
	161	Prima Traversa Luciano	Structure			Stretch	reticolata				
	162	Via Vicinale Cigliano	Wall				reticolata				
	163	Via Vicinale Cigliano	Areas				entirely plastered				
	164	Via Vecchia Campana	Area	Colombario?	vaulted		reticolata				
	165	Via Vecchia Campana	Cistern	Areas		Stretch	vittata	vittata			
	166	Via Vecchia Campana	Wall			Series	reticolata.				
	167	Via Vecchia Campana	Areas	With traces of painted decoration,		Stretch	reticolata.				
	168	Via Vecchia Campana	Wall			Stretch	reticolata.				
	169	Via Vecchia Campana	Wall				reticolata	vittata mista			
	170	Via Campana P.co Pisano	Cistern		a base of pabonensis						
	171	Area Croce Campana	Fragments	Architectural and scupltural							
	172	Via Luciano	Structure	Walled		Part	reticolata				
	173	Via Campana P.co Pisano	Ceramic materials	Unidentifiable		Part	reticolata				1st - 3rd C AD
	174	Via Campana P.co Pisano	Wall			Part	vittata				
	225	Via Campana P.co Pisano	Cistern			Part	basalt				
	227	Via Luciano	Wall			Part	basalt				
	o.	Via Campana	Road		diverging from the Via Puteolis-Capuam.	Part					
	u.	Via Vecchia Campana	Road		belonging to the Puteolis-Capuam	Part					
	v.	Prima Traversa Luciano	Road		diverging from the Via Domitiana	Part					
7	26	Via Celle	Necropolis	Monumental	along the Via Puteolis- Capuam	Part	reticolata			The necropolis o Via Celle	
	30	Loc. Cigliano	Structures				reticolata				
	31	Loc. Cigliano	Structures				reticolata				
	103	Loc. Cigliano	Area	Suburban residential		Complex	reticolata, opera reticolata	vittata	laterizia		
	104	Loc. Cigliano	Colombarium				reticolata				
	105	Loc. Cigliano	Cistern (1)				reticolata				
	106	Loc. Cigliano	Walls			Nucleus	cemetizia				
	107	Via Cupa Cigliano	Colombari			Group	reticolata				
	108	Via Cupa Cigliano	Wall				reticolata				
	175	Loc. Cigliano	Cistern	With cruciform vaults;			mixta				
	176	Loc. Cigliano	Cistern		probably belonging to the complex n. 103		reticolata				
	177	Loc. Cigliano	Cistern				reticolata				
	178	Loc. Cigliano	Cisterns			Series	reticolata	vittata			
	179	Loc. Cigliano	Colombari (1)				reticolata	stucco decoration			
	180	Loc. Cigliano	Cistern				reticolata				
	181	Via Vicinale Cigliano	Colombarium				reticolata				
	182	Via Vicinale Cigliano	Colombarium				reticolata				
	183	Via Vicinale Cigliano	Colombarium	On many levels		Large	reticolata				
	184	Via Cupa Cigliano	Cistern				reticolata				
	185	Via Vecchia delle Vigne	Wall			Part	reticolata	vittata			
	186	Via Vecchia delle Vigne	Wall			Part	reticolata				
	187	Via Cupa Cigliano	Cistern				reticolata				
	188	Via Cupa Cigliano	Walls	Emerging		Nucleus	cementizia				
	189	Via Cupa Cigliano	Walls	Emerging		Nucleus	cementizia				
	228	Loc. Cigliano	Areas				reticolata				
	235	Via Cupa Cigliano	Walls			Nucleus	cementizia				
	t.	Via Cupa Cigliano	Road			Stretch	basalt				
R	32	Vallone Cordiglia	Area				reticolata				
9	33	Via Celle	Building	With portico						Statio dei Tirii	Late Imperial
	34	Via Luciano	Tabernae			Complex	mixed reticolata	laterizia			
	35	P.co Cordiglia	Area		belonging to the residential complex no 40		reticolata				
	36	Via Terraccino	Cisterns		belonging to 2 complexes of residential function					The Villa of Cicero	
	37	Vallone Cordiglia	Structures				mixed laterizia	reticolata			
	38	Via Domitiana	Cistern								
	39	Via Terracciano	Wall		belonging to a habitation		mixed laterizia	reticolata			
	40	Via Terracciano	Tabernae		belonging to a residential complex nos. 36, 193, 194	Stretch	mixed laterizia	reticolata			
	41	Vallone Mandria	Wall				mixed laterizia	reticolata			
	42	Via Terraccino	Tabernae				quasi reticolata	graffiti inscriptions			
	43	Vallone Mandria	Cisterns								
	44	Via Terracciano	Areas	Thermal		Complex				Temple of Neptune	Hadrianic age
	45	Vallone Mandria	Areas	Vaulted		Series	incerta				
	46	Via Oberdan	Temple			Small	laterizia				
	47	Via Miliscola	Structures		of the Ripa Putelana (Vicus Lartidianus)						
	48	Via Pergolesi	Horrea				mixed laterizia	reticolata			
	49	Via Serapide	Macellum							Temple of Serapide	
	109	Loc. Celle	Structures	Basis villae?							
	110	Via Terracciano	Cistern				reticolata				
	111	Via Pergolesi	Remains				reticolata	vittata			
	112	Via Sacchini	Horrea				reticolata				
	190	Via Cella	Area				reticolata	mixtum			
	191	Via Domitiana	Area				reticolata				
	192	Via Celle	Wall			Part	vittata				
	193	Loc. Celle	Cistern				reticolata				
	194	Via Terracciano	Service area		part of a residential complex no's 36, 40, 194		reticolata	reticolata			
	195	Via Terracciano	Area				mixed laterizia				
	196	Via Domitiana	Area				reticolata				
	197	Via Pergolesi	Area	Thermal complex	probably belonging to the so called "Temple of Neptune"		reticolata				
	198	Via Sacchini	Stairs				volcanic rock (trachitica)				
	199	Via Pergolesi	Area				reticolata				
	236	Via Domitiana	Structures				reticolata	laterizia			
	237	Vallone Mandria	Vaulted area								
	246	Via Miliscola	Area	Residential or tabernae							
	247	Vallone Cordiglia	Area	Vaulted			laterizia				
	248	Via Terracciano	Area	Vaulted			laterizia	reticolata			
c.		Via Terracciano	Road		crossing the town	Part	a basalt				

Appendix 3: ADS Metadata sheets



List of files deposited with the Archaeology Data Service

Please complete this form with a list of all files that are being deposited with the ADS. It is important that you accurately record each file name with the correct combination of upper and lower case letters and file extension. Please describe each file carefully and accurately. The file descriptions will be preserved alongside the data by the ADS, and will also be made available to those who wish to reuse the data in the future.

If you would prefer to give us this information in another format this should not be a problem.

Title of project:	Visualising Pozzuoli: Digital models for reading imperial architecture.			
File name (with extension)	File path	Software application used to create file	Software version	Description of file contents and relationships with other files
Thesis_Volume_1.doc		Microsoft Word: Mac	12.3.6	Main thesis text images of which are found in Volume 2
Thesis_Volume_2.doc		Microsoft Word: Mac	12.3.6	Images and appendices corresponding to Volume 1
Contours_Annotation.DWG	FINAL_FILES_SUBMITTED_2013/03_AUTOCAD/01_LANDSCAPE	AutoCAD	2011	Digital plan of Campanian region
Contours_Points.DWG		AutoCAD	2011	Digital plan of Campanian region

Contours_Polygons.DWG		AutoCAD	2011	Digital plan of Campanian region
Pozzuoli_Bathymetry.dwg		AutoCAD	2011	Digitised plan of underwater contours
10000_VINCOLI.jpg	FINAL_FILES_SUBMITTED_2013/03_AUTOCAD/01_LANDSCAPE/Maps	Epson Scan	3.4.3	Scanned plan for digitising.
Sommella009.jpg		Epson Scan	3.4.3	Scanned plan for digitising.
Sommella010.jpg		Epson Scan	3.4.3	Scanned plan for digitising.
Sommella074.jpg		Epson Scan	3.4.3	Scanned plan for digitising.
Sommella075.jpg		Epson Scan	3.4.3	Scanned plan for digitising.
Sommella076.jpg		Epson Scan	3.4.3	Scanned plan for digitising.
Sommella093.jpg		Epson Scan	3.4.3	Scanned plan for digitising.
Stadium_plan.dwg	FINAL_FILES_SUBMITTED_2013/03_AUTOCAD/02_STADIO	AutoCAD	2011	Digitised plan of stadium.
Stadium_section.dwg		AutoCAD	2011	Digitised section of stadium.
axon_stad_Gros.jpg	FINAL_FILES_SUBMITTED_2013/03_AUTOCAD/02_STADIO/Scans	Epson Scan	3.4.3	Scanned plan for digitising.
Humphrey_Section.jpg		Epson Scan	3.4.3	Scanned plan for digitising.
plan_stad_Zevi.jpg		Epson Scan	3.4.3	Scanned plan for digitising.
SANC_scan.tif		Epson Scan	3.4.3	Scanned plan for digitising.
STADIO.bmp		Epson Scan	3.4.3	Scanned plan for digitising.
stadium_domitian_plastico.jpg		http://en.museociviltaromana.it	Na	Photo for reference.
Zevi_scan.jpg		Epson Scan	3.4.3	Scanned plan for digitising.
Stadio_3.jpg	FINAL_FILES_SUBMITTED_2013/03_AUTOCAD/02_STADIO/Screenshots	AutoCAD	2011	Screenshot produced in AutoCAD.
MAC_Plan.dwg	FINAL_FILES_SUBMITTED_2013/03_AUTOCAD/03_MACELLUM	AutoCAD	2011	Digitised plan of <i>Macellum</i>
MAC_Section.dwg		AutoCAD	2011	Digitised section of <i>Macellum</i>
Christie_watercolours.zip	FINAL_FILES_SUBMITTED_2013/03_AUTOCAD/03_MACELLUM/Scans/Macellum_CHRISTIE	Epson Scan	3.4.3	Scanned images for reference.
Puteoli012.jpg	FINAL_FILES_SUBMITTED_2013/03_AUTOCAD/03_MACELLUM/Scans	Epson Scan	3.4.3	Scanned images for digitisation.

Puteoli013.jpg		Epson Scan	3.4.3	Scanned images for digitisation.
Puteoli014.jpg		Epson Scan	3.4.3	Scanned images for digitisation.
Puteoli015.jpg		Epson Scan	3.4.3	Scanned images for digitisation.
Puteoli016.jpg		Epson Scan	3.4.3	Scanned images for digitisation.
Puteoli017.jpg		Epson Scan	3.4.3	Scanned images for digitisation.
3dModel_Macellum.jpg	FINAL_FILES_SUBMITTED_2013/03_AUTOCAD/ 03_MACELLUM/Scans	Epson Scan	3.4.3	Scanned images for digitisation.
Exedera_Projections.tif		Epson Scan	3.4.3	Scanned images for digitisation/ reference.
Pages from Demma_All.jpg		Epson Scan	3.4.3	Scanned images for digitisation/ reference.
Temple_Plan.dwg	FINAL_FILES_SUBMITTED_2013/03_AUTOCAD/ 04_TEMPLE_AUGUSTUS	AutoCAD	2011	Digitised plan of Temple of Augustus.
Temple_section.dwg		AutoCAD	2011	Digitised section of Temple of Augustus.

The completed form should be submitted to the ADS in **digital** form along with the deposited data that it describes, or via e-mail to Catherine Hardman at cs3@york.ac.uk

column_base.tif	FINAL_FILES_SUBMITTED_2013/ 03_AUTOCAD/04_TEMPLE_AUGUSTUS/Plans_Sections	Epson Scan	3.4.3	Scanned images for reference.
ExampleRoof_Front.jpg		Epson Scan	3.4.3	Scanned images for digitisation.
Fluting_details.tif		Epson Scan	3.4.3	Scanned images for digitisation.
flutingdetail.tif		Epson Scan	3.4.3	Scanned images for digitisation.
plan.jpg		Epson Scan	3.4.3	Scanned images for digitisation.
plan.TIF		Epson Scan	3.4.3	Scanned images for digitisation.
PodiumBase.jpg		Epson Scan	3.4.3	Scanned images for digitisation.
podiumBases.jpg		Epson Scan	3.4.3	Scanned images for digitisation.
SectionA_A.tif		Epson Scan	3.4.3	Scanned images for digitisation.
SectionB_B.tif		Epson Scan	3.4.3	Scanned images for digitisation.
Temple_Plan.jpg	FINAL_FILES_SUBMITTED_2013/03_AUTOCAD/ 04_TEMPLE_AUGUSTUS/Screenshots	AutoCAD	2011	Screenshots produced in AutoCAD.
Temple_Section.jpg		AutoCAD	2011	Screenshots produced in AutoCAD.
RioneTerra_Elevation.dwg	FINAL_FILES_SUBMITTED_2013/03_AUTOCAD/ 05_RIONE_TERRA	AutoCAD	2011	Screenshots produced in AutoCAD.
RioneTerra_Plan.dwg		AutoCAD	2011	Screenshots produced in AutoCAD.
Sommella_Elevations.dwg		AutoCAD	2011	Screenshots produced in AutoCAD.
MYSCAN_20071207_0004.jpg	FILES_SUBMITTED_2013/03_AUTOCAD/05_RIONE_TERRA/ Scans	Epson Scan	3.4.3	Scanned images for digitisation.
Puteoli_foro.pdf		Epson Scan	3.4.3	Scanned images for digitisation.
Puteoli031.jpg		Epson Scan	3.4.3	Scanned images for digitisation.
rione terra.jpg		Epson Scan	3.4.3	Scanned images for digitisation.
RioneTerra_2005.tiff		Epson Scan	3.4.3	Scanned images for digitisation.
DeCaro118.jpg		Epson Scan	3.4.3	Scanned images for digitisation.
tavola_0001.TIF		Epson Scan	3.4.3	Scanned images for digitisation.
tavola_0002.TIF		Epson Scan	3.4.3	Scanned images for digitisation.
unione copy_reduced50.jpg		Epson Scan	3.4.3	Scanned images for digitisation.

Valeri_plan.tiff		Epson Scan	3.4.3	Scanned images for digitisation.
RioneTerra.jpg	FINAL_FILES_SUBMITTED_2013/03_AUTOCAD/ 05_RIONE_TERRA/Screenshots	AutoCAD	2011	Screenshots produced in AutoCAD.
Somella_Sections2.jpg		AutoCAD	2011	Screenshots produced in AutoCAD.
Sommella1.jpg		AutoCAD	2011	Screenshots produced in AutoCAD.

Bath_iso.dwg	FINAL_FILES_SUBMITTED_2013/03_AUTOCAD/ 06_TEMPIO_NETTUNO	AutoCAD	2011	Digitised isometric drawing of bathhouses.
Bath_Plan.dwg		AutoCAD	2011	Digitised plan of bathhouses.
Plan_crop.tif	FINAL_FILES_SUBMITTED_2013/03_AUTOCAD/ 06_TEMPIO_NETTUNO/Scans	Epson Scan	3.4.3	Scanned images for digitisation.
sanc_011.jpg		Epson Scan	3.4.3	Scanned images for digitisation.
sanc_012.TIF		Epson Scan	3.4.3	Scanned images for digitisation.
Bath_plan.jpg	FINAL_FILES_SUBMITTED_2013/03_AUTOCAD/ 06_TEMPIO_NETTUNO/Screenshots	AutoCAD	2011	Screenshots produced in AutoCAD.
Isometric_drawing.jpg		AutoCAD	2011	Screenshots produced in AutoCAD.
Warehouses1.dwg	FINAL_FILES_SUBMITTED_2013/03_AUTOCAD/ 07_PORTO_JULIO	AutoCAD	2011	Digitised plan of warehouses.
Warehouses2.dwg		AutoCAD	2011	Digitised plan of warehouses.
Warehouses3.dwg		AutoCAD	2011	Digitised plan of warehouses.
WH_Sec_Aggri_Divided.dwg		AutoCAD	2011	Digitised section of comparative warehouses.
WH_Sec_Aggrippina.dwg		AutoCAD	2011	Digitised section of comparative warehouses.
WH_Sec_Aggrippina.dwg		AutoCAD	2011	Digitised section of comparative warehouses.
Hor1_LocationMap.tif	FINAL_FILES_SUBMITTED_2013/03_AUTOCAD/ 07_PORTO_JULIO/Scans	Epson Scan	3.4.3	Scanned images for digitisation.
img001.jpg		Epson Scan	3.4.3	Scanned images for digitisation.
img002.jpg		Epson Scan	3.4.3	Scanned images for digitisation.
tavola_0009.tif		Epson Scan	3.4.3	Scanned images for digitisation.
tavola_0016.TIF		Epson Scan	3.4.3	Scanned images for digitisation.
Hypothesized_Portico.jpg	FINAL_FILES_SUBMITTED_2013/03_AUTOCAD/ 07_PORTO_JULIO/Screenshots	AutoCAD	2011	Screenshots produced in AutoCAD.
Warehouses.jpg		AutoCAD	2011	Screenshots produced in AutoCAD.
Amph_All.dwg	FINAL_FILES_SUBMITTED_2013/03_AUTOCAD/ 08_AMPHITHEATRE	AutoCAD	2011	Digitised plan and section in AutoCAD.
Amph_Balcony.dwg		AutoCAD	2011	Digitised element of upper balcony in AutoCAD.

Amph_Plan_Sub.dwg		AutoCAD	2011	Digitised plan of underground level in AutoCAD
Amph_Plan.dwg		AutoCAD	2011	Digitised plan of amphitheatre in AutoCAD.
Amph_Section.dwg		AutoCAD	2011	Digitised section of amphitheatre in AutoCAD.

Portico.dwg		AutoCAD	2011	Digitised element of external portico in AutoCAD.
Amphitheatre003.jpg	FILES_SUBMITTED_2013/03_AUTOCAD/ 08_AMPHITHEATRE/Scans	Epson Scan	3.4.3	Scanned images for digitisation.
Amphitheatre031.jpg		Epson Scan	3.4.3	Scanned images for digitisation.
Plan_001.jpg		Epson Scan	3.4.3	Scanned images for digitisation.
Subterrean_Theatre.jpg		Epson Scan	3.4.3	Scanned images for digitisation.
Theatre_Section.jpg		AutoCAD	2011	Screenshots produced in AutoCAD.
Plan_Section_Portico.jpg	FINAL_FILES_SUBMITTED_2013/03_AUTOCAD/ 08_AMPHITHEATRE/Screenshots	AutoCAD	2011	Screenshots produced in AutoCAD.
PorticoandPlan.jpg		AutoCAD	2011	Screenshots produced in AutoCAD.
PorticoMaiuri.jpg		AutoCAD	2011	Screenshots produced in AutoCAD.
Teatro1.jpg		AutoCAD	2011	Screenshots produced in AutoCAD.
Theatre_Plan.jpg		AutoCAD	2011	Screenshots produced in AutoCAD.
Molo_plan.dwg	FINAL_FILES_SUBMITTED_2013/03_AUTOCAD/ 09_MOLO	AutoCAD	2011	Screenshots produced in AutoCAD.
Molo_section.dwg		AutoCAD	2011	Screenshots produced in AutoCAD.
Molo_Modern_plan.tif	FILES_SUBMITTED_2013/03_AUTOCAD/ 09_MOLO/Scans	Epson Scan	3.4.3	Scanned images for digitisation.
MoloPlan_Dubois.tif		Epson Scan	3.4.3	Scanned images for digitisation.
MoloSection_Dubois.tif		Epson Scan	3.4.3	Scanned images for digitisation.
Section_Dubois.jpg	FINAL_FILES_SUBMITTED_2013/03_AUTOCAD/ 09_MOLO/Screenshots	Epson Scan	3.4.3	Scanned images for digitisation.
Pozzuoli_DEM.sxd		ArcGIS	10	Digital elevation model of Campania.

PUTEOLI_POINT.mxd	FINAL_FILES_SUBMITTED_2013/05_GIS/GIS_1	ArcGIS	10	Digital elevation model of Campania.
PUTEOLI_TOPO.mxd		ArcGIS	10	Digital elevation model of Campania.
Landscape_FINAL.max	FINAL_FILES_SUBMITTED_2013/06_MAX/ 01_LANDSCAPE	3dsMax	2011/ 2012	3dsMax model of overall Campanian landscape.
Landscape.jpg	FINAL_FILES_SUBMITTED_2013/06_MAX/ 01_LANDSCAPE/Screenshots	3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Stadio_27_06_12.max	FINAL_FILES_SUBMITTED_2013/06_MAX/ 02_STADIUM	3dsMax	2011/ 2012	3dsMax model of Stadium.
stadio_BW.jpg	FINAL_FILES_SUBMITTED_2013/06_MAX/02_STADIUM/Screenshots	3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Stadio_Hidden_Lines.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.

Stadio_option_1.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Stadio_v3.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Stadio1.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Stadio2.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Stadium_option_2.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Macellum_26_06_12_A.max	13_FINAL_FILES_SUBMITTED_2013/06_MAX/ 03_MACELLUM	3dsMax	2011/ 2012	3dsMax model of Macellum.
Macellum_26_06_12_B.max		3dsMax	2011/ 2012	3dsMax model of Macellum.
26_6_2012.jpg	FINAL_FILES_SUBMITTED_2013/06_MAX/ 03_MACELLUM/Screenshots	3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Apse_Alternative1.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Apse_Alternative1wDecoration.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Apse_Altrenative2.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Mac_doorsANDWindows.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
MAC_FINALSCRSHOT.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Mac_wallytpe1.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Macellum_Completed.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Macellum_door_types1.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Macellum_wallAlter1.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Macellum1.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Macellum2.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Macellum3.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Macellum4.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
MacellumBalcony.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
MacNoDoors.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
MR_render.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
MR_render2.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.

MR_render3.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
MR_render4.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
render.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
render2.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Testing Individual elements.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
TempleAUG_26_06_12.max	FINAL_FILES_SUBMITTED_2013/06_MAX/ 04_CAPITOLIUM	3dsMax	2011/ 2012	3dsMax model of Temple.
Camera3.jpg	FINAL_FILES_SUBMITTED_2013/06_MAX/ 04_CAPITOLIUM/Screenshots	3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
ColumnDetail_1.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
ColumnDetail_2.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Finished_portico.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Hidden_Line.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
MR_Render_Camera1.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
MR_render1.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
MR_render2.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
mr_render3.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
MR_rendercam2.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Temple_Augustus_nearComplete.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Temple_Augustus_Roof.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Temple_augustus_viewfromChamber.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Temple_Augustus.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Temple_Augustus2.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
TEMPLE_FINAL.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Temple_renderFinal 1.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
PI_WH01_27_06_12materials.max	FINAL_FILES_SUBMITTED_2013/06_MAX/ 07_PORTO_JULIO	3dsMax	2011/ 2012	3dsMax model of Warehouses.
BW_Render.jpg	FINAL_FILES_SUBMITTED_2013/06_MAX/ 07_PORTO_JULIO/Screenshots	3dsMax	2011/ 2012	Screenshot produced in 3dsMax.

Horrea_BW.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Horrea_Render.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
mr_render1.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
mr_render2.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
PI_Hidden_Line.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Warehouse_view from portico_2.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Warehouse_view from portico.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Warehouses without golvinRoof.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Warehouses_1.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Warehouses_2.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Warehouses_3.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Warehouses_balcony.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Warehouses_Camera3.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Warehouses_FINALSCRNSHOT.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Warehouses_renderfromBalcony.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Warehouses1.jpg		3dsMax	2011/ 2012	Screenshot produced in

				3dsMax.
Warehouses2.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Warehouses3.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Warehouses4.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
WarehousesRender_2.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Amphitheatre_Full_26_6_12.max	FINAL_FILES_SUBMITTED_2013/06_MAX/08 AMPHITHEATRE	3dsMax	2011/ 2012	3dsMax model of Amphitheatre.
3Stories.jpg	FINAL_FILES_SUBMITTED_2013/06_MAX/08 AMPHITHEATRE/Screenshots	3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
AMPH_FINAL1.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
AMPH_FINAL2.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Amphitheatre.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.

Arcate.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Arches_Cavea.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Balcony_Elements.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Hollow_Egg.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
mr_render_interior.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
mr_render1.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
mr_renderCloseup.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
mr_renderCloseup2.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Orthographic_View.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Outside_2.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Outside.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Portico_Finished.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Portico.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Seating.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Solid.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Vaults_plus_Cavea.jpg		3dsMax	2011/ 2012	Screenshot produced in

				3dsMax.
Vaults_refined.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Vaults.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Mole_28_06_12.max	FINAL_FILES_SUBMITTED_2013/06_MAX/011_MOLO	3dsMax	2011/ 2012	3dsMax model of mole.
Mole_Camera2.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Mole_Conjectural_2.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Mole_Conjectural_Length.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Molo_stage1.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
mr_stage2.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
GF_ALL_Elements_30_06_12_FINAL_1.max	13_FINAL_FILES_SUBMITTED_2013/06_MAX/013_GAP_FILLING	3dsMax	2011/ 2012	3dsMax Model of all model elements.

Addition of buildings.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Additional_Landscape to match sections1.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
AdditionalConjecturalBuildings.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Basic_Conjectural_Elements.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Camera near Amph looking out.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Camera_Bottom of Rione Terra.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Conceptual_RioneTerra.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Contours.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
created landscape.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Extruded Lines based on survey plan.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
ExtrudedShapes RioneTerra1.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Golvin_Hypothesized_Viewer.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Image_Showing data attached to selection.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Landscape_references.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Landscape18_06_12.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Light_Test.jpg		3dsMax	2011/ 2012	Screenshot produced in

				3dsMax.
MainMonuments.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Motion Cameras.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Setting_out_Shapes.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
SimpleRender of plan lines_ZEVI_Survey.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
View1.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Camera_20_35_135mm_2000h.jpg	FINAL_FILES_SUBMITTED_2013/06_MAX/015_ANALYSIS_RENDERERS	3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Camera_20mm.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Camera_35mm.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Camera_135mm.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.

Camera_Capitolium_looking out.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Camera_Directly in front of Mole.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Camera_Golvin_1.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Camera_Golvin_2.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Camera_Golvin_3.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Camera_in_front_of_town_Port.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Camera_in_front_of_town_RT.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Camera_Land_looking_out.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Camera_Looking_N.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Camera_looking_NE_Closer.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Camera_Looking_NE.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Camera_looking_SE.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Camera_lookinng_NW.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Camera_On the way to Procida.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Camera_Ostrow_1.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Camera_Ostrow_2.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Camera_Ostrow_3.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Camera_righthand_extremity_ofmole.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Camera1_20_35_135mm_0700h.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Camera1_20_35_135mm_1900h.jpg		3dsMax	2011/ 2012	Screenshot produced in 3dsMax.
Landscape_22_09_10.vue	FINAL_FILES_SUBMITTED_2013/ 07_VUE	Vue Infinite xstream	8.5	Screenshot produced in 3dsMax.
Landscape_Test_1.vue		Vue Infinite xstream	8.5	Screenshot produced in 3dsMax.
Landscape_22_09_10.jpg		Vue Infinite xstream	8.5	Screenshot produced in 3dsMax.
				Screenshot produced in 3dsMax.
VID 00013-20120609-1354.3gp	FINAL_FILES_SUBMITTED_2013/ 08_Video			Video of Campanian landscape from the sea.

GIS documentation for the Archaeology Data Service

Please fully document and record the GIS that you intend to submit to the ADS for archiving. The table below provides a template for generic information required for archiving GIS, examples are provided in greyed out italics below. Please be sure to also complete the accompanying document (GIS_file_metadata.doc) to provide us with a list of all layers within the project.

Project Title	Pozzuoli topography
Hardware:	Windows 7 PC
Software:	ESRI ArcGIS version 9
Date of Creation:	2010 -2012
Coverage	Campania (Italy)
Author:	Elizabeth De Gaetano
Data Sources:	Main contours provided by the <i>Vincoli archeologici GENERALE + vincoli comune.dwg</i> provided by the Soprintendenza Archeologica di Napoli e Caserta (SANC). Bathymetry contours provided by <i>planimetria strutture sommerse 2000.dwg</i> provided by the SANC.
Projection:	Gauss-Boaga, official Italian national projection.

Scale of data capture:	Various
Scale of data storage:	Various
Assessment of data quality:	None
Method of original data capture:	Imported from AutoCAD files.
Purpose of data creation:	To create a digital elevation model of the area that could then be used if necessary to take large scale measurements.
Ownership	University of Southampton
Comments	None

Project metadata for the Archaeology Data Service

Please complete this form as fully as possible with details of your project. This data will form the basis of an entry about your dataset in the ADS Catalogue, and underpins the computerised searching process that allows users to discover and retrieve information.

<p>1. Title - please indicate the title (and any alternatives) for the dataset.</p> <p>Thesis for the degree of Doctor of Philosophy September 2013: Visualising Pozzuoli: Digital Models for reading Imperial Architecture.</p>
<p>2. Description - please provide a brief summary (max. 200-300 words) of the main aims and objectives of the project and the content of the dataset.</p> <p>Pozzuoli is also located in an area renowned for its volcanic activity, the most notable of which is a phenomenon called Bradyseism: a rapid rising and sinking of the coastline caused by the pressures of subterranean gas and steam. Its richness in archaeological remains coupled with its unique geological setting has resulted in plenty of scholarly research, particularly on the individual public monuments of the port. There has however been little attempt to understand the urban development of the port and when compared to other Campanian towns such as Pompeii and Herculaneum, thematic research in the area is still in its infancy. The context within which the study will take place is the idea of a unified Imperial urban image and the motives for urban intervention that were directed by a single vision, which began during the time of Augustus. The questions arising from this idea are the following: As an affluent port town and serving a very specific commercial role, how was Roman urban imagery applied to Pozzuoli? My approach towards the idea of imagery is a physical re-creation of the visual themes that I wish to explore, in this case the prominence, visibility and the monuments' visual impact on incoming vessels and their relationship with other architectural components (such as residential areas) together with the experiences these buildings may have generated on the town's population.</p>
<p>3. Subject - please suggest keywords for the subject content of the dataset. If possible, please used existing documentation standards (e.g. The RCHME thesaurus of Monument Types, the MDA Archaeological Object Name thesaurus) and indicate which standard you are following. If you use a documentation standard unique to your organisation, it would be extremely helpful if you could send a copy of it with your dataset.</p> <p>RCHME thesaurus of monument types: settlement, commercial, port, town, amphitheatre, dock and harbour installation, forum, promontory fort, grain warehouse, temple.</p>

<p>4. Coverage - please give the current and contemporary name(s) of the country, region, county, town or village covered by the data collection. If names or administrative units were different during the time period covered by the data please record them separately. Please give the dates/period covered by the dataset.</p>
<p>Europe, Italy, Bay of Naples, Pozzuoli, Puteoli Longitude: 14° 7' 24,9" Latitude: 40° 49' 18,20" Postcode 80078</p> <p>Ancient Roman</p>
<p>5. Creators - please list details about the creator(s), compiler(s), funding agencies, or other bodies or people intellectually responsible for the data collection. Information can include forename, surname, affiliation, address, phone, fax, email, or URL.</p>
<p>Elizabeth De Gaetano, Costanza Gialanella, <i>Soprintendenza Archaeologica di Napoli e Caserta</i>.</p>
<p>6. Publisher - please list details about any organisation which has published this data.</p>
<p>None.</p>
<p>7. Identifiers - any project or reference numbers used by you or your organisation to identify the dataset e.g. OASIS ID, NMR ID, HER/SMR IDs, sitecodes, etc.</p>
<p>n/a</p>
<p>8. Dates - when the dataset was created, when the archaeological project was carried out, processing dates, or computerisation dates as appropriate.</p>
<p>1/1/2009 – 30/6/2012</p>
<p>9. Copyright - please provide the name of the copyright holder for the dataset. If the collection was created during your work as an employee, the copyright holder will normally be your employer under your contract of employment. If the material is covered by Crown copyright please indicate this.</p>
<p>The copyright in a thesis submitted for a higher degree remains with me (the candidate) unless otherwise stipulated in any agreement with the sponsor/co-sponsor. The copyright (if any) in any research data I submit with my thesis may already be owned by the University under its Intellectual Property Regulations but if not, then to the extent that copyright subsists in the data, I will remain the copyright owner unless otherwise stipulated in any agreement with the sponsor/co-sponsor. If, however, I have included material that is not entirely of my own creation, e.g. if it is a sponsor/co-sponsor's confidential information, is reproduced from a book, a journal or other published source copies of photographs, drawings, diagrams, data or graphs, then clearance has been obtained from the copyright holder or owner before making copies and I have attached permissions to this form. Further I confirm where a sponsor/co-sponsor has been involved all necessary permissions to publish are in place.</p>

10. Relations - if the data collection was derived in whole or in part from published or unpublished sources, whether printed or machine-readable, please give references to the original material. Please give details of where the sources are held and how they are identified there (e.g. by accession number). If the collection is derived from other sources please indicate whether the data represent a complete or partial transcription/copy and the methodology used for its computerisation. Please provide below full references to any publications about or based upon the data collection.

Dubois, C. (1907) Pouzzoles Antique (Histoire Et Topographie). A. Fontemoing: Paris. Golvin, J.-C. (1988) L'amphithéâtre Romain : Essai Sur La Theorisation De Sa Forme Et De Ses Fonctions. Diffusion de Boccard: Paris. Maiuri, A. (1955) Studi E Ricerche Sull'anfiteatro Flavio Puteolano. G. Macchiaroli: Napoli. Zevi, F. (1993) Puteoli. Banco di Napoli: Napoli. (2002) Italia Antiqua. Envois Degli Architetti Francesi (1811-1950). Italia E Area Mediterranea. Catalogo Della Mostra. In: Beaux-Arts, É.N.S.D., (ed). École nationale supérieure des beaux-arts: Parigi-Roma. Deruyt, C. (1983) Macellum : Marche Alimentaire Des Romains. Institut superieur d'archeologie et d'histoire de l'art, College Erasme: Louvain-la-Neuve. Demma, F. (2007) Monumenti Pubblici Di Puteoli: Per Un Archeologia Dell'architettura. "L'Erma" di Bretschneider: Roma. Sommella, P. (1978) Forma E Urbanistica Di Pozzuoli Romana, Puteoli, Studi Di Storia Antica ;, Vol. 2. [s.n.]: Napoli. Gialanella, C. (2000) Nova Antiqua Phlegraea : Nuovi Tesori Archeologici Dai Campi Flegrei Electa Napoli, Soprintendenza archeologica di Napoli e Caserta: Milano. Gros, P. (1996) L'architecture Romaine Du Début Du Iiie Siècle Av. J.-C. À La Fin Du Haut-Empire. Picard éditeur: Paris. Humphrey, J. (1986) Roman Circuses: Arenas for Chariot Racing. B.T. Batsford Ltd: London.

Above sources are held at the British School at Rome library, available by accession numbers.

Printed original sources also held at the Archives of the *Soprintendenza Archaeologica di Napoli e Caserta*, available via card catalogue.

11. Language - please indicate which language(s) your dataset is in (e.g. English, French, Swahili).

English, Italian, French

12. Resource Type - is this dataset best described as primary data, processed data, an interpretation of data, or a final report?

Processed data, an interpretation of the data, final report

13. Format - please indicate what format your data is saved in (e.g. WordPerfect 5.1, HTML, AutoCAD).

MS word .doc, MS Excel .xls, AutoCAD 2010 .dwg, 3dsMax .max, GIS, .mxd .JPEG, TIFF

The completed form should be submitted to the ADS in **digital** form along with the deposited data that it describes, or via e-mail to Catherine Hardman at csh3@york.ac.uk

Archaeology Data Service: Raster Images Metadata Template

Please record below any raster images that you intend to submit to the ADS for archiving. A spreadsheet version of this file together with an example file is also available to download from the Guidelines for Depositors page. This table may also be expanded with the additional fields mentioned for raster images in the Guidelines.

File Name	Format	Caption
Figure_1.jpg	JPEG Image	Figure 1: Map of Italy and the Islands (after Rosenstein and Morstein-Marx: 2010)
Figure_2.pdf	PDF Document	Figure 2: Map of Italy highlighting the mountain ranges (after LaFleur and Elliot: 2000-2001)
Figure_3.pdf	PDF Document	Figure 3: Map of the Latium and Campanian regions (after Richard A. LaFleur and Tom Elliot: 2000-2001)
Figure_4.jpg	JPEG Image	Figure 4: Orientation map of Campania showing landforms (after Dainelli 1913)
Figure_5.JPG	JPEG Image	Figure 5: Photo highlighting the contrasting elements of the campanian landscape (Photo by Elizabeth De Gaetano)
Figure_6.jpg	JPEG Image	Figure 6: Map showing the volcanic areas in the campanian region (copyright: Google Earth)
Figure_7.jpg	JPEG Image	Figure 7: Map with the ancient names for the various parts of the campanian region (Barrington Atlas: 2000)
Figure_8.jpg	JPEG Image	Figure 8: Map showing the volcanic craters in the area of the <i>Campi Flegrei</i> (copyright: Google Earth)
Figure_9.jpg	JPEG Image	Figure 9: Delli Falconi's A.D. 1539 gravure showing crustal deformation of Pozzuoli Bay in connection with 1538 volcanic eruption of Monte Nuovo (After Mohrange and Mariner 2006)
Figure_10.JPG	JPEG Image	Figure 10: Photo of the <i>Macellum</i> also commonly known as the <i>Serapeum</i> with the stained columns due to immersion (photo Elizabeth De Gaetano)
Figure_11.jpg	JPEG Image	Figure 11: The columns of the <i>Macellum</i> as features on Charles Lyell's "Principles of Geology" first published in 1830
Figure_12.jpg	JPEG Image	Figure 12: Remains of Pozzuoli's Roman market, showing biological perforations up to height of 7 ± 10 m above present biological sea level (After Mohrange and Mariner 2006)

File Name	Format	Caption
Figure_13a.jpg	JPEG Image	Figure 13a: Figure showing the local winds. Winds from the N/NW most common in the summer, are not shown (After Heikell 2011)
Figure_13b.jpg	JPEG Image	Figure 13b: Figures showing the predominant currents in the Mediterranean sea (After Heikell 2011)
Figure_14a.pdf	PDF Document	Figure 14a: Map of the Puteolean region (after Richard A. LaFleur and T. Elliot, N. Feldl, A. Retzleff, J. Uy : 2000-2001)
Figure_14b.tiff	TIFF Image	Figure 14b: Map of Puteoli with the various <i>regiones</i> as outlined by Camodeca (after Camodeca 1977)
Figure_15.jpg	JPEG Image	Figure 15 - Plan of the <i>Puteoli</i> amphitheatre (after Golvin: 1988)
Figure_16.jpg	JPEG Image	Figure 16: Plan of the subterranean area and section of the <i>Puteoli</i> amphitheatre (after Golvin 1988)
Figure_17.jpg	JPEG Image	Figure 17: Plan, section and isometric drawings of the Republican amphitheatre (after Sommella 1978)
Figure_18.jpg	JPEG Image	Figure 18: Plan of the <i>Macellum</i> of <i>Puteoli</i> (after De Ruyt: 1983)
Figure_19.jpg	JPEG Image	Figure 19: Plan of Pozzuoli's stadium (after Zevi:1993)
Figure_20.TIF	TIFF Image	Figure 20: Isometric drawing of the surviving remains of the Roman baths in <i>Puteoli</i> Soprintendenza Napoli e Caserta (SANC)
Figure_21.tif	TIFF Image	Figure 21: Plan of <i>Puteoli</i> with archaeological remains noted (after Zevi:1993)
Figure_22.jpg	JPEG Image	Figure 22: Plan of the Rione Terra promontory with areas marked for digitization (after Crimaco <i>et al.</i> 2001)
Figure_23.jpg	JPEG Image	Figure 23: Plan and sketch of the <i>Capitolium</i> of Rione Terra (drawn by Sangallo reproduced in Crimaco <i>et al.</i> 2001)
Figure_24.jpg	JPEG Image	Figure 24: Plan and drawing of the façade of the <i>Maison Carrée</i> at Nîmes (after Jean Baptiste d'Agincourt: 1823)
Figure_25.TIF	TIFF Image	Figure 25: Plan of the underwater remains in the Pozzuoli harbor (by SANC)
Figure_26.jpg	JPEG Image	Figure 26: Outline of Rione Terra with hypothesized location of the <i>Emporium</i> (Crimaco in Zevi 1993 - elaborated by F. Esposito)
Figure_27.jpg	JPEG Image	Figure 27: The <i>Bellori</i> drawing reproduced in DeCaro 2002

File Name	Format	Caption
Figure_28.tif	TIFF Image	Figure 28: Dubois' drawing of the remains of the ancient pier of Pozzuoli (Dubois: 1907)
Figure_29.jpg	JPEG Image	Figure 29: Detail of the Prague flask (after Pianter: 1975)
Figure_30.TIF	TIFF Image	Figure 30: Detail of <i>Porto Julius</i> underground remains with highlighted sections used for digitization (SANC)
Figure_31.tif	TIFF Image	Figure 31: Detail of the Pilkington glass flask (after Painter: 1975)
Figure_32.tif	TIFF Image	Figure 32: Detail of the Odemira flask (after Painter: 1975)
Figure_33.tif	TIFF Image	Figure 33: Detail of the Populonia flask (after Painter: 1975)
Figure_34.tif	TIFF Image	Figure 34: Detail of the Ampurias flask (after Painter: 1975)
Figure_35.tif	TIFF Image	Figure 35: Detail of the Rome flask (after Painter: 1975)
Figure_36.jpg	JPEG Image	Figure 36: Isometric reconstruction of the <i>Puteoli</i> amphitheatre (after Dubois 1907)
Figure_37.tif	TIFF Image	Figure 37: Section drawing of the <i>Puteoli</i> amphitheatre (after Maiuri: 1955)
Figure_38.jpg	JPEG Image	Figure 38: Detail of the exterior portico of the <i>Puteoli</i> amphitheatre (after Maiuri: 1955)
Figure_39.tif	TIFF Image	Figure 39: Plan of the <i>Puteoli</i> amphitheatre (after Maiuri 1955)
Figure_40.jpg	JPEG Image	Figure 40: Drawings of architectural details of the <i>Puteoli</i> amphitheatre (after Maiuri: 1955)
Figure_41.tif	TIFF Image	Figure 41: Section and exterior drawings of the Colosseum, Rome (after Claridge: 1998)
Figure_42.TIF	TIFF Image	Figure 42: Section drawing of the <i>Capitolium</i> (incorporated within the church) (SANC)
Figure_43.TIF	TIFF Image	Figure 43: Plan of the <i>Capitolium</i> (incorporated within the church) (SANC)
Figure_44.jpg	JPEG Image	Figure 44: Column details of the <i>Capitolium</i> in Pozzuoli (SANC)
Figure_45.TIF	TIFF Image	Figure 45: Column base details of the <i>Capitolium</i> in Pozzuoli (SANC)
Figure_46.TIF	TIFF Image	Figure 46: Marble details of the <i>Capitolium</i> in Pozzuoli (SANC)
Figure_47.jpg	JPEG Image	Figure 47: Drawings of the Temple of <i>Apollo Palatinus</i> and <i>Apollo in circo</i> (after Gros: 1996)
Figure_48.jpg	JPEG Image	Figure 48: Drawings of types of podium bases (after Gros: 1996)
Figure_49.jpg	JPEG Image	Figure 49: Section drawing of a temple podium construction (after Gros: 1996)
Figure_50.jpg	JPEG Image	Figure 50: Plan of the <i>Macellum</i> in Pozzuoli (after Maiuri 1958, De Ruyt: 1983)

File Name	Format	Caption
Figure_51.jpg	JPEG Image	Figure 51: Plans of the <i>Macellum</i> in Pozzuoli (SANC)
Figure_52.tif	JPEG Image	Figure 52: Section drawings of the vestibule in the <i>Macellum</i> (after Demma: 2007)
Figure_53.jpg	JPEG Image	Figure 53: Drawings of the <i>Macellum</i> by Christie (as reproduced in <i>Italia Antiqua</i> : 2002)
Figure_54.jpg	JPEG Image	Figure 54: Watercolour reconstruction by Golvin (Golvin in Reddé: 2008)
Figure_55.jpg	JPEG Image	Figure 55: Volumetric reconstructions by Demma (after Demma: 2007)
Figure_56.jpg	JPEG Image	Figure 56: Watercolour reconstructions by Christie (as reproduced in <i>Italia Antiqua</i> : 2002)
Figure_57.tif	TIFF Image	Figure 57: Plan of some of the warehouses in the area of <i>Porto Julio</i> (SANC)
Figure_58.jpg	JPEG Image	Figure 58: Section drawing of the <i>Horea Aggrippiana</i> (after Gros: 1996)
Figure_59.jpg	JPEG Image	Figure 59: Section drawing of the <i>Horea Aggrippiana</i> (after Gros: 1996)
Figure_60.jpg	JPEG Image	Figure 60: Watercolour reconstruction of Roman Puteoli by Golvin (Golvin in Reddé: 2008)
Figure_61.jpg	JPEG Image	Figure 61: Plan of the stadium in Pozzuoli (SANC reproduced in Zevi 1993)
Figure_62.jpg	JPEG Image	Figure 62: Plan of the stadium in Pozzuoli (SANC reproduced in Gialanella: 2009)
Figure_63.jpg	JPEG Image	Figure 63: Section of the <i>Circus Maximus</i> in Rome (reproduced in Humphrey: 1986)
Figure_64.jpg	JPEG Image	Figure 64: Section drawing of the <i>ambulacro</i> and the <i>vomitaria</i> of the Stadium in Pozzuoli (SANC)
Figure_65.tif	TIFF Image	Figure 65: Plan of the modern mole of Pozzuoli (SANC)
Figure_66.tif	TIFF Image	Figure 66: Plan of the roman remains of the Pozzuoli mole as recorded by Dubois (1907)
Figure_67.tif	TIFF Image	Figure 67: Section of the roman remains of the Pozzuoli mole as recorded by Dubois (1907)
Figure_68.jpg	JPEG Image	Figure 68: Plan and isometric drawings of the visible remains of the Roman baths in Pozzuoli (SANC)
Figure_69.JPG	JPEG Image	Figure 69: Map of the underwater contour data (Istituto Idrografico della Marina, Italy: 1987)
Figure_70.TIF	TIFF Image	Figure 70: Map of the underwater contours of Pozzuoli including the underwater remains of the <i>Portus Julius</i> (SANC)

File Name	Format	Caption
Figure_71.jpg	JPEG Image	Figure 71: Plan of the Rione Terra promontory in Pozzuoli with the annotated archaeological remains (after De Caro: 2002)
Figure_72.tiff	TIFF Image	Figure 72: Plan of the Rione Terra promontory in Pozzuoli with the annotated archaeological remains (after Valeri: 2005)
Figure_73.jpg	JPEG Image	Figure 73: Landscape cross-section drawings with the positions of the major archaeological remains (after Sommella 1978)
Figure_74.TIF	TIFF Image	Figure 74: Plan and sections of the Rione Terra promontory with annotated spot heights above sea-level (SANC)
Figure_75.TIF	TIFF Image	Figure 75: Detail of map from Zevi's 1999 gazetteer with outlines of the larger archaeological remains and stars used for the less recognisable remains (SANC as reproduced in Zevi 1999)
Figure_76.jpg	JPEG Image	Figure 76: Plan of Pozzuoli highlighting the various areas as interpreted by Paolo Sommella (1978)
Figure_77.tiff	TIFF Image	Figure 77: Modern plan of Pozzuoli showing the areas of Via Carlo Maria Rosini (A) and Via Ragnisco (B) (Google Maps)
Figure_78.jpg	JPEG Image	Figure 78: Plan of Pozzuoli highlighting the various areas as interpreted by Paolo Sommella (1978)
Figure_79.jpg	JPEG Image	Figure 79: Plan of Pozzuoli showing the hypothesised location of the town's <i>Forum</i> (after Camodeca 1977)
Figure_80.jpg	JPEG Image	Figure 80: Golvin's watercolour reconstruction placing the forum of Pozzuoli as suggested by Camodeca, circled in red (Golvin in Reddè: 2008)
Figure_81_Ostrow_1.jpg	JPEG Image	Figure 81: Render image of the camera labelled Ostrow_1 (EDG)
Figure_82_Ostrow_2.jpg	JPEG Image	Figure 82: Render image of the camera labelled Ostrow_2 (EDG)
Figure_83_Ostrow_3.jpg	JPEG Image	Figure 83: Render image of the camera labelled Ostrow_3 (EDG)
Figure_84.rtf	RTF file	Figure 84: Buildings represented in the Bellori drawing compared with the conceptual buildings reconstructed digitally (EDG)
Figure_85.jpg	JPEG Image	Figure 85: Suggested viewer by Golvin (2008)
Figure_86_Golvin_1.jpg	JPEG Image	Figure 86: Render image of the camera labelled Golvin_1 (EDG)

File Name	Format	Caption
Figure_87_Golvin_2.jpg	JPEG Image	Figure 87: Render image of the camera labelled Golvin_2 (EDG)
Figure_88_Golvin_3.jpg	JPEG Image	Figure 88: Render image of the camera labelled Golvin_3 (EDG)
Figure_89.rtf	RTF file	Figure 89: Comparison of reconstructed image (EDG)
Figure_90.rtf	RTF file	Figure 90: Comparison of reconstructed image highlighting Rione Terra (EDG)
Figure_91.rtf	RTF file	Figure 91: Comparison of reconstructed image of the central area of the port (EDG)
Figure_92.rtf	RTF file	Figure 92: Comparison of reconstructed image of Rione Terra (EDG)
Figure_93.rtf	RTF file	Figure 93: Comparison of reconstructed image with camera facing the mole (EDG)
Figure_94_20mm.jpg	JPEG Image	Figure 94: Digital image with camera lens at 20mm (EDG)
Figure_95_35mm.jpg	JPEG Image	Figure 95: Digital image with camera lens at 35mm (EDG)
Figure_96_135mm.jpg	JPEG Image	Figure 96: Digital image with camera lens at 135mm (EDG)
Figure_97_135mm_0700h.jpg	JPEG Image	Figure 97: Digital image with lighting set to 07.00h (EDG)
Figure_98_135mm_0800h.jpg	JPEG Image	Figure 98: Digital image with lighting set to 08.00h (EDG)
Figure_99_135mm_1400h.jpg	JPEG Image	Figure 99: Digital image with lighting set to 14.00h (EDG)
Figure_100_135mm_1900h.jpg	JPEG Image	Figure 100: Digital image with lighting set to 19.00h (EDG)
Figure_101_35_135mm_2000h.jpg	JPEG Image	Figure 101: Digital image with lighting set to 20.00h (EDG)
Figure_102.jpg	JPEG Image	Figure 102: Hypothetical view of camera looking out towards the sea from the columns of the <i>Capitolium</i> (EDG)
Plate_1.jpg	JPEG Image	Plate 1: Photo of the promontory of Rione Terra at dusk (photographer looking north) (copyright Panoramio)
Plate_2.jpg	JPEG Image	Plate 2: Photo of the promontory of Rione Terra during the day (photographer looking north) (copyright Panoramio)
Plate_3.jpg	JPEG Image	Plate 3: Photo of the promontory of Rione Terra at dusk (photographer looking north east) (copyright Panoramio)
Plate_4.jpg	JPEG Image	Plate 4: Photo of the promontory of Rione Terra at dusk (photographer looking north east) (copyright Panoramio)
Plate_5.jpg	JPEG Image	Plate 5: Photo of the promontory of Rione Terra (photographer looking north east but from further afield) (Copyright Panoramio)

File Name	Format	Caption
Plate_6.jpg	JPEG Image	Plate 6: Photo taken directly in front of the seaward tip of the harbour mole (Copyright Panoramio)
Plate_7.jpg	JPEG Image	Plate 7: Photo taken from the right-hand side again at the extremity of the modern mole (Copyright Panoramio)
Plate_8.jpg		Plate 8: Close up photo of the Rione Terra taken southwest (left of) the harbour mole (Copyright Panoramio)
Plate_9.jpg	JPEG Image	Plate 9: Photo taken just in front of the bay of Pozzuoli (Copyright Panoramio)
Plate_10.jpg	JPEG Image	Plate 10: Photo taken from the sea showing a considerable portion (but not all) of the town and gulf of Pozzuoli (Copyright Panoramio)
Plate_11.jpg	JPEG Image	Plate 11: Photo taken from the SE (photographer looking NW) of Rione Terra (Copyright Panoramio)
Plate_12.jpg	JPEG Image	Plate 12: Photo taken from more or less the same distance (if perhaps a little further away) but SW of Rione Terra (photographer looking NE) (Copyright Panoramio)
Plate_13a.jpg	JPEG Image	Plate 13a: Possibly a photo of Monte Nuovo which dominates the coastline from this viewpoint as is evidenced by how dwarfed the buildings below (Copyright Panoramio)
Plate_13b.jpg	JPEG Image	Plate 13b: image taken from a SW (photographer looking NE) direction left of the harbour mole with contrast digitally enhanced (Copyright Panoramio)
Plate_14.tiff	JPEG Image	Plate 14: Comparison of Google Earth (copyright Google Earth) image compared with photo taken from Castello di Baia (EDG)
Plate_15.jpg	Tiff Image	Plate 15: Google image with the viewing locations as mentioned by Miniero
Plate_16.jpg	JPEG Image	Plate 16: G Hoefnagel (Cologne 1572-1598) for the <i>Civitates Orbis Terrarum</i> by G. Braun
Plate_17.jpg	JPEG Image	Plate 17: Topographic map by N. Van Aelst (1527-1612)
Plate_18.jpg	JPEG Image	Plate 18: Mario Cartaro <i>Ager Puteolanus</i> (Rome 1584)
Plate_19a.tiff/Plate_19b.tiff	Tiff Image	Plate 19: Francesco Villamena's <i>Ager Puteolanus</i>
Plate_20.jpg	JPEG Image	Plate 20: <i>Agro Neapoletano</i> published in 1793

File Name	Format	Caption
Plate_21.jpg	JPEG Image	Plate 21: <i>Nullus in orbe locus praelucet amoenis Baiis</i> - G. Hoefnagel (engraving)
Plate_22.jpg	JPEG Image	Plate 22: <i>Explicatio aliquot locorum quae Puteolis spectantur</i> - N. Van Aelst
Plate_23.jpg	JPEG Image	Plate 23: Jacobo Lauro <i>Topographia Puteolorum</i> (1626)
Plate_24.jpg	JPEG Image	Plate 24: <i>Carte du Golf de Pouzzoles avec une partie des Champs Plégréens dans la Terre de Labour</i> , F.e Pietro de la Vega (drawing) Perrier e Drouet (engraving)
Plate_25.jpg	JPEG Image	Plate 25 : <i>Amphithéâtre de Pozzuol</i> , Des Moulin (engraving), Varin (drawing) (etching)
Plate_26.jpg	JPEG Image	Plate 26: <i>Veduta di Pozzuoli da oriente</i> , P. Fabris (copper outline and watercolour)
Plate_27.jpg	JPEG Image	Plate 27: <i>Veduta presa da sopra Pozzuoli</i> , P. Fabris (copper outline and watercolour)
Plate_28.jpg	JPEG Image	Plate 28: <i>Veduta degli avanzi di tredici pile dell'antico porto di Pozzuoli</i> - Ph. Morghen (engraving)
Plate_29.jpg	JPEG Image	Plate 29: <i>Veduta dell' Antico Tempio Pseudoperittero che è in Pozzuoli</i> - Ph. Morghen (engraving)
Plate_30.jpg	JPEG Image	Plate 30: <i>Veduta a Ponente degli avanzi di un insigne edificio in Pozzuoli da molti creduto il Tempio di Serapide...</i> F. Morghen (engraving)
Plate_31.jpg	JPEG Image	Plate 31: <i>Veduta di Pozzuoli presa dal monte nuovo</i> - Ph. Hackert, W.F. Gmelin (engraving)
Plate_32.JPG	JPEG Image	Plate 32: Cross-section of the <i>Plastico</i> model reconstruction of the <i>Macellum</i> (Based on Christie's watercolour) (EDG)
Plate_33.JPG	JPEG Image	Plate 33: Photo of the rooftop details of the <i>Plastico</i> model reconstruction of the <i>Macellum</i> (Based on Christie's watercolour) (EDG)

File Name	Format	Caption
Plate_34.JPG	JPEG Image	Plate 34: Cross-section of the <i>Plastico</i> model reconstruction of the <i>Macellum</i> (Based on Christie's watercolour) (EDG)
SS_Amph1.jpg	JPEG Image	Amphitheatre screenshot 1: Plan of the amphitheatre in Pozzuoli digitised in AutoCAD (EDG)
SS_Amph2.jpg	JPEG Image	Amphitheatre screenshot 2: Plan of the amphitheatre in Pozzuoli with addition of seating in AutoCAD (EDG)
SS_Amph3.tiff		Amphitheatre screenshot 3: Addition of portico elevation drawing in AutoCAD (EDG)
SS_Amph4.jpg	JPEG Image	Amphitheatre screenshot 4: Creation of underground vaults in 3ds Max (EDG)
SS_Amph5.jpg	JPEG Image	Amphitheatre screenshot 5: Building of amphitheatre portico in 3ds Max (EDG)
SS_Amph6.jpg	JPEG Image	Amphitheatre screenshot 6: Exterior of amphitheatre with mental ray lighting in 3ds Max (EDG)
SS_Amph7.jpg	JPEG Image	Amphitheatre screenshot 7: Cross-section of the amphitheatre showing the columns on the upper tier of the seating (EDG)
SS_Capit1.tiff	Tiff Image	<i>Capitolium</i> screenshot 1: Digitised section of the <i>Capitolium</i> in AutoCAD (EDG)
SS_Capit2.tiff	Tiff Image	<i>Capitolium</i> screenshot 2: Digitised plan of the <i>Capitolium</i> in AutoCAD (EDG)
SS_Capit3.jpg	JPEG Image	<i>Capitolium</i> screenshot 3: Volumetric model of the <i>Capitolium</i> in 3ds Max (EDG)
SS_Capit4.jpg	JPEG Image	<i>Capitolium</i> screenshot 4: Simple colours used in the render of the <i>Capitolium</i> of Pozzuoli (EDG)
SS_Land1.jpg	JPEG Image	Landscape screenshot 1: Contour data imported into 3ds Max (EDG)
SS_Land2.tiff	Tiff Image	Landscape screenshot 2: Screenshot showing contour data in AutoCAD (SANC)
SS_land3.jpg	JPEG Image	Landscape screenshot 3: Contour data as evidenced in GIS showing missing contour data (EDG)
SS_Land4.tiff	Tiff Image	Landscape screenshot 4: AutoCAD contour map showing missing contour areas (SANC)
SS_Land5.jpg	JPEG Image	Landscape screenshot 5: Sommella's cross-sections being inserted into 3ds Max to help with the addition of missing terrain information (EDG)
SS_Land6.jpg	JPEG Image	Landscape screenshot 6: Volumetric reconstruction of the (hypothetical) Rione Terra promontory in 3ds Max (EDG)

SS_Land7.tiff	Tiff Image	Landscape screenshot 7: AutoCAD map with digitised archaeological remains added to the Rione Terra in addition to Zevi's gazetteer (1993) (EDG)
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File Name	Format	Caption
SS_Land8.tiff	Tiff Image	Landscape screenshot 8: AutoCAD map with digitised archaeological remains as noted in Zevi's gazetteer (1993) (EDG)
SS_Land9.tiff	Tiff Image	Landscape screenshot 9: AutoCAD map of Pozzuoli with various commercial areas as hypothesized by Sommella (1978) (EDG)
SS_Land10.jpg	JPEG Image	Landscape screenshot 10: Data attached to volumetric models in 3ds Max (EDG)
SS_Land11.jpg	JPEG Image	Landscape screenshot 11: Imported main monuments in the overall landscape (EDG)
SS_Land12.jpg	JPEG Image	Landscape screenshot 12: Simple conceptual extrusion of the imported AutoCAD lines in 3ds Max (EDG)
SS_Land13.jpg	JPEG Image	Landscape screenshot 13: Simple conceptual extrusion of the imported AutoCAD lines in 3ds Max (EDG)
SS_Land14.jpg	JPEG Image	Landscape screenshot 14: Hypothetical volumetric models used in the gap filling process with simple colours and layers attached (EDG)
SS_Land15.jpg	JPEG Image	Landscape screenshot 15: Hypothetical volumetric models used in the gap filling process with simple colours and layers attached (EDG)
SS_Land16		Landscape screenshot 16: Screenshot showing the various layers used during the volumetric modelling of hypothetical gap-filling buildings in 3ds Max (EDG)
SS_Macell1.tiff	Tiff Image	<i>Macellum</i> screenshot 1: Digitised plan of the <i>Macellum</i> in AutoCAD (EDG)
SS_Macell2.tiff	Tiff Image	<i>Macellum</i> screenshot 2: Digitised section of the <i>Macellum</i> in AutoCAD (EDG)
SS_Macell3.jpg	JPEG Image	<i>Macellum</i> screenshot 3: Volumetric reconstruction of the vestibule of the <i>Macellum</i> In 3ds Max (EDG)
SS_Macell4.jpg	JPEG Image	<i>Macellum</i> screenshot 4: Volumetric reconstruction of the vestibule of the <i>Macellum</i> In 3ds Max with addition interpretive element by Christie (EDG)
SS_Macell5.jpg	JPEG Image	<i>Macellum</i> screenshot 5: Volumetric reconstruction of the vestibule of the <i>Macellum</i> In 3ds Max (EDG)
SS_Macell6.jpg	JPEG Image	<i>Macellum</i> screenshot 6: Conjectural volumetric interpretations of the exterior of the <i>Macellum</i> (EDG)

File Name	Format	Caption
SS_Macell7.jpg	JPEG Image	<i>Macellum</i> screenshot 7: Conjectural volumetric interpretations of the exterior of the <i>Macellum</i> (EDG)
SS_Macell8.jpg	JPEG Image	<i>Macellum</i> screenshot 8: Render of the central <i>tholos</i> of the <i>Macellum</i> using simple white colours (EDG)
SS_Macell9.jpg	JPEG Image	<i>Macellum</i> screenshot 9: Render of the central <i>tholos</i> of the <i>Macellum</i> using simple white and terracotta colours (EDG)
SS_Molo1.jpg	JPEG Image	Harbour mole screenshot 1: Volumetric reconstruction of the harbour mole in 3ds Max (EDG)
SS_Molo2.jpg	JPEG Image	Harbour mole screenshot 2: Render with simple colours of the harbour mole in 3ds Max (EDG)
SSPorto_Jul1.jpg	JPEG Image	<i>Porto Julio</i> screenshot 1: Volumetric reconstruction of warehouse rooms in 3ds Max (EDG)
SSPorto_Jul2.jpg	JPEG Image	<i>Porto Julio</i> screenshot 2: Volumetric reconstruction of the hypothetical balcony elements in 3ds Max (EDG)
SSPorto_Jul3.jpg	JPEG Image	<i>Porto Julio</i> screenshot 3: Render of the <i>Porto Julio</i> hypothetical façade using simple colours in 3ds Max (EDG)
SS_Stadio1.jpg	JPEG Image	Stadium screenshot 1: Volumetric reconstruction of the Stadium of Pozzuoli in 3ds Max (EDG)
SS_Stadio2.jpg	JPEG Image	Stadium screenshot 2: Volumetric reconstruction of the Stadium of Pozzuoli in 3ds Max (EDG)
SS_stadio3.jpg	JPEG Image	Stadium screenshot 3: Hypothesized exterior of the stadium compared to screenshot 2 (EDG)

File Name	Software
Measurements.xls	Microsoft Excel 2011



**Archaeology Data Service:
Spreadsheet Metadata**

Worksheet Name	Worksheet purpose	Number of rows	Field name	Description
LANDSCAPE	Documentation	9	LANDSCAPE ELEMENT(S), Vector data (Layers) used, Raster data used for element, Provenance, Notes, GIS OUPUT (ArcMap), Notes on, VUE OUTPUT, Notes on.	Progressive note taking of the reconstruction process of the landscape elements.
MAIN MONUMNETS	Documentation	10	MONUMENT , Length (m), Width (m), Height (m), Notes, Work to do on the model, Images used for the Model, Sourced from, Used for, Output	Progressive note taking of the reconstruction process of the individual monuments and their elements.
GAP FILLING	Cross checking of data sources	6	Monument type, CrossRef No. Zevi, Ref No. Sommella, Sommella gazetteer References (pages), Other references, notes on:	Initial cross-checking exercise between the numbers used in the gazetteer published by Zevi and the earlier one by Sommella.
Sommella Gazetteer	Breaking down of complex information	4	Sector 1, Sector 2, Sector 3, Sector 4,	A list of the archaeology as Documentwnted by Paolo Sommella in ?

Zevi Gazetteer

Breaking down of complex
information

22 Tablet no., Arch no., Road, Type of
remains, Initial description or
identification, Association,
Described quantity/Surviving
remains, Material and/or opera
type, Material and/or opera type,
Commonly known as, date
assigned, Secondary remains,
Description, Association, Quantity,
Material, Commonly known as,
Third set remains, Third set
Association, Third set Material,
Associated Bibliography

An exercise in breaking down as
much of the archaeological data listed
in Zevi's (1990) gazetteer to glean as
much information about each
archaeological element and to then
see if this information could then be
used during the modelling process.

Archaeology Data Service: CAD and Vector Images Metadata template

Please record below any CAD/vector images that you intend to submit to the ADS for archiving. A spreadsheet version of this file together with an example file is also available to download from the Guidelines for Depositors page.

CAD (Landscape)

File Name	Software	Conventions	Notes	Caption
Contours.dwg	AutoCAD 2010	n/a	<i>Soprintendenza Archaeologica di Napoli e Caserta</i>	n/a
Contours_Annotation.dwg	AutoCAD 2010	n/a	<i>Soprintendenza Archaeologica di Napoli e Caserta</i>	n/a
Contours_Polygons.dwg	AutoCAD 2010	n/a	<i>Soprintendenza Archaeologica di Napoli e Caserta</i>	n/a
Contours_Points.dwg	AutoCAD 2010	n/a	<i>Soprintendenza Archaeologica di Napoli e Caserta</i>	n/a
Pozzuoli_Bathymetry.dwg	AutoCAD 2010	n/a	<i>Soprintendenza Archaeologica di Napoli e Caserta</i>	n/a

CAD (Stadium)

File Name	Software	Conventions	Notes	Caption
Stadium.dwg	AutoCAD 2010	Raster Images = blue, Scale = red Dashed lines = Hypothesized lines, text = cyan	Digitised by EDG from plan = Zevi_scan.jpg	n/a
Stadium_section.dwg	AutoCAD 2010	Raster Images = blue, Scale = red Dashed lines = Hypothesized lines, text = cyan	Digitised by EDG from plan = Humphrey_Section	n/a

CAD (Macellum)

File Name	Software	Conventions	Notes	Caption
MAC_Plan.dwg	AutoCAD 2010	Raster Images = blue, Scale = red	Digitised by EDG from plan = DeRuyt: 1983	n/a
MAC_Section.dwg	AutoCAD 2010	Raster Images = blue, Scale = red	Digitised by EDG from plan of = Exedra projection.tif	n/a

CAD (Temple of Augustus)

File Name	Software	Conventions	Notes	Caption
Temple_Plan.dwg	AutoCAD 2010	Raster Images = blue, Scale = red	Digitised by EDG from plan = Plan.jpg	n/a
Temple_section.dwg	AutoCAD 2010	Raster Images = blue, Scale = red Different architectural groups on separate layers.	Digitised by EDG from plan = SectionA_A	n/a

CAD (Rione Terra)

File Name	Software	Conventions	Notes	Caption
RioneTerra_Plan.dwg	AutoCAD 2010	Raster Images = blue, Scale = red, singular elements on individual layers.	Digitised by EDG from plan(s) of DeCaro118.jpg	n/a
RioneTerra_Elevations.dwg	AutoCAD 2010	Raster Images = blue, Scale = red, singular elements on individual layers.	Digitised by EDG from plan(s) of Sommella080.jpg	n/a
Plan_Elevation.dwg	AutoCAD 2010	Raster Images = blue, Scale = red, singular elements on individual layers.	Digitised by EDG from plan(s) of tavola_0001.TIF	n/a

CAD (Tempio di Nettuno)

File Name	Software	Conventions	Notes	Caption
Bath_Plan.dwg	AutoCAD 2010	Raster Images = blue, Scale = red, singular elements on individual layers.	Digitised by EDG from plan(s) of Plan:crop.tif and sanc_011.jpg	n/a
Bath_iso.dwg	AutoCAD 2010	Raster Images = blue, Scale = red, singular elements on individual layers.	Digitised by EDG from plan(s) of sanc_12.TIF	n/a

CAD (Porto Julio Warehouses)

File Name	Software	Conventions	Notes	Caption
Warehouses1.dwg	AutoCAD 2010	Raster Images = blue, Scale = red, singular elements on individual layers.	Digitised by EDG from plan(s) of tavola_0016.tif	n/a
Warehouses2.dwg	AutoCAD 2010	Raster Images = blue, Scale = red, singular elements on individual layers.	Digitised by EDG from plan(s) of tavola_0009.tif	n/a
Warehouses3.dwg	AutoCAD 2010	Raster Images = blue, Scale = red, singular elements on individual layers.	Digitised by EDG from plan(s) of tavola_0016.tif	n/a

WH_Sec_Aggri_Divided.dwg	AutoCAD 2010	Raster Images = blue, Scale = red, singular elements on individual layers.	Digitised by EDG from plan(s) of img_001.jpg	n/a
WH_Sec_Aggrippina.dwg	AutoCAD 2010	Raster Images = blue, Scale = red, singular elements on individual layers.	Digitised by EDG from plan(s) of img_001.jpg	n/a
WH_Sec_Partial.dwg	AutoCAD 2010	Raster Images = blue, Scale = red, singular elements on individual layers.	Digitised by EDG from plan(s) of img_002.jpg	n/a

CAD (Amphitheatre)

File Name	Software	Conventions	Notes	Caption
Amph_All.dwg	AutoCAD 2010	Raster Images = blue, Scale = red, singular elements on individual layers.	Digitised by EDG from plan(s) of Amphitheatre003.jpg, Amphitheatre0031.jpg, Plan_001.jpg, Subterrean_Theatre.jpg, Theatre_Section.jpg.	n/a
Amph_Plan.dwg	AutoCAD 2010	Raster Images = blue, Scale = red, singular elements on individual layers.	Digitised by EDG from plan(s) of Plan_001.jpg.	n/a
Amph_Plan_Sub.dwg	AutoCAD 2010	Raster Images = blue, Scale = red, singular elements on individual layers.	Digitised by EDG from plan(s) of Subterrean_Theatre.jpg	n/a
Amph_Section.dwg	AutoCAD 2010	Raster Images = blue, Scale = red, singular elements on individual layers.	Digitised by EDG from plan(s) of Theatre_Section.jpg.	n/a
Amph_Balcony.dwg	AutoCAD 2010	Raster Images = blue, Scale = red, singular elements on individual layers.	Digitised by EDG from plan(s) of Amphitheatre003.jpg.	n/a
Portico.dwg	AutoCAD 2010	Raster Images = blue, Scale = red, singular elements on individual layers.	Digitised by EDG from plan(s) of Amphitheatre0031.jpg	n/a

CAD (Harbour Mole)

File Name	Software	Conventions	Notes	Caption
Molo_plan.dwg	AutoCAD 2010	Raster Images = blue, Scale = red, singular elements on individual layers.	Digitised by EDG from plan(s) of MoloPlan_Dubois.tif	n/a
Molo_section.dwg	AutoCAD 2010	Raster Images = blue, Scale = red, singular elements on individual layers.	Digitised by EDG from plan(s) of MoloSection_Dubois.tif	n/a

Other vector images (3dsMax files)

File Name	Software	Conventions	Notes	Caption
Landscape_FINAL.max	3dsMax	Singular elements on individual layers.		n/a
Stadio_27_06_12.max	3dsMax	Singular elements on individual layers.		n/a
Macellum_26_06_12_A.max	3dsMax	Singular elements on individual layers.		n/a
Macellum_26_06_12_B.max	3dsMax	Singular elements on individual layers.		n/a
TempleAUG_26_06_12.max	3dsMax	Singular elements on individual layers.		n/a
PI_WH01_27_06_12materials.max	3dsMax	Singular elements on individual layers.		n/a
Amphitheatre_Full_26_6_12.max	3dsMax	Singular elements on individual layers.		n/a
Mole_28_06_12.max	3dsMax	Singular elements on individual layers.		n/a
GF_ALL_Elements_30_06_12_FINAL_1.max	3dsMax	Singular elements on individual layers.		n/a