

NOTION ARCHAEOLOGICAL SURVEY, 2016  
(forthcoming in *35.Araştırma Sonuları Toplantısı* [Ankara 2018])

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## INTRODUCTION

The Ionian city of Notion is a coastal site (50 km due south of Izmir) approximately 35 ha in area, surrounded by 3 km long fortification walls (Map 1). It occupies a ridge running east-west and parallel with the coast, framed by two promontories projecting southward into the Aegean Sea. It is clear from the visible remains and from satellite imagery that Notion is a grid-planned city, oriented according to the cardinal directions. The promontories and the north and south slopes of the site are occupied by residential areas. The central ridge is dominated by a chain of public and sacred building complexes, set on terraces largely carved out of the native rock. These include, from west to east, the Temple of Athena, the “Heroon” or Temple of Apollo, the Agora, the Theater, and the so-called East Agora. The highest point on the site is the hill east of the Theater, which rises to an elevation of 85 m asl. An archaeological survey of Notion was begun by the University of Michigan and Brown University in 2014.

Historical sources attest the existence of Notion as a polis at least as early as the 5<sup>th</sup> century BC, and the history of the city is closely connected with that of the neighboring town of Colophon 15 km to the north. Originally the smaller and less important of the two communities, Notion came to supplant Colophon in the Hellenistic period, acquiring the name of New Colophon or Colophon-by-the-sea. Roman and late Roman references to Colophon – to the Christian bishop of Colophon, for example – are probably referring to the community occupying the site of Notion. Surprisingly, however, a program of collection of surface finds begun in 2015 suggests that major occupation of the site was relatively short-lived, extending only from the late 3<sup>rd</sup> century BC through the 1<sup>st</sup> century AD. Perhaps the town was originally located elsewhere, and was moved to the promontory site in the Hellenistic period. The apparent decline of the city in the early imperial era may have been due to long-term changes brought about by the development of the Roman empire, including the growth of metropolitan centers such as Ephesus (only 15 km southwest of Notion) at the expense of smaller regional towns.

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Work at Notion in 2016 included geophysical survey, mapping and architectural documentation, study of the water supply, collection and analysis of surface finds, and study of the local geology.

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## GEOPHYSICAL SURVEY

Two forms of geophysical survey were carried out in 2016: magnetic survey (continuing the program begun in 2014 and 2015), and electrical resistivity survey (undertaken for the first time in 2016). As in previous seasons, the geophysical survey was based on a grid of 30 X 30 m squares, laid out with a differential GPS system. In total, 64 full and 40 partial 30 X 30 m grid squares were surveyed with a Bartington Grad 601-2 fluxgate gradiometer, and 8 full and 14 partial 30 X 30 m grid squares were surveyed with a Geoscan RM-15D advanced resistance meter. The results of the survey are shown in Map 2. Work concentrated on the area west of the Agora around the Temple of Apollo, on the terraces stepping down the north side of the city, and on the level fields just north of the city wall, between the wall and the modern coastal road (which forms the boundary of our survey area). This area may be connected with the ancient harbor. Of special interest are what appear to be a number of large structures on the south side of this area.

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## MAPPING AND ARCHITECTURAL DOCUMENTATION

In 2016 the program of systematic recording of all visible architectural features begun in 2015 was continued. As noted in last year's report, a detailed aerial survey of the city was carried out in 2015 with the aid of lightweight drones. The imagery taken by these drones was used to generate a digital elevation model and an orthorectified photomosaic of the entire site to aid in mapping architectural remains. Over the course of the 2015-16 academic year, all the architectural features (walls, cisterns, miscellaneous architectural blocks, etc.) visible in this photomosaic were traced in a GIS (Geographical Information System). In the 2016 field season, the GIS was loaded onto iPads, which were then taken into the field so that more detailed records could be made of every identified architectural feature (see Map 1). Over 1,300 such features have now been recorded both in the GIS and in a separate database (Drawing 1). This recording program has clarified the street system, the organization of civic and sacred areas, the terracing of the city, and the layout of residential housing blocks. Since one of our goals is to

understand the development of domestic space in the city, special interest attaches to large peristyle houses visible throughout the site (see Map 1, peristyle house west of Agora, and Drawing 2).

Architectural documentation of civic and religious buildings continued to focus on the Heroon and the Bouleuterion. Laser scans and 1:25-scale plans and section drawings were made of both buildings. A laser scan was also made of the Temple of Athena, to serve as a basis for detailed architectural recording in a future season (Drawing 3).

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#### STUDY OF WATER SUPPLY

During the 2016 field season, four additional cisterns were identified on the site, so that a total of 14 certain cisterns and five possible cisterns have now been recorded. In 2015, laser scans were made of two cisterns, producing detailed three-dimensional models; encouraged by the success of this method of documenting these subterranean features, which are otherwise difficult to measure accurately, in 2016 we produced laser scans of the six other known cisterns that can still be entered (Drawing 4). These images demonstrate similarities in construction – a flask or bottle-shape cut out of the bedrock, with a narrow masonry shaft supporting schist or limestone cover slabs, some carved with an opening for access – but also differences in shape resulting from the bedrock in which they are carved. Those excavated from marble have retained their shape, while those cut into schist have distorted profiles due to the splitting and collapse of this laminated rock.

The four cisterns newly discovered this year are located on the north and south slopes of the site, supporting the conjecture made last year that although most of the known cisterns are found on the central ridge of the site, there must have been many more in the residential areas to the north and south, which are now covered by erosion. At other Hellenistic cities such as Pergamon and Morgantina, most excavated houses have at least one cistern, located in the peristyle or courtyard.<sup>4</sup> If the same pattern applied at Notion, there could originally have been hundreds of cisterns, one for each household. Estimates of the urban population at Notion based on the area of the city range from 3,500 (at 100 persons per hectare) to 8,750 (at 250 persons per hectare), while estimates based on the presumed

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<sup>4</sup> G. Garbrecht, *Altertümer von Pergamon I. Stadt und Landschaft*. Teil 4. *Die Wasserversorgung von Pergamon*, vol. 1-2 (Berlin 2001) 16-40; U. Wulf, *Altertümer von Pergamon XV. Die Stadtgrabung*. Teil 3. *Die hellenistischen und römischen Wohnhäuser von Pergamon* (Berlin 1999) 20-21; B. Tsakirgis, "The Domestic Architecture of Morgantina in the Hellenistic and Roman Periods," Ph.D. diss. Princeton University (1984) 334-41; D. Crouch, "The Hellenistic Water System of Morgantina, Sicily: Contributions to the History of Urbanization," *American Journal of Archaeology* 88 (1984) 353-365, at 355.

number of houses hover around 4,000 (as many as 100 residential blocks, each consisting of 8 houses, each with ca. 5 inhabitants).<sup>5</sup> Epigraphic evidence indicates that Hellenistic Notion had 2,000 citizens, which would give a total population of upwards of 10,000 (assuming at least 5 persons per citizen-household), but this number may have included citizens and their families living in the territory of Notion outside the city walls.<sup>6</sup> Even the lower urban population estimate of 3,500-4,000 persons corresponds to 700-800 households, and therefore around the same number of cisterns, although some houses must have lacked one, perhaps sharing with a neighbor or relying on the public water supply. Indeed, some of the cisterns are associated with public areas or buildings (for example, in the Agora and next to the northeast corner of the Bouleuterion) or are constructed using more elaborate methods (for example, a wider shaft spanned by arches rather than cover slabs), and these may have served public rather than private needs.

The sizes of the cisterns may also suggest that many of them served more than one household. Most of the cisterns at Notion have an estimated capacity of 30-50 cubic meters each (debris infill makes it difficult to reconstruct the original capacities). Assuming that average annual rainfall in antiquity was close to 700 mm per year (the average annual rainfall in Izmir for the years 1938-2010 was 695.9 mm<sup>7</sup>), a one-time filling of such a cistern would require a roof area of 43-72 sq. m. Where visible, the remains of houses at Notion indicate that they may have ranged from 225 to 400 sq. m in area, including some unroofed space in the form of peristyles or courtyards (see Drawing 2). Such a house would offer between 195 and 375 sq. m of roof surface for the collection of rainfall, providing between 136 and 262.5 cubic meters of water per year, enough to fill a cistern of this size multiple times in a year, even if only half the available roof surface drained into the cistern. A single filling of 30-50 cubic meters of water per cistern could supply 40-68 persons per year, assuming one person requires a minimum of 2 liters of water a day; a higher rate of consumption would have been possible if the cistern was filled more than once a year, as was likely the case.

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<sup>5</sup> The estimate of 5.3 persons for the average urban household in Roman Egypt is proposed in R. S. Bagnall and B. W. Frier, *The Demography of Roman Egypt* (Cambridge 1994) 68.

<sup>6</sup> The relevant inscription is published by Ph. Gauthier, "Le décret de Colophon l' Ancienne en l'honneur du Thessalien Asandros et la sympolitie entre les deux Colophon," *Journal des savants* (2003) 61-100, at 84.

<sup>7</sup> <https://www.mgm.gov.tr/veridegerlendirme/il-ve-ilceler-istatistik.aspx?m=IZMIR> (accessed 31 July 2017).

## COLLECTION OF SURFACE FINDS

In 2016, the program of systematic collection of surface finds begun in 2015 was expanded and developed in new ways. Collection was carried out in a greater number and wider variety of locations across the site, including areas both inside and outside the fortification walls. We also experimented with a new collection method. In 2015, we collected in 10 X 10 m survey units, subdivided from the 30 X 30 m grids laid out for the geophysical survey (shown in white on Map 3). By the end of the field season, however, it had become apparent that in all the 10 X 10 m grids surveyed that year, the only areas in which surface finds were visible were the footpaths that happened to pass through the grids. Because Notion has been a protected archaeological site for decades, there is no agricultural plowing, and much of the ground is covered with vegetation. The two activities that disturb the vegetation and thereby provide visibility for surface finds are repeated foot traffic (primarily by sheep, but also by humans) in well-trodden footpaths, and erosion. Visibility of the ground surface in these footpaths and eroded patches is complete, whereas visibility outside these areas is low to nonexistent. These conditions mean that all the surface material collected within a 10 X 10 m survey unit actually comes from a much smaller, more spatially well-defined subset of that unit.

The 10 X 10 m survey unit 6d from 2015 located just west of the Temple of Athena serves as a useful example of this problem (Drawing 5; see also the collection area west of the Temple of Athena shown on Map 3). Not only was approximately 70% of the survey unit completely inaccessible due to dense vegetation (trees and shrubs), but surface finds were present only within a 0.6-m wide footpath running through the remaining 30% of the unit, since the path runs through grasses and shrubs, in which surface materials are also not visible (Photo 1). The visible area of the survey grid was therefore not 100 sq. m, nor even 30 sq. m, but only the 5.4 sq. m of the footpath (9 m long X 0.6 m wide). Materials collected in this survey unit in 2015 included 572 pottery sherds, giving a sherd density over the entire 10 X 10 m survey unit of 5.72 sherds per sq. m. But since these sherds were actually all collected only from within the 5.4 sq. m footpath, the sherd density is more accurately calculated in relation to the area of the footpath alone, in which case it is 105.93 sherds per sq. m.

We therefore concluded that using 10 X 10 m grid squares as the unit of collection rather than using only the areas where the soil surface is visible – that is, the footpaths and eroded patches – is in fact not only less accurate but also misleading when calculating artifact densities and when trying to pinpoint exactly where surface finds originate. For that reason, we decided in 2016 to target areas of high visibility for surface collection, while also continuing to collect in grids under certain circumstances, such as on fields located north of the city wall, which are plowed and

therefore comparable to traditional Mediterranean field survey transects. Because this new method essentially corrects for visibility (since collection is carried out only in areas with 100% surface visibility), it is now possible to compare sherd densities across collection areas – something that had been much less straightforward when using the grids.

Collection in 2016 was carried out in a total of 53 survey units in varied locations across the site, both inside and outside the fortification walls: the area west of the Temple of Athena, the northwest slope of the site, the west promontory, the slope south of the Agora, the east promontory, the terraces in the north part of the site, and the fields outside the fortification walls to the north (see Map 3). Two collection methods were used. Areas with 100% visibility (footpaths and eroded areas) were divided into survey units that were mapped directly into the GIS in the field on an iPad and then surveyed by 2-3 persons (full coverage) (Photo 2). A different method was used in the fields north of the north city wall, which are open, level areas used to grow cereals and therefore plowed regularly (Photo 3). For this reason, and because of the low artifact density here relative to areas inside the city wall, we surveyed these fields using a more conventional survey method. Survey units were defined as 30 X 30 m or 30 X 60 m grids (the latter for areas with very low surface finds densities), which were surveyed by 3 persons spaced 10 m apart (20% coverage).

As a result of these efforts, we surveyed a smaller total area in 2016 than in 2015 (3,078 sq. m as opposed to 5,945 sq. m)<sup>8</sup> but retrieved more materials (including 12,370 sherds, compared with 10,935); the proportion of diagnostics among these sherds was the same in both years (11%). Overall sherd density increased from 1.84 sherds per sq. m in 2015 to 4.02 in 2016, but densities varied considerably by collection area: the area west of the Temple of Athena yielded the highest densities in both years (the highest being 78.81 sherds per sq. m from Transect 21, a survey unit of 5.39 sq. m), while the lowest sherd densities came from the fields outside the north city wall (the lowest being 0.05 sherds per sq. m from Transect 42, a survey unit of which 20%, or 360 sq. m, was surveyed and is therefore used in this calculation).

Although the collected materials included some chronological outliers (dating possibly as early as the Iron Age and as late as the late Roman period), the overwhelming majority of datable pottery fell within the 3<sup>rd</sup> century BC to 1<sup>st</sup> century AD, largely corroborating our hypothesized date range for major occupation of the city, based on last year's collection results and analysis of architectural remains. As in 2015, in 2016 we recovered the same typical

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<sup>8</sup> The calculation of area surveyed in 2016 includes only 20% of the area of the grids in the fields outside the city wall to the north, since these were surveyed with 20% coverage.

Hellenistic and early Roman table wares commonly found in Asia Minor, such as Hellenistic mold-made bowls, Eastern Sigillata A, Eastern Sigillata B, and Western Sigillata, along with less fine, regionally and more locally produced table wares from western Asia Minor, and transport amphorae, primarily from Rhodes, Kos, and the Black Sea and Adriatic. Ceramic identification was carried out under the direction of A. Berlin.

Of interest was the difference in the character of the finds from inside and outside the fortifications on the north side of the city. The date range was the same, but the pottery collected in the fields outside the city wall consisted almost exclusively of storage and transport vessels, with much less table ware than that found inside the city (Photos 4-5). Of the rare examples of table ware that were found, almost all was table in form (plates or saucers) but plain in fabric, with no gloss or slip. Though the difference is striking, it must be noted that part of the reason for the lack of fine table wares may be the heavy plowing in these fields and low visibility due to stubble left behind from the cereal cultivation, both of which discourage the recovery of fragile fine wares. Also notable is the richness of surface material from the survey units located just west and downslope of the Temple of Athena. These areas yielded the highest sherd densities and the most varied assemblage of finds, including not only pottery in table, plain, and cooking ware, but also tile, pipe, lamps, coins, metal objects, tesserae, glass, painted wall plaster, shell, and bone. Another observation is the frequency of sherds that obviously came from broken vessels (since they range widely in shape and size, even including handles) but have been smoothed on all sides, as though used for scraping or repeatedly tumbled in water (Photo 6).<sup>9</sup> They have been found in every collection area except by the Temple of Athena, but were recovered in the greatest numbers on the east promontory. If worn by the sea, it is not clear why they were brought up to the site or how they were used.

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## GEOLOGY

A preliminary study of the geology of Notion was undertaken by P. Knoop, in partnership with C. Steidl. The goals of this project are to examine the natural environment that conditioned the development of the site; to achieve a better understanding of an important natural resource available to the inhabitants of Notion, namely building stone; and to investigate the transformation of the landscape brought about by the development of the city, both by

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<sup>9</sup> The similarity in form between these smoothed sherds and cobbles on local beaches that have been worn by wave action in the sea was noted in 2017 by C. DiFabio, C. Harvey, and A. Commito.

intentional quarrying and by large-scale terracing operations, especially the leveling of the Agora and other public and sacred building complexes occupying the east-west ridge running through the site.

About three-quarters of the geological outcroppings occurring at Notion were visited during the 2016 field season. For each outcropping, a description of the rock type was produced; reference photos were taken; and the approximate spatial extent of the outcropping was mapped. Where bedding was evident, dip and dip direction were measured. All of this information was recorded in the Notion GIS, as demonstrated by the accompanying map (Map 4).

The main rock types identified at Notion are:

- Alluvium – Water-transported materials are present in the northeastern portion of the site, in the general vicinity of a drainage entering this area. Clast sizes range from mud to cobbles. Locally derived rock types represent most clasts, but other rock types are also represented, as well as human-derived materials.
- Colluvium – Gravity-transported materials occupy much of the non-outcrop surface of the site. Clasts range up to cobble sized, and generally represent locally derived materials, with a good measure of human-derived materials in some localities. The fields in the northern portion of the site contain significant amounts of colluvium, mingling with alluvium to the east.
- Conglomerate – Composed mostly of grayish marble clasts, generally cm- to dm-sized, and with a grayish to reddish, calcareous matrix, it is generally poorly exposed in the few outcroppings in which it has been located.
- Calcareous Sandstone – This rock varies in color from yellowish to tannish to reddish, and is composed of lithic fragments of marble, schist, and other rock types. The matrix is likely also carbonate.
- Schist – Moderately to highly schistos, this rock ranges from grayish to greenish in color. It is generally poorly exposed at the surface in outcrop, and is sometimes inter-bedded with marble. Better exposures exist where revealed inside some cisterns. Poor exposures, possibly exhibiting less schistosity, may occur on the northeastern slope of the hill into which the Theater is dug.
- Marble – Grayish to whitish marble occasionally exhibiting mm-scale silica beds and light/dark banding is exposed throughout the site. Some outcroppings do not exhibit the differentially weathered thin silica beds and have an overall more uniform whitish color; it is not yet clear, however, if this is a separate unit, or just the result of different weathering patterns. In places, the marble is heavily deformed and/or brecciated, and possibly correlates with poorer outcrop exposure.

### *Proposed Tentative Stratigraphic Section*

Based on observations to date, the following stratigraphic section is tentatively proposed:

- Qa/Qc – Quaternary alluvium and colluvium
- Conglomerate – appears to unconformably overly the marble unit where it has been found. (Might be coeval with the calcareous sandstone?)
- Calcareous Sandstone – appears to unconformably overly the schist to the east of the theater. May be the result of faulting.
- Schist – Appears to be interbedded with marble in some locations, and may be in conformable contact with the marble.
- Marble – Believed to be lowest unit exposed at Notion.

### *Geological Structures*

The marble unit exhibits N-S trending folds across much of the site. Antiforms and synforms are observed that range in size from cm- to tens-of-meters, and can often be traced along axis for tens- to hundreds-of-meters. In a few locations, S- and Z-folds are exhibited in the mm-scale silica beds within the marble. Fold axes are occasionally delineated by cm- to dm- scale fractures filled with carbonate material and/or breccia.

Carbonate filled fractures in the marble unit are found occasionally across the site. They typically range in size from cm- to dm-scale. While some are associated with N-S folding axes, others appear to form E-W, possibly associated with faulting, or even NW-SE, such as the most traceable one, which appears to cut across most of the Agora.

The schist unit also exhibits folding, particularly at a small scale, as evident in the few poorly exposed outcroppings. Larger scale folding may be present as well. Lineation and foliation are also exhibited in schist outcroppings, but there was not a concerted effort to measure the orientation of these features during the 2016 field season.

Several large faults appear to cut across the site of Notion. The most evident so far is the E-W trending fault that defines the shoreline of the first small inlet west of the eastern promontory. It can be observed clearly paralleling the

northern side of the inlet, dipping steeply to the south. It also appears to be exposed in the marble at the top of the eastern promontory as a small canyon bounded by extensively deformed marble with breccia, the brecciated and deformed marble presumably having been weathered out more easily to form the canyon. Another major fault exposed along the coastline of the western promontory also appears to define the shore.

### *Geology and Quarrying*

One of the goals of exploring the geology of Notion is to understand the availability and extraction patterns for locally quarried building materials, and in particular to assist with volume estimates of quarry activities, by helping to re-create the paleotopography.

A conglomerate similar to what is found in outcrop is one of the main building materials used at Notion, but there is very little conglomerate presently exposed at the site. The largest outcropping is in the area between the fields on the north side of the site and the modern coastal highway, down from what appear to be significant outcroppings on the other (north) side of the highway. Other small exposures are present on the west and north sides of the western promontory. Far less conglomerate is found in outcrop than one might imagine for such an extensively used stone, which suggests that much of the conglomerate used in Notion construction came from off-site, perhaps from the area north of the modern highway (outside our survey area).

The marble unit is also correlative with what appears to be another one of the main types of building materials at Notion. Evidence for quarrying the marble can indeed be found throughout much of the site, and will be studied in greater detail in a future season.

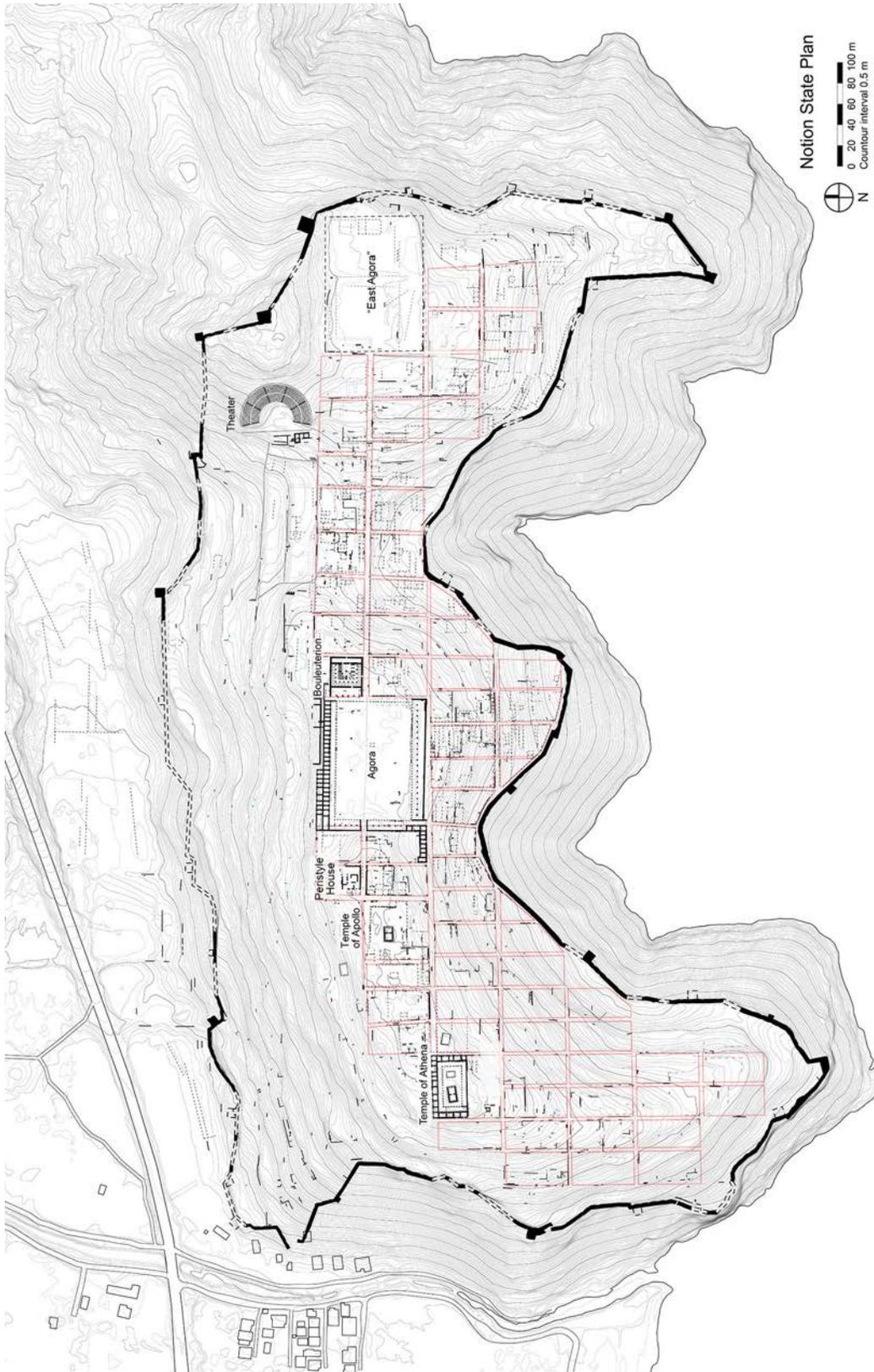
The schist unit may also have been quarried to provide flooring, as much of the schist material used in construction at Notion matches that found in outcrop. There is, however, no clear evidence of quarrying activities on any of the schist outcroppings identified to-date.

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## CONCLUSION

Notion was completely abandoned in the Middle Ages and never resettled. It was largely overlooked by earlier investigators, and thus remains mostly unexplored. In addition, the location of the site on two isolated promontories has ensured that it is only lightly buried. This combination of circumstances makes Notion an unusually promising candidate for archaeological survey. Modern mapping technologies such as geophysical prospection and low altitude aerial photography, combined with close examination of individual monuments, systematic collection of surface finds, and study of the local environment, are helping us to reconstruct a detailed biography of ancient Notion, and to shed light on major issues in the study of ancient Greek and Roman urbanism, such as Hellenistic synoikism, and the effects of the growth of the Roman Empire on provincial towns in Asia Minor.

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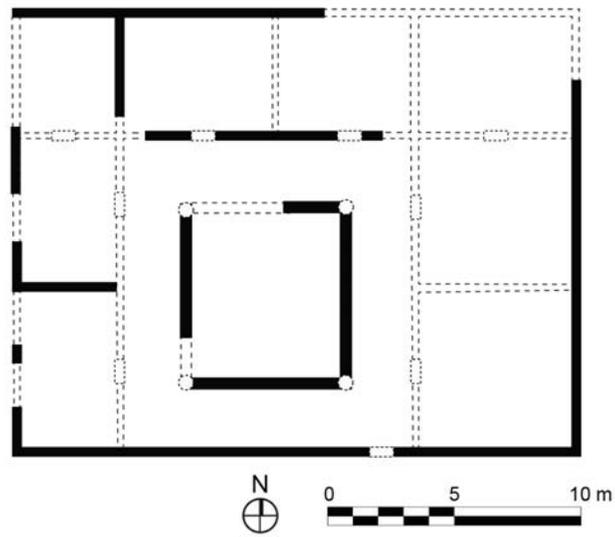
Map 1: City Plan of Notion



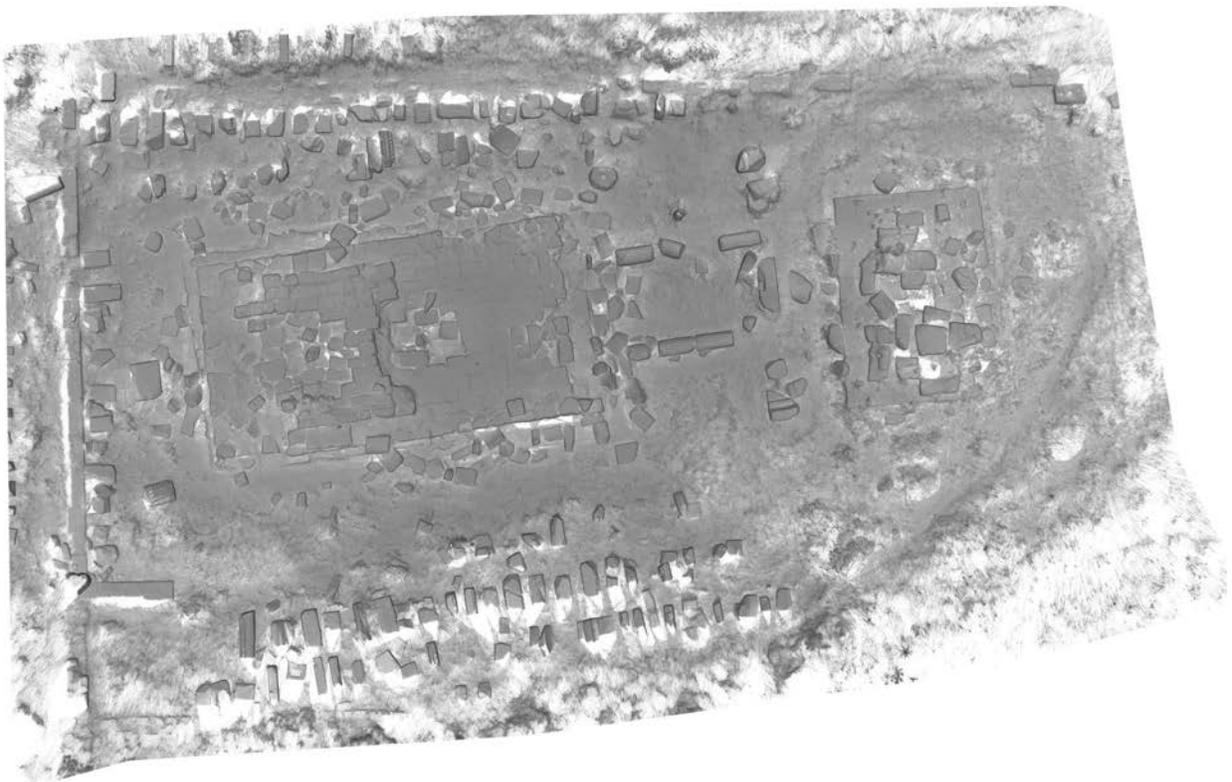
Map 2: Results of geophysical survey carried out in 2016

Notion GIS Recording Sheet In Progress			
<b>Basic Information:</b>			
Feature Unique #:	2015.0232	Date:	6/13/2015
First Temp Pt:	G352	Shot in with TS:	<input type="checkbox"/> Yes <input type="checkbox"/> Not to be shot in
Last TS Point (if req):		Photo #:	tp136e_g351org352
Total Station Points			
<b>Feature Data:</b>			
Feature Type:	<input type="checkbox"/> Landscape <input checked="" type="checkbox"/> Architectural <input type="checkbox"/> Modern <input type="checkbox"/> Water	<input type="checkbox"/> Tomb <input type="checkbox"/> Fortification <input type="checkbox"/> Agricultural	Feature Date: <input type="checkbox"/> Prehistoric <input type="checkbox"/> Bronze Age <input type="checkbox"/> Iron Age <input type="checkbox"/> Archaic
		<input type="checkbox"/> Classical <input type="checkbox"/> Hellenistic <input type="checkbox"/> Augustan/Early Imperial <input type="checkbox"/> High Imperial	<input type="checkbox"/> Late Roman <input type="checkbox"/> Byzantine <input type="checkbox"/> Ottoman <input type="checkbox"/> Early Modern
Specific Feature Type:			
Landscape:		Tomb:	
Architectural:	Threshold	Fortification:	
Modern:		Agricultural:	
Water:			
Description:	Conglomerate threshold running north-south and door turning to west. Set in wall on terrace below G351 (2015.231) in southern slope of East Agora. One square pivot hole. New garmin point in 2015. Picture most likely of 352, but also possibly 351.		
<b>Building and Construction Data:</b>			
Building Type:		Room Type:	
Construction Details:		Building Element:	
Building Material:	Conglomerate		
<b>Threshold Data</b>			
Orientation:	<input checked="" type="radio"/> N-S <input type="radio"/> E-W		
Direction of Interior:	<input type="radio"/> N <input type="radio"/> S <input type="radio"/> E <input checked="" type="radio"/> W		
Door opens:	<input type="radio"/> In <input type="radio"/> Out		
In situ?	<input checked="" type="radio"/> Yes <input type="radio"/> No		

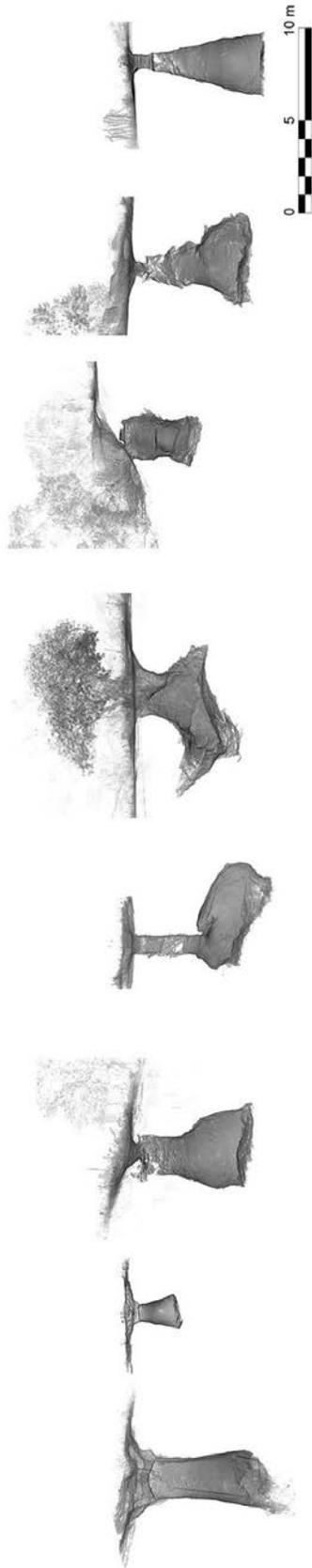
Drawing 1: Sample entry in architectural feature database



Drawing 2: Conjectural restored plan of peristyle house west of Agora



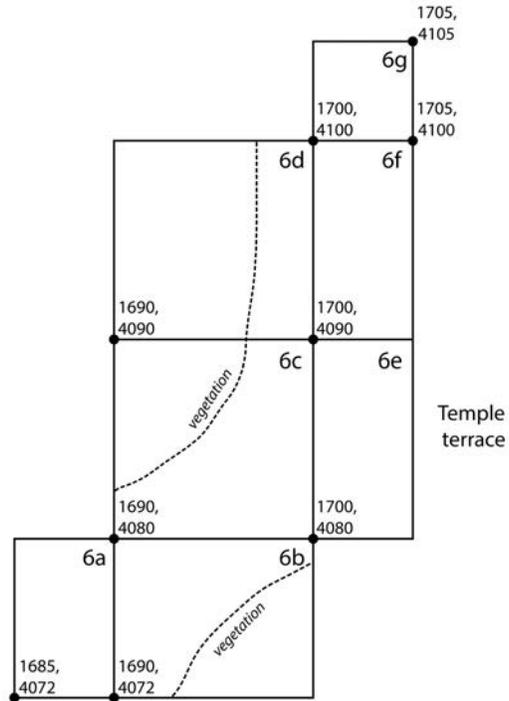
Drawing 3: Laser scan of Temple of Athena



Drawing 4: Profiles of cisterns made with laser scanner



Map 3: Map of surface collection areas surveyed in 2015 (grids shown in white) and 2016 (paths, polygons, and grids shown in red)



Drawing 5: Schematic plan of collection area Grid 6 from 2015



Photo 1: Footpath through survey unit 6d from 2015



Photo 2: Collection along footpath on east promontory



Photo 3: 30 X 30 m survey grid in fields outside fortifications on north side of city



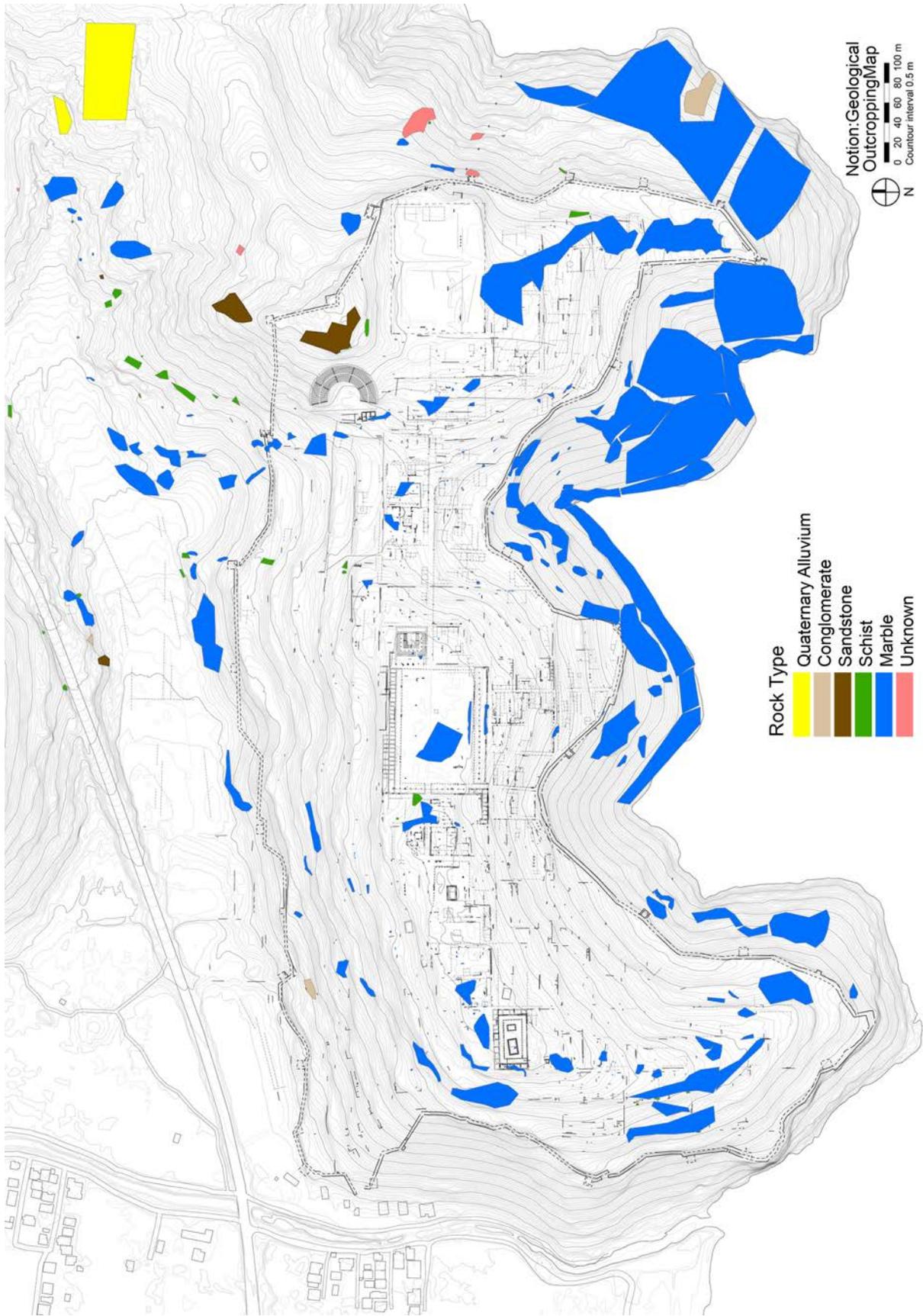
Photo 4: Selection of surface finds from inside fortifications on north side of city



Photo 5: Selection of surface finds from outside fortifications on north side of city



Photo 6: Smoothed ceramic sherds from east promontory



Map 4: Geological map of Notion