

TRANTS, MONTSERRAT: THE 1995 FIELD SEASON

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Résumé

La saison de fouilles 1995 au site Trants (MS-G1), d'une durée de sept semaines, concentra ses efforts sur l'aire centrale et les champs avoisinants, dans le cadre d'une étude plus approfondie de 17 semaines des gisements archéologiques situés à l'intérieur des limites d'un projet de nouvel aéroport à Montserrat. Aux méthodes de terrain déjà utilisées en 1990, et qui portaient sur un échantillonnage basé sur des sondages en corridors, s'ajoutent en 1995, à l'aide d'un équipement mécanique lourd, cinq tranchées importantes et un décapage de surface d'une étendue d'environ 600 mètres carrés. Cette fouille de plus grande envergure a révélé des structures allant des empreintes de pieux et des fosses, aux sépultures humaines. Les profils des tranchées et de la surface décapée ont fourni un contexte stratigraphique entièrement nouveau pour le site. Les recherches de 1995 confirment l'étendue de forme ovale du gisement mais révèlent une orientation différente de son axe le plus long.

Abstract

The 1995 field season at the Trants site (MS-G1) involved seven weeks of research at the site's «core area» and the peripheral fields, as part of a more expansive 17-week study of archaeological sites within the borders of the proposed new airport facility for Montserrat. Field methods utilized in 1990, such as test pit sampling corridors, were augmented by the use of mechanical equipment in 1995 to dig five trenches and strip an area of about 600 square meters. The large-scale excavations revealed features ranging from post-molds to pits to human burials. Profiles of the trenches and strip area provided stratigraphic context to a degree previously unknown for this site. The 1995 research confirmed the site configuration to be oval-shaped, but with a different long-axis orientation.

KEY WORDS: Trants; Saladoid site; oval shaped; airport project

Resumen

La temporada de campo de 1995 en el sitio Trants (MS-G1) incluyó siete semanas de investigación en el núcleo del sitio y en los campos periféricos, como parte de un estudio más amplio de 17 semanas de los sitios arqueológicos dentro de los límites del nuevo aeropuerto propuesto para Montserrat. Además de los métodos de campo que se utilizaron en 1990, por ejemplo pozos de prueba alineados, se usaron equipos mecánicos en 1995 para excavar cinco trincheras y para limpiar la tierra superficial que cubría unos 600 metros cuadrados. Las excavaciones a gran escala revelaron rasgos como hoyos de posts, pozos, y entierros humanos, entre otras cosas. Los perfiles de las trincheras y del área limpiada revelaron el contexto estratigráfico con un grado de detalle anteriormente desconocido para este sitio. Las investigaciones de 1995 confirmaron que la configuración del sitio es ovalada, pero con una orientación diferente del eje más largo.

THE MONTSERRAT AIRPORT PROJECT

Carnegie Museum of Natural History (CMNH) and the University of Maine at Farmington (UMF) jointly conducted a second field season of archaeological research on Montserrat from March through June 1995. The proposed development of a new airport on Montserrat, including a new runway, terminal building, and associated support facilities, was the impetus for this study. The Overseas Development Administration (O.D.A.) of the United Kingdom funded the archaeological study through a contract with CMNH. Montserrat is a Dependent Territory of Great Britain.

The terms of reference in the O.D.A. contract required the identification of all archaeological sites within the airport project area, demarcation of their boundaries, and evaluation of their significance. The 17-week project was scheduled in seven phases: a) set-up period (weeks 1-2); b) Trants prehistoric site (3-7); c) peripheral fields surrounding the Trants site (8-9); d) survey of the runway corridors (10-12); e) Trants Estate historic site (13); f) Windward Bluff prehistoric site (14-16); and g) break-down period (17). This schedule was implemented in the field with only minor alterations.

The O.D.A. contract also required independent assessment of archaeological findings (undertaken by the Oxford Archaeological Unit, U.K.), coordination with an Environmental Impact Assessment being conducted by W. S. Atkins International Ltd. (U.K.) and Rapid Environmental Assessment Ltd. (Trinidad), and collaboration with the airport design firm of Halcrow Consulting Engineers (U.K.).

The 1995 project drew upon findings from two previous field seasons at the Trants site (MS-G1), a two-week study by Watters in 1979 (Watters 1980) and a ten-week study by CMNH-UMF in 1990 (Petersen and Watters 1991; Watters 1994). The 1995 CMNH-UMF project encompassed an area much larger than the Trants site itself.

AIRPORT PROJECT AREA

Terrain included in the archaeological study began near the northern terminus of the present Blackburne airport runway near Trants Bay and extended SSW for a distance of approximately 2 km, ending at White's Bottom Ghaut (Figures 1 and 2). It extended from the east coast inland to the airport security fence line on the western boundary. The project area had been delineated in a pre-feasibility study and design study conducted by Sir Alexander Gibb and Partners (1988, 1992). Included in the 1992 study were provisional locations for a terminal building, airport support facilities, control tower, and runway corridors.

The 1995 archaeological study made use of these provisional locations in two ways: a) assessing their potential impact on known archaeological sites, the Trants (MS-G1) and Windward Bluff (MS-G2) prehistoric sites and Trants Estate historic site, and b) developing a strategy to survey the «archaeologically unexplored» terrain, especially the two runway corridor options (A and B) being considered. The extended version of the Option B runway attained a maximum length of 2080 m.

Farm River traverses and separates the airport project area into northern and southern sectors.

Northern sector

Four archaeological sites exist north of Farm River (Figure 1). Within the airport project boundary are the Trants prehistoric site (MS-G1) and Trants Estate historic site. The Trants prehistoric site, the most significant site investigated, is discussed below.

The CMNH-UMF archaeological testing of Trants Estate's domestic and industrial components recovered mainly late 18th- and 19th-century artifacts, although historical documents indicate a plantation existed in this area at least by the mid 17th century. This estate's three well preserved cane crushing mills, powered by animals, wind, and steam, provide a superb sequence of changing technology in sugar processing. The Oxford Archaeological Unit conducted an independent architectural evaluation of the buildings themselves.

Trants Estate was the home of S. W. Howes who assembled, in the early 20th century, an important collection of Amerindian artifacts from the adjacent Trants prehistoric site (Watters and Scaglia 1994).

Two sites located (Figure 1) slightly north of the airport project area are Trants Bay Hill (MS-G9) and Trants Bay cemetery (MS-G10). MS-G9, a small (ca. 100-m diameter) post-Saladoid site situated on the north side of Trants Bay, was surface collected but not tested since it technically fell outside the project area. At the MS-G10 site, a skeleton recovered in May 1985 by Peace Corps archaeologist Bob Bell was subsequently identified as a «... young adult Negroid male» (Mann 1987:2), which suggests the presence of an historic cemetery. The CMNH-UMF team found no surface evidence of the MS-G10 site in 1995, but informants said that a flood a number of years ago had buried or washed away some structural remnants. MS-G10 possibly is Trants Estate's slave village, the location of which has yet to be ascertained on the ground.

Southern sector

The study identified five previously unknown sites south of Farm River Ghaut and further investigated one known site (Figure 2). Two post-Saladoid sites discovered immediately south of Farm River are the Farm Bay (MS-G12) and Goat Trail sites (MS-G13). Although surface artifacts were broadly scattered across both sites, the subsurface testing defined more densely concentrated artifacts in a smaller area of each site. Diameters of these concentrations were about 150 m and 100 m respectively. The two sites are separated by about 400 m of intervening terrain having limited surface and subsurface artifacts. MS-G12 is shallow (ca. 30 cm) and much disturbed by cultivation; MS-G13 has deeper cultural deposits (to ca. 60 cm) that are intact under the hoe zone. The Goat Trail site yielded larger sized sherds and better preserved faunal remains.

Three historic sites occur within the project area south of Farm River. The most significant is Farm Cemetery (MS-G14), a colonial site containing headstones, crypts, and an enclosing stone wall. Legible dates on headstones indicate a mid 18th-century use of the cemetery. Farm Cemetery was mapped by the CMNH-UMF team. The Oxford Archaeological Unit undertook backhoe testing of this cemetery to confirm the preservation of human skeletons. The skeletons are presumed to be whites.

The second historic site, MS-G15, the Canadiana site is difficult to interpret. There seemingly are two, perhaps three, phases of foundation construction at different elevations; the easternmost (and lowest) foundation incorporates an in-flowing conduit and plastered interior walls suggestive of a water containment function. However, the structure's elevated position behind Farm Bay also suggests a defence or observation function. Few artifacts were recovered and none was diagnostic, either for establishing age or determining function.

The final historic site, a large-scale modification of the landscape, consists of a set of stepped-down terraces bordered by earthen ridges. The sloping landform had been altered to provide level surfaces for colonial-period cultivation as well as retard water runoff. The expansive terraces confirm a major commitment of human labor was necessary to create this culturally modified landscape.

The Windward Bluff site (MS-G2) was the only known site existing south of Farm River. Discovered and tested (two test pits) in 1979, Windward Bluff was characterized as post-Saladoid (Watters 1980). Three test pit transects, one paralleling the cliff face and two trending perpendicularly (going inland), were used to demarcate the site boundary in 1995. One excavation unit (1.0 m x 1.0 m) provided more detailed stratigraphic information. Large sized sherds recovered immediately below ground surface indicate this site has suffered little or no damage from historic cultivation. Windward Bluff is the fourth post-Saladoid site in the airport project area.

TRANTS PREHISTORIC SITE

Previous research (Petersen and Watters 1991; Watters 1994) at Trants (MS-G1) established that the core area's northern and southern sectors consist of opposing but seemingly complementary curvilinear segments demarcated by dense artifact distributions, indicating an oval-shaped configuration for the site (Figure 3). One crucial aspect of the 1995 project was to thoroughly study the western and eastern margins since they had been minimally investigated in 1990. Rapid and accurate demarcation of the Trants site's boundary was of paramount importance because the final design engineering study was scheduled to commence while the 1995 archaeological study was underway. Determination of the spatial dimensions of MS-G1 would allow the design engineers to consider alternative sitings for buildings threatening the Trants site under the 1992 proposal.

The 1992 Gibb development plan, which fortunately existed only on paper, included the installation of the terminal building and adjacent aircraft parking apron over the southwest quadrant of the Trants site, with future expansions of the apron, freight facility, and aviation refueling facility impacting its northwest quadrant. Fully one-half of the Trants site ultimately would be damaged or destroyed if the 1992 development plan was instituted. The test pit sampling corridor strategy employed in 1990 was reinstated for the 1995 project at MS-G1. The single east-west and north-south corridors completed in 1990 were augmented by two more east-west and two more north-south corridors in 1995. Thus, three parallel test pit corridors traversed the site in each direction (Figure 4). Test pits again were excavated at 50 m intervals. This strategy resulted in the rapid determination of variability among depths of cultural remains, artifact and ecofact densities, and the presence of midden and anthrosol deposits, all of which assisted in delineating the boundary. Several of these corridors eventually were extended into the peripheral fields around the core area; they confirmed the low artifact densities that were obtained in other peripheral fields during the 1990 study.

This more intensive sampling resulted in a reconfigured and reoriented Trants site (Figure 5), where the western margin is slightly more contracted (i.e., shifted eastward), the northern sector extends further northward, and the southern and eastern borders approximate those identified in 1990. The final plot results in a generally oval-shaped configuration but with the long axis orientation shifting from east-west, as posited in 1990, to north-south. Maximum extents also change; the north-south dimension becomes 275 m and the east-west 225 m (compared to, respectively, 200 m and 250 m in 1990). Site area increases from 50,000 m² to about 62,000 m² primarily due to the northward extension where the Trants prehistoric site actually lies beneath part of Trants Estate (Figure 5). The expanded core area of the Trants prehistoric site occupies portions of Fields 8, 9, 10, 11, and 12 (compare Figures 3 and 5).

Following demarcation of the MS-G1 boundary, the research strategy focused on intra-site excavation in order to assess site significance as required by the O.D.A. contract. Test pits were spaced at 10 m distances across the site's northern and southern sectors to provide close-interval stratigraphic context. The intervening deposits between the southern sector test pits were then excavated by backhoe to create Trench 1, a 140 m long trench that extended from outside the site, through the midden deposit, and into the site center. Thereafter, the backhoe dug Trenches 2-4 in the site center and Trench 5 across the eastern margin (Figure 6). All trenches were dug through the cultural deposits to the geological strata beneath. These underlying geological strata ranged from fine sand to coarse gravel and even to sizeable boulders; the impressive depositional variability was clearly evident even within the single continuous profile provided by Trench 1 (see Petersen et al., this volume).

Mechanical excavation continued with horizontal stripping of an area comprising about 600 m² (ca. 10 m x 60 m). Strip Area 1 was positioned in the southern sector of the Trants site, the area most directly threatened by the terminal building and apron under the 1992 airport design. It paralleled Trench 1 and was situated in an area of high artifact density and well developed anthrosol.

Deposits were removed to the lowest stratum of human occupation in order to expose features in the land surface upon which the Amerindian inhabitants originally settled. Strip Area 1 also provided lengthy profiles of the east and west walls, for comparison with the Trench 1 profiles.

Finally, four excavation units (1 m² or larger) were dug, two to investigate burials, one to explore stratigraphy in the west wall of Strip Area 1, and a discretionary unit to sample northern Field 10.

Seven human skeletons were exposed in test pits, trenches, and the strip area. Four of the more complete skeletons were excavated fully. Feature 5, the best preserved skeleton, had associated grave goods including a killed pot missing its base but otherwise complete, coral rasp, shell celt, and several pottery sherds. Skeletal remains were widely distributed across the site (Figure 6) rather than being concentrated in a single area; they included primary and secondary burials.

Voluminous quantities of ceramics, lithics, and faunal remains were recovered; other artifacts included worked shell, groundstone, and stone beads (including finished beads, blanks, raw materials, and debitage). Eleven radiocarbon samples are dated (see Petersen et al., this volume) and others have been submitted. Sediment samples were obtained from all excavations for soil and floral analyses. The ongoing analysis of these materials will add to a growing list of publications derived from previous research at Trants (Bartone and Crock 1991; Donahue et al. 1990; Harrington 1924; Petersen and Watters 1991, 1995; Pregill et al. 1994; Reitz 1994; Reitz and Dukes 1995; Steadman et al. 1984; Watters 1980, 1994; Watters and Petersen 1995; Watters and Scaglione 1994).

PRELIMINARY OBSERVATIONS

The 1995 CMNH-UMF archaeological project was considered a success for four reasons. First and foremost, the design engineers have committed themselves to repositioning the airport buildings off the Trants site, thereby preserving the majority of the site for future research. The only area likely to be damaged is a small part of the eastern margin which would be impacted by the Option B runway corridor. Repositioning of a navigational direction beacon and the control tower will eliminate or minimize impact on the post-Saladoid Farm Bay (MS-G12) and Goat Trail (MS-G13) sites situated south of Farm River. Sites likely to be adversely impacted to some degree include the colonial-period Farm Cemetery (MS-G14) and one or more buildings at Trants Estate. Appropriate mitigation measures for those sites are being considered.

Second was the discovery of new archaeological sites and the further investigation of previously known sites. The new sites include two post-Saladoid prehistoric sites, MS-G12 (Farm Bay) and MS-G13 (Goat Trail) and three historic sites, Farm Cemetery (MS-G14), Canadiana site (MS-G15), and the plantation terraces. Additional investigations took place at the known prehistoric sites of Trants (MS-G1), Trants Bay Hill (MS-G9), and Windward Bluff (MS-G2) and the historic sites of Trants Estate and Trants Bay Cemetery (MS-G10). In all, ten archaeological sites exist within or near the airport project area.

Third was the large-scale investigation of the Trants prehistoric site, which enabled clarification of its borders, configuration and orientation; discovery of its first skeletons; and a better understanding of the site's vertical and horizontal parameters, including its stratigraphy, subjacent geological formations, and community patterning (Petersen et al., this volume). However, one important endeavor, delineation of an indisputable house pattern, unfortunately was thwarted by the insufficient number of exposed post molds.

Fourth was the study of the three post-Saladoid sites of Windward Bluff, Farm Bay, and Goat Trail. For the first time on Montserrat, multiple excavations at post-Saladoid sites yielded abundant artifacts and faunal remains from secure stratigraphic contexts. Samples from this later period of human occupation of Montserrat complement the materials already available from the earliest Saladoid occupation represented by the Trants site.

The Overseas Development Administration of the United Kingdom is to be commended for its willingness to initiate and fund this project, as is the Government of Montserrat for insisting that archaeology be included in the terms of reference for airport development. The success of this endeavor hopefully has set a precedent for the inclusion of archaeological studies in future development projects in the British Caribbean.

ACKNOWLEDGMENTS

The Co-directors express their sincere gratitude to the Overseas Development Administration (U.K.) for funding and the British Development Division in the Caribbean (Barbados) for administering this contract (CNTR 94 - 3393A); to the Government of Montserrat for help in implementing the project, especially Director Vernon White and Supervisor Christopher (King) Lee of the Public Works Department, and Chief Planner Alan Gunne-Jones of the Physical Planning Unit; and to President Sarita Francis of the Montserrat National Trust for that organization's absolutely vital on-island coordination. The Co-directors also acknowledge the field crew consisting of Robert Bartone, Belinda Cox, William Crandall, Mark Petersen, and Nathalie Serrand from UMF; Deborah Casselberry from CMNH; Alfred Browne, Dwayne Cassell, Keithroy Daley, Toni Frederick, Gregory Gerald, Richard Pollowy, Stephan Ryan, Oswald Samuel, Wendell Samuel, Dion Weeks, Franceen West, and Helen White from Montserrat; and finally the many volunteers who materially aided the successful completion of the study. We are appreciative of the abstract translations kindly provided by Louis Allaire (French) and Daniel Sandweiss (Spanish).

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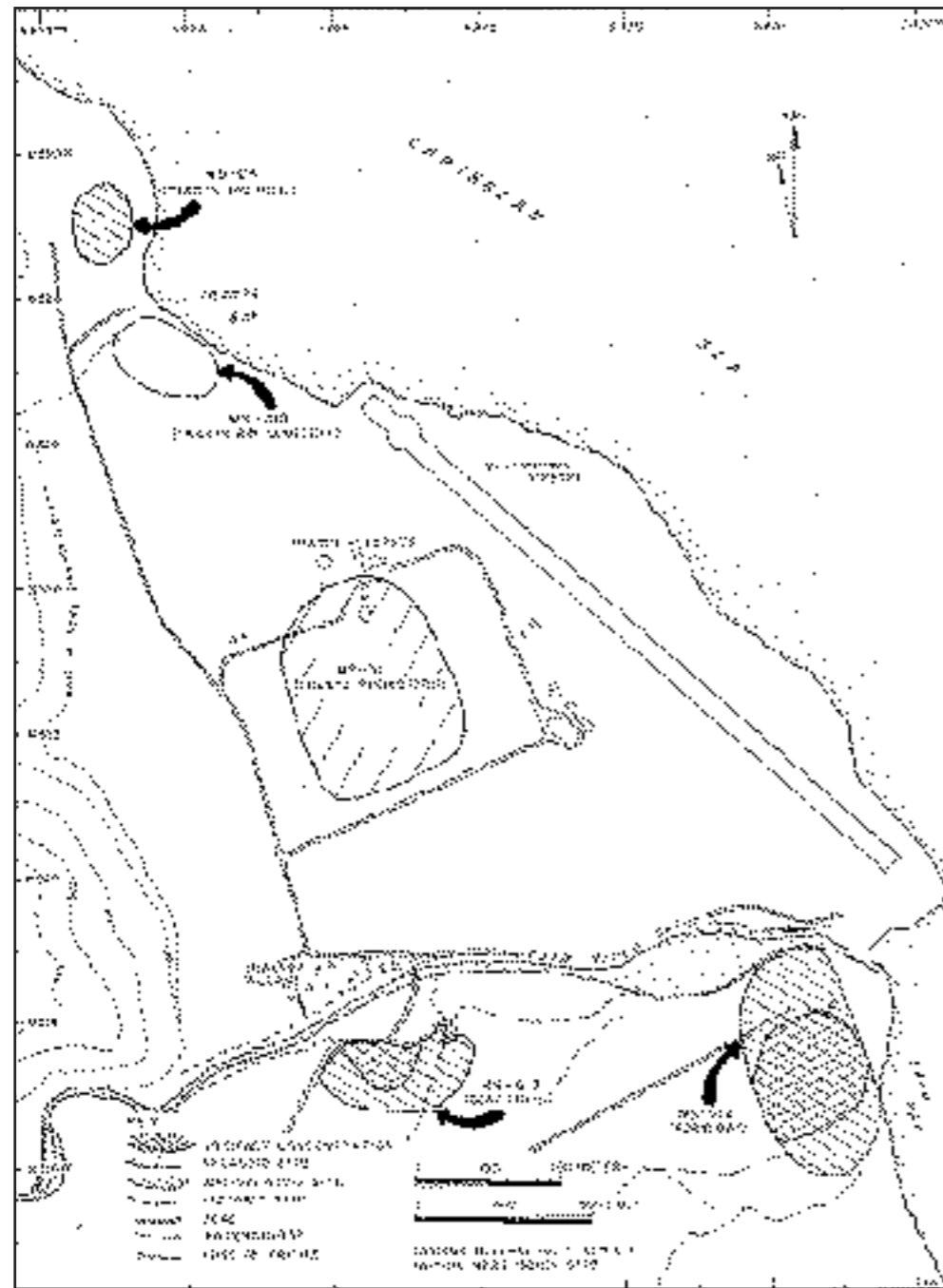


Figure 1. Northern sector of the archaeological project area.

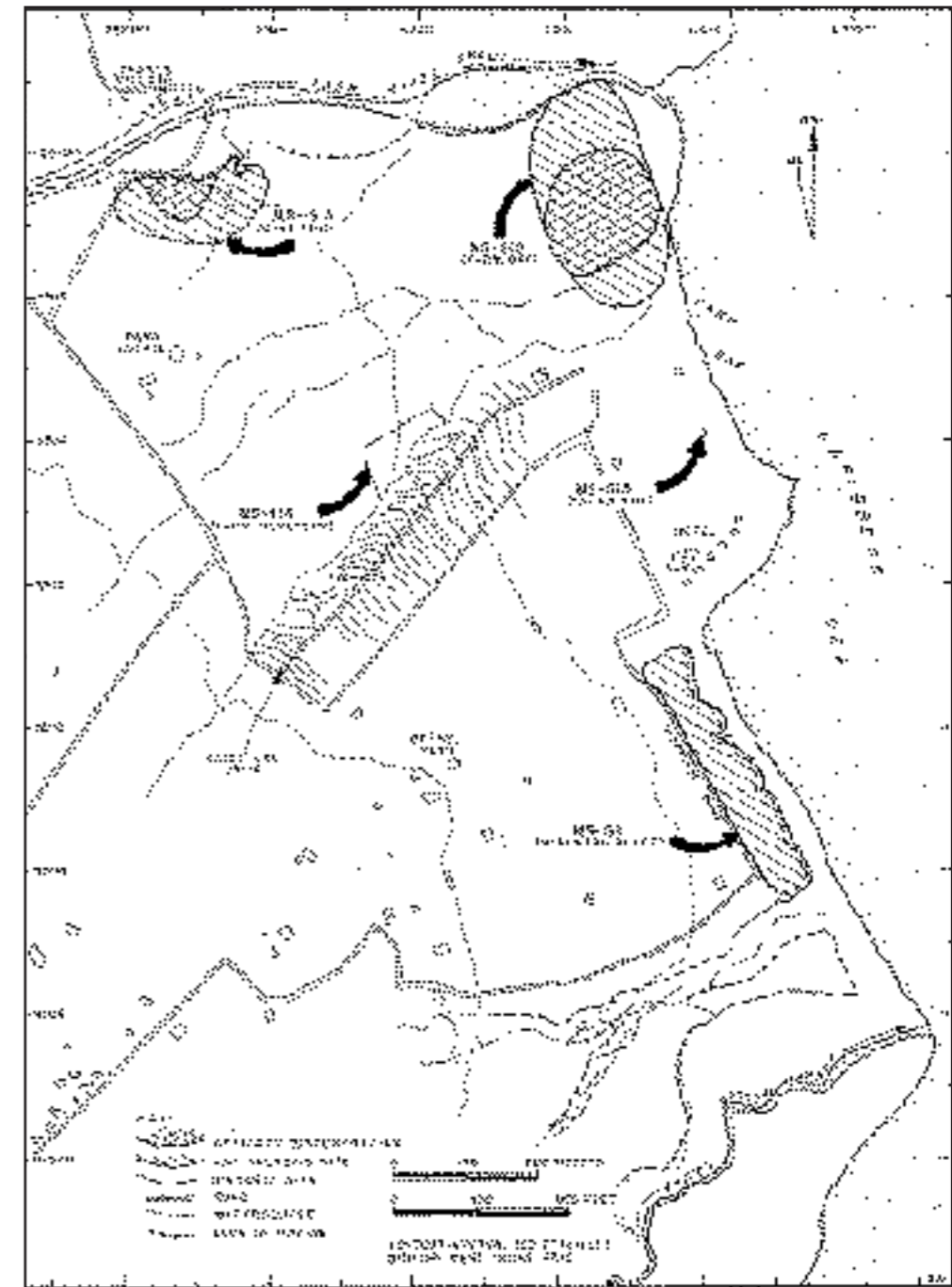


Figure 2. Southern sector of the archaeological project area.

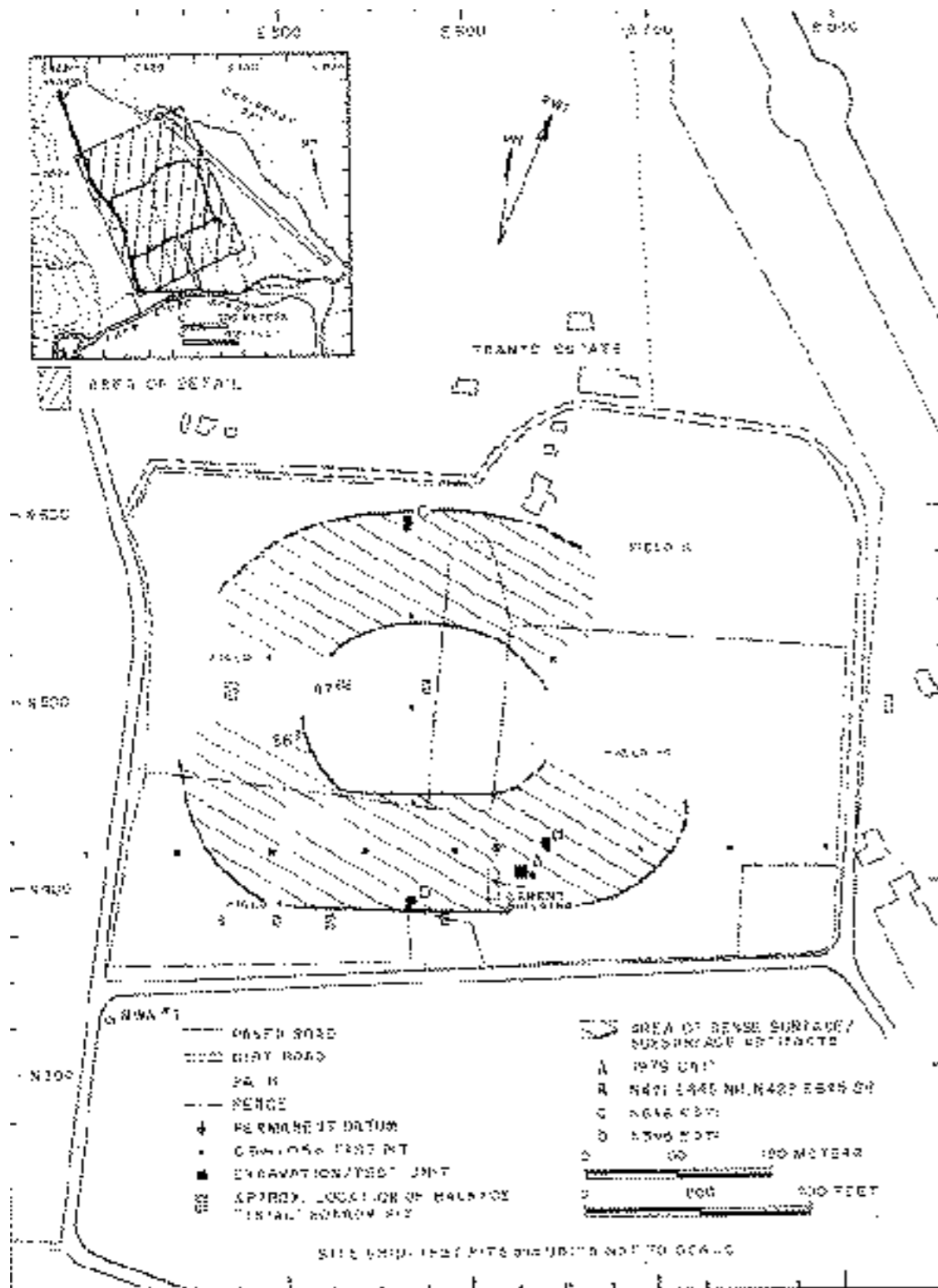


Figure 3. The oval configuration of the Trants site following the 1990 study

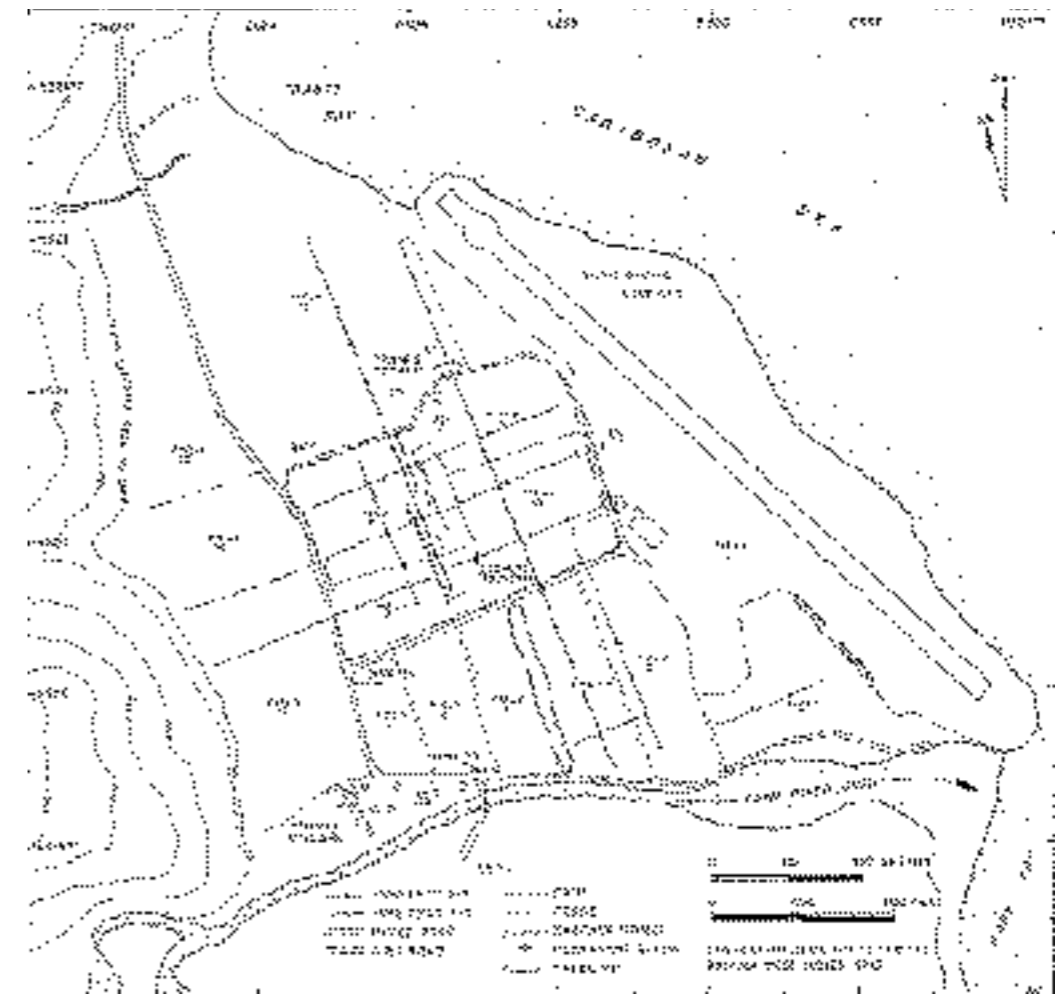


Figure 4. The test pit sampling corridors traversing the Trants site and the peripheral fields.

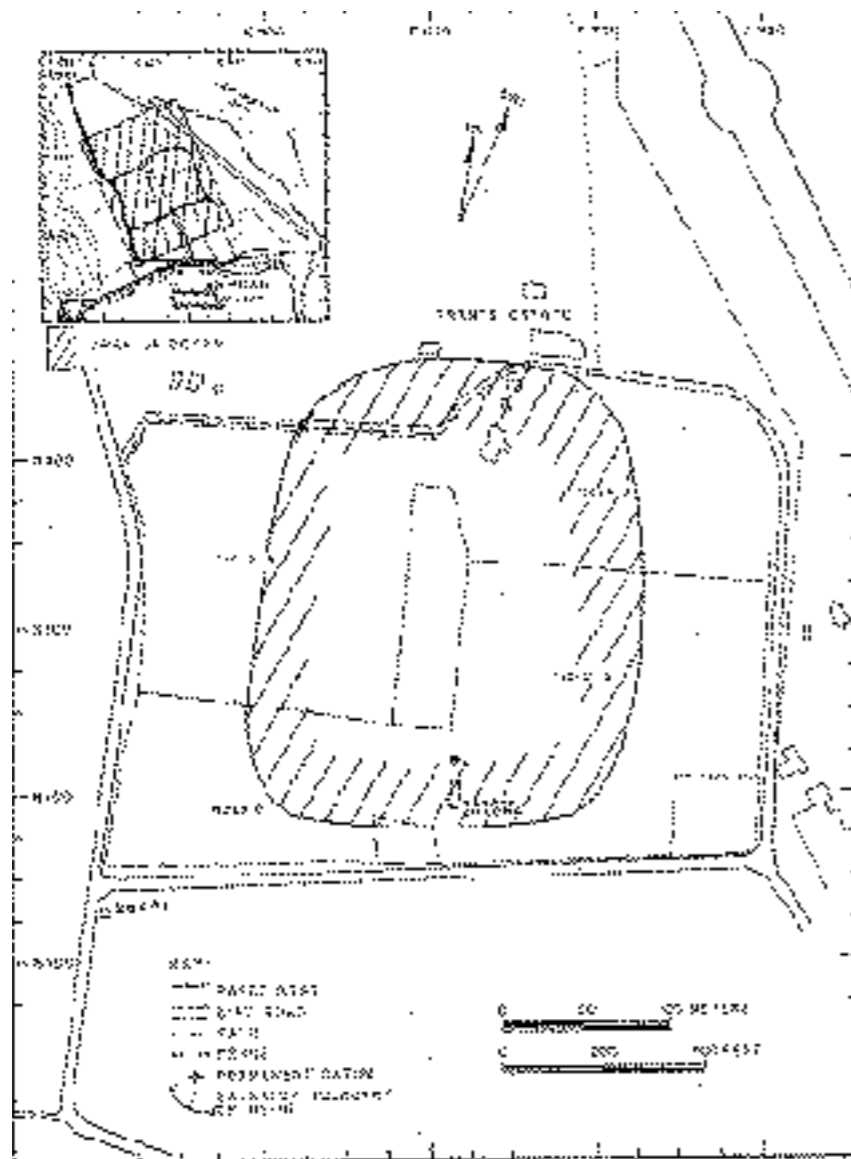


Figure 5. The reconfigured oval of the Trants site following the 1995 study.

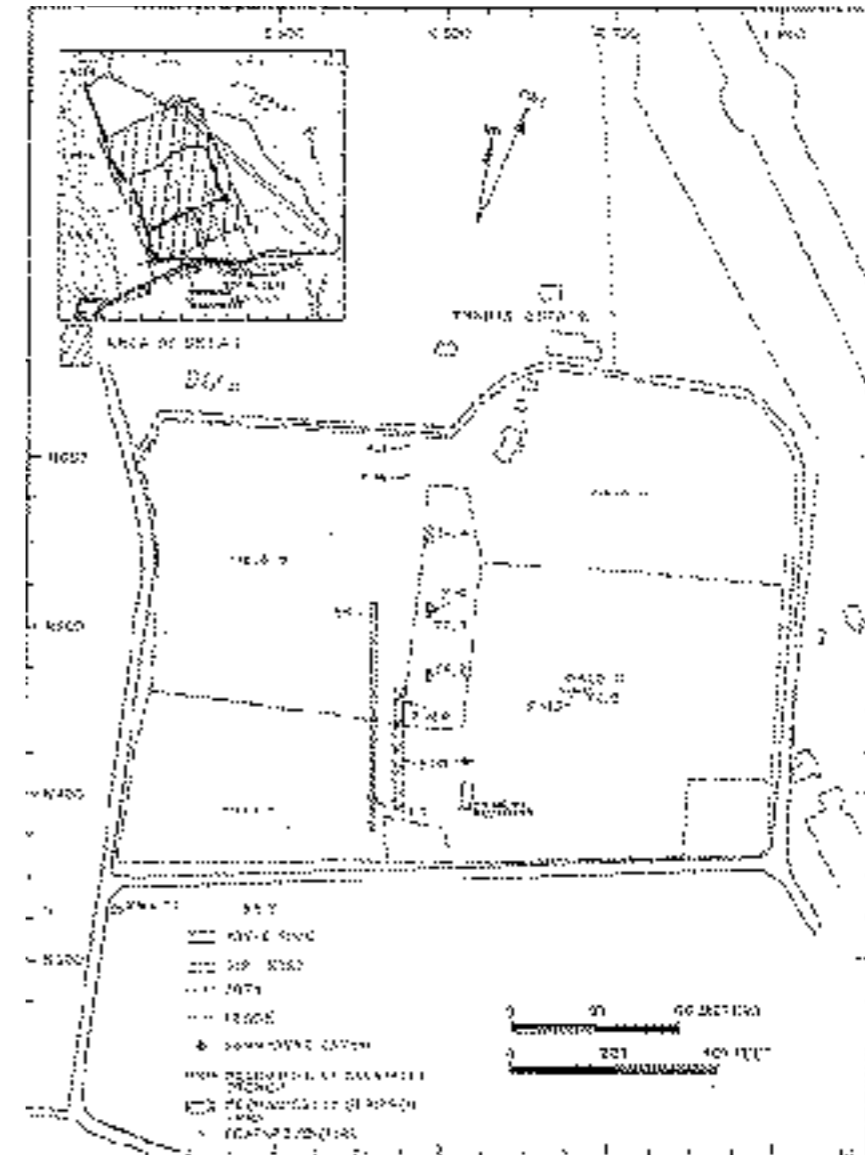


Figure 6. The trenches, strip area, and human skeletons at Trants. The seven skeletons (F5, F6, F10, F16, F58, F144, F145) are widely dispersed.