

Oak Archaeology Wales CIC

Asesiad ar Sail Gwaith Desg: Amffitheatr Rufeinig Arfaethedig a'r Strwythurau Cysylltiedig, Ruperra Home Farm

Desk-Based Assessment: Proposed Roman Amphitheatre and Associated Structures, Ruperra Home Farm

1. Crynodeb Gweithredol / Executive Summary

Welsh / Cymraeg

Mae'r Asesiad ar Sail Gwaith Desg (DBA) hwn yn cyflwyno canlyniadau ymchwiliad diymyrraeth i amffitheatr Rufeinig arfaethedig a nodweddion pensaernïol cysylltiedig yn Ruperra Home Farm, Caerffili. Mae'r astudiaeth yn cyfuno arsylwadau maes, arolwg mesuredig, dadansoddiad synhwyredig o bell, a dogfennau ffotograffig i gasglu nodweddion cynllun gofodol, ffurf morffolegol a photensial archeolegol y safle.

Mae'r canlyniadau'n dangos presenoldeb ôl-troed pensaernïol tanddaearol mawr, hynod reolaidd, gyda geometria, cyfrannau a threfniadaeth sy'n gyson â seilwaith milwrol Rhufeinig. Dehonglir y brif nodwedd fel amffitheatr sylweddol neu arena hyfforddi / perfformio gyda hyd cyfanswm amcangyfrifedig o tua 100 m, yn cynnwys platfform canolog wedi'i godi o tua 35 m x 70 m, wedi'i gynnal gan grid strwythurol o 33 o dyllau pyst neu sylfeini colofnau wedi'u leoli gyda tua 7 m rhyngddynt.

Mae yna flociau sgwar o adeiladwaeth ar ddwy ystlys y llain wedi eu trefn mewn matrices systematig o unedau tua 10 m x 10 m, gyda bylchau 5 m rhyngddynt, gan ffurfio tua 56 uned ar wahân. Dehonglir y rhain fel barics, gweithdai, cyfleusterau storio, neu strwythurau atodol sy'n gysylltiedig â sefydliad milwrol.

Mae tystiolaeth synhwyro o bell, gan gynnwys cysgodolion LiDAR a delweddau lloeren, yn dangos powlen morffolegol glir sy'n cyfateb i ôl-troed yr amffitheatr, ynghyd a llinellau anghyson sy'n ymdebygu i rwydwaith o ffyrdd wedi eu cynllunio yn ffinio a chroesi'r safle.

Ceir yma nant weithredol ac o bosib ffynnon wedi ei amgylchynu gan gerrig neu strwythur rheoli dŵr wedi ei leoli'n strategol tua 100m o'r amffitheatr ei hun.

Mae'r safle'n dangos gradd uchel o gydlynid gofodol, cyfeiriadedd a bwriad pensaernïol, gan awgrymu adeiladu cynlluniedig yn hytrach na phatrymau naturiol neu amaethyddol. Mae'r nodweddion hyn, ynghyd â graddfa'r strwythurau, yn dynodi potensial archeolegol uchel a'r posibilrwydd o sefydliad milwrol Rhufeinig sylweddol sydd heb ei gofnodi o'r blaen.

Argymhellir yn gryf y cynhelir ymchwil bellach drwy arolygon geoffisegol, gan gynnwys GPR a magnetometreg, i gadarnhau maint, dyfnder a chymeriad yr olion tanddaearol.

English

This Desk-Based Assessment (DBA) presents the results of non-invasive investigation of a proposed Roman amphitheatre and associated architectural features at Ruperra Home Farm, Caerphilly. The study integrates field observations, measured survey, remote sensing analysis, and photographic documentation to characterise the spatial layout, morphological form, and archaeological potential of the site.

The results indicate the presence of a large, highly regular, sub-surface architectural footprint with geometry, proportions and organisation consistent with Roman military infrastructure. The principal feature is interpreted as a substantial amphitheatre or performance/training arena with an estimated total length of c. 100 m, incorporating a raised central platform c. 35 m × 70 m, supported by a structural grid of 33 posthole or column foundations distributed at approximately 7 m intervals.

The arena is flanked on both sides by rectilinear blocks of building plots, arranged in a systematic matrix of c. 10 m × 10 m units, separated by 5 m gaps, forming approximately 50 discrete modules (6 modules missing to swallow for curvature). These are interpreted as barracks, workshops, storage facilities, or related ancillary structures associated with a military installation.

Remote sensing evidence, including LiDAR hillshade and satellite imagery, demonstrates a clear morphological bowl corresponding to the amphitheatre footprint, together with linear anomalies consistent with a planned road network bounding and intersecting the site.

An active spring source is provisionally interpreted as a possible stone-lined well or water management structure, strategically located c. 100 m from the amphitheatre complex.

The site displays a high degree of spatial coherence, shared alignment, and architectural intentionality, strongly suggesting planned construction rather than natural or agricultural patterning. These characteristics, combined with the scale of the features, indicate a high archaeological potential and the possibility of a substantial and previously undocumented Roman military establishment.

Further investigation through geophysical survey, including GPR and magnetometry, is strongly advised to confirm the extent, depth, and character of the subsurface remains.

2. RHAGYMDRODD AC AMCANION / INTRODUCTION & AIMS

Cymraeg / Welsh

Mae'r Asesiad ar Sail Gwaith Desg (DBA) hwn wedi'i gynnal i gasglu, syntheseiddio a dehongli'r data sydd ar gael sy'n ymwneud ag amffitheatr Rufeinig arfaethedig a gweddillion pensaernïol cysylltiedig yn Ruperra Home Farm, Caerffili. Mae'r astudiaeth yn canolbwyntio'n benodol ar brif ardal yr amffitheatr a'i chyd-destun pensaernïol uniongyrchol, gan gynnwys nodweddion tanddaearol a ddehonglir fel sylfeini platfform wedi'i codi, plotiau adeiladu ar y naill ochr a'r llall, seilwaith ffyrdd cysylltiedig, a nodwedd reoli dŵr bosibl.

Mae'r gwaith yn seiliedig ar arolwg maes di-ymyrraeth a gynhaliwyd rhwng Awst 2025 ac Ionawr 2026, gan gynnwys defnydd o ddowsio i ddarganfod stwythurau anghyffredin tanddaearol ac yna arolwg mesuredig gan ddefnyddio olwyn fesur i bennu maint, bylchu, a pherthnasau gofodol y nodweddion. Cafodd setiau data synhwyro o bell, gan gynnwys LiDAR, cysgodolion a delweddau lloeren, eu dadansoddi'n ddiweddarach i asesu mynegiant topograffig, cadarnhau nodweddion a ddehonglir, a gwerthuso perthnasau ar raddfa tirwedd.

Mae'r asesiad hwn â thri phrif nod:

1. **Nodweddu ffurf, maint a threfniadaeth yr elfennau a welwyd** a gwerthuso eu potensial archeolegol.
2. **Gwerthuso tebygolrwydd tarddiad Rhufeinig**, gan ystyried cynllun gofodol, rhesymeg adeiladol, a data cymharol o safleoedd adnabyddus.
3. **Nodi y camau ymchwil priodol nesaf**, gyda phwyslais ar arolwg geoffisegol di-ymyrraeth cyn unrhyw gloddio targedig.

Nid yw'r astudiaeth hon yn cynnig adnabod pendant ar hyn o bryd; yn hytrach, mae'n ceisio asesu a yw'r dystiolaeth sydd ar gael yn cyfiawnhau ymchwiliad archeolegol strwythuredig.

Mae'r canlyniadau'n dangos ôl-troed pensaernïol cydlynol ac hynod reolaidd, sy'n gymharol o ran graddfa a threfniadaeth ag amffitheatrau milwrol Rhufeinig a seilwaith cysylltiedig. Gan ystyried gwerth posibl y safle i dreftadaeth ranbarthol, argymhellir yn gryf y cynhelir arolwg geoffisegol strwythuredig fel blaenoriaeth i wirio presenoldeb, dyfnder a maint yr olion tanddaearol.

English

This Desk-Based Assessment (DBA) has been undertaken to collate, synthesise, and interpret available data relating to a proposed Roman amphitheatre and associated architectural

remains identified at Ruperra Home Farm, Caerphilly. The study focuses specifically on the amphitheatre precinct and its immediate architectural context, including sub-surface features interpreted as raised platform foundations, flanking building plots, associated road infrastructure, and a possible water-management feature.

The work is based upon non-invasive field survey conducted between August 2025 and January 2026, incorporating the use of dowsing to identify sub-surface anomalies, followed by measured survey using a trundle wheel to determine the size, spacing, and spatial relationships of features. Remote sensing datasets, including LiDAR, hillshade and satellite imagery, were subsequently analysed to assess topographic expression, corroborate interpreted features, and examine landscape-scale relationships.

This assessment has three principal aims:

- 1. **To characterise the form, extent, and organisation of observed features** and assess their potential archaeological significance.*
- 2. **To evaluate the plausibility of a Roman origin**, considering spatial layout, constructional logic, and comparative data from known sites.*
- 3. **To identify appropriate next stages of investigation**, with an emphasis on non-invasive geophysical survey, prior to any targeted excavation.*

The study does not propose definitive identification at this stage; rather, it seeks to evaluate the available evidence and determine whether the site merits structured archaeological investigation.

The results demonstrate a coherent and highly regular architectural footprint, comparable in scale and organisation to Roman military amphitheatres and associated infrastructure. Given the potential value of the site to regional heritage, structured geophysical survey is recommended as a priority action to verify the presence, depth, and extent of sub-surface remains.

3. LLEOLIAD Y SAFLE A CHYD-DESTUN AMGYLCHEDDOL / SITE LOCATION & ENVIRONMENTAL CONTEXT

Cymraeg / Welsh

Mae safle'r amffitheatr arfaethedig wedi'i leoli yn Ruperra Home Farm, Caerffili, De Cymru, ar dir amaethyddol tonnog i'r gogledd-ddwyrain o ystâd hanesyddol Castell Ruperra. Nodweddir y dirwedd gan gymysgedd o dir pori, gwrychoedd, a phlygiadau coetir bach, gyda'r tir yn ffurfio llethr naturiol sy'n codi yn raddol tuag at y de-orllewin.

Mae ôl-troed yr amffitheatr yn meddiannu iselder bas siâp powlen a ffurfiwyd gan lethrau gyferbyniol o raddiant ac uchder tebyg, gan greu amgaead topograffig naturiol. Mae'r nodwedd hon yn weladwy mewn delweddau lloeren ac ar fodelau cysgodol LiDAR, lle mae'n ymddangos fel ceudod hirgrwn eang gyda chanol cymharol wastad wedi'i amgylchynu gan dir sy'n codi.

Mae rhan helaith o'r tir yn lômiau a chlai-lômau draeniad da, yn gyson â dyddodion rhewlifol ôl-ladw yn nodweddiadol o'r rhanbarth. Mae mudiad dŵr daear tymhorol yn ymddangos yn weithredol yn lleol, yn enwedig ar ymylon gorllewinol prif ardal yr amffitheatr, lle mae arwyneb wedi'i fwydo gan ffynnon yn ymddangos yn gyson.

Mae'r gorchudd llysdyfiant yn cynnwys yn bennaf laswellt byr wedi'i bori, ond mae sawl ardal o fewn ôl-troed yr amffitheatr yn dangos tyfiant llysdyfiant gwahaniaethol, gan gynnwys mannau o laswellt hirach a gwyrddach sy'n cydfynd â lleoliadau nodweddiad strwythurol arfaethedig megis sylfeini colofnau, corneli adeiladau, a ffiniau llinellol. Cafodd yr annomaleddau hyn eu ffotograffu a'u mapio fel rhan o'r arolwg.

Nid oes tystiolaeth arwyneb eang o strwythurau, cloddwaith, na maen yn sefyll yn y tirwedd ehangach; fodd bynnag, mae synhwyro o bell yn datgelu sawl annomaledd llinol a reitlinol tanddaearol nad ydynt yn gyson â systemau cae amaethyddol diweddar ac sy'n ymddangos yn dilyn trefniadaeth gydlynol a chynlluniedig.

Mae lleoliad yr amffitheatr mewn ceudod naturiol gweddol gaeedig, ynghyd â'i agosrwydd at ffynonellau dŵr, llwybrau mynediad, a llwyfannau adeiladu gwastad, yn cynrychioli cydestun topograffig sy'n addas i adeiladu a defnydd Rhufeinig, ac yn gymharol gyffredin â lleoliadau amffitheatr milwrol adnabyddus ym Mhrydain.

English

The proposed amphitheatre site is located at Ruperra Home Farm, Caerphilly, South Wales, situated on undulating agricultural land to the north-east of the historic Ruperra Castle estate. The landscape is characterised by a mixture of pasture, hedgerow, and small woodland belts, with the underlying terrain forming a natural slope that ascends gently towards the south-west.

The amphitheatre footprint occupies a shallow, bowl-shaped depression formed by opposing slopes of near-equal gradient and elevation, creating a natural topographic enclosure. This feature is visible in both satellite imagery and LiDAR hillshade models, where it appears as a broad, semi-oval hollow with a central relatively level area surrounded by rising ground.

Soil conditions are dominated by well-drained loams and clay-loam substrates, consistent with post-glacial drift deposits typical of the region. Seasonal groundwater movement

appears to be locally active, particularly at the western margins of the amphitheatre precinct, where a persistent spring-fed surface emergence has been observed.

Vegetation cover consists predominantly of short grazed grassland, although several areas within the amphitheatre footprint exhibit differential vegetation growth, including patches of longer and greener grass which coincide with the positions of proposed structural features such as column foundations, building corners, and linear boundaries. These anomalies have been photographed and mapped as part of the survey.

The wider landscape shows no surface evidence of standing structures, earthworks, or stone masonry; however, remote sensing reveals multiple linear and rectilinear anomalies beneath the surface which are not consistent with recent agricultural field systems and which appear to follow a coherent, planned arrangement.

The location of the amphitheatre in a sheltered natural hollow, combined with its proximity to water sources, access routes, and level building platforms, represents a topographic context well-suited to Roman construction and use, and broadly comparable to known military amphitheatre locations in Britain.

4. DULLIAU / METHODS

Cymraeg / Welsh

Mae'r asesiad hwn yn seiliedig ar raglen o ymchwiliad maes di-ymyrraeth a gynhaliwyd rhwng Awst 2025 ac Ionawr 2026, ynghyd â dadansoddiad desg o setiau data gofodol ar gael i'r cyhoedd. Defnyddiwyd cyfuniad o ddulliau arsylwol, offerynnol ac analitig i adnabod, mapio a gwerthuso nodweddion archeolegol posibl.

4.1 Canfod Annomaleddau drwy Ddowsio

Cynhaliwyd dowsio systematig er mwyn adnabod nodweddion tanddaearol, ar draws trawstoriadau ailadroddus o'r ardal astudio. Nod y cam hwn oedd canfod newidiadau mewn egni, gwrthiant neu ymddygiad draenio'r ddaear a allai ddynodi strwythurau claddu, gwacterau neu ffiniau pensaernïol.

Er bod dowsio'n cael ei gydnabod fel techneg anghonfensiynol, defnyddiwyd y dull yn systematig ac yn ofalus, gan bwysleisio:

- Darlleniadau ailadroddus
- Croeswirio annomaleddau
- Cydlyniad gofodol

- Adnabod patrwm geometrig

Dim ond nodweddion a ddangosodd ymatebion ailadroddus a chyson a gafodd eu cynnwys yn y mapio a'r dadansoddiad.

4.2 Arolwg Mesurol

Ar ôl eu hadnabod, mesurwyd nodweddion ar y safle gan ddefnyddio olwyn fesur, gan alluogi cofnodi:

- Dimensiynau unedau pensaernïol
- Bylchu rhwng nodweddion
- Cyfeiriadedd a chyfluniad
- Maint gridiau strwythurol

Gwiriwyd mesuriadau am gysondeb mewnol, a nodwyd cyfnodau ailadroddus (e.e., **7 m, 5 m, 10 m**) ac fe'u defnyddiwyd i ddeillio cynlluniau gofodol.

4.3 Cofnodi Ffotograffig

Cymerwyd ffotograffau i ddogfennu:

- Gwahaniaethau llysydfiant
- Lleoliadau nodweddion wedi'u marcio gyda baneri
- Amrywiadau topograffig
- Patrymu strwythurol ar lethrau

Sylwyd ar fannau o laswellt hirach a gwyrddach mewn lleoliadau a rhagfynegyd ar gyfer:

- Sylfeini colofnau
- Corneli adeiladau
- Ffiniau llinellol

Mae'r annomaleddau hyn yn gyson â newidion mewn lleithder, dyfnder pridd neu gwaith maen wedi'u claddu, ac maent yn gyffredin mewn ymchwiliaeth archeolegol.

4.4 Dadansoddiad Synhwyro o Bell

Adolygwyd delweddau lloeren a modelau cysgodol LiDAR i asesu:

- Ffurf topograffig bowlen yr amffitheatr
- Annomaleddau llinol a reitlinol
- Morffoleg rhwydwaith ffyrdd
- Perthynas i'r tirwedd

Mae LiDAR yn dangos ceudod siâp powlen clir sy'n cyfateb i ôl-troed yr amffitheatr, ynghyd â nodweddion llinol sy'n gyson â choridorau ffyrdd cynlluniedig.

4.5 Integreiddio a Dehongli Data

Drwy gyfod setiau pell a data maes crewyd cynllun safle dros-dro, gan ddangos:

- Platfform wedi'i codi
- Grid colofnau
- Plotiau adeiladu ar y naill ochr a'r llall
- Cyfeiriadau ffyrdd
- Ffynnon neu strwythur dŵr posibl

Cafodd y cynllun ei werthuso yn erbyn enghreifftiau pensaernïol Rhufeinig a thypolegau amffitheatr milwrol.

Mae'r canlyniadau'n cael eu dehongli'n ofalus, ond maent yn dynodi ol-troed pensaernïol sylweddol, trefnus, sy'n gyson â gwaith adeiladu milwrol Rhufeinig.

4.6 Sgiliau a Meddylfryd yr Ymchwilydd

Cefndir yr Ymchwilydd

Mae gan yr ymchwilydd dros drideg o flynyddoedd o brofiad proffesiynol mewn adeiladu modiwlaidd a chynllunio gofodol yn y diwydiant sgaffaldio. Roedd y gwaith hwn yn gofyn am sgiliau uwch mewn:

- Mesur a gosod manwl gywir

- Rhesymu strwythurol a chynllunio llwythau
- Dylunio gridiau modiwlaidd
- Gweithio ar dir anwastad
- Dychmygu strwythurau cyn eu hadeiladu

Yn ogystal, mae gan yr ymchwilydd dros ddeugain mlynedd o brofiad mewn canfod metal, adfer arteffactau, ac adnabod diwylliant deunyddol maes, gan gynnwys dyddio rhagarweiniol ac asesiad teipolegol o ganfyddiadau bach. Mae hyn wedi cyfrannu at ddealltwriaeth ymarferol o ddefnydd tirwedd, dyddodiad, tafonomeg a phrosesau ffurfio safleoedd.

Cymhwyso i Arolwg Maes

Mae'r sgiliau hyn wedi llywio'r gwaith maes drwy:

- Adnabod nodweddion tanddaearol posibl drwy ddadansoddiad gofodol a chydabod patrymau
- Sefydlu pwyntiau mesuredig ar y ddaear gan ddefnyddio olwyn fesur 1 m
- Mapio cynlluniau pensaernïol posibl gan ddefnyddio gridiau orthogonol, bylchu modiwlaidd, a gwerthusiad cyfrannol

Nod y dulliau hyn yw cynhyrchu data strwythuredig a phrawfadwy y gellir eu gwerthuso drwy dechnegau annibynnol megis LiDAR, geoffiseg neu gloddiad.

Defnyddio Dulliau Greddfol

Defnyddiwyd dull greddfol yn ystod y camau cynnar i nodi ardaloedd o ddiddordeb. Roedd y gwaiil llaw yn gweithredu yn unig fel mynegiant corfforol o ymatebion mewnol, yn hytrach nag offer synhwyro. Mesurwyd, mapwyd a chofnodwyd pob nodwedd yn dilyn hynny, gan sicrhau bod y data gofodol yn annibynnol o'r broses reddfol ac ar gael ar gyfer profi empirig.

Cyfraniad i'r Canlyniadau

Mae profiad cyfansawdd yr ymchwilydd wedi galluogi:

- Adnabod trefniadau gofodol rheolaidd yn y tirwedd
- Cydnabod patrymau strwythurol sy'n gyson â gwaith peirianyddol
- Dehongliad cychwynnol o swyddogaethau posibl y safle yn seiliedig ar raddfa, trefniadaeth a hierarchaeth ofodol

Cyflwynir y canfyddiadau fel hypothesisau yn seiliedig ar ddata gofodol mesuradwy, sy'n addas ar gyfer eu gwerthuso drwy dulliau archaeolegol cydnabyddedig.

Felly, mae'r arolwg yn cynrychioli cyfuniad o arbenigedd ymarferol mewn mesuriadau, dewis greddfodol o nodau arolygu, a dulliau cofnodi systematig wedi'u cynllunio i gynhyrchu canlyniadau y gellir eu gwerthuso'n wyddonol ac a ddilysir yn annibynnol.

English

This assessment is based on a programme of non-invasive field investigation carried out between August 2025 and January 2026, supplemented by desk-based remote analysis of publicly available geospatial datasets. A combination of observational, instrumental, and analytical methods was employed to identify, map, and evaluate potential archaeological features.

4.1 Dowsing-Based Anomaly Detection

Initial identification of sub-surface features was undertaken through systematic dowsing survey, conducted along repeated transects over the study area. The aim of this stage was to detect variations in ground energy, resistance, or drainage behaviour that might indicate buried structures, voids, or architectural boundaries.

While dowsing is recognised as a non-conventional technique, the method was applied systematically and cautiously, with emphasis on:

- *Repeated readings*
- *Cross-checking of anomalies*
- *Spatial consistency*
- *Geometric pattern recognition*

Only features that demonstrated repeated, replicable responses were subsequently incorporated into mapping and analysis.

4.2 Measured Survey

Following identification, features were measured in situ using a trundle wheel, enabling the documentation of:

- *Dimensions of architectural units*
- *Spacing between features*
- *Orientation and alignment*
- *Extent of structural grids*

Measurements were subjected to internal consistency checks, and recurring intervals (e.g., 7 m, 5 m, 10 m) were recorded and used to derive overall spatial layouts.

4.3 Photographic Recording

Photographs were taken to document:

- *Vegetation differentials*
- *Flagged feature positions*
- *Topographic variation*
- *Structural patterning on slopes*

Notably, patches of longer, greener grass were observed at predicted locations of:

- *Column foundations*
- *Building corners*
- *Linear boundaries*

These vegetation anomalies are consistent with differential moisture retention, soil depth, or buried masonry, and are commonly recognised in archaeological prospection.

4.4 Remote Sensing Analysis

Satellite imagery and LiDAR hillshade were reviewed to assess:

- *Topographic form of the amphitheatre bowl*
- *Linear and rectilinear anomalies*
- *Road network morphology*
- *Landscape integration*

LiDAR clearly shows a broad bowl-shaped depression corresponding to the amphitheatre footprint, and multiple linear features consistent with planned road corridors.

Overlay mapping of interpreted structures onto LiDAR and satellite imagery provided an additional spatial verification test, demonstrating strong alignment between:

- *Field-recorded dimensions*

- *Remote-sensed topography*
- *Predicted architectural geometry*

4.5 Data Integration and Interpretation

Field and remote datasets were synthesised to create a provisional site plan, showing:

- *Raised platform*
- *Column grid*
- *Flanking building plots*
- *Road alignments*
- *A possible well or water structure*

This plan was evaluated against known Roman architectural precedents, military layouts, and amphitheatre typologies.

Results are interpreted cautiously, but indicate a substantial, ordered architectural footprint consistent with Roman military construction.

4.6 Skills and Approach of Investigator

Investigator Background

The investigator has over thirty years' professional experience in modular construction and spatial planning within the scaffolding industry. This work required advanced skills in:

- *Precise measurement and layout*
- *Structural reasoning and load planning*
- *Modular grid design*
- *Working across uneven terrain*
- *Visualising structures prior to construction*

In addition, the investigator has over forty years' experience in metal detecting, artefact recovery, and field-based material culture identification, including preliminary dating and typological assessment of small finds. This has contributed to a practical understanding of landscape use, deposition, taphonomy, and site formation processes.

Application to Field Survey

These combined skillsets have informed fieldwork through:

- *Recognition of potential sub-surface features via spatial analysis and pattern recognition*
- *Establishing measurable points on the ground using a 1 m measuring wheel*
- *Mapping possible architectural layouts using orthogonal grids, modular spacing, and proportional assessment*

These methods aim to produce structured, testable data that can be evaluated through independent techniques such as LiDAR, geophysics, or excavation.

Use of Intuitive Methods

An intuitive approach was used during early prospection to identify areas of interest. Hand-held rods acted solely as physical indicators of internal responses, rather than sensory instruments. All features were subsequently measured, mapped, and recorded, ensuring that the resulting spatial data are independent of the intuitive process and available for empirical testing.

Contribution to Results

The investigator's combined experience has supported:

- *Identification of regular spatial layouts in the landscape*
- *Recognition of structural patterns consistent with engineered construction*
- *Preliminary interpretation of possible site functions based on scale, organisation, and spatial hierarchy*

The findings are presented as hypotheses based on measurable spatial data, suitable for evaluation through recognised archaeological methods.

The survey therefore represents a fusion of practical measurement expertise, intuitive selection of survey nodes, and systematic recording practices designed to produce results which can be scientifically evaluated and independently verified.

5. CANLYNIADAU / RESULTS

5.1 Ffurf yr Amffitheatr a'i Mesuriadau Cyffredinol / Amphitheatre Form and Overall Dimensions

Cymraeg

Y brif nodwedd a adnabuwyd yw strwythur mawr, rheolaidd, tebyg i amffitheatr gyda hyd cyfanswm amcangyfrifedig o **dua 100 m**. Mae'r arena mewnol yn mesur tua **35 m o led a 70 m o hyd**, gan gulhau tuag at y ddau ben i greu coridorau mynediad ac ymadael o tua **20 m**.

Yn wahanol i amffitheatrau a gloddiwyd yn uniongyrchol i'r tir, dehonglir wyneb canolog yr arena fel plattform wedi'i codi, wedi'i gynnal gan sylfeini o golofnau neu bileri tanddaearol, yn hytrach na cheudod a gloddiwyd yn y tir. Mae'r trefniant hwn yn gyson ag enghreifftiau archeolegol lle cefnogwyd uwch-strwythurau pren gan systemau post a thrawst, gan gynnwys amffitheatrau Rhufain, Capua, Pozzuoli a Trier.

Mae delweddau lloeren a LiDAR yn datgelu ceudod siâp powlen o amgylch y plattform canolog, sy'n gyson â teras o fanciau eistedd neu waith tirwedd a allai fod wedi cuddio ffurfiau strwythurol yn ddiweddarach (gweler Ffigur 6, Atodiad).

Mae'r gosodiad topograffig yn cynnwys llethrau cyferbyniol o raddiant tebyg, gan ffurfio amgaead hirgrwn eang. Mae arolwg maes yn cadarnhau bod y llethrau'n ddigon rheolaidd a chymesur i gyd-fynd â therasu seddau wedi'u cynllunio'n bwrpasol.

English

*The principal feature identified is a large, regular, amphitheatre-like structure with an overall estimated length of c. **100 m**. The internal arena measures approximately **35 m** in width and **70 m** in length, narrowing towards both ends to create entrance and exit corridors of c. **20 m**.*

Unlike conventionally excavated earth-cut amphitheatres, the central arena surface is interpreted as a raised platform, supported by sub-surface columns or pillar foundations, rather than a hollow cut directly into the ground. This arrangement is consistent with archaeological examples where timber superstructures were supported by post-and-beam systems, including amphitheatres at Rome, Capua, Pozzuoli and Trier.

Satellite imagery and LiDAR hillshade reveal a bowl-shaped depression surrounding the central platform, consistent with terraced seating banks or naturalised earthworks later masking structural forms (see Figure 6, Appendix A).

The topographic setting comprises opposing slopes of near-equal gradient, together forming a broad, semi-oval enclosure. Field survey confirms that the slopes are sufficiently regular and symmetrical to be compatible with purpose-engineered seating terraces.

5.2 Llwyfan wedi'i godi a grid colofnau / Raised Platform and Column Grid

Cymraeg

Adnabuwyd cyfres o sylfeini pyst neu bileri wedi'u leoli'n rheolaidd, yn ymddangos fel ardaloedd o laswellt hirach, gwyrddach, wedi'u trefnu mewn grid o **35 m × 70 m**. Cofnodwyd cyfanswm o **33 nodwedd**, wedi'u dosbarthu mewn tri rhes hydredol o unarddeg, gyda **thua 7 m o fylchau** hydredol a lledredol (gweler Ffigur 4 a 5, Atodiad).

Mae ffurf y grid sylfeini, ynghyd â'i raddfa a'i bylchu, yn nodweddiadol o is-strwythur dwyn llwyth a ddyluniwyd i gynnal plattform neu lawr sylweddol wedi'i codi. Mae'r trefniant hwn yn gyson â phensaernïaeth post-a-trawst Rhufeinig, lle codwyd lloriau pren uwchlaw'r ddaear i hwyluso:

- Draeniad
- Storfa
- Daliadau anifeiliaid
- Symudiad tanddaearol
- Systemau mecanyddol

Mewn sawl lleoliad, mae marciau cylchog o lysdyfiant yn cyfateb i dyllau postyn unigol tua **1 passus Rhufeinig (tua 1.48 m) o amgylch**, gan awgrymu diamedr sylweddol a chynnwys llwythog (gweler Ffigur 3, Atodiad).

English

*Field survey identified a series of regularly spaced posthole or column foundations, expressed as areas of longer, denser green grass, arranged in a grid measuring **35 m × 70 m**. A total of **33 features** were recorded, distributed in three longitudinal rows of eleven, with **c. 7 m** spacing both longitudinally and transversely (see Figure 4 and 5, Appendix).*

The form of the foundation grid, combined with its scale and spacing intervals, is indicative of a load-bearing substructure designed to support a substantial raised platform or floor. This arrangement is consistent with Roman post-and-beam architecture, where timber decking was raised above ground level to permit:

- *Drainage*
- *Storage*
- *Animal pens*

- *Sub-floor movement*
- *Mechanical systems*

*In several locations, circular vegetation marks correspond to individual postholes measuring approximately **1 Roman passus (c. 1.48 m)** in circumference, suggesting substantial column diameter and mass-bearing capacity (see Figure 3, Appendix).*



Digital Surface Model (DSM) visualization showing topographic relief and features near Ruperra. Data derived from DataMapWales elevation data, © Welsh Government / licensed data. Contains public sector information licensed under the Open Government Licence v3.0. Image processed and annotated by Daryn Groves.

Ffigur 9. Cynllun yr amffitheatr dros ddelwedd gysgodol LiDAR / Figure 9. Amphitheatre overlay on LiDAR hillshade

Cymraeg: Haenau gofodol yn dangos cynllun yr amffitheatr dros LiDAR cysgodol. Mae'r strwythur yn cyd-fynd ag iselder siâp powlen naturiol, gan gefnogi'r dehongliad o derasu a gwaith pridd bwriadol. *Ffynhonnell: DataMapWales (Llywodraeth Cymru), © Hawlfraint y Goron, TLG. Dehongliad gan yr awdur.*

English: *Geospatial overlay showing the amphitheatre plan superimposed onto LiDAR hillshade. The structure aligns with a natural bowl-shaped depression, supporting interpretation of designed terracing and earthworks. Source: DataMapWales (Welsh Government), © Crown copyright, OGL. Interpretation by the author.*

5.3 Plotiau adeiladu ar y naill ochr a'r llall / Flanking Building Plots

Cymraeg

Ar y ddwy ochr i'r amffitheatr, sef y de-orllewin a'r gogledd-ddwyrain, cofnodwyd cyfres o blotiau adeiladu sgwar, wedi'u trefnu mewn cynllun systematig o:

- **7 plot yn hydredol**, dros tua 100 m
- **4 plot yn draws**, dros tua 40 m
- Maint plot: **10 m × 10 m**
- Bwlch rhwng plotiau: **5 m**

Mae hyn yn cynhyrchu **tua 56 uned adeiladu tanddaearol**, llai o bosibl wrth ystyried y crymedd ar y terfynau (gweler Ffigur 7, Atodiad).

Mae'r rheoleidd-dra gofodol, dimensiynau modwlar a bylchu ailadroddus yn gyson â chynllunio pensaernïol milwrol Rhufeinig, yn enwedig barics, gweithdai neu unedau storio.

Amgylchynir y plotiau gan goridorau o ffyrdd, gan awgrymu cyfadeilad strwythuredig a chylchrhedeg yn hytrach nag adeiladau arwahan.

English

On both the south-west and north-east sides of the amphitheatre, a series of rectilinear building plots were recorded, arranged in a systematic layout of:

- **7 plots longitudinally**, covering c. 100 m
- **4 plots transversely**, covering c. 40 m
- Plot size: **10 m × 10 m**
- Gap between plots: **5 m**

This produces c. 56 sub-surface building units, likely fewer when accounting for curvature at extremities (see Figure 7, Appendix).

The spatial regularity, modular dimensions, and repeated spacing are consistent with Roman military architectural planning, particularly barrack blocks, workshops, or storage units.

The plots are bounded by road corridors on both sides, suggesting a complex integrated with transport and circulation infrastructure rather than isolated buildings.

5.4 Rhwydwaith Ffyrdd / Road Network

Cymraeg

Mae annomaleddau llinol sy'n weladwy mewn LiDAR yn cyfateb i rhwydwaith ffyrdd cynlluniedig, gyda llwybrau'n ffinio'r amffitheatr ar bob ochr, a phrif lwybr dwyrain-gorllewin yn croesi canol yr arena. Mae'r rhain yn gyson â ffyrdd milwrol neu ffyrdd cylchredeg mewnol Rhufeinig.

Mae eu rheoleidd-dra, eu haliniad a'u perthynas â strwythurau yn nodweddiadol o waith adeiladu cynlluniedig, yn hytrach na llwybrau achlysurol.

English

Linear anomalies visible in LiDAR correspond to a planned road network, with routes bounding the amphitheatre on all sides, and a primary east-west route intersecting the centre of the arena. These roads are consistent with Roman viae militares or internal circulation roads.

Their regularity, alignment, and relationship to structures indicate planned construction, rather than incidental trackways.

5.5 Ffynnon Bosibl / Strwythur Rheoli Dŵr / Possible Well / Water Management Feature

Cymraeg

Cofnodwyd annomaledd cylchol o dua **2 m o ddiamedr allanol** ynghyd â **ffynnon naturiol gyson** tua 100 m i'r gorllewin o'r amffitheatr. Dehonglir y nodwedd yn rhagofalus fel twll dŵr â leinin carreg neu strwythur rheoli dŵr, yn defnyddio ffynhonnell ddŵr naturiol at ddefnydd swyddogaethol. Mae gosodiadau o'r fath yn gyffredin mewn cyfadeilad milwrol Rhufeinig, ac mae ei leoliad yn gyson â chefnogi gweithgareddau domestig, diwydiannol neu borthi anifeiliaid (gweler Ffigur 1, Atodiad).

English

*A circular anomaly of c. **2 m external diameter** associated with a **persistent natural spring** was recorded c. 100 m west of the amphitheatre. The feature is interpreted provisionally as a stone-lined well or water management structure, integrating a natural water source for functional use. Such installations are common in Roman military facilities, and its location is consistent with supporting domestic, industrial, or animal provisioning activities (see Figure 1, Appendix).*

6. DEHONGLI A THRAFODAETH / INTERPRETATION & DISCUSSION

6.1 Cydlyniad pensaernïol a dyluniad bwriadol / Architectural Cohesion and Intentional Design

Cymraeg

Mae canlyniadau'r arolwg mesuredig a'r synhwyro o bell gyda'i gilydd yn datgelu ôl-troed pensaernïol hynod drefnus, sy'n cynnwys arena ganolog, plotiau adeiladu ar y naill ochr a'r llall, a chorridâu ffyrdd ffurfiol. Mae'r rheoleidd-dra gofodol, dimensiynau modwlar, bylchu ailadroddus a chymesuredd dwyochrog yn awgrymu cynllunio bwriadol, yn hytrach nag arddull achlysurol neu amaethyddol.

Mae'r nodweddion a welwyd yn ffurfio trefniant pensaernïol cydlynol gyda:

- Ffocws canolog mawreddog
- Lle cylchredeg integredig
- Strwythurau ategol modwlar
- Mynediad at adnoddau dŵr

Mae'r ffurfweddiad hwn yn nodweddiadol o bensaernïaeth ffurfiol Rhufeinig, yn enwedig mewn cyd-destun milwrol neu ddinesig lle'r oedd cynllun safleoedd yn seiliedig ar egwyddorion safonol.

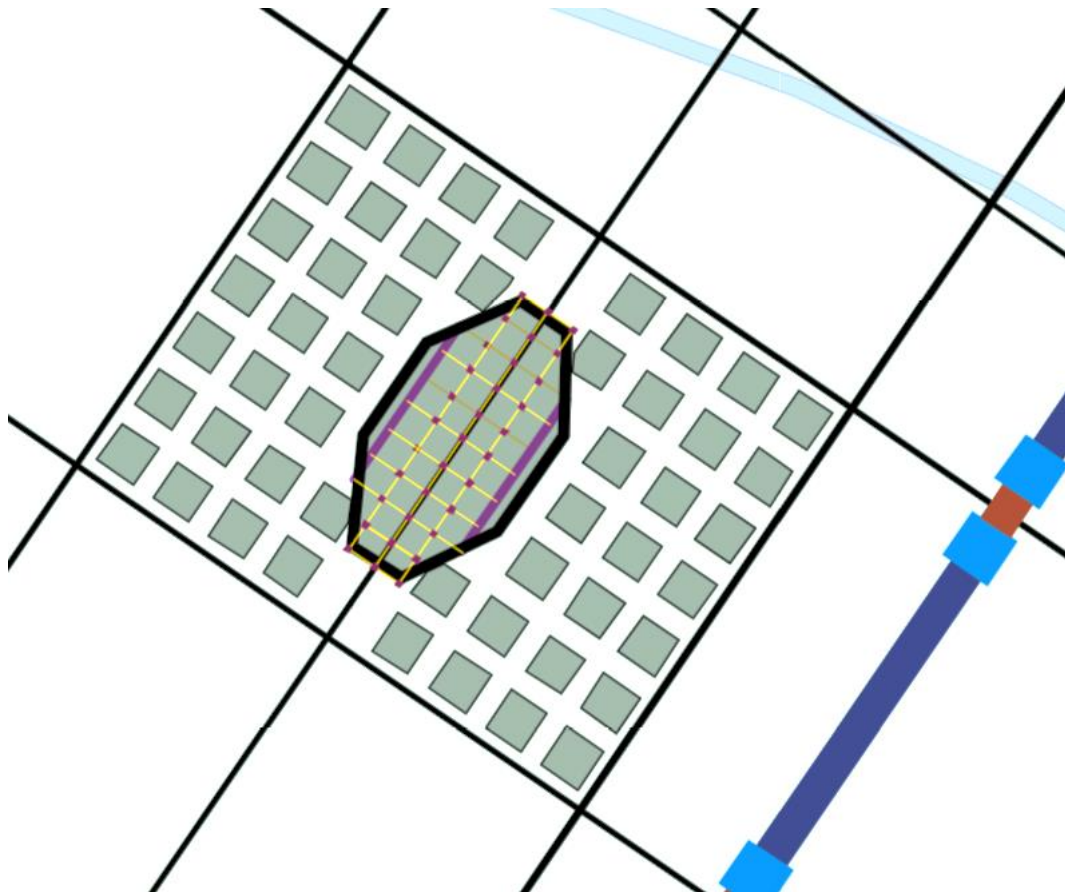
English

The results of field measurement and remote sensing collectively reveal a highly ordered architectural footprint, comprising a central arena, flanking building blocks, and formalised road corridors. The spatial regularity, modular dimensions, repeated intervals, and bilateral symmetry strongly indicate deliberate planning, rather than random or agricultural patterning.

The observed features form a coherent architectural arrangement with:

- *A central monumental focus*
- *Integrated circulation space*
- *Modular ancillary structures*
- *Access to water resources*

This configuration is characteristic of formalised Roman construction, particularly in military or civic contexts where facility layout was governed by standardised planning principles.



Ffigur 8. Cynllun strwythurol platform yr arena wedi'i godi gan grid o golofnau / Figure 8. Structural plan of raised arena platform with column grid

Cymraeg: Darlun cynllun yn dangos 33 sylfaen colofn wedi'u gosod bob 7 m, yn cynnal platform arena wedi'i codi tua 35 × 70 m. Mae sylfeini perimedrol wedi'u hamlygu (mewn porffor), gan nodi strwythur peirianyddol sylweddol.

English: Plan illustration showing 33 column foundations positioned on 7 m centres, supporting a raised arena platform c. 35 × 70 m. Perimeter foundations are highlighted (in purple), indicating a substantial engineered structure.

6.2 Dehongliad y Strwythur canolog fel Amffitheatr / Interpretation of the Central Structure as an Amphitheatre

Cymraeg

Mae maint, ffurf a threfniadaeth y strwythur canolog yn gyson â hamffitheatrau neu arenaoedd hyfforddi milwrol Rhufeinig. Prif ddangosyddion sy'n cefnogi hyn yw:

- Dimensiynau cyffredinol sy'n gymharol â hamffitheatrau adnabyddus ym Mhrydain
- Echelin hir o tua 100 m, arena fewnol tua 35 × 70 m
- Powlen topograffig debyg i deras
- Dwy fynedfa ar yr echelin hir

Mae'r nodweddion hyn yn cyfateb i dypoleg amffitheatr Clasuraidd, gyda gwahaniaethau o fewn ystod ffurfiadol arferol.

Elfen nodedig yw dehongliad yr arena fel platform wedi'i codi, ac wedi'i gynnal gan grid o golofnau tanddaearol. Dogfennir systemau o'r fath yn:

- Rhufain (Colosseum)
- Capua
- Pozzuoli
- Trier

Roedd platfformau wedi'i codi yn caniatáu:

- Draeniad tanddaearol
- Storfa a chelloedd anifeiliaid
- Systemau mecanyddol neu lwyfannu
- Trefniant digwyddiadau effeithlon

Mae maint y grid sylfeini yn awgrymu system dwyn llwyth sylweddol, yn gyson â pheirianeg bensaernïol yn hytrach na strwythur dros-dro (gweler Ffigur 7, Atodiad).

English

The scale, form, and organisation of the central structure are fully consistent with Roman amphitheatres or military training arenas. Key supporting indicators include:

- Overall dimensions comparable to known amphitheatres in Britain
- Long axis c. 100 m, internal arena c. 35 × 70 m
- Terrace-like topographic bowl
- Bilateral entrances on the long axis

These characteristics match Classical amphitheatre typology, with variation within a normal morphological range.

A notable feature is the interpretation of the arena as a raised platform, supported by a grid of sub-surface columns. Such systems are documented in:

- Rome (Colosseum)
- Capua
- Pozzuoli
- Trier

Raised platforms allowed for:

- Sub-floor drainage
- Storage and animal pens
- Mechanical or staging systems
- Rapid turnover of events

The scale of the foundation grid suggests a substantial load-bearing system, consistent with architectural engineering rather than temporary construction (see Figure 2, Appendix).

6.3 Dehongliad o blotiau adeiladu ar y naill ochr a'r llall / Interpretation of Flanking Building Plots

Cymraeg

Mae'r matrices o **blotiau adeiladu 10 × 10 m** gyda **5 m o fwllch**, wedi'u trefnu mewn **4 × 7** uned ar bob ochr yr arena, yn gyson â chynllunio modwlar milwrol Rhufeinig. Mae'r unedau'n addas ar gyfer:

- Llety barics

- Gweithdai (fabricae)
- Storfa
- Lle swyddogol
- Stablau

Mae'r grid ailadroddus, y gymesuredd dwyochrog, a'r berthynas â llwybrau mynediad yn awgrymu cyfadeilad ategol cynlluniedig, yn hytrach na gweithgarwch amaethyddol gwasgaredig neu gaeau modern.

English

*The matrix of **10 × 10 m building plots** with **5 m spacing**, organised in 4 × 7 units each side of the arena, is consistent with Roman military modular planning. Such units are appropriate for:*

- *Barrack accommodation*
- *Workshops (fabricae)*
- *Storage depots*
- *Administrative spaces*
- *Stable blocks*

The repeated grid, bilateral symmetry, and relationship to circulation routes indicate a planned ancillary complex, rather than dispersed agricultural activity or modern enclosures.

6.4 Ffyrdd a Chylchrediad / Roads and Circulation

Cymraeg

Mae presenoldeb sawl annomaledd llinol syth sy'n ffinio â'r safle ac yn ei groesi yn gyson â viae internas Rhufeinig (ffyrdd mewnol). Mae eu haliniad â nodweddion pensaernïol yn awgrymu cyd-ddylunio yn hytrach na defnydd ffwrdd a hi dros dro.

Mae'r patrwm cylchredeg yn awgrymu cyfleuster a allai drin:

- Symudiad milwyr

- Llif gwylwyr
- Cludiant anifeiliaid
- Mynediad cerbydau

Mae hyn yn cryfhau'r dehongliad o'r safle fel cyfadeilad gweithredol ffurfiol, nid amgaead seremonïol.

English

The presence of multiple straight, linear anomalies bounding and intersecting the complex is consistent with Roman viae internas (internal roads). Their alignment with architectural features indicates co-design rather than opportunistic use.

Circulation patterns suggest a facility capable of handling:

- Troop movement
- Spectator flow
- Animal transport
- Vehicle access

This strengthens the interpretation of the site as a formal, active-use installation, not a symbolic or ceremonial enclosure.

6.5 Dehongliad Cyffredinol o'r Swyddogaeth / Overall Functional Interpretation

Cymraeg

Wrth ystyried y dystiolaeth yn ei chyfanrwydd, gellir awgrymu cyfadeilad amlbwrpas sy'n cyfuno:

1. Lle perfformio amffitheatrig
2. Cyfleusterau hyfforddi / disgyblu milwrol
3. Cefnogaeth weinyddol a logistaidd
4. Gweithrediadau diwydiannol neu storio

5. Seilwaith cludiant integredig

Mae'r raddfa, y buddsoddiad a'r cynllunio yn awgrymu sefydliad parhaol o bwys rhanbarthol, nid gwersyll dros dro.

Mae'n rhesymol ei ddehongli fel cyfadeilad milwrol Rhufeinig mawr gydag amffitheatr, cymharol â:

- Caerllion (Isca)
- Caer (Deva)
- Caerwent (Venta Silurum)

ond gyda dyluniad pensaernïol gwahanol.

English

Taken together, the architectural evidence suggests a multi-functional complex combining:

- 1. Amphitheatrical performance space*
- 2. Military training/discipline facilities*
- 3. Administrative and logistical support*
- 4. Industrial or storage functions*
- 5. Integrated transport infrastructure*

The scale, investment, and planning imply a permanent installation of regional importance, rather than a temporary encampment.

A plausible interpretation is a large Roman military complex with an amphitheatre, comparable to:

- *Caerleon (Isca)*
- *Chester (Deva)*
- *Caerwent (Venta Silurum)*

but of distinctive architectural design.

6.6 Asesiad o'r potensial archeolegol / Assessment of Archaeological Potential

Cymraeg

Os caiff ei gadarnhau, mae'r safle'n cynrychioli darganfyddiad archeolegol mawr gyda'r potensial i:

- Drawnewid dealltwriaeth o weithgarwch Rhufeinig yng Nghymru
- Ddarparu tystiolaeth o feddiannaeth filwrol anhysbys nas dogfennwyd o'r blaen
- Ddangos arbrofi pensaernïol
- Gefnogi ymchwil, ymwybyddiaeth ac ymgysylltiad treftadaeth

Felly asesir y safle fel un sydd â phosibilrwydd archeolegol uchel, sy'n gofyn am ymchwiliad strwythuredig.

English

If confirmed, the site represents a major archaeological discovery with potential to:

- *Transform understanding of Roman activity in South Wales*
- *Provide evidence for previously undocumented military occupation*
- *Demonstrate architectural experimentation*
- *Support extensive research, outreach, and heritage engagement*

The site is therefore assessed as having high archaeological potential, requiring structured investigation.

7. PWYSIGRWYDD / SIGNIFICANCE

7.1 Cyflwyniad / Introduction

Cymraeg

Mae'r adran hon yn gwerthuso pwysigrwydd yr amffitheatr arfaethedig a'r nodweddion cysylltiedig o ran gwerth ymchwil archeolegol, treftadaeth ranbarthol, potensial academaidd

a budd cymunedol. Rhoddir y gwerthusiad yn ofalus, yn seiliedig ar dystiolaeth ddi-ymledol gyfredol, gyda chydnyddiaeth bod angen ymchwil bellach i gadarnhau'r damcaniaethau.

English

This section evaluates the significance of the proposed amphitheatre and associated features in terms of archaeological research value, regional heritage, academic potential, and community benefit. Significance is assessed cautiously, based on current non-invasive evidence, with recognition that further investigation is required to verify hypotheses.

7.2 Arwyddocâd Archaeolegol / Archaeological Significance

Cymraeg

Os caiff ei gadarnhau, mae'r safle'n cynrychioli cyfadeilad milwrol Rhufeinig sylweddol a chymhleth o ran pensaernïaeth, gyda hamffitheatr a strwythurau ategol cysylltiedig wedi'u hadeiladu'n bwrpasol. Mae ei raddfa, cynllunio a pheirianeg yn awgrymu meddiannaeth hirdymor â buddsoddiad, yn gymharol o ran uchelgais â chanolfannau milwrol mawr fel Caerllion a Chaer, ond yn dangos nodweddion pensaernïol unigryw nad ydynt wedi'u dogfennu yng Nghymru o'r blaen.

Mae presenoldeb plattform arena codi wedi'i gynnal gan grid o golofnau yn drawiadol, gan ei fod yn nodwedd o beirianeg Rhufeinig uwch sy'n cael ei chysylltu'n amlach â lleoliadau cyhoeddus mawr nag â safleoedd llai.

Mae'r ymddangosiad o integreiddio:

- Amffitheatr
- Unedau barics/gweithdai
- Rhwydwaith ffyrdd
- Seilwaith dŵr

yn awgrymu cyfadeilad milwrol amlbwrpas gyda gallu trefniadol sylweddol.

Mae'r posibilrwydd o ddarganfod safle milwrol Rhufeinig cwbl anhysbys yng Nghymru yn cyfrannu'n sylweddol at archeoleg ranbarthol a chenedlaethol.

English

If confirmed, the site represents a substantial, architecturally complex Roman military installation with a purpose-built amphitheatre and associated ancillary structures. Its scale, planning, and engineering imply a long-term, invested occupation, comparable in ambition to major military centres such as Caerleon and Chester, but exhibiting distinctive architectural features not previously documented in Wales.

The presence of a raised arena floor supported by a column grid is especially notable, as this is a hallmark of advanced Roman engineering more commonly associated with large public venues than minor installations.

The apparent integration of:

- *Amphitheatre*
- *Barrack/workshop units*
- *Road network*
- *Water infrastructure*

suggests a multi-functional military complex of considerable organisational capacity.

The potential to uncover an entirely undocumented Roman military base in South Wales constitutes a major contribution to regional and national archaeology.

7.3 Arwyddocâd academaidd / Academic Significance

Cymraeg

Mae gan y safle bwysigrwydd academaidd uchel gan ei fod yn:

- Ehangu dosbarthiad gwybyddus pensaernïaeth filwrol Rhufeinig yng Nghymru
- Darparu tystiolaeth o seilwaith Rhufeinig graddfa fawr mewn lleoliad heb ei gofnodi o'r blaen
- Herio rhagdybiaethau am raddfa rheolaeth filwrol yn y rhanbarth
- Cynnig mewnwelediad i amrywiad ac arbrofi pensaernïol o fewn parth ffin Rhufeinig

Mae'r ffurfweddiad anarferol — yn enwedig yr arena codi — yn meddu ar botensial i:

- Gyfrannu data newydd at astudiaethau amffitheatrau Rhufeinig ym Mhrydain
- Ysgogi ymchwil gymharol gyda safleoedd cyfandirol

- Ail-asesu modelau o ryngweithio filwrol a sifil yng Nghymru

Byddai cadarnhau'r safle'n denu diddordeb ysgolheigaidd sylweddol mewn archeoleg Rhufeinig, astudiaethau milwrol, hanes pensaernïol a gwyddorau treftadaeth.

English

The site has high academic significance because it:

- *Expands the known distribution of Roman military architecture in Wales*
- *Provides evidence of large-scale Roman infrastructure in a previously unrecorded location*
- *Potentially challenges assumptions about the extent of military control in the region*
- *Offers insight into architectural variation and experimentation within the Roman frontier zone*

The unusual configuration — particularly the raised arena — has the potential to:

- *Contribute new typological data to Romano-British amphitheatre studies*
- *Stimulate comparative research with continental examples*
- *Reassess models of Roman military and civilian interaction in Wales*

If verified, the site would generate considerable scholarly interest within Roman archaeology, military studies, architectural history, and heritage science.

7.4 Gwerth Treftadaeth Ranbarthol a Chymunedol / Regional and Community Heritage Value

Cymraeg

Mae gan y safle werth treftadaeth ranbarthol sylweddol, gyda'r potensial i:

- Wella dealltwriaeth y cyhoedd o hanes lleol
- Gryfhau hunaniaeth a balchder cymunedol
- Creu cyfleoedd newydd ar gyfer dehongli treftadaeth

- Gefnogi gweithgarwch economaidd sy'n gysylltiedig â thwristiaeth
- Ddarparu adnoddau addysgol cynhwysol

O ystyried ei leoliad gwledig, ynghyd â'i raddfa a'i eglurder pensaernïol, mae ganddo botensial cryf fel ased ymgysylltu treftadaeth ac archeoleg gymunedol.

English

The site holds considerable regional heritage value, with the potential to:

- *Enhance public understanding of local history*
- *Strengthen community identity and pride*
- *Create new opportunities for heritage interpretation*
- *Support tourism-related economic activity*
- *Provide inclusive educational resources*

Its location within a rural setting, combined with its scale and architectural clarity, gives it strong potential as a community archaeology and heritage engagement asset.

7.5 Crynodeb o Arwyddocâd / Summary of Significance

Cymraeg

Yn seiliedig ar y dystiolaeth sydd ar gael, asesir y safle fel un sydd â:

- Phwysigrwydd archeolegol uchel
- Phwysigrwydd academaidd uchel
- Gwerth treftadaeth ranbarthol/cymunedol uchel

Gan aros am gadarnhad, mae'r amffitheatr arfaethedig yn cynrychioli ased treftadaeth enfawr, gyda'r gallu i ail-lunio dealltwriaeth gyfredol o bresenoldeb a seilwaith Rhufeinig yng Nghymru.

English

Based on the available evidence, the site is assessed as having:

- *High archaeological significance*
- *High academic significance*
- *High regional/community heritage value*

Pending verification, the proposed amphitheatre constitutes a potentially major heritage asset, with the capacity to reshape current understanding of Roman presence and infrastructure in Wales.

8. Argymhellion ar Gyfer Gwaith Pellach / Recommendations for Further Work

8.1 Trosolwg / Overview

Cymraeg

O ystyried graddfa, rheoleidd-dra a phwysigrwydd posibl y nodweddion a grybwyllwyd, argymhellir rhaglen o ymchwiliadau strwythuredig, cam-wrth-gam. Dylai'r nod cyffredinol fod i wirio presenoldeb, maint a chymeriad yr olion tanddaearol drwy ddulliau di-ymledol priodol cyn cynnal unrhyw gloddio targedig.

English

Given the scale, regularity, and potential importance of the features identified, a programme of structured, phased investigation is recommended. The overarching aim should be to verify the presence, extent, and character of sub-surface remains through appropriate non-invasive methodologies before any targeted excavation is undertaken.

8.2 Gweithred Blaenoriaethol: Arolwg Geoffisegol / Priority Action: Geophysical Survey

Cymraeg

Y flaenoriaeth uchaf yw gweithredu arolwg geoffisegol cynhwysfawr, yn ddelfrydol yn cynnwys:

- Radar treiddiol daear (GPR)
- Magnetometreg
- Arolwg gwrthiant

Mae'r dulliau hyn yn ategu at eu gilydd ac, ynghyd, yn darparu data penderfyniad uchel ar:

- Bensaerniaeth danddaearol
- Dyfnder a maint olion strwythurol
- Gwacterau o dan y platfform arena
- Aliniad a strwythur ffyrdd
- Sylfeini waliau a chynlluniau adeiladu

Gan ystyried cymhlethdod posibl y strwythur, argymhellir yn benodol defnydd o GPR amrywiaethol, fel y cynghorwyd gan RCAHMW.

Bydd y cam hwn yn darparu tystiolaeth empirig hanfodol i:

- Gadarnhau'r dehongliad
- Gefnogi cydweithio academiaidd
- Agor cyllid grant ar gyfer gwaith pellach

English

The highest priority is the implementation of a comprehensive geophysical survey, ideally incorporating:

- *Ground-Penetrating Radar (GPR)*
- *Magnetometry*
- *Resistivity survey*

These methods are complementary and together will provide high-resolution data on:

- *Sub-surface architecture*
- *Depth and extent of structural remains*

- *Void spaces beneath the arena platform*
- *Road alignments and surfaces*
- *Boundary walls and building footprints*

Given the apparent complexity of the amphitheatre structure, the use of array GPR is specifically recommended, as advised by RCAHMW.

This phase will provide the crucial empirical evidence needed to:

- *Validate the interpretation*
- *Support academic collaboration*
- *Unlock grant funding for further work*

8.3 Adrodd, Archifo, a Rheoli Data / Reporting, Archiving, and Data Management

Cymraeg

Dylid:

1. Dadansoddi a dehongli'r holl ddata'n llawn
2. Ei gyflwyno i Gofnod Henebion Cenedlaethol Cymru (NMRW)
3. Ei groesgyfeirio â Chofnodion Amgylchedd Hanesyddol rhanbarthol

Bydd hyn yn sicrhau:

- Cydnabyddiaeth ffurfiol o'r safle
- Diogelu cofnodion am yr hir dymor
- Hygyrchedd i ymchwilyr

English

All resulting data should be:

1. *Fully analysed and interpreted*

2. *Submitted to RCAHMW's National Monuments Record of Wales (NMRW)*
3. *Cross-referenced with regional Historic Environment Records*

This will ensure:

- *Formal recognition of the site*
- *Secure long-term preservation of records*
- *Accessibility for researchers*

8.4 Cydweithrediad Academaidd / Academic Collaboration

Cymraeg

O ystyried pwysigrwydd posibl y safle, argymhellir ymgysylltiad cynnar gyda:

- Prifysgolion
- Arbenigwyr archeoleg Rhufeinig
- Timau tirlun a geoffiseg

Bydd partneriaeth ag academyddion yn:

- Cryfhau gallu technegol
- Darparu mynediad at ddadansoddiad arbenigol
- Gwella hygyrdded allbynnau dilynol

Mae'r gefnogaeth sydd eisoes yn bodoli gan Brifysgol Caerdydd yn sail gadarn ar gyfer cydweithio.

English

Given the potential significance of the site, early engagement with:

- *Universities*
- *Roman archaeology specialists*
- *Landscape and geophysics teams*

is strongly advised.

Partnership with academic institutions will:

- *Strengthen technical capability*
- *Provide access to specialist analysis*
- *Enhance the credibility of subsequent outputs*

The existing support from Mark Lodwick of Cardiff University provides a strong foundation for collaboration.

8.5 Ymgysylltu Cymunedol a Budd Cyhoeddus / Community Engagement and Public Benefit

Cymraeg

Mae gan y safle botensial cryf ar gyfer datblygu treftadaeth sy'n canolbwyntio ar y gymuned, gan gynnwys:

- Teithiau tywys
- Arddangosfeydd
- Rhaglenni ysgolion
- Dehongli digidol
- Archeoleg gwirfoddol

Argymhellir cynllunio cynnar ar gyfer mynediad a dehongli cyhoeddus, mewn partneriaeth â sefydliadau lleol, i sicrhau budd hirdymor.

English

The site has strong potential for community-focused heritage development, including:

- *Guided walks*
- *Exhibitions*
- *School programmes*
- *Digital interpretation*
- *Volunteer archaeology*

Early planning for public access and interpretation, in partnership with local organisations, is recommended to maximise long-term benefit.

8.6 Cloddiaid wedi'i Dargeddu (Hirdymor) / Targeted Excavation (Long-Term)

Cymraeg

Dylid ystyried cloddio targedig yn unig ar ôl:

- Cwblhau arolwg geoffisegol
- Asesu ffurfiol
- Fframwaith ymchwil archeolegol

Dylai cloddio ganolbwyntio ar:

1. Y colofnau sylfeini o dan yr arena
2. Blotiau adeiladu ger yr amffitheatr
3. Groesffyrdd ffyrdd
4. Strwythir posibilrwydd o ffynnon

Mae'r ardaloedd hyn â'r potensial uchaf i gynhyrchu:

- Arteffactau diagnostig
- Manylion pensaernïol
- Tystiolaeth ddyddio

English

Targeted excavation should only be considered following:

- *Completion of geophysical survey*
- *Formal assessment*
- *Archaeological design framework*

Excavation should focus on:

1. *Column foundations beneath the arena*

2. *Building plots adjacent to the amphitheatre*
3. *Road intersections*
4. *The possible well structure*

These areas have the highest potential to yield:

- *Diagnostic artefacts*
- *Architectural details*
- *Dating evidence*

8.7 Ariannu ac Adnoddau / Funding and Resourcing

Cymraeg

Argymhellir strategaeth cyllido cam-wrth-gam, gan ddechrau gyda chefnogaeth ar gyfer:

1. Cam arolwg geoffisegol
2. Dadansoddiad a chyhoeddi data
3. Allbynnau ymgysylltu cymunedol

Bydd y camau hyn yn cynhyrchu'r dystiolaeth empirig angenrheidiol i wneud ceisiadau am mewnbwn ariannol megis grantiau mwy ar gyfer cloddio, dehongli a datblygu treftadaeth.

Mae llythyrau cefnogaeth presennol gan:

- Sefydliadau academiaidd
- Sefydliadau cymunedol
- Corffau arbenigol

yn darparu plattform cryf ar gyfer ceisiadau cyllido, gan gynnwys i'r National Lottery Heritage Fund (NLHF).

English

A staged funding strategy is recommended, beginning with support for:

1. *Geophysical survey phase*
2. *Data analysis and reporting*

3. Community engagement outputs

This phase will generate the empirical evidence needed to unlock larger grants for excavation, interpretation, and heritage development.

Existing letters of support from:

- *Academic institutions*
- *Community organisations*
- *Specialist bodies*

provide a strong platform for funding applications, including to the National Lottery Heritage Fund (NLHF).

8.8 Crynodeb o Argymhellion / Summary of Recommendations

Cymraeg

Blaenoriaeth ar unwaith:

Arolwg geoffisegol cynhwysfawr o brif ardal yr amffitheatr.

Yna:

- Dadansoddi a chofnodi canlyniadau
- Cydweithrediad academiaidd
- Cynllunio ymgysylltu cymunedol
- Cloddio targedig strategol

Y nod yw sefydlu sylfaen glir, seiliedig ar dystiolaeth ar gyfer ymchwil archeolegol pellach, cyllido, a datblygu treftadaeth.

English

Immediate priority:

Comprehensive geophysical survey of the amphitheatre precinct.

Followed by:

- *Analysis and archiving of results*
- *Academic collaboration*

- *Community engagement planning*
- *Strategically targeted excavation*

The objective is to establish a clear, evidence-based foundation for further archaeological investigation, funding, and heritage development.

9. Casgliad / Conclusion

Cymraeg / Welsh

Mae'r Asesiad yn Seiliedig ar Ddesg yma wedi datgelu ôl-troed tanddaearol mawr, cydlynol a chymhleth yn Ruperra Home Farm, a ddehonglir fel amffitheatr Rufeinig arfaethedig a strwythurau cysylltiedig. Mae tystiolaeth o'r arolwg maes, dadansoddiad llysydfiant, cofnodi mesuredig a synhwyro o bell gyda'i gilydd yn dangos gradd uchel o rheoleidd-dra gofodol, cynllunio modwlar a dyluniad peiranyddol, sy'n gyson ag egwyddorion adeiladu Rhufeinig.

Mae'r nodwedd ganolog yn cynnwys arena tua 35 m × 70 m, o fewn strwythur cyffredinol o tua 100 m o hyd. Ymddengys bod yr arena wedi'i hadeiladu fel platfform wedi ei godi a'i gynnwys gan grid o 33 colofn fel sylfaen gyda bylchu rheolaidd o 7 m, yn ffurfio system strwythurol sy'n gyson â lleoliadau Rhufeinig mawr. Mae'r trefniant yn awgrymu adeilad o soffistigeiddrwydd pensaernïol sylweddol, a ellir gefnogi swyddogaethau amrywiol gan gynnwys gwyllo, hyfforddi a defnydd logistaidd.

Ar ystlys yr arena, cofnodwyd tua 56 plot adeiladu, wedi'u trefnu mewn grid o unedau 10 × 10 m gyda 5 m o fwllch, wedi'u ffinio gan ffyrdd ar y ddwy ochr. Mae eu maint, eu lleoliad a'u rheoleidd-dra yn awgrymu defnydd barics, gweithdai, storfa neu weinyddol, gan ffurfio cyfadeilad integredig o faint sylweddol.

Mae data synhwyro o bell yn cadarnhau cydlyniaid strwythurol y nodweddion hyn mewn lleoliad tirwedd, gan gynnwys iselder siâp powlen sy'n gyson â therasu seddau, a rhwydwaith o annomaleddau llinol sy'n gyson â seilwaith ffyrdd cynlluniedig.

Dehonglir annomaledd cylchol sy'n gysylltiedig â ffynnon naturiol fel twll dŵr leinin-garreg neu strwythur rheoli dŵr, sy'n cefnogi anghenion gweithredol ehangach y safle.

Ar y cyfan, mae'r dystiolaeth yn awgrymu cyfadeilad milwrol Rhufeinig mawr, heb ei gofnodi o'r blaen, gyda hamffitheatr wedi'i hadeiladu'n bwrpasol, sy'n cynrychioli cyfraniad sylweddol posibl i ddealltwriaeth archeolegol o weithgarwch Rhufeinig yng Nghymru.

Mae gan y safle:

- Werth archeolegol uchel
- Pwysigrwydd academaidd uchel

- Potensial cryf ar gyfer treftadaeth gymunedol

Ar hyn o bryd, mae arolwg geoffisegol di-ymlledol yn hanfodol i gadarnhau'r dehongliad ac i sefydlu maint, dyfnder a chymeriad yr olion tanddaearol. Dylai'r gwaith hwn ffurfio cam cyntaf rhaglen strwythuredig o ymchwiliad, gyda chefnogaeth cydweithrediad academiaidd, ceisiadau cyllido ac ymgysylltiad gymunedol.

Os caiff ei gadarnhau, mae gan safle Ruperra y gallu i ddod yn ased treftadaeth o bwys rhanbarthol a chenedlaethol, gan gynnig cyfleoedd sylweddol ar gyfer ymchwil, addysg a budd cyhoeddus.

English

This Desk-Based Assessment has identified a large, coherent, and architecturally complex sub-surface footprint at Ruperra Home Farm, interpreted as a proposed Roman amphitheatre and associated ancillary structures. Evidence from field survey, vegetation analysis, measured recording, and remote sensing collectively demonstrates a high degree of spatial regularity, modular planning, and engineered design, consistent with Roman constructional principles.

The central feature comprises an arena approximately 35 m × 70 m, set within an overall structure of c. 100 m in length. The arena appears to have been built as a raised platform, supported by a grid of 33 column foundations spaced at regular 7 m intervals, forming a structural system consistent with major Roman venues. This configuration suggests a building of substantial architectural sophistication, capable of accommodating varied functions including spectacle, training, and logistical use.

Flanking the arena, approximately 50 building plots were recorded, arranged in a grid of 10 × 10 m units with 5 m spacing, bounded by roads on both sides. Their scale, placement, and regularity strongly imply barrack, workshop, storage, or administrative use, forming an integrated complex of considerable extent.

Remote sensing data confirms the structural coherence of these features within a landscape setting, including a bowl-shaped hollow consistent with terraced seating, and a network of linear anomalies consistent with planned road infrastructure.

A circular anomaly associated with a persistent spring is interpreted as a possible stone-lined well or water-management installation, supporting the wider operational needs of the site.

Taken together, the evidence suggests a major, previously undocumented Roman military complex with a purpose-built amphitheatre, representing a potentially significant contribution to the archaeological understanding of Roman activity in Wales.

The site exhibits:

- *High archaeological value*
- *High academic significance*
- *Strong potential for community heritage development*

At this stage, non-invasive geophysical survey is essential to validate the interpretation and establish the extent, depth, and character of sub-surface remains. This work should form the first phase of a structured programme of investigation, supported by academic collaboration, funding applications, and community engagement.

If confirmed, the Ruperra site has the capacity to become a heritage asset of regional and national importance, offering substantial opportunities for research, education, and public benefit.

Atodiad / Appendix



Ffigur 1. Ffynnon honedig â leinin cerrig a man tarddu'r ffynnon / Figure 1. Suspected stone-lined well and spring emergence

Cymraeg

Mae'r ddelwedd yn dangos parth cylchol o ffrwd ddŵr o fewn annomaledd tua 2 m o ddiamedr, a ddehonglir fel lleoliad posibl twll dŵr â leinin garreg. Mae'r ffynnon yn cyd-daro â chanol y nodwedd, gan awgrymu manteisio bwriadol ar ffynhonnell ddŵr naturiol. Amcangyfrifir bod trwch y wal tua 0.4 m, sy'n gyson â rheoli dŵr strwythuredig.

English

This image shows a circular zone of water emergence within a c. 2 m external diameter anomaly, interpreted as the possible location of a stone-lined well. The persistent winter spring appears to coincide with the centre of the feature, suggesting deliberate exploitation of a natural water source. The estimated wall thickness is approximately 0.4 m, consistent with structural water management.



Ffigur 2. Aliniad llinol o lystyfiant yn dynodi sylfeini / Figure 2. Linear alignment of vegetation indicating structural foundations

Cymraeg

Mae baneri wedi'u gosod ar hyd llinell syth o lysdyfiant gwyrddach a thalach, a ddehonglir fel mynegiant arwynebol o sylfeini tanddaearol. Mae'r aliniad yn cyfateb i'r rhes flaen o blotiau adeiladu ger yr amffitheatr ac yn rhedeg ar ongl gogledd-ddwyrain / de-orllewin.

English

Flags are positioned along a straight line of greener, taller grass tufts, interpreted as the surface expression of underlying foundation remains. The alignment corresponds with the proposed front row of building plots adjacent to the amphitheatre and runs obliquely on a NE–SW orientation.



Ffigur 3. Aliniad llystyfiant a ffiniau plot (golwg amgen) / Figure 3. Vegetation and plot boundary alignment (alternative view)

Cymraeg

Golygfa arall o'r aliniad llystyfiant, yn dangos gwahaniaeth tyfiant yn fwy eglur ar draws y nodwedd. Mae safleoedd y baneri yn adlewyrchu ffiniau plot wedi'u mesur ac yn dangos parhad y strwythur llinol.

English

A second view of the vegetation alignment, showing clearer articulation of differential growth across the feature. The flagged positions reflect measured plot boundaries and demonstrate continuity of the linear structure.



Ffigur 4. Grid o safleoedd wedi'u fflagio yn dynodi y colofnau sylfeini / Figure 4. Grid of flagged positions indicating column foundations

Cymraeg

Mae'r ddelwedd yn dangos marciwyr wedi'u trefnu mewn grid tua 14×14 m, gyda safleoedd strwythurol wedi'u gosod bob 7 m. Dehonglir y trefniant fel patrwm o golofnau sylfeini tanddaearol sy'n cynnal plattform arena wedi ei godi.

English

The image shows flagged markers arranged in a grid measuring c. 14×14 m, with structural points spaced at 7 m intervals. This configuration is interpreted as a foundation pattern for sub-surface column bases supporting an elevated arena platform.



Ffigur 5. Manylion safle'r golofn a'i diamedr / Figure 5. Detail of column position and diameter

Cymraeg

Delwedd glos o safle colofn wedi'i faneri, yn dangos ardal gylchol o laswellt gwyrddach yn nodi amlinell y sylfaen. Mae'r diamedr yn cyfateb i tua un passus Rhufeinig, gan awgrymu elfen dwyn llwyth sylweddol.

English

Close-up image of a flagged column position showing a circular area of greener grass marking the foundation circumference. The diameter corresponds to approximately one Roman passus, implying a substantial load-bearing element.



Ffigur 6. Graddiant y tir yn awgrymu teras eistedd posibl / Figure 6. Ground slope indicating possible seating terrace

Cymraeg

Mae'r ddelwedd yn dangos y llethr rhwng gwaelod yr arena a'r ardal eistedd arfaethedig. Mae'r faner yn nodi ochr isaf y teras eistedd. Mae'r llethr yn gyson a phridd-derasu nodweddiadol amffitheatrau Rhufeinig.

English

This image shows the incline from the arena base toward the proposed seating zone. The flagged marker denotes the lower edge of the seating terrace. The slope is consistent with terraced embankments typical of Roman amphitheatres.



Ffigur 7. Trefniant plotiau yn cwmpasu tua 70 × 100 m / Figure 7. Plot layout covering c. 70 × 100 m

Cymraeg

Golygfa gynllun o 7 blot adeiladu hirsgwar mewn 4 rhes drawsbynciol, pob un tua 10 × 10 m gyda 5 m o fwllch. Mae hyn yn cyfateb i tua 56 o blotiau i gyd, gan ffurfio lle ategol strwythuredig wrth ochr yr amffitheatr.

English

Plan view showing the arrangement of 7 longitudinal building plots by 4 transverse plots, each c. 10 × 10 m with 5 m spacing. This equates to c. 56 plots overall, forming structured ancillary space flanking the amphitheatre.