The Discovery Programme
Centre for Archaeology and Innovation Ireland

CANDIDATE INFORMATION PACK

The Discovery Programme, Centre for Archaeology and Innovation Ireland is committed to a policy of equal opportunity.

Digital Documentation: Geomatics and Survey Support Officer

The Discovery Programme: Centre for Archaeology Innovation Ireland is seeking applications to fill the post of **Digital Documentation: Geomatics and Survey Support Officer**.

Nature of Employment:	This post will be fixed term of up to 36 months (three years) in duration, depending on funding (subject to successful completion of a six-month probationary period).
Salary:	In the region of at €33,149.00 – €42,422.00 per annum (pro rata) (Point 1-5 Archaeologist Scale 65175(3)), starting point depending on role and experience.
Current Location:	Merchants House, Merchants Quay, D08 K3KD, Ireland.
	Company Reg. No. (CRO): 243328
	Reg. Charity No. (RCN): 20036973
	Charity Revenue No. (CHY): 12549.
Reporting to:	Chief Executive Officer or their nominee
Applications Due by	No later than 12 noon on Wednesday 02 November 2022
Expected employment start date:	No later than the 03 January 2023.

Supported By

General

The Discovery Programme (a company limited by guarantee) is a publicly funded institution for advanced research in the archaeology of the island of Ireland. It engages in archaeological and related research, to benefit the community by deepening our understanding of Ireland's past. The Discovery Programme seeks to communicate the results of its research to scholars and the general public, promoting the introduction of new technologies and techniques into Irish archaeological research, and to co-operate with other national and international archaeological bodies. We are working to support the research community, providing research leadership and supporting strategic policy development and evidence-based decision-making.

Background

Over the past 30 years the Discovery Programme has developed and applied many innovative and cutting-edge survey approaches within cultural heritage and archaeological research. The successful applicant will have the opportunity to join a team using state-of-the-art methods on some of the best-known and best-preserved historical monuments, archaeological sites and artefacts across Ireland. Working under the supervision of the Senior Geo-surveyor, the Digital Documentation: Geomatics and Survey Support Officer will have a key role in supporting the survey activities of the Discovery Programme and sharing the results of our survey work with the wider public, including key sectoral stakeholders and general interest groups.

At the present time the Discovery Programme is involved in several major archaeological research projects which include the study of the impacts of climate change on our coastal historic environment, and the use of new technologies for archaeological survey, analysis and visualisation. As part of its ongoing work to share the results of its research, the Discovery Programme is seeking to progress a series of publications and research materials arising from its past projects, which will include publication in hard copy and digital formats.

While the successful candidate will be expected to be able to demonstrate a good working knowledge of Ireland's archaeological and built heritage, the primary skills that are being sought for this post are in relation to measured survey of objects, structures and landscapes, using a variety of new technologies and established techniques.

The Discovery Programme engages with those communities that live in the areas where there are active projects, as well as sharing the results of its research more generally. Local engagement projects may include workshops, presentations and talks, site tours and provision of education resources. The Discovery Programme also seeks to ensure that its data, alongside its interpretation, is available to the wider world. The post-holder will be encouraged to prepare articles for publication in appropriate formats and outlets, including solo, joint and multi-authored pieces, as well as supporting the publication of survey projects and research of colleagues within the Discovery Programme.

Detail about the Discovery Programme's ongoing research activities can be access via its website [www.discoveryprogramme.ie,](www.discoveryprogramme.ie) and via the CHERISH Project website [www.cherishproject.eu.](www.cherishproject.eu)

Job Purpose and Significance of the Role

The Digital Documentation: Geomatics and Survey Support Officer will play an important role in helping the Discovery Programme meet its strategic objectives of delivering archaeological and related research, to benefit the community by deepening our understanding of Ireland's past. This includes developing new knowledge about specific monuments, structures and artefacts as well as increasing understanding and awareness of climate change and its effects upon the condition of our built and archaeological heritage.

The successful candidates will have a central role in our research activities, working as part of an interdisciplinary team that will provide you with expertise and support that you need to undertake your work. You will help survey and report a diverse range of archaeological sites, monuments, buildings and artefacts across the island of Ireland, from all periods and in a variety of environments. This will include World Heritage Sites (inscribed and tentative), National Monuments, important artefacts and many other examples of our historic environment. The survey results will support research, conservation and management activities, and the visualisation and promotion of many sites.

Field survey will include working in remote locations as well as urban environments, frequently on difficult terrain or at ruinous structures. It may involve work in constricted spaces, farmland, upstanding monuments and construction sites. The Discovery Programme will provide training and support, including facilitating the successful applicant taking part in a Safe Pass safety awareness training programme. Applicants should be fit and able to undertake this work which can be physically demanding.

You will contribute to the organising, archiving and publishing a diverse array of traditional and modern survey datasets created over the course of the various projects, including the preparation of materials for publication, online access and outreach activities. The successful applicant will also carry out digitisation, management, analysis and visualisation of geospatial data within a range of GIS environments and software.

This vacancy offers the opportunity to work within a national heritage body and gain valuable experience across several areas including digital documentation, advanced survey methods, remote sensing, managing survey data sets, and heritage visualisation on some of the most iconic heritage sites in Ireland.

The successful candidate will be expected to have sufficient proficiency in the use of the English language to be able to carry out their day-to-day duties, write reports, and make presentations to stakeholders and the wider public about their work

Key work areas and duties

1. Carry out pre-survey assessment to determine the appropriate level and methodology of survey, including the production of risk assessments and determine safe working strategies in conjunction with senior colleagues.

2. Conduct digital surveys in line with statutory requirements (especially any licence requirements under the provisions of applicable archaeological or National Monuments legislation appropriate to the lands involved, and any special provisions around the use of certain survey equipment). Key activities involved will include:

   - Establishment of national grid control framework on each site using the OSi GNSS geodetic network
   - Setting out control grids for other survey activities, excavation plans and finds or context surveying and recording
   - Carrying out digital documentation across a range of scales including:
     - topographic survey of landscape and earthwork monuments,
     - historic building and upstanding archaeological structure survey
     - digital documentation of architectural and archaeological structural details (e.g., high crosses, megalithic art)
     - digital documentation of artefacts and movable heritage objects
   - Operation of a range of geomatics survey equipment including:
     - Total station
     - RTK GNSS
     - Terrestrial laser scanner
     - Close range object scanner
     - Terrestrial photogrammetric systems
     - UAV photogrammetric systems
     - Other equipment as appropriate
   - Operation of geophysical survey equipment including:
     - Magnetic gradiometry
     - Electrical resistivity

3. Process survey data to an agreed and consistent standard and prepare data for archiving to recognised standards in long-term repositories. This will include:
   - Downloading, saving and checking of data from survey instruments
   - Processing, analysis and visualisation of a range of survey data
   - Digitisation and geospatial data management with a GIS environment
   - Production of plans of features identified in the course of the surveys or recording activities
   - Producing features inventories with descriptions of the data source, methodology employed, and features identified
   - Annotated interpretive plans (in collaboration with colleagues) of features identified in the course of surveys and recording activities
   - Compilation of archive-ready datasets and associated metadata

4. Production of 2D and 3D outputs from digital survey using a variety of appropriate geospatial and graphics software. This will include:

- Production and editing of 2D illustrations and 3D models from a range of survey capture methods (plan, elevations, online 3D models, 3D visualisations)
- Creation of digital 3D building or artefact reconstructions
- Creation of landscape visualisations

5. Advise and assist in writing specifications for the commissioning of digital survey and dissemination products
6. Ensure appropriate maintenance, servicing and updating of survey equipment and software
7. Contribute to updating the Discovery Programme about new development in digital technologies across data collection, processing, visualisation and outputs for archaeological, built and landscape heritage, including submerged landscapes and archaeology.
8. Develop skills in digital survey and recording, data processing, visualisation and digital outputs within the Discovery Programme.
9. Contribute to the promotion of the Discovery Programme's work, including production of materials for use in outreach activities, web content, social media and video content.
10. Produce plans, maps and illustrations using digital data for inclusion in publications.
11. Engage with key stakeholder, project partners and the wider heritage sector to advance and promote digital survey and data standards including delivery of training and mentoring activities on behalf of the Discovery Programme.
12. Carrying out any other duties, appropriate to the grade of the post and the project, as may be reasonably requested by the Discovery Programme.

The Person

The Discovery Programme is seeking individuals who are highly motivated, focused upon results while at the same time respecting and following instruction and processes that relate to their work. They will need to have:

- Excellent written, visual and verbal communication skills.
- Excellent practical skills in the application of geospatial data
- Experience of survey report writing, including the writing-up of survey reports and preparation of illustration materials
- Strong organisation and time management skills.
- Sound academic and professional knowledge of digital survey, its application, and practical considerations for the conduct of such survey.
- Demonstration of successful project completion.
- Accuracy and attention to detail essential.
- Strong interpersonal skills and ability to work well with others and as part of an interdisciplinary team.
- Ability to prioritise workload.
- Demonstrable evidence of a willingness to learn and explore new methodologies and

approaches.
- Flexibility and adaptability in the context of remote working arrangements.
- A driving licence, valid in Ireland, to enable them to carry out the duties of the post in full.

Selection Criteria

Applicants should note that they should clearly set out in their application how they satisfy the criteria outlined below. For guidance, applicants should be aware of the following definitions of essential and desirable:

Essential Criteria – requirements without which a candidate would not be able to undertake the full remit of the role. Applicants who have not clearly demonstrated intheir application that they possess the essential requirements will normally be rejected at Stage 2 of the selection process outlined above.

Desirable Criteria – requirements which would be useful for the candidate to hold, and which are highly relevant to the post. These criteria will be considered for short-listing candidates when more than one applicant meets the essential requirements.

Further Desirable Criteria – requirements which would be useful for the candidate to hold, and which may be used in order that the competition may be progressed in a timely manner should a significant number of candidates meet the first shortlisting criteria.

Essential Criteria:

Applicants must, by the closing date for applications, have:

EC1   At least an honours degree (Irish National Framework of Qualifications Level 8) in an appropriate discipline for this role (level 6 qualification (Bachelor Degree) as recognised by the European Qualifications Framework*)
AND:

EC2   At least two years' professional experience** gained within the last 10 years, to include both of the areas of essential experience outlined at Table 1 below.

It is for the applicant to demonstrate that their qualification is in a discipline closely related to this position, and that any further qualification held is industry-recognised in the Ireland or the United Kingdom. If you believe your qualification is relevant or equivalent to the one required, the onus is on you to provide the panel with details of modules studied and relevancy to the post so that a well-informed decision can be made.

***Types of experience may be combined to achieve the required two years and may include research that formed part of your academic studies.*

EC 3   Applicants must have a driving licence, valid for use in Ireland, to enable them to carry out the duties of the post in full.

Table 1: Essential Experience

a. A minimum of twelve months' demonstrable experience of surveying archaeological sites, monuments, buildings, and landscapes using a range of techniques and equipment including at least one of the following: GNSS; Total Station; Terrestrial Laser Scanning; UAV Survey; Photogrammetry
b. A minimum of twelve months' demonstrable working knowledge of relevant ICT applications for processing and preparing survey data, GIS, and production of outputs including 2D and 3D plans, illustrations, maps and models.
Please note: Applicants should have at least 12 months experience of both of these elements, noting that the 12 month period may run concurrently or separately for both, i.e. you are not expected to have 12 months experience of element (a) as a distinct activity from element (b), but you will need to demonstrate that you have at least 12 months experience of both.

Desirable Criteria/Shortlisting Criteria

Where shortlisting of candidates is required, applicants should, in addition to meeting the Essential Criteria set out above, have:

SC1   At least an honours degree (Irish National Framework of Qualifications Level 6 or 7) in remote sensing or geomatics (level 6 qualification (Bachelor Degree) as recognised by the European Qualifications Framework):
OR

SC2   A professional qualification or accreditation in a relevant field

OR

SC3 At least three years post-graduate professional research and fieldwork experience** gained within the last 15 years to include both of the areas of essential experience outlined at Table 1 above

*It is for the applicant to demonstrate that their qualification is in a discipline closely related to archaeology, and that any further qualification held is industry-recognised in the Ireland or the United Kingdom. If you believe your qualification is relevant or equivalent to the one required, the onus is on you to provide the panel with details of modules studied and relevancy to the post so that a well-informed decision can be made.

**Types of experience may be combined to achieve the required three years and may include research that formed part of your academic studies.

Further Desirable Criteria/Shortlisting Criteria

Where further shortlisting is required, **SC3** will be used in addition to **SC1** or **SC2**, that is, a specific qualification in remote sensing or geomatics, a professional accreditation or qualification **and** length of experience will be required.

Eligibility to compete and certain restrictions on eligibility

Appointment to this role is subject to the candidate's eligibility to work in Ireland. It will be for the successful candidate to demonstrate that they are permitted to work in Ireland or will be permitted to work in Ireland on or before **03 January 2023**.

How to Apply

Applications must be made by submitting an email, with the title of the position entered into the subject field of the email, to info@discoveryprogramme.ie no later than **12 noon on Wednesday 02 November 2022. Applications received after this time will not be accepted.**

Attached to that email, applicants must include Application Form **Re-advertised COM_2022_006**, along with:

- A short cover letter / personal statement, no more than 500 words 12pt single spaced text, outlining why you wish to be considered for this post and why you believe your skills, experience and values meet the requirements of the position.

- A comprehensive CV detailed as relevant to the position but to be no more than three pages in length. The first page of the CV should include a summary biography.

  NB: Please ensure that your CV **does not** include any personal information that is not relevant to the post being applied for.

- Completion of the information fields set out on the application form

Please note:

- You should ensure that you provide evidence of your experience in your application form, giving length of experience, examples and dates as required

- It is not sufficient to simply list your duties and responsibilities

- The Assessment Panel will not make assumptions from the title of an applicant's post or the organisation where they are employed as to the skills and experience gained
- If you do not provide sufficient detail the Assessment Panel will reject your application

Certified proof of qualifications and eligibility to work in Ireland will be sought prior to interviews and **should not** be included with your application.

Effective date of appointment

The successful candidate will be expected to be able to take up their appointment no later than **03 January 2023**.

Privacy notice (GDPR)

In accordance with the General Data Protection Regulations (GDPR) any personal information which you provide to us will be treated in confidence and in accordance with the Data Protection Acts 1988-2018. Documentation (digital and hard copy) relating to unsuccessful applications other than those that may be retained on a short list will be destroyed after six months from closing date of applications. For those on the short list this data will be destroyed after one year after completion of interviews.

Application and Selection Process

Candidates will be required to demonstrate through their application that they:

- fulfil the key criteria identified for this post, including qualifications and experience.
- that they have the key competencies required for this post.
- have the ability to successfully undertake the duties outlined for this post.

Stage 1 – submission of applications and preliminary review

Applications must be received prior to the closing date and time stated, that is **12 noon on Wednesday 02 November 2022**.

All applicants will receive email confirmation that their application has been received. Applications received after the stated deadline will not proceed to preliminary review. All valid applications will be subject to a preliminary review by an Assessment Panel. Incomplete applications received will not be considered further. Applicants who have submitted incomplete applications will be notified of such.

Stage 2 – evaluation of applications

Completed applications will be evaluated by the Assessment Panel. A successful candidate **may** be appointed on the basis of their written application. Where one or more candidates appear suitable for the post the Assessment Panel will call these for interview.

All applicants will be notified of the outcome of Stage 2.

Stage 3 – call to interview

The invitation to interview is not to be taken as implying that the Assessment Panel is satisfied that such a person fulfils all of the requirements for the post.

The Assessment Panel will seek to give a minimum of two weeks' notice of the date and time of interview for any candidate called to interview. Arrangements for interviews will depend upon government guidelines and the wider COVID-19 restrictions in place at that time. Any in-person interviews will be held in central Dublin. However, it may be necessary for the interviews to be held remotely via Zoom. It is anticipated that interviews will be held during the week commencing **14 November or 21 November 2022.**

Interviews will be designed to assess the competencies outlined at Appendix 1. Your attention is also drawn to the guidance for interviews at Appendix 2 below.

Please note that the Discovery Programme will not be responsible for refunding any expenses incurred by candidates incurred as part of the interview process. Reschedule requests may only be considered under exceptional circumstances as deemed acceptable by the Assessment Panel (such as bereavement, or illness that would otherwise prevent the candidate from attending the workplace). Please note that supporting information from the candidate may be required where such a reschedule request is made. Only one reschedule request will normally be considered. Rescheduled dates will normally be within two weeks of the original scheduled date.

Shortlisting for interview may be conducted using the criteria set out in this information pack.

Stage 4 – interview

Where interviews are held the Assessment Panel will use a competency-based approach using the Public Appointments Service Civil Service Competency Models for reference. These can be accessed online at: https://publicjobs.ie/documents/PAS_CS_Competency_Models_2017.pdf

In addition to the professional competencies and qualifications set out at *Essential Criteria* below, candidates' attention is drawn in particular to the competencies outlined for Executive Officer and Administrative Officer posts.

Further detail around core competencies is provided below.

Candidates called to interview will be scored against a common matrix and placed in order of merit (highest scoring first). Candidates will be expected to meet a minimum score threshold of 60% overall, and to achieve at least 50% of the marks available for each competency tested at interview.

Stage 5 – notification of outcome of Stage 4

All candidates called to interview will be notified of the outcome. Notification will be to advise whether or not they have passed the interview. Where a candidate has not passed the interview, they will receive feedback from the Assessment Panel.

The successful candidate will normally be the person who has scored highest at interview. However, prior to any offer of appointment the Discovery Programme will make all such enquiries that may be deemed necessary (e.g., health, character, written employer references and security checks). The successful candidate will not be appointed to the post unless they:

- Agree to undertake the duties outlines and accept the conditions under which the duties are or may be required to be performed;
- Are fully competent and available to undertake, and fully capable of undertaking, the duties attached to the post.

In the event that a second round of interviews is required, candidates may be required to make a presentation as part of that interview. Where a presentation is required, candidates will be informed of the presentation topic when interview times are being assigned.

<u>Stage 6 – appointment</u>

Once all necessary checks have been completed, an offer of employment will be made to the successful candidate.

The successful candidate will be expected to take up employment with the Discovery Programme no later than **03 January 2023**.

Details of candidates who have passed the interview will be retained on an order of merit list for one year as suitable for appointment and may be offered employment by the Discovery Programme should any similar vacancy arise in that time. This is without prejudice to any other recruitment undertaken by the Discovery Programme while any such list exists.

The principal Conditions of Service are outlined at **Appendix 3**.

Appendix 1 Key Competencies

Management and Teamwork
Create, maintain and enhance effective working relationships Encourages and supports new and more effective ways of working Encourages, listens to and acts on feedback from the team to make improvements Actively shares information, knowledge and expertise to help the team meet its objectives
Technical Analysis and Decision Making
Has a good working knowledge of geospatial data in all its forms including primary survey data, GIS and mapping data and remote sensing data. Is skilled in geospatial data analysis and visualisation and has an understating how spatial data processes operate Is proficient in geospatial data management and process with specific emphasis of remote sensing data and the geospatial historic environment data. Understands the importance of an maintain data processing routines, GIS workflows and other associated metadata Quickly gets up to speed in a complex situation, rapidly absorbing all relevant information/data (written, visual and oral) Is resourceful and creative, generating original approaches when solving problems and making decisions
Delivery of Results
Assumes personal responsibility for and delivers on agreed objectives/goals Manages and progresses multiple work strands and activities successfully Accurately estimates time parameters for projects and manages own time efficiently, anticipating obstacles and making contingencies to manage these Is logical and pragmatic in approach, delivering the best possible results with the resources available Maintains a strong focus of delivery of agreed outcomes at all times Ensures all outputs are delivered to a high standard and in an efficient manner Uses resources effectively
Interpersonal and Communication Skills
Communicates in a fluent, logical, clear, concise and convincing manner, verbally and in writing Is able to listen effectively and develop a two-way dialogue quickly Effectively influences others to take action Builds and maintains contact with colleagues and stakeholders to assist in performing role Works to establish mutual understanding to allow for collaborative working Collaborates and supports colleagues to achieve organizational goals
Specialist and Technical Knowledge, Skills and Self Development
Clearly understanding the role, objectives and targets, and how they fit into the work of the Discovery Programme Ability to use a range of software including: GIS (e.g. ESRI and QGIS), CAD (e.g. Autodesk Software) illustration and image packages (e.g. Adobe Creative Cloud) and general software (e.g. Microsoft Office) Has significant expertise in their field that is recognised and utilised by colleagues Is proactive in keeping up to date on issues and key developments that may impact upon their own work area and that of the Discovery Programme

Drive and Commitment to the Discovery Programme's Code of Conduct
Consistently strives to perform at a high level Demonstrates high levels of initiative, taking ownership for projects within the management and organizational parameters of the Discovery Programme Is trustworthy, upholding highest standards of honesty, professionalism, ethics and integrity

Appendix 2   Interview Guidance for Applicants

If you are called to interview, the Assessment Panel will want to give you the opportunity to further demonstrate your suitability for the post. Interviews can be stressful – even for the Assessment Panel – and you should be assured that you will be treated with professionalism, courtesy and understanding. Interviews will have time limits, and the Assessment Panel will guide you if you are coming close to the time limit for one section or another. But take your time, listen carefully to the question, and if you need the question to be repeated just ask!

If this is your first experience of a competence-based interview, bear in mind that it does not require you to:

- Talk through previous jobs or appointments from start to finish;
- Provide generalised information as to your background andexperience; or
- Provide information that is not specifically relevant to the competence the question is designed to test.

A competence-based interview does however require you to:

- Focus exclusively, in your responses, on your ability to fulfil the competencies required for effective performance in the role; and
- Provide specific examples of your experience in relation to the required competency areas.

In preparation for the interview, you may wish to think about having aclear structure for each of your examples, such as:

- Situation – briefly outline the situation;
- Task – what was your objective, what were you trying to achieve;
- Action – what did you actually do, what was your unique contribution;
- Result – what happened, what was the outcome, what did you learn.

The panel will ask you to provide specific examples from your past experience inrelation to each of the competences. You should therefore come to the interview prepared to discuss in detail a range of examples which best illustrate your skills and abilities in each competence area outlined at Appendix 1 above. You may draw examples from any area of your work / life experiences.

Appendix 3   Principal Conditions of Service

Nature of Employment:	This post will be fixed term of up to 36 months (three years) in duration, depending on funding (subject to successful completion of a six-month probationary period).
Salary:	In the region of €33,149.00-€42,422.00 per annum (pro rata) (Point 1-5 Archaeologist Scale 65175(3)), starting point depending on role and experience.
Place of Work:	Merchants House, Merchants Quay, D08 K3KD, Ireland. **NB:** see note below
Reporting to:	The Chief Executive Officer or their nominee
Hours of Work and Rest:	As provided for under the Organisation of Working Time Act 1997 Normal hours of work are full time, 37.5 hours per week, Monday to Friday, excluding lunch breaks, normally to be worked as agreed between the hours of 08:00 and 18:00. The Discovery Programme operates a flexi-time policy. From time to time the post holder will be expected to work outside normal working hours subject to the limits set down in the working time regulations.
Holidays:	In addition to usual public holidays the annual leave entitlement is 25 days per calendar year
Pension:	The Discovery Programme (Employer) Pension contribution is on a matching basis from 1% up to a maximum of 5% of salary; the employee may make a greater contribution to their salary, with employer contribution capped at 5%.
Other Information:	While this is primarily an office-based post, applicants should note that from time-to-time field visits to sites of archaeological interest or research may be required. This may include visits to institutions, located in centres of population, as well as sites located in the countryside, mountain tops and foreshore, including sites in various states or repair or disrepair, subject to archaeological excavation and/or in conservation or construction phases. Travelling and subsistence expenses are paid according to the rates set by the Discovery Programme.

NB: Place of Work - The post holders will be expected to spend at least 60% of their time in office-based activity, at the Discovery Programme's offices. From time to time the post holder will be required to work at different locations to carry out fieldwork, facilitate meetings and engagement with stakeholders.

Successful candidates may request blended working arrangements, this will be considered on a case-by-case basis in line with the business needs of the organisation, and in accordance with the Discovery Programme's Staff handbook. The Discovery Programme reserves the right, at its discretion, to change working arrangements on any future date.