Melton City Council

3D Digital Twin Officer

Position Description

PD: 00150

A thriving community
where everyone belongs

1. Position details

Position Title	3D Digital Twin Officer
Directorate	Planning and Development
Service Unit/ Department	Engineering Services
Position Classification	Band 6
Enterprise Agreement	Melton City Council Enterprise Agreement No 9 2019 or any successor enterprise agreement.

2. Organisational relationships

Reports to	Mike Johnston
Supervises	Nil
Internal liaisons	• All Council Departments
External liaisons	• Consultants
	• Government Agencies
	• Developers
	• Technology Suppliers

3. Our Organisation

1. **Council Values**
   Our Values; Vibrant Melton or **M**otivate, **E**mpower, **L**ead, **T**rust **O**pen and **N**urture represent how we behave and operate in all our interactions with community and each other. At Melton City Council our diversity is our strength. We foster an inclusive workplace where everyone, regardless of who they are or what they do for our organisation, is equally involved and supported in all areas of Council.

2. **Occupational Health and Safety**
   Each employee has the right to a safe working environment and should advise their Manager/ Supervisor of any risk or condition which could result in accident or injury. Each employee is responsible for their own health and safety; to adhere to Melton City Council procedures, participate in appropriate safety education and evaluation activities.

3. **Melton City Council Policies and Procedures**
   Our policies and procedures are set out in various documents located throughout the organisation and electronically on the intranet. It is the responsibility of each employee to familiarise themselves with these policies, procedures, including our Employee Code of Conduct.

4. **General Information**
   The incumbent can expect to be allocated duties, not specifically mentioned in this document, but within the capacity, qualifications and experience normally expected from persons occupying positions at this classification.

5. **Child Safe Environment**
   Melton City Council is committed to ensuring a Child Safe environment.

4. Position objectives

- Development, production and implementation of a 3D Digital Twin model, data-rich models, products and analysis, for the City of Melton.

- Creation and communication of 3D visualisations that support consultation and evidence-based decision making.

5. Key responsibility areas

- Develop, manage and implement a high-spec 3D Digital Twin model for the City of Melton.

- Production of engaging 3D models, visualisations and analysis, that demonstrate evidence-based decision making and support a platform for scenario modelling.

- Provide leadership through mentoring and training stakeholders to create 3D models, undertake analysis and produce visualisations outputs from the Digital Twin Model.

- Liaise and promote the benefits of the 3D Digital Twin model and its capabilities to ensure that internal stakeholders are aware of the model's potential applications.

- Develop standards and procedures relating to the development of Council's 3D Digital Twin model, creation of spatial analysis and delivery of the model.

- Investigate and evaluate new and emerging 3D technologies.

- Develop and operationalise the use of Augmented Reality (AR) capabilities across Council utilising the 3D Digital Twin model to aid consultation, communication & decision making

- Update corporate systems with data updates from external agencies and the provision of data to third parties (Government agencies, Utilities and Consultants).

6. Accountability and extent of authority

- Ensure the accuracy and integrity of the assets and other spatial data within Council's Asset Management Systems and Geographic Information Systems.

- Keep up to date with developments in legislation, acts, regulations, Australian Standards and guidelines that relate to Asset Management Systems and Geographic Information Systems and data management.

- Maintain confidentiality regarding Council information that is private or inappropriate for general release.

- Administer the organisation's 3D Digital Twin model and delivery program, and report on risks, opportunities found, and recommended actions.

- Represent Council demonstrating the 3D Digital Twin model to key stakeholders at Committees and Meetings and actively participating in networking events.

- Facilitate and deliver projects and activities within agreed timeframes.

7. Judgement and decision making

- Make decisions related to the key responsibilities as agreed by the Asset Management and GIS Coordinator.
- Work independently and to make decisions on a daily basis in accordance with the approved performance work plan.
- Provide solutions to problems using technical knowledge that relate to immediate work tasks, and with regard to organisational and operational constraints.
- Display initiative, innovation and creativity when approaching all aspects of the position.
- Make recommendations to ensure the accuracy and integrity assets and spatial information within Council's Asset Management Systems and Geographic Information Systems.
- Guidance and advice is usually available.

8. Specialist skills and knowledge

- Good technical knowledge and application of the systems and processes related to 3D Visualisation/Modelling.
- Expert knowledge of 3D techniques related to the production and creation of 3D models and products.
- Demonstrated ability to supply services and analysis derived from 3D technology.
- Familiarity with 3D applications such as ArcGIS Pro, Sketchup, FME, TerraExplorer Pro, Unreal Engine, Cesium, etc.
- Computer literacy in the use of Microsoft Office particularly Microsoft Word and Microsoft Excel.
- Understanding of the long-term goals of Council's Asset Management and Geographic Information Systems business plans, strategies and other relevant policies and plans within both the unit and Council.

9. Management skills

- Manage own time to establish own daily objectives, priorities and task requirements.
- High degree of accuracy and attention to detail.
- Work as both a member of a team and in an unsupervised capacity.
- Liaise effectively with internal and external stakeholders to ensure goals are achieved within mutually acceptable timeframes.
- Support and train staff to create 3D models, undertake analysis and produce visualisations outputs from the Digital Twin Model as required by the Asset Management & GIS Coordinator.

10. Interpersonal skills

- Work in a team environment, with a positive, facilitative and pro-active approach.
- Sound communication skills, both oral and written, and ability to communicate effectively and politely with customers.
- Gain co-operation and assistance from state government agencies, developers and other Council employees to maintain 3D models and data stored in the Asset Management System and Geographic Information Systems.

- Provide a consistent level of exemplary customer service.

11. Qualifications and experience

- Tertiary Qualification in Geomatics, Surveying, Multimedia Cartography, Architecture, or similar with substantial experience in this field.
- Experience of developing business solutions and value-added products using 3D data.
- Experience in developing 3D models, standards and procedures.
- Current valid Victorian driver's licence.

12. Key Selection Criteria

1. Tertiary qualifications relevant to the position (e.g. Geomatics, Surveying, Multimedia Cartography, Architecture) and some relevant experience in developing 3D Digital Twins, or a lesser formal qualification and substantial relevant experience.
2. Demonstrated skills and experience in the creation of 3D models, products and analysis, including 3D visualisations that demonstrate evidence-based decision making.
3. Experience in developing standards and procedures related to the creation of a Digital Twin.
4. Working knowledge of 3D applications such as ArcGIS Pro, Sketchup, FME, TerraExplorer Pro, Unreal Engine, Cesium, etc.
5. Well-developed communication skills, good time management and demonstrated ability to work as part of a team.
6. Demonstrated experience in providing technical advice, support and training to staff.

I confirm I have read the Position Description, understand its content and agree to work in accordance with the requirements of the position.

Coordinator Asset Management & GIS	August 2021	
Approved by Position Title	Date Approved	
Incumbent's name	Signature	Date