

WALGETT SHIRE COUNCIL



Position Description GIS & Asset officer

Position Title: Geographic Information System (GIS) & Asset Officer

Department: Engineering Technical Services

Reports Directly To: Director Engineering / Technical Services

Staff Directly Controlled: Nil

Grade:

Present Incumbent:

Commencement Date:

Location of Work Place: Council Chambers, Walgett

Hours of Work: Monday to Friday 35hrs per week

Objective:

Key objectives of the position are to:

1. Coordinate, develop and manage Council's GIS and LIS operations.
2. Ensure the integrity of Council's property database.
3. Undertake GPS field surveys using differential GPS.
4. Ensure that asset related data is gathered and maintained in a format suitable for use in Council's asset management systems.
5. Initiate and oversee business improvement processes related to Council's GIS and LIS operations.
6. To contribute to the efficient and effective management of the Council's assets and infrastructure by optimising the use of technology and asset Management practice.
7. To assist with the implementation the Asset Management strategy and continuous improvement of Asset management practices.
8. To provide strategic advice , timely innovative and solution focused professional engineering services in asset management and strategic infrastructure planning for Council, including planning for a range of engineering services including renewal, upgrade and new capital works projects.

Responsibilities:

GIS Data Management & mapping

1. Undertake and facilitate the creation and maintenance of GIS data, including metadata statements.
2. Maintain spatial cadastral data within Mapinfo Professional, QGIS and PostGIS server and a spatial related data within Authority.
3. Implement and maintain data linkages between Intramaps and Authority.

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4. Implement and maintain Intramaps server so that core GIS data is readily accessible to Council staff.
5. Facilitate the preparation of high quality standard and thematic maps for Council staff and external customers as required and as appropriate.
6. Establish and maintain high quality maps of public interest on Council's web site, such as urban and rural addressing, cemetery plots, LEP mapping, etc.

Asset Management

1. Ensure asset related data integrity and assist with the collection and maintenance of asset attribute and condition data.
2. Develop tools and reports to analyse asset data including modelling, thematic mapping and statistical analyses. Use these tools to prepare detailed asset reports, asset management plans, and maintenance and capital programs.
3. Assist in the preparation of asset management plans for various asset classes.
4. Ensure that lifecycle cost analysis is undertaken supported by modelling and optimum decision making, specifically for renewal, upgrade and new infrastructure programs formulated through analysis and application of the condition assessments.
5. Assist in the implementation of Council's Asset Management policy and strategy including promoting awareness of Asset Management policy and principles across Council.
6. Develop and implement innovative and effective procedures for the ongoing monitoring of the condition of infrastructure assets.
7. Provide engineering advice for the preparation of Development Control (i.e. Structure Plans, Development Plans and Overlays) including Development Contributions Plans.

Surveying, data capture and development:

1. Facilitate and undertake regular data capture of asset objects, including geocoding processes, in accordance with appropriate standards.
2. Create and maintain map layers within Mapinfo Professional and QGIS using data derived and/or validated from aerial photography, differential GPS, field inspections, works reports, drone imagery, etc.
3. Conduct regular reviews of Council's GIS data to ensure that appropriate data integrity standards are maintained and avoid unnecessary duplication.
4. Plan and execute field surveys using differential GPS equipment.
5. Plan and execute aerial surveys with the drone, process images into datasets.

Modelling and Analysis

1. Develop processes to link various types of tabular datasets to GIS data in order to create thematic maps as required.
2. Develop tools and templates to create modelling, analysis and reporting of the themed maps.
3. Using 3D modelling techniques analyse volume changes of assets, i.e. quarry stockpiles and landfill utilisation.

Technical Support:



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1. Provide technical advice and support to users and editors of GIS, LIS and asset data to improve data quality and troubleshoot problems, as necessary.
2. Provide technical advice and support to users of differential GPS data and equipment.
3. Provide regular and on-call user training for all GIS users to facilitate staff use of the GIS.
4. Identify, advise and implement continuous improvements to Council's GIS, LIS and asset management systems.
5. Maintain GIS software on personal computers, servers and mobile devices.
6. Provide advice on the capabilities of the drone and the restrictions of its use with regard to relevant legislation and policies.

Corporate planning & management:

1. Prepare reports and correspondence on GIS, LIS and asset management matters associated with the position.
2. Ensure completion of tasks and projects within agreed time frames.
3. Ensure that expenditure related to the position is consistent with Council's adopted budget and management plan.

WH&S Responsibilities

1. In accordance with the Workplace Health and Safety Act the employee must take reasonable care for their own health and safety, take reasonable care for the health and safety of others, comply with any instruction from Council and co-operate with any reasonable policies and procedures of Council.

General Accountabilities:

1. Develop and promote a positive image of the Shire, the Council and the community
2. Minimise Council's exposure to risk.
3. Maintain a customer service focus for the delivery of services and activities
4. Deliver agreed outcomes, on time and in accordance with best practice principles
5. Contribute to an organization environment that values and rewards integrity, trust and innovation
6. Ensure effective communication of corporate decisions, policies and directions to staff
7. Maintain confidentiality of all Council operations
8. Ensure documented policies, code of practice and processes are in place and adhered to by all staff
9. Work within adopted budgets applicable to the position
10. Perform other duties as directed within the skill range of the employee

Essential Criteria:

1. Enrolled and satisfactory progress of a Degree or diploma in a GIS or Civil Engineering related field or equivalent experience.

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2. Understanding of civil engineering and infrastructure requirements and how they apply particularly within a Council engineering environment
3. A good working knowledge and understanding of asset management principles and practices
4. Demonstrated advanced proficiency in creating, maintaining and translating GIS data using Mapinfo Professional or QGIS software.
5. Demonstrated experience in surveying and processing differential GPS data.
6. Demonstrated experience in maintaining asset related data.
7. Demonstrated problem solving skills and initiative, including the ability to respond effectively to change.
8. High level of computer literacy and personal computer application experience, including a detailed understanding of the workings of an Asset Management Information System (Conquest, Confirm , Assetic)
9. Demonstrated ability to work effectively across multidisciplinary teams to deliver desired and co-ordinated outcomes.
10. Highly motivated and capable of working with minimal supervision.
11. A current Australian Class "C" Driver's Licence

Desirable Criteria:

1. Demonstrated advanced ability to manage spatial and aspatial cadastral data, including establishing and maintaining linkages between spatial and aspatial data sets.
2. Demonstrated experience in advanced word processing, spreadsheet and database skills particularly using the Microsoft Office suite of applications.
3. Demonstrated ability to provide GIS training, advice and implementation services.
4. Demonstrated advanced knowledge of structured query language (SQL) and relational database management system (RDMS) connectivity.
5. Demonstrated experience with operating a drone.
6. Demonstrated advanced ability in the use and maintenance of GIS related software, such as Intramaps, Surfer, Agisoft Metashape, Trimble Pathfinder, TerraSync or similar.
7. Local Government Experience