

CAD TECHNICIAN

NATURE OF WORK

This is responsible, technical civil engineering and drafting work performing a variety of engineering tasks. Work is performed under the managerial direction of the Assistant City Engineer.

ESSENTIAL FUNCTIONS OF WORK (May not include all of the duties performed.)

Designs and drafts detailed construction drawings, topographical and existing features drawings, and related maps used in planning and construction of civil engineering projects.

Assists project managers with preparation of civil engineering design plans and surveys.

Generates draft sketches, drawings, and other engineering data received from project managers.

Prepares engineering designs, plans, specifications and cost estimates for the construction of streets, street lighting, traffic signals, sidewalks, curbs, sewers, water mains, storm drains and the like.

Plots maps, plans, profiles and cross-sections, indicating topographical contours and elevations.

Makes redline revisions as requested by project managers to create final engineering plans and/or surveys.

Drafts drawings of structures and installations such as roads, culverts, and public utility infrastructure.

Reviews "as-built" plans submitted after construction is completed.

Maintains a variety of records pertaining to public works installations and projects; prepares reports related to the work.

Answers inquiries and complaints from the public regarding property boundaries, easements, subdivisions, and the like.

Occasionally works outdoors as a construction observer or survey crew member.

Performs other related duties as assigned.

CAD TECHNICIAN (continued)

REQUIREMENTS OF WORK

Knowledge of professional civil engineering principles, practices and methods applied to public works construction.

Strong working knowledge of AutoCAD Civil 3D including an understanding of features and concepts with the ability to create grading plans, conduct earthwork computations, develop alignments & profiles, cross sections, pipe networks, and generate plan sheets.

Knowledge of construction standards and regulations.

Knowledge of maps, deeds, plats and plans.

Ability to prepare accurate plans, specifications, cost estimates and engineering reports.

Ability to maintain a variety of technical records, both hard copy and digital.

Ability to establish and maintain effective working relationships with other employees, engineers, contractors, and the general public.

Understanding of basic survey concepts with prior field survey experience preferred.

Ability to maneuver on foot around construction sites, on uneven terrain, climb stairs and ladders, in all weather conditions.

Ability to manage time and multi-task on multiple priorities.

Ability to work extended hours as needed to meet deadlines.

Attention to detail with ability to recognize engineering plan discrepancies.

DESIRED MINIMUM TRAINING AND EXPERIENCE

Possession of an associate's degree in civil engineering, drafting technology, computer-aided design or equivalent experience.

2+ years of successful design experience within Civil Engineering.

NECESSARY SPECIAL REQUIREMENTS

Possession of a valid North Dakota driver's license.