ENGINEERING AID SERIES

INCLUSIONS

The Engineering Aid (EA1 - EA4) series encompasses four levels where the primary work performed is technical work involving the gathering, recording, verification and validation of data in support of engineering and/or surveying disciplines.

This work may be performed in the field, laboratory or office and may range from performing very basic and routine tasks to performing tasks which involve the knowledge and application of advanced data gathering techniques, procedures and methods.

EXCLUSIONS

Excluded are positions where the primary duties and responsibilities are included in the definition of any other classification specification.

APPLICATION OF THE SERIES

Further to the inclusions statement in the preamble, the series is applied through the general intent statement at each level, and is further supported by the factors described at each level.

ENGINEERING AID 1 (EA1)

GENERAL INTENT

This is the entry level of the series where incumbents are trained in various methods, procedures and processes associated with data collection. Under direct supervision, positions perform routine or repetitive tasks and procedures in accordance with specific instructions.

FACTORS

COMPLEXITY

Skills/Expertise Required

 Knowledge of basic mathematics as it applies to measuring distance, volume and depth.

Variety

Minimal variety.

OTHER LEVEL DETERMINANTS

Independence of Action and Decision Making

- Work is repetitive, well defined and clear cut with specific guidelines.
- Work is highly structured.

Supervision Received

Works under direct supervision.

Consequence of Errors

 Consequence of error is minimal due to positions working under direct supervision.

ENGINEERING AID 2 (EA2)

GENERAL INTENT

This is the full working level of the series. Positions receive direction on processes, methods or procedures to be followed for data collection and recording. Positions work under general supervision.

FACTORS

In addition to the factors described at the EA1 level, the following factors apply to positions at the EA2 level:

COMPLEXITY

Skills/Expertise Required

 Knowledge of sampling techniques, data collection and/or recording used in the fields of engineering and/or surveying.

Variety

Work involves data collection and recording.

OTHER LEVEL DETERMINANTS

Independence of Action and Decision Making

 Makes decisions on routine matters and works within established methods and procedures.

Supervision Received

 Receives general supervision on the work to be performed and procedures to be applied.

Consequence of Error

• Errors are readily detected and corrected, usually by the supervisor and/or through checks and balances.

ENGINEERING AID 3 (EA3)

GENERAL INTENT

This is the advanced working level of the series. Positions collect and validate data and report results. Positions exercise independence of action and use judgment in applying department standards, policies and/or guidelines. Positions may assign or plan the work of employees at the same or lower classification levels and use discretion in setting priorities and work schedules. This level is differentiated from the Engineering Aid 2 in that positions ensure accuracy and quality of data through the enforcement of specifications and/or standards.

FACTORS

In addition to the factors described at the EA2 level, the following factors apply to positions at the EA3 level:

COMPLEXITY

Skills/Expertise Required

 Knowledge of the principles, practices and methods of data related to engineering and/or surveying.

Variety

- Data collection is validated through basic analysis.
- May perform inspections.

SUPERVISORY AND ADMINISTRATIVE RESPONSIBILITY

 If supervisory, provides direction regarding work for which detailed instructions exist.

OTHER LEVEL DETERMINANTS

Independence of Action and Decision Making

 Works independently and makes decisions regarding priorities and work schedules.

Supervision Received

 Under general direction the position performs the duties according to standard procedures but may exercise discretion in work priorities.

Consequence of Error

Errors may result in loss of own or others' time to correct the error.

ENGINEERING AID 4 (EA4)

GENERAL INTENT

This is the senior level of the series. Positions require technical/specialized knowledge of the principles and practices in the appropriate field of engineering and/or surveying to select and apply the appropriate data collection and recording methods, processes, procedures and/or technology. Positions are involved in compiling, manipulating and/or analyzing specialized technical data. Positions are expected to proceed on their own initiative to validate and verify the data collection and recording.

Positions at this level may perform supervisory and/or specialist functions:

- **a) Supervisory** Positions have supervisory responsibilities which include assigning and planning of work and making recommendations with respect to performance management.
- **b) Specialist** Positions are responsible for performing work requiring specialized technical ability.

FACTORS

In addition to the factors described at the EA3 level, the following factors apply to positions at the EA4 level:

COMPLEXITY

Skills/Expertise Required

 Advanced knowledge of the principles, practices, methods and guidelines related to engineering and/or surveying.

Variety

 Interpretation and verification of data is required to apply multiple methods and/or procedures.

SUPERVISORY AND ADMINISTRATIVE RESPONSIBILITY

- May provide direction regarding work activities and training.
- If supervisory, plans, organizes and directs the work of subordinates by identifying work activities, training and monitoring performance.

OTHER LEVEL DETERMINANTS

Independence of Action and Decision Making

 Uses judgment in selecting and applying methods, processes and procedures. Verifies the accuracy of calculations and data collection.

Supervision Received

 Proceeds on own initiative regarding completion of projects and/or assignments with reviews by supervisor.

Consequence of Error

Errors may result in minor project and/or program delays and/or monetary loss.