Assessment Requirements for AHCARB507 Generate tree plans using computer-aided design software

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Modification History

Release	TP Version	Comment
1	AHCv1.0	Initial release

Performance Evidence

The candidate must produce tree protection plan drawing containing tree protection zones (TPZ) and encroachments, and perform area calculations using computer-aided design software (CAD).

The candidate must be assessed on their ability to integrate and apply the performance requirements of this unit in a workplace setting. Performance must be demonstrated consistently over time and in a suitable range of contexts.

The candidate must provide evidence for and demonstrate:

- confirming project requirements for computer-aided design (CAD) drawings
- identifying drawing requirements, purpose and scope and confirm with relevant project personnel
- setting up basic drawing environment
- creating layering strategy as required
- creating arboricultural and architectural library of standard detail and components
- creating text and dimension styles
- creating line types of different thicknesses to provide visual differentiation of plan elements
- creating hatch patterns and types
- setting up title blocks for different drawing sizes
- setting up reference schedules as required
- using 2-D CAD software programs and functions to produce different types of 2-D drawings using appropriate layers as required
- importing digital text and drawing files from other software applications into 2-D CAD drawings
- scanning and save hard copy documents as correct file types to import into 2-d CAD drawings
- deleting or purge elements that are not required from drawings
- adding notations to drawings as required
- adding dimensions and scales to drawings as required
- using editing commands to modify drawing elements and text

- plotting trees with precision
- differentiating visually trees to be retained, removed and transplanted
- calculating areas of tree protection zones (TPZ), encroachments and distances
- undertaking quality control check of drawing
- setting page layout with appropriate scale and lineweights for the drawing file to suit printing requirements
- setting print parameters for the printer
- printing drawings on the correct media
- creating suitable file directories for the drawing project
- saving drawing files for later retrieval and back up to specified drives or directories
- creating drawing files and send to external personnel for use in different software applications
- creating portable document format (PDF) files for relevant personnel to view completed drawings without using CAD software packages.

Knowledge Evidence

The candidate must demonstrate knowledge of:

- project requirements
- types of drawings
- computer-aided design (CAD) drawings
- drawing requirements
- purpose of drawing
- scope of drawing
- project personnel
- drawing environment
- layers and layering strategy
- arboricultural library of standard detail and components
- architectural library of standard detail and components
- text and dimension styles
- line types of different thicknesses
- visual differentiation of plan elements
- hatch patterns and types
- title blocks for different drawing sizes
- reference schedules
- 2-D CAD software programs
- different types of 2-D drawings
- notations
- dimensions and scales
- editing commands
- plotting trees
- trees to be retained, removed and transplanted
- quality control check and document control

- page layout
- scale and lineweights
- drawing file types
- printers and printing requirements
- print parameters
- printing drawings
- correct media
- file directories and drives
- methods of saving files
- file retrieval
- file backup
- calculation of areas
- tree protection zones (TPZ)
- encroachments
- distances
- completed drawings
- portable document format (PDF).

Assessment Conditions

Assessment must be demonstrated consistently over time in a suitable range of contexts and have a productivity-based outcome. No single assessment event or report is sufficient to achieve competency in this unit.

Assessment may be conducted in a simulated or real work environment, however determination of competency requires the application of work practices under work conditions.

The mandatory equipment and materials used to gather evidence for assessment include:

- equipment:
  - computer
  - word processing software
  - CAD software
- materials:
  - tree plan drawings in print and file format

Assessors must satisfy current standards for RTOs in the assessment of arboriculture units of competency.

Assessment must be conducted only by persons who have:

- arboriculture vocational competencies at least to the level being assessed
- current arboriculture industry skills directly relevant to the unit of competency being assessed

Links

Companion Volume implementation guides are found in VETNet - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72