

Unit ref. R/600/7354 *** MANDATORY UNIT ***** (QCF Level 6 Credit Value 10)**

Unit No	17	Establishing Project Dimensional Control Criteria in the Workplace
----------------	-----------	---

1.3	Explain ways that relevant survey information can be obtained. In the construction site, relevant survey information can be obtained through various methods. Here are some ways to obtain survey information: 1. Topographic Surveys: Topographic surveys provide detailed information about the existing terrain, including elevation levels, contours, natural features, and any man-made structures. This data is crucial for understanding the site's characteristics. 2. Geodetic Surveys: Geodetic surveys use satellite-based positioning systems (such as GPS) to establish precise horizontal and vertical control points on the site. This data helps in accurately locating and referencing various project elements. 3. Boundary Surveys: Boundary surveys determine the legal boundaries of the property. They are essential to ensure that construction activities remain within the designated property lines. 4. Utility Surveys: Utility surveys identify the locations of underground utilities, such as water lines, gas lines, electric cables, and sewer systems. This information is vital to prevent accidental damage to utilities during construction. 5. Building Surveys: Building surveys provide detailed measurements and drawings of existing structures on the site. This data is valuable when planning renovations, additions, or demolitions. 6. Laser Scanning Surveys: Laser scanning surveys use laser technology to create highly accurate 3D representations of the site and existing structures. This data aids in clash detection and as-built verification. 7. Drone Surveys: Drones equipped with surveying tools can capture aerial images and data of the site, helping to monitor progress, conduct inspections, and gather valuable information from inaccessible areas. 8. Ground Penetrating Radar (GPR) Surveys: GPR surveys use radar signals to detect subsurface features like buried utilities, underground structures, and voids. 9. Environmental Surveys: Environmental surveys assess the site's environmental conditions, identifying potential risks or impacts on the project. 10. Soil Investigation Surveys: Soil investigation surveys determine the soil composition and properties, crucial for foundation design and other geotechnical considerations. 11. Hydrographic Surveys: Hydrographic surveys are used in projects involving bodies of water, providing information on water depth, underwater features, and navigational hazards. 12. Existing Plans and Records: Existing plans and records from previous surveys, local authorities, or relevant agencies can also provide valuable information. 13. Collaboration with Surveying Professionals: Engage professional surveyors who are experienced in construction surveying to conduct on-site measurements and data collection. 14. Remote Sensing Technologies: Use remote sensing techniques like LiDAR, satellite imagery, and aerial photography to gather data from a broader perspective. By using these various surveying methods, construction teams can obtain accurate and comprehensive information about the site, facilitating precise project planning, design, and construction activities.
1.4	Explain how survey information can be checked to ensure it is up to date and accurate. To ensure survey information is up to date and accurate, construction site managers can implement the following checks and verification processes: 1. Field Verification: Conduct field visits to physically verify the survey data against the actual site conditions. This includes cross-referencing measurements, elevations, and features on the ground with the survey data. 2. Quality Control Checks: Perform quality control checks on survey data to identify any errors or inconsistencies. This can involve reviewing data points, measurements, and calculations for accuracy.