

LAND SURVEYING ASSISTANT (7283)

TASK LIST - 2024

1. Sets up and operates, levels, GPS and other survey instruments in order to determine the location/position of lines, points, corners, elevations, and grades.
2. Sets up and operates total stations, GPS and data collectors, to collect and transmit data, and to measure direction, distance, and alignment.
3. Operates/uses hydrographic surveying instruments and related equipment, such as GPS, single and multi-beam echo sounders, lead lines, and tide gauges, in order to collect bathymetric data.
4. Performs field tests and adjustments of transits, total stations, levels, and other survey equipment in order to maintain operating efficiency and accuracy, and recommends repairs or calibrations if necessary.
5. Assists and directs Field Engineering Aides and/or others in loading and securing survey equipment and personnel on transport vehicles such as trucks, boats, and helicopters, used in conjunction with survey projects.
6. Drives/operates a variety of survey vehicles such as 4-wheel drive vehicles, vans, pick up trucks, large trucks, small boats, to, at, and from field surveying sites, sometimes in inclement weather.
7. Operates/uses survey support equipment such as brush cutter, cement mixer, pneumatic hammer, winch, and post hole digger.
8. Operates a two-way or multi-channel radio used to maintain communications between various members of a survey party.
9. Directs members of the survey by verbal, or hand, or other signals in taking measurements and setting rods, stakes, reflectors, sights, and monuments.
10. Makes field reconnaissance in order to assess available horizontal and/or vertical survey control points.
11. Assists and directs the Field Engineering Aides and others in setting up traffic control devices and other safety equipment such as traffic cones or other delineators, and high-level warning devices (e.g., signs)

12. Independently performs calculations and/or assists Survey Party Chief in performing calculations using appropriate equations in order to obtain survey closures and adjustments, placement of construction stakes, and other survey related computations.
13. Drafts and/or plots (prepares) sketches, drawings, cross sections, graphs, and topographic maps from data, fields notes, and observations in order to compile visual data as requested by City personnel, other public agencies, or private agencies.
14. Uses programs for calculating and adjusting survey data using computer or programmable calculator.
15. Compiles, reviews, and evaluates notes and observations of surveys and communicates, orally or in writing, such information to a Survey Party Chief or others for recording, verification, plats, and/or analysis.
16. Checks the field notes of the Survey Party Chief in order to verify their accuracy and completeness.
17. Locates, and obtains references material, such as legal record information, record maps, field notes, or drawings, from various departments, outside agencies, or other sources as requested by the Survey Party Chief or other supervisory personnel.
18. Investigates, analyzes, and interprets reference material, such as land title information, court records, and other surveying agency information, in order to compile survey job packages or studies.
19. Interprets and uses design plans, profiles, maps, standard plans, and manuals in order to plan and coordinate survey activities.
20. Assists with training Field Engineering Aides in order to develop their proficiency in performing proper surveying procedures and techniques.
21. Verbally answers questions from the general public or outside agencies when working in the field, or refers them to the appropriate personnel when necessary, in order to promote good public relations.
22. Acts as a Survey Party Chief when necessary in order to facilitate job progress.
23. Utilizes a computer for word processing, spreadsheet management, and Computer-Aided Design and Drafting (CADD) applications.
24. Sets up and operates Global Positioning System (GPS) equipment to collect GPS data.