

Work Processes Schedule

SURVEYOR ASSISTANT

RAPIDS: 0551M

O*NET/SOC: 17-3031.01

REVISION DATE: 12/2014

Perform various duties incidental to construction design, planning, estimating, and management. Use optical reading/electronic survey instruments to establish horizontal and vertical alignment/layout for construction projects. Use manual or computer aided methods of preparing architectural/mechanical/civil drawings, to include computations of material/earthwork volumes. Demonstrate knowledge and skills for qualifying as Journeyman. Applicable Job Qualification Requirements will be used as a guide in performing tasks and demonstrating knowledge in the following areas. Actual work time must be recorded in the Work Experience Log.

Applicable Ratings/MOS

USMC MOS 0261, 0844, 1361

USCG None

USN EA

Related Instruction

Any trade related schools/courses totaling 288 or more hours.

Additional Requirement

None

Total Hours: **4000**

Skill	Description	Hours
A	TAPING Application, use and care of equipment. Horizontal taping. Slope taping. Baselines. Precision, error of closure and accuracy ratio.	200
B	RODDING Application, use and care of equipment. Select turning points or stations for leveling. Construction layout. Planetable work. Stadia Survey.	200
C	LEVELING Application, use and care of equipment. Adjust instrument. Perform peg-tests. Differential, profile and cross section leveling. Trigonometric leveling. Operate semiprecise level. Operate precise level. Determine "C" factor for levels.	475
D	TRANSIT/THEODOLITE Communicate using standard survey hand signals. Application, use and care of repeating and/or direction type instruments. Adjust instruments. Determine horizontal and vertical angles.	475
E	NOTEKEEPING Record note for all field operations. Compute angles for directions. Sketch and describe control stations. Make simple field computations. Compute temperature corrections.	150

F	<p>PLANETABLE/STADIA SURVEY</p> <p>Application, use and care of equipment. Instrument adjustments. Measure vertical distances using alidade with planetable. Measure horizontal distance using alidade with planetable. Traverse intersection and resection. Contouring for plane/tabling or stadia survey. Preparation of field sheets.</p>	400
G	<p>TRAVERSING/TRIANGULATION</p> <p>Perform interior, deflection angle and/or other type of traverse. Determine error of closure of accuracy. Compute and adjust traverse. Operate infrared EDM and record field notes. Operate microwave EDM and record field notes. Record horizontal directions for the theodolite. Compute and adjust triangulation. Astronomic observations for azimuth determination.</p>	800
H	<p>ROAD AND CONSTRUCTION LAYOUT</p> <p>Field operations for layout roads, buildings and utilities including horizontal and vertical curves. Staking and proper identifications. Slope and grade stakes. Field operations for hypsographic surveys.</p>	500
I	<p>COMPUTATIONS</p> <p>Determine area and volume. Layout building site. Construction layout survey. Road. Bridge site. Survey operations for an airfield.</p>	300
J	<p>PARTY CHIEF</p> <p>Supervise party. Analyze the job for more efficient procedures. Read and work from plans, sketches, notes, maps of record, etc. Instruct apprentices in field procedures. Acquire additional training in one or more of the following branches of survey work: land survey, subdivision, topography, triangulation, construction, hydrographic, railroad or mineral.</p>	500