



FUNCTIONAL JOB ANALYSIS

DEPARTMENT: Highway Department

POSTION TITLE: Engineering Worker, Engineering Technician II, Engineering Technician III, Engineering Specialist

Key:

Never (0%)	Rarely (1-5%)	Occasionally (6-33%)	Frequently (34-66%)	Continuously (67-100%)
Not at all	1-24 minutes in an 8 hour work day	.5 hours-2.5 hours in an 8 hour work day	2.75- 5.25 hours in an 8 hour work day	5.5 – 8 hours in an 8 hour work day

Functional job demands:

- 1. Sitting:** **Frequently (34-66%)**
Sitting to complete computer work, travel by vehicle up to an hour.
- 2. Standing:** **Occasionally: (6-33%)**
This individual stands in stationary position to complete GPS readings, use distance meters, total station and other tools. Standing and walking alternates, prolonged standing.
- 3. Walking:** **Frequently: (34-66%)**
Walking distances of 2+ miles on uneven ground, swamps, hills, and inclines to access land.
The ability to walk in waders, water boots when accessing swamp and shoreline occurs occasionally.
- 4. Balance:** **Frequently: (34-66%)**
Walking on uneven terrain, in snow and on ice, stepping over obstacles occurs during fieldwork.
- 5. Step-up/over:** **Frequently: (34-66%)**
Stepping over obstacles such as brush, downed trees, field grass, and marshy areas.
- 6. Low level work:** **Occasionally: (6-33%)**
Crouching, squatting, kneeling and/or crawling (4-point), forward bending for 5 to 10 minutes.

7. Climbing: Occasionally: (6-33%)

Navigating steep hills inclines and uneven terrain occurs when completing surveys.

8. Fine motor skills: Frequently: (34-66%)

Pinch and precise finger action is required to set up tripod and other field tools.

Computer skills.

Drafting/drawing.

9. Single hand carry: Occasionally: (6-33%)

Carry hand tools weighing up to 45 pounds in one hand.

10. Two-handed carry: Occasionally: (6-33%)

Carry project files weighing 30 pounds, 20 feet, desk height to desk height.

11. Long handled tools: Occasionally: 6-33%)

Shovel, post-hole digger, manual jack hammer.

Hand tools (primarily 8 pound sledge or 3 pound maul) are used, repetitively, to pound objects into the ground.

12. Shoulder carry: Occasionally: (5-33%)

Walking long distances carrying a shoulder bag weighing up to 20 pounds.

13. Lift and carry: Occasionally (5-33%)

Lift sample bags weighing 40 pounds, move from ground to tailgate, carrying a distance of 30 feet.

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