

JOB TITLE: Engineer I  
EMPLOYEE:

DOT #: 221.362-026  
CLAIM #



## **KING COUNTY ON SITE JOB ANALYSIS**

**JOB TITLE** Engineer I

**JOB CLASSIFICATION** Engineer I

**DOT TITLE** Pavement Management Engineer I

**DOT NUMBER** 221.362-026

**DEPARTMENT** Transportation

**DIVISION** Roads

**# OF POSITIONS IN THE DEPARTMENT WITH THIS JOB TITLE**

1 full time, 4-5 seasonal.

**JOB STATUS**

Full Time, Career Service

**ADDRESS OF WORKSITE**

201 South Jackson  
Seattle, WA 98104

**CONTACT'S NAME** Dan Stage

**CONTACT'S PHONE** 206-296-8088

**EMPLOYER JOB TITLE** Senior PMS Engineer

**DATE COMPLETED** 2/20/02

**VRC NAME** Jeff Casem

**DATE REVISED** 5/26/09

**WORK HOURS**

4 days per week and 10 hours per day. 6:00am-4:30. Hours may vary depending on season.

**OVERTIME**

Optional, Rare. Fair Labor Standards Act Non-Exempt (hourly).

**PAGE 1**

**King County Job Analysis Form Revised 11/9/01**

JOB TITLE: Engineer I  
EMPLOYEE:

DOT #: 221.362-026  
CLAIM #

### **JOB DESCRIPTION**

Collecting, analyzing and updating pavement condition data for the King County Pavement Management System (PMS).

### **ESSENTIAL ABILITIES FOR ALL KING COUNTY JOB CLASSIFICATIONS**

1. Ability to demonstrate predictable, reliable, and timely attendance.
2. Ability to follow written and verbal directions and to complete assigned tasks on schedule.
3. Ability to read, write & communicate in English and understand basic math.
4. Ability to learn from directions, observations, and mistakes, and apply procedures using good judgement.
5. Ability to work independently or part of a team; ability to interact appropriately with others.
6. Ability to work with supervision, receiving instructions/feedback, coaching/counseling and/or action/discipline.

### **JOB SPECIFIC REQUIREMENTS**

High school diploma or equivalent, and Washington State Driver's License. All other skills and requirements are learned through on the job training.

### **ESSENTIAL FUNCTIONS Listed in order of importance**

1. Perform road surface field inspection and evaluation utilizing various hand tools and safety equipment in all weather conditions.
2. Identify and implement all necessary traffic control and safety procedures required to ensure a safe work zone while working within the road right-of-way.
3. Perform office work if available, on days when weather prohibits field work.

### **TOOLS, MACHINES, EQUIPMENT, PRODUCTS, AND SERVICES USED**

Clipboard, walk wheel, hardhat, reflective vest, computer, pen and pencil.

### **PHYSICAL DEMANDS AS JOB IS TYPICALLY PERFORMED**

Continuously = occurs 66-100% of the time

Frequently = occurs 33-66% of the time

Occasionally = occurs 1-33% of the time

Rare = may occur less than 1% of the time

Never = does not ever occur (such demands are not listed)

### **This job is classified as**

Light

**Standing**

Frequently on asphalt, dirt, sidewalk, gravel and roadway as well as rough and uneven surfaces for up to 10 minutes at a time for up to 2 hours total in a work shift. Most commonly occurs while inspecting roads as well documenting information about road conditions using a pen and a clipboard.

**Walking**

Frequently on asphalt, dirt, sidewalk, gravel and roadway as well as rough and uneven surfaces for up to 15 minutes at a time for distances up to 2000 feet for up to 4 hours total in a work shift. Most commonly occurs while inspecting roads as well documenting information about road conditions using a pen and a clipboard. The worker is able to take rest breaks from walking as needed.

**Sitting**

Occasionally on automobile seat for up to 15 minutes at a time for up to 1 hour total in a work shift. Most commonly occurs while driving to various King County locations to inspect the roads. Occasionally office work can require up to 4 hours of sitting per day.

**Balancing**

Rare on narrow shoulders of a road or on bridges for 5 minutes at a time for up to 10 minutes total in a work shift. Most commonly occurs while maintaining ones balance while walking on the shoulder of a road with out a handrail or guardrail.

**Bending/Stooping**

Rare on asphalt, dirt, sidewalk, gravel and roadway as well as rough and uneven surfaces for 5 seconds at a time for up to 30 minutes total in a work shift. Most commonly occurs while reaching into the trunk of a car to remove materials, adjust the handle of the walk wheel, pick up markers from the ground as well as entering and exiting an automobile.

**Operating Controls with Feet**

Occasionally for up to 15 minutes at a time for up to 1 hour total in a work shift while driving to various King County locations to inspect the roads.

**Reaching at waist to shoulder height**

Frequently for up to 15 minutes at a time for up to 7 hours total in a work shift while driving an automobile, pushing the walk wheel, and writing on a clipboard.

**Reaching at knee to waist height**

Occasionally for 1 minute at a time for up to 30 minutes total in a work shift while pushing the walk wheel.

JOB TITLE: Engineer I  
EMPLOYEE:

DOT #: 221.362-026  
CLAIM #

**Reaching at floor to knee height**

Rare for 3 seconds at a time for up to 15 minutes total in a work shift while picking up markers off of the ground.

**Lifting 1-10 pounds**

Occasionally for 3 seconds at a time for up to 1 hour total in a work shift. Most commonly occurs with weights of 5-10 pounds while removing or placing a walking wheel on the sidewalk or in the trunk of a car. A small walk wheel weighs 5 pounds and a large one weighs 10 pounds. Large walk wheels are used when measuring extensive stretches of roadway

**Pushing and Pulling**

Frequently for distances of up to 2000 feet for up to 15 minutes at a time with a force of 3 pounds for up to 4 hours total in a work shift while using the walk wheel to measure the roads and document the location of cracks and faults in the roadway. The worker is able to take rest breaks from pushing/pulling as needed.

**Handling**

Frequently to continuously for 15 minutes at a time for up to 7 hours total in a work shift while holding a clipboard and manipulating a walk wheel.

**Operating Controls with Hands**

Occasionally for up to 15 minutes at a time for up to 1 hour total in a work shift while driving to various King County Locations to inspect the roads.

**Fingering**

Occasionally to frequently for 10 minutes at a time for up to 2 hours total in a work shift. Most commonly occurs while hand writing documentation, using a pen and clipboard, regarding the condition of the roads for 10 minutes at a time for up to 2 hours in a shift. 3 months out of the year the employee may need to perform office duties that may include performing calculations, writing and keyboarding for 50 minutes at a time for up to 4 hours in a day.

**Talking**

Occasionally for 15 seconds at a time for up to 20 minutes total in a work shift while conversing with co-workers and answering questions from inquiring persons.

**Hearing**

Continuously for up to 1.5 hours at a time for up to 10 hours total in a work shift while listening for oncoming cars when inspecting roads as well as listening for emergency sirens while driving.

JOB TITLE: Engineer I  
EMPLOYEE:

DOT #: 221.362-026  
CLAIM #

**Near acuity—clarity of vision at 20 inches or less**

Frequently for up to 45 minutes at a time for up to 4 hours total in a work shift while perform office duties that may include performing calculations, writing and keyboarding as well as reading and recording information on a clipboard while out in the field.

**Far acuity—clarity of vision at 20 feet or more**

Frequently for 15 minutes at a time for up to 4 hours total in a work shift while inspecting roads for cracks as well as watching for oncoming cars and other potential hazards.

**Depth perception—three dimensional vision**

Occasionally for up to 15 minutes at a time for up to 1 hour total in a work shift while driving to various King County locations to inspect the roads.

**Color vision—ability to identify and distinguish colors**

Occasionally for up to 15 minutes at a time for up to 1 hour total in a work shift while driving to various King County locations and inspecting the color of the asphalt of roads.

**Field of vision—observing an area that can be seen up and down or right or left while eyes are fixed on a given point**

Occasionally for up to 15 minutes at a time for up to 1 hour total in a work shift while driving to various King County locations to inspect the roads as well as watching for potential hazards.

**TEMPERAMENTS**

Performing repetitive or short-cycle work: Continuously  
Working alone or apart in physical isolation from others: Continuously  
Working effectively under stress: Rare  
Attaining precise set limits, tolerances, and standards: Frequently  
Working under specific instructions: Occasionally  
Working with others: Occasionally  
Making judgements and decisions: Occasionally

**ENVIRONMENTAL FACTORS**

Work is performed in an outside setting on or next to county roads. Three months out of the year the majority of the work is performed in an office setting.

The noise level is quiet to moderately loud.

**Workers are exposed to**

Outside weather: Continuously  
Fumes: Frequently  
Odors: Occasionally

JOB TITLE: Engineer I  
EMPLOYEE:

DOT #: 221.362-026  
CLAIM #

Dusts: Frequently  
Mists: Occasionally  
Vibration: Occasionally

**POTENTIAL MODIFICATIONS TO JOB**

Rests or breaks from walking, driving, or pushing/pulling as needed.

---

Signature & title of evaluator

---

Date

---

Signature & title of contact

---

Date

---

Signature & title of employee

---

Date

JOB TITLE: Engineer I  
EMPLOYEE:

DOT #: 221.362-026  
CLAIM #

### HEALTH CARE PROVIDER SECTION

Check all that apply

☐ The employee is released to perform the described duties without restrictions on performance or work hours.

☐ The employee is released to perform the described duties on a reduced schedule. The recommended schedule is:

\_\_\_\_\_

☐ Temporary until \_\_\_\_\_ ☐ Permanent as of \_\_\_\_\_

☐ The employee is released to perform the described job with the following modifications:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

☐ Temporary until \_\_\_\_\_ ☐ Permanent as of \_\_\_\_\_

☐ The employee is not released to perform the described duties due to the following job functions:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

☐ Temporary until \_\_\_\_\_ ☐ Permanent effective \_\_\_\_\_

☐ The employee is unable to work in any capacity.  
A release to work is: ☐ anticipated by \_\_\_\_\_ ☐ Not expected

The limitations are due to the following objective medical findings:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Printed or typed name and phone number of Health Care Provider

\_\_\_\_\_  
Signature of Health Care Provider

\_\_\_\_\_  
Date