CLAIM #



JOB TITLE Drainage Investigator

JOB CLASSIFICATION Engineer I

**DEPARTMENT** Natural Resources and Parks

**DIVISION** Water and Land Resources

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

8 regular full time positions

#### **JOB STATUS**

Full Time, Career Service.

#### ADDRESS OF WORKSITE

201 South Jackson Suite 600 Seattle. WA 98104

**CONTACT'S NAME** Dave Hancock

**CONTACT'S PHONE** 206-296-8230

**EMPLOYER JOB TITLE** Senior Engineer

**DATE COMPLETED** 4/25/02

VRC NAME Jeff Casem

**DATE REVIEWED** 8/13/09

#### **WORK HOURS**

Monday through Friday 8:00am to 4:30pm.

#### OVERTIME

Optional and occasional depending on season. Fair Labor Standards Act Non-Exempt (hourly).

## **JOB DESCRIPTION**

Investigates drainage and water quality complaints. Performs maintenance assessments of storm water facilities. Develops Work Authorizations and

PAGE 1
King County Job Analysis Form Revised 11/9/01

JOB TITLE: Drainage Investigator EMPLOYEE:

DOT #: 954.385-010 CLAIM #

Maintenance Correction Letters indicating maintenance needs. Respond to drainage inquiries. Inventories new residential and commercial drainage facilities. Evaluate requests for Special Use Permits. Provide technical support to engineering staff. Field measures impervious surfaces to calculate areas.

#### **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

Ability to independently perform field work; accurately take and record field measurements; apply knowledge of surface water and water quality control; inspect and record maintenance needs with drainage facilities and/or field conditions. Ability to draw maps from field data; read and interpret maps and aerial photographs for land use, land cover, and topographic features. Must be able to plan, organize, communicate, and provide excellent customer service. The employee must be able to operate a computer in order to process, access, and enter data. Worker must possess a valid Washington State Driver's License. Employee must be able to lift catch basin lids varying in weight up to 80 pounds for up to 32 times in a shift.

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

- 1. Investigates complaints and reviews proposed permits.
- 2. Inspects and assesses water quality and drainage systems and facilities on varying terrain in all kinds of weather.
- 3. Prepares written and computer generated reports and sketches.
- 4. Sketches and inventories drainage facilities for new developments.
- 5. Enters, processes and accesses data in Management Information System (MIS).
- 6. Researches County and other agency records using computers or visiting agencies
- 7. Communicates and provides direction to field crews.
- 8. Communicates with office staff and customers
- Performs general office tasks to maintain records and attend training.
- 10. Field measures impervious areas of private properties for assessors area calculations.

JOB TITLE: Drainage Investigator DOT #: 954.385-010

EMPLOYEE: CLAIM #

#### NON-ESSENTIAL FUNCTIONS

1. Provides technical support to engineers.

2. Participates in flood warning responses/flood emergencies.

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

County vehicle, computer, laptop computer, catch basin lids, bollard (post), pen, pencil, manhole cover lifting hook, shovel, measuring tools (probes), hard hat, clipboard, mirror probe, tape measure, telephone, fax machine, copy machine, printer, cellular telephone, survey vest, walking wheel, Allen wrench, 2-way radio, digital camera, files, various hand tools, air tester, pump, hammer, and sledge hammer.

#### 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

Medium by DOT but Heavy in this particular instance.

## **Standing**

Occasionally on varying terrain and slopes for up to 15 minutes at a time for up to 1 hour total in a work shift. Most commonly occurs while speaking with customers.

#### Walking

Frequently on uneven terrain and slopes for distances of up to 300 feet for up to 5 minutes at a time for up to 4 hours total in a work shift. Most commonly occurs while inspecting sites or investigating drainage complaints.

## Sitting

Frequently on an office chair or automobile seat for up to 45 minutes at a time for up to 7 hours total in a work shift. Most commonly occurs while driving as well as performing computer and office duties.

#### Climbing stairs

Rare for up to 30 seconds at a time while climbing up to 2 flights for up to 2 minutes total in a work shift. Most commonly occurs while walking up stairs to the front door of a house during a complaint investigation.

#### Climbing

Rare on metal ladders to heights of up to 20 feet for up to 30 seconds at a time, for up to 1 minute total in a work shift. Most commonly occurs while inspecting catch basins, tanks, vaults or manholes. Climbing ladders rarely happens.

JOB TITLE: Drainage Investigator

DOT #: 954.385-010

EMPLOYEE: CLAIM #

## Balancing

Frequently on uneven, wet and slippery surfaces for up to 2 hours at a time for up to 5 hours total in a work shift. Most commonly occurs while inspecting sites and performing complaint investigations.

## Bending/Stooping

Occasionally on varying terrain and sloped surfaces for up to 2 minutes at a time for up to 40 minutes total in a work shift. Most commonly occurs while inspecting and assessing water quality, drainage systems and facilities.

## Kneeling

Occasionally on varying terrain or slopes for up to 3 minute at a time for up to 30 minutes total in a work shift. Most commonly occurs while inspecting manholes and loosening bolts on locking lids.

## Crouching

Occasionally on uneven terrain or slopes for up to 1 minute at a time for up to 10 minutes total in a work shift. Most commonly occurs while inspecting manholes and loosening bolts on locking lids.

## **Operating Controls with Feet**

Occasionally for up to 45 minutes at a time for up to 1.5 hours total in a work shift while driving a County vehicle to various sites.

## Reaching above shoulder height

Rare for up to 30 seconds at a time for up to 5 minutes total in a work shift while using measuring rods and climbing.

#### Reaching at waist to shoulder height

Continuously for up to 45 minutes at a time for up to 6 hours total in a work shift while driving, using measuring rods, and performing computer work.

#### Reaching at knee to waist height

Occasionally for up to 5 minutes at a time for up to 15 minutes total in a work shift while using the walking wheel and measuring rods.

#### Reaching at floor to knee height

Occasionally on uneven terrain or slopes for up to 1 minute at a time for up to 8 minutes total in a work shift. Most commonly occurs while inspecting manholes and loosening bolts on locking lids.

#### Lifting 1-10 pounds

Occasionally for up to 1 minute at a time for up to 55 minutes total in a work shift. Most commonly occurs with weights of 6-8 pounds while using a sledge hammer, hooks, shovel, measuring rods, clipboard, mirror probe, and a laptop computer.

JOB TITLE: Drainage Investigator DOT #: 954.385-010 CLAIM #

EMPLOYEE:

## Carrying 1-10- pounds

Continuously for distances of up to 300 feet for up to 5 minutes at a time for up to 7 hours total in a work shift. Most commonly occurs with weights of 6-8 pounds while transporting a sledge hammer, hooks, shovel, measuring rods, clipboard, mirror probe, and a laptop computer.

#### Lifting 21-50 pounds

Occasionally for 3 seconds at a time for up to 1 minute total in a work shift. Most commonly occurs with weights of 20-25 pounds while picking up a bollard (post) and multiple tools.

## Lifting 51-100 pounds

Rarely for up to 5 seconds at a time for up to 2.5 minutes total in a work shift. Most commonly occurs with weights of 80 pounds while lifting up a solid, round catch basin lid.

## Pushing and Pulling

Occasionally for distances of 3 feet for 4-5 seconds at a time with a force of 20-25 pounds for up to 5 minutes total in a work shift while moving a grated catch basin lid. Worker needs to pull a solid, round catch basin lid using up to 60 pounds of force for up to 20 seconds at a time for up to 4 minutes total in a shift.

## Handling

Continuously for up to 2 hours at a time for up to 7 hours total in a work shift while using tools, measuring equipment, and maps.

#### **Operating Controls with Hands**

Frequently for up to 45 minutes at a time for up to 4 hours total in a work shift while driving a County vehicle or operating the computer mouse.

#### Fingering

Occasionally for up to 15 minutes at a time for up to 1 hour total in a work shift while typing reports and performing data entry.

#### Talking

Occasionally for up to up to 30 minutes at a time for up to 2 hours total in a work shift while conversing with customers.

#### Hearing

Occasionally for up to 45 minutes at a time for up to 1.5 hours total in a work shift while driving, conversing with customers and listening to water sounds for assessment.

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

Continuously for up to 2.5 hours at a time for up to 7 hours total in a work shift while performing computer work as well as reading documents and maps.

PAGE 5

JOB TITLE: Drainage Investigator DOT #: 954.385-010

EMPLOYEE: CLAIM #

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

Continuously for up to 2.5 hours at a time for up to 7 hours total in a work shift while driving, inspecting sites, identifying trip/fall hazards, and investigating customer complaints.

## Depth perception—three dimensional vision

Continuously for up to 2.5 hours at a time for up to 7 hours total in a work shift while driving, inspecting sites, and identifying trip/fall hazards.

## 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 45 minutes at a time for up to 1.5 hours total in a work shift while driving a County vehicle to various sites.

## Night vision--seeing after sundown with minimal or no supplemental light sources

Rare for up to 30 seconds at a time for up to 1 minute total in a work shift while inspecting manholes. Worker may climb a ladder and be in a confined space when inspecting a manhole

#### **TEMPERAMENTS**

Performing repetitive or short-cycle work: Continuously

Influencing people in their opinions, attitudes, and judgements: Occasionally

Performing a variety of duties: Continuously

Expressing personal feelings: Rare

Working alone or apart in physical isolation from others: Frequently

Working effectively under stress: Occasionally

Attaining precise set limits, tolerances, and standards: Frequently

Working under specific instructions: Continuously

Working with others: Occasionally

#### **ENVIRONMENTAL FACTORS**

Work is performed in an office setting as well as in the field. When working in the field the employee is exposed to rough, uneven terrain that may be slippery or wet and/or sloped. The noise level is quiet to moderately loud.

## Workers are exposed to

Outside weather: Frequently

Wet: Frequently

Humidity/dampness: Occasionally

Fumes: Occasionally Odors: Occasionally Dusts: Occasionally

Mists: Rare

Gases: Occasionally

# PAGE 6 King County Job Analysis Form Revised 11/9/01

JOB TITLE: Drainage Investigator DOT #: 954.385-010 EMPLOYEE: CLAIM# Poor ventilation: Rare Vibration: Occasionally Working in high, exposed places: Rare POTENTIAL MODIFICATIONS TO JOB New lifting mechanism for solid, round catch basin lids was tested but was unsuccessful. Walking stick for added balance when walking on uneven terrain. Signature & title of evaluator Date Signature & title of contact Date Signature & title of employee

Date

JOB TITLE: Drainage Investigator EMPLOYEE:

DOT #: 954.385-010

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 I	imitations are due to the following objective medical findings:
Printe	ed or typed name and phone number of Health Care Provider
Signa	ature of Health Care Provider Date