

EMPLOYEE:

CLAIM #



# Job Analysis Form

ALTERNATE FORMAT AVAILABLE

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**JOB TITLE** Bridge Tender

**JOB CLASSIFICATION** Bridge Tender

**DOT TITLE** Bridge Operator, Slip

**DOT NUMBER** 919.682-010

**DEPARTMENT** Transportation

**DIVISION** Road Services

**# OF POSITIONS IN THE DEPARTMENT WITH THIS JOB TITLE** 3 FTE, 2 PT and 4 on call.

**CONTACT'S NAME & TITLE** Ross Pettit

**CONTACT'S PHONE** 206-296-8185

**ADDRESS OF WORKSITE**

16<sup>th</sup> Avenue South Bridge

**VRC NAME** Kyle Pletz

**DATE COMPLETED** 1/20/04

**VRC NAME** Jeff Casem

**DATE REVISED** 7/14/09

**WORK HOURS**

Monday thru Friday with a day, swing, and grave yard shift for 24 hour coverage. The employee may need to attend training classes six times per year. Work hours may increase based upon staffing.

**OVERTIME** (Note: Overtime requirements may change at the employer's discretion) Does not occur.

**JOB DESCRIPTION**

Operates and maintains a drawbridge according to regulations. Incumbents log vessels, time, tides, weather and electrical current levels; routinely monitor and maintain machinery, assist with traffic control and perform routine custodial duties. Uses independent judgment to safely operate the bridge and control traffic lights.

**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 judgment.
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**

Must have a high school diploma or equivalent and one year of experience operating, maintaining, or repairing electrical machinery. Must have knowledge of flagging rules and regulations as well as U.S.

Coast Guard regulations governing waterways and bridges. Must have skill in reading amp and volt gauges, reading tide charts and weather patterns. Applicants must have a valid Washington State driver's license and must pass a physical examination.

### **ESSENTIAL FUNCTIONS**

1. Watch for vessel and open and close bridge on signals from vessels in accordance with navigation regulations.
2. Turn traffic stop lights on and off and open and close gates to bridge approaches. On a rare occasion, in the event of malfunction, the employee may need to manually raise and lower gates.
3. Maintain log of bridge openings.
4. Prepare daily reports of activities.
5. Call police and set out flares in case of automotive accidents; complete reports on bridge accidents.
6. Perform necessary custodial duties including cleaning bridge facility, emptying trash, cleaning lavatory, sweeping and moping floors.
7. Clean and oil bridge operating equipment; report failure in any bridge machinery.
8. Grease bridge machinery every two months (takes approximately four hours with multiple workers).
9. Observe panel board control lights and report deficiencies.
10. Perform related work as required.

### **PERSONAL PROTECTIVE EQUIPMENT USED**

Vest, hard hat, gloves, disposable coveralls and disposable booties.

### **OTHER TOOLS & EQUIPMENT USED**

Traffic cones, hand truck, barricades, telephone, fax machine, computer, e-mail, broom, mop, cleaning products, spot light, radio (County and marine), bridge controls (buttons and levers), grease gun, putty knife, grease, vacuum, megaphone, flashlight, step ladder/footstool, television monitor, binoculars and flagging sign/paddle.

### **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

Rarely = may occur less than 1% of the time

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

Highly Repetitive = Repeating the same motion every few seconds with little or no variation for more than two hours total per day.

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

Sedentary—exerting up to ten pounds of force occasionally and/or a negligible amount of force frequently. A sedentary job involves sitting most of the time.

**Standing**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally on flat cement, metal grating, carpet and linoleum surfaces for up to 5 minutes at a time for up to 25 minutes total in a work shift. Most commonly occurs while operating bridge controls, flagging for deliveries, accidents or vendors at the end of the bridge.

**Walking**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally on flat cement, cement with cracks and imperfections, metal grating, carpet and linoleum surfaces for distances of up to 400 feet for up to 5 minutes at a time for up to 30 minutes total in a work shift. Most commonly occurs while walking between the end of the bridge to the bridge tower (400 feet), walking between bridge towers (250 feet) and performing daily bridge inspection/walkthrough (200 feet on metal grating catwalk and 250 feet on cement).

**Sitting**

Health Care Provider initials if restricted \_\_\_\_\_

Continuously on an office chair for up to 4 hours at a time for up to 10.5 hours total in a work shift. Most commonly occurs while waiting between openings and observing the television for approaching vessels. The employee can alternate sitting and standing as needed.

**Climbing stairs**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely for up to 2 minutes at a time while climbing up to 45 steps (two flights) for up to 5 minutes total in a work shift. Most commonly occurs while performing daily bridge inspection/walkthrough and greasing duties as well as traversing to and from the lavatory. The stairs are very steep and have a short tread depth.

**Balancing**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely on grease covered floor or a catwalk/gangway (with railings) at heights of approximately 30 feet for up to 5 minutes at a time for up to 5 minutes total in a work shift. Most commonly occurs while performing daily bride inspection/walkthrough. Exposure to grease covered floor is rare when performing greasing duties once every two months. Greasing duties also require the employee to walk around uncovered gear pits approximately 2.5-3 feet deep.

**Bending neck up**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely for up to 10 seconds at a time for up to 30 seconds total in a work shift. Most commonly occurs while performing daily bridge inspection/walkthrough which requires looking for cracks in the cement structure. On an extremely rare occasion, such as after an earthquake a more detailed inspection is needed which required additional bending of the neck.

**Bending neck down**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely for up to 2 minutes at a time for up to 5 minutes total in a work shift. Most commonly occurs while completing logs, operating bridge controls and traversing steep stairs. Once every two months, when performing greasing duties, the employee bends the neck down for up to 5 minutes at a time for up to one hour in a shift.

**Bending/Stooping**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely for up to 2 minutes at a time for up to 5 minutes total in a work shift. Most commonly occurs while completing logs, operating bridge controls and traversing steep stairs. Once every two months, when performing greasing duties, the employee bends/stoops for up to 5 minutes at a time for up to one

hour in a shift. When performing greasing duties the employee can alternate bending/stooping with kneeling or squatting as needed, according with preference.

**Kneeling**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely for up to 2 minutes at a time for up to 5 minutes total in a work shift. Most commonly occurs while once every two months, when performing greasing duties and can alternate kneeling with bending/stooping or squatting as needed, according with preference.

**Squatting**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely for up to 2 minutes at a time for up to 5 minutes total in a work shift. Most commonly occurs while once every two months, when performing greasing duties and can alternate squatting with bending/stooping or kneeling as needed, according with preference.

**Operating Controls with Feet**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely for up to 20 seconds at a time for up to 5 minutes total in a work shift while operating the clutch/brakes when closing the bridge.

**Reaching above shoulder height**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely for up to 10 seconds at a time for up to 1 minute total in a work shift while removing gear off of wall hooks as well as placing/removing articles in a locker.

**Reaching at waist to shoulder height**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for up to 1 minute at a time for up to 15 minutes total in a work shift while operating bridge controls, operating a computer, using the fax machine, dialing the telephone and completing logs.

**Reaching at knee to waist height**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for up to 2 minutes at a time for up to 10 minutes total in a work shift while using a mop or broom when performing custodial duties.

**Reaching at floor to knee height**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely for up to 2 minutes at a time for up to 5 minutes total in a work shift. Most commonly occurs while once every two months, when performing greasing duties.

**Lifting 1-10 pounds**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely for up to 30 seconds at a time for up to 5 minutes total in a work shift. Most commonly occurs with weights of 3-8 pounds while manipulating binders, radio, cleaning products, traffic cones and a flagging paddle. Once every two months when performing greasing duties the employee may hold a grease gun for up to 10 minutes at a time for up to 30 minutes in a shift.

**Carrying 1-10 pounds**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely for up to 2 minutes at a time for up to 5 minutes total in a work shift. Most commonly occurs with weights of 3-8 pounds while transporting binders, radio, cleaning products, traffic cones (7 pounds each) and a flagging paddle. Once every two months when performing greasing duties the employee may carry a grease gun (approximately 8 pounds) for up to 10 minutes at a time for up to 30 minutes in a shift.

**Pushing and Pulling**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely for up to 2 minutes at a time with a force 2-10 pounds for up to 5 minutes total in a work shift while opening and closing doors as well as transporting three traffic cones on a hand truck. Once every two months when performing greasing duties the employee scrapes grease off of bridge gears for up to two hours in a shift.

**Handling**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for up to 2 minutes at a time for up to 10 minutes total in a work shift while using a hand truck and using a broom or mop and operating bridge controls (levers) as well as manipulating traffic cones, binders, logs or cleaning products.

**Operating Controls with Hands**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for up to 1 minute at a time for up to 10 minutes total in a work shift while operating bridge controls (levers and buttons).

**Fingering**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for up to 2 minutes at a time for up to 15 minutes total in a work shift while manipulating logs, documents, County radio, operating bridge controls (buttons), using a computer and operating a marine radio.

**Talking**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for up to 1 minute at a time for up to 10 minutes total in a shift while using the telephone, marine radio, County radio and reporting accidents.

**Hearing**

Health Care Provider initials if restricted \_\_\_\_\_

Continuously for up to 12 hours at a time for up to 12 hours total in a work shift while listening for vessel air horns, marine radio transmissions, County radio transmission and the telephone.

**Seeing**

Health Care Provider initials if restricted \_\_\_\_\_

Continuously for up to 12 hours at a time for up to 12 hours total in a work shift while watching the television monitor for approaching vessels, watching for traffic accidents of bridge, ensuring safe traffic light operation, ensuring safe gate operation and ensuring safe passage of vessels as well as when performing bridge inspections.

**ENVIRONMENTAL FACTORS**

Work is performed in a bridge tower setting on a King County drawbridge. The employee is exposed to the outside weather when performing daily bridge inspections as well as traffic accidents on the bridge. The work area is on the bridge and requires traversing 400 feet uphill from the parking area. Since the bridge tower is part of the metal bridge (which flexes) and Boeing (next door) commonly ships large airplane parts via truck across the bridge, the work area constantly moves and vibrates.

**The noise level is**

Approximately 50-90 decibels. The noise is caused by traffic.

HCP Initials if Restricted

\_\_\_\_\_

**Work environment may include the following exposure(s):**

Outside weather: Occasionally

HCP Initials if Restricted

\_\_\_\_\_

KING COUNTY JOB ANALYSIS COMPLETED ON: 1/20/04

JOB TITLE: Bridge Tender

EMPLOYEE:

DOT #: 919.682-010

CLAIM #

Dusts: Occasionally

Moving mechanical parts: Rare

Vibration: Continuous

Working in high, exposed places: Rare


**POTENTIAL MODIFICATIONS TO JOB**

Hand truck to transport cones to avoid carrying.

### SIGNATURES

Signatures on this page are obtained before the document becomes available for use and are not required each time the document is reused. Obtained signatures are kept on file at King County Safety & Claims. The Health Care Provider signature section is separate and appears on the following page.

Kyle Pletz, VRC, Vocational Consultant

Printed name & title of VRC evaluator

\_\_\_\_\_  
Signature of VRC evaluator

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed name & title of contact

\_\_\_\_\_  
Signature of contact

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed name & title of employee

\_\_\_\_\_  
Signature of employee

\_\_\_\_\_  
Date

**HEALTH CARE PROVIDER SECTION**

Check all that apply

The employee is released to perform the described duties without restrictions on performance or work hours as of \_\_\_\_\_.

The employee is released to perform the described duties on a reduced schedule as of \_\_\_\_\_. 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