

Job Analysis

lob Title: PCS Carpenter	Worker:	
DOT Number: 860.381-022	Claim Number:	
Employer: Port of Seattle	Employer Phone #:	206-787-5831
Employer Contact: Terry Dix	Date of Analysis:	April 16, 2013
☑ Job of Injury ☐ Previous Job	☐ New Job ☐ 10 Hours Per	Day

Job Description, Essential Functions, Tasks and Skills

The Port of Seattle is a municipal corporation created on September 5, 1911 by the voters of King County. The Port of Seattle is divided into operating divisions, plus other departments that support the divisions and the broad mission of the Port:

- 1) Aviation Division
- 2) Capital Development Division
- 3) Corporate Division
- 4) Real Estate Division
- 5) Seaport Division



This job analysis is for a member of the Capital Development Division. PCS employs tradesmen specializing in specific trades: Laborers, Teamsters, Operating Engineers, Carpenters, Pile Bucks, Iron Workers, Millwrights and Cement Masons. There are times when a specific skill set is not immediately required on a project, so workers assist in other trades with selected basic tasks.

The primary responsibilities of a Carpenter include a wide variety of tasks, from dock construction to detailed interior trim work. Carpenters may work in the shop (located at 19425 28th Avenue S in SeaTac), or may work in the field at one of the Port's properties. May be assigned tasks to assist with repairing and maintaining pilings (made of wood, concrete or steel) used as support for docks, retaining walls, bulkheads, and foundations of structures. Carpenter and Pile Buck work may be performed on the land, various piers, or from a boat.

Assigned Tasks

- Obtain, read and review work orders, plans, and requests to understand piling construction/ repair/maintenance projects.
- Request parts, supplies and materials needed for projects.
- Prepare and review site specific safety plan for each project. Review job plan. Ensure work is performed in a safe manner
- Complete tenant improvements for property lessees.
- Frame and install panels of drywall.
- Build cabinets. Adjust doors. Install windows in doors.
- Fabricate, install, or repair fixtures.
- Install drop-ceiling tiles.
- Construct and remove concrete forms.
- Install bollards/cleats on docks to tie up vessels ranging from cruise ships to kayaks.
- Construct docks and piers on pilings. [Note: Carpenters do not do drive piles unless they have obtained the training necessary to be a Pile Buck.]
- Patch flooring surfaces.
- Assemble and construct platforms, decking, walkways, and other supporting structures to protect

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workers and structures in and around project sites.

- Demolish items/structures when no longer needed.
- Position, repair, and maintain pilings.
- Inspect pilings, retaining walls, bulkheads, and foundations of structures to identify cause of problems or defects and potential maintenance issues.
- May operate air compressors, pumps, and other power equipment at construction sites.
- Operate or drive vehicles or mechanized equipment, such as forklifts, passenger vehicles, vans, pickups or water craft to complete required construction and repairs.
- Work with outside vendors as needed to complete inspections.
- Enter time by project identification on a daily basis into job tracking system.
- Enter description of work completed in a work log.
- Send and respond to electronic mails.
- Meet/connect with Foreman or General Foreman on a daily basis.
- Attend periodic meetings during which training is provided and important safety issues are discussed.
- Assist other crafts as requested.
- Potentially supervise apprentices or mentor students.
- Complete all required forms and documents.

Other assigned tasks may include

- Clean and prepare project sites, including setting up traffic control cones and signs.
- Clean rubble/debris.
- Assist with scaffolding erection.
- Dig, spread, and level dirt and gravel, using pick and/or shovel.
- Move dirt and gravel using wheel barrows or other types of wheeled carts.
- Lift, carry, and hold building materials, tools, and supplies.
- Clean tools, equipment, and materials.
- Guide objects, such as jersey barriers, trench boxes, pipes, or water tanks, into place when suspended by a lift or crane.
- Spray water at project sites to reduce/control dust.
- Move excess furniture into storage.
- Return excess materials to the PCS yard.

Skills and Abilities

- Ability to physically accomplish assigned tasks.
- Knowledge of materials, methods, and tools used in the construction industry.
- Ability to work independently, and within a team as required.
- Ability to follow directions closely and be detail oriented while working.
- Ability to identify the best way to accomplish a task, and complete assigned tasks in a timely and efficient manner.
- Ability to work in a safe manner.
- Ability to work in any kind of weather, potentially from a boat.
- Ability to identify the best methods to correctly complete assigned task.
- Ability to read blueprints or sketches.



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- Ability to measure boards, timbers, plywood, or drywall panels using square or measuring tape, and marking cutting lines on materials.
- Ability to use hand and power tools to perform assigned tasks.

Machinery, Tools, Equipment, Personal Protective Equipment

Hand and power tools such as hammer, drill, shovel, pick, rake, tamper, level, measuring tape, circular saw, reciprocating saw, roto hammer, nail gun, sander, wrenches, squares, levels, chisel, hand saw, utility knife, router, sawsall, skilsaw, wheelbarrow, cart, fixture jack, manlift, ladders, buckets, water trucks and spraying equipment, two-way radios, kneepads, manual pallet jack, fans, lighting, forklift, planer, table saw, joiner, panel saw, tool box or belt, burke bar, prybar, portable generator, air compressor, work skiff, nylon straps and rope, oxyacetylene torch, job box, wheeled cart, computers and periphery. Personal protective equipment includes safety vests, eye and ear protection, hard hats, safety glasses, respirators as needed, gloves, chainsaw chaps, approved safety boots, fall arrest harnesses, and rain gear. Must wear personal floatation devices when within 6 feet of an edge of the water.





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Education / Training

Carpenters and Pile Bucks are members of either Local 30 of the Carpenters union, or Local 196 of the Pile Drivers union. Union workers are either Apprentices or Journeymen. Initial experience is gained through an apprenticeship program, after which workers become Journeymen Carpenters and Pile Bucks.

Per the Dictionary of Occupational Titles (DOT)

860.381-022 Carpenter

Specific Vocational Preparation (SVP)

7 (From two to four years).



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COGNITIVE AND BEHAVIORAL ELEMENTS/DEMANDS

Frequency Definitions
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	
Comprehension	
Articulating and comprehending information in conversations.	Continuously
Reading, comprehending, and using written materials.	Frequently
Understanding and solving problems involving math and using the results.	Occasionally
Using technology/instruments/tools & information systems.	Continuously
Working with two and three dimensional formats.	Continuously
Remembering spoken instructions.	Continuously
Remembering written instructions.	Continuously
Remembering visual information.	Continuously
Recalling information incidental to task at hand.	Occasionally
Memorizing facts or sequences.	Occasionally
Remembering simple instructions.	Continuously
Remembering detailed instructions.	Frequently
Effectively learning and mastering information from classroom training.	Occasionally
Effectively learning and mastering information from on-the-job training.	Occasionally
Learning from past directions, observations, and/or mistakes.	Occasionally
Using common sense in routine decision making.	Continuously
Recognizing and anticipating potential hazards and taking precautions.	Continuously
Thinking critically and making sound decisions.	Frequently
Integrating ideas and data for complex decisions.	Occasionally
Determining and following precise sequences.	Continuously
Coordinating and compiling data and information.	Occasionally
Analyzing, synthesizing data and information.	Occasionally
Tasking and Planning	
Performing repetitive or short-cycle work.	Continuously
Working under specific instructions.	Continuously
Completing complex tasks.	Occasionally
Directing, controlling, or planning for others as necessary for basic tasks.	Frequently
Directing, controlling, or planning for others as necessary for complex tasks.	Occasionally
Multi-tasking.	Continuously
Planning, prioritizing, and structuring daily activities.	Occasionally
Use Appropriate Behavior for Professional Work Environment	
Receiving criticism and accepting limits appropriately.	Occasionally
Maintaining emotional control and organization under increased stress.	Continuously



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Maintaining socially appropriate affect, temperament, and behavior.	Continuously
Monitoring own quality of performance and altering behaviors to correct mistakes	Continuously
or improve outcome.	
Working independently and/or unsupervised.	Continuously
Adapting to frequent interruptions, changes in priorities, or changes in work	Continuously
location.	
Responding effectively to emergency situations.	Occasionally

Frequency Designations	
Required	
Beneficial	
Not Necessary	
Maintaining Attendance and An Assigned Work Schedule	
Maintaining predictable and reliable attendance each work shift.	Required
Being punctual.	Required
Taking rest periods at set times or only at times determined by breaks in job	Required
responsibilities.	
Adjusting to a flexible schedule of work days and or shifts.	Beneficial



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PHYSICAL DEMANDS

Constant: Constant (Over 70% of the time)
Frequent: Frequent (30%-70% of the time)
Occasional: Occasional (10-30% of the time)

Seldom: Seldom (1-10% of the time)

WNL: Within Normal Limits (talking, hearing, etc.)

N/A: Not Applicable

STRENGTH: S	edentary	Light	☐ Medium ☐ Heavy ☐ Very Heavy
Action		Frequency	Comments
Sitting		S	Drive to job sites or operate a forklift.
Standing		F	Interchange with walking. Frequency depends on assigned tasks, and whether worker is in the shop or in the field.
Walking		F	Interchange with standing. Frequency depends on assigned tasks, and whether worker is in the shop or in the field. May be over uneven, slippery surfaces, rough terrain, dirt, mud, pieces of lumber or rebar.
Lifting (up to 10 pour	nds)	F	Hand and portable power tools (saws all 9#, roto hammer 8#, router 8#, drills up to 10#, gallon of paint 10#, nail gun 8#), small to medium pieces of material, hardware and partial/smaller boxes of fasteners, tool boxes.
Lifting (11 to 25 pour	ıds)	F	Hand and portable power tools (belt sander 12#, drill 15#), small to medium pieces of material, hardware and partial/smaller boxes of fasteners, tool boxes.
Lifting (26 to 50 pour	ıds)	F	Hand and portable power tools, small to medium pieces of material, hardware and partial/smaller boxes of fasteners, tool boxes.
Lifting (50 to 75 pour	nds)	F	Full tool box, medium to large pieces of material (or multiple pieces of material), whole sheets of plywood (depending on thickness, 4x8 sheets weigh 40-60 lbs.), box of fasteners/nails (40-60 lbs.), portable air compressor (60 lbs.), cabinets (est. 40-80 lbs.).
Lifting (75 to 100 pou	ınds)		Timbers, doors, large pieces of wood, multiple pieces of lumber and portable generators (generator weighs approx. 100 lbs.). Assistance from other workers is typically available to lift heavy items, and 2-person lift used over 50 pounds where able. NOTE: Heavy items can generally be lifted/moved using a forklift or hoist.
Carrying (up to 10 po	unds)	F	Tool box, tools (saws all 9#, roto hammer 8#, router 8#, drills up to 10#, gallon of paint 10#, nail gun 8#), and small to medium pieces of material.
Carrying (11 to 25 po	unds)	0	Tool box, tools (belt sander 12#, drill 15#), and small to medium pieces of material.
Carrying (26 to 50 po	unds)	0	Tool box, tools, and small to medium pieces of material.
Carrying (50 to 75 po	unds)	0	Loaded tool box, medium to large pieces of material (or multiple items), sheets of plywood.



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Carrying (75 to 100 pounds)	S	Timbers, doors, large pieces of wood, multiple pieces of lumber. NOTE: Heavy items can generally be lifted/moved using a forklift or hoist.
Pushing/Pulling (up to 10 pounds of force)	F	Hammering, holding wood in place to nail, pulling nails with a claw hammer or nail bar, pushing wheeled cart loaded with material, using Burk bar to separate items, pushing/pulling forms into place, opening and closing shop drawers.
Pushing/Pulling (10 to 20 pounds of force)	F	Hammering, holding wood in place to nail, pulling nails with a claw hammer or nail bar, pushing wheeled cart loaded with material, using Burk bar to separate items, pushing/pulling forms into place, opening and closing shop drawers.
Climbing Ladders/Stairs	0	Workers may encounter stairs when working in the field. Ladders range from stepstools to 20'+ extension ladder.
Working at Heights/Balancing	O	Frequency depends on assigned tasks. Workers climb ladders, walk on elevated scaffolding, walkways and decking. May work from boats, which can take a significant amount of balancing.
Bending at Waist	F	Building and installing items, placing and securing materials and fixtures, gathering materials and supplies.
Bending Neck	С	All assigned tasks involve neck movement: building items, placing and securing materials, climbing ladders, constructing forms, placing supports, gathering lumber and supplies, cutting material, entering information in a computer.
Reaching (up to shoulder level)	F	In general, most of the assigned tasks involve reaching movements: building items, placing and securing materials, constructing forms, placing cabinets, gathering lumber and supplies, cutting material.
Reaching (over shoulder level)	0	Gathering items stored above shoulder height, climbing ladders, working under a dock.
Stooping	0	Entering and working in or exiting from tight areas.
Kneeling/Squatting	F	Working below waist level. NOTE: Workers may wear kneepads while working.
Crawling	S	Working below waist level. NOTE: Workers may wear kneepads while working.
Repetitive Motion	S	While using hand tools, hammers, nail guns, shop tools (when producing multiple units of a required item).
Twisting at Waist	0	Maneuvering in tight areas, gathering materials, placing materials or fixtures to install, cutting materials.
Handling/Grasping	С	30% pinch grasp; 70% who hand grasp.
Fine Finger Manipulation	F	Using measuring tape, marking tools, holding nails and other fasteners, using wrenches, pulling triggers on power tools, entering data in a computer.
Driving	0	Work trucks and forklifts.
Foot Controls	0	Driving work trucks and forklifts, and using safety switches on boom lifts and drill press.



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Talking	0	Communicating with supervisors and coworkers.
Hearing	0	Communicating with supervisors and coworkers.
Seeing	С	Visual abilities would be considered important in this position.
Writing	S	Marking measurements or taking notes.
Normal Job Site Hazards	С	Carrying large and/or heavy objects, working at heights, falling objects, striking head on overhead objects, moving/mechanical equipment, slippery walkways and decking, saws and other sharp tools, fumes, dust, noise, odors, vibrations, capsizing while working in a boat.
Expected Environmental Conditions	С	Work may be performed inside a shop environment, temperature controlled office space, or outside exposed to the weather. Worker may be exposed to loud environments, wood dust, and fumes. Carpenters may work in tight spaces (although they are not trained for working in confined spaces).

The above job analysis represents the requirements of a specific job based on personal observations, discussions with employer representatives, and/or workers. On occasion, practicality and feasibility prevent the direct observation and/or gathering of objective quantifiable data. For this reason, a "best estimate" may have been used when reporting physical demand frequencies.

Analysis was done on the job site?	☐ Yes ☐ No
Job Analysis Reviewed By	Terry Dix
Date April 22, 2013	
Completed by Vocational Provider	Nicki Gorski VRC CDMS
Signature of Vocational Provider	Nicki Gorski



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FOR PH	YSICIAN'S/EVALUATOR'S USE ONLY
	The injured worker can perform the physical activities described in the job analysis and can return to work on
	The injured worker can perform the physical activities described in the job analysis on a part-time basis for hours per day. The worker can be expected to progress to regular duties in weeks/months.
	The injured worker can perform the described job, but only with the modifications/ restrictions in the attached report and/or listed below. These modifications/restrictions are (check one): □ Temporary for weeks months □ Permanent
	The injured worker cannot perform the physical activities described in the job analysis based on the physical limitations in the attached report and/or listed below. These limitations are (check one):
	☐ Temporary for weeks months ☐ Permanent
COMN	MENTS .
Physicia	an's/Evaluator's Name (<i>printed</i>)
	hysician's/Evaluator's Signature
	Date

PLEASE RETURN COMPLETED FORM VIA FACSIMILE TO:

Port of Seattle Health and Safety Department at (206) 787-3406