COMPETENCY MODEL FOR
CONSTRUCTION EQUIPMENT SERVICE WORKER (3541)

The following competencies have been identified as those that best separate superior from satisfactory job performance in the class of CONSTRUCTION EQUIPMENT SERVICE WORKER. (Numbers refers to the order of the competencies in the Competency Bank.)

2. Mathematics
6. Attention to Detail
8. Safety Focus
20. Job Knowledge
43. Follows Oral Directions
44. Follows Written Directions
45. Oral Communication
47. Written Communication

On the following pages are descriptions of each competency, including a definition, the level of the competency required for the class (italicized, bolded, and underlined), examples of behavioral indicators, and satisfactory and superior performance levels.
2. MATHEMATICS – Performs arithmetic or higher-level mathematical computations accurately.

Level of Competency Required by Job:

**Level 1:** Perform arithmetic computations (add, subtract, multiply, divide, ratios, percentages).

Level 2: Use algebra (substitute numbers for letters in a formula), geometry (angles, distances, area), and/or descriptive statistics (mean/median/mode, standard deviation, range).

Level 3: Apply and interpret calculus, inferential statistics (t-tests, correlations, ANOVA, multiple regression) or other very high level mathematics.

Examples of Behavioral Indicators:

- Quickly and accurately performs arithmetic computations.
- Appropriately selects and applies formulas for stated purpose.
- Correctly identifies an appropriate analysis for a specific purpose and selects the appropriate computer program for computation.
- Accurately interprets and presents results of mathematical/statistical computations. Learns information presented in writing.

Performance Levels:

**Satisfactory**
- Knows mathematical requirements of the job and performs them correctly.
- Verifies work to ensure accuracy.

**Superior**
- Identifies additional opportunities for the application of mathematics in work.
- Answers questions/trains others to assist them in their use of mathematics.
6. ATTENTION TO DETAIL – Extremely careful in addressing all aspects of each work assignment in order to produce “completed staff work” and/or avoid any negative outcomes.

Level of Competency Required by Job:

Level 1: Ensure all aspects of work assignment are completed as directed.

**Level 2:** Verify that each aspect of work assignment is properly completed; make logical inference regarding additional activities that may need to be performed to produce “completed staff work.”

Level 3: Include evaluation of final work/work product in its accomplishment; make adjustments as possible to improve.

Examples of Behavioral Indicators:

- Carefully checks all aspects of work for completion and accuracy before submitting.
- Identifies errors (for example, typo’s, computations, measurements, application of laws/rules/policies) and corrects them prior to submitting.
- Cross-checks work against available resources.
- Sets up a means of checks and balances to ensure work accuracy.
- Considers changes in final work product to ensure usability by recipient.
- Completes all revisions upon request.

Performance Levels:

**Satisfactory**

Ensures that each task accomplished represents “completed staff work.” No remaining details/ inconsistencies for others to address.

**Superior**

All aspects of each task completed are verified to be correct. Identifies any foreseeable consequences of work that may need to be addressed and does so.
8. **SAFETY FOCUS** – Performs work in a way that minimizes risk of injury to self or others.

**Level of Competency Required by Job:**

- **Level 1:** Maintain awareness of unsafe conditions and actions to avoid injury.
- **Level 2:** Follow safety rules/procedures; avoid known hazards in the work environment.
- **Level 3:** Carefully follow safety rules and procedures and consistently use all necessary safety equipment.

**Examples of Behavioral Indicators:**

- Wears seat belt.
- Ensures safe physical work environment by taking actions such as eliminating unstable stacks of materials, closing drawers so filing cabinets will not tip over, and keeping pathways clear of tripping hazards.
- Reviews safety procedures before beginning each job with known hazards.
- Follows safety procedures while performing work even when it takes more time.
- Uses safety equipment such as goggles, gloves, and earplugs as required or warranted.
- Frequently checks safety equipment for proper condition and operation.

**Performance Levels:**

**Satisfactory**

Maintains awareness of personal safety to avoid injury or property damage during all work activities.

**Superior**

“Safety first.” Places avoidance of injury or property damage above all other job requirements. Mentions the need to follow safe work practices to co-workers. Actively seeks ways to avoid injury.
Safety Focus Areas

1. Knowledge of departmental and California Occupational Safety and Health Administration (Cal/OSHA) safety regulations for maintaining and operating construction equipment, such as fire extinguisher requirements, regulations when using hoists, and/or proper maintenance of boom trucks, ladder trucks and/or other aerial equipment, in order to ensure compliance with the safety regulations set forth by Cal/OSHA.

2. Knowledge of Cal/OSHA requirements related to the handling and disposal of hazardous waste and materials, including use of Material Safety Data Sheets (MSDS), proper disposal of cleaning solvents and degreasers, and storm water pollution prevention guidelines, sufficient to ensure compliance and the protection of public health and the environment.
20. JOB KNOWLEDGE – Knows information required to perform a specific job. Includes both widely available courses of study (for example, chemistry, human resources management, graphic arts) and City-specific information (parking regulation and ticketing practices; purchasing procedures; provisions of the City Charter).

Level of Competency Required by Job:

Level 1: Knowledge is concrete, factual, and/or procedural and may be defined by the organization. Situations in which it is applied are quite consistent.

**Level 2:** Knowledge is substantive and may be defined by an external trade, field, or profession. Situations in which it is applied vary and, as such, require breadth and depth of understanding.

Level 3: Knowledge is abstract, conceptual, and/or complex and may be supported by a well-defined academic discipline or authoritative sources (e.g., laws, ordinances, government guidelines/regulations/codes). Situations in which it is applied may vary greatly or be novel.

Examples of Behavioral Indicators:

- Performs work correctly/avoids technical (job content related) errors.
- Answers technical questions about work accurately.
- Asks few technical questions about the performance of routine work activities.
- Offers advice (“coaching”) to new employees regarding their work.
- Develops training programs for other employees.
- Sought out as a source of information by others.

Performance Levels:

**Satisfactory**

Sufficient job knowledge to perform work correctly independently. Answers technical questions about work correctly.

**Superior**

Expertise in technical job information sufficient to serve as a resource to others. May develop training manuals/programs and/or give internal and/or external presentations related to work.
Job Knowledge Areas

1. Knowledge of the methods, procedures, tools, and materials used to service and maintenance construction and transportation equipment and their components, including lubricants, fuels, coolants, filters, and batteries sufficient to properly service various equipment and vehicles.

2. Knowledge of various types of equipment systems, their components, and their operational characteristics, such as cooling systems, water, oil, and air filters, batteries, new, used, and/or recapped tires, air pressure gauges, volt meters, grease fittings, rims, valve stems, valve cores, hand and/or power operated stationary and mobile fuel and lubrication equipment, and air/hydraulic brake systems sufficient to routinely service construction equipment and vehicles.

3. Knowledge of the location and function of brake master cylinders, wheel cylinders, brake lines, air brake systems, brake fluids, and various types of gauges, including hour meters, air gauges, voltage gauges, fuel gauge, temperature gauges or odometers, warning lights, dipsticks, level plugs, sight glasses, and petcocks sufficient to perform routine maintenance properly.

4. Knowledge of departmental procedures on record keeping in order to properly document vehicle maintenance/repairs and reporting traffic accidents sufficient to adhere to California State Vehicle Code and departmental rules.

5. Knowledge of shop inventory procedures sufficient to ensure proper supplies of the equipment, materials and tools necessary to perform vehicle servicing and maintenance activities.

6. Knowledge of the Department of Transportation (DOT) regulations related to the service and maintenance of construction and transportation equipment, including but not limited to the Basic Inspection of Terminals (BIT) Program and restrictions on the use of recapped tires on front wheels of construction and transportation equipment, sufficient to ensure compliance with DOT regulations.
43. FOLLOW ORAL DIRECTIONS – Performs work accurately as directed orally.

Level of Competency Required by Job:

Level 1: Receive specific, complete oral directions daily or by individual task assignment throughout the day.

**Level 2: Receive general instructions orally that span across days or for entire assignments.**

Level 3: Receive general instructions/assignments orally regarding long-term objectives/responsibilities.

Examples of Behavioral Indicators:

- Does work assigned orally properly and on time.
- Asks pertinent questions for clarification of assignments.
- Performs work correctly when instructions were given orally.
- Explains assignments to others who received the same instructions.
- Performs work in accordance with general outline provided orally.
- Correctly infers details of assignments given only in general terms.

Performance Levels:

**Satisfactory**
Properly performs work when concrete, specific instructions are given orally. Asks pertinent questions when parts of the instructions are unclear or omitted.

**Superior**
Properly performs work assigned orally. Answers questions or explains work to others. Correctly infers details or portions of instructions that were omitted.
44. FOLLOW WRITTEN DIRECTIONS – Performs work accurately as directed in writing.

Level of Competency Required by Job:

Level 1: Perform tasks assigned in writing.

**Level 2: Perform work after reading instructional manual.**

Level 3: Perform work after completion of training modules or programs presented in writing.

Examples of Behavioral Indicators:

- Correctly completes work assigned in writing.
- Answers questions and/or explains work to others who received the same instructions.
- Learns and applies information presented in writing (instruction manual; training program).
- Correctly infers details of work to be performed that were unclear or omitted as presented in writing.

Performance Levels:

**Satisfactory**

Correctly performs work assigned or for which training was provided in writing.

**Superior**

Understands instructions and training materials presented in writing to the extent that is able to answer questions or explain to others. Correctly infers unclear or omitted details as presented in writing.
45. ORAL COMMUNICATION – Communicates orally in a clear, concise, and effective manner.

Level of Competency Required by Job:

**Level 1:** Exchange specific, job-related information orally with others in the immediate work environment or via telephone and/or radio.

Level 2: Obtain/provide/present general and/or job-specific information orally to a variety of others in various situations.

Level 3: Obtain/provide/present a diverse array of information orally at varying levels of complexity to a wide range of others across many different situations and circumstances.

Examples of Behavioral Indicators:

- Audience clearly understands the intended message.
- Rarely must repeat information in response to questions.
- Refrains from use of unnecessary words, phrases, or jargon.
- Provides a level of detail appropriate to the situation (avoids too much or too little detail).
- Speaks at a level appropriate to the audience in terms of terminology, sentence structure, and simplicity/complexity of ideas expressed.
- Uses words with precision (vocabulary) to convey exact information.

Performance Levels:

**Satisfactory**

Speaks clearly and audibly, providing the appropriate information and level of detail. Typically conveys the message on the first attempt. Answers questions accurately and directly.

**Superior**

Speech is direct and to the point. Speaks convincingly and with authority when appropriate. Maintains sensitivity to the audience while providing thorough information with the appropriate level of detail through the use of precise language.
47. WRITTEN COMMUNICATION – Communicates effectively in writing.

Level of Competency Required by Job:

Level 1: Write notes/e-mails. Completes forms with some open-ended responses (sentences).

Level 2: **Write letters, articles/reports, and/or detailed descriptions of activities/occurrences.**

Level 3: Write lengthy reports, instruction manuals, in-depth analyses/reviews of complex issues and/or articles for publication. Reviews the written work of others.

Examples of Behavioral Indicators:

- Writing includes the necessary information to convey the intended message.
- Sufficiently few errors in spelling, punctuation, grammar to not interfere with the intended message or distract the reader.
- Little editing or re-writing needed to produce a final product.
- Composes materials efficiently.
- Information is presented in a well organized manner.
- Tone and degree of formality are appropriate to the purpose and audience.

Performance Levels:

**Satisfactory**

Writes material that clearly communicates the necessary information; needs little editing.

**Superior**

Precisely uses words and organizes information in a way that enhances presentation of the message. Virtually no editing needed.