CONSTRUCTION REPRESENTATIVE I

DEFINITION OF CLASS:

This is entry level construction monitoring work performed primarily in the field on either building or highway construction sites of County Government Capital Improvement Program (CIP) projects. An employee in this class provides assistance in ensuring contractor compliance with County standards, contract specifications, applicable State and Federal codes and regulations, in the construction of County buildings, highways, roads, bridges and related structures. Employee collects and delivers to the Construction Materials Laboratory various materials submitted for use in the construction of highways, roads, bridges and appurtenances (e.g. storm drains, curbs and gutters) within the County's right-of-way, for the purpose of ascertaining conformance with specifications. Work assignments are issued by a higher level authority and conducted under general supervision. The employee handles problems and deviations in accordance with instructions, policies or accepted practices. All completed work is reviewed to ensure that employee is providing an adequate level of inspection, is using proper procedures, and is building knowledge and skills for future assignments. Contacts with other County employees, outside agency representatives, developers, contractors and project superintendents, require effective and well-developed communication skills. An incumbent in this position provides limited direct service or assistance to the public.

Employee exercises judgment to select and apply appropriate guidelines to varied situations, however significant deviations from guidelines or unusual situations are referred to the supervisor for assistance. The complexity of the work involves the analysis of various construction methods and materials and their interrelationship to ensure compliance with contract specifications and generally-accepted construction practices. The work affects the provision of a safe and durable infrastructure and influences the successful implementation of the County's Capital Improvement Program. Work is performed primarily at construction sites, in the field, with exposure to adverse weather, or a construction trailer. In construction areas, employees are exposed to some risks, such as close proximity to moving traffic, moving or energized construction equipment, the construction activity itself, uneven terrain or constructed spaces, working on ladders or atop structures (with potential for falls) and possibility of falling construction materials, tools or debris, which require situational awareness, adherence to safety precautions and use of safety equipment such as hard hats, safety boots, ear plugs, eye protection and safety belts with lanyards and on occasion, may be required to be in confined spaces, which requires certification of confined entry training and the use of special safety equipment. The work involves sitting, standing, walking, pushing, pulling, lifting, carrying and other physical demands typical of people who work in the field and also perform administrative duties; effort includes standing for long periods, kneeling, stooping, bending and reaching to inspect areas and work located in trenches, roofs, framing, etc. and the use of ladders or scaffolding to view certain spaces or access building mechanical systems and the like.

EXAMPLES OF DUTIES: (Illustrative Only)

- Inspects, collects and tests materials (e.g., paint, soil, gravel, concrete, asphalt, brick, storm drain pipe, reinforcement steel, etc.) used in the construction of highways, bridges, roads and accessory structures (storm drains, curbs and gutters, sidewalks, driveways) to verify quality and appropriate application.
- Inspects subgrades prior to paving; foundations, cofferdams and other subterranean structural systems prior to road embankment construction; the installation of storm drains and other underdrain systems; form and false work (e.g., driveways, sidewalks, curb and gutter forms, bridge false work); and asphalt or concrete paving to final grade for conformance with plans, standards, specifications, codes and regulations.
- Verifies the accuracy of all line and grade establishments using approved survey techniques and equipment.
- Coordinates utility relocation work by contacting involved parties and ensuring that work occurs at the proper time.
- May help conduct field or laboratory tests of materials (e.g., concrete, soil, aggregate, brick and hot mix asphalt) to determine compliance with mix designs, job mix formulas and/or project specifications and requirements.
- Reviews contractor schedules to ensure that work is being conducted in conformance with the approved and accepted schedule of procedure.
- Ensures contractors enact proper safety precautions for pedestrians and motorists and minimize obstruction of traffic where road construction work is being performed.
- Maintains daily records and reports of all project related matters and activities (e.g., documentation of weather and soil conditions, measurement of the quantities of materials incorporated in the work, annotation of equipment and the classification of the labor force utilized at the job site).
- Reviews plans to become familiar with assigned projects and makes recommendations for modifications as necessitated by actual field conditions.
- Measures, computes, sketches and certifies contract item quantities for payment of work performed by contractors on County CIP and participation projects.
- Maintains complete financial controls to ensure project expenditures remain within the scope of the contract.
- Maintains project schedules to document actual progress as compared to as-planned construction.
- Documents the use of all contract items.
- Investigates, resolves and prepares written reports or recommendations on assistance requests from various agencies, developers, contractors or the public.
- Performs related duties as required.

KNOWLEDGE, SKILLS AND ABILTIES:

• Familiarity with, and ability to increase knowledge of, the standards and codes governing the construction of buildings, building systems, highways, roadways, bridges and other vertical or horizontal construction (including jobsite safety requirements), as dictated by the assignment; of construction practices, methods, techniques, materials, costs, systems and equipment associated with the trades involved in vertical or horizontal construction, as dictated by the assignment; of construction inspection practices; of documents and procedures commonly used by contractors in construction project administration; and of 'green building' documentation, as dictated by the assignment.

- Familiarity with, and ability to increase knowledge of, structural or civil engineering methods and techniques in practice, as dictated by the assignment; of site preparation and sediment and erosion control and stormwater management techniques and requirements; of material tests required (such as concrete tests, soil tests, water service tests and electrical service tests), how they are conducted and how to evaluate results; of mathematics, including algebra and geometry, to check layouts, calculate properties or costs, etc.
- Ability to acquire knowledge of baseline aspects of construction scheduling methods, such as progress schedules, Program Evaluation Review Technique charts and Critical Path Method schedules.
- Skill in problem solving to select, organize and logically process relevant information (verbal, numerical and ideational) to solve a problem. Examples include baseline skill, and/or ability to increase skill, in interpreting construction engineering plans, specifications, drawings and related documents; in maintaining accurate records of construction activity and preparing progress reports; in reviewing contractor requests for progress payments, time extensions, equipment/materials substitutions, etc.; in inspecting jobsite materials and workmanship for quality; and in using equipment and tools, including transits and levels to check for elevation, plumb and square, a camera to document progress or problems, megohmmeters, ohmmeters, penetrometers, gas meters, torque wrenches, air entrainment meters, slump cones and sand cones to perform tests on site, and concrete compression machines, nuclear asphalt content determiners, and asphalt content reflux extractors to perform tests in a laboratory.
- Skill in English oral communication to understand verbal information (including instructions, descriptions and ideas) and to express such information verbally so that others will understand. Examples include exchanging routine and non-routine project information with business contacts or the public.
- Skill in English written communication to understand written information (including instructions, descriptions and ideas) and to express such information in writing so that others will understand. Examples include baseline skill, and/or ability to increase skill, in reading specifications, codes and equipment model numbers, reviewing project plans, recording inspection results, writing reports, etc.
- Interpersonal skills to interact effectively with business contacts or the public in a businesslike, customer service-oriented manner. Contacts include but are not limited County employees, State employees, employees in public utility companies or agencies, contractor employees, other private sector personnel and the public.
- Skill in the use of a computer for planning, scheduling, communicating (email), word processing, spreadsheets and other applications. Ability to use, and build skill in use of, project scheduling software (such as Primavera) or specialized databases, such as the Maryland Construction Management System (MCMS) database, may be required.

MINIMUM QUALIFICATIONS:

Experience: Three (3) years of experience in construction or inspection of buildings, roads or accessory structures (storm drains, bridges, curbs and gutters, driveways, sidewalks).

Education: Completion of high school or High School Certificate of completion recognized in the State of Maryland.

Equivalency: An equivalent combination of education and experience may be substituted.

LICENSE:

• Possession and maintenance at all times of a valid Class "C" (or equivalent) driver's license from the applicant's state of residence.

PROBATIONARY PERIOD:

Individuals appointed to this class will be required to serve a probationary period of six (6) months, during which time performance will be carefully evaluated. Continuation in this class will be contingent upon successful completion of the probationary period.

MEDICAL EXAM PROTOCOL: Core II Exam.

Class Created: June, 2000 Revised: August, 2009 April, 2010 August, 2012