DUTY STATEMENT

☐ CURRENT ☒ PROPOSED

RPA Number: 25-280-057	Classification Title: IT Specialist III	Position Number: 880-280-1415-023
Incumbent Name: VACANT	Working Title: Lead Application Architect	Effective Date: **TBD**
Tenure: Permanent	Time Base: Full-time	CBID: M01

Division/Office: Division Information Technology	Section/Unit: IT Business Operations Support Branch-Application Development Unit
Supervisor's Name: Brian Bustos	Supervisor's Classification: Information Technology Manager II

Human Resources Use Only:	
HR Analyst Approval:	Date:

General Statement

Under the administrative direction of the Information Technology Manager II (ITM II) of the Business Operations Support Branch in the Division of Information Technology (DIT) and consistent with good customer service practices and the goals of the State and Regional Boards' Strategic Plan, the incumbent is expected to be courteous and provide timely responses to internal/external customers, follow through on commitments, and to solicit and consider internal/external customer input when completing work assignments.

Position Description

The incumbent will provide services from Information Technology (IT) domains including Software Engineering, System Engineering, Information Security Engineering, Information Technology Project Management, and Business Technology Management. The incumbent acts as a Lead Application Architect and provides expert level application development functions in support of the agency's enterprise web systems including the Safe and Affordable Drinking Water Program (SADW) using Angular, REST architecture, JAVA EE, and SQL Server.

The incumbent will work cooperatively with stakeholders to create new technical solutions and enhance existing systems to streamline data collection and reporting for the SADW program and other enterprise related needs. The incumbent works independently and acts in a lead capacity in the

planning and coordination of activities that require the development of technology solutions for the most complex business, scientific or engineering problems. Other technologies used in the agency's complex custom web application systems include JAVA EE, ASP.Net, C#, Model View and Controller, Angular, NuGet, Node.js, REST architecture, AJAX, JavaScript, Spring Boot, commercial off-the-shelf (COTS), software as a service (SaaS) technology platforms, AWS, Azure, Enterprise Java Beans, Java Server Pages, Java Server Faces, Hibernate, Oracle, MSSQL, JBoss Enterprise Application Platform (JBoss EAP), IIS, JavaScript, JSON, jQuery, XML, SSRS, SSIS, ArcGIS JavaScript API, Web Services, GIT Hub, Access, Red Hat Linux (RHL), and Windows Server.

Essential Functions (Including percentage of time):	
35%	Provide expert-level application architecture support using Java and Spring frameworks, and Angular for front-end development, building and integrating RESTful APIs, leveraging Azure Functions, and working with SQL Server for data management and Java EE. Perform complex analysis, development, testing, implementation tasks necessary to automate data collection, transformation, and reporting to support agency goals. Provide technical analysis to assess program business goals. Define how data will be stored, consumed, integrated, and managed by different data entities, systems, and applications. Provide expert-level technical support for COTS and SaaS technology platforms, and custom web solutions including analysis, design, development, application deployment, system integration, communication of design recommendations. Implement an optimized user experience using industry best practices. Present solution recommendations to management and executive level staff. Evaluate complex system solutions and make recommendations for new and existing applications and interface projects to ensure system solutions align with the enterprise data architecture. Document and develop the enterprise application architecture direction and advise management and executive level staff of solution recommendations. Provide complex analysis and application development support for data translation and interfaces required to support the data needs for program. Design and develop the most complex Extract-Transform-Load (ETL) processes and standards used to integrate data from multiple systems. Responsible for creating levels of design that span multiple business problems and continue to deliver appropriate behaviors as technology and business requirements evolve.
30%	Provide expert-level technical support including enhancements, configuration, maintenance, and troubleshooting of web and database application software. Work with business process staff, DIT staff, vendors and technical consultants on maintenance and operation of the agency's COTS, and SaaS technology platforms, complex custom web application systems and other programming assignments. Provide logical and physical database design, data table generation, performance tuning, data conversion, migration, and integration into the department's overall data management structure. Provide software solution code and configuration of web, database, and network systems to ensure the highest standard for application security compliance. Perform upgrades and security patches on system software run in test and production environments. Migrate web enterprise JAVA EE, JBoss EAP, Oracle, ASP.Net, C#, IIS, and MSSQL based application systems to cloud-based architectures including integration with COTS and SaaS based solutions. Provide lead

	technical application architect support services with cloud-based system environments. Research, evaluate, and document the strategy and work plan for migrating existing web application technologies to a cloud-based architecture. Design, code, test, implement, and monitor cloud-based web application system solutions. Assess and plan for future cloud-based application needs.
20%	Serve as the application technical programmer lead to establish coding and design standards at an enterprise level. Perform structured systems analysis and prepare system specifications and detailed design specifications, including prototype record and screen formats, entity relationship diagrams (ERD), database schemas, access requirements, system flowcharts and data flow diagrams. Develop test plans, prepare test data, and establish conditions necessary to perform detailed program and system test functions. Assess and plan for future cloud-based application needs. Recommend and establish guidelines for infrastructure and software licensing procurement. Ensure software licensing compliance. Coordinate complex information technology projects to include defining project scope, objectives, project schedules, resource plans, cost estimates, risk identification, procurement plans, roles and responsibilities for team members, and communication. Advise management on the planning, development, implementation, and coordination of IT issues.

Marginal Functions (Including percentage of time):

5%	Evaluate and recommend vendor software packages and hardware/software purchases.
5%	Provide technical training, mentoring and knowledge transfer to DIT staff on all aspects of systems analysis, troubleshooting, coding, testing, implementation, maintenance, operations, and application architecture work. Attend regularly scheduled DIT staff meetings and training sessions and lead as needed
5%	Perform other duties as required.

Typical Physical Conditions/Demands:

The position requires extensive use of a personal computer and the ability to sit/stand at a desk for extended periods of time. Ability to lift and carry up to 20 pounds. Ability to sit for long periods of time while traveling extended distances.

Typical Working Conditions:

The incumbent works in an office building in a smoke-free environment. The work schedule is Monday through Friday as required to support core business hours. Will be required to work unusual hours including evenings, weekends, and holidays in response to IT outages or when the department is mission tasked. Overnight travel may be required within the state as necessary to support job functions.

Supervisor Statement

I certify this duty statement represents an accurate description of the essential functions of this position. I have discussed the duties of this position with the employee and provided the employee a copy of this duty statement.

Supervisor Name	Supervisor Signature	Date

Employee Name	Employee Signature	Date