Position Code
1. INTCSPL3

POSITION DESCRIPTION

This position description serves as the official classification document of record for this position. Please complete the information as accurately as you can as the position description is used to determine the proper classification of the position.

2. Employee's Name (Last, First, M.I.)	**8. Department/Agency** TECH, MGMT AND BUDGET - IT
3. Employee Identification Number	**9. Bureau (Institution, Board, or Commission)** DTMB
4. Civil Service Position Code Description Info Tech Specialist-3	**10. Division** Agency Services
5. Working Title (What the agency calls the position) Solutions Architect - ITS 14	**11. Section** MDOC
6. Name and Position Code Description of Direct Supervisor PARHAM, TRACY A; INFO TECH MANAGER-3	**12. Unit** Architect Team
7. Name and Position Code Description of Second Level Supervisor BRYNOLFSON, BRETT W; STATE ADMINISTRATIVE MANAGER-1	**13. Work Location (City and Address)/Hours of Work** / 8:00 A.M. – 5:00 P.M. M-F (may vary)

14. General Summary of Function/Purpose of Position

This position will participate and provide technical leadership in project planning meetings with vendors, Business Analyst and MDOC stakeholders. Provide technical expertise to the Application development team in developing innovative cost-effective design solutions promoting useability, security, and scalability. This position has direct responsibility for ongoing support of WebFocus, OffenderLlink, MDOC Healthcare and Pharmacy Services and other systems/initiatives as assigned. Design network solutions related to MDOC stakeholders and Project Managers requirements following DTMB standards. The Architect will provide ongoing support to vendors for solution design maintenance and upgrades to assigned projects. Execute process for deploying and decommissioning MDOC servers. Coordinate with MDOC Infrastructure Liaison to submit ISR infrastructure request for installation of network drops, new hardware, and network configurations. Submit Helix request for IP reservations, firewalls rule implementations and testing, system configuration changes for MDOC related projects. Remediate any realized security vulnerabilities and gaps. Initiate and provide technical support for SDT sessions on behalf of MDOC stakeholders. Attend Architect meetings, providing project status updates and conducting peer review sessions. Perform research related task and provide cost analysis reports for MDOC special projects. This position requires the ability to multi-task on assigned tasks and a high degree of organization and time management skills. This position must be able to function with minimum direct supervision and requires a high degree of collaboration with Architect 15, Business Analyst, DTMB Infrastructure Services, MISAP, CRM team and Portfolio Management Office (PMO) on significant projects.

15. Please describe the assigned duties, percent of time spent performing each duty, and what is done to complete each duty.

List the duties from most important to least important. The total percentage of all duties performed must equal 100 percent.

Duty 1

General Summary: **Percentage:** **60**

In a specialist capacity, develop and manage the enterprise level architecture for all of Customer Services, MDOC Division, IT systems and projects.   Plan, develop and administer architectural design related policies and procedures.

Individual tasks related to the duty:

- Provide technical architecture expertise as it relates to the integration of systems, security, middleware, services, database design, hardware/server, and tools, to IT project business and technical requirement sessions and for system implementation.
- Lead and coordinate with other technical resources in the overall system design, implementation and integration of systems with other existing systems/technologies/data sources on multiple platforms within the agency, across multiple state agencies, Office of Enterprise Architecture and with multiple vendors.
- Develop strategic goals required to ensure that the overall architecture is in compliance with the DTMB Strategic Plan.
- Consult with system designers on proper system design and use of enterprise architecture components.
- Compile or design hardware and software architectural models of current and proposed systems across the client enterprise for use internally and in conjunction with third party technology partners.   The models are of two types:
- Enterprise Models that depict the entire client enterprise and its inter-relationships internally and with the state enterprise architecture.
- Reference Models that depict recommended & approved technologies & designs, which can serve as a template for future projects.
- Perform architecture design reviews across the organization.
- Define, implement, and maintain the IT technical architecture design methodology and best practices.
- Lead the alignment effort toward State of Michigan (SOM) Digital Strategies development and implementation.
- Survey external emerging developments, and evangelize new technologies, standards and methodologies that will have a positive impact on the quality of (Agency) systems and services.
- Ensure the implementation of security standards in system architectures and designs.   Be familiar with, provide research, documentation and input (when applicable) to Enterprise Security standards.
- Plan, develop and administer architecture design related policies and procedures to promote high quality, accuracy and usable system designs.
- Provide technical leadership, guidance and direction to Application Architects, Database Administrators, Programmer/Analyst(s) supporting system design, database architecture and design and overall architecture functions in client agencies.

Duty 2

General Summary: **Percentage:** **20**

Develop and maintain system level architecture components and design repositories (i.e. middleware, services, database, hardware).   Manage projects related to architecture component design and development.

Individual tasks related to the duty:

- Perform technical requirements analysis for client enterprise level middleware, services, database, hardware components and objects.
- Oversee the design, development and testing of client enterprise level components, API's and related databases.
- Oversee and approve the development and changes to the architecture to ensure proper execution of the design.
- Provide technical support to application designers in the use of the architecture environment.
- Provide "practical" technical solutions to the development team to solve complex development problems.
- Chair appropriate change control boards.
- Oversee the development of testing plans, scenarios and test data to ensure compliance and fit with the overall architecture.
- Manage architecture components and documentation versions using the established configuration management process and tools.
- Manage associated projects to develop client enterprise level architecture components and objects.
- Review the security and account administration services.
- Act as the (Agency) IT Architect on statewide and client enterprise application integration projects.
- Act as liaison to DTMB Enterprise Architecture and the Office of Enterprise Security.
- Direct the use of EA Solution Patterns and Reference Models with existing and proposed solutions within the area of responsibility.   Assist in creating EA Solution Assessments and network diagrams.

Duty 3

General Summary: **Percentage:** **10**

Perform middleware, services, hardware support as required.

Individual tasks related to the duty:

- Provide assistance to the server hardware and database administrator on system level components, middleware and APIs (assets).
    - Insure the installation, configuration, and implementation of the assets follow the architecture guidelines.
    - Insure proper operation of the assets.

Duty 4

General Summary: **Percentage:** **10**

Perform additional duties as assigned.

Individual tasks related to the duty:

- Participate in the development and implementation of processes that improve efficiency and enhance productivity.
- Provide leadership, consultation and expertise on special teams and projects as assigned.
- Ensure relevant administrative functions are complete and accurate.

16. Describe the types of decisions made independently in this position and tell who or what is affected by those decisions.

Final decision maker on the following:

- Technical architecture design – all development projects, development staff and systems users.
- Technology used to implement architectures – all development projects, development staff and system users.
- The best approach to resolve technical issues and troubleshoot problems – all development projects, development staff and system users.
- Plan, develop and administer architecture design related policies and procedures – all development projects, development staff and system users.

17. Describe the types of decisions that require the supervisor's review.

- Recommendations for technical design that may have a direct impact on other State Agency systems or the data warehouse.
- Requiring endorsement from managers of other impacted systems, impact budget and staffing needs, or significantly impacting project schedules.
- Decisions having strategic technical implications.
- Conflicts between technical directions or staff organizations and changes having significant impact to staff.
- Security considerations impacting the enterprise or requiring additional review by policy.

18. What kind of physical effort is used to perform this job? What environmental conditions in this position physically exposed to on the job? Indicate the amount of time and intensity of each activity and condition. Refer to instructions.

Typical office environment

19. List the names and position code descriptions of each classified employee whom this position immediately supervises or oversees on a full-time, on-going basis.

Additional Subordinates

20. This position's responsibilities for the above-listed employees includes the following (check as many as apply):

N	Complete and sign service ratings.	N	Assign work.
N	Provide formal written counseling.	N	Approve work.
N	Approve leave requests.	N	Review work.
N	Approve time and attendance.	N	Provide guidance on work methods.
N	Orally reprimand.	N	Train employees in the work.

22. Do you agree with the responses for items 1 through 20? If not, which items do you disagree with and why?

Management prepared.

23. What are the essential functions of this position?

The Solutions Architect role for MDOC is critical in designing and implementing the enterprise-level architecture, middleware, services, database, and hardware components. This position will be responsible for supporting the state's digital strategy by compiling or designing architectural models of current and proposed systems across the client enterprise. Additionally, this role will conduct peer design reviews and evaluate vendor software for possible integration into the systems or environment. The Solution Architect will manage the development and maintenance of MDOC's architecture environment as an IT resource for tier 3 support. Collaboration with Architect 15, Business Analysts, and vendors will be essential in implementing enterprise architecture components and resolving any issues. Technical expertise will be crucial in ensuring the success of MDOC's technological infrastructure. This position will develop and manage the enterprise-level architecture for WebFocus, OffenderLlink, MDOC Healthcare and Pharmacy Services and other systems/initiatives as assigned.

Critical Job Role: Solutions Architecture

Occasional overtime may be required.

24. Indicate specifically how the position's duties and responsibilities have changed since the position was last reviewed.

New Position

25. What is the function of the work area and how does this position fit into that function?

This division is responsible for providing software/hardware/infrastructure system development to multiple program areas within the client agency. This division assess user problem/needs, design, develop, implement, maintain, enhance, manage, and control numerous MDOC systems. It must perform these activities in compliance with state and federal regulations, in adherence to prevailing division policy, procedures, and standards, while maintaining operational effectiveness.

This position will develop and manage the enterprise level architecture for WebFocus, OffenderLlink, MDOC Healthcare and Pharmacy Services and other systems/initiatives as assigned.

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26. What are the minimum education and experience qualifications needed to perform the essential functions of this position.

EDUCATION:

Possession of a bachelor's degree with at least 21 semester (32 term) credits in one or a combination of the following: computer science, data processing, computer information systems, data communications, networking, systems analysis, computer programming, information assurance, IT project management or mathematics.

EXPERIENCE:

Information Technology Specialist 14 - 15
Three years of professional experience equivalent to an Information Technology Infrastructure or Programmer/Analyst P11 or one year equivalent to an Information Technology Infrastructure or Programmer/Analyst 12.

KNOWLEDGE, SKILLS, AND ABILITIES:

A thorough knowledge of the various aspects of complex technology systems, ability to use precedents in making decisions, capacity to communicate effectively with others, and maintain favorable public relations with clients. Considerable knowledge of application development environments, ability to gather and analyze facts, define problems and recommend solutions, ability to conduct interviews and establish and maintain effective relationships with system users, ability to communicate technical terminology at a level appropriate to the audience. A thorough knowledge of the various aspects of the client agency. The ability to recommend technical solutions to business problems is essential.

Advanced systems engineering techniques, PowerBuilder, JAVA, JavaScript, .NET, HTML, XML, SQL, Microsoft VISIO, Microsoft Project, Microsoft Office (Word, Excel, Access, PowerPoint), relational database concepts, database concepts, telecommunication concepts, web services.

CERTIFICATES, LICENSES, REGISTRATIONS:

None.

NOTE: Civil Service approval does not constitute agreement with or acceptance of the desired qualifications of this position.

I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.

Supervisor	**Date**

TO BE FILLED OUT BY APPOINTING AUTHORITY

Indicate any exceptions or additions to the statements of employee or supervisors.

None.

I certify that the entries on these pages are accurate and complete.

SARAH SEGERLIND	5/17/2024
Appointing Authority	**Date**

I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.

_____   _____
Employee   **Date**