Ministry

Infrastructure

Describe: Basic Job Details

Position Name (30 characters)

Intern-BIM/DPD Technologist

Requested Class

Technologies 4

Job Focus

Corporate Services

Supervisory Level

00 - No Supervision

Organizational Structure

Division, Branch/Unit

SIO/Tech Svces & Procurement/Bldg Design & Tech

Supervisor's Position Name (30 characters)

DPD Supervisor

Design: Identify Job Duties and Value

Job Purpose and Organizational Context

Why the job exists:

The Building Information Modeling (BIM)/Digital Project Delivery (DPD) Technologist provides technical support in the planning, development, and implementation of Digital Project Delivery and Building Information Modeling processes for the department of Infrastructure. The position is a technical resource to provide support to internal and external project teams from software, research, quality control and implementation.

Responsibilities include supporting DPD and BIM aspects of projects including reviewing and providing guidance on execution, performing quality control on digital project deliverables, and liaison with project teams to ensure all required data is included in the deliverables. The BIM/DPD Technologist will also assist in defining project scope and deliverables, developing standards, and delivering training initiatives. This position reports directly to the DPD Supervisor and works in close collaboration with IT and other internal and external stakeholders such as vendors, industry lead groups, DPD and BIM associations.

Responsibilities

Job outcomes (4-6 core results), and for each outcome, 4-6 corresponding activities:

1. Plan, develop, and implement DPD and BIM processes for Infrastructure.
- Provide support to the DPD Supervisor and input into DPD and BIM implementation and QA/QC.
- Provide technical support to DPD and BIM projects including project work relating to modeling, detailing, clash detection, and costing.

- Manipulate and utilize existing Digital Project Delivery and Building Information Models for project specific requirements including costing, record management and reporting.
- Manage and distribute coordinated digital documents to project teams.
- Communicate with project teams to receive, coordinate and update all electronic models.
- Create and maintain the software template file to ensure standards are upheld.
- Assist with automating routines in DPD and BIM to support standards and productivity.
- Assist with DPD and BIM training initiatives, including the creation, education, and delivery of training programs.
- Provide quality control for completeness and adherence for all models.
- Assist with developing and maintaining provincial standards for DPD and BIM based on research and industry best practices.

2. Provide technical advice and support to the department as part of the DPD team.
- Troubleshoot problems and establish collaborative solutions with project teams.
- Assist in the creation and delivery of training material regarding DPD and BIM processes.
- Initial contact for DPD and BIM Helpdesk to resolve issues and identify ongoing issues for reporting and improvement purposes.
- Provide continual support to project teams/individual users of hardware and software as it relates to DPD and BIM production in a team environment.
- Stay informed on DPD and BIM best practices by attending conferences, seminars, training, and workshops for DPD and BIM.
- Provide recommendations to the DPD Supervisor.

3. With the DPD Supervisor, work in collaboration with IT and other stakeholders.
- Work with IT team to develop compatible technologies and environments that support current and future DPD and BIM initiatives.
- Work with IT team and, other long term stakeholders, in the area of 'digital preservation' as it applies to corporate electronic files and actively preserve records.
- Coordinate DPD and BIM project close-out/transition to facilitate DPD and BIM for facility management.
- With the DPD Supervisor manage software products including the incorporation of new version releases and customization of the product.
- Create and maintain the software template file to ensure standards are upheld.
- Assist with automating routines in DPD and BIM to support standards and productivity.
- Assist project teams with DPD and BIM project setup and resolving DPD and BIM issues.
- Assist in managing and distributing coordinated digital documents to the project team.
- Communicate with the project teams to receive, coordinate and update all electronic models.
- Liaise with DPD and BIM vendors, service providers, and subcontractors.

Problem Solving

Typical problems solved:

Identifying required DPD and BIM data required for different user groups such as Facility Management and Asset Management. Verification that the data is collected from the project teams in a format that complies with current standards.

Types of guidance available for problem solving:

In most cases, the position works within guidelines and standards which guide the quality and scheduling of activities. For complex assignments, consultation with supervisor, external and internal stakeholders is conducted to ensure that the required information is being understood and collected for the relevant user groups.

Direct or indirect impacts of decisions:

Developing and maintaining provincial standards for DPD and BIM based on research and industry best practices. Ensure project teams compliance of the standards for quality deliverables for Infrastructure facilities.

Key Relationships

Major stakeholders and purpose of interactions:

- DPD and BIM project teams and individual users - Provide technical support and advice on DPD and BIM processes.
- IT - Work collaboratively on DPD and BIM initiatives related to internal applications and systems.

- Vendors - Provide information contracts and exchange information on DPD and BIM processes.
- Industry lead groups, DPD and BIM associations - Exchange information on latest technological trends.

Required Education, Experience and Technical Competencies

Education Level	Focus/Major	2nd Major/Minor if applicable	Designation
Diploma (2 year)	Engineering	Other	

If other, specify:

At least one year in a related degree or technical diploma (e.g., Civil, Architectural Design or Engineering)

Job-specific experience, technical competencies, certification and/or training:

- Must be a recent graduate and apply within 2 years of graduating.
- Basic understanding and knowledge of Autodesk software including AutoCAD and Revit is desired. Previous experience in a DPD and BIM production environment is an asset. Ability to use or develop Dynamo scripts and Python coding is an asset.
- Knowledge in Digital Project Delivery (DPD) or Building Information Management (BIM) processes.
- Knowledge of Asset Information Management (AIM) databases and COBie is an asset.
- Ability to read and understand plans and specifications.
- Written and verbal communication skills with the proven ability to make concepts a reality.
- Listening and collaboration skills with the ability to work with multiple departments.
- Ability to work collaboratively with stakeholders across the organization and with clients and consultants.
- Ability to use time productively, maximize efficiency, and meet challenging work goals.
- Self-starter with the drive to pursue continued education on BIM practices.
- Ability to work collaboratively within a team environment and the organization as a whole.

Behavioral Competencies

Pick 4-5 representative behavioral competencies and their level.

Competency	Level A B C D E	Level Definition	Examples of how this level best represents the job
Systems Thinking	◉ ○ ○ ○ ○	Observes and understands larger impact of role: • Sees impact of work on organization; anticipates change in own area based on activities in other areas • Considers how own work impacts others and vice versa • Ask questions to understand broader goals • Aware of how organization adds value for clients and stakeholders	The position is a technical resource to provide support to internal and external project teams from software, research, quality control and implementation. Responsibilities include assisting with quality control for digital project deliverables, coordinating with project teams to ensure all necessary data is incorporated into deliverables, analyzing completed projects to identify lessons learned, and offering recommendations for future improvements.
Drive for Results	◉ ○ ○ ○ ○	Actively sets goals and remains open to advice on reaching them: • Sets goals and prioritizes work • Identifies and corrects	The position provides technical support in the planning, development, and implementation of DPD and BIM processes for the department of

		areas for improvement • Suggests actions; asks for advice when lacking information or multiple priorities • Operates within APS value system	Infrastructure, as well as assist in defining project scope and deliverables, developing standards, and assist with training initiatives.
Agility	○ ◉ ○ ○ ○	Works in a changing environment and takes initiative to change: • Takes opportunities to improve work processes • Anticipates and adjusts behaviour to change • Remains optimistic, calm and composed in stressful situations • Seeks advice and support to change appropriately • Works creatively within guidelines	Must have the ability to work collaboratively with stakeholders across the organization and with clients and consultants. Have the ability to use time productively, maximize efficiency, and meet challenging work goals. Must be a self-starter and possess the drive to pursue continued educations on DPD and BIM practices. Possess the ability to work collaboratively within a team environment and the organization as a whole.
Creative Problem Solving	◉ ○ ○ ○ ○	Is open to new ideas and breaks problems down to identify solutions: • Breaks down problems into small parts • Constructively questions and challenges the norm • Open to other's perspectives and aware of own • Contributes ideas for improving processes, and adapts existing practice to address problems	As part of the DPD team, this position is expected to contribute ideas and solutions when challenges arise. Core responsibilities include staying up to date on DPD and BIM best practices by participating in conferences, seminars, training sessions, and workshops; assisting in automating processes in DPD and BIM to improve standards and efficiency; and troubleshooting issues while collaborating with project teams to develop effective solutions.