

# Be|Inspired Awards



## 2012 Categories

- Innovation in Asset Lifecycle Information Management
- Innovation in Bridges
- Innovation in Building
- Innovation in Communications Networks
- Innovation in Construction
- Innovation in Generative Design
- Innovation in Geotechnical and Geoenvironmental Engineering
- Innovation in Government
- Innovation in Land Development, Engineering, and Management
- Innovation in Mining & Metals
- Innovation in Offshore Engineering
- Innovation in Power Generation
- Innovation in Process Manufacturing
- Innovation in Rail And Transit
- Innovation in Roads
- Innovation in Structural Engineering
- Innovation in Utility Transmission and Distribution Networks
- Innovation in Water and Wastewater Treatment Plants
- Innovation in Water, Wastewater and Stormwater Networks
- Connecting Project Teams

## 2012 Criteria

### Innovation in Asset Lifecycle Information Management

#### DESCRIPTION

Enterprise deployments that have demonstrated excellence in existing infrastructure operations, providing improved information integrity, accessibility of information to stakeholders, improved process efficiency, productivity, and safety.

#### CRITERIA / EXAMPLES

1. Any AssetWise products including eB Insight, Lifecycle Server, transportation operations, utilities, and communications products (alone or in combination with other software) applied to configuration/change management, requirements/compliance management, knowledge management, document control/records management, incident management/corrective action, linear referencing, handover of design basis/engineering documentation to operations, roads/highways management, permitting, engineering maintenance.
2. Submissions will be judged on a combination of criteria, including integration with core business processes, interoperability with other enterprise systems, demonstrable impact of change (e.g. improved regulatory ratings, business process improvements, maintaining budget/schedule despite changing requirements, etc.), clear return on investment in terms of either cost savings or risk avoidance, user base distribution across enterprise, automation of previously manual processes, improved safety metrics, and/or quality assurance.

### Innovation in Bridges

#### DESCRIPTION

Projects that have demonstrated excellence in planning, designing, building, modeling, analyzing, and maintaining bridges.

#### CRITERIA / EXAMPLES

1. Bentley technology will have been used (alone or in combination with other software) to plan, design, build, operate, model or analyze the bridge.
2. For consideration in this category a Bentley (Road, Rail, Bridge, Geotechnical or GeoStructural) application must have been used.
3. The project will need to demonstrate a combination of technical innovation, applied engineering principles, a positive impact on local infrastructure socially, economically, or environmentally, and demonstrate a return on investment.

## Innovation in Building

### DESCRIPTION

Projects that have demonstrated excellence in planning, designing, building, modeling, analyzing, operating and maintaining one or more buildings.

### CRITERIA / EXAMPLES

1. Bentley technology should have been used (alone or in combination with other software) to plan, design, build, operate, model or analyze the building(s).
2. The project should demonstrate the use of technical innovation to deliver high quality building(s). Where 'quality' may be in terms of the building or project's functional performance, utilization, acoustics, safety, security, energy savings, reduction in carbon footprint, compliance with regulations or accreditations, operational process, delivery process, aesthetics, quality of service or otherwise.
3. The project will need to demonstrate a clear return on investment in terms of either cost savings or risk avoidance (to owner, project, or submitter), increased value in the resulting project, increased business performance of the building or the business the building supports.
4. Submissions will benefit from clearly presenting the project and benefits achieved by using project images, screenshots, animations, charts or diagrams, and text.

## Innovation in Communications Networks

### DESCRIPTION

For projects that have demonstrated excellence in the planning, engineering and analysis of communications networks. These networks may either be revenue-generating networks or internal networks.

### CRITERIA / EXAMPLES

1. Bentley technology should have been used (alone or in combination with other software) to design or enhance communications network infrastructure.
2. The project will need to demonstrate a combination of technical innovation, good project management, and a clear return on investment.

## Innovation in Construction

### DESCRIPTION

Projects that have demonstrated excellence during the construction phase of a project, demonstrating a clear return on investment (usually in shortened project schedules), describing how risks were mitigated to avoid overruns, and how the use of technology has advanced work processes especially with the construction workforce to the benefit of all stakeholders.

### CRITERIA

1. Any ProjectWise® products (including ProjectWise Navigator), ConstructSim, or OnSite used (alone or in combination with other software) by construction personnel.
2. The project will need to demonstrate a combination of technical innovation, good project management, and a clear return on investment.

### EXAMPLES

Technology used to...

- Identify and resolve clashes and multi-disciplinary coordination before construction
- Provide information to other stakeholders e.g. the public, senior executives
- Improve communication across organizations and disciplines
- Standardize data and project standards among multiple project partners
- Facilitate a more rapid deployment of a project team
- Manage the delivery of design and construction information from multiple contractors
- Accelerate information sharing across the construction project team
- Optimize the ideal construction path prior to actual construction e.g. crane and scaffolding positioning planning
- Support real time work face planning
- Support real time earth moving planning, tracking and management
- Enable construction personnel from different organization to share design data on a project
- Facilitate the delivery to site process
- Coordinate between project stakeholders, e.g., contractor, owner, suppliers
- Share information among the design and/or construction teams and the client
- Improve project commissioning and/or handover
- Deliver critical construction and fabrication information directly to the materials controls and project controls systems
- Provide intelligent electronic deliverables to sub-contractors to perform detailed fabrication design
- Redefine the form, scope, and timing, etc. of construction deliverable

## Innovation in Generative Design

### DESCRIPTION

Projects that have demonstrated excellence in the pursuit of designs and achievement of results that would have been impossible or impractical without the use of advance design technology and methodology to design exceptional buildings.

### CRITERIA / EXAMPLES

1. Bentley® GenerativeComponents® should have been used (alone or in combination with other software) to plan, design, document or analyze all or part of the building(s).
2. The project may demonstrate results as buildings that are freer in form, use innovative materials and assemblies, or integrate design analysis or rules into the process.
3. The project may demonstrate the exploration of a broad range of “what-if” alternatives of form, configuration, material, or other design objectives.
4. The project will need to demonstrate the use of technical or process innovation to deliver high quality buildings. Where ‘quality’ may be in terms of the building or project’s functional performance, utilization, acoustics, safety, security, energy savings, reduction in carbon footprint, compliance with regulations or accreditations, operational process, delivery process, aesthetics, quality of service or otherwise.
5. The project will need to demonstrate clear benefits to the project in terms of measurable or subjective value gained. Value may be in terms of material savings, systems performance, energy performance, engineering innovation, aesthetic achievement, project or design methodology benefits, or as fits the project’s intent in relation to the design objectives.
6. Submissions will benefit from clearly presenting the project and benefits achieved by using project images, screenshots, animations, charts or diagrams, and text.

## Innovation in Geotechnical and Geoenvironmental Engineering

### DESCRIPTION

For projects that have demonstrated excellence in geotechnical or geoenvironmental engineering using gINT or Bentley software.

### CRITERIA / EXAMPLES

1. Bentley technology should have been used (alone or in combination with other software).
2. For consideration in this category a Bentley Civil-Transportation (Road, Rail, Bridge, Geotechnical or GeoStructural) application must have been used.
3. The project will need to demonstrate a combination of technical innovation, good project management, and a clear return on investment.

## Innovation in Government

### DESCRIPTION

For projects that have demonstrated excellence in local, state, provincial, federal and national government projects. Such projects may leverage engineering content and team collaboration, geospatial, civil engineering, and communications network technology, or combinations thereof.

### CRITERIA / EXAMPLES

1. Bentley technology should have been used (alone or in combination with other software) to survey, map, manage, or develop government land or infrastructure.
2. The project will need to demonstrate a combination of technical innovation, good project management, and a clear return on investment.

## Innovation in Mining & Metals

### DESCRIPTION

Projects that have demonstrated excellence in planning, engineering, construction, operations and analysis of mining operations or metals processing facilities.

### CRITERIA / EXAMPLES

1. Bentley technology should have been used (alone or in combination with other software) to survey, map, manage, or develop mines or plan, design, construct, and/or operate materials handling or processing facilities.
2. The project will need to demonstrate a combination of technical innovation, good project management, and a clear return on investment.
3. The submission should also discuss safety, environmental impact, and business drivers.

## Innovation in Offshore Engineering

### DESCRIPTION

Projects that have demonstrated excellence in planning, engineering, construction, operations and/or analysis in the marine environment

### CRITERIA / EXAMPLES

1. Bentley technology should have been used (alone or in combination with other software) to plan, design, build, operate, model or analyze these facilities
2. This technology includes acquired products such as SACS, Maxsurf, Hydromax but is not exclusive to these products
3. The project will need to demonstrate a combination of technical innovation, engineering and project management excellence, and a clear return on investment.
4. The submission should cover the particular conditions found at sea - various sea states, salt water and biological (marine growth) effects, wave and vessel impact analysis
5. The submission should also discuss safety, environmental impact, and business drivers

## Innovation in Power Generation

### DESCRIPTION

Projects that have demonstrated excellence in planning, designing, building, operating, modeling, and analyzing power generation plants including traditional fossil fuel plants, combined cycle plants, nuclear power facilities, and renewable power generation facilities such as hydroelectric, solar or wind powered.

### CRITERIA / EXAMPLES

1. Bentley technology should have been used (alone or in combination with other software) to plan, design, build, operate, model or analyze these facilities.
2. The project will need to demonstrate a combination of technical innovation, good project management, and a clear return on investment.
3. The submission should also discuss safety, environmental impact, and business drivers for the choice of facility.

## Innovation in Process Manufacturing

### DESCRIPTION

Projects that have demonstrated excellence in the planning, engineering, and construction through into operations of any process manufacturing facility (such as oil and gas facilities either onshore or offshore, upstream or downstream, chemical plants, pharmaceuticals, food/beverage factories, pulp/paper mills).

### CRITERIA / EXAMPLES

1. Bentley technology should have been used (alone or in combination with other software) to plan, design, construct, and/or operate these facilities.
2. The project will need to demonstrate a combination of technical innovation, good project management, and a clear return on investment.
3. The submission should also discuss safety, environmental impact, and business drivers.

## Innovation in Rail And Transit

### DESCRIPTION

Projects that have demonstrated excellence in rail and transit design or operations and maintenance.

### CRITERIA / EXAMPLES

1. Bentley technology should have been used (alone or in combination with other software) to design, operate or maintain rail or transit systems.
2. For consideration in this category a Bentley Civil-Transportation (Road, Rail, Bridge, Geotechnical or GeoStructural) application must have been used.
3. The project will need to demonstrate a combination of technical innovation, good project management, and a clear return on investment.

## Innovation in Roads

### DESCRIPTION

Projects that have demonstrated excellence in planning, engineering, analysis, and/or design of roads or highways for transportation.

### CRITERIA / EXAMPLES

1. Bentley technology should have been used (alone or in combination with other software) to design or enhance our transportation infrastructure.
2. For consideration in this category a Bentley Civil-Transportation (Road, Rail, Bridge, Geotechnical or GeoStructural) application must have been used.
3. The project will need to demonstrate a combination of technical innovation, good project management, and a clear return on investment.

## Innovation in Structural Engineering

### DESCRIPTION

Projects that have demonstrated excellence in planning, modeling, analyzing, designing, documenting, detailing, or delivering one or more structures.

### CRITERIA / EXAMPLES

1. Bentley technology should have been used (alone or in combination with other software) to model, analyze, design, document or detail the structure(s).
2. The project will need to demonstrate the use of technical innovation to deliver high quality structure(s) or improved structural project workflows. Where 'quality' may be in terms of the structure's functional performance, delivery process, material savings, design or engineering innovation, quality of service or otherwise.
3. The project will need to demonstrate a clear return on investment in terms of either cost savings or risk avoidance (to owner, project, or submitter) or increased value in the resulting project.
4. Submissions will benefit from clearly presenting the project and benefits achieved by using project images, screenshots, animations, charts or diagrams, and text.

## Innovation in Utility Transmission and Distribution Networks

### DESCRIPTION

For projects that have demonstrated excellence in the planning, engineering and analysis of utility networks. These networks may be for electricity, gas, or district energy (and possibly in combination). They may be for the transmission and/or the distribution segments of the network including transmission infrastructure corridor planning. This category includes the design and management of electric substations.

### CRITERIA / EXAMPLES

1. Bentley technology should have been used (alone or in combination with other software) to design or enhance utility network infrastructure.
2. The project will need to demonstrate a combination of technical innovation, good project management, and a clear return on investment.

## Innovation in Water and Wastewater Treatment Plants

### DESCRIPTION

Projects that have demonstrated excellence in planning, designing, building, and operating water or wastewater treatment plants.

### CRITERIA / EXAMPLES

1. Bentley technology should have been used (alone or in combination with other software) to plan, design, build, or operate, water or wastewater treatment facilities.
2. The project will need to demonstrate a combination of technical innovation, good project management, and a clear return on investment.
3. The submission should also discuss the environmental impact, impact and engagement of all stake holders, and the business drivers for the choice of facility.

## Innovation in Water, Wastewater and Stormwater Networks

### DESCRIPTION

Projects that have demonstrated excellence in planning, designing, building, operating, modeling, and analyzing, water, wastewater, or stormwater networks.

### CRITERIA / EXAMPLES

1. Bentley technology should have been used (alone or in combination with other software) to plan, design, build, operate, model or analyze water distribution, wastewater conveyance, or stormwater drainage infrastructure.
2. The project will need to demonstrate a combination of technical innovation, good project management, and a clear return on investment.

## Connecting Project Teams

### DESCRIPTION

Projects that have demonstrated excellence and improved collaboration by connecting people and information across project teams – no matter where they are located – to provide a single source of truth for all project information.

### CRITERIA

1. ProjectWise was used (alone or in combination with other software) for content management, content publishing, or design review.
2. The project will need to demonstrate a combination of technical innovation, good project management, and a clear return on investment.

### EXAMPLES

ProjectWise technology used to...

- Integrate a design team distributed across multiple locations/time zones
- Leverage global resources in face of local skill shortages
- Facilitate a more rapid deployment of a project team
- Accelerate information sharing across the project team
- Enable company's multiple design offices to share design data on a project
- Provide information to citizens of a municipality with Bentley® Geo Web Publisher®
- Improve communication across organizations and disciplines
- Standardize data and project standards among multiple project partners
- Facilitate the procurement process
- Coordinate between project stakeholders, e.g., contractor, owner, suppliers
- Enable "follow the sun" design by connecting design offices, across multiple continents
- Share information among the design and/or construction teams and the client
- Improve project commissioning and/or handover
- Redefine the form, scope, and timing, etc. of project deliverable
- Deliver critical design information directly to the Owner's ERP system (e.g., SAP)
- Deliver process and control information from P&ID's to process control systems
- Manage the delivery of design information from multiple contractors
- Cache all design work adjacent to teams who accessed it the most leading to faster file access
- Provide intelligent electronic deliverables to sub-contractors to perform detailed design