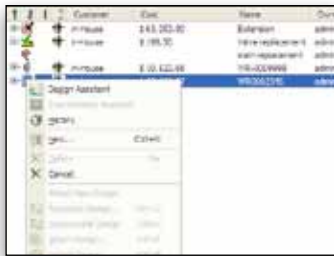




## Bentley® Expert Designer Water

Streamlined, Intelligent Distribution Design for Water Utilities

Bentley Expert Designer Water improves the efficiency and throughput of distribution design by merging network design and work management in a single environment. It is the application of choice for designers, estimators and their supervisors. Providing structured workflows integrated with work management systems, Bentley Expert Designer Water is the workspace for designers to monitor and fulfill work requests.



*A fully-configurable workflow engine that allows management of the even most complex workflows.*

### Ensuring Reliability

With aging assets near or past their planned lifespan, utilities face the need to build new infrastructure while upgrading and maintaining existing infrastructure. The reliability of this infrastructure is also a concern for utilities and that means modernizing and maintaining the utility network with pro-active processes to optimize maintenance, the management of service outages, and the restoration of service. Bentley Expert Designer Water will help utilities to ensure reliability by improving the quality of planning and design. It provides designers with unique decision support tools to help them determine best practice solutions. Feedback is provided during the design process to facilitate the best decisions and to avoid rework.

### Budget Management

Bentley Expert Designer Water helps ease the management of budgets with efficient planning and engineering by allowing users to take advantage of on-the-fly cost estimates using the most up to date asset and labor cost information. Users know the cost of each component as it is added to the design. It eliminates the need for time-consuming iterations between design and work management systems or manual job costing, and it closes the gap between design, estimating, and mapping. Bentley Expert Designer Water supports both in-house and contractor labor. Many utility companies use a mix of labor types to construct new designs. If their service territory is large, they may have multiple union contracts or have a number of contractor options. Bentley Expert Designer Water helps them to make the best decisions and achieve the lowest costs by evaluating the costs associated with different labor options.



*Create new design versions and compare the cost of constructing each version*

*Bentley Expert Designer Water will help utilities to ensure reliability by improving the quality of planning and design.*

### Enhancing Utility Workflows To Increase Revenue

Bentley Expert Designer Water improves communication across all workflows and it captures accurate records of as-built and field conditions. It interoperates transparently with multiple GIS platforms and when used in conjunction with MicroStation® or Bentley® Water, Bentley Expert Designer Water supports collaboration with a variety of file formats including DWG and SHP. Bentley Expert Designer Water streamlines the design process so that revenue can be generated more quickly. Managers and supervisors can easily compare construction options and verify that alternatives have been evaluated per company standards and have been submitted for review and approval.



*A complete solution that integrates network modeling, design engineering, and detailed asset and cost data*

## SYSTEM REQUIREMENTS

### Processor:

Intel or AMD processor 3.0 GHz or greater

### Operating System:

Windows Vista, Windows XP Professional

### Prerequisite Application:

Oracle Client 9.2.0.1.0 with Oracle ODBC Patch 9.2.0.64 or Oracle Client 10.2.0.1.0, Oracle Database 11g Release 1 Client

### Web Browser:

Microsoft Internet Explorer 6.0 or greater with 128-bit cipher strength

### RAM:

512 MB minimum, 1 GB RAM recommended. More memory typically results in better performance with large models.

### Hard Disk:

2 GB free disk space

### Display:

Graphics Card supported by DirectX 9.0. See graphics card manufacturer for latest information on DirectX drivers. If no graphics card supported by DirectX can be found, MicroStation will attempt to use software emulation under Windows XP SP2. At least 128 MB of video RAM is recommended. For optimal performance, graphics display color depth should be set to 24-bit or higher. When using a color depth setting of 16-bit, some inconsistencies will be noted.

Find out about Bentley at:  
[www.bentley.com](http://www.bentley.com)

### Contact Bentley

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### Global Office Listings

[www.bentley.com/contact](http://www.bentley.com/contact)

## BENTLEY EXPERT DESIGNER WATER AT-A-GLANCE

### Utility Network Design

- Facility data organization and checking, according to:
  - » Industry construction standards and company-defined business practices
- Full integration with Bentley Water
- Work request submission in batch mode or as a scheduled event
- Default attribute definition (at global or feature level)
- Control of graphic layout offsets, object annotations, and other placement settings
- Automatic assignment of compatible units to features
- Multiple design cost comparison
- Modification of design work details to allow for extra labor and materials
- Comments and leader lines added to graphic design
- Built-in or custom plotting templates (for construction drawing creation)
- Creation of design templates
- Automatic connectivity preservation
- Automatic spatial and WMS database update
- Point and span mode design creation
- Same user interface for GIS or offline design format

### Open Architecture

- Operation on multiple geospatial platforms
- Operation on field data-capture systems
- Deployment with legacy systems and third party business solutions
- Open GIS Interoperability Specification (OGC) standards

### Interface

- Windows application standards
- Customizable interface (information display, toolbar, shortcuts, navigational tools)

- Design Assistant (drag and drop objects into a design, automatic compatible unit assignment, continuously updated cost information)

### Workload Management

- Workplace Today (configurable data organizer)
- Project timeline tracker
- Project duration calculation
- Project details storage

### Integrated Work Management

- Standalone mode
- Integration with external Work Management Systems (WMS)
- Lifecycle status and scheduled due date tracker
- Work requests and designs treated as discrete data sets (for separate folder storage)
- Multiple design links to a work request (for construction scenario comparison)
- Design access from work request
- Automatic design update (with finalized design and work request)
- As-built data incorporation and geospatial environment update

### Design Formats

- GIS format (for designs with spatial data)
- Offline format (for field work without a network connection)
- Template format (for all basic design tasks)
- Automatic coordinate application to template

### Construction Unit Defaults

- Unit data support (macro units, compatible units, and material units)
- Customizable compatible units
- Supports an external system's compatible units

### Automated Layout

- Configurable tools for laying out features

- Placement logic based on mapping, construction standards, and user-defined business rules
- Multiple feature and annotation combinations

### Cost Estimation

- Dynamic (real-time) cost estimation
- Labor, materials, equipment cost estimation
- Detailed cost breakdown reports (using Seagate Crystal Reports)

### Editing

- Catalogs of features and units (macro, compatible and material)
- Feature selection from catalog
- Feature drag and drop placement
- Automatic addition of feature (if resulting configuration complies with current business rules)
- Simultaneous change to group of features
- Tools for adding facilities and annotations at a single location
- Built-in data model (for organizing and manipulating data structures)
- Context-sensitive help

### Data Validation

- No need to enter data multiple times
- Identification of data error (e.g. invalid facility connectivity, invalid data dependencies)
- Automatic derivation of new feature data from existing features

### Reporting

- Numerous standard reports:
  - » Cost estimates, cost comparisons, as-built comparisons, plant account reports, bills of materials, design orders
- Customizable report templates
- Report access with ODBC reporting tool