



*Volume VI
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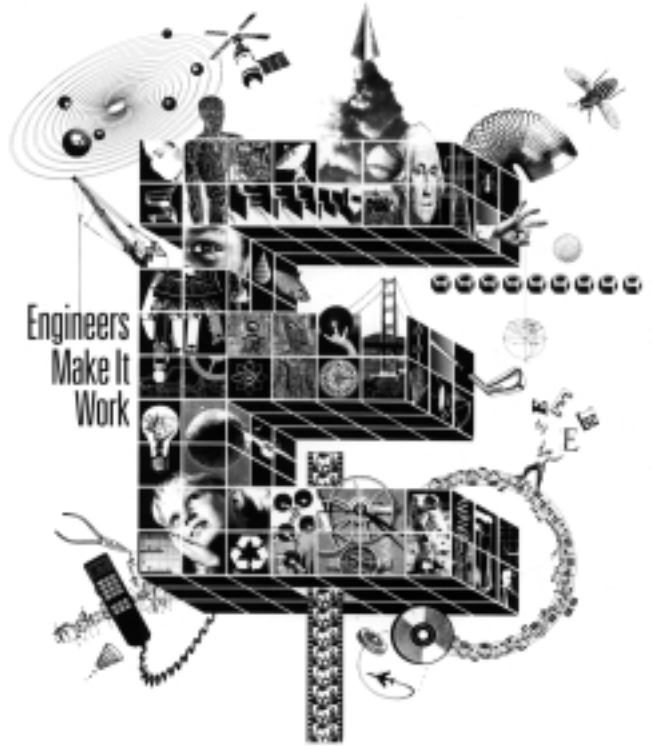
BY DESIGN

***A Viable Option:
Windom's "New"
Wastewater
Treatment Plant
Retrofits for Smart
Use of City Resources***

A change in environmental regulations for the Des Moines River basin forced the City of Windom, Minnesota to undertake the construction of major wastewater treatment facility improvements. Dennis Nelson, City Clerk, noted that during the initial planning of the wastewater treatment improvements, it was the goal of the City to provide the most cost-effective wastewater treatment improvements which would provide a long-term reliable and efficient operating facility.

The City interviewed several engineering consulting firms to perform the engineering design and construction management and selected Bolton & Menk. "Bolton and Menk came in with a well thought out, creative plan that included retrofitting," Nelson explains. "Their plan met our needs and kept us at Class B status, which will save money for years to come."

(Windom, continued on page 4)



National Engineers Week.

February 18-24, 1996

Engineers: Turning Ideas Into Reality

Engineers transform ideas into reality, solving practical problems with science and technology so that products, services and systems better serve people's needs.

Bolton and Menk joins with the National Society of Engineers in

celebrating National Engineers' Week February 18 through 24. We offer congratulations to our own engineers and others, who are making an important difference in the quality of life in this region and throughout the world.

Company News

Service Awards

Employees Devote Years of Service



Honored for years of service with Bolton and Menk at the firm's annual holiday dinner party were (l-r) Joanne Wasmund of Fairmont, Laura Busch and Kirk Yahnke of Mankato, all for ten years; Larry Zeig, L.S., of Sleepy Eye for twenty five years and Linda Kimble of Mankato for ten years. Not pictured from Mankato are Neil Schuette for twenty five years, and Dave Kunath for ten years.

New Staff

Scott R. Vandenburg has joined our Environmental Division in Mankato. He has over three years of experience



Scott R. Vandenburg

in the water and wastewater field, including two years as a Water Resources Engineer for the Peace Corps in Mali, West Africa. Scott

holds a B.S. degree in civil engineering and is a graduate of the University of Iowa.

1995 Founders Award Presented to Dick Gardner of Bolton & Menk's Mankato Office

Richard D. Gardner, a survey technician of the Mankato office, has been named recipient of the 1995 Bolton & Menk Founders Award.

Presented in honor of the firm's founders, John Bolton and Martin Menk,

the award recognizes outstanding contributions to the company as well as community and professional leadership. John and Martin believed that truly successful businesses are made up of people who are committed to the goals of the firm, who represent the firm well to their community and who are dedicated to meeting the needs of our clients. This award is given to an individual who exemplifies them but is not normally in the limelight or the recipient of public



Dick (center) is pictured with Bolton & Menk president, Jon Rippke, and co-founder, Martin Menk.

attention. Dick has dedicated his entire career to Bolton and Menk, joining the firm in 1951. He is committed to the goals of the firm and to our clients. At times, he may seem over-committed as he has a hard time saying "no" to a prospective client and will literally work day and

night to meet a client's needs.

Dick is also a dedicated family man. He is very involved with the activities of his children and wife, who has frequently assisted him on a weekend in the field to complete a project. Dick is not only a top-notch employee but also a good citizen, and a fine person to know. We congratulate Dick on his achievements and honor him with this award.

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**Quality Engineering for
Tomorrow's World.**

Bolton & Menk is an affirmative action employer.

BY DESIGN

Restoring One of Minnesota's Treasures



*Jon Rippke,
President*

The Minnesota River is one of Minnesota's most treasured resources. It provides a recreational opportunity for thousands of Minnesotans and visitors, and is used for municipal and industrial purposes. From a major spring originating at the Minnesota-South Dakota border, the Minnesota River flows for 335 miles through some of the richest agricultural land in Minnesota and joins the Mississippi River at Minneapolis/St. Paul. As Minnesota's largest tributary of the Mississippi River, its average volume increases the Mississippi River's flow by 47%. It has also been estimated that it adds to its pollutant load. In fact, the United States Geological Survey measured the sediment load of the Minnesota River at Mankato for thirteen years and found a median sediment concentration of 92 milligrams per liter, a sediment load equal to 2,700 tons per day or the equivalent of a 10-ton dump truck passing through every five and a half minutes.

In the past, efforts to clean up the Minnesota River have concentrated on controlling pollution from point sources. Point source pollution arises from a well-defined origin such as the end of an outfall line from a municipal wastewater treatment facility or an industrial facility. The Federal Clean Water Act of 1972 enacted legislation mandating the regulating and permitting of point source pollution. Along with the regulatory requirements, legislation also established a financing source to encourage pollution generators to comply with the new regulations. These legislative actions have served to significantly reduce the amount of point source pollution that enters the Minnesota River.

Today, state and federal agencies are taking legislative action to reduce the amount of nonpoint source pollution that enters the Minnesota River and its tributaries. Nonpoint source pollution is generated by a wide range of human activities and land management practices that generally cannot be traced to a single source. In this case, the

pollutants are carried to the river by wind, seepage through the soil and runoff from irrigation, rainfall and snow melt. Nonpoint source pollution can originate from roads, parking lots, construction sites, lawns, septic tanks, feedlots, and agricultural fields. Many people believe that runoff from urban areas doesn't contain pollutants that can degrade water quality. This perception is understandable since the amount of pollution from any single location is typically so small that it can't be physically seen and on its own, would not be a significant concern. However, when the effects of all of these single locations



The Minnesota River Basin

are combined, they are a major source of pollution because urban runoff can contain salt, heavy metals and organic chemicals from paved areas; fertilizers, pesticides, leaves, grass and pet waste from lawn areas; and sediment from construction sites.

In response to the social, economic and environmental impacts of nonpoint source pollution, the Minnesota Legislature enacted a statute that mandates local governments to require the provision of storm water retention devices for all developments that create more than one acre, cumulatively, of impervious surface. The Minnesota Pollution Control Agency now requires the permitting of any construction activity that disturbs more than five acres of land.

To maintain pre-development runoff rates and improve the quality of runoff our states' receiving streams will have to be looked at differently. Storm water management philosophy, planning and policy will

(River Valley, continued on page 4)

ALTA/ACSM Land Title Surveys:

What Are They & Why is Demand for them Increasing?

An increasingly common requirement for all types of land sales is a title survey — more often referred to as an ALTA/ACSM survey. ALTA surveys record significant improvements on the subject property such as structures, utilities, roads, parking areas, easements and other features that can affect the use of the property. Buyers, lenders, title insurance companies and others involved in the transaction use the ALTA surveys to assist in evaluating current and future ownership problems.

Survey managers throughout Bolton & Menk have noted a steady increase in the number of ALTA survey requests over the last decade. Legislation and legal decisions have increased the risks associated with all property transfers, and lenders and title insurance companies have used ALTA surveys to better identify potential problems. The additional detail of an ALTA survey helps the title team resolve

responsibility for underground tanks, building encroachments, burial grounds, accessibility and other matters that may not be otherwise known.

The title survey standards were jointly developed by the American Land Title Association and American Congress of Surveying and Mapping. The standards are periodically revised to reflect current concerns in the title and survey industry. Bolton & Menk performs many ALTA surveys each year for all classes of transactions, from residential to complex commercial deals like a recent project involving thirty separate sites, each requiring an ALTA survey.

As more buyers and lenders seek to protect themselves against the uncertainties of land ownership, it is likely that the need for ALTA surveys will continue to grow.

New Law Affects Water Tower Restoration



On August 19, 1996, new regulations regarding lead abatement went into effect in Minnesota. These regulations prescribe exact methods of removal of lead paint from steel structures (water storage tanks, bridges, chemical storage tanks, light poles, buildings, hand railings, etc.). Not only do the regulations prescribe exact methods of removal, but they also require the collection of all lead-containing waste and its disposal in an approved hazardous waste facility.

Although the most recent layer of paint on a storage tank may not contain lead,

it is possible that previous layers do. Therefore, abatement may be required; and there is no "grandfathering" provision in this new regulation.

Methods to control the escape of lead from the site include: containment with curtains around the entire structure, localized blasting and power



tools which have a vacuum attached, and chemical stripping with a vacuum. The particular method allowed depends on the amount of lead present, the height of the structure, the area to be repainted, the proximity and use of neighboring properties.

To municipalities, this means that the expense of repainting an existing water storage tank has just increased. It also requires a community to have a competent engineering evaluation of current facilities. In many cases, it will be more economical to construct a new tower rather than attempt to renovate the existing one.

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