

YOUR WATER WELL AND PUMP SYSTEM

Consumer's Guide

Do you need a water well for the new home you're building? Does your existing well or pumping equipment need to be replaced? Some homeowners feel uneasy when hiring a contractor to drill or repair a well. Here's some helpful information to assist you.

Does Michigan have water well construction standards?

Yes. Michigan's well construction code is based on the public health principle that if a well is properly located, constructed of suitable materials, and pumping equipment is correctly installed, the water system should provide a safe, reliable supply of water. Some counties have ordinances that are more stringent than the state code and most counties require that a permit be obtained before drilling a well or performing major repairs. Permits are required by state law for most wells that serve the public. Check with your county health department before proceeding.

Who can install or repair a well or pump?

Only a registered well driller or property owner can drill a well. Regardless of who installs the water system, it must comply with all applicable codes.

The Michigan Department of Environmental Quality registers water well drilling contractors and pump installers.

Minimum experience qualifications and an examination help ensure that only knowledgeable individuals become registered.

How to select a well drilling contractor

A new well and pump can cost several thousand dollars. Before deciding who to hire, do a little homework to compare quality and value. It will be time "well" spent.

You can obtain the names of local contractors from:

**County health department
County extension agent
Telephone directory under
"Water Well Drilling & Service"
Neighbors with wells
Well drilling equipment/pump
dealers
Local building contractors
Michigan Ground Water
Association, Inc.
Michigan Department of Environmental
Quality-Water Division-Groundwater
Section-Well Construction Unit**

To verify whether a contractor is registered, ask to see a current registration certificate or contact your county health department or the Michigan Department of Environmental Quality.

Check the contractors reputation by contacting past customers. Find out if the contractor completed the work satisfactorily and in a timely manner. A reputable contractor will have no objection to giving you a list of customers' names upon request.

Some questions to ask the contractor:

- ✓ **What diameter well will be installed?**
- ✓ **What will be the depth of my new well?** (A contractor cannot always predict the final depth, but depths of nearby wells offer some guidance.)
- ✓ **Will the well be finished in bedrock or will it be screened?**

- ✓ **Will steel or plastic well casing pipe be used?**
- ✓ **What type of screen material is used? Will the screen be removable for future replacement if necessary?**
- ✓ **How much will the drilling cost and are casing and screen included?** (Most contractors charge on a per foot basis.)
- ✓ **Is a lower drilling rate charged for the uncased portion of a bedrock well or does the same drilling rate apply for both the cased and uncased portions?**
- ✓ **What type and size pump and pressure tank will be used?**
- ✓ **How will the space between the well casing pipe and the borehole be sealed (grouted) to prevent well contamination?**
- ✓ **Are there any water quality problems in my area that will require a deeper well or that will require water treatment equipment?**
- ✓ **Are there water quantity problems in the area? Will additional storage tanks be required?**
- ✓ **Will the water be tested after the system is completed and will I be given a copy of the water test results?**
- ✓ **Is the cost of the water test included or will I be charged extra?**
- ✓ **Will a well log be given to me within 60 days of completion, as required by state law?** (A well log shows the well construction details and formations penetrated. It is useful if future well service is necessary and is also needed during real estate transfers.)
- ✓ **Do I still pay if no water is found, if not enough water is found, or if poor quality water is obtained? If so, how much is charged?**

- ✓ **How much will it cost to plug my abandoned well?** (A well no longer in use can be a channel for contamination and can ruin your new well.)
- ✓ **Do you use written estimates and contracts for our mutual protection?**
- ✓ **Do you carry insurance to protect both of us?**
- ✓ **Will I be given a detailed billing invoice?**
- ✓ **Will the contractor obtain the permit or will that be my responsibility?**
- ✓ **Will any replaced parts be returned to me or will I be given an opportunity to inspect the replaced parts?** (Some parts must be returned to the dealer to obtain replacement under warranty and some items, such as well casing and screens, cannot always be retrieved.)
- ✓ **What type of material is used for the water line from the well to the house and for the pump drop pipe (pipe within the well on which submersible pump is suspended)?**
- ✓ **What length water service line is included with the quoted price?**
- ✓ **What equipment is covered under warranty and for how long?**
- ✓ **Is some or all of the work performed by subcontractors? If so, who are they?**
- ✓ **If a problem arises with a subcontractors work, will I have to deal directly with the subcontractor or will you get the problem resolved?**
- ✓ **How much site restoration will be done?** Well drilling rigs and support vehicles can make large ruts in lawns and the drilling process can be messy. Make sure you know what the contractor will do and what you will be expected to do.

Make sure that you and the contractor are in agreement over the location of the new well. A well must be located where it is not subject to contamination and where it is accessible for maintenance. The driller must also be able to get a drilling rig set up while avoiding overhead or buried utility lines. The location you had in mind may not be far enough from contamination sources such as septic systems, sewer lines, and fuel storage tanks. If you are having a well drilled to replace a contaminated well, be sure to let the well drilling contractor know. Tell the contractor about any special water needs that you have. If you plan to install a lawn irrigation system the contractor must know beforehand so the water system can be properly designed.

Good communication between you and the well drilling contractor is essential.

WELL TERMS

Aquifer - An underground layer of rock, sand, or gravel that contains groundwater in sufficient quantity to supply a well.

Borehole - A circular hole drilled into the ground for the purpose of constructing a well to remove groundwater.

Casing - Steel or plastic pipe placed into a borehole to maintain the well opening.

Groundwater - Water beneath the earth's surface which saturates the pores and fractures of sand, gravel and rock formations.

Grout - Cement or swelling bentonite clay used to seal the space between the casing and borehole to prevent well contamination.

Pitless Adapter - A device used to connect a water service line to a well casing below frost level without using an unsanitary well pit.

Screen - A filtering device at the bottom of the casing in a sand or gravel aquifer, used to keep sediment from entering the well.

Got a Complaint?

Usually the work will be completed satisfactorily. However, if you feel that you've been treated unfairly, the work was not performed satisfactorily or you didn't get what you paid for, discuss your concerns with the contractor. Often when you bring your problem to the attention of the business, you will find them willing to listen to your complaint and eager to settle it to your satisfaction. When you talk to the contractor, remember:

- * Be calm and courteous.
- * Explain the problem accurately and state how you think it should be handled.
- * In many disputes neither side is entirely correct. If you are willing to negotiate, say so.
- * If your attempt to resolve the problem fails, you may file a complaint with the health department. You may wish to advise the contractor that you intend to file a complaint.

How to File a Complaint

A complaint form can be obtained by contacting your county or district health department.

If your complaint involves violation of the well construction code, it is within the health department's authority and an investigation will be made. The health department will assist in getting the defect corrected.

There are certain types of complaints where the health department has no power to investigate or mediate. These include complaints about:

- * pricing or "overcharging"
- * product warranties
- * contractual disputes

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Sources for help with Water Well Problems

Water Well Industry (State)

Michigan Ground Water Association, Inc.
10475 Noggles Road
Manchester, MI 48158-9658
Phone: (734) 428-0020
Fax: (734) 428-0088

Water Well Industry (National)

National Ground Water Association
601 Dempsey Road
Westerville, OH 43081-8978
Phone: 1-800-551-7379
Fax: (614) 898-7786
Internet: <http://www.h2o-ngwa.org>

Consumer Protection

Local consumer protection agency, Better Business Bureau or:
Michigan Attorney General
Consumer Protection & Charitable Trusts
Law Building - 6th Floor
525 W. Ottawa, P.O. Box 30213
Lansing, MI 48909
Phone: (517) 373-1140
Fax: (517) 335-1935

Product Warranties

Water well drilling equipment and supply dealers or manufacturer's district representatives.

Water Treatment Problems

Water Quality Association
4151 Naperville Road
Lisle, IL 60532
Phone: (630) 505-0160
Fax: (630) 505-9637
Internet: <http://www.wqa.org>
Website: mail.wqa.org

Well Construction Code

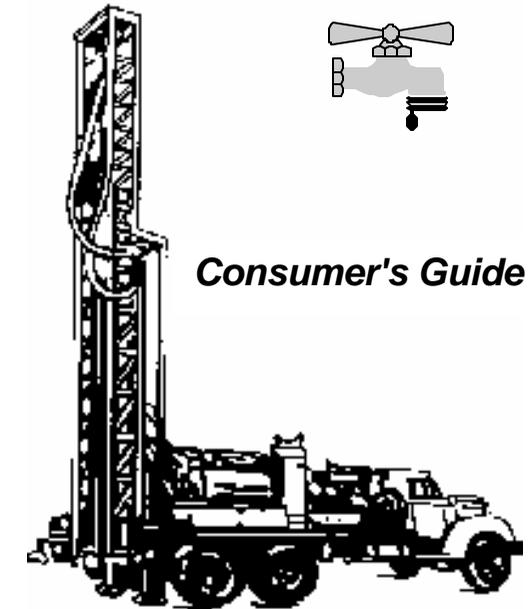
Michigan Department of Environmental Quality
Water Division
Groundwater Section
Well Construction Unit
Constitution Hall, 525 West Allegan, 2nd Floor North
P. O. Box 30630-8130
Lansing, Michigan 48909
Phone: (517) 241-1377
Fax: (517) 241-1328
Internet: <http://www.michigan.gov/deq>

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State of Michigan
Jennifer M. Granholm, Governor

Department of Environmental Quality
Steven E. Chester, Director

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