



AUGLAIZE COUNTY

Engineering Department

P.O. Box 59
1014 S. Blackhoof Street
Wapakoneta, Ohio 45895

TELEPHONE 419-739-6520
FAX 419-739-6521
Email: doug@augcoeng.com



Douglas Reinhart
COUNTY ENGINEER

Jeremy Bowersock
12889 Ritchie Road
Wapakoneta, Ohio 45895

November 20, 2012

Dear Jeremy;

The following is the flood plain information you requested on the parcel of ground on the north side of National Road, 0.4 mile east of Bowsher Road and west of an existing creek.

The first attachment is the FEMA flood plain map # 39011C0020C which depicts the flood zone along the adjacent creek just east of your parcel. Note that the flood plain does not extend south to the roadway but is confined to an area adjacent to the stream and a few hundred feet off the roadway. Unless you were planning to build adjacent to this stream, versus the higher ground to the west, your proposed structure should be well out of the FEMA flood plain and not subject to mandated flood insurance.

Just because the FEMA flood maps do not cover a large area near the stream, that does not say that there cannot be localized flooding during a major event. During the February, 2011 storm (which we are calling a 50-year event), water did not go over the roadway at the bridge, but was hitting the bottom of the beams. I'm sure also water was not contained inside the limits of the channel and flooded some of the adjacent field near the stream. People who build immediately adjacent to streams during low flows do not realize the consequences during a major event.

Please use that data to help determine the elevation of the bottom of your footers or basement. If you build to the far west side of your proposed lot, due to that elevation, you may be able to eliminate the need for a sump pump. Based upon the numerous phone calls I receive here about flooded basements, a gravity drain for a home should be something everyone would strive for.

Other suggestions that I used at my home when it was built. Do not use the corrugated rolled plastic tile for drainage. It was designed for agricultural drainage and not residential. It has an extremely low crushing strength and I have seen it virtually collapse when initially installed due to the weight of the dirt. Second, the corrugations on the inside will catch any debris (solids from a septic tank or leaves, bird nests from a downspout drain) and plug the line. Use black polyethylene plastic piping that is corrugated on the outside for strength and smooth walled on the inside to eliminate flow restrictions. It comes in 20' sticks with premium joints that will seal the pipe so you don't have tree root problems from the landscaping you do around the house. Plus, a 4" smooth walled pipe will carry 50% more water than a 4" with a corrugated interior. You can use this same pipe with perforations for your footer tile around the house but then go with sealed pipe to the ditch. Do not hook your downspout drains into your footer tile. Most people who complain of water in their basement tell me that it is clear water which means it is from off their own roof. I ran two separate lines around my house. A 4" smooth walled perforated was installed adjacent to the house for a footer drain which was then nonperforated as it headed to the stream. The second was a 6" smooth walled non-perforated for downspouts and was located about 8' away from the home. They both were run independently (but in the same trench) to the outlet and I have not had a single drop of water in my basement in 20 years and there is no sump-pump.

Don't let contractors talk you out of using the better pipe. It takes only a small amount of extra work to install initially and the extra price for the better pipe was only a few hundred dollars more. As close to the open ditch outlet as you are, doing the drainage correctly will only be a small portion of the overall cost of the house. It's much cheaper than having to replace carpeting in the basement just once. The pipe is made in Findlay at the Hancor plant and is sold by a few local distributors. They also will deliver to this area quite often. I have some of their books here that shows their fittings, pipe specifications, etc.

Hope this helps and if you have any other questions, please call.

**Douglas Reinhart, P.E., P.S.
Auglaize County Engineer
Auglaize County Flood Plain Coordinator**

A handwritten signature in dark ink, appearing to be 'DR' or 'Douglas Reinhart', written in a cursive style.

One last thought. Look closely at the aerial photo that is enclosed. Those white lines across your parcel are buried subsurface tile running mostly north/south that drain the field and eventually discharge into the creek. I have seen contracts cut them off during the construction of a home when it is dry and not divert them around the home. They will carry water during the wet season and need to be re-routed around your construction. They can be hooked into the 6" tile I spoke earlier about that will carry your downspout water. People have called in numerous times asking why their sump pump is always running or they have a constant wet spot along a basement wall. In almost every case, it was an old field tile that was cut off and never addressed.