Improve your bottom line from the underground, up.

Total solutions for agriculture drainage
IS DRAINAGE AT THE TOP OF YOUR LIST?

We have over 40 years experience in agricultural applications. Our pipe—the one with the distinctive green/blue stripe—has been used for everything from mains and gravity manure systems to culverts and open ditch enclosures.

Many agricultural professionals agree that improved drainage is one of the most cost-effective ways to increase crop production.

According to research experts, the top twelve factors that affect yield are: (Listed in order of importance)

1. Drainage
2. Crop variety
3. Insect/seed problems
4. Crop rotation
5. Tillage (timing and type)
6. Compaction (susceptibility by soil type)
7. Soil pH (liming)
8. Herbicides (misapplication & drift, organic tie up and clay %)
9. Subsoil conditions (clay layer, acid fragipans)
10. Fertilizer placement (broadcast, band, stratification)
11. Fertility of soil
12. Plant population (23,000 vs. 30,000)

IT SHOULD BE.

NUMEROUS BENEFITS ARE GAINED BY IMPROVING AGRICULTURAL DRAINAGE SYSTEMS:

Greater crop production—According to a study by The Ohio State University, subsurface drainage can increase crop production up to 50 percent.

Make resources more efficient—Fertilizer and crop protection products work best with an effective drainage system.

Disaster prevention—Drainage helps lessen the risk that fields will be too wet to plant.

A longer growing season—Well-drained soil warms faster in the spring, allowing for earlier planting.

Prevent heavy soil erosion—A quality drainage system enables the soil to absorb heavy rainfalls.

Reduced downtime and labor costs—Operations on well-drained soil can be completed faster than damp ground. Also reduces wear and tear on equipment and lowers fuel consumption.

Increased revenue—With greater crop production and improved farming operations, a quality drainage system can pay for itself within five to seven years. G.R.O.W. Analysis™ proves this.
**PROOF THAT DRAINAGE PAYS**

G.R.O.W. Analysis℠ software shows why draining fields gives a Greater Return On Water and a greater return on investment. The software shows how a drainage system from ADS/Hancor pays for itself (and then some) with increased yield alone.

Land Purchase Analysis℠ software illustrates how the purchase of more land would affect a farm’s bottom line. Rarely do the benefits of investing in more land exceed the value of draining presently owned fields.

Both programs are easy to use and only require that the user complete a short information form to help generate accurate data. The software is available free of charge from your local sales representative. The software can also be found online at [www.ads-pipe.com](http://www.ads-pipe.com).

<table>
<thead>
<tr>
<th>Corn Yield Range</th>
<th>Percentage of Field</th>
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<tbody>
<tr>
<td>220–130</td>
<td>10%</td>
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<tr>
<td>210–219</td>
<td>20%</td>
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<td>200–209</td>
<td>30%</td>
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<td>190–199</td>
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<td>180–189</td>
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<tr>
<td>140–149</td>
<td>90%</td>
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<td>130–139</td>
<td>100%</td>
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<tr>
<td>less than 130</td>
<td>0%</td>
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</tbody>
</table>

Proper drainage promotes healthy roots, yielding greater crop production.

This GPS yield map shows a corn field in which the lower third features a subsurface drainage system. It's plain to see the difference drainage makes: the drained portion produced around 40 bushels per acre more than the field’s average yield.
The sizing and maintenance of agriculture mains is crucial for the performance of drainage systems. No matter how many acres need to be drained, ADS/Hancor has a product to fit your specific installation needs.

For agriculture mains, we offer both perforated and solid single wall corrugated pipe in sizes up to 24". Maxi coils of large diameter pipe are available in sizes up to 12". A maxi coil of 12" pipe contains 330', 10" contains 520' and 8" contains 820'.

The smooth interior of N-12 HDPE drainage pipe reduces friction, allowing water to flow smoothly, while its corrugated exterior allows for superior strength beneath farm equipment. N-12 pipe is manufactured with integral bell couplers or plain end pipe with split couplers to make installation simple. N-12 pipe meets the standards of ASTM 2648, AASHTO M252 or AASHTO M294 depending on product type and diameter. For installation information please refer to ADS/Hancor IG1.03 and Plastic Pipe Institute TN-37/2006.

ADS/Hancor manufactures tees for all sizes of pipe that make it easy to connect the submains and laterals to the main line—saving time and money. Also available are 4" tap tees that allow the lateral to be connected to the agriculture main by drilling a hole and then inserting the tap tee.
IRRIGATION AND DRAINAGE WITH THE SAME PIPE

The Irri-Drain® system allows fields to be irrigated and drained using the same pipe and installation. By installing the Irri-Drain system, farmers gain better—and immediate—control of the moisture in their fields. The Irri-Drain system may also prevent the run-off of nitrates which saves money and conserves the environment.

In the irrigation process, water can be pumped back into the field via the perforated pipe system—watering crops’ roots directly. When drainage is required the pump is shut down and the drainage outlet is opened.

In 1992, The Ohio State University and the USDA Agricultural Research Service began a five-year subirrigation/drainage study in Ohio. The results show soybean yields and corn yields as great as 43% and 30%, respectively, for subirrigation/drainage systems compared to subsurface drainage alone.

THE IRRI-DRAIN SYSTEM

Saves money—Irri-Drain is comparable in price to a pivot irrigation system.

Saves energy—Using gravity flow and low pumping pressure, an acre-inch of water can be built into the sub-soil with minimal energy usage.

Eliminates evaporation—Common overhead sprinklers waste a great deal of water.

Increases field coverage—Irri-Drain reaches corners that pivot systems can’t touch.

Encourages deep rooting—Allows for maximum moisture and nutrient intake.

Allows for modifications—Irri-Drain is easily adaptable to previously installed drainage systems.

Controls nitrates—Studies have shown that controlling the water table during winter months may control nitrate outflow.

Sloping Land Design

The Irri-Drain system also works effectively on sloping lands. Head-control stands with overflow baffles are used to distribute the flow in stair-step fashion down the slope. Pressures of no more than 5 psi are sufficient to operate the Irri-Drain system.
ADS/Hancor manufactures smooth interior high density polyethylene (HDPE) pipe for a variety of installations enhancing animal feed operations. Our products meet and exceed the strictest engineering specifications.

We offer both soil-tight and watertight N-12 pipe joints to fit a wide variety of needs around animal feed operations. N-12 HP (High Performance) pipe is an ideal choice for animal feed operations because of joint integrity and minimized deflection.

**WATER AND EFFLUENT MANAGEMENT FOR ANIMAL FEED OPERATIONS**

N-12 pipe can also be used to collect storm water around buildings and underneath the site and route run-off to an outlet or a retention system.

Because HDPE is inert to animal effluent, N-12 pipe can be used for manure transfer from the barn to the animal waste lagoon.

ADS/Hancor can fabricate a wide assortment of fittings to fit the project’s requirements such as manure pond risers, manure reception pits and recharge line risers.
GEOTEXTILES HELP KEEP SOIL WHERE IT BELONGS

Woven and nonwoven fabrics improve the load carrying capacity of soils and can prevent rutting in animal loafing areas and unpaved roadways. Geotextiles also provide subgrade stabilization under waste ponds and pits, and help keep fine or silty soils out of buried drainage collector pipe. In addition, ADS/Hancor supplies pre-assembled silt fence to control sedimentation and run-off.

ADVANCED TERRACE DRAINAGE

Terraces have long been one of the most effective methods used to reduce soil loss on sloping ground. ADS/Hancor provides pipe and inlets for a complete terrace drainage system.
GROW YOUR BUSINESS WITH ADS/HANCOR

Your local ADS/Hancor representative offers a number of valuable services for farmers, contractors and distributors:

- G.R.O.W. Analysis™
- Land Purchase Analysis™
- Irri-Drain®
- Water flow calculators
- Installation training
- Farmer meetings
- Marketing support