



Time saved on Shadow Lake project with 3DXi

JAM Grading, Trucking & Demolition, a Nebraska-based contractor, had 400,000 yards of material to remove for a 47-acre horseshoe shaped lake, Shadow Lake. Shadow Lake would be the crown jewel of the 700 home development of the same name in a rapidly growing and prestigious suburb of Omaha.

The lake would require two separate digs. One 11-acres, the other 36-acres —with an uneven lake bottom — deliberately designed to provide for fish habitat.

Jon Maloney, the project superintendent for JAM explained that, "In many areas, the lake bed is anything but flat. It undulates with bowls, humps and ridges that are designed to be enticing habitats for fish when the lake is filled. While that's a great, environmentally-sound idea, it presented a whole new set of grading challenges for us. Based on previous experience with this technology, I made the decision early on to purchase a GPS system; it proved to be one of the best decisions we could have made."

JAM Grading used a Topcon 3DXI GPS+ system to bring operators the same grade control benefits available for years to users of dozers and scrapers.

According to the Todd Bechtel, vice president of Omaha-based DK&B Construction Specialties which worked to outfit JAM Grading with its Topcon equipment, the 3DXi features 360° CAN-based tilt sensors which continually measure angles from the excavator's cab, boom, stick, and

Company: JAM Grading, Trucking & Demolition

Location: Omaha, Nebraska

Project: Residential development

Location: Papillion, Nebraska

Scope: 400,000 yards of material - 47 acre lake

Topcon Products: Topcon 3DXi GPS+

Topcon Dealer:

DK&B Construction Specialties
La Vista, Nebraska

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AT WORK

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bucket. "This allows the operator to make a precise cut every time regardless of what angle the machine is at. If he is sitting on a 4% grade, for example, and puts the stick out, the unit has already factored in that grade and displays the appropriate terrain shot to him in real time." This new method to check grade became even more useful in the areas that were under water.

The grading project was completed ahead of schedule. Maloney said, "There's no doubt that the accuracy of the GPS shaved time off this project – in our case, I'd say we saved

weeks. In this business, both time and money can be lost through over-excavating and on a site comparable to what we were doing at Shadow Lake, just over digging by one inch can result in unnecessarily moving 5,000 yards of material. Given that our expenses out there were about \$12,500 a day, it's easy to see how that can all add up. Using conventional methods, it is possible to waste \$50,000 to \$60,000 in a hole that size. Because excavation is no longer guess work, that risk has been eliminated with the Topcon system."

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Topcon's GX-60

provides the operator with all the information needed to expedite excavation tasks. Topcon's GPS+ technology ensures maximum productivity with access to both GPS and GLONASS satellites



3DXi-GPS features include:

- Multiple views (plan, profile, section) display real time movement of the Bucket, Stick, Boom and entire machine.
- Easy to use color Cut/Fill Indicator for instant grade verification.
- Elevation reference lets you control grade on the left, right, or middle of your bucket.
- New graphical Machine builder specific for Excavators.
- Change buckets on the fly. Store up to six different sizes.
- Compatible with GR-3, Legacy, HiPer+ & HiPer Lite+ receivers.