

PROJECT DESCRIPTION: **EGGERS Wood Products Facility** **Linwood, NC**

Morris-Shea Project Component: **DeWaal Drilled Displacement Piles**



MORRIS-SHEA

Particle Board Plant

DDP PERFORMANCE CONCLUSION:

- REDUCED MATERIAL COSTS
- IMPROVED SCHEDULING
- INCREASED LOAD STRENGTH
- MINIMIZED NOISE/VIBRATION



ENGINEERED RE-DESIGN:

Morris-Shea installed deep foundation piles for the construction of the EGGER Wood Products plant in Linwood, NC. The EGGER Group, headquartered in Austria, is an international wood-based materials manufacturer. The new facility will be the company's first manufacturing plant in the U.S. This state-of-the-art particle board manufacturing plant will utilize the most advanced technology. Morris-Shea worked with general contractor Gray Construction, Inc. and structural engineer Teasley Services Group, LLC to redesign the initial foundation specification from H-piles to Morris-Shea's patented and more cost-efficient DeWaal Drilled Displacement Pile System.



DEEP FOUNDATION INSTALLATION:

The successful installation of DeWaal Piles decreased material expenses and improved project scheduling at the new particle board manufacturing facility. The DeWaal Pile System provided superior load strength in comparison to the initial driven H-pile design and minimized noise and vibration concerns at the I-85 Corporate Center building site. Morris-Shea utilized a Fundex 3500 drill rig to install 753 DeWaal Drilled Displacement Piles with lengths up to 84 feet. This unique fixed mast rig is ideal for deep foundation applications such as the DeWaal Pile System. Morris-Shea maintains the largest fleet of powerful Fundex drill rigs.



SITE CONDITIONS:

The site-specific geotechnical study reported residual soils above partially weathered rock (PWR). Morris-Shea's DeWaal Pile System provides excellent load bearing capacity in these soil conditions. DeWaal Piles are a drilled, full displacement, cast-in-place concrete pile installed by powerful, fixed mast drill rigs capable of applying high rotational torque and crowd forces to the unique DeWaal tool. DeWaal piles displace 100% of the soil, which densifies and improves the soil profile as the piles are installed.

DEWAAL PILE SYSTEM:

DeWaal Piles are the original drilled displacement pile system invented in Europe in 1985. Morris-Shea is the U.S. patent holder and sole licensee for DeWaal Drilled Displacement Piles in the Western Hemisphere. Morris-Shea has installed hundreds of thousands of DeWaal Piles since 1992.

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