



HELICAL

Geotechnical Design/Build

WORKING PLATFORMS

PART III OF III: OWNERS, CONTRACTORS AND GEOTECHNICAL CONSULTANTS WORKING TOGETHER

As described in our [Part I](#) and [Part II](#) narratives on this important topic, stable Working Platforms are essential for safe, productive working conditions on sites that have poor soil conditions at shallow depths. These soil conditions are often not suitable for construction loads imparted by cranes, piling rigs, ground improvement rigs, concrete trucks, and other construction traffic. Unstable Working Platforms can cause equipment/rig instability and tipping, which can lead to serious injury.



► A lull for concrete formwork is stuck after attempting to traverse an unstable Working Platform.



► Accident Involving a Piling Rig
Image source: Guide to Working Platforms By the Joint EFC/DFI Working Platform Task Group 1st Edition December 2019

After numerous serious accidents attributed to inadequate Working Platforms, industry trade organizations at the national level recognized the critical need to address Working Platform deficiencies. A joint effort between EFC/DFI/ADSC developed thorough guidelines and recommendations detailing Working Platform design and performance. Our three-part narrative is intended to provide a high-level review of Working Platforms. Much greater detail can be provided by reviewing the reference guidelines, which can be found [here](#).

While Owners are ultimately responsible for providing safe working conditions for their workers, it takes a team of professionals working together to help ensure safe, dry, and stable Working Platforms (WPs) from which site construction activities can be executed. Our Part I and Part II narratives focused on the roles of contractors and geotechnical consultants, respectively. The list below summarizes the high points from those narratives, including how the respective roles should coordinate together during project evolution.

- 1 Early identification of potential Working Platform instability is a geotechnical issue (similar to foundation support, slab/pavement support, lateral earth pressures, excavation support, fill compaction, and subgrade preparation), and should be addressed in the geotechnical report and project specifications. This is often crucial for piling and ground improvement projects where poor subgrade conditions are coupled with tall, heavy equipment.
- 2 Contractors should plan for WP considerations during the bidding process, including developing a WP Plan that can be distributed and considered by bidding site subcontractors such that they can carry corresponding costs. WP Plan development should include solicitation of equipment specifications from bidding site and geotechnical subcontractors, and consultation with the geotechnical consultant. Refer to our [Part I](#) narrative for further detail on WP Plan development.
- 3 Once the job is awarded to a General Contractor, the site subcontractor procurement process should include a review of the WP Plan to ensure that appropriate costs have been carried. Safe WPs are a safety matter and not something that can be omitted as a cost/value measure.



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Once the job is awarded to a site subcontractor (and perhaps also a geotechnical contractor as the case may be), preconstruction meetings should include a review of the WP Plan to ensure buy-in from all parties. Any differences-in-opinion should be vetted and resolved with clear accountability prior to beginning work.

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During construction, on-site observation and documentation of WP preparation by the project geotechnical consultant is important to help ensure consistency with the project planning phase.



► Two Geopier® GeoConcrete® Column (GCC) rigid inclusion crews operate on a well-prepared Working Platform.

In summary, a well-prepared Working Platform is critical to help provide safe, productive working conditions for all workers. Early communication and coordination by a team of professionals are essential to help ensure that proper Working Platform measures (and associated costs) are implemented.

For more information on sitework Working Platforms, refer to [the EFC/DFI Guide to Working Platforms](#). We would once again like to acknowledge and thank the International Association of Foundation Drilling (ADSC) for their ongoing efforts in championing this important safety matter at the regional and local levels. Thanks for your leadership EFC, DFI and ADSC!

