Case Study

Public Application



Crystal Creek Shiller Park, IL

In Shiller Park, IL (a suburb of Chicago) an existing flood control channel needed to be enhanced. The existing channel was in disrepair, needed some minor re-alignment, and needed to have an increased flow capacity. The area in which the channel existed was a densely populated residential area with the back sides of existing homes coming right up to the channel. Thus, excavation limits were VERY TIGHT. A gravity wall was critical

The solution involved a VERY UNIQUE approach, focused on limiting the excavation cut and allowing for near vertical construction so as not to encroach upon existing structures and adjacent property owners.





Project: Crystal Creek Flood Control

Location: Shiller Park, IL

Product: ReCon Series 50

Channel Gravity Wall

ReCon Manufacturer: Service Konstruction Supply

Wall Area: 25,000 SF

Wall Contractor: Albin Carlson & Company

Engineer: Highland Engineering, PC



In addition, the approach avoided the need for temporary shoring as well. The ReCon design was a gravity wall with a twist. To limit the cut at the base of the wall, a 39" deep block was utilized. This did not provide sufficient mass / base depth for the design, but it required a less invasive cut than what would have been required had a 60" deep block been placed at the bottom of the wall.



For more information on ReCon products and services, please visit www.reconwalls.com, or call 952-922-0027

Retaining Walls

To get the design to work from an overall stability perspective, the wall transitioned from a 39" block at the base, to a 45" deep block and then a 60" deep block. The cut had to be "laid back" for safety and did allow for the gradual transition to these deeper blocks. The 39" and 45" blocks were completely embedded and the soil behind them needed to be low permeable.

By using the 39" as the base, the depth of the cut was minimized and they solved the problem with "right of way". Because they could not go vertical with the cut, it gave them the room on course #2 for a 45" and on course #3 for a 60".

