

Case Study

NDS StormChamber[®] System Dura Slope[®] Channel Drains

NDS CHAMBER AND SLOT DRAINS TACKLE STORMWATER FOR ESTATE'S RENOVATED PATIO AND POOL

A Milwaukee resident was planning to make several renovations to the exterior of his single-family estate, which was located on a double lot in a coveted Upper East Side neighborhood outside of Milwaukee. The project entailed updating the in-ground pool and spa area at the back of the home, enlarging the dining and lounge patio area, and incorporating new concrete pavers that matched the same design elements as the old-world details the home already possessed.

The addition of a larger pool and patio impervious hardscape surface required the owner to incorporate a stormwater management solution that was capable of handling not only the water from the new patio and pool area but drainage from the rooftops as well. The designer knew that NDS Design Worx[®] services could assist with developing a plan to address the new requirements.

CHAMBERS AND DRAIN SYSTEMS MAKE A SPLASH

The NDS Design Worx team reviewed the proposed plan with the designer to size and locate needed inlets and infiltration systems, offering a complete stormwater management solution. The recommendation included the placement of two rows of NDS StormChamber[®] system units in the open lawn space to the side of the home and adjacent to the pool and patio area. Thanks to the system's flexibility, the designer was able to direct the runoff from the roof, patio, and other landscaped areas to the storm chamber system – making it easy to store and detain all the extra water around the home.

For capturing sheet flow across the hardscape, the plan specified NDS Dura Slope[®] stainless steel slot top drain grates with the channel drains since their low-profile style was the best match for the home's overall design and architecture.



NDS Dura Slope channel drains are constructed of a durable plastic that is ideal for residential applications. With four ft. modular sections that snap together quickly, they are easy to install. The designer had originally specified another product but switched to Dura Slope channel drains due to their quality and durability. The contractor appreciated that NDS grates were in stock and readily available, as the original selection would need to be special ordered and take more time to arrive.

QUICK AND SUCCESSFUL INSTALL BEFORE WINTER

The contractor wanted to install both stormwater systems before temperatures plummeted to allow all newly placed sod to settle and attach. Product was ordered and delivered immediately, and the contractor and the NDS in-field technical team worked quickly to hold a preconstruction meeting to review installation best practices and the system layout provided by NDS. System placement was completed quickly and the contractor was ready for winter ahead of schedule, and able to plan for other phases of the project when spring reappeared.

PROJECT SUMMARY

PROJECT TYPE	PROPERTY
Storage and Infiltration Capture and Convey	Single Family Residence

STAKEHOLDERS
David J. Frank Landscape Contracting

NDS PRODUCTS USED
120 linear ft. NDS Dura Slope[®] channel drains and stainless steel slot top grates
16 qty. NDS SC-34 StormChamber[®] system units
NDS Flo-Well[®] dry well, pop-up emitter, and backwater valve

"Having resolved thousands of drainage issues over the years, this project's grade, site, and surrounding conditions presented a unique and substantial challenge to collect and disperse a tremendous amount of stormwater. By partnering with NDS, we were able develop a solution that not only functions perfectly, but aesthetically is undetectable."

- Jeff H., PLA, Senior Landscape Architect