Clean up is worth crowing about

Nebraska's Kearney State College had unwanted visitors from November to April for more than 10 years: an infestation of crows. When hired as Director of Physical Plant, Ron Smith was charged by the Faculty Senate with solving the problem.

The crow problem was serious for the College's 10,000 students, 36 residence halls and academic buildings, covering 1.6 million square feet.

"Crows are scavengers," says Smith. "They roost in large numbers

and are very large birds, breaking branches of trees they roost in. Their droppings are very acidic, and can be a real health problem."

Beside the health hazard, the crows were really a nuisance. The problem had become worse because winters have been milder and the birds congregated in Kearney instead of flying further south.

Smith's research indicated four unacceptable methods of ridding the campus of the crows. Those choices were chemical repellants, noises, trapping the birds in cages, and using poison.

Smith learned that "nothing was 100 percent effective. So we used a combination of ultrasonic units, pulsating lights, noise devices, repellents, and Terror-Eyes—two-foot diameter yellow vinyl inflatable balls with holographic 'eyes' and markings on front and back that make the crows think they are dealing with an owl. Crows don't like owls."

The Ultrasonic units (sound that can be heard by birds, but inaudible to humans), transonic units (audible to people, but not disturbing), and

Terror-Eyes inflatable balls all came from *Bird-X, Inc.*

Smith says his plan has been 95 to 98 percent effective in ridding the campus of the unwanted crows. Kearney spent about $8000 in fighting the birds. At least that much had been spent each year for cleaning up the crow's droppings and broken tree branches.
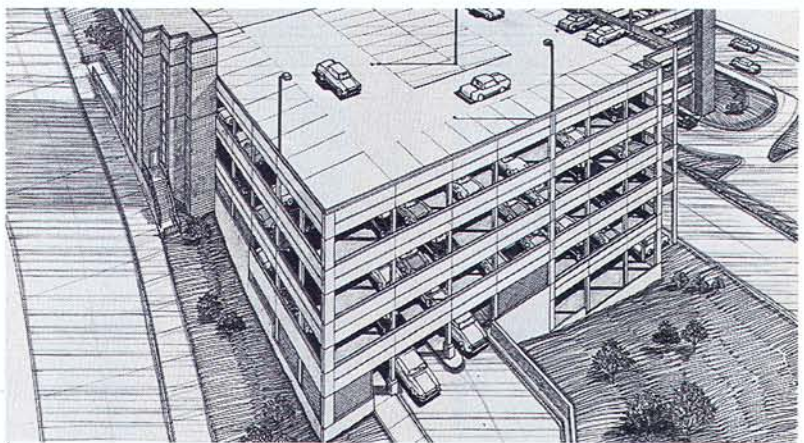
FOR DETAILS, CIRCLE **204**

Getting a garage and classrooms

The new parking garage being built on the Duquesne University campus in Pittsburgh, PA, will do a lot more than house cars.

The facility—being built on a 80-foot steep slope—will also support two floors of much-needed classroom space.

"Eventually, we're going to put two floors of classrooms and labs on top, which is very unusual, and this affects the design of the footers and the strength of the columns," says Isadore Linglet, Executive Vice President, Management & Business, Duquesne University.

"This is an expansion project built on an existing garage," says Linglet. "This basically doubles the space. It

will provide controlled-access parking to students and faculty during the day, and public special event parking in the evening."

Built by *Mulach Parking Structures Corp. (MPS)*, the expansion

was designed to utilize vertical rather than horizontal space, due to limited overall campus space. The company also was responsible for the design and construction of the existing parking garage.

"Mulach was our choice because of cost per parking space, construction guarantees (both steel and concrete), and their overall track record in building high-quality garages," says Linglet. "We looked at the guaranteed maximum price, and it was a turnkey operation. The first garage was actually built under the original contract price and under budget."

Hiring contractors amounts to forming partnerships, according to Linglet, so it is important to pick them carefully.

"We've had very good success in our construction projects," says Linglet, "and that's mainly because we carefully select the contractors. Sometimes contractors low-ball the cost and then they kill you with change orders throughout the project. We look for guaranteed maximum cost, where if one item of the budget goes up, then another goes down. We also take a close look at their subcontractors."

MPS uses hybrid castellated beams in steel-framed parking structures, resulting in stronger beams at lower cost. The builder also use a "composite structural frame" composed of structural steel, concrete slab and pre-cast panels. This technique takes maximum advantage of the concrete's compressive strength.

FOR DETAILS, CIRCLE **213**