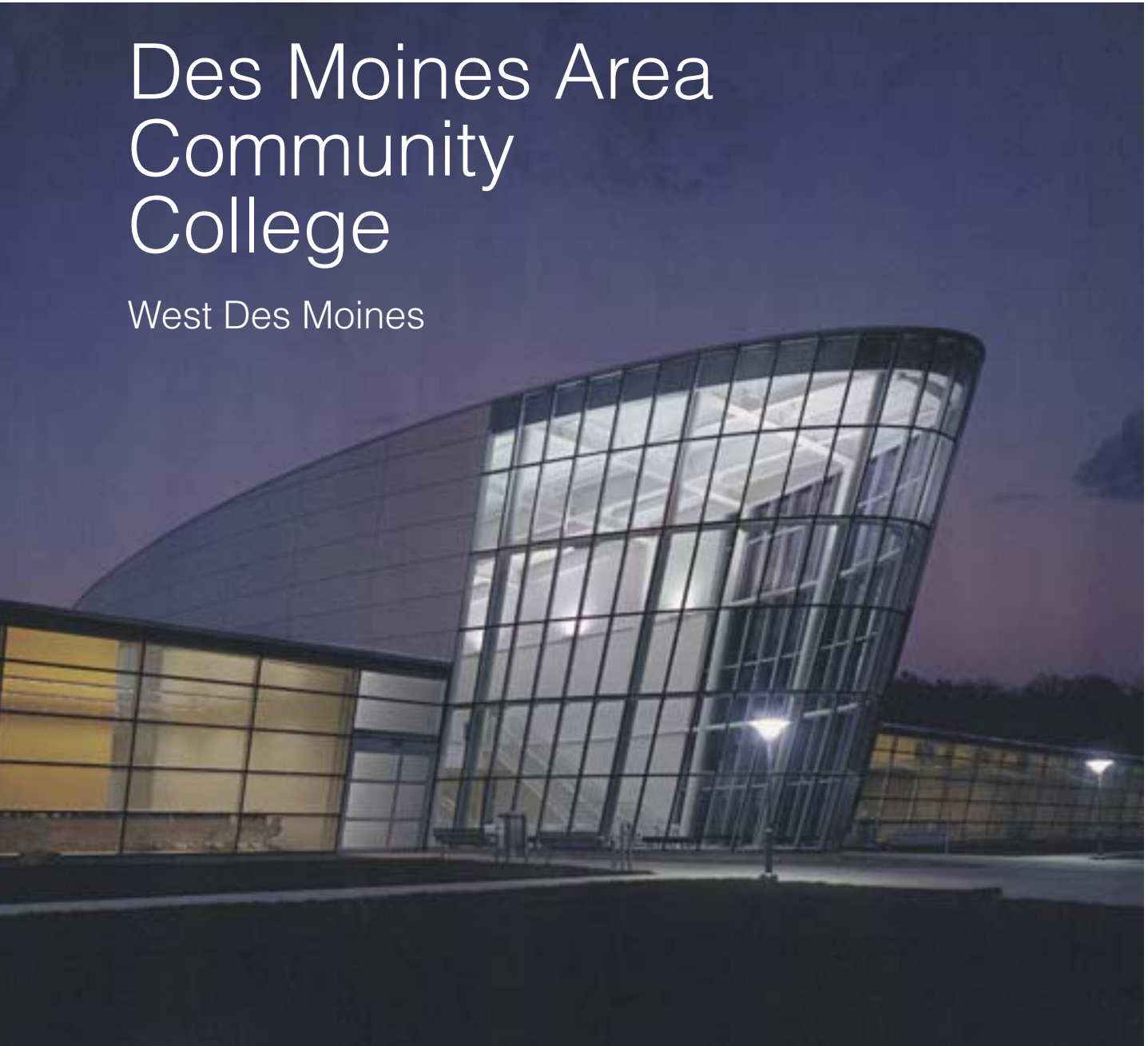




national winner
less than \$10 million

Des Moines Area Community College

West Des Moines



Photograph © Assassi Productions

Des Moines Area Community College envisioned its west-campus facility as a super-computer for education. Steel is used to organize the functional spaces into what resembles a computer data board in a central processing unit. An elliptically shaped social space at the core of the building includes a reception area, coffee bar, auditorium and lounge. It is a gathering

place for students and faculty to relax and learn more about what's happening throughout the college.

The ellipse is flanked by two expandable wings with various teaching components, such as the flexible labs, telecommunication lab, networking computer lab, classrooms, offices, team rooms and mechanical support rooms. Raised computer-access flooring provides flexible integration of technology,

juror comments

“Extreme simplicity and clarity of organization. Straightforward and simple framing offers refined elegance.”

and the use of strategically placed glass provides both acoustical separation and visual connection.

All of the columns were hollow structural shapes. The center elliptical section columns were 14" in diameter with $6\frac{5}{8}$ " HSS struts. The columns in the two wings were rectangular. All columns "leaned" toward the front of the structure. Lateral loads were taken out with a concrete shear wall in the center section.

The roof was supported on wide-flange shapes rolled to a 417' radius. Floor beams were composite with the slab. The slab between floor beams was supported on long-span metal deck. Connections were mostly welded to eliminate visible bolts.

The placement of the structure obliquely in relation to the street both animates the building design and protects computer-intensive courses from the sun. The passive solar design solution is supported by a pond-water-sourced geothermal mechanical system, providing exceptional energy performance. The 45,000-sq.-ft building was completed in 2001. ★

ARCHITECT

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Des Moines

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ENGINEERING SOFTWARE

RISA-3D

STEEL FABRICATOR/DETAILER

Johnson Machine Works, Chariton, IA
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DETAILING SOFTWARE

AutoCAD

GENERAL CONTRACTOR

Taylor Construction Group,
Des Moines, IA



Photograph courtesy Johnson Machine Works, Chariton, IA



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