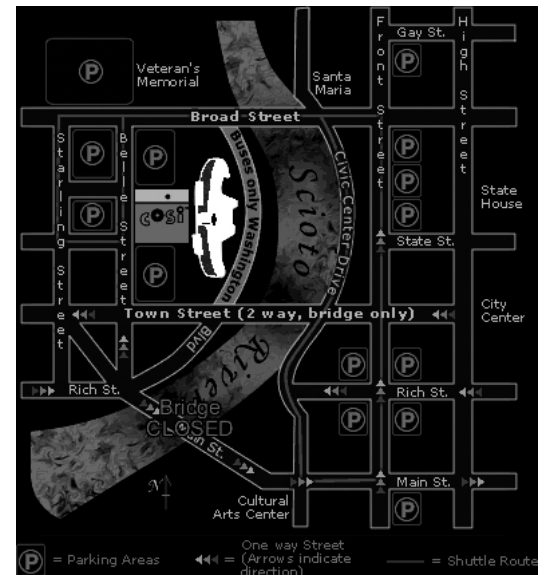




SITE AND ARCHITECTURE

COSI sits on the west bank of the Scioto River in downtown Columbus, Ohio. COSI's building envelope combines a new building featuring an innovatively curved precast concrete exterior and flooring system with an existing high school. The façade consists of a "clothoid curve" shape with precast concrete panels curving both side-to-side and bottom-to-top. The building highlights the unique design with cutaways in the walls to show the wall panel backs by leaving the double tees exposed over the first level.



PROJECT DATA

Building Name:

COSI – Center of Science and Industry

Location and Site:

COSI is located on the west bank of the Scioto River at 333 West Broad Street, Columbus, Ohio 43215

Building Occupant Name:

COSI Columbus

Occupancy or Function Types:

- Administration
- Retail
- Theater
- Public Assembly
- Restaurant

Size:

320,000 square feet

Number of Stories above grade:

COSI has two floors and a mezzanine

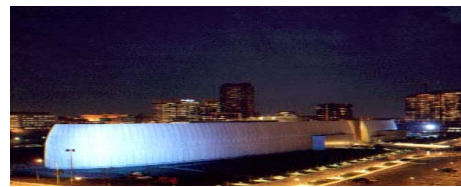




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Primary Project Team:	Owner:	COSI Columbus 333 West Broad Street Columbus, Ohio 43215
	Architects:	Arata Isozaki & Associates 9 – 6 – 7 Akasaka, Minato – KU Tokyo 107 Japan
		NBBJ Architects 1555 Lake Shore Drive Columbus, Ohio 43204
	Construction Manager:	Ruscilli Construction 2041 Arlingate Lane Columbus, Ohio 43228
	Mechanical Engineers:	H.A.Williams & Associates, Inc. 980 Old Henderson Road Columbus, Ohio 43215
	Structural Engineers:	Korda / Nemeth 1650 Watermark Drive, Suite 200 Columbus, Ohio 43215
	Civil Engineers:	Moody/Nolan LTD. Inc. 300 Spruce Street Suite 300 Columbus, Ohio 43215
Dates of Construction:		Construction for COSI began in 1997 and ended in November of 1999. The building opened to the public on November 6, 1999.
Cost:		\$125,000,000
Project Delivery Method:		Five prime; State Funded





Architecture:

Internationally acclaimed architect Arata Isozaki combined the past with the future in an innovative design by combining a historical building with a modern structure to form the new COSI. The new 230,000 square foot building, featuring an innovatively curved precast concrete exterior is joined with an existing 90,000 square foot Central High School.

Major National Codes:

- State of Ohio (BOCA)
- NFPA 45

Zoning and Historical:

- Zoning for the City of Columbus
- COSI does not comply with historical preservation

Building Envelope:

The existing high school was created from hand-laid brick while the new structure offers high-tech, precision made, precast concrete. The spacious glass atrium represents a joining of the two styles and a transition between the two architectural forms.

Building Systems

Electrical Systems:

The electrical distribution system is a radial system. The main transformer is located on the outside of the building and is owned by the utility company. There are 3- 2000/2240 kVA transformers that are in parallel. Power then enters the building to 2- 4000A, 480/277V, 3 ϕ , 4 wire, 100,000 AIC switchboards which is distributed to distribution panels and motor control centers throughout the building. There are two 1200A, 480/277V, 3 ϕ , 4 wire panels that feed off of each of the Main Distribution Panels. Also, there are 2 – 75KVA dry type transformers that serve to each exhibit area throughout the entire building, (1) serves for lighting and is 208Y/120, while the other serves for receptacles and other equipment and is 480V. HVAC is typically at 3 ϕ , 480V.

Lighting:

General areas of COSI are illuminated using fluorescent lighting. Typically, through the corridors and lobby, there are either T8 or T12 strips that are wall mounted. There are also many compact fluorescent downlights primarily in the lobby area. Daylight is integral to the design since lots of spaces in the building contain many skylights and window. This allows for natural light to enter, thus creating a very open and well-lit space. The lighting of each exhibit area is uniquely designed to fit the tasks and different themes in each of the areas. The lighting system is run on a theatrical control system.





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Mechanical Systems:

COSI's mechanical system is very efficient. There are (3) natural gas boilers that provide heat throughout the building. The chiller system consists of (3) high efficiency centrifugal chillers at 600 tons each. There are (35) air handling units that allow for good circulation throughout the building.

Structural Systems:

COSI is uniquely built in that it combines a new building featuring an innovatively curved precast concrete exterior and flooring system with an existing high school. The façade of the building consists of a "clothoid curve" shape with precast concrete panels curving both side-to-side and top to bottom. Double tees support the second floor and are exposed over the first level.

Construction:

The delivery method applied to this project was five prime. The project was state-funded. Construction for COSI began in 1997 and ended in November of 1999. The building opened to the public on November 6, 1999. The total cost of the project was \$125,000,000.

Transportation:

Since COSI is approximately 320,000 square feet, there is a need for the two main elevators in the building.

Telecommunications:

There are many data outlets located throughout the entire building. Also, there are junction boxes for data cables and power in the ceiling plenums of the exhibit areas for viewing of videos for projectors.

