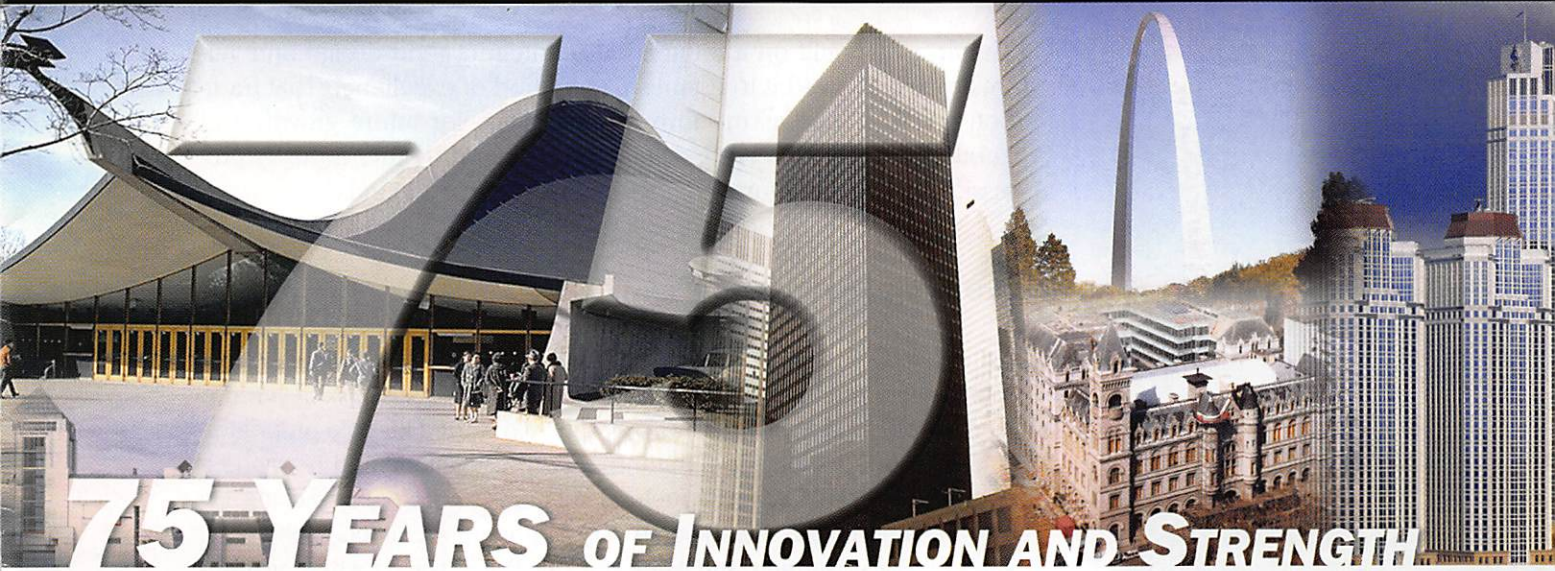


Severud Associates

NEW YORK

LONDON

PARIS



75 YEARS OF INNOVATION AND STRENGTH

- Office Buildings
- Museums and Cultural Facilities
- Airport Facilities
- Schools and Universities
- Healthcare Facilities
- Residential Facilities
- Hospitality (retail, restaurants, clubs)
- Auditoriums and Theatres
- Sports and Convention Facilities
- Research Facilities/Laboratories
- Houses of Worship
- Parking Structures
- Government Buildings
- Warehouses/Industrial
- Renovations/Alterations

2003

Severud Associates: 75 Years and of Innovation and Strength

Innovative. Reliable. Solid. Artistically savvy. The first three attributes are most revered in structural engineers. The fourth is equally revered at Severud Associates. Together, these attributes describe what makes Severud Associates 75 years strong and getting stronger.

The firm was built on a foundation of integrity, good design and versatility that allowed it to establish a tradition of excellence. That tradition will continue as the firm sets the stage for future growth and another 75 years of serving owners, architects and other industry professionals with structural engineering services of all kinds.

A Strong Foundation

It's about knowing where you come from to know where you are going. The strength of the firm comes from its roots. In 1928, Fred N. Severud, a Norwegian native, came to New York City and started his sole proprietorship. He started out performing masonry investigations, and he made a name for himself devising structural solutions to masonry cracking. He also became involved with some very important architects at the time, such as Eero Saarinen and Mies van der Rohe. This is when Severud Associates gained the reputation as a structural engineer that could think through any architectural "problem" and come up with an efficient, effective structural solution.

Through the years, Severud Associates built on its strong roots. Fred Severud took on many principals over the years. His son, Fred Jr. was a principal at one time, and only retired eight years ago. He is still active in the profession, teaching occasionally at the University of Missouri – Rolla, near the home of one of Severud Associate's early engineering feats – the St. Louis Arch.

The firm grew on its reputation and good work. But it wasn't until John Cryan became managing principal in 1984 that the firm started to plan for its long-term future.

People are The Firm's Greatest Asset

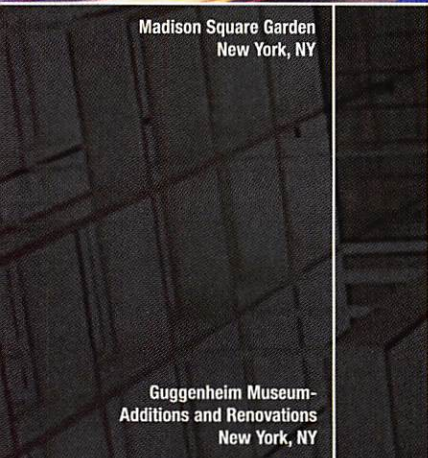
Cryan set into motion an ownership transition plan and firm structure that rewarded what the firm regards as its greatest asset – its staff.

He knew that the future was all about people. A solid plan for the future was what was going to attract and keep good engineers. It worked. Severud Associates hires good students right out of college, carefully nurtures them in the early stages and retains them for the rest of their careers.

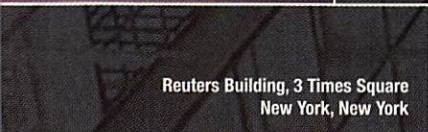
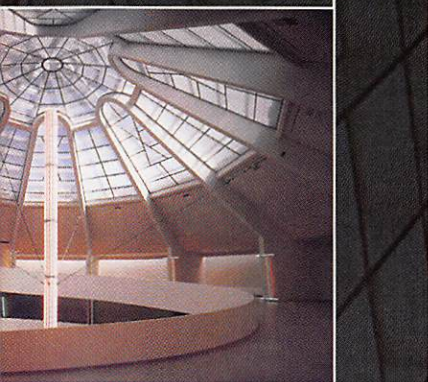
That means that clients are guaranteed competent, well-trained engineers working on every job – from the smallest stair replacement to the



Madison Square Garden
New York, NY



Guggenheim Museum-
Additions and Renovations
New York, NY



Reuters Building, 3 Times Square
New York, New York



most complex intricate structures. It also means that engineers advance as quickly as their abilities allow them and are given challenging, interesting assignments. That is why they stay. "Where else can I structurally condition survey the Lincoln Tunnel in New York, design an office building in Beverly Hills and a Boathouse in Texas, and renovate a 250 year old church in Pennsylvania, all in rapid succession?" asks Cawsie Jijina, one of the firm's five principals.

The environment at Severud Associates teaches engineers not to be afraid, but to be creative. The collaborative atmosphere allows engineers to think through issues, try them and know they will work – even if they have never been done before. It's this kind of environment that allows its young engineers to grow and take on new challenges all the time, without having to go to another firm.

"We are one big happy family, and that shows in our work," says John Baranello Jr., principal at Severud. "Our younger engineers find the principals approachable and know they can ask questions. That breeds development and growth at all levels. We are compassionate about our people and their families, and that means they stay and have long, rewarding careers, and our clients get the very best engineers in return.

"The talent and versatility of our staff means that we can solve any structural problem that is handed to us," says Jijina. "We can reach back historically for solutions, and use current advances in technology. There is nothing in the world we can't engineer."

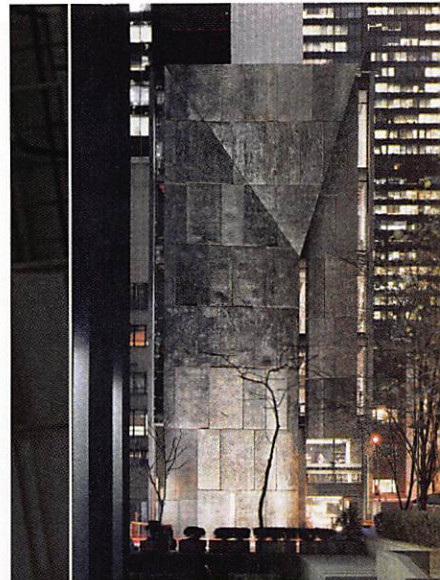
The firm is organized loosely in four design studios and there is an atmosphere of healthy competition among the staff. It shows in the lunch-time ribbing about different projects under design. At the same time, information, advice and the benefit of experiences on past projects flows freely between the entire staff. Personnel switch back and forth amongst the principals to meet staffing needs.

Quality Documents are Essential

The staff also takes great pride in its product, says John J. Cryan. He says the two greatest attributes of the firm are that "we are not afraid to be innovative," and "we put out documents that can be built."

In truth, a structural engineer can't have one without the other – if a design is innovative and perhaps never attempted before, then it is essential to produce drawings that a contractor can take out into the field, price out and build.

Severud prides itself in producing clear, concise, detailed drawings that rigorously adhere to the architectural design. Severud Associates employs this fundamental engineering practice on all projects to ensure that the firm's drawings are solid. Buildable.



Museum of American Folk Art
New York, New York



US Airway Terminal,
Philadelphia Airport



I.D.S. Center
Minneapolis, MN

One of the techniques that Severud uses to ensure that their drawings accurately reflect an architect's vision, is by listening. While it sounds simple, listening is one of the most difficult skills to master. Severud's Associates focus their energy on listening to the needs of the client. Once they have digested the challenges, they devise the most effective, economical structural solution. The Severud team utilizes the latest in CADD technology which allows them to produce their drawings efficiently and cost-effectively.

All Building Types Require Severud's Efficiency

One of the main attributes of Severud Associates is its systemized collaboration. By working as a team, the firm's principals, associates and project engineers work out structural solutions for all types of buildings:

- Office Buildings
- Museums and Cultural Facilities
- Airport Facilities
- Schools and Universities
- Healthcare Facilities
- Residential Facilities
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Ed Messina, Severud's principal says the diversity of projects that the firm delivers is one of its strengths. "In our 75-year history, we have 11,500 jobs under our belt that we can draw experience from. We cross all market sec-



Blue Cross Building-
1919 Market Street
Philadelphia, PA



Defense Plaza,
Paris



Hamptons Roads Coliseum
Hampton, VA

tors from offices, to apartment buildings, to museums and hospitals, and that allows us to apply the most efficient systems to each individual project."

Severud applies its teamwork philosophy to all project types. This philosophy is why "the firm excels at not just the most intricate and elaborate projects, like the Denver International Airport, but also produces efficient drawings for office buildings and other structures with repetitive typical floor arrangements" according to Edward DePaola, the principal who designed the tensile roof of the new Denver International Airport and the Reuters Tower in New York City.

Owners and architects know where to go to get the tough projects done right. They come to Severud. They have for years. In the 1950s, the firm provided the structural engineering for many innovative structures, including the Dalton Arena in Raleigh, N.C. and the auditorium and coliseum in Charlotte, N.C.

In the 1960's Severud provided the engineering for Madison Square Garden complete with its cable roof. The Ford Foundation offices in New York City were also built in this era along with the St. Louis Arch (formally called the Jefferson National Expansion Memorial).

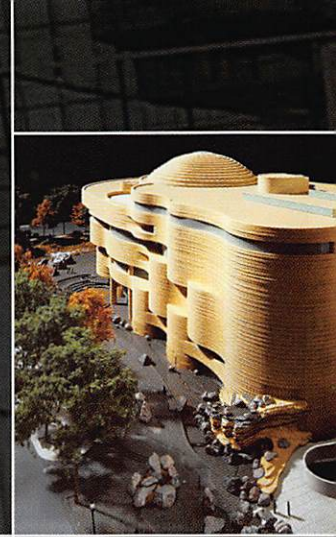
This early work set the stage for more recent special structures, such as the Denver International Airport, Denver, Co. and the National Museum of the American Indian in Washington, D.C, the last open site on the Mall.

The firm was just recently named as the structural engineer on the design team to re-build the new permanent Transportation Terminal at the site of the former World Trade Center in lower Manhattan. Working with premiere architect Santiago Calatrava to bring his architectural vision to life will be the firm's next structural challenge. But by thinking through the problem, collaborating, there is no doubt the firm will deliver on its promise.

Severud Associates: The Next 75 Years

Severud Associates has developed a structure that will allow the firm to advance into the next century with strength and confidence. The firm organizes each project with an interwoven web of principals, associates, project engineers, designers and CADD operators. A principal is involved in every project to advise clients on structural systems, alternatives, and the most cost-effective structural solutions. They recommend materials, and assume responsibility for timely performance within budget parameters. The principal in charge is always available to serve the needs of the project.

Severud regards its Associates as the core of the firm. They are the project captains. Associates prepare and assist in the evaluation of alternative designs. They prepare the specifications and assist the principal-in-charge with organizing and preparing the drawings. They prepare the details that make each project so uniquely Severud. They monitor project schedule and budget.



National Museum of the American Indian
Washington, DC

320 Park Avenue-Mutual of America
New York, NY





Broad Financial Center
New York, NY

Over the years, some very talented engineers have led Severud Associates. Here is a list of the principals of the firm during its first 75 years.

1. Fred N. Severud
2. Evin Elstad
3. Max Krueger
4. Alfred J. Perrone
5. Fred Fischer
6. Werner C. Sturm
7. Walter Conlin, Jr.
8. Hanskarl Bandel
9. Fred Severud Jr.
10. Tibor Szegezdy
11. John J. Cryan
12. Ronald C. Denger
13. Edward M. Messina
14. John A. Muller
15. Edward M. DePaola
16. John A. Baranello, Jr.
17. Cawsie Jijina

The project engineers work with their project leaders on all tasks needed for the project. They prepare the necessary calculations, check shop drawings, make field inspections and more. Engineers and CADD operators round out the team.

A different Principal and his Associates serve as the Quality Assurance Team, poking holes in the contract documents before they are released.

This holistic approach engages all the talents of the firm at all levels. It is the essence of Severud Associates' success and its roadmap for the future.

"It will always be all about people," Jijina says. "People sitting across the table from each other, communicating and creating. You can have the best technology, computers, PDAs and all but it comes right back down to people. Architects are incredibly talented personalities. You cannot serve them with computer technicians, you need equally talented structural engineers. Take a very talented architect and match him/her with a brilliant structural engineer and you get magic. In 75 years, that ability to bond with an architect and create something breath-taking will still be our strength."

By creating a place where young engineers can grow and prosper, Severud Associates creates a future for them as well. The team can continue to be challenged professionally all the time, which keeps them engaged and enlightened.

It also allows for the innovation and problem-solving in structures that the firm has been known for over the past 75 years.

"I would be very pleased if in 75 years, the firm still has a strong retention rate, and continues to care for its people as we do today," Cryan says.

(L to R) Dalton Arena,
Livestock Judging Pavillion
Raleigh, NC

Seagram Building,
Park and 52nd Street
New York, NY

Museum of History and Technology-
Smithsonian Institution
Washington, D.C.



1950-1960

(L to R)
Department of Defense
Ionospheric Research Facility
Arecibo, PR

Mt. Sinai Medical Center
New York, NY

Jefferson National Expansion Memorial
St. Louis, MI



1960-1970

(L to R)
Kingsborough Community College Library
Brooklyn, NY

8 Penn Center Tower
Philadelphia, PA

High Rise Apartment Buildings
Damman, SA



1970-1980

(L to R)
Hercules Inc. Corporate Headquarters
Wilmington, DE

General Reinsurance Headquarters Building
Stamford, CT

1 Reading Tower
Philadelphia, PA



1980-1990

(L to R)
Turkiye Is Bankasi As
Istanbul

Columbia University-
Butler Library
New York, NY

Denver International Airport-
Main Terminal Building
Denver, CO



1990-2000

(L to R)
407 Maple Dr.,
Beverly Hills, CA

SUNY
Stonybrook, NY

Columbia University
School of Social Work,
New York, NY

Mercersburg Academy



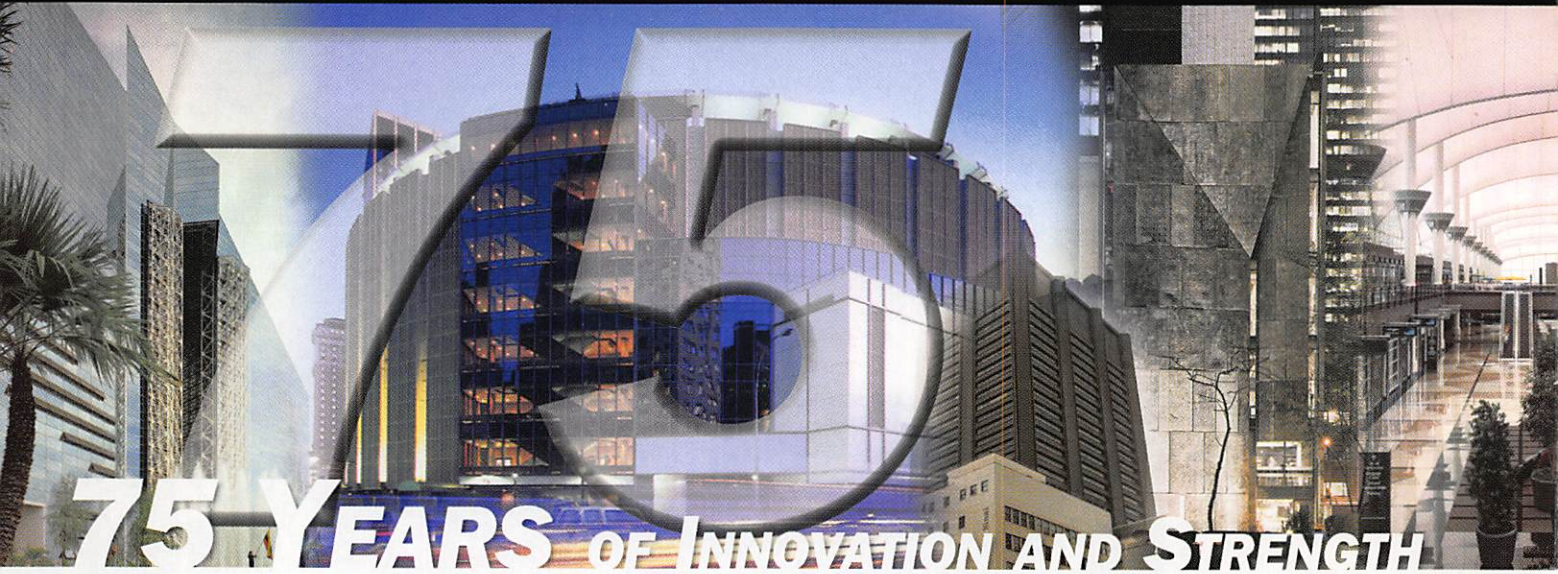
2000-2003

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