

GOING THE DISTANCE

Second, in the series of long-haul TD2 projects, this issue details how a strong vision and lasting relationships were instrumental in creating a unique West Omaha Catholic Church and School.

Today St. Vincent de Paul Catholic Church (SVdP) is a thriving, 3,000+ member family congregation located at 14330 Eagle Run Drive. It is massive at 130,000 SF, and structures like this don't happen overnight. For SVdP, it spanned decades, phases, and relationships.

TD2 has been one of the key sub-consultants over the 27 years of planning and construction, with professional and personal ties to the parish.



A rendering from the May 1992 Master Plan compares faithfully to the 2019 aerial on Page 4. Image courtesy of RDG.

STEP BY STEP

- Master Plan The guiding document for six construction phases since 1992.
- Phase I: 58,600 SF; Education Center PI Offices, Multipurpose, and School - Completed: 1994.
- Phase II: 22,400 SF; Education Center PII Completed: 1996.
- Phase III: 23,800 SF; Worship Space (1,000 Seats) Dedicated: February 6, 1998.
- Phase IV: 9,000 SF; Cafeteria, Kitchen, and Offices Completed: 1999.
- Phase V: 12,000 SF; Junior High School addition and renovation, and Sports Fields – Completed: 2012.
- Phase VI: 28,000 SF; Parish Hall, Meeting Rooms, Outreach Center & Pantry - Completed: 2019.



An impressive 35-foot spire sets the tone of "Modern Gothic" with red brick and pointed arches.



The two story-school overlooks the athletic fields.

MASTER PLANNING

The project's Architect, RDG Planning & Design (RDG Schutte Wilscam Birge at the time), guided the steering committee and parishioners through a year-long discovery process. Participants were asked what a church looked like, felt like, and meant to them. The approach explored options, built consensus, clarified costs, and created guidance for their future construction.

What emerged as a priority was providing a catholic education for the children in this part of town and building the School and its support areas first. This determined how the project was phased and constructed. For example, the 1,000-seat worship space wasn't built until 1998 in Phase III. According to John Sova, AIA, from RDG, who directed the process, the building may have been far different if the worship space had come first.

The resulting Facilities Program and Master Plan revealed the unique nature of the parish. Their preferences and vision, with minor refinements, have changed little from the original intention and are reflected in the structure you see today.

Constructed over six phases, the structure sits on the Champions Golf Course. In 1992, the surrounding subdivision was new, and a large Church and School were envisioned on 13.26 acres.



Photo courtesy of RDG. Phase III Sanctuary construction.



Athletic fields.

TD2 HIGHLIGHTS

TD2 played roles across all disciplines and in different phases.

THE SITE

The irregularly shaped site was previously cultivated farmland with a moderately steep average slope of 10% to the North, East, and West. An unnamed tributary to the Big Papillion Creek runs along the north side on the adjacent golf course.

The building makes the most of the site. Visible from the 144th and West Maple intersection, it sits prominently above the golf course. The Education wing takes full advantage of the slope allowing for two stories along its length. Vehicular access to the site is off Eagle Run Drive into the sizable curvilinear parking lot and via a service drive on the north end between the building and recreational fields. The primary entry to the School is served by a student drop-off zone.

SURVEY/CIVIL HIGHLIGHTS

- Phase I (Education Center) Civil Engineering site, grading, and drainage design.
- Phase V (Junior High Addition/Renovations) Land Surveying, Civil Engineering, Geotechnical Engineering, Erosion Control.
- Phase VI (Parish Hall) Land Surveying, Civil Engineering, Geotechnical Engineering.



Photo courtesy of Tom Kessler and RDG. The Nave ceiling resembles the hull of a ship.



Exterior pulpit and courtyard entries to the Church and Parish offices.



TD2 Structural has worked on every phase. Principals Kip Squire and Troy Nissen are also parishioners. When a church project is also their second home, it becomes more than a structural design. Being members of the church, they paid particular attention to the details. As a hallmark project in TD2's project portfolio, it has been professionally memorable and personally meaningful for them both.

Both the Sanctuary and the Parish Hall were complicated structures with large column-free spaces. At the Sanctuary, a pair of 36" deep steel beams were supported by 2 columns at each end to provide continuity and allow greater spans than a simple span beam. At the Parish Hall, steel members were fabricated to form a Vierendeel truss to provide long column-free spans.

STRUCTURAL HIGHLIGHTS

- Phases I & II (Education Center)
 - Walls Masonry bearing shear walls selected for durability.
 - Floor Concrete slab on metal deck and steel bar joists.
 - Basement Alternate design accepted to create storage space.
 - Roof Steel beams and 3-inch metal decking achieve the sloped roof.
- Phase III (Worship Space, Exterior Courtyard)



Junior High Wing entrance.



Courtyard entrance and 90-foot bell tower.

- Walls Diagonally braced framing in exterior walls provides lateral stability.
- Interior support Pairs of columns at each end of steel girders create a large open volume and column-free interior.
- · Roof Vaulted roof achieved using structural steel.
- Courtyard Steel and metal stud framing provide a "skeleton" for attaching the finished surfaces of brick, cast stone, precast, and glass fiber reinforced concrete.
- Belltower Masonry bearing walls, cast-in-place concrete slabs used at various transition levels, and brick cladding.
- Phase IV (Cafeteria, Kitchen, Offices) Infill between the school gymnasium and worship space.
 - Footings Oversized footings constructed in PI & PII anticipated this later phase.
 - Columns New columns located up against the gym and worship spaces.
- Phase V (Jr. High Addition/Renovation)
 - Systems and materials mirror Phases I & PII.
- Phase VI (Parish Hall)
 - Framing Structural steel clad with precast veneer.
 - Roof Steel Vierendeel truss spans the east-west direction used at the clerestory level to provide columnfree space.
 - Basement Located away from existing building walls to minimize underpinning.



East end of the Junior High addition.



Photo courtesy of Project Advocates.

REWARDING RELATIONSHIPS

It is remarkable that in the end, the church was faithful to the master plan. It is not uncommon with projects of such long duration that clients change teams somewhere along the line. But even as the parish has grown, the support has been there. Constancy and consistency have played prominent supporting roles.

The Architect assisted the Steering Committee in setting down a strong vision and foundation for church leadership to support. Pastors and School Principals were strong cheerleaders. Parishioners showed their support with fundraising from phase to phase. The big picture was clear and well-founded to visualize why and how construction was to proceed. And finally, for many of the critical sub-consultants who were also members of the church, it was personal.

Bob Krupa, AIA, the RDG project architect for St. Vincent since 1995, compares this long-haul experience to a good marriage. It has been successful because all parties have been present, putting in the time and the care to gain the trust needed to have a long relationship.



The Parish Hall facade repeats the pointed arch and red brick.



Photo courtesy of Tom Kessler and RDG. Parish Hall interior.

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