

# 2016 Exhibition of School Planning and Architecture

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## Windmoor Center at St. Teresa's Academy

Category: New Construction

Private School  
Kansas City, Missouri

# Windmoor Center at St. Teresa's Academy



More than a new building on campus... Windmoor Center is the "Heart of the Campus."



# Windmoor Center at St. Teresa's Academy



Windmoor Center  
(New Construction)

St. Teresa's Academy  
Campus Boundary

Windmoor Center supports flexible learning space and community space





# A Centerpiece for the Community – Local and Afar

## **Community Environment:**

St. Teresa's Academy is the oldest school in Kansas City – a school with tremendous legacy, founded by the Sisters of St. Joseph in 1866. Its namesake, **Sister Teresa of Avila, is known as the Patron Saint of Lace-Making**. The new centerpiece learning center and chapel raises homage to her steadfast commitment to the Sisters' ministries.

Serving young women in grades 9-12, the private school hosts students from 64 zip codes, four countries, and a diverse socio-economic spectrum including many inner-city charter schools that don't have an affiliated high school. 75% of STA's students are Catholic. This is a school of diversity, yet it's also a school where strong common values create a powerful sense of family.

*"The lace on the Windmoor Center really speaks to the feminine culture of St. Teresa's, an all-girls school that originated in the French countryside. The lace is a beautiful symbol of the sisterhood that is so important to our community. We have incredibly tight bonds with our classmates and a strong sense of female empowerment."*

*- Kate Rohr, Recent Graduate, Class of 2012*



Lobby: Historical exhibits and archives celebrate the legacy of Kansas City's oldest school.



# Shared Values Build Powerful Community

## **Community Environment (Internal School Community):**

Prior to the Windmoor Center, the school's chapel was located in a classroom – they would often see only two families during monthly parent/daughter worship. Today, mass commonly exceeds 150, and the families stay afterwards for events in the lobby and across campus.

*"Parent bonds here are entirely different than those at public schools. Parents invest in STA as a community – parents want to be here; they're committed."*

-Nan Bone, President

Community service activities are a large part of the students' experience and a major catalyst for drawing the community together. It's also an important part of the school's approach to holistic learning. At public schools, service activities are offered but not required. Here, everyone participates!



# Flex Learning and Community Space

## Learning Environment:

The flexible, tech-rich learning space gives teachers an opportunity to collaborate with a variety of new instructional models (pedagogical freedom). There's no limiting "front" to the classrooms – they support active learning all the time. Many teachers are engaging collaborators from abroad in their classroom activities using the distance learning capabilities, not to mention the obsolescence of textbooks on the campus facilitated by the robust access to online learning.



*The flex space converts nicely from hi-tech learning spaces into a large open-span banquet and event space. Specialty lighting shifts from classroom mode to event mode, and full-height glass white boards provide a finished look for public events.*

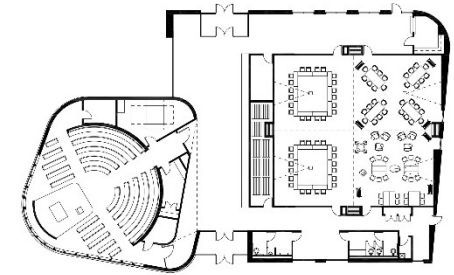
## Windmoor Center's Value to the Campus:

### Academic Applications:

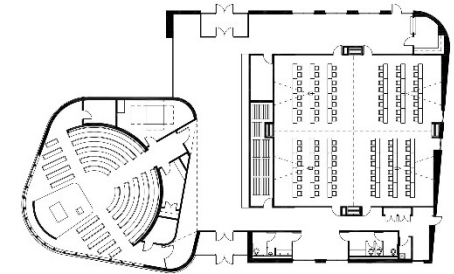
- Flex-Learning with mobile furnishings and multi-directional AV systems; provides pedagogical freedom
- Project-Based Learning Ctr.
- Cross-curricular STEAM-based learning projects
- Distance education and telepresence
- Astronomy class (on the roof)
- Guest speakers and colloquia
- Professional development
- Student success commons

### Community Event Applications:

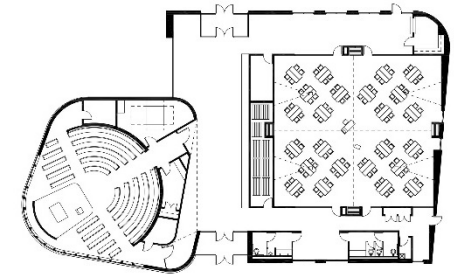
- Class meetings and reunions
- Student art exhibits
- Prospective Student Orientation
- Banquet events (public and school-oriented)
- Town Hall meetings
- Alumni card night
- Grandparent's Day celeb.
- New parents cocktail hour
- Father's club
- Neighborhood organization meetings
- Community auctions
- Open House events
- Teleconferences with donors (worldwide)



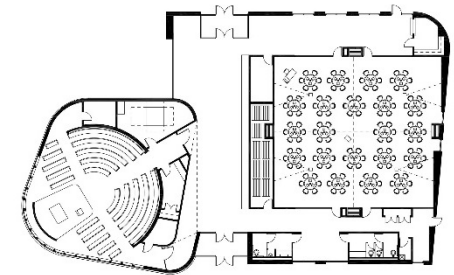
Active Learning



Seminar



Team-Based Learning



SCALE-UP Learning and Banquet Space



# Education of the Whole Person

## Learning Environment:

*"These girls are smart, service minded, and well-balanced. But they're stressed out! The chapel offers a quiet place of reflection; a place to meditate as well as reflect on art and spirituality. "*

- Barb McCormick, Principal

At St. Teresa's, there is an emphasis on mindfulness training; the academy integrates a holistic education approach – to educate the whole person. This extends well beyond the academic growth of each student.

**Kairos is a fundamental part of the school's philosophy** – seizing the right or opportune moment to work with each student on specific growth opportunities. Retreats and meditation are a regular part of seeking this holistic balance.



*The chapel serves host to theology classes, retreats, worship services, and individual reflection, meditation, and study. It's a core space for these students' holistic education and a symbolic heart for the school community.*



# Campus as Arboretum

## **Physical Environment:**

The Sisters of St. Joseph have always insisted on being kind to the environment. They began a sustainable approach to their campus from its inception. To this day, the site enjoys some of the city's best specimen trees; so much so, that it has become a well-established arboretum in the Kansas City metro area. A partnership between the faculty and a landscape architect is leading to a curriculum wherein the students are classifying the site's landscape species and developing interpretive displays.

## **Energy Conservation:**

In the spirit of the school's founders, the current leadership was committed to an efficient geothermal mechanical system and implementation of solar panels on the roof. The energy performance of the building is well below ASHRAE standards.





# Neighborhood Context

## Physical Environment:

The campus is snugly rooted in a historic residential neighborhood. The Windmoor Center is small-scaled to respect this context and features a contemporary expression of the school's history, named after St. Teresa, the Patron Saint of Lace-Making. At the same time, it blends in with the historic fabric of the 150-year-old school campus and surrounding neighborhood. The exceptional preservation of the site's landscape, as well as the open-armed embrace of neighborhood partnerships, has resulted in the campus becoming a popular neighborhood park and community center.



# A Process Rooted in History

## Planning Process:

### Research and inspiration came from the history of the school:

Founded in 1650 in Le Puy, France, the early Sisters of St. Joseph were not wealthy or educated and had to work to support their ministries. Lace-making was a common trade in that region of France. St. Teresa of Avila became known as the Patron Saint of Lace-Making. Through the French Revolution, the community of sisters dwindled but regained momentum in size when the Bishop of St. Louis, Missouri, sent a request for some of the sisters to come to America to teach deaf children. Within 30 years, the Sisters of St. Joseph had established 30 separate communities across the U.S., one of which was founded near Kansas City, Missouri.

It was this history that led to the inspiration for the lace sunscreen and scrim that wraps the new academic center and chapel.

## Student Engagement:

After surveying students and faculty, a vision for the Windmoor Center emerged as a soft, feminine, contemplative space flooded with light and connected to nature. There was a strong desire to connect to the narrative of St. Teresa, the Patron Saint of Lace-Makers. Focus groups with students and faculty revealed the following values:

**Question: How can the space convey the school's mission and the values passed on to you by the heritage and commitment of the Sisters of St. Joseph?**

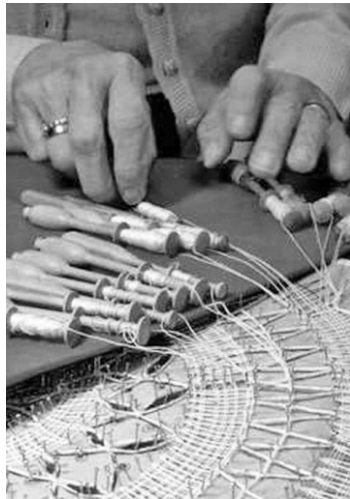
Environmentally-friendly/holy place/visual representation of females in relationship with God/lace/symbolic connection to the Sisters/etched glass to resemble lace

**Question: What is important to imagine or envision in a physical space for worship at St. Teresa's?**

Use of skylights/lots of windows/natural light/meditative garden/classic- not trendy/traditional/simplicity/strength/feminine/soft



St. Teresa of Avila, the Patron Saint of Lace-Making



Sister Ramona continues the lace-making tradition today



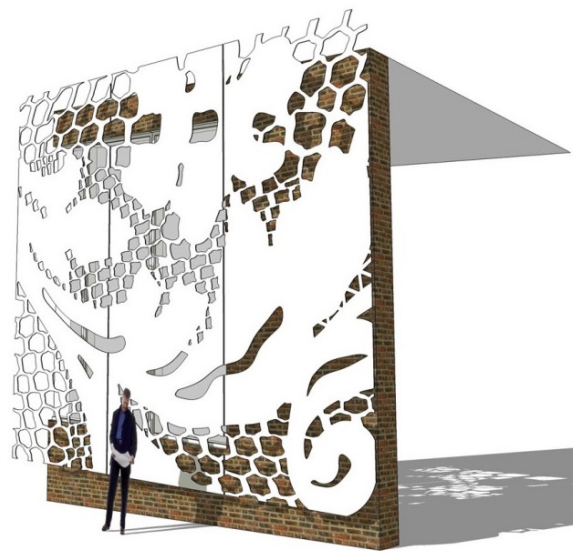
An example of Sister Ramona's handmade bobbin lace, used as a pattern for the laser cut aluminum sunshade and scrim



# Transforming Handmade Craft into Digital Craft

## Planning Process:

Authentic lace patterns were translated into digital form, manipulated to apply as a sun shade wrapping around the building, and scaled to a size appropriate to the facade.



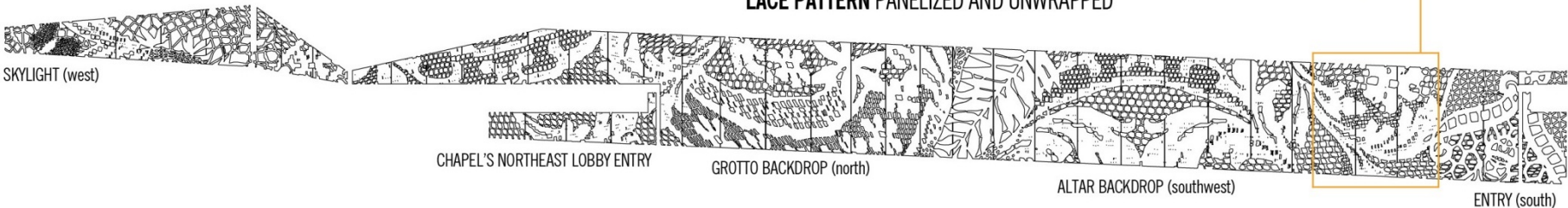
**CONCEPTUAL MOCK-UP** OF WATER JET CUT ALUMINUM LACE ON MASONRY SKIN



**EXTERIOR SURFACE** OF WATER JET CUT ALUMINUM PANEL SYSTEM DURING FABRICATION PROCESS BEFORE BEAD BLASTING AND PAINTING



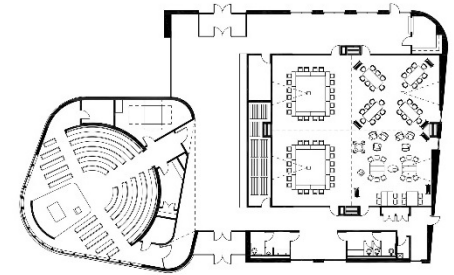
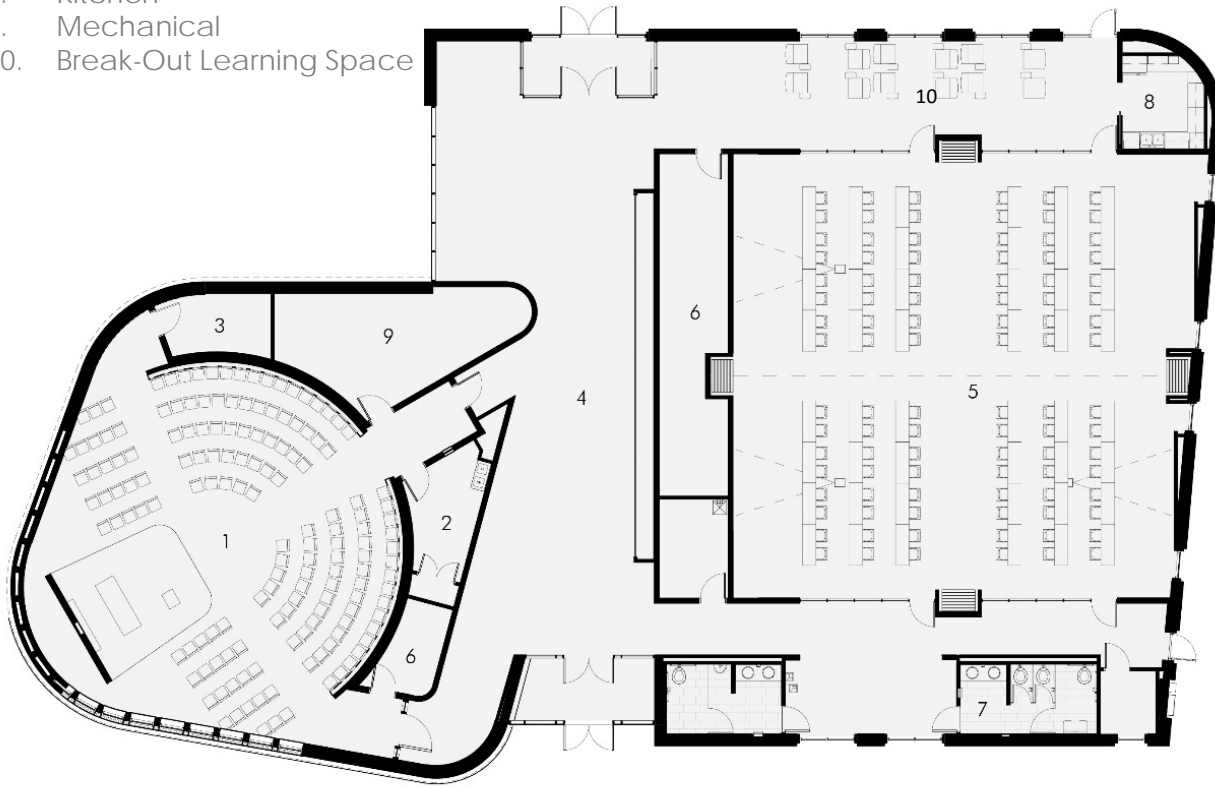
**DESIGN REALIZED** AFTER A THREE DAY INSTALLATION SET THE FORTY-FOUR PANELS IN PLACE



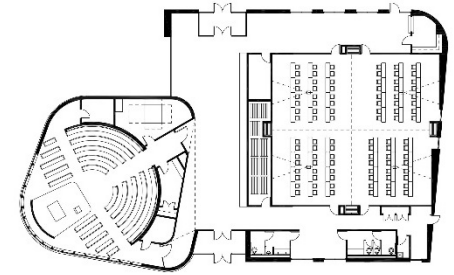
**LACE PATTERN** PANELIZED AND UNWRAPPED

# Floor Plan

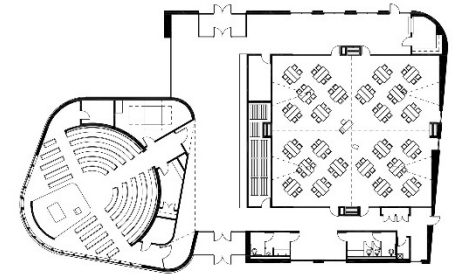
1. Chapel
2. Sacristy
3. Confessional
4. Lobby/Exhibit/Pre-Function/Break-Out Learning
5. Flexible Active Learning Space and Event Space
6. Storage
7. Restroom
8. Kitchen
9. Mechanical
10. Break-Out Learning Space



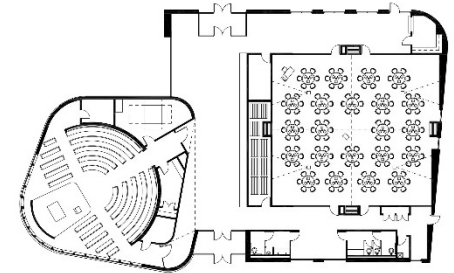
Active Learning



Seminar



Team-Based Learning



SCALE-UP Learning and Banquet Space





# Exhibition of School Planning and Architecture Project Data

Submitting Firm :	Gould Evans
Project Role	Prime Architect
Project Contact	David Reid
Title	Principal
Address	4041 Mill Street
City, State or Province, Country	Kansas City, MO USA
Phone	816-701-5335

Joint Partner Firm:	A. Zahner Company
Project Role	Metal Fabrication and Design Assist
Project Contact	Bill Zahner
Title	President and CEO
Address	1400 E. 9 <sup>th</sup> Street
City, State or Province, Country	Kansas City, MO USA
Phone	816-474-8882

Other Firm:	
Project Role	
Project Contact	
Title	
Address	
City, State or Province, Country	
Phone	

Construction Firm:	JE Dunn Construction
Project Role	Contractor
Project Contact	Jeremy Baum
Title	Project Manager
Address	1001 Locust Street
City, State or Province, Country	Kansas City, MO 64106
Phone	816.474.8600

# Exhibition of School Planning and Architecture Project Details

<b>Project Name</b>	Windmoor Center at St. Teresa's Academy
<b>City</b>	Kansas City
<b>State</b>	Missouri
<b>District Name</b>	Private School: Sponsored by the Sisters of St. Joseph of Carondelet
<b>Supt/President</b>	Ms. Nan Bone, President
<b>Occupancy Date</b>	January 2012
<b>Grades Housed</b>	9-12
<b>Capacity(Students)</b>	120 Building, 600 overall campus
<b>Site Size (acres)</b>	20-acre campus
<b>Gross Area (sq. ft.)</b>	11,200 SF
<b>Per Occupant(pupil)</b>	93 SF
<b>gross/net please indicate</b>	gross
<b>Design and Build?</b>	No
<b>If yes, Total Cost:</b>	
<b>Includes:</b>	
<b>If no,</b>	
<b>Site Development:</b>	not applicable
<b>Building Construction:</b>	\$4,100,000
<b>Fixed Equipment:</b>	not applicable
<b>Other:</b>	
<b>Total:</b>	\$4,100,000









*The learning and worship space is cloaked in the history of St. Teresa's Academy and benefits from the solar shading.*





**The Windmoor Center is the “Swiss Army Knife” of St. Teresa’s campus.**  
*“I don’t know where we would be without this space – it does everything for us!” - Nan Bone, President*



### What's in a name?

When the campus was first built, there was only enough money to build the Music & Arts Building (photo below, west building on campus). It was on the roof of this building that the sisters would seek refuge from the summer heat, the breezes blowing stronger as they looked over the moor.

### Serving many cultures over many generations:

A 91-year-old alumna recently celebrated her birthday at the Windmoor Center. She told a story about when her mother attended St. Teresa's and how the Indian chiefs would drop off their princess daughters en route to the Oklahoma territory. They were wealthy from their oil, and would leave their daughters at St. Teresa's until their return several months later.



*The original Music & Arts Building, still used on campus today.*







WINDMOOR CENTER

AD  
2011