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		9				1		7

Introductions:

- Practitioner Advisors: Dave Karnowski
Peter Clark
- Honorary Lifetime
Contact Member: Bob Thorn
- Faculty Advisors: Dr. Hossain
Dr. Riding

Officer Reports:

- President: Jessica Hennes
- Vice President: Jennifer Sommerfeld
- Treasurer: Xinch Zhang
- Recording Secretary: Adam Emerson
- Corresponding Secretary: Taylor Smith
- Newsletter Editor: Jessalyn Fisher
- Historian: Carl Peterson
- Student Council Rep: Cole Turner
- Freshman/Sophomore Rep: Schyler Rohleder
- Graduate Student Rep: Gus Wuertz
- Activities Chair: Casey Mahoney
- Special Projects Chair: Walter Hicks
- Webmaster: Ryan Scott
- Steel Bridge Chair: Rachel Spicer
- Concrete Canoe Chairs: Jenny Swabb
Brianna Kryzstof
- Open House Chairs: Cale Armstrong
Don Powers
Vince Studer

Agenda:

- Announcements: Jessica Hennes
- Introduction of Speaker: Jennifer Sommerfeld
- Speaker: Catherine Patrick, P.E



Speaker Profile

Senior Design Presentations:

Task 1-Civil and Utilities:

Task 1 required for the senior design class to develop a site plan for the proposed Bellerive Apartment Complex off of Grand Mere Parkway. The site plan needed to be in conformance with local ordinances and engineering standards. The layout needed to use the land most efficiently, without a minimum or maximum number of apartment buildings given. A transportation study; including site access, vehicle parking, traffic generation, sight distances, etc. needed to be performed. As well as development of a utility plan to provide water, sanitary, and electrical services to the apartments. Cost estimates were required for all aspects of the project.

Subtask 1a- Site Plan & Earthwork:

Limitless Engineering: Luke Fangman, Brett Fearing, Andrew Mishler, Justin Strelow (presenting), Justin Vibbert, and Tanner Yost

Subtask 1b-Grading Plan & Storm Drainage:

MC Engineering Inc.: Samuel Corey (presenting), Tyler Davison, Samuel Hegarty, Drew Kuder, Daniel Mealiff(presenting), and Josh Riley

Subtask 1c-Utilities Plan:

Coulshar & McGrundwin Engineering: Aubrey Coulter, Thomas Grund, Bethany McDiffett, Andrew Shearrer, and Lauren Winnen (presenting)

ASCE Building Profile



Leaning Tower of Pisa

The Leaning Tower of Pisa or simply the Tower of Pisa is the campanile, or freestanding bell tower, of the cathedral of the Italian city of Pisa. Prior to restoration work performed between 1990 and 2001, the tower leaned at an angle of 5.5 degrees, but the tower now leans at about 3.99 degrees. This means that the top of the tower is displaced horizontally 12 ft 10 in from where it would be if the structure were perfectly vertical.

Construction of the tower occurred in three stages across 177 years. The tower began to sink after construction had progressed to the second floor in 1178. This was due to a mere three-metre foundation, set in weak, unstable subsoil, a design that was flawed from the beginning. Construction was subsequently halted for almost a century, because the Republic of Pisa was almost continually engaged in battles with Genoa, Lucca and Florence. This allowed time for the underlying soil to settle. Otherwise, the tower would almost certainly have toppled. In 1272 construction resumed and, in an effort to compensate for the tilt, the engineers built upper floors with one side taller than the other. Because of this, the tower is actually curved.

Many methods were proposed to stabilize the tower, including the addition of 800 tonnes of lead counterweights to the raised end of the base. On January 7, 1990, after over two decades of stabilization studies, the tower was closed to the public. The bells were removed to relieve some weight, and cables were cinched around the third level and anchored several hundred meters away. The final solution to prevent the collapse of the tower was to slightly straighten the tower to a safer angle, by removing 50 yd³ of soil from underneath the raised end. The tower was straightened by 18 in, returning to its 1838 position. In 2008, after the removal of another 77 short tons of ground, engineers announced that the Tower had been stabilized such that it had stopped moving for the first time in its history.

Officer Contacts

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1	6	7	2	5	9	3	8	4
9	2	5	4	8	3	7	6	1
4	8	3	7	1	6	5	2	9
6	1	8	3	9	4	2	7	5
3	9	4	5	2	7	6	1	8
5	7	2	8	6	1	4	9	3
7	3	1	9	4	2	8	5	6
8	4	6	1	7	5	9	3	2
2	5	9	6	3	8	1	4	7

Important Information

FE Review manuals are available for purchase for \$75 each. Contact any officer if you are interested in purchasing the manual.

Students must become national members to receive credit for ASCE Student Membership. Registration is free and can be done online at <http://www.asce.org/>. Click "login" at the top of the page, then click "click here to create one" and follow the instructions to become a national member.

Scholarship and Internship Opportunities:

Mid West Concrete Scholarship, Due April 30

Applications available in CE office or at www.mcibconcrete.org

KS APWA Steve Webb Memorial Scholarship, Due May 1

Contact Person: Bob Stokes

KS American Water Works Association Scholarship, Due July 27

Contact Lester Estelle at lestelle@olatheks.org

International Concrete Repair Institute Scholarship, Due May 17

www.icri.org

Internship with Delta Companies

www.deltacos.com

Internship with Riley County Engineering Division

www.rileycountyks.gov

Schedule

March 8 – **Assembly: Senior Presentations (Fiedler Auditorium)**

March 19-23 – **Spring Break**

March 29 – **Assembly: Ryan Chancey from Nelson Architectural Engineers**

April 5 – **Joint Dinner (KU)**

April 12 – **Picnic (City Park)**

April 14 – **FE Exam**

April 20-21 – **Open House & Regional Competitions**

April 26 - **Assembly: Elections & Senior Projects**