

Figure 1: Grass lot in front of Carson



Figure 2: An icosahedron and its skeleton

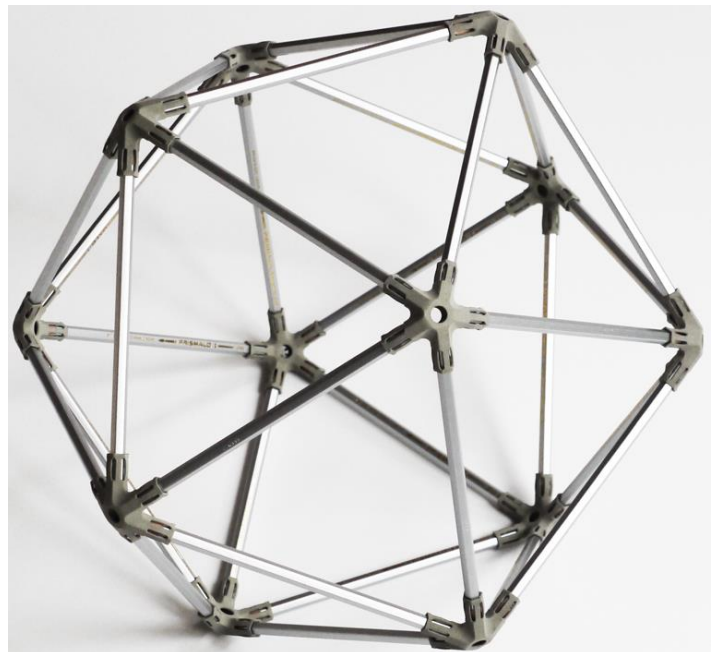
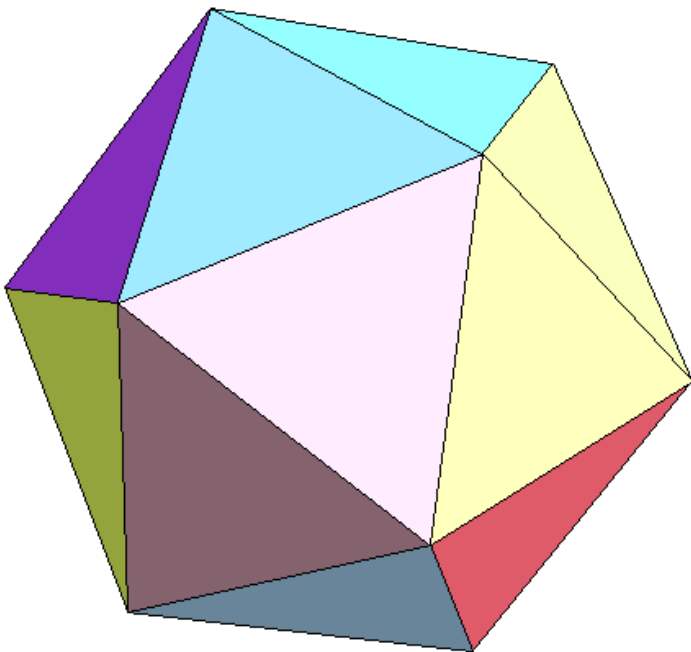


Figure 3: Prospective sculpture placement

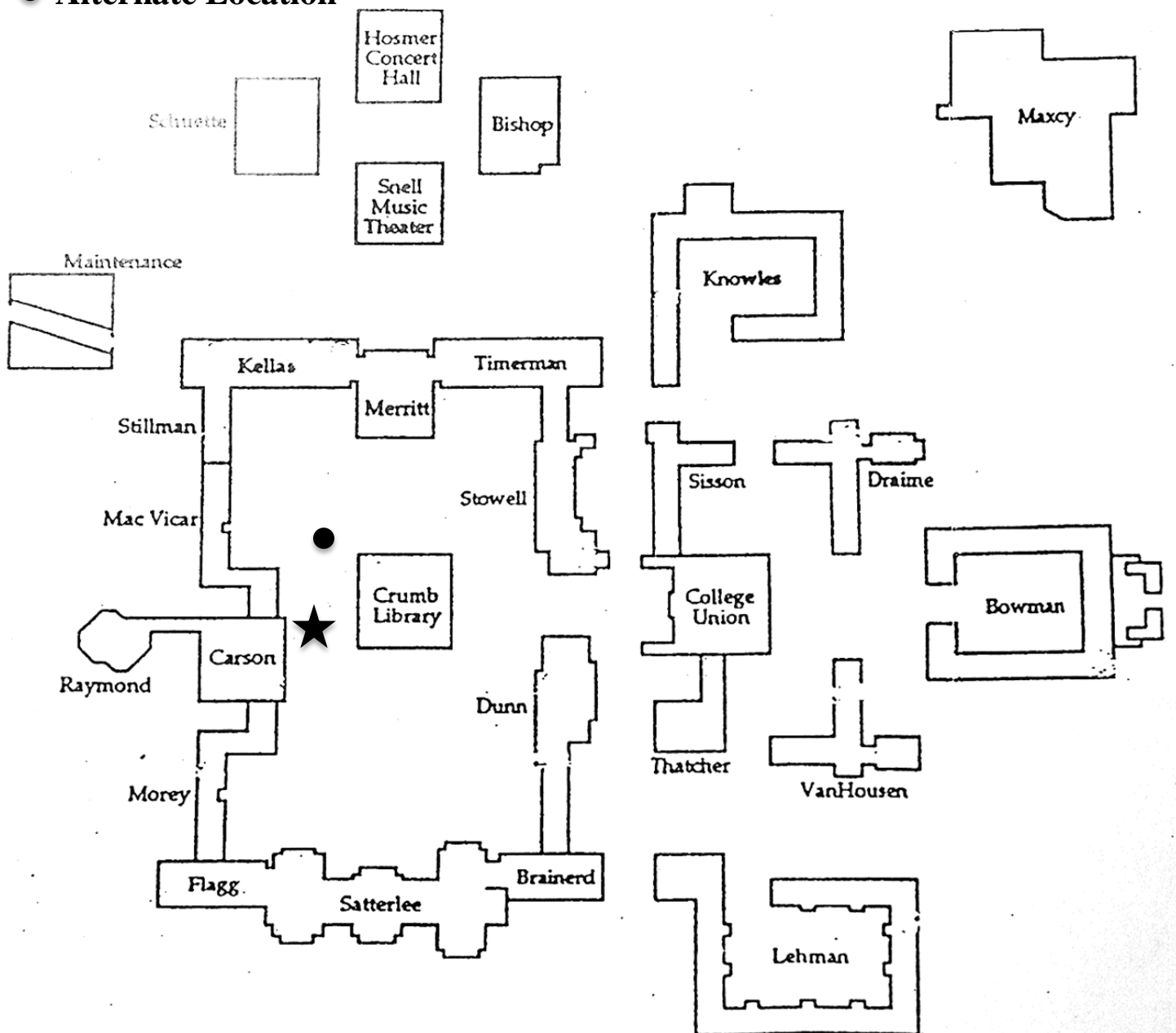


Figure 4: Campus map with approved site location

SUNY POTSDAM CAMPUS MAP

★ Approved Location (By Physical Plant)

● Alternate Location



To Whom it May Concern:

In Spring 2015, the SUNY Potsdam Math Alliance club (MA) would like to donate a large icosahedron sculpture to the Mathematics Department, as a measure of appreciation and a way to excite students about mathematics at SUNY Potsdam. Since the completed sculpture will span approximately six feet between points, students will be able to interact with the sculpture from all sides outdoors. This sculpture, if approved, will enhance the grass lot in front of Carson/MacVicar (Figure 1).

Being the greatest of the five Platonic solids, the icosahedron is a symbol of the greatness that our mathematics department has brought to SUNY Potsdam throughout the years (Figure 2). Although most students are unaware, our Mathematics department is not only renowned, but mimicked by other schools, including SUNY Fredonia and the University of Michigan. Furthermore, the legacy that Clarence F. Stephens left behind is comparable only to few, if any, stories of great lifetime achievement; he, as chair of our Mathematics department from 1969-1987, changed the way that teachers and students interacted, opening new boundaries and giving the opportunity for our students to succeed in ways that they never conceived possible. Students will be drawn to this icosahedron sculpture and recognize its simple yet complex mathematical form, which will open their minds to how complexity can be derived from simplicity. In order to enhance this fundamental concept in mathematics, we have chosen to build an icosahedron, rather than a tetrahedron or a cube. The complex properties and symmetries of the icosahedron will engage viewers of all ages, including mathematicians and artists.

The MA would like to leave a visual imprint on the campus through a sculpture that will have a great impression on our students. The sculpture, when placed outdoors, will be inviting, as students can look in and around the sculpture. Because the icosahedron will be constructed out of lines, rather than planes, the shadows will become an interesting element of the sculpture. As the shadows change throughout the day, the rigid mathematical form will be enhanced, leaving behind an array of unique perspectives for students to enjoy and be inspired by.

To withstand the weather conditions of each season, the icosahedron will be constructed from treated wood and will be stained and sealed appropriately to maintain the integrity of the material and minimize maintenance of the piece. The joints have precise angles that will stabilize the entire structure and will be made of steel to increase the stability of the piece. The edges of the joints will be slightly rounded to create a structure that is safe for all ages to view and interact with. The completed sculpture will be joined securely and will be bolted to the concrete pad on three joints (Figure 3).

Upon the approval of this project, the Physical Plant has agreed to pour a cement pad that will meet all the requirements of any campus policies (Figure 4). The MA has discussed this project with Alicia Conway, the current sculpture professor, as well as with Dr. Blair Madore and the MA's academic advisor, Dr. Derek Habermas. The chair of the Mathematics Department, Dr. Joel Foisy, has confirmed that he will accept this donation upon approval for placement on campus.

Sincerely,

Jonathan Doane

President, SUNY Potsdam Math Alliance Club