Breadth Proposal

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Construction Management Breadth

The construction of the proposed geothermal heat pump on the campus quad will be invasive to campus life. Many precautions will be taken to maintain safety and necessary circulation on the site throughout the construction process. To accomplish this in the months to come, site safety plans as well as site utilization plans will be generated. These plans will make it possible to preserve access to the buildings surrounding the quad while also planning the construction phases efficiently. Re-direction of the paths shown below in ***Figure 13*** will no doubt be necessary throughout the construction to make this acheivable.

Figure 12 *–Proposed site for CM Breadth*

Cost and scheduling impacts of this construction proccess will also be evaluated to reduce the amount of time this construction will disrupt the MIT campus. If possible, this construction will be proposed for the summer months when the campus is least active.

In conclusion, the construction management breadth of this project will act to preserve site circulation, ensure safety for MIT students and faculty and create an efficient schedule of construction to minimize the impact on MIT's campus.

Electrical Breadth

The addition of a geothermal pumping system will result in necessary changes to the electrical service of the Koch Institute. The ground source heat pump will be powered electronically and therefore will have to be tied into the existing design. The cooling and heating that this system will provide may also result in significat changes in HVAC equipment. All of these additional system components and changes to the existing electrical design will be investigated. New service panels will be incorporated to operate the pumping system efficiently. All of the changes to the buildings demand load will be determined to correctly adjust the incoming electrical service.

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Proposed Work Schedule