





7,965 kVA. This means the existing transformer capacity will not have 100% redundancy when 10,000 kVA is exceeded. Given the project growth of the campus noted above, it is estimated the load will be 10,860 kVA for Phase II and 16,935 kVA for Phase III.

The existing three primary 12,470 volt loop feeds have a total capacity of 800 amps. As noted in the 2006 Master Plan it consists of 2-200 amp and 1-400 amp loops. At 80% loading, the existing total current can handle 640 amps. Note that one 10,000 kVA at 100% load will deliver 465 amps to the three loops.

Recommendations – Phase II/III (Amended March, 2012)

1. The existing 10,000 kVA transformer should be replaced with a 15,000 kVA transformer.

2. The existing 12,470 volt primary loop feeds should be replaced with three 400 amp primary loop feeds.

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4. (III-2) Implement the installation of a second campus substation from GPC on the south

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2. (II-1) The existing 12" line coming into the campus from Frey Road, containing one of the KSU's water meters will have to be relocated north to allow for the addition of the Education Classroom Facility (Phase II) and its addition (Phase III).

3. (II-2) The above line will be extended along Dayton Avenue to the 8" line at Frey Lake Road in a 10" line.

Frey Lake Road in a 10" line.

4. (III-1) The Student Center Facility (Phase III) will require a 12" line to be installed from Frey Lake Road to the building.

order to attain greater savings in the design, construction, and maintenance of each facility in the development of the campus.

2. The current Cobb County requirements will be documented with regards to capacity and quality requirements for new construction. This will be done to update the information submitted in the 2005 Master Plan.

quantity run-off is calculated on new building sites. In the 2005 Master Plan, it was



Recommendations

1. (II-1) Network cabling to link Building 79 (Owls Nest) to the Intramural Fields and

KSU's new Soccer Stadium require a pathway and cabling. The KSU Foundation is providing partial pathway. The University will be responsible for the remainder.

as the fiber link.

2. (II-2) A DAS (distributive antenna system) is needed throughout KSU to allow for local