01 50 00 | Temporary Facilities and Controls

This design guideline is written to the designer of record (DOR). This guideline is written to document UA standards of work, assist the designers in ensuring UA standards are incorporated into the contract documents and provide a resource to facilitate the design process. It is the designer of record's responsibility to coordinate the criteria set forth in design guideline and in conjunction with the manufacturer requirements and use the most stringent standard.

A. General

1. Safety Precautions: Provide and assume complete responsibility for such safety program and facilities as will adequately protect workmen, the public and others who may properly be about this site. In compliance with OSHA requirements, the Contractor shall conduct weekly safety meetings and submit to Construction Administration.

2. Electrical Service: Unless otherwise indicated in the construction documents, the Owner shall make available utility service to the construction area from the Owner's distribution system. Contractor shall be responsible for all cost incurred for extension of the utility service to the site/project. Contractor shall provide and install all service entrance equipment including service poles, conductors, meter base and disconnect.

    a. If electrical service to the site is provided by the University of Alabama distribution system, the contractor shall not include the cost for electricity during construction. The Contractor shall follow the Construction Project Energy and Utility Management Plan outlined below in Paragraph 6 for the project. The plan will be implemented by the Contractor at all times while work is taking place.

    b. If electrical service to the site is provided by the Alabama Power Company distribution system, then the Contractor shall be responsible for paying for and providing temporary construction power and lighting for entire job site. Coordinate with local jurisdictions and utility companies and pay all fees necessary to get temporary power to the job site. Contractor shall be responsible for all monthly utility costs for duration of project or date of substantial completion.

3. Water Services: Unless otherwise indicated in the construction documents, the Contractor will contact the City of Tuscaloosa to provide service. It is the responsibility of the Contractor to reconcile and transfer this service to the University at the Date of Substantial Completion.

    a. The contractor is required to have any temporary metering removed at the end of the project. Any usage cost of the temporary service is the contractor's responsibility.

4. HVAC Equipment: Do not operate any of the permanent heating, ventilation, or air conditioning equipment prior to the Pre HVAC Conference. The Contractor may schedule this meeting only after the doors and exterior windows or suitable temporary construction is in place and the area is relatively dust free. At a minimum, the floors shall be broom clean, drywall finishing and paint spraying completed.

    a. Prior to starting equipment, install minimum MERV 8 filters on all returns and outside air serving the air handling units. It is the responsibility of the contractor to change filters and clean coils as required until the Date of Substantial Completion.

5. Permanent Electrical Service: A permanent meter must be installed and functioning properly prior to energizing any new utility service. University of Alabama Energy Management must be present at the start-up of this service to verify the meter is reading zero and functioning properly. If the meter is found to not function properly, the utility service will be terminated until such time that

the meter is repaired. If the Utility Company provides the meter and service, it is the responsibility of the Contractor to reconcile and transfer this service to the University at time of substantial completion.

B. UA Construction Project Energy and Utility Management Plan

1. General: This energy management plan is to be implemented at the initiation of the project, and is to be maintained for the full duration of the project.

    a. The general contractor and all sub-contractors are expected to be conscientious of the fact that The University of Alabama is paying for certain utility costs during construction Review of 'b' through 'g' below

    b. All sub-contractors are expected to adhere to the general contractor's energy conservation plan. The contractor is required to adequately communicate the energy conservation plan to all of the contractor's and sub-contractor's employees working at the job site to ensure compliance.

2. Temporary Construction Power:

    a. All temporary / permanent construction power will have an appropriate electric meter installed prior to energizing power to the construction site.

    b. Contractors are to limit their consumption of construction power to only activities required to complete their contract work.

    c. Energy management shall also include any jobsite trailers. To minimize energy usage, the lighting is to be used only while trailers are occupied. The thermostat is to set at a moderate temperature when occupied, and at an energy savings level when unoccupied.

3. Temporary Lighting

    a. All temporary construction lighting is to be energized at the beginning of the workday and de-energized at the end of the workday. Turning the lights out at the end of the day is to be an assigned responsibility.

    b. Temporary lighting is to be provided to meet work, safety, and security requirements. Lighting should be installed to meet the needs of the work being installed.

    c. Temporary lighting used for security must be installed so that only a small percentage of the total lighting is to remain energized after hours.

    d. The contractor is to review all lighting periodically, and repair or maintain as required. This includes replacing any burned out bulbs.

4. HVAC Systems

    a. For buildings being tied into the UA central energy plant thermal water system, appropriate BTU meters are to be installed in the building thermal water piping prior to the use of chilled / hot water from the central energy plant.

b. No HVAC equipment will be started or operated prior to the Pre-HVAC conference, which is to include the General Contractor, the HVAC subcontractor, the architect, the mechanical engineer, UA Energy Management and UA Construction Administration.

c. Thermal water piping systems will be flushed and cleaned prior to the start-up of any HVAC equipment. Flushing / cleaning requirements are to be addressed in detail in the Pre-HVAC Conference.

d. Prior to start-up of heating and cooling equipment inside the building, doors and window are to be closed by some method. If the permanent windows and doors are not already installed, then temporary panels of plywood, plastic, etc. must be installed.

e. Systems for temporary air in the building are to be set at a level to conserve energy while providing necessary conditioning to meet the requirements of submittal data and contract documents. Settings should be determined based on what is needed to install the various paints, adhesives, woodwork, and other finishes per the manufactures recommendations (typically between 50-65 degrees during winter months, and between 75-85 degrees during summer months). The temperature should not set at 70-72 degrees just for personal comfort of those working inside the building.

f. The contractor will submit the requirements for the actual temperatures that will be maintained inside the building, and what methods will be used to ensure the temperature is maintained at these set-points.

g. Systems are to be protected with filter media on all return grilles and speed drives (VFDs) to provide the proper level of dust and contaminant protection required by the construction documents. The areas around HVAC return air intakes must be kept clean and the appropriate MERV 8 filter media must be used in all AHUs and associated speed drives (VFDs). The HVAC units should be turned off during any work that creates significant dust or other contaminants that can enter into the HVAC system.

h. The contractor is responsible for daily maintenance of the required filtering and protection. Maintenance is to be done by an HVAC contractor properly trained for this activity.

5. Domestic Water Management

a. All temporary construction water is to be used only when needed, and all valves are to be turned off at the end of each workday.

b. Water is not to be left running unattended for any reason.

c. Water usage in the building is to be for final cleaning and testing purposes. No sinks, urinals, or toilets in the building are to be used by construction personnel.

6. Natural Gas Management

a. The construction site will have an appropriate natural gas meter installed prior to any natural gas usage.

b. Gas will used only for testing purposes as per the construction documents unless needed for climate control.

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