



Flores Consulting Services, Inc. |

3847 Westside Ave. | Los Angeles | CA 90008 | P: 323 481-1645 | natof2014@gmail.com

California State University Los Angeles Design & Construction of 2,500 Ton Central Plant With Centrifugal Chillers

Managed the design and construction of a central chiller plant comprised of two 1,250 ton centrifugal chillers, cooling towers, controls and auxiliary equipment. The prime equipment is a new one-story masonry building with a structural steel roof.

The addition of the two chillers brings the total no. of chiller to 4 with a capacity of 5,000 tons of cooling capacity. The chillers controls are fully integrated so that any chiller can utilize any cooling tower providing not only increased capacity but redundancy for the campus. The existing 1M gallon thermal storage tank also increases the capacity and redundancy. In addition, new chilled water lines were taken to the new 8 story student housing building at the NE side of the campus.

The next goal of the campus is to do away with space and water heating based on combustion in its buildings. The campus is working on upgrading the systems to utilize the chilled water loop to provide water heating and space heating via water source heat pump systems.

Electrical power was brought to the site from the new substation (also managed by Flores Consulting Services, Inc.) via the South end of a utility tunnel located in the lower level at the South East corner of Parking Structure B. In addition to u

The plant was fully integrated with the existing central plant which was comprised of two 1,250 ton chillers and cooling towers as well a 1,900,000 gallon chilled water storage tank. The project included; but was not limited to the relocation of utilities and communication lines.

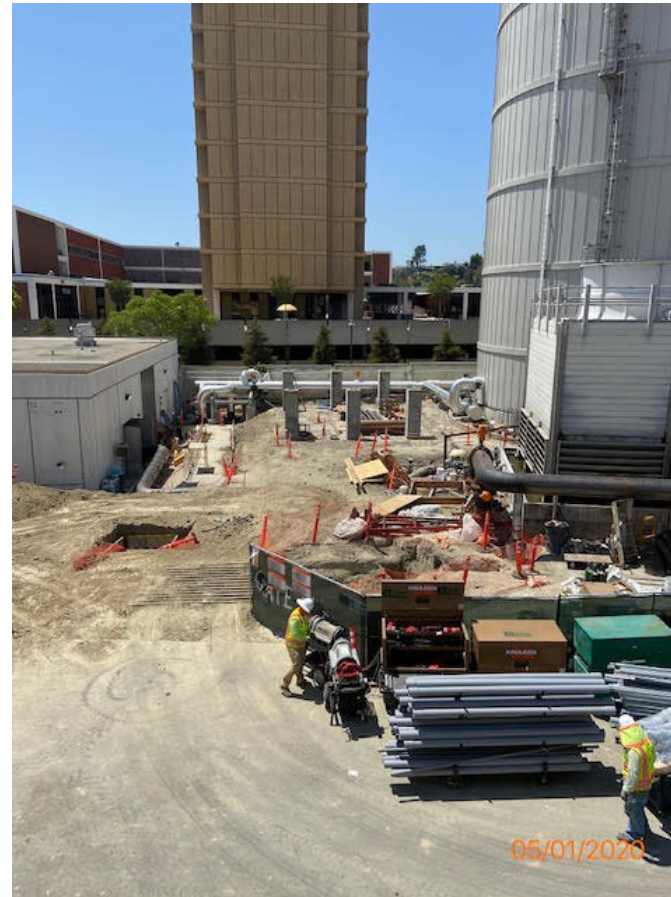
All construction work was carried out to achieve the final configuration of the plant without interruption to the existing electrical and chilled water services to the campus buildings. Achieving continuity of services entail temporary bypass piping so as to eliminate the need for rental chillers and cooling towers.

Flores Consulting Services managed the design and installation of the by-pass piping and points of connection prior to the project being bid so as to reduce the unknowns and risks to the bidding contractors and consequently the costs to the university.

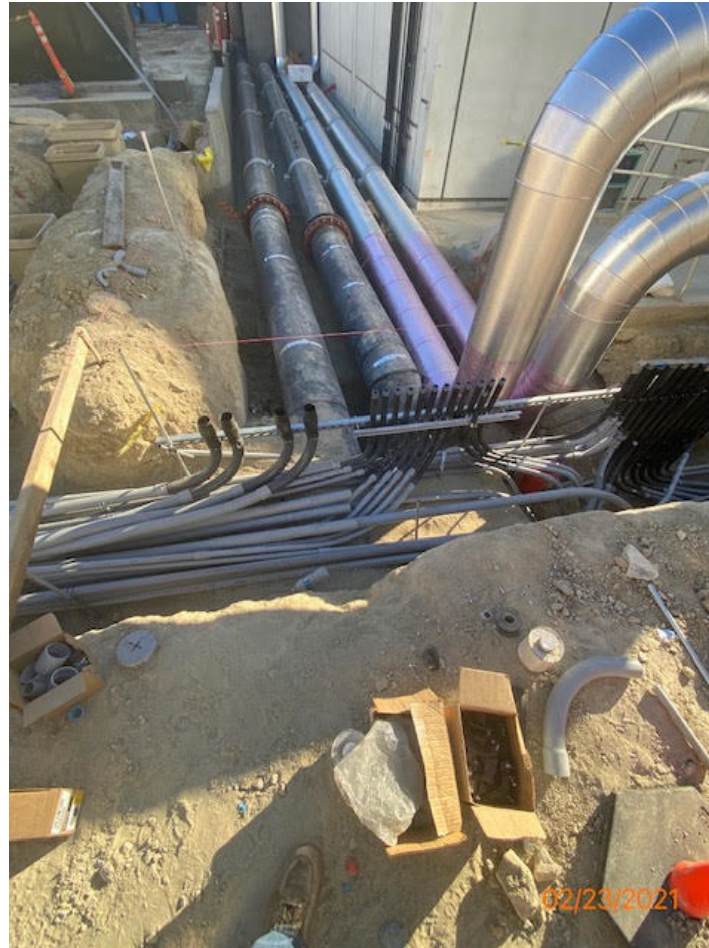
California State University Los Angeles
Design & Construction of 2,500 Ton Central Plant With Centrifugal Chillers
View Looking West at Existing Plant, Cooling Towers and TES Tank



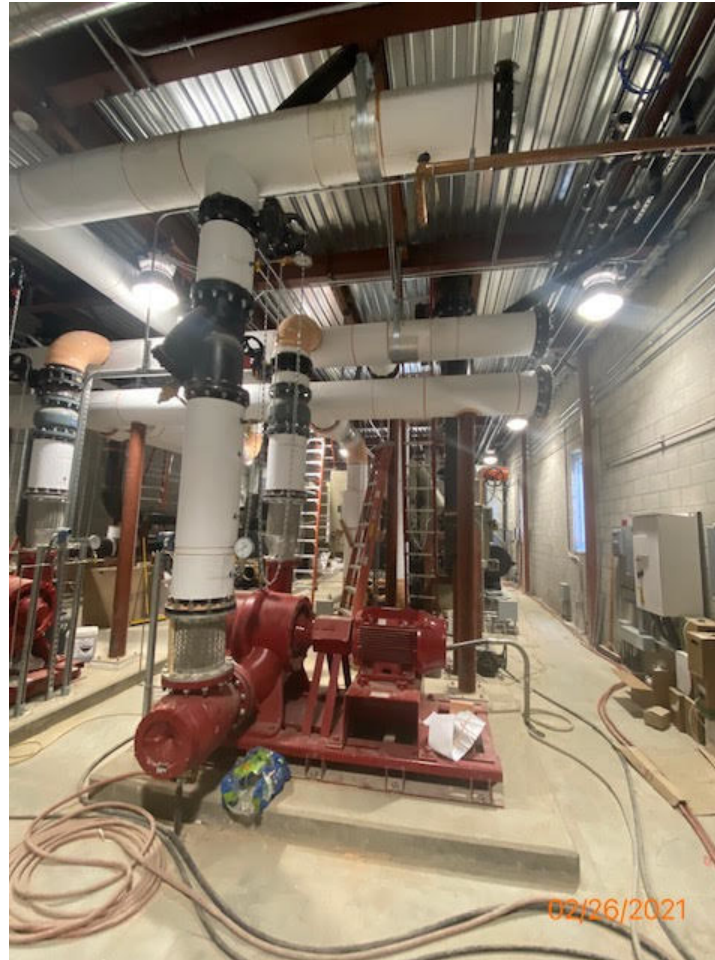
California State University Los Angeles
Design & Construction of 2,500 Ton Central Plant With Centrifugal Chillers
View Looking West at Existing Plant, Cooling Towers and TES Tank
Cooling and Tower and Piping Support Piers in Place



California State University Los Angeles
Design & Construction of 2,500 Ton Central Plant With Centrifugal Chillers
East Elevation Piping

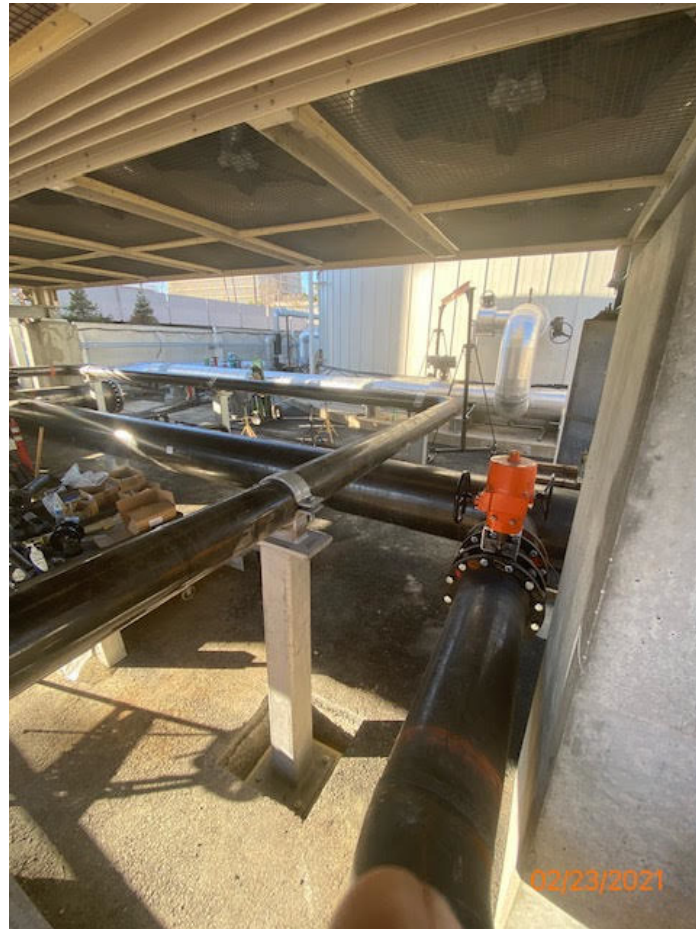


California State University Los Angeles
Design & Construction of 2,500 Ton Central Plant With Centrifugal Chillers
New Chilled Water Pumps

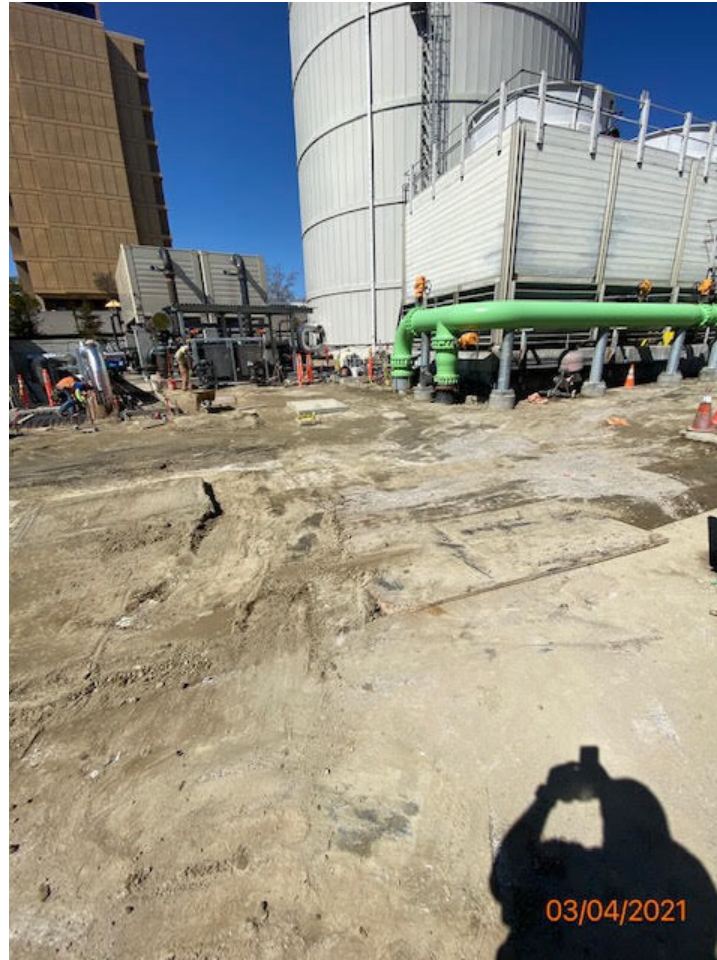


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California State University Los Angeles
Design & Construction of 2,500 Ton Central Plant With Centrifugal Chillers
Piping Under the New Cooling Towers



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California State University Los Angeles
Design & Construction of 2,500 Ton Central Plant With Centrifugal Chillers
Tunnel Piping to Student Housing



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California State University Los Angeles
Design & Construction of 2,500 Ton Central Plant With Centrifugal Chillers
Newly Installed Electrical Distribution Board in New Plant



California State University Los Angeles
Design & Construction of 2,500 Ton Central Plant With Centrifugal Chillers
East View at Main Entrance to New Plant



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California State University Los Angeles
Design & Construction of 2,500 Ton Central Plant With Centrifugal Chillers
New Chiller in Place



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Design & Construction of 2,500 Ton Central Plant With Centrifugal Chillers
New Distribution Boards

