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The New CalSTRS Eco-Friendly Headquarters



Mills-Peninsula Medical Center



Healthcare Designer Phil Crompton of Vantage Technology Consulting Group

High-Tech With A Heart: Young Communications Wires One Of The Nation's Top Hospitals—

Advanced Medicine For Everyone: State-Of-The-Art Communications Technology Makes Mills-Peninsula 'The Hospital Of The Future'

"All aspects of the project support the mission of patient and family-centered care." - Anshen+Allen Architects

hen Mills Peninsula Health Services opens its new \$618 million medical center in Burlingame in November, it will have every right to claim the title 'Hospital of the Future.' Named one of the nation's top hospitals for the last three years, the new Mills-Peninsula acute-care facility will be equipped with some of the most advanced healthcare technology available, including eICU, electronic patient charting, wireless telemetry nursing and an earthquake reporting system. (See center spread for more details about the technology; to see additional photos, go to www.norcalvdv.org and go to Feature Project.)

IBEW-NECA contractor Young Communications, working with healthcare technology designer Phil Crompton of Vantage Technology Consulting Group, installed the new systems. The architect for the project was Anshen+Allen; Turner Construction Co. is the building contractor.



The 56-year old hospital is being replaced to meet new seismic safety standards, and sits only a few miles from the seismicallyactive San Andreas fault. Spurred by Senate Bill 1953 to improve seismic standards in California and ensure that hospitals are operable in the event of severe natural disasters, the new hospital will feature the first base isolating

system and friction-pendulum bearing in California, which allow the building to move in any direction up to 30 inches.

The new hospital will provide a new 450,000 square foot, six story acute care facility and an 180,000 square foot medical office building. Communications on the project. "This is a state-of-the art facility," said Beatie. "The technology was also installed in such a way that it can be easily updated, and can be used for many years to come."





A publication of the National Electrical Contractors Association (NECA) and the International Brotherhood of Electrical Workers (IBEW) of Northern California.







Through various energy efficiencies, it uses one-third less energy than a standard California hospital.

Len Beatie, the project manager for Young Communications, a division of Young Electric, has worked on the project for two years, overseeing the installation of 3.5 million feet of cabling and the wiring of thousands of connections for various systems, many of them the latest innovations in digitized medicine.

Ten IBEW Technicians from IBEW Local 6 and IBEW Local 617 worked with Young Young Communications has a strong healthcare technology background, with previous experience wiring healthcare facilities for Kaiser Permanente, Sutter Health and Catholic Healthcare West. It was this track record of experience that helped Beatie and the technicians quickly implement the various system modalities, including the integration of a new earthquake reporting system.

continued on page 8

To find a NECA/IBEW Union Contractor go to www.norcalvdv.org

WPCS International Installs Technology Infrastructure For The New CalSTRS **Eco-Friendly Headquarters**

The teachers are going for green!

The new glass-and-steel CalSTRS (California State Teachers' Retirement System) headquarters, which opened in late 2009, has received LEED Gold WPCS International, an IBEW-NECA telecom contractor in Suisun City, is part of the team that helped to build the project to U.S. Green Building Council LEED certification.

The new 17 story, 409,000 square foot building on West Sacramento's River Walk is considered to be one of the most environmentally friendly headquarters in the region. Although the building offers state-of-the-art technology and more than 1,250 work stations, it uses 12% less energy than comparable conventional buildings, along with 40% less water.

90% of the building's occupants

receive natural lighting. The building minimizes building heat generation by using "fritted" glass, reflective roof and sidewalk pavers, covered parking, and shade-producing landscape. CalSTRS built its headquarters sustainably partially in response to Governor Schwarzenegger's 2004 executive order to make state buildings more efficient.

WPCS, working with technology consultant Jim Augustus of RLS Consultants, wired the entire telecom plan and voice/data infrastructure, using cable trays underneath the raised floor for a pathway. CalSTRS was looking for a state-of-the-art cable plan that would carry the organization forward for a number of years, since it owns the building. Part of the solution was to use







Donald Walker, Design Engineer.

webcast studio system.

system," he said.

"For instance," added Augustus, "there is no extra wire for telephone risers because it's an IP phone system. In the



The WPCS Team: Martin Rodriquez, Site Superintendent; Nick Rueda, Field Foreman; Mary Walker, Administrative Assistant: Mike Candler, Project Manager: Brett Smith, Senior Project Manager:

CAT 6A, since all of the outlets are on the desktop, along with a full fiber optic riser that is OM4 rated. CalSTRS also wanted a complete TV studio with webcast capabilities for remotely broadcasted board meetings, as well as a robust AV system.

WPCS installed all of the building backbone infrastructure and built out all of the MDF. IDF and server rooms to house the telecommunications infrastructure and equipment. They installed the cabling for the AV systems, including cabling for the

WPCS also honored the mandate to the entire team to work toward the LEED Gold certification. "We assembled every floor off site to minimize the amount of waste that would be delivered to the job site," said WPCS project manager Brett Smith, who led the company's telecom wiring effort during the 16-month project.

"The IDF closets were put together off site, the racks came preloaded with the wire managers on, with the jack panels preloaded, so anything that went inside the IDF was on one pallet. Everything on the floor, like the faceplates, jacks, and the patch cords, were put on another pallet, and those IDF elements were shipped to the site, so there was very little waste on site."

Jim Augustus of RLS Consultants, who designed the technology plan for the building, said that WPCS made every effort to find all its materials within a 300 mile radius of the headquarters, to use less energy and minimize the environmental damage that would occur if the materials were shipped from a wider radius.

"We tried to buy cable trays in Nevada and find other materials close by," he said. "It's difficult, because a lot of cabling products are made far and wide."

Augustus added that RLS designed a fully converged network system. "Although it doesn't necessarily get you LEED points, having a fully converged network is certainly in the spirit of a LEED installation, because you don't use a lot of extra wire and cable installed for each

spirit of LEED, there were a lot of things that were done to the building to reduce cost and reduce waste."



The data resource cabling in the server room. installed by WPCS.

The infrastructure installation itself included 1506 voice/data connections. at a budget of \$2.7 million. There are approximately 200 data outlets per floor, with the data locations being used for both telephones and computers, with a voice over IP system. The phones are plugged

into the data port and the computers and PDA's are plugged into the phones.

Technicians from IBEW Local 180 and IBFW Local 340 worked on the installation; one of the requirements of the project was that all of the technicians be BICSI (Building Industry Consulting Service International) certified. All IBEW technicians have high levels of training, including various certifications such as BICSI.

"When you work with a company such as WPCS, that uses IBEW technicians, you get quality workmanship," said Augustus.

WPCS used CAT 6A Systimax cable for the installation, which is a 10 gig solution. The fiber backbone runs in a riser system from closet to closet and then runs back to the main server room, located on the 4th floor. There is an IDF closet on each of the 14 floors that contain workstation connections.

One of the challenges of the project, according to Augustus, was the fact that the cabling was done under raised floors. That mandated a search for cable that had a truly limited combustable construction, basically low smoke zero halogen style cables.

"All of the cabling had to be fully enclosed in cabling trays, with a floor box in every cube location. It was a big challenge trying to fit the cabling and cable tray in along with the electrical distribution and process piping."



CalSTRS, the nation's second-largest public pension fund, with \$172 billion in assets, now has a building worthy of its mission-with the technology futureproofed for years to come.

For more information, contact Brett Smith, WPCS, at brett.smith@wpcs.com, or call 916.253.5309. Jim Augustus, RLS, can be contacted at jaugustus@rls.com, or call 415.401.7600.

PROJECT TEAM

CalSTRS:

Jim Ehnes, CEO; Jesse Jones, HMH Project Engineer and Owner's Representative

Architect:

Hellmuth, Obata+Kassabaum, Inc. (HOK)

Contractor:

Harbison-Mahony-Higgins Builders, Inc.

TeleCom Consultant/Designer:

RLS Consultants: Jim Augustus, Lead Consultant; Randy Sparks, Principal; Mark McComb, Principal & AV Designer; Dusty Mendes, AV Design

Voice/Data Installation:

WPCS International, Inc. Brett Smith, Project Manager

IBEW Technicians:

Technicians from IBEW Local 180 and IBEW Local 340

How can I find a contractor?

Visit the Northern California Voice-Data-Video website at www.norcalvdv.org to view over 125 qualified contractors in the Sound and Communications industry. The large number of companies can be narrowed down to fit your specific needs by utilizing the search options, which are available alphabetically, by county, by specialty, and by zip code.

Mills-Peninsula Medical Center Teams With Young Communicat

Video Conferencing In ICU, Wireless Health Services Monitoring And An Electronic Earthquake Alert System Provid

The new Mills-Peninsula Medical Center in Burlingame, part of the Sutter Health Network, will be one of the region's finest examples of state-of-the-art medical care when it opens in November 2010.

An important component of that care is the use of advanced communications technology to help save lives and improve treatment and patient outcomes. Young Communications, working with healthcare

technology designer Phil Crompton of Vantage Technology Consulting Group, is installing the hospital's technology-ready infrastructure, which features some of the most cutting edge healthcare systems available. The

infrastructure wiring includes electroi patient charting, internet-based capa for advanced patient/physician/family communication, and the installation o of-the-art earthquake reporting syste

MEDICAL OFFICE BUILDING

- 1. Fiber Backbone
- 2. One Technology Closet Per Floor
- 3. Distributed Antenna System

HOSPITAL EAST TOWER B

- 1. Main Media Distribution System
- 2. Main Server Room
- 3. Fiber Backbone
- 4. One Technology Closet Per Floor
- 5. Distributed Antenna System
- 6. Earthquake sensor system

C CONNECTING LINK

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Project Team Mills-Peninsula Health Services:

Architect: Anshen+Allen

Contractor: Turner Construction

HealthCare Telecom Consultant, Designer: Phil Crompton, Vantage Technology Consulting Group

Voice/Data/Communications/Wireless Installation: Len Beatie, Young Communications

IBEW Technicians:

Local 6 and Local 617, including Hospital Superintendant, Jerry Ruaro POB Superintendant, Wendell Tomas Lead Technician, Chris Gonzales Lead Technician, Antonio Reyes Tech, Cully Taylor

Fire Alarm System Installation: AECO Systems Inc. Estimator/Project Manager, Brent Hensley







elCU **State-of-the-Art Telecommunications**

The intensive care rooms at Mills-Peninsula Medical Center are equipped with state-of-the-art technology. Each room is connected via a videoconferencing unit to the Sutter Health Intensive Care Call Center in San Francisco, which is staffed 24/7 by intensive care physicians and nurses who can provide second opinions to the Mills-Peninsula Intensive Care team onsite. The intensive care room is also connected to the wireless telemetry system and the electronic medical records systems via an on location server.



Mills-Peninsula Medical Center Teams With Young Communications To Install Advanced Technologies Video Conferencing In ICU, Wireless Health Services Monitoring And An Electronic Earthquake Alert System Provide State-Of-The Art Patient Safety At Mills-Peninsula Health Services.

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infrastructure wiring includes electronic patient charting, internet-based capabilities for advanced patient/physician/family communication, and the installation of a stateof-the-art earthquake reporting system.

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The \$618 million hospital and attached Medical Office Building replaces the 50 year old Peninsula Medical Center (already ranked in the top 5 percent of the nation for clinical quality). The six-story hospital (over

one lower level) has approximately 240 beds in 450,000 square feet. You can read more about the new hospital or view ongoing construction at http://www.mills-peninsula. org/newhospital/.

TECHNOLOGY HIGHLIGHTS

- 1 The main server room, MPOE, and one technology closet are in the lower level. The cabling network is a Cat 6 system with single mode and multi-mode optical fiber in the riser. There are 3.5 million feet of total cabling installed throughout the building.
- 2 The backbone runs from the server room in the basement horizontally to the riser stacks. The backbone then runs vertically up each of the riser stacks to each IDF on each floor.
- The standard voice data networking runs over Cat 6 cable through the fiber backbone. There are thousands of terminations supported by the building.
- 4 The main media distribution feed (from DirecTV) is run over RG 11 cable from the roof, through the riser to the MDF where it is modulated and distributed to each IDF. From each IDF to each patient room, it is distributed via RG 6 guad shielded cable as part of the Interactive Patient Television system.
- Earthquake reporting technology developed by the California Strong Motion Institute Program runs on specialized 6 conductor cable to 31 earthquake sensors that monitor all the major structural support of the building. The sensors detect motion, measure how the building performs in an earthquake, and are connected via a roof feed to the Emergency Broadcasting Network.
- 14 technology closets throughout the building receive data from the main server room. Each closet has about 700 to 800 Cat 6 terminations.
- A wireless system on the roof connects to a distributed antennae system throughout the hospital to provide cell phone coverage throughout the facility. It supports communications throughout the building, including wireless to medical staff, as well as signals to police radio, fire radio, and walkie talkies for hospital security and maintenance. The building receives data from the main server room. Each closet has about 700 to 800 terminations.

Monitoring Systems Continuously **Update Patient Conditions**

Young Communications wired many of the monitoring systems that continuously update patient conditions or provide for communication between medical professionals on behalf of the patient. From electronic medical records to wireless telemetry nursing, these state-of-the-art technologies are helping to improve the quality of health care.

1 A Philips Intelliview monitoring system is connected to each patient to monitor heart rate, AKG, etc. The data is exhibited on an in-room screen, tramsmitted to to servers in the technology closets and then relayed back to screens at the nursing stations. Patient monitoring is located in every room, plus OR and ICU, for a total of 700+ connections.



3 The nurse call system is operated from a cable box in the ceiling. It is connected to a push button, but is also connected to a touch screen LCD panel beside the bed that nurses or physicians can use. The call system sends data to a monitor in the nurses station. It also illuminates a light outside the patient's door. The nurse call system is an IP system run over Cat 5E cable.





2 The patient monitoring system monitors the patient wirelessly when the patient is mobile, such as walking down the hall or being moved on a gurney. A transmitter attached to the patient's wrist monitors their heart rate and other information and sends data wirelessly back to the nursing station or to the nurse or physician directly.

4 A wireless telemetry nursing system is operated via a touch screen in each patient's room. The wireless system collects data from the patient monitoring system and sends alerts to the patient's assigned nurse.

5 An electronic charting system is installed at every bedside so that physicians and nurses can access the electronic medical record systems to update the patient's chart, review results, or look at an X-ray or image. Staff can also use wireless devices to access the same systems as they walk from room to room.

Healthcare Technology Consultant Phil Crompton Talks Hospital Trends



Phil Crompton, a Principal at Vantage Technology Consulting Group in El Segundo, applies his extensive project experience, strong communication skills and comprehensive technical knowledge to help healthcare organizations envision the role of technology in their future.

Phil has provided strategic technology planning, systems design, engineering and installation services for over 14 years. Some of his projects include Laguna Honda Hospital, Cathedral Hill Hospital, John Muir Hospital, Kaiser Antioch Hospital, St. John's Health Center, and the UCLA Westwood Replacement Hospital. Here he discusses healthcare technology, and more specifically, some of the work he did at Mills-Peninsula Medical Center.

Q: How did you become interested in healthcare technology?

A: I have always been interested in convergent technologies which represent the opportunity to do more with less by integrating the systems as much as prudently possible. Instead of creating a number of different systems we can build systems that communicate with each other and work together, providing improved outcomes without requiring the additional cost, overhead, space and management that all these separate systems cost. I found that the health care industry can really benefit from this approach.

Q: What has happened to healthcare technology in the last decade?

A: Just ten years ago, healthcare technology typically lagged behind many other industries that we worked in, primarily because most hospitals had aging facilities and buildings. Their ability to upgrade and install new systems was limited because of their older infrastructure. I know SB 1953 (which requires all general acute care hospitals to meet new stringent earthquake standards) has been a source of heartache for hospitals in California, but it actually did help from one perspective: it gave them a mandate to build new state-of-the-art facilities. With a new facility, you can often benefit from a big jump in technology because you don't have to deal with the impact of legacy systems. Instead you can deploy the "latest and greatest" in healthcare technology.

Q: Which hospitals have been pioneers in California in the implementation of healthcare technology?

A: When technology is at a pretty early stage, many hospitals don't feel the need to take a technology risk by adopting a "bleeding edge" system. We have found that, understandably, most hospitals would prefer to avoid being the first facility to install a new system and often wait until the system has been proven. Hospitals that did pioneer some of the early technology integrations include St. John's Health Center in Santa Monica and the UCLA Westwood Replacement Hospital. These two facilities were a driving force behind these integrated technology systems and we were able to see some great benefits from integrating the technologies.

Q: How did you get involved with Mills-Peninsula **Medical Center?**

A: Vantage was hired to produce the Technology Plan for the new hospital in 2003. From there the hospital asked us to design the systems and to manage the implementation. However, it's not enough to build a hospital and fill it up with new technology. You have to find a way to train the staff to take advantage of the new technologies. There is no down time in hospitals, so we are working with the hospital to transition all of the existing staff seamlessly into using the new technology.



Q: How do you transition in a new technology system?

A: It's important that the staff (and patients) don't immediately suffer from information overload when they move into the new building. Part of our strategy is to look at the timeframes for systems deployment and decide which systems and features will be prioritized, so staff are able to continue to do their jobs while gradually familiarizing themselves with the new technology.



Q: What is one of the most important new healthcare technologies?

A: The move to the Electronic Medical Records is driving a lot of technology in hospitals because you need to support access to the information stored in these systems at the point of care. We want to be able to push the electronic medical record information out to the doctors and nurses wherever they are, anywhere in the hospital, so we are deploying a high density wireless network. In fact, in our experience healthcare has been one of the fastest adopters of wireless technology. We are expecting at some point to see wireless deployed as a primary connection for physicians and nursing staff, with wired cabling provided for dedicated high speed connections. However, that doesn't mean there won't be any wires in the building, because you still need to connect all of these access points together, and the number of access points in the building are growing exponentially as well.

Q: What are other technologies are influential?

A: Wireless voice systems that allow the nursing staff to communicate with each other at will are becoming increasingly important. It used to be that a huge part of a nurse's job was "hunting and gathering." They were always looking for people. I'm pleased to say that we are now moving away from voicemails, sticky notes and overhead pages towards a point when a doctor calls in, he or she can talk directly to the nurse assigned to that patient by calling them directly.

Q: How do you like working with NECA/IBEW contractors and technicians?

A: It's wonderful. Their training means that they all know what they are doing. We have been involved in a few projects where we haven't had IBEW technicians and the difference is night and day. IBEW technicians have a level of credibility and dependability that is hard to find elsewhere.

To contact Phil Crompton, e-mail Phil.Crompton@VantageTCG.com, or call 310.536.7676 ext. 208.



Civic Hub

The Lafayette Library and Learning Center opened its sparkling new facility last November, showcasing a contemporary library space complete with a state-ofthe-art mini-auditorium. Known as the Community Hall, the assembly area seats 200 and is equipped with AV technology that serves a multitude of needs-making it part civic center, part theater, and part meeting and teaching hub.



The mini-auditorium's versatility is due to the audio-visual technology installed by IBEW/ NECA contractor Lloyd F. McKinney Associates of Hayward and designed by AV consultant Marshall Long. The AV system's adaptability allows the Community Hall to host activities as diverse as Lafayette City Council meetings, theater performances, lectures, travel programs, jazz concerts, and piano recitals. Portable seating adds to the room's flexibility.

The \$435,000 installation project took two years to complete, and promises to make the Library a town hub. Lloyd F. McKinney Associates, known for its work at several other Bay area libraries, also completed the AV installation for two classrooms in the center.





Lloyd F. McKinney Associates' **AV System Turns The Lafayette Library Into A State-Of-The-Art**





"Practically everyone in Lafayette supported the new library in some way," said Tony Coe, engineering services manager for the city. "Many different people worked within the community to make it happen, from the Friends of the Library to the Lafayette Library Foundation to several other groups. Our old library was very antiquated and very small. It didn't accommodate the needs of our residents. The needs of the community had outgrown it."

The AV system for the new library's Community Hall was planned to accommodate City Council meetings and Planning Commission meetings, which were formerly held at the town's community center. To facilitate the meetings there are multiple microphones with sound reinforcement, multiple speakers, and teleconferencing equipment.

"An adjacent control room functions as a mini broadcasting studio," said Jeremy Hamm, Project Manager for Lloyd F. McKinney Associates. "In addition to allowing those who use it to record, dub and broadcast meetings, it contains video editing equipment as well as a sophisticated video projection system that shows movies with stereo sound."

The room's equipment racks include a digital video recorder,

digital switcher, monitors, video editing, computers, video cameras, and a video projector. Technicians from IBEW Local 595 worked on the project.

"The feedback so far has been pretty overwhelming in terms of the service and the programs that we are able to provide in the community room," said Tony Coe. "It's really become more than a library—it's a learning center campus and community hub."

PROJECT TEAM

Lafayette Library: Library Construction Management Tony Coe, City of Lafayette

Architect: Killefer Flammang Architects

> **Contractor:** C. OVERRA

AV Consultant/Designer: Marshall Long, Marshall Long Acoustics

AV Installation:

Lloyd F. McKinney Associates ystems Engineer, Frits Groenhuizen System Programming, Ron Taylor Jeremy Hamm, Project Manager

IBEW Technicians:

IBEW Local 595 Lead Technician: Andy Glock Technicians: Carl Shifflett, Tim Osterdock, Steve Thompson

Where can I find a Nurse Call contractor?

Contra Costa Electric Inc

Contact: Chris Payne chris payne@emcorgroup.com 825 Howe Rd. Martinez CA 94553 Tel: (925) 229-4250 Fax: (925) 229-1672 http://www.ccelectric.com

DK Technology

Contact: Pedro Chavez pchavez@dk-technology.com 11875 Dublin Blvd. Suite C-153 Dublin, CA 94568 Tel: (925) 829-600 Fax: (925) 829-6003 http://www.dk-technology.com

Eilbacher Electric Contact: Eilbacher Electric Lectrospec@aol.com 41794 Vargas Rd. Fremont, CA 94539

Groseclose Electric Compan Gyeager@redshift.com 231 Commission St Salinas, CA 93901 Fax: (831) 424-6132

Intrepid Electronics Systems Inc. Contact: Kurt Brinkman

kurt@intrepidelectronic.com 4377 Adeline St. Emeryville, CA 94608 Tel: (510) 597-9966 Ext. 115 Fax: (510) 597-9980 http://www.intrepidelectronic.com

J M Electric

Contact: Chris Jensen SRT@jmelectric.com 400 Griffin St. Salinas, CA 93901 Tel: (831) 422-7819 Fax: (831) 758-9638 http://www.jmelectric.com

Lloyd F. McKinney Associates Inc.

Contact: Rick McKinney rick@mckinneyassoc.com 25350 Cypress Ave. Hayward, CA 94544 Tel: (510) 783-8043 Fax: (510) 783-2130 http://www.mckinneyassoc.com

MDE Electric Company

Contact: Marshall Goldm 152 Commercial St. Sunnyvale, CA 94086 Tel: (408) 738-8600 Fax: (408) 728-0385 http://www.mde-electric.com

For a complete listing of over 125 qualified Sound and Communications contractors, please visit www.norcalvdv.org.



Metropolitan Electrical

Construction Inc. Contact: Nick Dutto ndutto@metroelectric.com 2400 3rd Street San Francisco, CA 94107 Tel: (415) 642-3000 Fax: (415) 550-6515 http://www.metroelectric.com

Paganini Communications Inc

Contact: Ken Paganini kenp@pagcos.com 190 Hubbell Street San Francisco, CA 94107 Tel: (415) 575-3900 Fax: (415) 575-3920 http://www.pagcos.com

Point One Electrical Systems Inc.

Contact: Shane Stoltenberg shane.stoltenberg@point1.com 6751 Southfront Rd. Livermore, CA 94551 Tel: (925) 667-2950 Fax: (925) 667-2951 http://point1.com

Quality Sound

Contact: James Brian ibrian@gualitysound.ne 2010 E. Fremont St. Stockton, CA 95205 Tel: (209) 948-2104 Fax: (209) 948-0955 http://www.qualitysound.net

Rosendin Electric Inc

Contact: Larry Hollis Ihollis@rosendin.com 440 Ninth St., San Francisco, CA 94103 Tel: (415) 575-1600 Fax: (415) 575-1699 http://Rosendin.com

Steiny and Company Inc. Ssteinv@steinvco.co

27 Sheridan St., Vallejo, CA 94590

Young Communications Co. Inc

Contact: Len Beatie LenB@youngelec.com 195 Erie Street San Francisco, CA 94103 Tel: (415) 648-4700 Fax: (415) 648-8259 http://www.youngelec.com Union Contractors (IBEW/NECA) in Sound & Communications combine a skilled and trained work force with world class technology. For the best installations in voice/data/cabling, network systems, data center facilities, audio/video systems, sound systems, fiber optics, wireless, security systems, fire/life safety systems, and CATV, call a union contractor or visit www.norcalvdv.org.



CalSTRS Headquarters

norcalvdv.org



Advanced Medicine For Everyone: State-Of-The-Art Communications Technology Makes Mills-Peninsula 'The Hospital Of The Future'

The CCSI Earthquake Alert system, designed by the California Strong Motion Institute, carries data from the communications center to 31 earthquake sensors that monitor all the major structural support for the building. In the event of an earthquake, the sensors transmit data to a feed on the roof. This data is then carried via satellite to Sacramento, and then onto the emergency broadcasting network. The building is designed to remain



operational after an earthquake; and the data feed transmitted to the emergency broadcasting network is slated to notify authorities that the hospital is intact and ready for triage.



Young Communications also installed the latest systems that promote digitized medicine. The most well known is the electronic patient record system, which includes information about test and imaging results, medication history, doctors' notes and general health history. The electronic system replaces paper charts and helps ensure better, safer and more efficient health care.

Mills-Peninsula Medical Center

Many of the new systems are wireless, such as the telemetry monitoring, which allows the medical staff to track patient data wirelessly and continuously. Updated data is then transmitted to the medical cell phones of individual nurses and physicians, as well as to nursing stations.

The electronic elCU technology allows a patient in intensive care to be monitored not only by on-site medical staff, but also by a team of trained intensive care physicians and nurses. They are located off-site in a call center, and are available 24/7 through a video conferencing hookup in each elCU room. When it opens later this year, the hospital will offer exemplary patient care in one of the safest, most technologically advanced healthcare facilities in Northern California.



For more information about the hospital, see www.mills-peninsula.org/ newhospital/or contact Len Beatie at Young Communications, LenB@youngelec.com, or call 415.230.8619, or contact Phil Crompton at Phil.Crompton@VantageTCG.com, or call 310.536.7676 ext. 208.





SOUND AND COMMUNICATIONS

of Northern California