VALUE DELIVERED
Paradigm’s guidance and expertise provided design, development, integration, and validation which required state-of-the-art, highly technical, emerging technological trends and the selection of appropriate novel technologies based on a variety of criteria such as engineering, risk assessments and logistical requirements. Bottom line benefits for this facility were impressive creating a more powerful, cost-effective and energy-efficient heating, ventilation and air conditioning (HVAC) system with improved system controls, greater year-around comfort and productivity and further expansion capability.

OBJECTIVES
- Construct a space from existing warehouse to be used as a morgue and autopsy room with consideration of Biosafety Levels into the design;
- Equipment installations resulting in lower total ownership costs and maintenance;
- Complete conversion during regular business hours with minimal to no disruption of normal business operations;
- Support critical current and future business needs by increasing energy capacity and efficiency, and upgrading electrical service.
- Bring the facility into compliance with stringent new hospital regulations.

SOLUTIONS
Paradigm included features with the latest in both energy-saving and sustainable elements. It also includes the supply and installation a central energy plant, air handling units, terminal units, energy recovery units, state-of-the-art chilled water precision cooling systems, and over variable frequency drives.
Work also included:

- Demolition (All aspects)
- Trenching & backfilling for new underground plumbing lines
- Welding & structural attachments for seismic anchorage of owner equipment
- Concrete forming & pouring for the equipment pad and trenching repairs
- New doors and hardware installation
- Line Voltage Electrical
- Direct Digital Controls
- Fire life safety systems
- Framing & drywall construction for new walls and soffit area
- Installation of the new HVAC equipment
- Sheet metal ducting
- Heating Hot water & Chilled Water piping for new Air Handler
- Plumbing lines for new sinks
- Installation of all owner supplied fixtures & furnishings
- Exterior & interior plaster and painting to match existing finishes
- Overall project management and coordination of all disciplines involved

PROJECT SCOPE
Convert an existing portion of a Hospital’s storage area into a new Morgue/Autopsy area as part of the State’s requirement for growing hospitals. The project involved extensive demolition of the warehouse area and new construction of a room complete with dedicated HVAC system, electrical upgrades, plumbing services, and installation of owner required equipment and fixtures.

SUSTAINABLE FEATURES
From expert pre-construction guidance to optimized design of all mechanical, electrical, building automation, safety and other systems, Paradigm implemented an extensive list of energy conservation initiatives. These included:

- Redirecting reusable materials to appropriate sites;
- Incorporating recycled content materials into construction process;
- Establishing a minimum indoor air quality performance for comfort and well-being of occupants;
- Utilizing low or no emitting VOC materials;
- Providing optimal thermal comfort for occupants; and
- Including control and reliability of systems.

PROJECT DELIVERY WITH "NO LOOSE ENDS"
This project required an effective management and coordination of performance of multiple disciplines in an existing and operational facility without disrupting the daily operations. In the middle of the project Paradigm adapted to a major redesign initiated by the Office of Statewide Health Planning and Development. The project required a very strategic and expedited approach of completion to ensure the least minimal disruptions to the occupants of nearby medical rooms. Paradigm established an aggressively accelerated schedule to meet this need. Quality of work was never sacrificed and safety measures of Infectious Control and Air Quality was established and adhered to at all times. To do this, we ensured:

- Well defined scope
- Extensive early planning
- Good leadership, management and first line supervision
- Positive client relationship with client involvement
- Proper project team chemistry
- Quick response to changes
- Engineering managers concerned with the total project, not just the engineering elements

ABOUT PARADIGM MECHANICAL CORP.
Paradigm Mechanical Corp. is a Woman-Owned Small Business located in San Diego County. Our principals have over 75 years of combined industry experience. We specialize in working with project teams to design and build for government, commercial and industrial facilities in the Southern California region.

Paradigm by definition means “A clear example or model on which all others are based”. At Paradigm, we work hard to ensure we live up to our name and perform accordingly.