## Mt. San Antonio College Master Plan



## Library, Learning Resources and Campus Center (Project A)



Project Budget: \$151,000,000 - State Bond Funds: \$79,000,000 - Local Bond Funds: \$72,000,000 GSF: 217,000 ASF: 153,655 Schedule: - Design: Summer 2013 - Summer 2015

- Construction: Fall 2015 - Summer 2017

This proposed project will construct a new facility that would consolidate all



the services of the Learning Resource Center, Student Life Center, and the Campus Center into one permanent complex and will provide additional space that would accommodate the enrollment growth that the college is experiencing. The existing facilities were built in the early 1940s-1970s and were designed for the technologies and student body that existed at that time. Significant technological advances and growth have occurred since then. This project will create a modern facility that would provide an efficient network infrastructure for current student needs, upgraded and necessary technologies, and make better and more efficient use of assignable space to enhance the educational learning environment.

The project would achieve the following goals:

- A. Consolidate all the services of the Learning Resource Center, Student Life Center, and Campus Center into a permanent facility.
- B. Provide appropriate support for student organizations and the development of leadership skills.
- C. Provide building-wide network, telecommunications, and electrical infrastructure to safely locate computers and meet the advances in technology that will enhance educational delivery to students.
- D. Provide a permanent facility that provides the additional space that would accommodate the enrollment growth consistent with the Educational and Facilities Master Plans.
- E. Provide a modern learning resource environment capable of enhancing instruction, utilizing the technology that will prepare students for four-year institutions and current employment standards.
- F. Improve the configuration of institutional space for increased and efficient usage.
- G. Consolidate food services, student activities, and bookstore to a central campus location.
- H. Provide large gathering spaces easily accessible to the community.

## **Business and Computer Technology**



(Project B)

Project Budget: \$46,000,000 - State Bond Funds: \$23,000,000 - Local Bond Funds: \$23,000,000 GSF: 87,000 ASF: 60,000 Schedule: - Design: Fall 2011 – Spring 2013

- Construction: Spring 2013 – Winter 2015

The Business and Computer Technology Center will provide for construction of a



new 87,000-square-foot center to consolidate business administration, accounting, management, computer information systems, office technology, and family and consumer sciences instructional programs. These programs are currently housed in facilities constructed in the 1940s that are not suitable for renovation. The new two-building complex will include state-of-the-art technology that supports current teaching methods including increased use of laboratory-based learning environments as opposed to traditional lecture classrooms. The new space will more appropriately support instruction in skills-based programs such as Hospitality and Restaurant Management and Fashion Design.

The designed space includes a law library and mock courtroom, a foods lab and training kitchen, large open computer labs, 45 - 50 classrooms, and faculty and division offices. Support spaces include meeting and conference areas, locker rooms, laundry, and printing services. The building site will include outdoor gathering spaces and a landscaped courtyard suitable for group activities.

## Child Development Center

(Project C)



Project Budget: \$20,000,000 GSF: 33,000 ASF: 22,000 Schedule: - Design: Complete - Construction: Spring 2010 - Summer 2012



This project will expand, consolidate, and improve the Child Development Center in a new protected site on campus and create a state-of-the-art Early Childhood Education Laboratory.

This project will provide construction of four new buildings totaling 35,000 square feet to house child development classrooms, laboratories, observation spaces, and all required facilities for providing child care for up to 162 children, from birth to five years old. This facility will meet all State licensing requirements and will serve as a model facility for combining child care education and training programs with child care services. College classrooms with observation windows will be placed adjacent to child care areas in order to offer appropriate learning opportunities for students in onsite psychology and nursing classes in childhood development.

Additionally, the new Center is designed to include faculty and administrative offices, meeting and conference rooms, staff and lab preparation areas, children's meal preparation and serving spaces to provide three meals a day; nursing and isolation areas for infants and toddlers, and spaces designed for student collaborative activities. Support facilities will also include specialized restrooms for small children.

Site work will include walkways, roadways, emergency vehicle access, parking enhancements for a convenient drop-off parking area, handicap access, play areas and fencing to ensure the safety of the children, and landscaping.

## **Athletics Complex Phase 2**



(Project D)

Project Budget: \$26,950,000 - State Bond Funds: \$8,000,000 - Local Bond Funds: \$18,950,000 GSF: 44,000 ASF: 38,000 Schedule: - Golf Driving Range - Football Practice Field

- Track and Field Upgrades
- Site Improvements:
  - Design: Spring 2010 Fall 2010
  - Construction: Fall 2010 Fall 2011
- Tennis Courts:
  - Design: Complete
  - Construction: Winter 2011 Summer 2011
- Gymnasium:
  - Design: Summer 2012 Winter 2014
  - Construction: Summer 2015 Winter 2016

The second phase of the Athletics Complex completes the relocation and consolidation of the majority of the athletics programs to the south side of the campus, allowing for growth of other educational programs closer to the center of campus.

Replacement of the old Gymnasium, which was constructed in the 1940s and does not meet ADA/accessibility standards, will provide a fully accessible facility with improved spectator seating and facilities for the broadcast of athletic competitions. (The cost of bringing the existing Gymnasium up to current standards would exceed the cost of a new Gymnasium.) The building will also include training and rehabilitation spaces for team sports as well as support spaces for physical education and athletic programs.

Relocation of the tennis courts will allow for the construction of the new 80,000-squarefoot Business and Computer Technology Center, to be located adjacent to other academic facilities. A new golf driving range will support the instructional program and offer opportunities for the community to attend golf classes and practice their game. A new football-sized field will allow the various field sports adequate space for practice, and upgraded safe facilities for hammer throw and shot put will be constructed.



## Career and Technical Education Building Renovation

(Project E)



Project Budget: \$38,000,000 - State Bond Funds: \$19,000,000 - Local Bond Funds: \$19,000,000 GSF: 128,143 ASF: 88,000 Schedule: - Design: Summer 2011 - Spring 2013

- Construction: Summer 2013 - Summer 2015



This project will improve the instructional programs at the College by remodeling the classroom buildings known as the Technology Center. The buildings currently house the Aeronautics, Transportation and Travel; Aircraft Maintenance and Manufacturing; Architecture and Engineering Design Technology, Electronics and Computer Technology, Computer Security, Fire Technology, Allied Health including Nursing, and Public Services instructional programs. As these programs have changed and developed over time, their space infrastructure needs have changed dramatically. This project will address those needs by constructing learning spaces that meet the current program needs.

The Technology Center was constructed prior to the use of computer technology in the classroom. Therefore, these buildings are in need of modernization to provide better access to technology and meet current codes, improve efficiency, and remove asbestos-containing building materials. The buildings were also constructed at a time when primarily male students attended the programs housed in these buildings, and the women's restroom facilities are not adequate for the demographics of the current student population. This project will include electrical, mechanical, and technology system upgrades, retrofitted interiors for user efficiency; and new casework and all interior finishes. A recent structural analysis of the facility indicates that major work must be done to the five-story portion of the building to protect students and staff and to prevent a catastrophic failure should a major seismic event occur in the area. The building also needs improvements such as the replacement of the elevators and automatic doors to meet current building code and accessibility standards.

## **Classroom Building Renovation**

(Project F)

Project Budget: \$25,500,000

Phase 1 (\$8,000,000): GSF: 20,000 ASF: 18,000 Schedule: - Design: Complete - Construction: Spring 2010 - Summer 2011

Phase 2 (\$17,500,000): GSF: 40,000 ASF: 32,000 Schedule: - Design: Fall 2015 - Summer 2017 - Construction: Fall 2017 – Spring 2019







This project consists of two phases; the first will upgrade a currently non-compliant facility to the State Field Act

standards required for teaching space, and the second will renovate sections of the current library building for much needed teaching space.

Phase 1 involves the renovation of an existing 20,000-square-foot metal building to provide a new Physical Education Center incorporating faculty offices, the division offices and support areas, weight rooms, classrooms, team rooms, and locker/shower rooms. The building was originally constructed in 2000 as a temporary facility to house the nursing program prior to completion of their permanent building. Major structural modifications will ensure that the facility can be used for the appropriate support of students in credit classes on a permanent basis by complying with State Field Act requirements and seismic standards.

Following the construction of the new Library-Learning Resources and Student Activity Center, the Phase 2 of the project will renovate approximately 40,000 square feet on the top floor in the existing Learning Technology Center that currently houses the Library.

The space will include desperately needed active learning space, laboratories, and classroom space necessary to meet the College's growth needs in the future as well as faculty offices, meeting and conference rooms, and office support areas.

## Laboratory Building Expansion

(Project G)



Project Budget: \$5,300,000

Phase 1: Schedule:

- Design: Summer 2009 Summer 2010
- Construction: Summer 2010 Spring 2011

Phase 2: GSF: 7,000 ASF: 5,600 Schedule:

- Design: Fall 2014 Summer 2016
- Construction: Summer 2016 Spring 2018



This project provides for growth in the science disciplines by providing four new state-of-the-art teaching laboratories. These new lab spaces will be located adjacent to the recently renovated Science Complex to ensure support from related faculty offices and laboratories. Special emphasis will be placed on exemplary systems for health, safety, and environmental sensitivity.

Installation of rooftop instructional areas on the recently completed Science Laboratories building, featuring an astronomical observation center, is also included in this project.

## Fire Academy

(Project H)



Project Budget: \$10,000,000 GSF: 10,000 plus Training Tower ASF: 7,000 Schedule: - Design: Summer 2010 - Winter 2012

- Construction: Spring 2012 - Fall 2013

This project provides for the construction of a Fire Academy facility on or near the campus, eliminating the need to lease space from other institutions. This facility will improve the cooperation and synergy between the College and the Fire Academy through a fixed location and will provide an improved working relationship between the Fire Academy, Fire Science, and Paramedic programs. The College is evaluating several sites to determine whether this will be an on- or off-campus facility.

A state-of-the-art training facility will be constructed to meet State environmental laws, fire service training needs, and local storm water requirements. The facility will include a Training Tower as well as an administrative building to contain instructional classrooms, faculty offices, and storage space, along with space for training equipment and vehicles.

Fire Academy space allows for program growth at a time where firefighters are desperately needed in the area and simultaneously creates a local opportunity for neighboring public safety operations to update and maintain required training levels. The project will foster the development of partnerships with many of the local firefighting units.

## **Public Transportation Center**

(Project I)



Project Budget: \$7,000,000

- Local Bond Funds: \$3,500,000
- Other Funds: \$3,500,000

### Schedule:

- Preliminary Planning: Summer 2009 Spring 2013
- Design: Spring 2013 Summer 2014
- Construction: Summer 2014 Winter 2016



The Public Transportation Center will provide easy access to the campus for students and staff who wish to ride the bus to Mt. SAC. The Center will attract additional bus routes and carriers to the campus and will create easy access from both sides of Temple Avenue with a safe pedestrian bridge crossing the roadway. Traffic in the area can be significantly reduced by constructing modern bus turn-outs to allow loading and unloading without delaying traffic. The Center will decrease the number of vehicles on the road by encouraging increased use of public transportation that provides the riders and the transportation agencies with the facilities they need. Pedestrian pathways to the interior of the campus will by upgraded and improved to ensure safe, compliant, and attractive aces at each of the six main entry points.

## Parking, Public Safety, and Traffic Improvements



(Project J)

Project Budget: \$44,000,000 Schedule:

- Preliminary Planning: Summer 2010 Winter 2011
- Design: Winter 2013 Summer 2014
- Construction: Summer 2014 Winter 2016



Mt. San Antonio College serves over 65,000 students, with the vast majority commuting from the local communities. Currently, there are three heavily used main entry points to the campus. Traffic in these areas spills out on to the public streets, impacting everyone in the community. This project will play a major role in meeting the Master Plan goal to create three new main entry points; allowing efficient entry and exit of vehicles and balancing the flow of traffic around campus. Interior lighting, emergency phones, and controlled pedestrian crossings at each entry and within the campus interior will provide for efficient and safe passage of students, staff, and the public on, off, and within the campus.

Current traffic studies indicate that Mt. SAC will require an additional 1,400 to 1,800 parking spaces by 2014 to accommodate expected growth. A new parking structure will address this need and will allow the college to continue to grow to serve students

## Parking, Public Safety, and Traffic Improvements (Project J) (continued)



in the area. The parking structure site has been selected so that vehicles can enter the campus from the intersection at Mountaineer and Grand Avenue at the northwest

corner of the campus, reducing the traffic impact on the busy Grand and Temple Avenues and the San Jose Hills Road and Grand Avenue intersections. Constructing parking on the northwest corner of campus will provide parking spaces where they are needed, closer to the classrooms and Student Services facilities that currently do not have adequate parking. Design criteria will ensure an attractive, non-intrusive, structure. For this project, the design-build project delivery method will be considered to ensure the best value for the district.

## Scheduled Maintenance



(Project K)

Project Budget: \$9,000,000 Schedule: Ongoing



In conjunction with the State-funded Scheduled Maintenance grant system, this project will provide funding for scheduled maintenance projects across the campus in the following categories:

- Roofing Repair or Replacement
- Utility Repair or Replacement (electrical, lighting, alarm, water and sewer, drainage, data and communications systems, and energy management systems)
- Mechanical Equipment Repair or Replacement (chillers, boilers, cooling towers, and air handlers)
- Exterior Refinish and Repair (masonry, stucco, siding, doors, waterproofing, and painting)
- Other Critical Needs (erosion control, fencing, walkways, flooring, etc.)

### Campus-wide Improvements

(Projects L1 – L7)



Infrastructure Improvements: COPS Debt Retirement: Temporary Space: Demolition: Equipment Allowance: Contingency: Improvement Projects: Construction Support: Schedule Ongoing \$35,000,000 \$11,000,000 \$4,000,000 \$4,500,000 \$5,000,000 \$21,000,000 \$17,800,000 \$4,900,000



Infrastructure Improvements (overview, projects L1-A through L1-W) – Studies indicate that the District faces a backlog of infrastructure improvements in excess of \$60 Million. This project reduces that backlog by roughly half by upgrading and replacing critical infrastructure installed prior to 1970. An efficient campus-wide approach will maximize efficiency, while minimizing cost and impact to students and faculty, by dividing the campus into twelve zones. These utility system upgrades are essential to the campus operation and will prevent continual power outages, sewer overflow, polluted storm drain run-off, computer network failures, and inadequate water pressure for fire suppression systems. New reclaimed water system and energy efficiency projects are included. Rooftop solar and solar array systems will be evaluated and constructed as implementation costs allow.

COPS Debt Retirement (Project L2) – In 2008, a Certificates of Participation loan (COPS) was authorized by the Board of Trustees for various construction projects not included in the 2001 Measure R. This item will retire that debt. COPS projects include the Administration Building renovation match funds, exterior improvements for three buildings, and new parking lot construction.

Temporary Space (Project L3) – Temporary housing must be arranged for classrooms and offices that are impacted by major renovation work or where existing facilities are demolished so new spaces can be constructed. Utilities and site improvements must be provided for all temporary units, and sites must be restored after the units are removed.

Demolition (Project L4) – The Master Plan includes demolition and removal of seven buildings.

#### Campus-wide Improvements (Projects L1 – L7) (continued)



Equipment Allowance (Project L5) – Allowance must be made for major instructional equipment necessary for the long-term operation of each facility.

Contingency (Project L6) – Contingency funds must be available to cover excess construction cost inflation, necessary changes in project scope of work, and unforeseen elements. Any excess contingency will be used to further reduce scheduled maintenance and infrastructure improvement backlogs.

Facility Improvement Projects (Projects L7A-C) – Several smaller renovation and space additions are necessary as secondary effects to the major projects. Projects include renovation of the old Agricultural Sciences Labs to provide teaching space, conversion of the old Bookstore into office space, and a new plan room for the Facilities Management offices.

## San Jose Hills Entrance/Intersection Improvements



(Project L1-A)

Project Budget: \$2,200,000 Schedule:

-Construction: Summer 2017 - Winter 2018



The San Jose Hills Road entrance is the main access point to campus from the west. The area is currently plagued with traffic snarls (that back up onto Grand Avenue), inadequate pedestrian pathways, an ineffective drop-off zone, and underground utility systems that are in need of upgrade. This project will improve the flow of traffic at the four-way intersection on campus and create a secure connection with the access/fire road that serves the northeast campus area. New student, faculty and visitor parking will be developed and effective pedestrian circulation will be featured; including adequate public access to the Performing Arts Center and Founders Hall. Modifications to the pay lot B parking area will be included as necessary to accomplish complete corrections to traffic flow and resolve underground utility deficiencies. The continued need for the information booth will also be evaluated.

San Jose Hills Entrance/Intersection Improvements (Project L1-A) (continued)



Project sequencing – the project should ideally begin after the (old) Gym is demolished, and (possibly) the vacated area is no longer needed for lay down to support the renovation of the Learning Technology Center (Project F). Multiple phases to the project may be planned to meet steadily growing needs to improve the drop-off zone, secure access to campus at both fire lanes and create safe pedestrian pathways from the Grand Avenue bus stop. Additional funds may also be leveraged for the project by combining the project with the Gym demolition and by including the Grand Avenue bus stop as an element of the Public Transportation Center (Project I).

## New Main Campus Entrance

(Project L1-B)



Project Budget: \$3,900,000 Schedule: - Construction: Fall 2016 - Summer 2017



As the Measure RR program unfolds, many new facilities will be built on the east side of the site. The campus begins to take shape around a central quad, oriented to the south of the Design Technology Center, east of the Student Services and Founders Hall facilities, west of the Humanities building and north of the Library, Learning Resources and Campus Center (Project A). This new geographic center point, which will be prominently identified by the new LRC/Campus Center, will be a primary destination and gathering place for many students, faculty, and staff; events will be planned in this area and it will be a place that the public will be invited to interface with the campus community. A new main entrance to campus in this area is essential. Not only will the campus community find improved access here, but the neighboring communities will benefit as well. By adding entrance points, commuter traffic will be New Main Campus Entrance (Project L1-B) (continued)



able to move on and off campus more efficiently and deliveries will be centralized to the LRC/Campus Center, eliminating unsafe truck traffic in pedestrian areas and on campus traffic congestion.

The new main entrance project will add a traffic signal with dual left turn lanes on Temple Avenue between Mt. SAC Way and Bonita Drive, a multi lane entrance road that terminates with a safe, efficient drop off zone to the south of the new LRC/ Campus Center, and add short term, visitor and accessible parking. Underground utilities, pedestrian access, and landscape improvements will also be included. Aesthetic and infrastructure improvements to the main power station, traffic circulation, surface restoration, and landscape improvements to the adjacent student lot may be included if funds permit. The project is bounded on the south by Temple Avenue, on the west by Mt. SAC Way, on the northwest by the Science Laboratories building, on the north by the LRC/Campus Center, and on the east by the Technology building.

Project sequencing - this work must be done in conjunction with the LRC/Campus Center project, and will require collaboration with the Walnut City Engineer. Ideally, this work will take place after additional student parking is available with the new parking structure.

# *Campus Site Improvements (South of Temple Avenue)*



(Project L1-C)

Project Budget: \$5,000,000 Schedule:

- Construction: Winter 2011 - Summer 2011



The 2004 Facilities Master Plan identified the site of the new gymnasium south of Temple Avenue, just west of Bonita Drive. Further evaluation of the site and subsequent changes to the accepted campus seismic coefficient resulted in a rejection of the site at the southwest corner of Temple and Bonita. Several options were considered, ultimately leading to the planned grading and removal of the hill west of the Hilmer Lodge Stadium. Major grading work will create a site suitable for the gymnasium, tennis courts, new practice areas for football and field sports, a new field house, event parking, and athletics equipment storage. Underground utilities, including storm drains, main water, power, and telecommunication services, will be updated and pedestrian pathways, landscape, parking and site lighting, and marquis signage will be included. The site grading will generate soil to raise grades at both the Campus Site Improvements (South of Temple Avenue) (Project L1-C) (continued)



Business and Computer Technology building and golf driving range sites, and the parking surface will allow for student parking while the new structure is built. Oak and

walnut trees that must be removed will be relocated to or replaced in the expanded Wildlife Sanctuary at a minimum rate of 1.5 to 1 as per the College's 2008 Supplemental Environmental Impact Report.

Optional scope of work includes reclamation of the retention basin northeast of the Hilmer Lodge Stadium, installation of utility points of connection for future buildings at this and the planned site for the Heritage Hall facility, additional field restrooms, and reconstruction of the stadium concession stand.

Project sequencing - this work must be scheduled such that the tennis courts can be relocated prior to the start of construction of the Business and Computer Technology building; temporary parking must be established to recover displaced parking at the north side of the campus, necessary to construct the parking structure; and a temporary field house must be constructed before the old field house can be demolished. Planning wok for the Public Transportation Center should be completed early to eliminate conflicts with this project.

Funding Notes - Project funds for temporary space (field house), the Bonita/Temple and Temple/Lot F intersection, and the tennis courts relocations projects are in addition to this project. Funds for the golf driving range construction are included in the budget.

## Temple and Bonita Intersection Improvements

(Project L1-D)



Project Budget: \$900,000 Schedule:

- Construction: Summer 2010



The Temple Avenue/Bonita Drive intersection has become heavily used by the campus community and general population for major athletic events. With the further development of the athletics complex to the south of Temple, the segment of Bonita from Temple, south to Stadium Way, must be widened and the south side of the intersection must be properly aligned with the northern section of Bonita Drive to allow for safe pedestrian crossing and efficient traffic flow. The project will include modifications to the traffic signal and the addition of a second left turn lane from eastbound Temple to northbound Bonita. The short term parking permit dispenser site will be made permanent, and identification signage will be updated.

Project sequencing - this work must be coordinated with the Walnut City Engineer, and must be done in conjunction with the major grading work to the east. Planning work for the Public Transportation Center should be completed early to eliminate conflicts with this project.

## Bonita and Walnut Intersection Improvements

(Project L1-E)



Project Budget: \$340,000 Schedule:



Under local bond Measures R and RR, three major building sites will be developed at the intersection of Bonita Drive and Walnut Avenue, where previously no buildings existed. The southeast corner of the intersection represents the largest parking area on campus. In order to ensure efficient traffic flow into the parking area and through the intersection, and safe pedestrian traffic to the three building sites, the intersection has been widened and realigned. Conduit infrastructure for the signal controls has also been installed as part of the first phase. This project is the final phase of the development of the Bonita and Walnut pedestrian safe intersection. The new signal will be installed with controlled pedestrian crossing, new crosswalks and wheelchair ramps will be added as necessary, and the lane striping at the intersection approach will be modified as needed at each roadway section.

Optional scope of work includes necessary improvements along Walnut Avenue, between Bonita Drive and parking lot G, to ensure that pedestrian crossing along this segment is safe and efficient.

Project Sequencing - safe pedestrian crossings must be established as the Agricultural Sciences project is occupied, while maintaining access to student parking lot F.

## Walnut Drive/Parking Lot G Intersection Improvements



(Project L1-F)

Project Budget: \$650,000 Schedule:

- Construction: Summer 2013



Student parking lot H contains nearly 1,000 parking spaces and is often full throughout the semester. Students that park in lot H must cross Walnut Avenue safely and without impeding traffic. Currently, pedestrian crossing exists at the north side of student parking lot G. As the Business and Design Technology Center facilities are occupied, the pedestrian traffic across Walnut Avenue will no longer naturally occur at the lot G crossing. Formal safe crossing must be established at several points along Walnut Avenue and unsafe crossing must be restricted. Crossing points will be established at the fire road west of the Language Center, at parking lot G, and at other points along Walnut as necessary. Crossing points will be controlled by electronic signal devices.

Optional scope of work (funding permitting) includes a pedestrian bridge from parking lot H to parking lot G; other sites may be considered.

Project Sequencing - safe pedestrian crossings must be established as the Design Technology Center is occupied.

## Campus Quad

(Project L1-G)



Project Budget: \$950,000 Schedule:

- Construction: Summer 2013



As the Measure RR program unfolds, many new facilities will be constructed to the east of the original campus core, and the reconfigured Campus begins to take shape around a large central quad bounded on the north by the Design Technology Center, on the west by the Student Services and Founders Hall facilities, on the east by the Humanities building, and to the south by the LRC/Campus Center. This new geographic center of the campus will provide opportunities for gathering, visiting, studying, resting, contemplating, and interacting for the Campus community. Faculty and staff events will take place in this area, and the open space will balance the most densely built area of campus.

Designs for the campus quad will require input from virtually every group on campus. This process will provide an excellent opportunity to physically express many of the shared values of the community, to establish new traditions and invigorate old ones. The quad will be surrounded by main pedestrian walkways, and accessible pathways will diagonally across the open turf area. Many trees will provide shade and beauty, and landscape will be abundant. The area will be well lit and there will be ample seating with wireless connectivity available. Funds permitting, center sections may Campus Quad (Project L1-G) (continued)



include shade structures, fixed seating, gardens, statuary, or other creative expressions of the character of Mt. San Antonio College. To ensure that this site remains undisturbed for the foreseeable future, underground utilities will be upgraded to current standards.

Project Sequencing - row building 16 must be demolished before the quad can be constructed. This area may also be required to support the construction of the new Learning Resources/Campus Center as a construction lay down area.

## Temple/Grand Intersection & Wildlife Sanctuary Improvements





Project Budget: \$1,000,000 (Intersection \$250,000/Sanctuary \$750,000) Schedule:

- Construction (Phase 1): Spring 2010 – Summer 2010 (Phase 2): Spring 2013 – Summer 2013

The 2001 Mt. San Antonio College Environmental Impact Report identified the Temple Avenue and Grand Avenue intersection as severely inadequate to serve the City of Walnut and Mt. SAC student traffic. The City of Walnut developed several options for the improvement of the intersection, each of which required both a financial contribution and a land dedication on the part of the College. The scenario determined to be most effective resulted in an approximately 1/10<sup>th</sup> acre land dedication from the College's Wildlife Sanctuary. In order to ensure the continued success of the sanctuary as a teaching tool and a valued community asset, the College has set aside approximately 4 additional acres to permanently expand the sanctuary boundaries.

The expanded sanctuary provides space to mitigate other environmental impacts of the Measure RR building program, and to develop new sample ecosystems for study and enjoyment. This project will upgrade some existing structures and systems within the current sanctuary boundaries, permanently fence the new land, bring in the plant species necessary to establish the new ecosystems, and construct new features. A safe bus drop off area will be considered as part of this project.

Project Sequencing - fencing and tree species must be established early to protect wildlife and to begin the growth process so that more mature plants will be available to study and enjoy as soon as possible. Aging asbestos containing irrigation piping must be removed and replaced early with a properly sized system to support the new, larger facility.

### Campus Interior Site Improvements (3 Sites)





Project Budget: \$2,700,000 (Site 1 \$650,000/Site 2 \$650,000/Site 3 \$900,000) Unallocated- \$500,000

#### Schedule:

- Construction (Site 1): Summer 2011 - Fall 2011

(Site 2): Summer 2011 - Fall 2011

(Site 3): Winter 2012 - Summer 2013

As the various building projects are completed, it is important to make the required improvements to the adjacent sites so that the area is finished. This ensures that no further (planned) underground work will take place in the area, and surface improvements can be made knowing that the site will not further be disturbed. Interior site improvements will generally include permanent seating and gathering spaces, way-finding signage, underground utilities (power, domestic water, district heating and cooling water, fire suppression systems, irrigation water, natural gas, sewer, storm drains, data connectivity), pedestrian and emergency vehicle access, waste handling, and landscape development. The three sites are as follows:

#### Site 1 - Vacated Information Technology Building Site:

As the old Information Technology Building is demolished, and a new structure is built in its place, the surrounding area must be improved. This site is bounded to the south by the Learning Technology Center, to the west by the Performing Arts Center and Arts Complex, to the north by the Arts Studio (building 1A), and to the east by the Student Services building. The above listed elements will be addressed, primarily the utilities, the additional items will be evaluated with special attention to the grassy triangle adjacent to the fountain.

#### Site 2 -Vacated Agricultural Sciences Building:

As the old Agricultural Sciences building is renovated and the Design Technology Center project is occupied, the area previously used as construction lay-down will require attention to provide a finished space. Underground utilities in the area should not require major treatment as the adjacent building projects should have addressed that scope of work. The focus will be on pedestrian access, landscape and outdoor seating and gathering spaces.

### Campus Interior Site Improvements (3 Sites) (Project L1-I) (continued)



#### Site 3 - Business Complex:

The Business and Computer Technology Center will be constructed on the site currently occupied by the tennis courts. The majority of the site improvement work will be included with that project, but it is important to reserve funds to ensure that pedestrian walkways, landscape, utilities and service vehicles access pathways effectively link up with the campus. A number of needs exist in the area that will be considered as part of this project. Connecting pedestrian pathways, a new entrance to the language center, and gathering spaces will be the focus.

Project Sequencing - all site work must be closely coordinated with the related building projects and other infrastructure work (fire lanes, quadrant infrastructure work, and pedestrian pathways).

### **Central Plant Improvements/Energy Conservation** (Project L1-J)



Project Budget: \$3,900,000 (Central Plant \$1,400,000/Energy Conservation \$2,500,000) Schedule:

- Construction: Summer 2013

#### Central Plant Expansion:

Measure R project 3 included the construction of a chilled water central plant and associated underground piping to serve the major buildings on campus. In 2006, the plant was extended to include the Agricultural Sciences and Child Development center projects. In order to effectively serve the new Business and Computer Technology building, and other facilities to be constructed under Measure RR, an additional chiller and cooling tower unit must be added. The original plant design contemplated such an expansion, allowing space and future connections. The added capacity will provide the cooling capacity to operate the campus on the hottest days while adding system redundancy during normal seasons.

#### Energy Conservation Projects:

The College has completed three phases of energy improvement projects and operates one of the most sophisticated building energy management systems in the community college system. Further energy savings measures will ensure that Mt. San Antonio College is operating as efficiently as possible. Source reduction strategies, building metering, existing building commissioning, and additional building automation projects will be planned and implemented to leverage available incentives in accordance with the College's sustainability policies. Renewable energy systems will be evaluated and implemented as the final layer of the plan.

Project Sequencing - the Central Plant expansion must be on line and commissioned at the time construction is completed for the Business and Computer Technology Center. Energy Conservation projects must be complete by December 2011 to qualify for Public Utility Commission incentives.

## Temple Avenue/Student Lot F Intersection Improvements





Project Budget: \$2,900,000 Schedule:

- Construction: Summer 2015 - Winter 2016



Student parking lot F currently has capacity for 750 vehicles. The lot does not function efficiently as there is only one viable exit and entrance. Wait times to exit the lot exceed 30 minutes at peak times thus making it an unattractive place to park. A signalized exit/entrance onto Temple Avenue will be created to alleviate this problem. Additionally, the entrance to the Hilmer Lodge Stadium and future site of the Heritage Hall facility currently requires an unsafe left turn across traffic. This intersection will establish dedicated left turn lanes in both directions, a deceleration lane and dedicated right turn lane into student parking lot F, from westbound Temple, and dedicated left and right turn lanes exiting the parking lot onto Temple Avenue. Pedestrian circulation across Temple will remain through the existing tunnel. Lighting

Temple Avenue/Student Lot F Intersection Improvements (Project L1-K) (continued)



and security measures will be added to the tunnel. Optional work will include improvements at the stadium entrance, surface improvements to the student lot, and a new landscaped frontage along the north side of Temple Avenue.

Project Sequencing - planning for this intersection must integrate with planning for the public transportation center and Heritage Hall Projects. Construction should start only after the new Parking Structure project is complete as many student parking spaces will be out of service during construction to provide contractor lay-down areas.

## East Campus Main Fire Road Access

(Project L1-L)



Project Budget: \$2,200,000 Schedule:

- Construction: Spring 2013



As Mt. San Antonio College has grown, open space on the east side of the campus has been targeted as the site of several new buildings. The Language/Health Careers Center, Student Health Center, and Central Plant were built early in the Measure R program. The Agricultural Sciences Laboratories and the final phase of the Bonita/Walnut intersection projects are currently under construction as two of the final Measure R projects. Under Measure RR, the Business and Computer Technology building will be built on the site currently occupied by tennis courts, and the Child Development Center will be constructed just north of Walnut Avenue.

In support of these major developments, a new fire access lane suitable for heavy fire and rescue equipment will be necessary. This project will reconstruct the temporary asphalt roadway west of the Language Center, add a new access road connecting the Language Center access road with student lot G to the west, and provide compliant fire equipment access to the Central Plant, the east side of the Humanities buildings, and to existing facilities just south of the main walkway that extends to the west of the pedestrian bridge. As funds permit, this project will also address the need for a pedestrian entrance on the west side of the Language Center, create a pedestrian

## East Campus Main Fire Road Access (Project L1-L) (continued)



pathway from student parking lot H to the buildings south of Walnut Avenue, and solve vehicle circulation problems around the Student Health Center.

Project Sequencing - planning for this work must be done in conjunction with the Business and Computer Technology building and related site improvements, the Walnut Drive/parking lot G intersection signalization work (project L1-F), and the pedestrian corridor planned to extend to the east from the Humanities pedestrian access bridge. The tennis courts must also be relocated prior to construction.

## Reclaimed Water System & Well Rehabilitation



(Project L1-M)

Project Budget: \$1,000,000 Schedule:

- Construction: Groundwater Well Rehabilitation (Phase 1): Summer 2010 Reclaimed Water System (Phase 2): Summer 2013



Consistent with Mt. San Antonio College's commitment to resource conservation and stewardship, the College has conducted a detailed engineering study to determine the feasibility of implementing reclaimed water and reactivating several ground water wells that historically provided clean water for irrigation on the college farm. This study, conducted in 2006, recommends the use of reclaimed water from any of several potential sources for use in irrigating the sports fields south of Temple Avenue, the golf driving range, and several pastures to be used for livestock grazing. The study

### Reclaimed Water System & Well Rehabilitation (Project L1-M) (continued)



also recommends utilizing the ground water wells for irrigating the Wildlife Sanctuary. Funds identified for this project may best be used to leverage water conservation incentive funds available from local and state sources. The planned reclaimed water system (Phase 2) includes storage facilities, a high capacity main feeder, and distribution and metering infrastructure. The ground water well rehabilitation (Phase 1) will include upgrading two wells to serve the sanctuary and the conversion of one well into an observation well. It is estimated that this project will reduce the consumption of domestic water by a minimum of 20%.

Project Sequencing - planning for this work should begin as soon as Bond funds are available. Construction will depend upon the timeline for incentive funds.

## Pedestrian Corridors (5 Locations)



(Project L1-N)

Project Budget: \$1,800,000 Schedule: Ongoing

The Mt. San Antonio College Facilities Master Plan identifies five prominent pedestrian corridors. These corridors are essential to the safe and efficient travel of pedestrians predominately in the east-west direction. Because the College is located on a steep slope, pedestrian corridors in the east-west direction provide relatively level pathways to traverse the Campus. Smaller corridors oriented in the north-south direction must meet the requirements of the Americans with Disabilities Act of 1990 (ADA).

Since most of the pedestrian pathways on Campus were constructed prior to the development of ADA guidelines, many do not meet these requirements. This project will improve five major pedestrian pathways to meet ADA requirements, improve circulation, and enhance and beautify the Campus.

## West Campus Main Fire Road



(Project L1-O)

Project Budget: \$860,000 Schedule: -Planning: Summer 2010 – Winter 2011 -Construction: Spring 2011 – Summer 2011

Currently, emergency vehicle access to the northwest quarter of the Mt. San Antonio College Campus is maintained by a network of fire roads. These fire roads also serve as pedestrian pathways and provide access for service vehicles, vendor deliveries and other Campus functions. Several segments of the network do not meet current fire access requirements. This project will upgrade this network to ensure that fire vehicles can adequately access this are of Campus.

### Utilities Infrastructure

(Projects L1-P – L1-T)



Project Budget: \$24,000,000 Schedule: Ongoing

All Mt. San Antonio College buildings are served through a network of utilities including power, water, sewer, storm drain, telecommunications/data, and natural gas. Generally, these networks were installed prior to the 1970's and have reached the end of their useful life. The majority of the renovations necessary will be completed as part of major construction activities; however, there will be numerous, smaller projects necessary to complete the upgrade. The Campus has been divided into five sections and funds have been allocated to each section to allow for these smaller projects.

## **Energy Projects Phase 4**

(Projects L1-U)



Project Budget: \$1,000,000 Schedule: Ongoing

The College has completed three phases of energy improvement projects and operates one of the most sophisticated building energy management systems in the community college system. Further energy savings measures will ensure that Mt. San Antonio College is operating as efficiently as possible. Source reduction strategies, building metering, existing building commissioning, and additional building automation projects will be planned and implemented to leverage available incentives in accordance with the College's sustainability policies. Renewable energy systems will be evaluated and implemented as the final layer of the plan.