

## 7.0 Master Plan

### FACILITIES MASTER PLAN

The Ventura College Facilities Master Plan has been developed to guide the future development of the Ventura College campus through the expenditure of Measure S bond funds and beyond.

The master plan program is based on the Educational Master Plan developed by the College and the JCM Group, Title 5 of the California Code of Regulations, the Measure S project descriptions, the Facilities Needs Analysis and programming information from the Project Building Teams.

The master plan design was developed by Leo A Daly in consultation with the Ventura College Facilities Oversight Group (FOG), the JCM Group and the various Project Building Teams.

The master plan has been presented to the Ventura County Community College District Board, Local Community Groups and Local Authority Agencies.

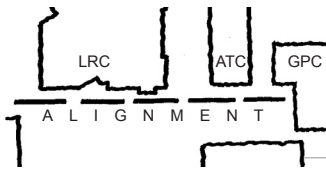
The master plan diagram indicates the location, scale and relationships between the major campus elements: new and existing buildings, open space, circulation, parking and support facilities.

Subsequent diagrams describe important aspects of the master plan to clarify the intentions and effects of the master plan design.



Overall Campus Master Plan rendering (above)

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The alignment of east elevations of the new LRC, the proposed ATC and the proposed HSC.

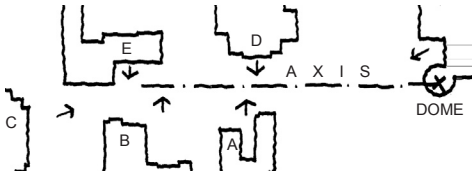
## PLANNING CONCEPTS AND ORGANIZATIONAL PRINCIPALS

The following planning concepts are important features of the Master Plan.

### Alignments

The alignment of building lines creates a planar unity of facades. These planes in turn create spaces, direct the flow of users and provide a sense of common purpose.

Although the diagram describes an alignment of the east facades of the new Learning Resource Center (LRC), the proposed Advanced Technology Center (ATC) and the proposed Health Sciences Complex (HSC), there are several other important alignments within the Master Plan.



The axis organizes the circulation and main entrances of the associated buildings, focusing on the proposed Planetarium dome.

### Axes

An axis is a line through space that organizes, directs and focuses spatial elements. Axes direct movement through space, allow users to see the organization and location of buildings and focus attention on important features.

The diagram illustrates one of several important axes contained in the Master Plan. This East-West axis directs users between the facilities in the B building and the the proposed Science/Art Facility. This axis allows users to see the entrances of the buildings arranged along it and focuses attention on the unique form of the planetarium dome.

## Edge

An edge provides definition to the outside of building groups. This in turn communicates the boundary of the development, direction to the inside and provides a frame to gateways.

A unique Ventura College campus edge condition, illustrated in the diagram to the right, includes a rotation of the buildings relative to the roadways and large triangular lawns.

This form of edge is repeated in several locations in the Master Plan.

Other forms of campus edge are examined in Chapter 10, Landscape Design Guidelines.

## Entry

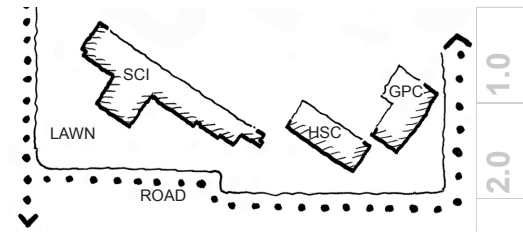
A campus entry is composed of a sequence of three elements: adjacent route(s), gateway, and internal campus space.

The entry defines access points into the campus, organizes the internal and external circulation systems and provides an identity to the campus.

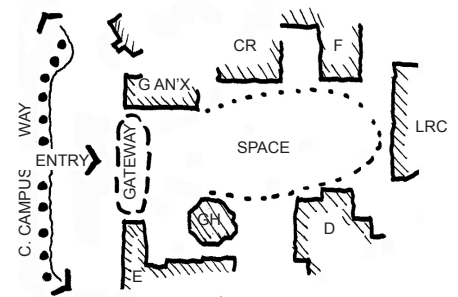
The diagram on the right illustrates the Central Campus Way entry, the proposed building G Annex and the proposed E building extension forming a gateway, and the internal campus space, a large lawn bordered by the CR, F, LRC, D and GH buildings, called the West Grove Quad.

## Heirarchy

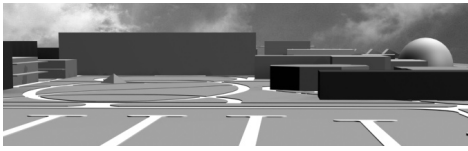
Heirarchy in building scale organizes the campus buildings into a visually cohesive whole and provides a logical spatial composition for the large and significant buildings on campus.



Campus edge condition illustrating the rotation of the buildings, the lawns and the roads.



Campus entry off Central Campus Way includes a roadway, gateway and space beyond.

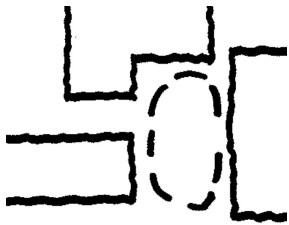


A view of the new LRC from Central Campus Way illustrates hierarchy in building scale.

The new Learning Resources Center (LRC) is sited in the middle of the “Academic” part of the campus, is larger in scale than the surrounding buildings and functions as an important campus resource. Proposed buildings in the Master Plan are arranged to create a visually cohesive hierarchy of building scale relative to the new LRC.

### Space-Making

Space-making in the Master Plan reflects the importance of the deliberate design of the spaces between campus buildings.



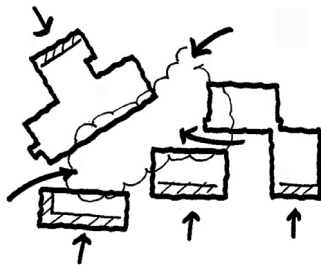
Space-making provides deliberately designed spaces between buildings to enhance the beauty and enjoyment of the campus.

The diagram illustrates space-making on a relatively intimate scale- the buildings form a courtyard open to one side.

Successful examples of this type of space-making on campus generally provide circulation to classroom and other common-use areas, have a human-scale, an inviting quality, and are open to the South admitting more sun and warmth into the courtyard.

### Zoning

Zoning in the Master Plan takes place at many scales and levels of organization.



The outer zones (hatched) are formal/ceremonial, the inner zones (clouded) are casual/back-of-house/informal spaces.

The diagram on the right illustrates zoning within the composition of a building cluster. The outer zone provides building entrances and identities, the inner zone provides casual space, circulation and delivery access.

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Proposed Facilities Master Plan  
(See 8.24 for Proposed Building Descriptions)

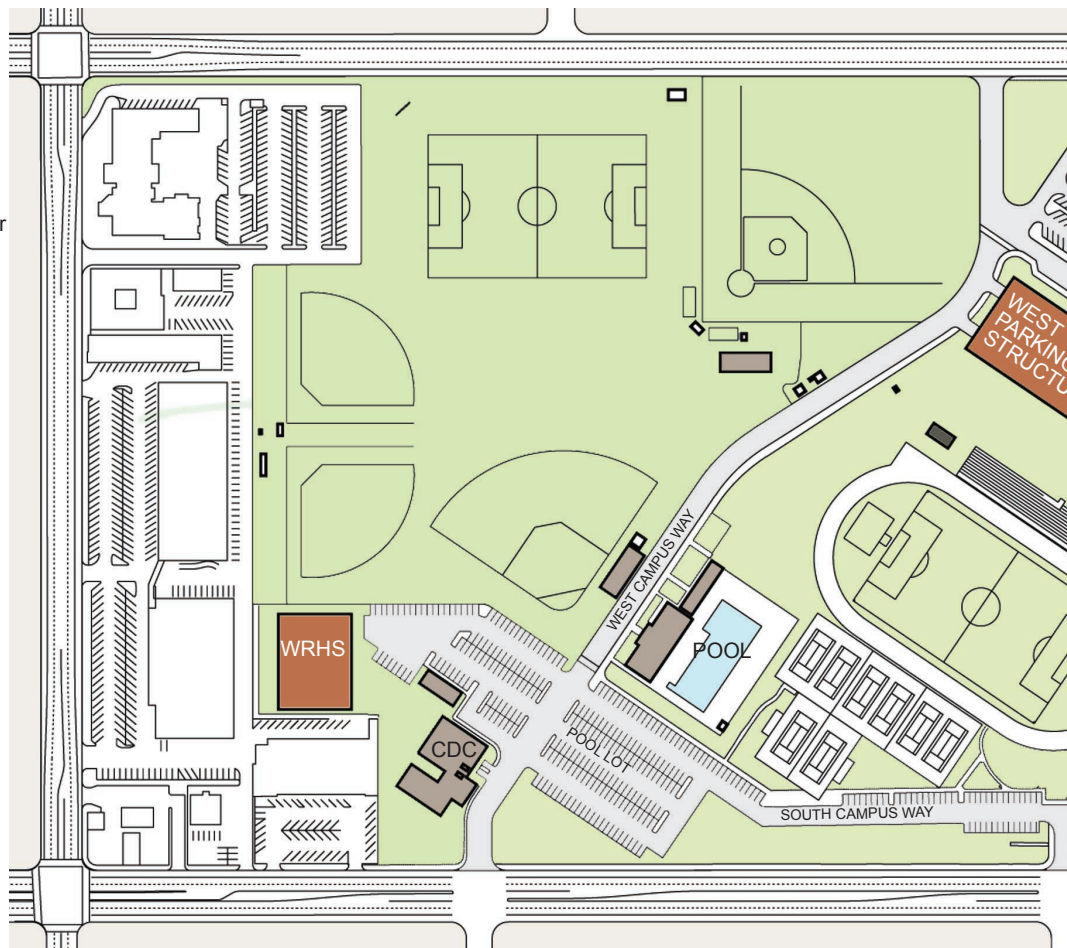
The master plan diagram indicates the final stage of the implementation sequence within the scope of this master plan. The significant results of the plan include:

- New buildings are arranged on the campus in compatible zones
- New buildings are arranged on the campus within a consistent open space framework

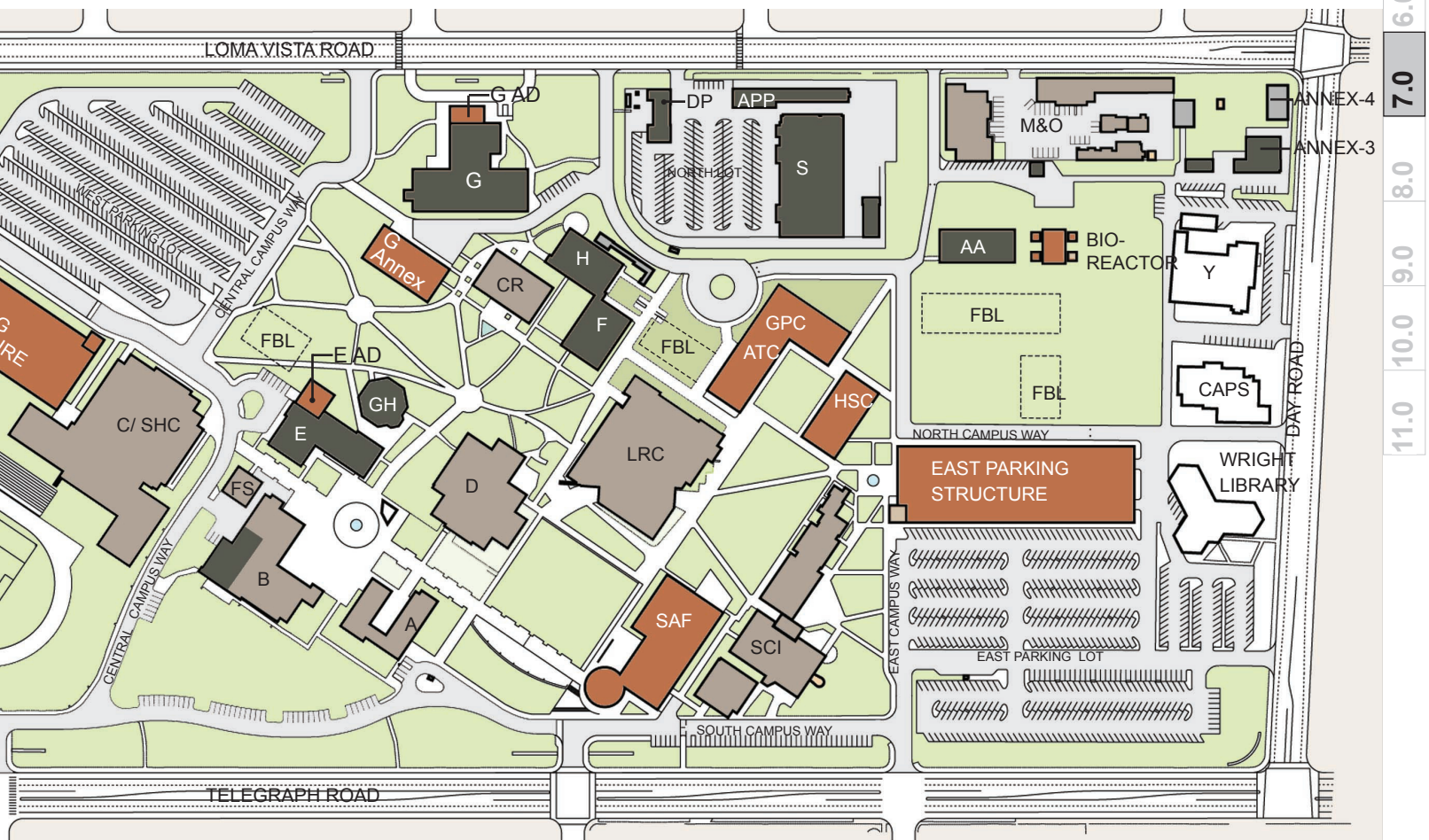
**PROPOSED MASTER PLAN**  
Ventura College Master Plan

**Building Name List:**

A	Administrative Offices/ DSPS
AA	Agriculture Classrooms
APP	Apprenticeship Classrooms
AX-3	Day Road English Labs
AX-4	Annex
ATC	Advanced Technology Center
GPC	General Purpose Classroom
B	Associated Students, Cafeteria, Campus Copy Center
BIO-REACTOR	
C	Physical Education, Student Health Center
CAPS	Community Access Partners Center
CR	Classroom Building
CDC	Child Development Center
D	Student Services Center
DP	Bilingual Education
E	Campus Police, Bookstore, and Student Offices
E AD	E Building Addition
F	Photography and Journalism
FBL	Future Building Location
FS	EOPS
G	Theater and Music Classrooms
G AD	G Building Addition
G AX	Performing and Fine Arts
GH	"Guthrie Hall" Emeritus Center
H	Fine Arts Classrooms
HH	Head House
HSC	Health Science Center
LRC	Learning Resource Center
M&O	Maintenance and Operations
POOL	Aquatic Center
S	Auto, Machine and Welding Classrooms
SAF	Science and Arts Facility
SCI	Math Science Complex
SHC	Student Health Center (in the C Building)
WRHS	Warehouse Facility
Y	Institute for Community and Professional Development



- The combination of selective demolition, re-alignment of roadways and new construction provides the campus with improved visibility between the campus core facilities
- The circulation framework on the campus has been restructured to reflect these changes and improve convenience and way-finding for both vehicles and pedestrians



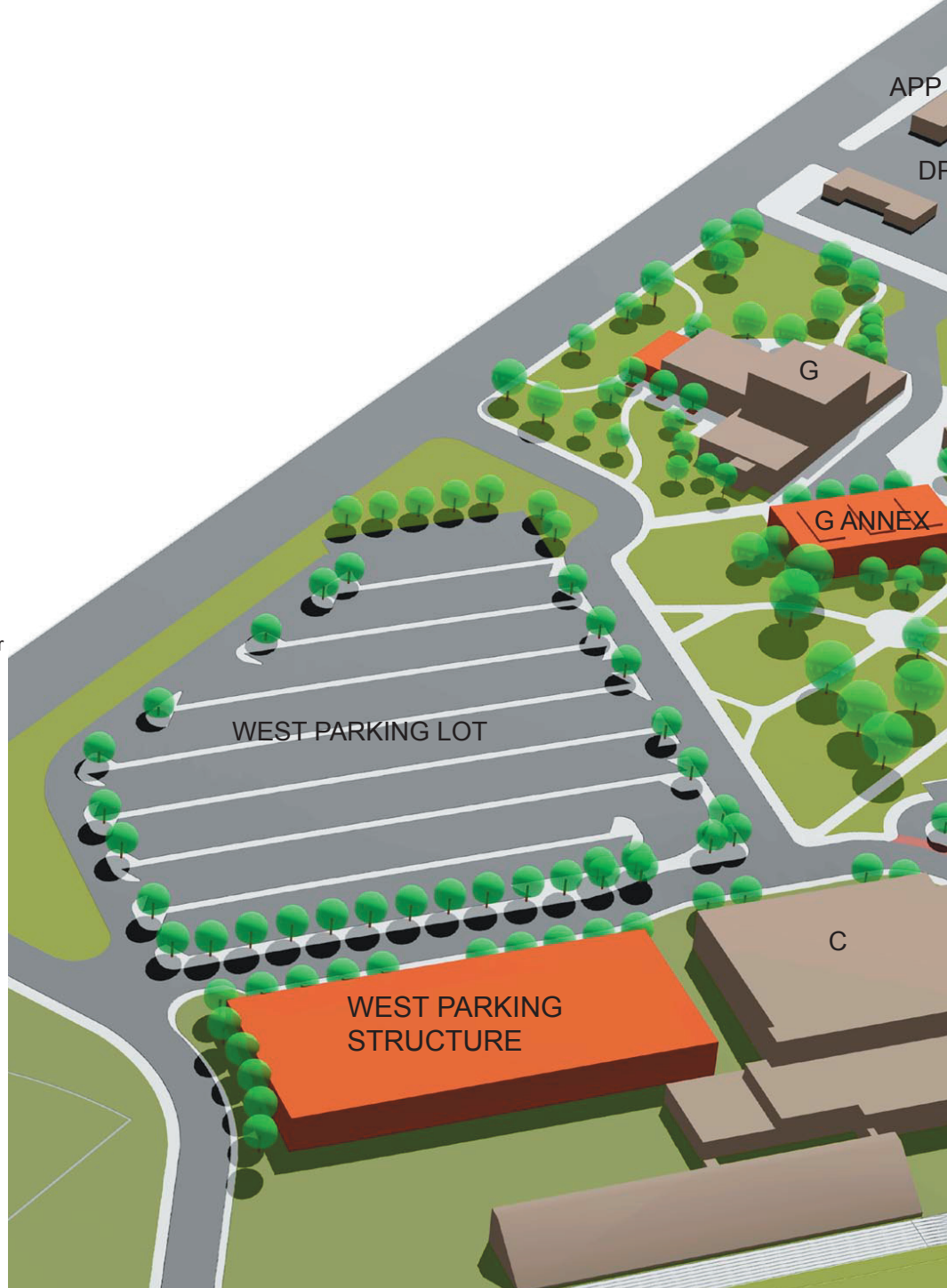
**PROPOSED MASTER PLAN  
OVERALL AERIAL RENDERING**

Ventura College Master Plan

View from the South West

**Building Name List:**

- A Administrative Offices/ DSPS
- AA Agriculture Classrooms
- APP Apprenticeship Classrooms
- AX-3 Day Road English Labs
- AX-4 Annex
- ATC Advanced Technology Center
- GPC General Purpose Classroom
- B Associated Students, Cafeteria, Campus Copy Center
- BIO-REACTOR
- C Physical Education, Student Health Center
- CAPS Community Access Partners Center
- CR Classroom Building
- CDC Child Development Center
- D Student Services Center
- DP Bilingual Education
- E Campus Police, Bookstore, and Student Offices
- E AD E Building Addition
- F Photography and Journalism
- FBL Future Building Location
- FS EOPS
- G Theater and Music Classrooms
- G AD G Building Addition
- G AX Performing and Fine Arts
- GH "Guthrie Hall" Emeritus Center
- H Fine Arts Classrooms
- HH Head House
- HSC Health Science Center
- LRC Learning Resource Center
- M&O Maintenance and Operations
- POOL Aquatic Center
- S Auto, Machine and Welding Classrooms
- SAF Science and Arts Facility
- SCI Math Science Complex
- SHC Student Health Center (in the C Building)
- WRHS Warehouse Facility
- Y Institute for Community and Professional Development







### Proposed Building Area

Implementation of the master plan will require the demolition of obsolete buildings to make space for the construction of new facilities. In order to provide the classroom space required during the construction period, the work will be carried out in phases to reduce the need for adding temporary facilities as swing space.

The existing campus core has an approximate building area of 465,408 square feet. The proposed master plan provides for a campus core building area of 580,412 square feet, a net increase of 115,004 square feet.

Buildings outside the campus core include the warehouse, the Maintenance and Operations (M&O) area, Y building and various accessory, storage and utility buildings.

### Existing Campus Building Area \* Table

EXISTING BUILDINGS	GROSS AREA	FOOTPRINT AREA
BUILDING A	9,900	9900
BUILDING AA	6,700	6,700
APP	4,900	4,900
AX 3	1,500	1,500
AX 4	2,200	2,200
B	23,000	23,000
C1	45,000	58,949
C2	28,000	
CDC	8,000	8,000
CR	14,500	9,770
D	21,000	21,000
DP	3,000	3,000
E	12,000	12,000
F	12,000	16,853
FL	1,600	1,600
FS	2,200	2,200
G	35,000	35,000
GH	4,800	4800
H	8,000	8,000
HH	7,569	7569
J	5,500	5,500
K	6,800	6,800
LRC	86,000	40,965
MAINT. 1	7,569	7,569

EXISTING BUILDINGS	GROSS AREA	FOOTPRINT AREA
MAINT. 2	10,987	10,987
NMG	800	800
O	4,800	4,800
P	6,200	6,200
POOL	4,700	4,700
Q	5,500	5,500
S	27,000	27,000
SCI	68,000	32,457
T	5,500	5,500
TR1-2	1,500	1,500
TR3	1,000	1,000
TR4	1,500	1,500
TR5-8	3,000	3,000
U	5,800	5,800
UV	3,900	3,900
X	5,528	5,528
<b>TOTAL</b>	<b>484,725</b>	<b>390,219</b>

\* All areas are approximate

Area Calculations for the existing campus

- A. Total area within the property boundaries  
628,452,567 SF (approximate)  
1,442 acres (approximate)
- B. Total gross square footage of campus buildings  
484,730 SF (approximate)
- C. B/A (acres)= 335 SF/acre
- D. B/A (SF)= .0077 FAR (floor area ratio)
- E. Area of development footprints  
390,219 SF (approximate)
- F. E/A (SF)= .62% site coverage ratio

Area Calculations for the completed Master Plan

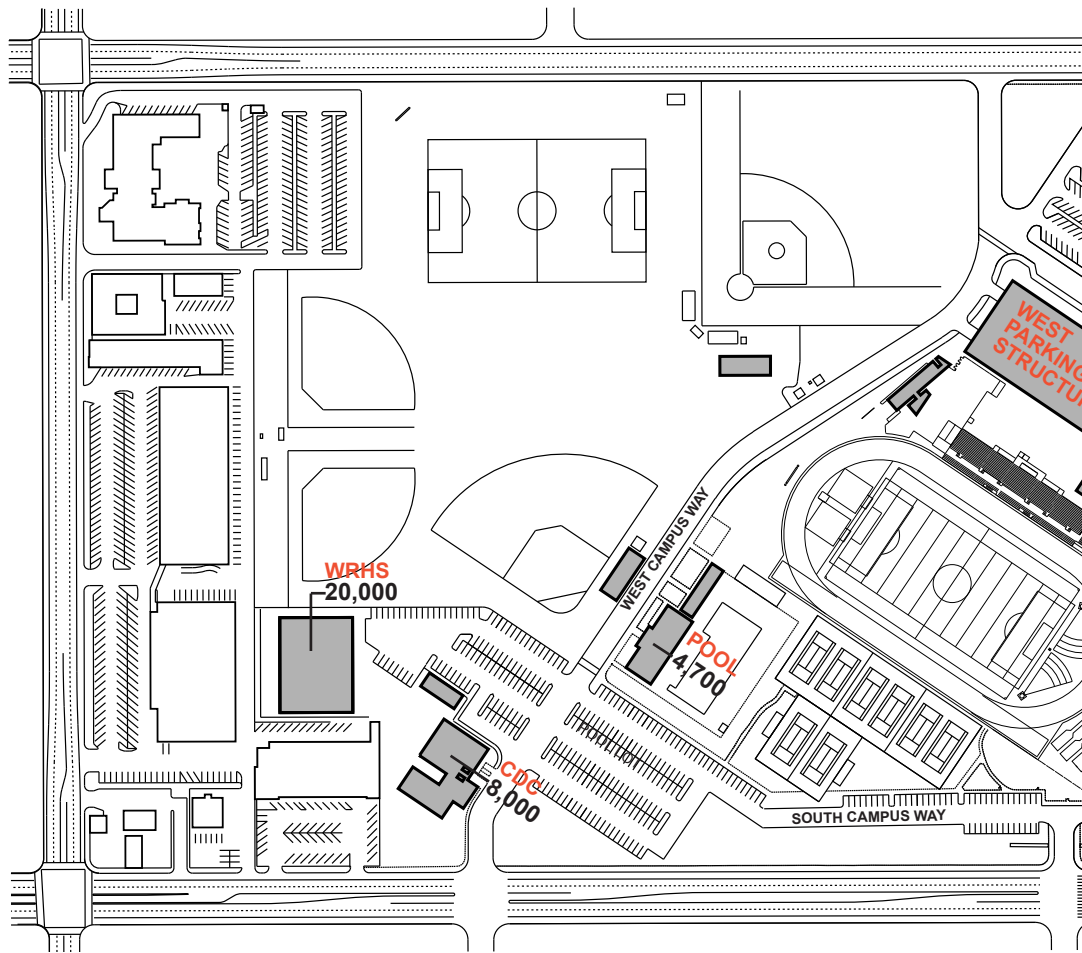
- A. Total area within the property boundaries  
628,452,567 SF (approximate)  
1,442 acres (approximate)
- B. Total Gross square footage of all campus buildings  
595,325 SF (approximate)
- C. B/A (acres)= 412 SF/acre
- D. B/A (SF)= .0094 FAR (floor area ratio)
- E. Area of development footprint  
447,318 SF
- F. E/A (SF)= .71% site coverage ratio

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Proposed Campus Core Building Area \* Table

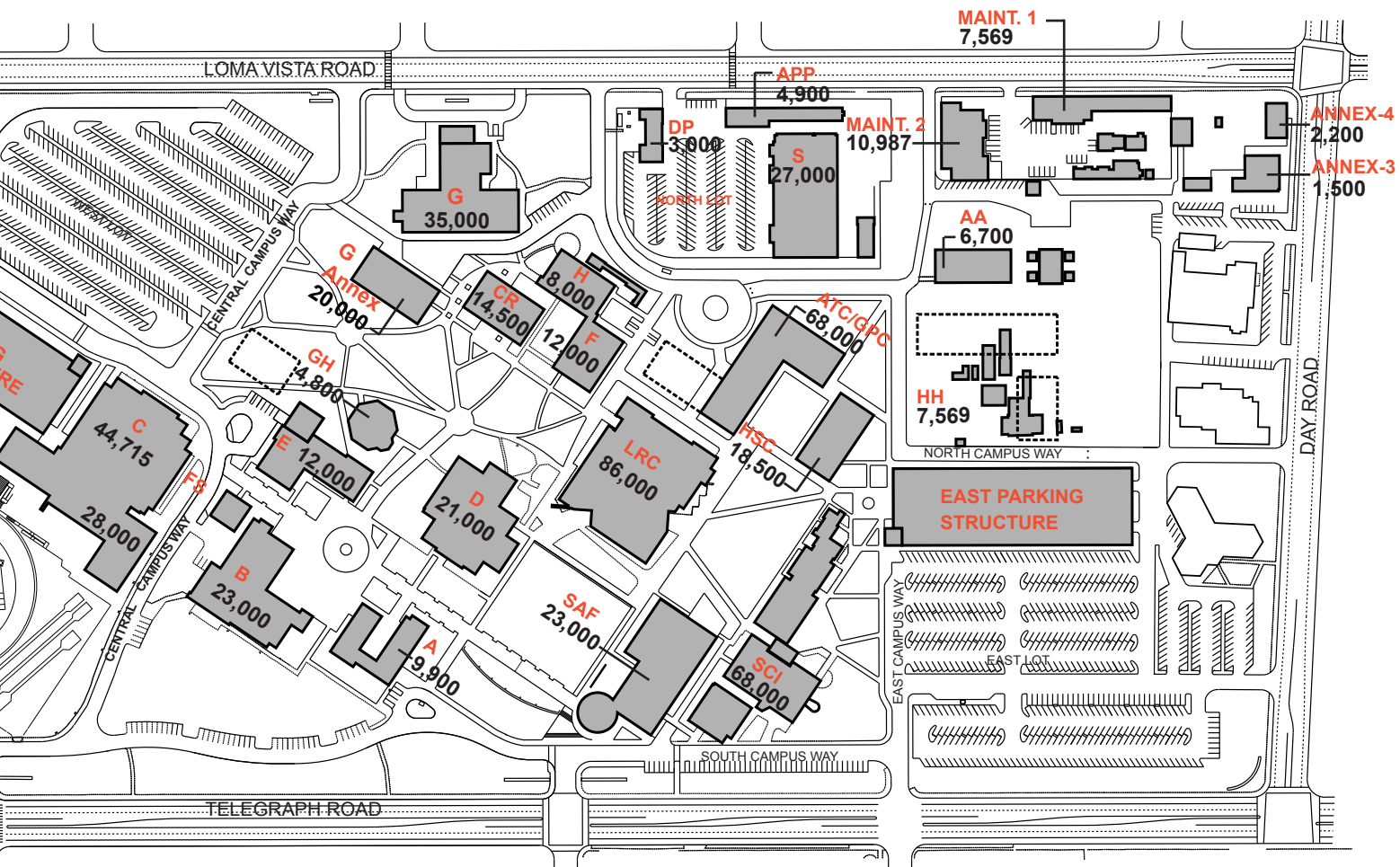
PROPOSED BUILDINGS	GROSS AREA	FOOTPRINT AREA
BUILDING A	9,900	9,900
BUILDING AA	6,700	6,700
APP	4,900	4,900
ATC/GPC	68,000	30,399
AX 3	1,500	1,500
AX 4	2,200	2,200
B	23,000	23,000
BIO REACTOR	3,500	3,500
C1	45,000	58,949
C2	28,000	
CDC	8,000	8,000
CR	14,500	9,770
D	21,000	21,000
DP	3,000	3,000
E	12,000	12,000
F	12,000	16,853

**PROPOSED BUILDING AREA**  
Ventura College Master Plan



PROPOSED BUILDINGS	GROSS AREA	FOOTPRINT AREA
LRC	86,000	40,985
G	35,000	35,000
G ANNEX	20,000	9,800
GH	4,800	4,800
H	8,000	8,000
HH	7,569	7,569
HSC	18,500	9,800
MAINT. 1	7,569	7,569
MAINT. 2	10,987	10,987
POOL	4,700	4,700
S	27,000	27,000
SAF	17,000	17,000
SCI	68,000	32,457
WRHSE	20,000	20,000
<b>TOTAL</b>	<b>598,325</b>	<b>447,318</b>

\* All areas are approximate



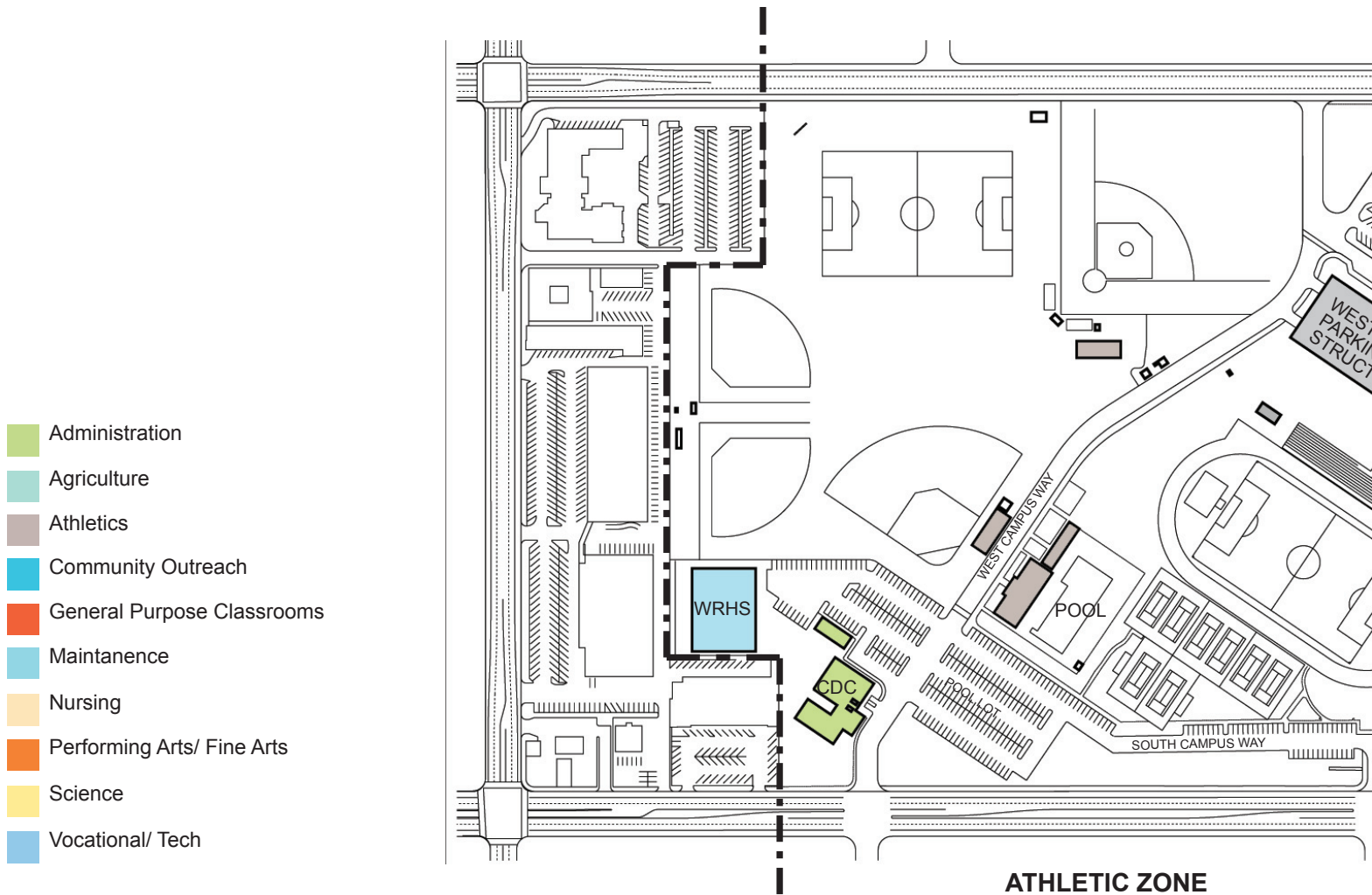
### Proposed Building Use and Campus Zones Diagram

The master plan retains the existing campus zones, athletic, academic and public/support areas.

The location of the proposed warehouse, at the extreme west edge of the campus near the CDC building is one exception. This facility has been placed in a periphery location due to the low-use and function of this building. The construction of this building will be utilitarian, possibly fully grouted concrete masonry unit construction, and unarticulated. As a result, it will not blend into the academic core of the campus.

### PROPOSED BUILDING USE AND CAMPUS ZONES DIAGRAM

Ventura College Master Plan





### Proposed Figure Ground

The figure ground diagram illustrates the relationship between campus buildings and open space in a high contrast illustration: the campus buildings are solid black, the campus open space is the white of the page. This diagram reveals some important features of the master plan, including:

#### FIGURE GROUND DIAGRAMS

Ventura College Master Plan

- Comparative massing and scale of buildings, note for example the compatible scale of the buildings to the east of the LRC, to the southwest of the LRC and to the northwest of the LRC.
- Orientation of buildings, the two orientations of the existing campus buildings are resolved with a change in orientation across the Great Lawn and Barranca Quad. This allows the HCS and SAF buildings to orient compatibly with the SCI building, while the ATC/GPC orients to both the existing northwest to southeast alignment and the SCI alignment.
- Axes and alignments of buildings, the diagram illustrates alignments of existing and proposed buildings and the creation of axes through the campus. Note how the checker board pattern of building sites is maintained while open space is



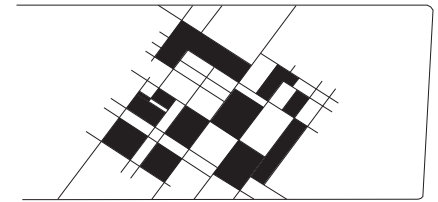
Existing Figure Ground Diagram



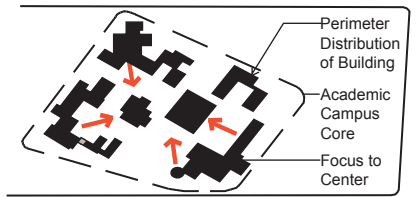


developed between the buildings.

- Density and clusters of buildings are clearly read in this diagram, illustrating how the master plan reinforces this important principle: clusters of buildings form specialized zones (administration, arts and academics).
- Center, the organization of these clusters is centered on the LRC. The LRC is like a pinwheel, with the academic zone to the east, the arts zone to the northwest and the administration zone to the southwest. This approximately puts the LRC at the heart of the campus and reinforces the rational and open-to-all values of the campus.
- Perimeter, the organization distributes the building clusters around the perimeter of the academic campus core, maximizing the internal campus open space and orientation to the center of the campus.
- The master plan has developed open space between the building clusters, creating an orderly patchwork pattern of building/open space/building. This patchwork unifies the campus and provides space for the development of landscaping that in turn reinforces the collegiate atmosphere.



Proposed campus patchwork diagram



Proposed perimeter distribution pattern diagram



Proposed Figure Ground Diagram



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### Proposed Axes and Open Spaces

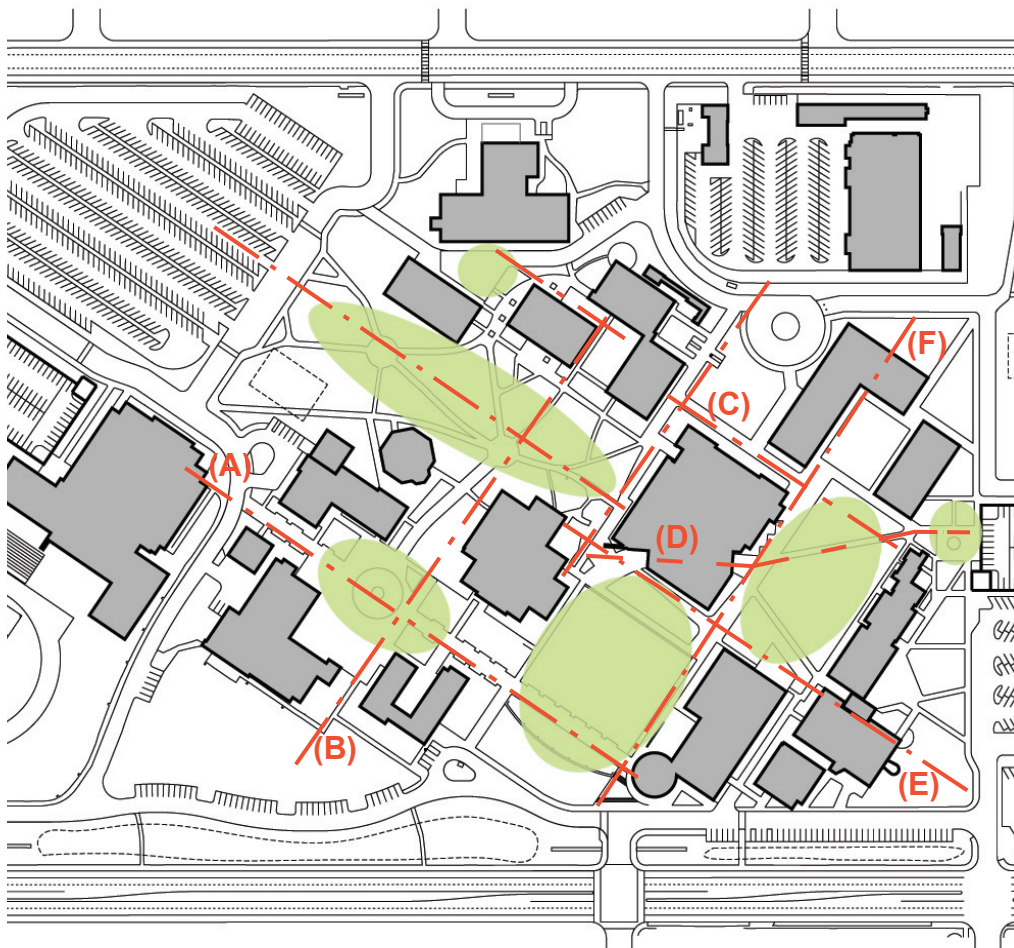
The proposed axes and open spaces of the Ventura College campus master plan play an important role in forming the identity of the college, as well as providing practical and useful spaces for circulation, orientation and other use.

The diagram illustrates the location of major axes and open spaces on the campus, including:

#### Axes

(A) This axis has been developed to become the

**PROPOSED AXES AND OPEN SPACES**  
Ventura College Master Plan



primary campus circulation, the “Pirates Walk”. From this axis, the rest of the campus is organized and accessed. Another way of describing this is to say that, within the academic core, all paths that lead down the campus hillside intersect the “Pirates Walk”.

(B) This axis connects the Main Quad area with the CR/H/F building cluster and the courtyard within. This north-south axis is one of two major axes in this direction.

(C) This axis connects the north interior of the academic campus, from the CR/H/F building cluster across the north lawn of the LRC and across the ATC/GPC and HSC cluster to the East Parking Structure Plaza.

(D) This axis connects the D building back courtyard, through the new LRC, to the East Parking Structure Plaza. This axis is a major circulation route through the campus from the east parking area to the campus core.

(E) This axis is re-established as an important connection between the D building back courtyard, the LRC, SAF, SCI buildings, and the east parking zone.

(F) This axis connects the east interior of the academic campus along the Barranca Quad, extending from South Campus Way, across the Great Lawn, LRC and Barranca Quad to the ATC/GPC and HSC complex to North Campus Way and the north parking zone.

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### Open Space

(1) The West Campus Quad is a large lawn area with mature trees, winding paths and a gentle southwest-facing slope. This open space provides a deep vista into the campus interior and provides a distinctly collegiate image to the campus. This space is framed and focused by the G Annex and enhanced with sidewalks and dense clusters of tree plantings.

(2) The Main Quad (central to the administrative

### PROPOSED AXES AND OPEN SPACES

Ventura College Master Plan



zone) is largely hardscaped and contains a series of sub-spaces linked by the main circulation spine, the “Pirates Walk”

(3) The Barranca Quad is the area between the new LRC and the SCI building. This space is developed as a naturalistic landscape and provides a focus for approximately 242,000 square feet of campus facilities- almost half the campus square footage.

(4) The Performing Arts Courtyard is formed by the G Annex and provides a focus for the G building and annex, CR, H and F buildings. This hardscaped courtyard can be developed with a simple, robust industrial aesthetic, thus inviting the students to inhabit and imprint this space in various ways over a long period of time.

(5) The Great Lawn is the area to the south of the new LRC, extending to South Campus Way. This lawn provides a suitably scaled forecourt to the LRC and allows a deep view into the campus from South Campus Way and Telegraph Road.

(6) East Parking Structure Plaza is a forecourt to the campus gateway framed by the HCS and SCI buildings and punctuated by the existing date palm and proposed water feature.

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### External Access Points

The master plan proposes the retention of existing campus access points from the surrounding public streets.

Inbound campus vehicular traffic has a number of access points conveniently located for the various campus zones. Outbound campus vehicular traffic is directed by right-turn only signage onto Telegraph Road. The impact of this restriction on the East Parking Lot and East Parking Structure traffic can be mitigated by signage directing traffic to Day Road where a left turn lane from the Day Road/Telegraph Road intersection gives access to the eastbound lanes of Telegraph Road.

### Internal Access Points

The plan proposes the development of new internal access points and the enhancement of existing internal access points.

(1) From the West Parking Lot and West Parking Structure, this is a major campus entry point with unique features. This entry should be developed to meet the following goals:

- Removal of barriers from the parking lot into the campus to improve pedestrian flow and convenience
- Discourage local through traffic from using Central Campus Way
- Improve walkways to reflect the volume and direction of pedestrian traffic
- Resolve the misalignment of the Pirates Walk and the West Parking Lot through sidewalk widening, wider crosswalks, and the removal of visual barriers

(2) From the North Parking Lot, this entry point provides access into the campus through the open space north of the ATC/GPC site and along the access roadway into the Performing Arts Courtyard. The detailed development of these spaces and buildings should provide for convenient and direct pedestrian flow into the campus core and campus circulation system, with an emphasis on connecting directly to the major circulation axes.

(3) From the East Parking Lot and East Parking Structure, this is a major campus entry point, split into two main sections:

- The north section takes pedestrian traffic from the East Parking Structure and adjacent surface parking areas into the East Parking Structure Plaza. This plaza is a gateway space that reinforces the identity of the campus.
- The south section takes pedestrian traffic from the East Parking Lot and filters through the SCI building, using the various ground level transverse passages through this building. In some ways the SCI building becomes a campus wall and these passages become gateways. These gateways open onto the Barranca Quad, and thus connect into the major campus circulation network and provides an entry sequence that reinforces the image of the campus.

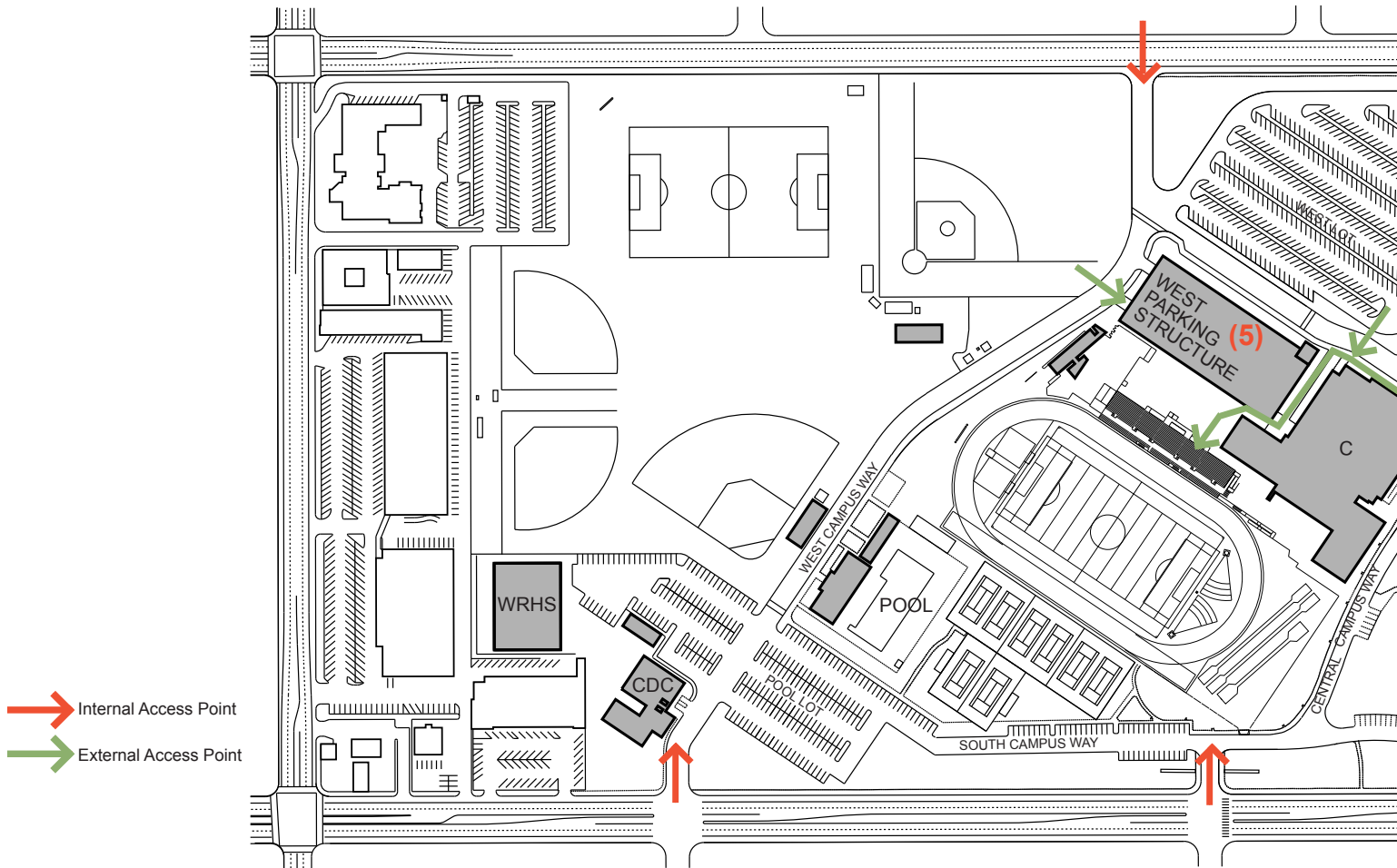
(4) From the turn-around on South Campus Way a drop-off/pick-up zone has been created. This zone lies at the foot of the Great Lawn, the LRC is at the top of this slope. This relationship to the LRC, the Great Lawn open space and Telegraph Road provide an opportunity for an outward focused entry point with an immediate connection to the LRC. These conditions make it an ideal location for a student drop-off/pick-up zone.

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(5) From the West Parking Lot and West Parking Structure an entry sequence into the track and field area bleachers will be developed in the design of these facilities. A number of options can be developed, including:

- A courtyard between the C building and the West Parking Structure for circulation and activities
- Development of a circulation route through the West Parking Structure at ground level

**PROPOSED ACCESS POINTS**  
Ventura College Master Plan







### Proposed Service Vehicle Circulation

The proposed service vehicle circulation system retains the existing campus system and extends it to serve the new facilities.

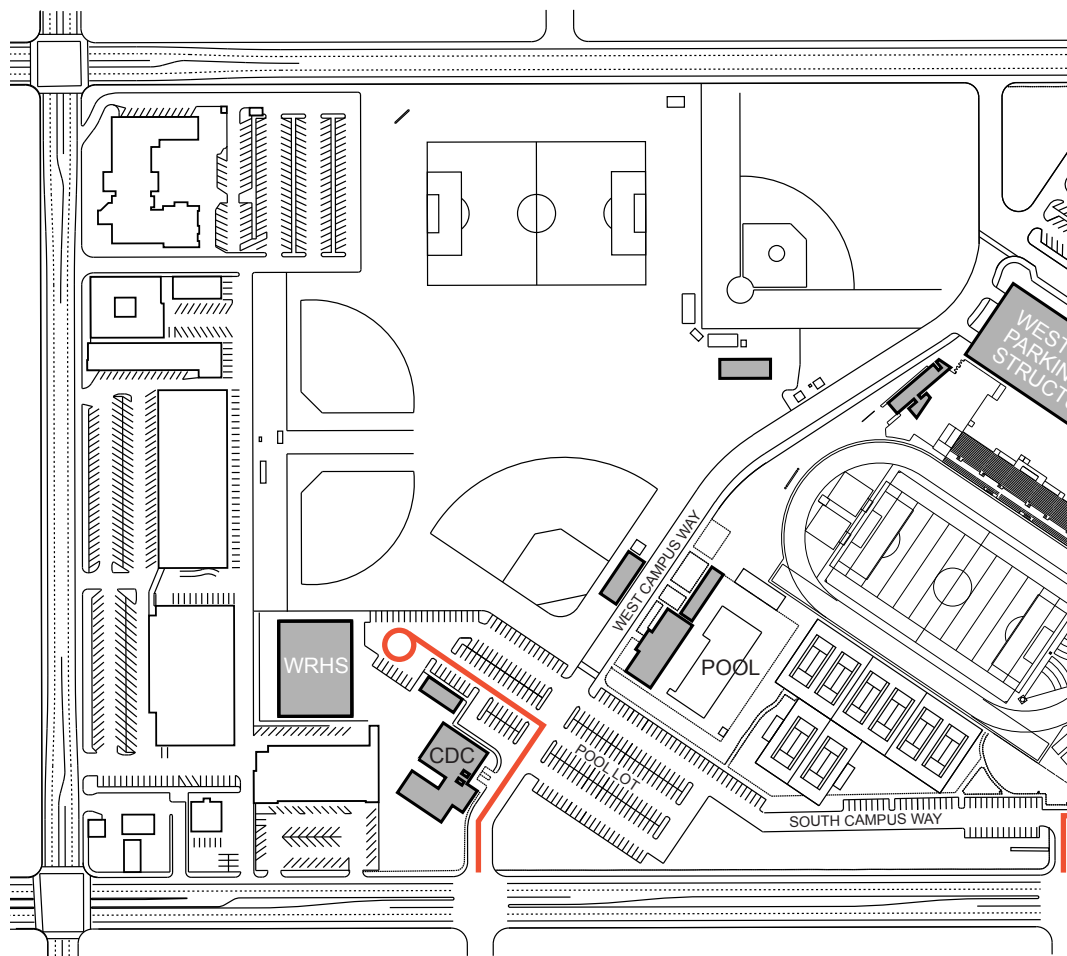
Access into the Performing Arts Courtyard will be infrequent, as a result it will provide some unique animation to this space.

The access to the LRC loading dock is retained.

Access to the proposed GPC/ATC and HSC complex is through the vehicle cul-de-sac to the north of this

### PROPOSED SERVICE VEHICLE CIRCULATION

Ventura College Master Plan

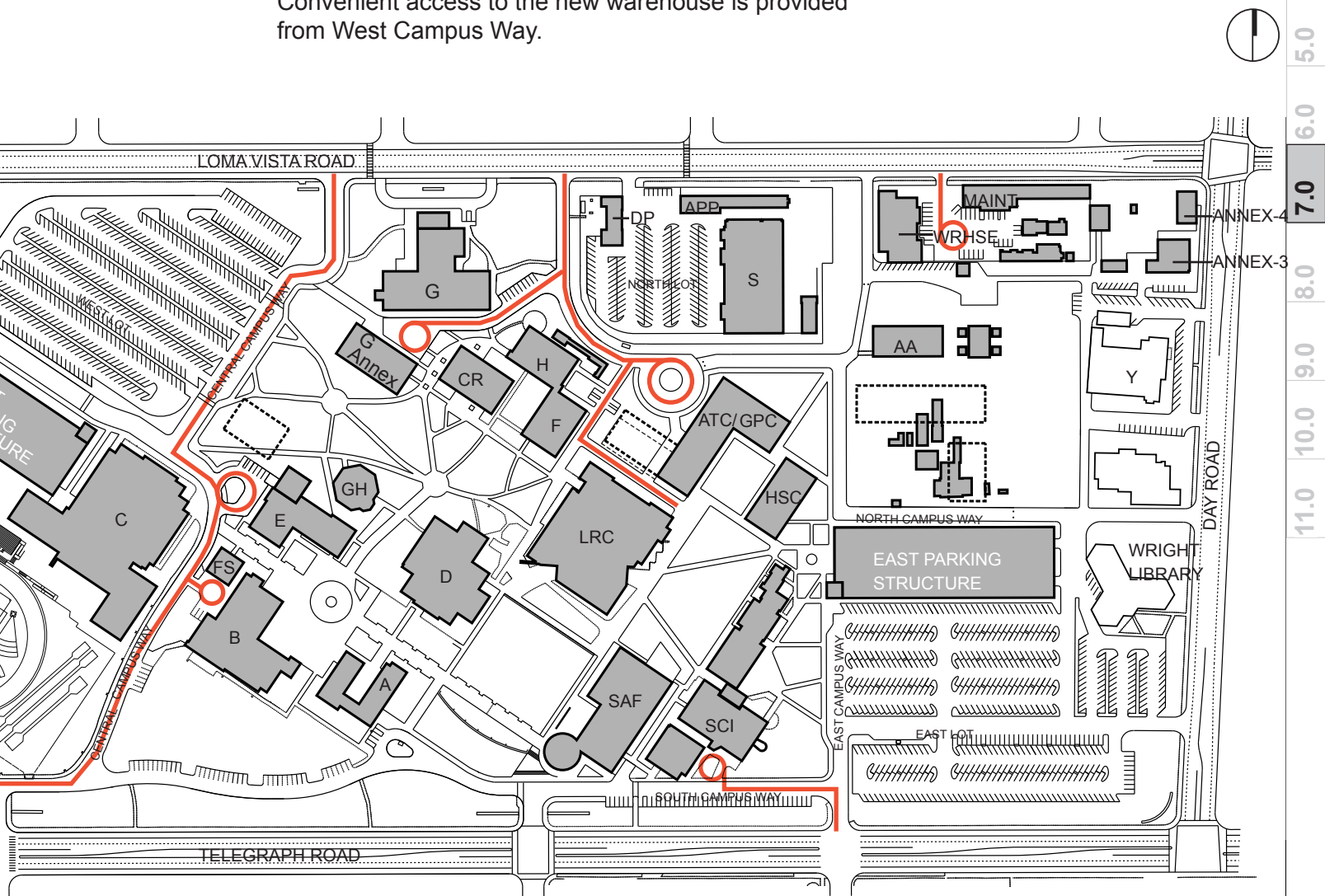


complex, accessed from North Campus Way.

The new bookstore loading dock and vehicle maneuvering area illustrated is suitable for a medium-sized tractor-trailer vehicle.

Access into the B building loading area, the arrangement of this area and vehicle maneuvering in this area should be planned to increase utility and to better shield these activities from Central Campus Way.

Convenient access to the new warehouse is provided from West Campus Way.



## Traffic, Circulation, and Parking Study

The potential traffic, circulation, and parking impacts associated with the Ventura College Master Plan were assessed by Associated Transportation Engineers.

Analysis of the existing traffic conditions found that all of the study area intersections operate at a Level of Service (LOS) of C or better (LOS A indicating very good operations, LOS F indicating forced flow conditions).

Trip generation estimates were developed for the Master Plan based on anticipated student growth with the campus improvements. The campus growth proposed under the Master Plan would result in the addition of 1,152 average daily trips (105 morning peak hour trips and 127 afternoon peak hour trips).

An analysis of the existing plus project conditions found that all of the study area intersections would operate at LOS C or better, see table below.

Morning Peak Hour Levels of Service\* Assumes implementation of planned improvement (one additional eastbound right-turn lane)

Morning Peak Hours Level of Service Diagram  
(below)

Intersection	Existing LOS	Existing + Project LOS	Impact?
Telegraph Rd./Estates Avenue-East Campus Way	A	A	NO
Telegraph Rd./Day Rd.	A	A	NO
Telegraph Rd./Bryn Mawr Rd.	A	A	NO
Telegraph Rd./Wake Forest Ave.	A	A	NO
Telegraph Rd./Victoria Ave.	C	C	NO
SR 126 Eastbound Ramps-Webster Ave./Victoria Ave.	B	A*	NO
Telephone Rd./Victoria Ave.	B	A	NO

\* Assumes implementation of planned improvement (one additional eastbound right-turn lane)

Afternoon Peak Hours Level of Service

An estimate of year 2020 traffic conditions was made based on growth factors developed from traffic volumes contained in the Ventura County Transportation Commission's regional traffic model. The analysis of year 2020 traffic conditions found that the project would contribute to cumulative impacts at the Victoria Avenue/Telegraph Road intersection. Improvements at this location will be reviewed by the City under the Comprehensive Plan process.

The Ventura College Master Plan proposes a total of 2,464 parking spaces on the campus. The parking analysis showed that the project would create a total parking demand of 1,931 parking spaces, resulting in a 22% reserve capacity in the proposed parking lots.

Afternoon Peak Hours Level of Service Diagram  
(below)

Intersection	Existing LOS	Existing + Project LOS	Impact?
Telegraph Rd./Estates Avenue-East Campus Way	A	A	NO
Telegraph Rd./Day Rd.	A	A	NO
Telegraph Rd./Bryn Mawr Rd.	A	A	NO
Telegraph Rd./Wake Forest Ave.	A	A	NO
Telegraph Rd./Victoria Ave.	C	C	NO
SR 126 Eastbound Ramps-Webster Ave./Victoria Ave.	B	A*	NO
Telephone Rd./Victoria Ave.	B	A	NO

\* Assumes implementation of planned improvement (one additional eastbound right-turn lane)

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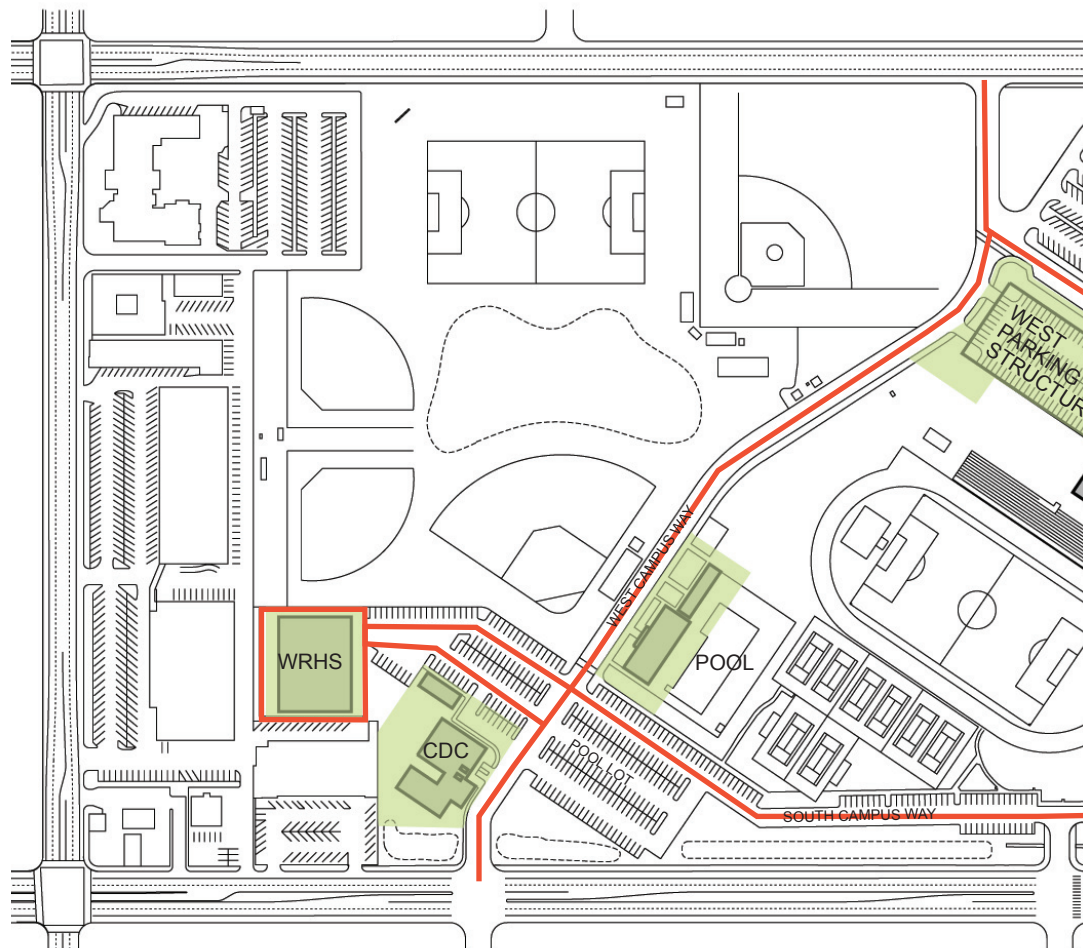
### Proposed Emergency Vehicle Circulation

Emergency vehicle circulation provides access for fire fighting apparatus within the campus.

In general, these circulation routes should be planned to reach the sides of each building from 150 feet to each side of the access roadways. These routes should be 28 feet in width, however wider roadways may be required if parking, turning or other factors are present, these dimensions must be confirmed with the Fire Department during detailed design phases.

### PROPOSED EMERGENCY VEHICLE CIRCULATION

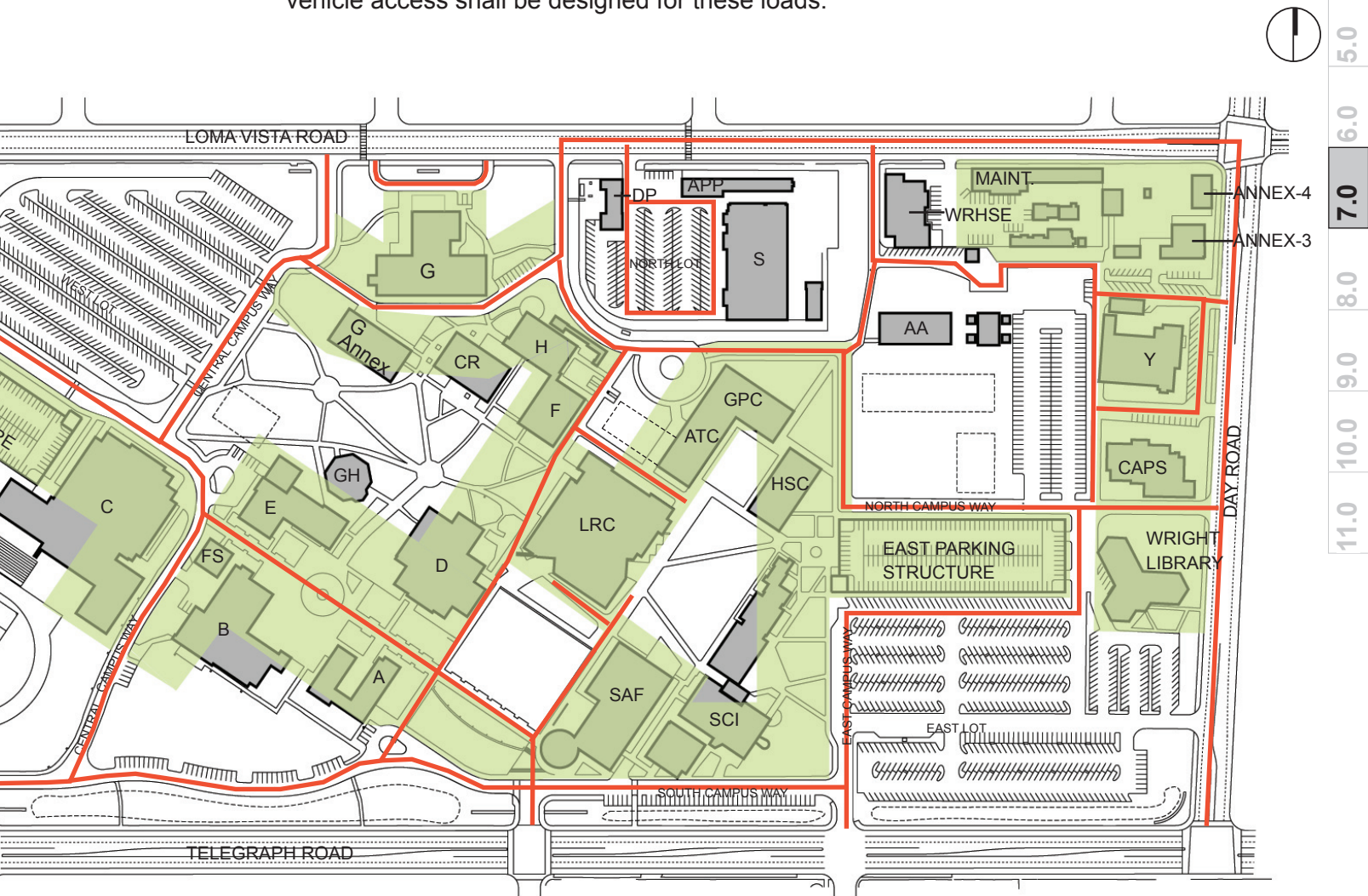
Ventura College Master Plan



Turning radii for the vehicles should be confirmed with the Fire Department. Recent consultations indicate a truck turning radius of 32 feet and an engine turning radius of 33 feet. The Fire Department should also be consulted for compliant designs if turnarounds are to be incorporated.

Fire flows, hydrant spacing and type of hydrant shall comply with the Fire Department's requirements.

Pedestrian circulation walkways used for emergency vehicle access shall be designed for these loads.



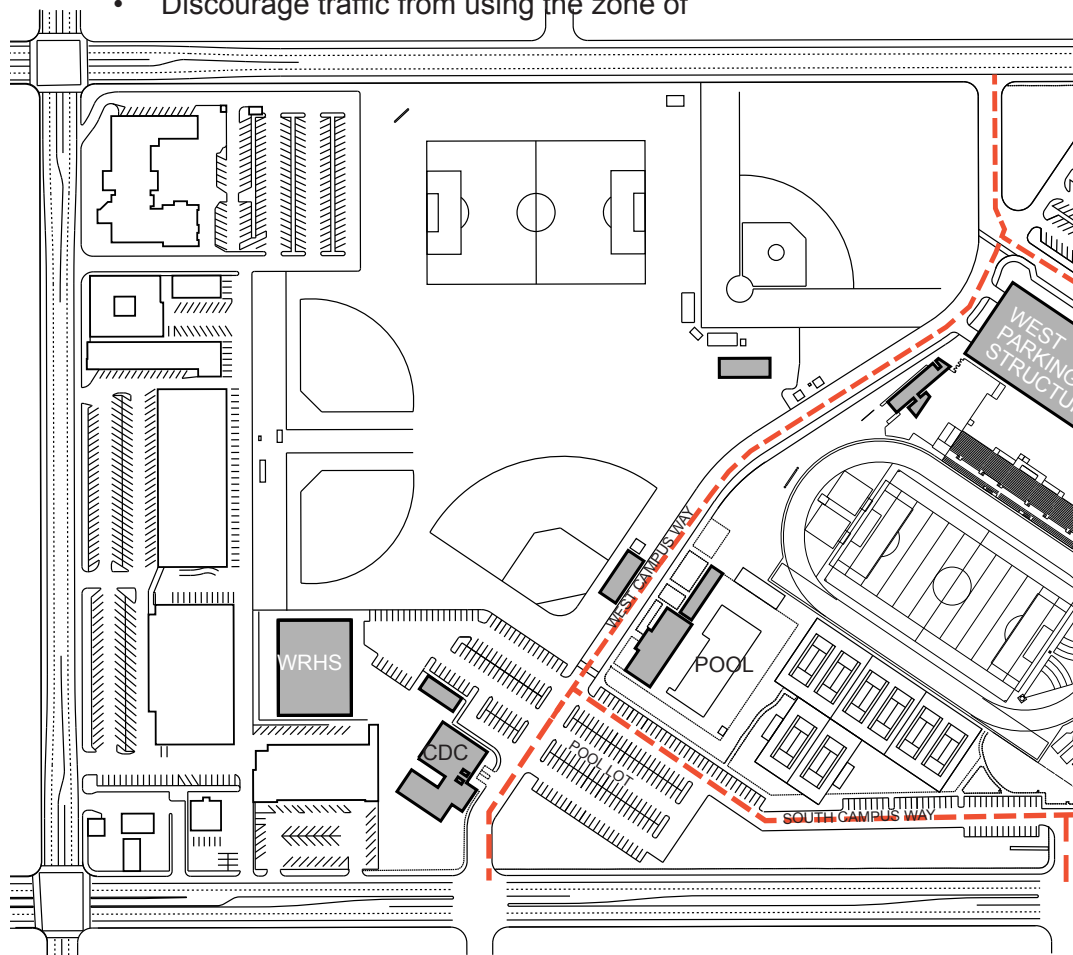
## Proposed Vehicular Circulation

The proposed vehicle circulation system has been developed to respond to the following goals:

- Retain and improve internal campus circulation (connect South Campus Way through to the CDC building and Warehouse, re-align East Campus Way with the entry from Telegraph Road, make South Campus Way two-way circulation throughout)
- Discourage through traffic on Central Campus Way by re-aligning the road and providing two chicanes
- Align Central Campus Way on the C building to make it a dramatic axial roadway
- Discourage traffic from using the roadway south of the G building
- Discourage traffic from using the zone of

### PROPOSED VEHICULAR CIRCULATION

Ventura College Master Plan

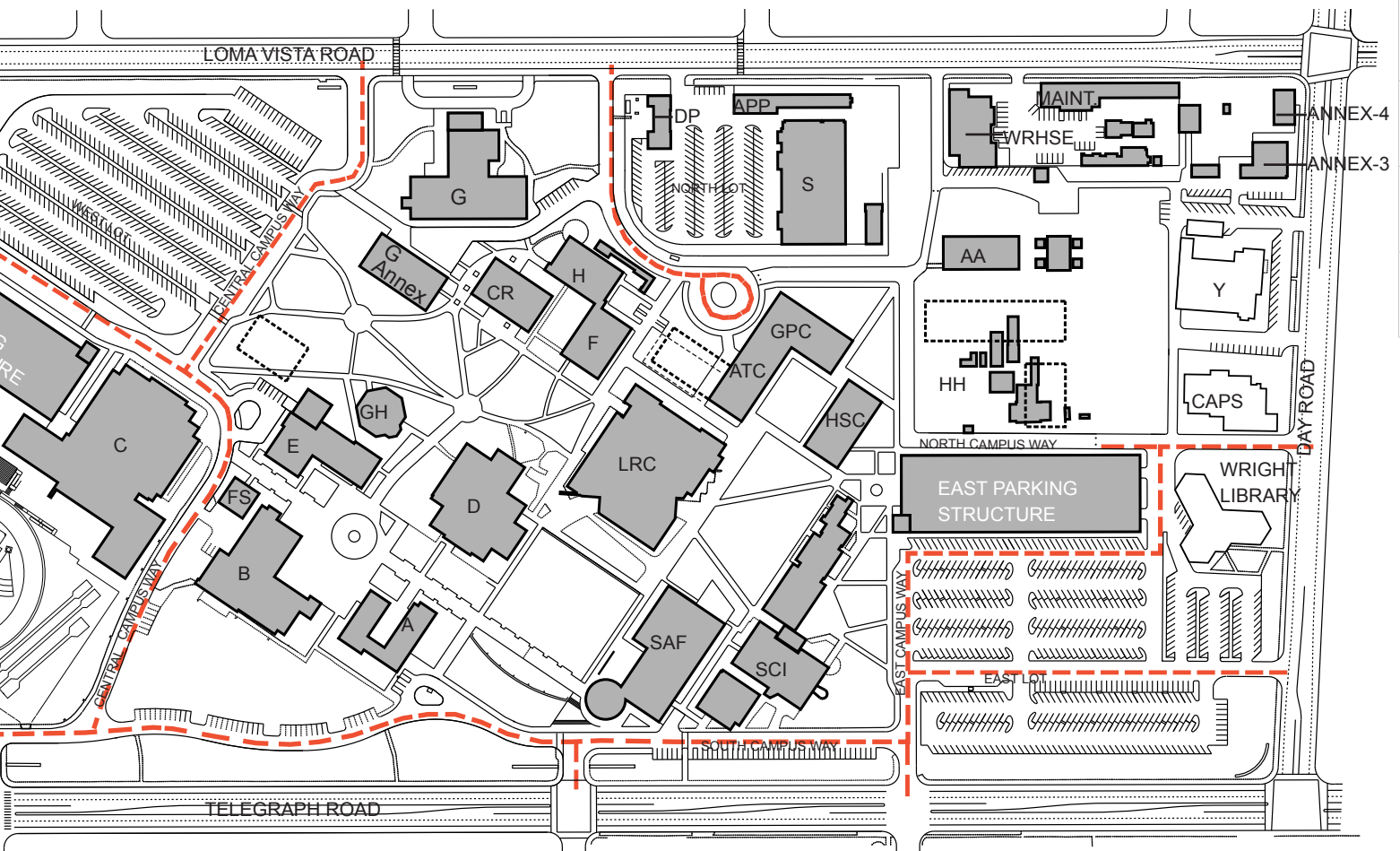




- roadway where North Campus Way connects to East Campus Way
- Re-align the North Campus Way/East Campus Way intersection to provide a development site contiguous to the campus core for the ATC/GPC and HSC building projects

In addition, the master plan acknowledges the limited funds available for construction work on the campus. To this end, the master plan encourages the retention of existing roadways, intersections and turning radii wherever this is reasonable, safe, and practical.

Finally, if practical, the connection between the Performing Arts Courtyard and Central Campus Way should be developed using a perforate roadway system that allows the lawn to grow within the voids of the paving system. (See Chapter 10, page 10.44 for details)



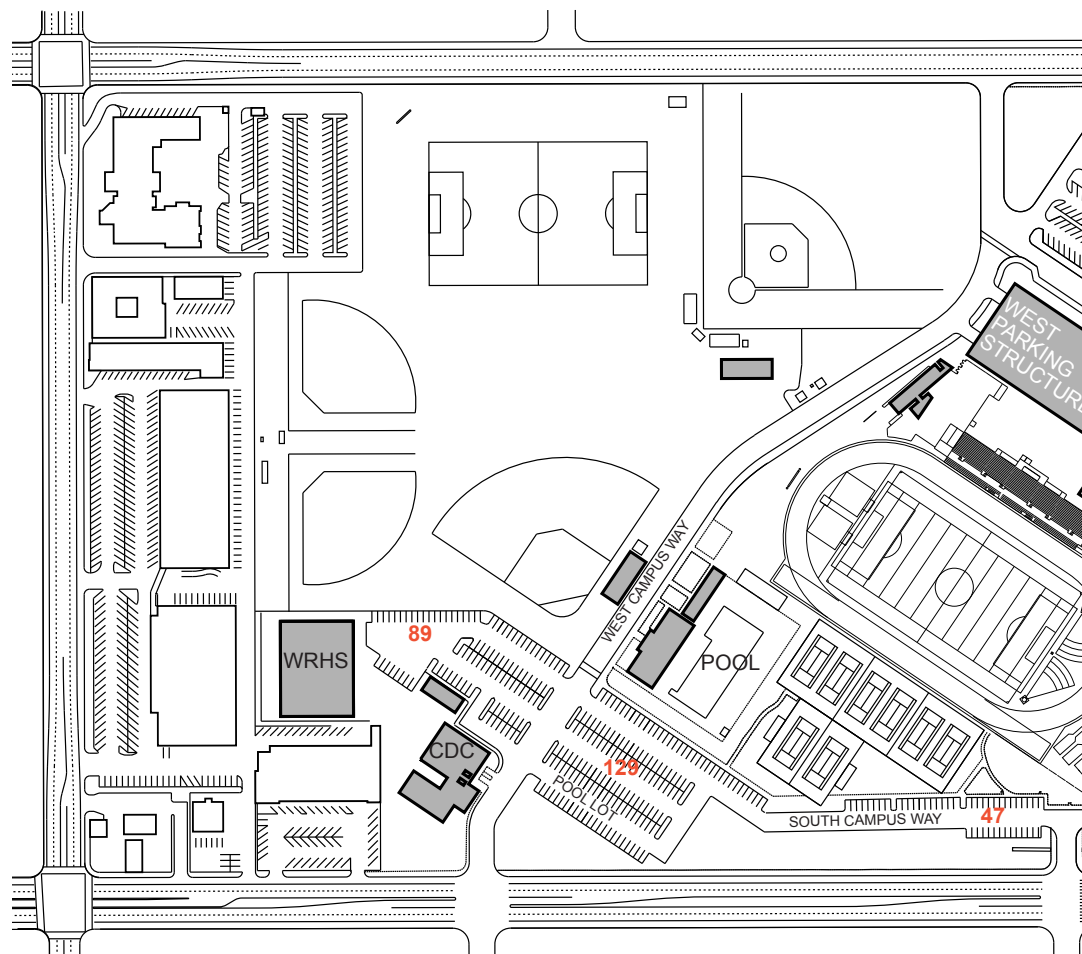
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## Proposed Parking

Through the implementation of the master plan, additional parking will be added to the campus. The aim of the master plan is to balance the location of parking between the various zones of the campus, to consolidate student parking for convenience and to provide accessible parking in numerous areas around the campus. The current campus parking provision is approximately 1,800 spaces. The master plan provides planning direction for an ultimate build-out of 2,323 spaces.

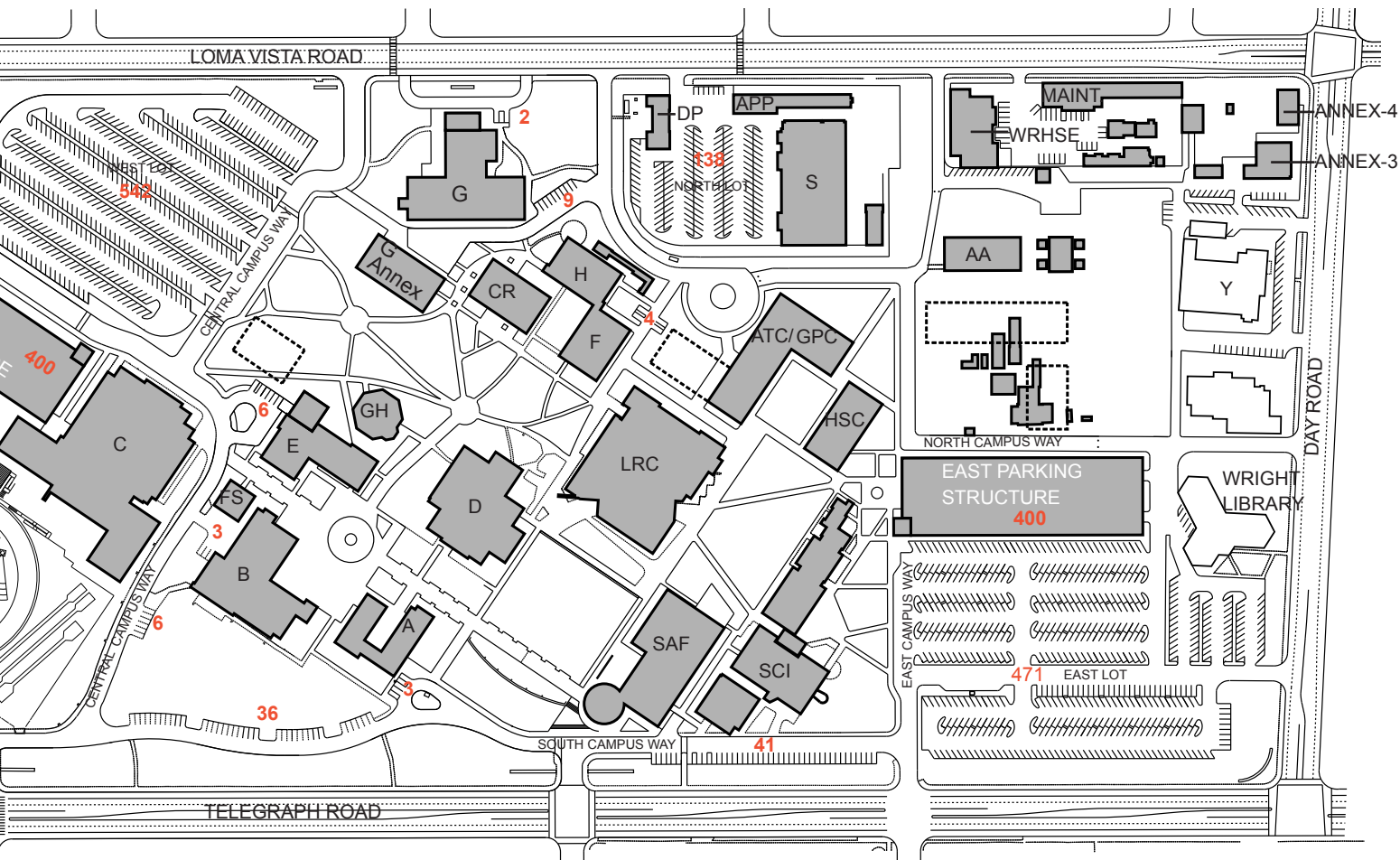
### PROPOSED PARKING

Ventura College Master Plan



Proposed Parking Spaces Breakdown:

Warehouse Lot	89
Pool Lot	129
Tennis Lot	47
West Lot	542
West Parking Structure	400
North Lot	138
East Lot	471
East Parking Structure	400
Small Lots	107
<b>Total Spaces</b>	<b>2,323</b>



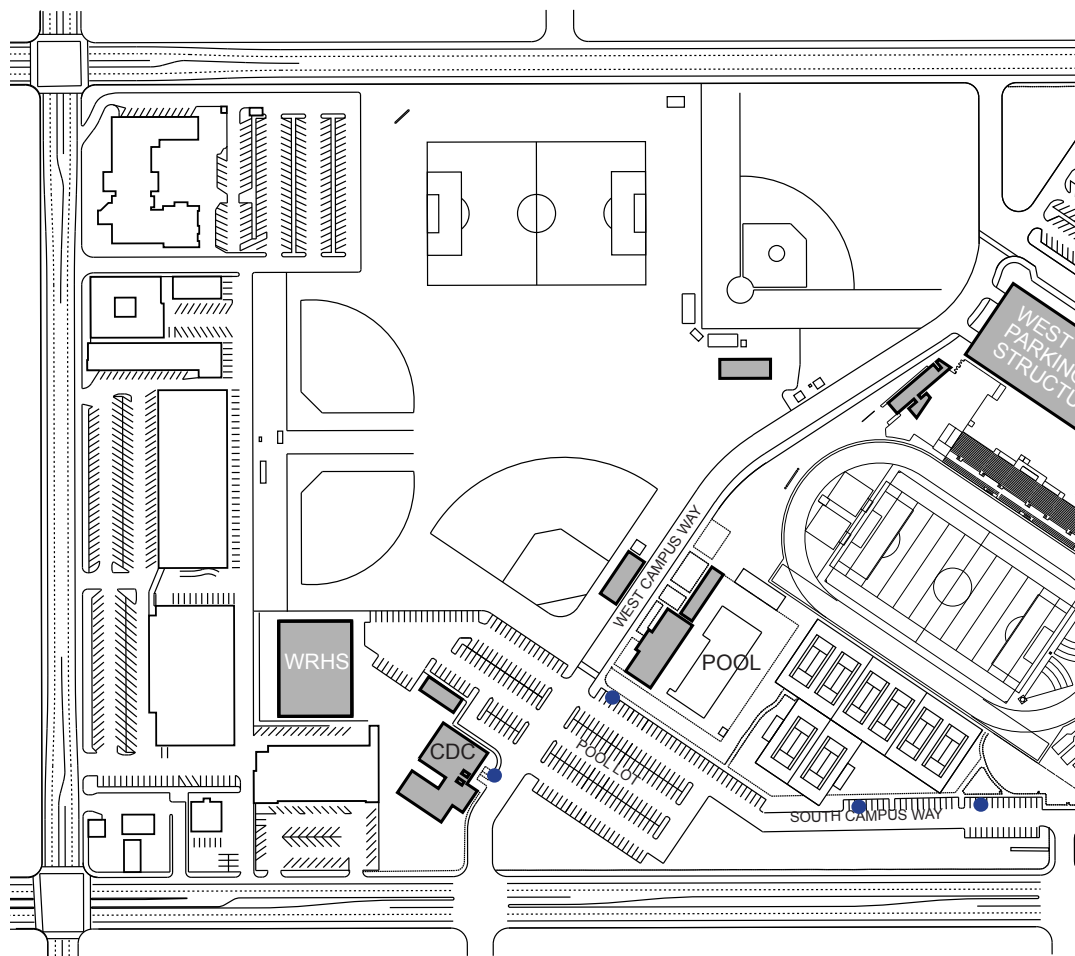
### Accessible Parking

The existing system of accessible parking stalls seeks to provide a well distributed network of parking and accessible routes for convenient access to College facilities. The campus has approximately 120 accessible spaces.

The California Building Code Accessibility Standards requires that parking lots of 401 to 500 stalls provide 9 accessible stalls, for lots with 501 to 1000 stalls the required number is 2 percent of the total. Please refer to the current edition of the Accessibility Standards. In

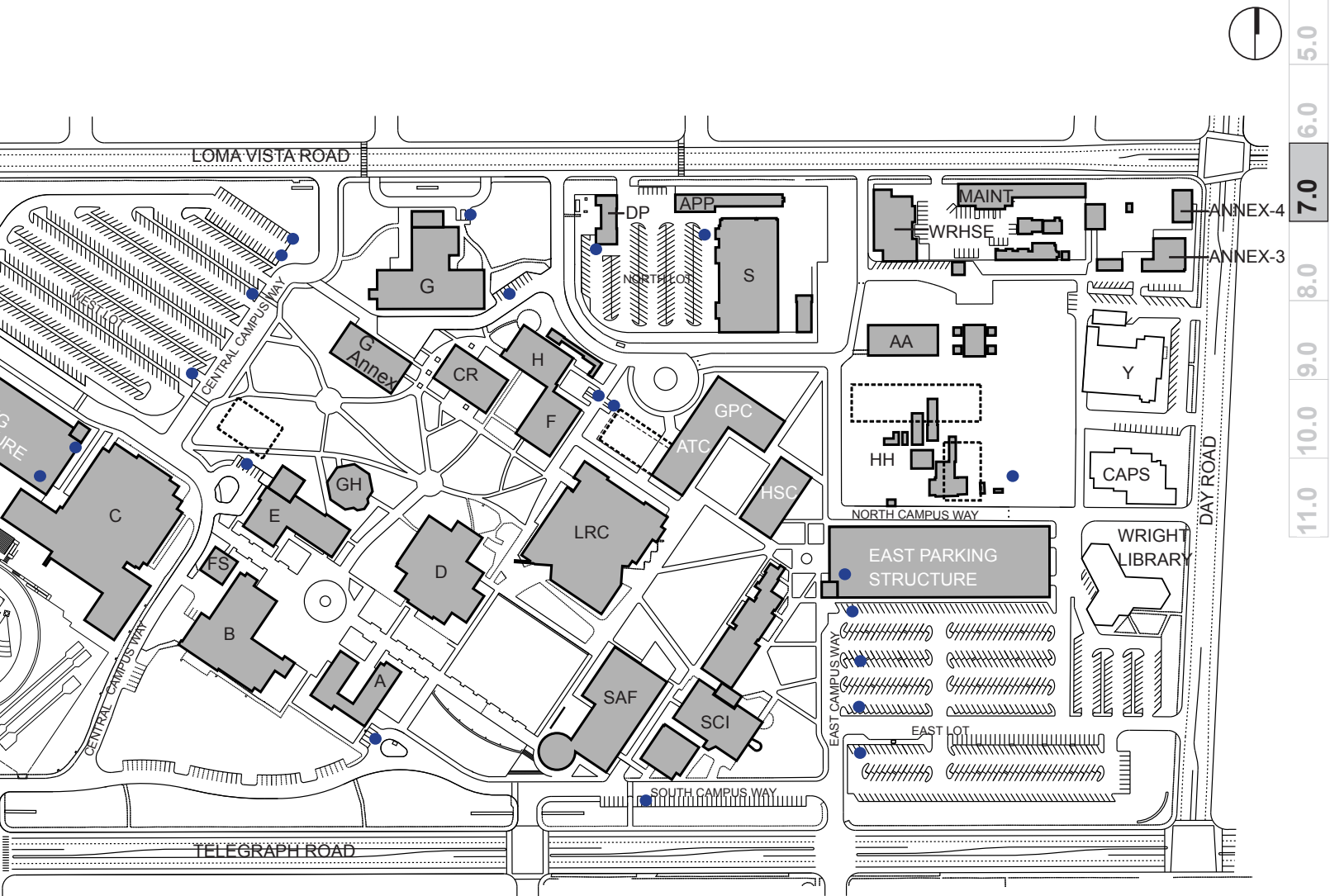
### PROPOSED ACCESSIBLE PARKING

Ventura College Master Plan



addition, one out of every eight accessible stalls must be a van-accessible stall.

There are very particular requirements in connection with accessible parking, including signage, accessible routes, grading and layout. Please refer to the current edition of the Accessibility Standards.



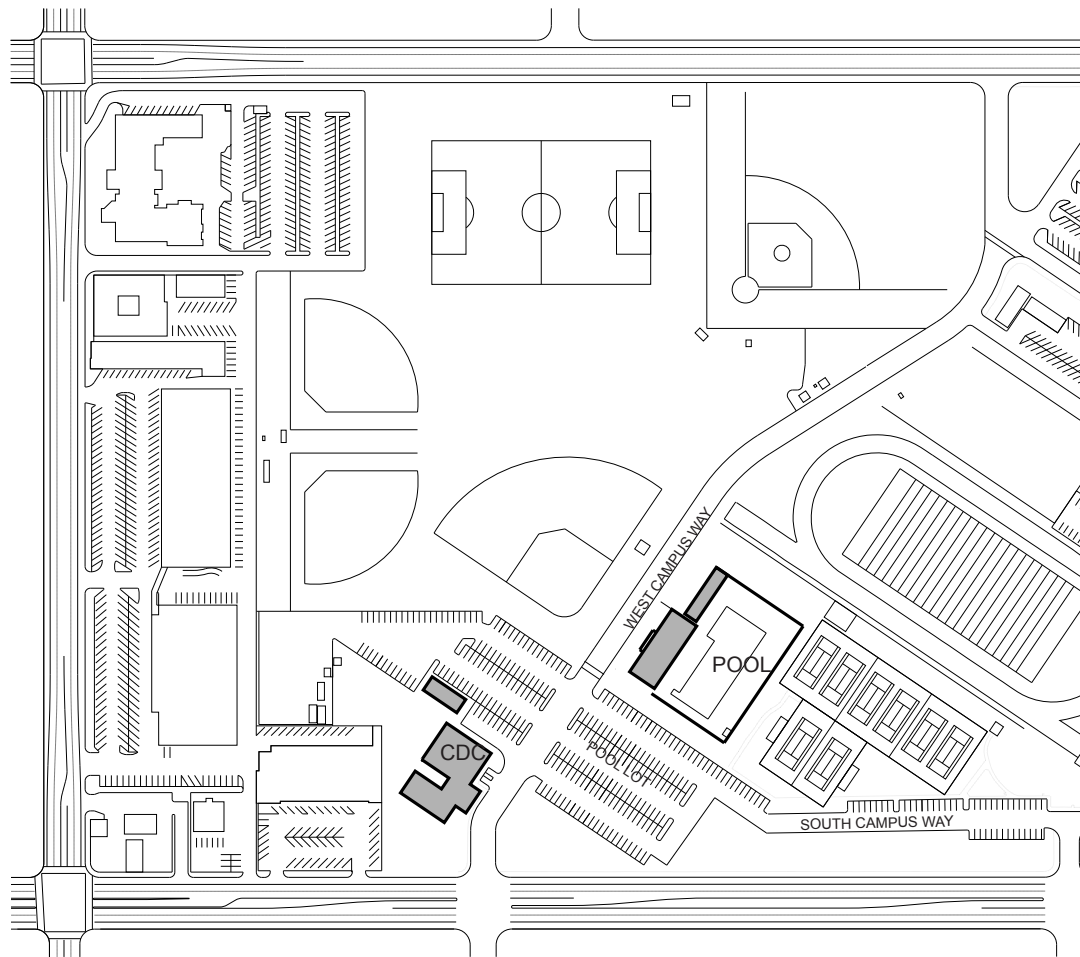
### Proposed Interim Parking

The interim parking solution addresses the following needs:

- Provision of additional parking spaces on campus as a matter of urgency at minimal cost
- Provision of parking during construction activities, including during the East Parking Structure construction

### PROPOSED INTERIM PARKING

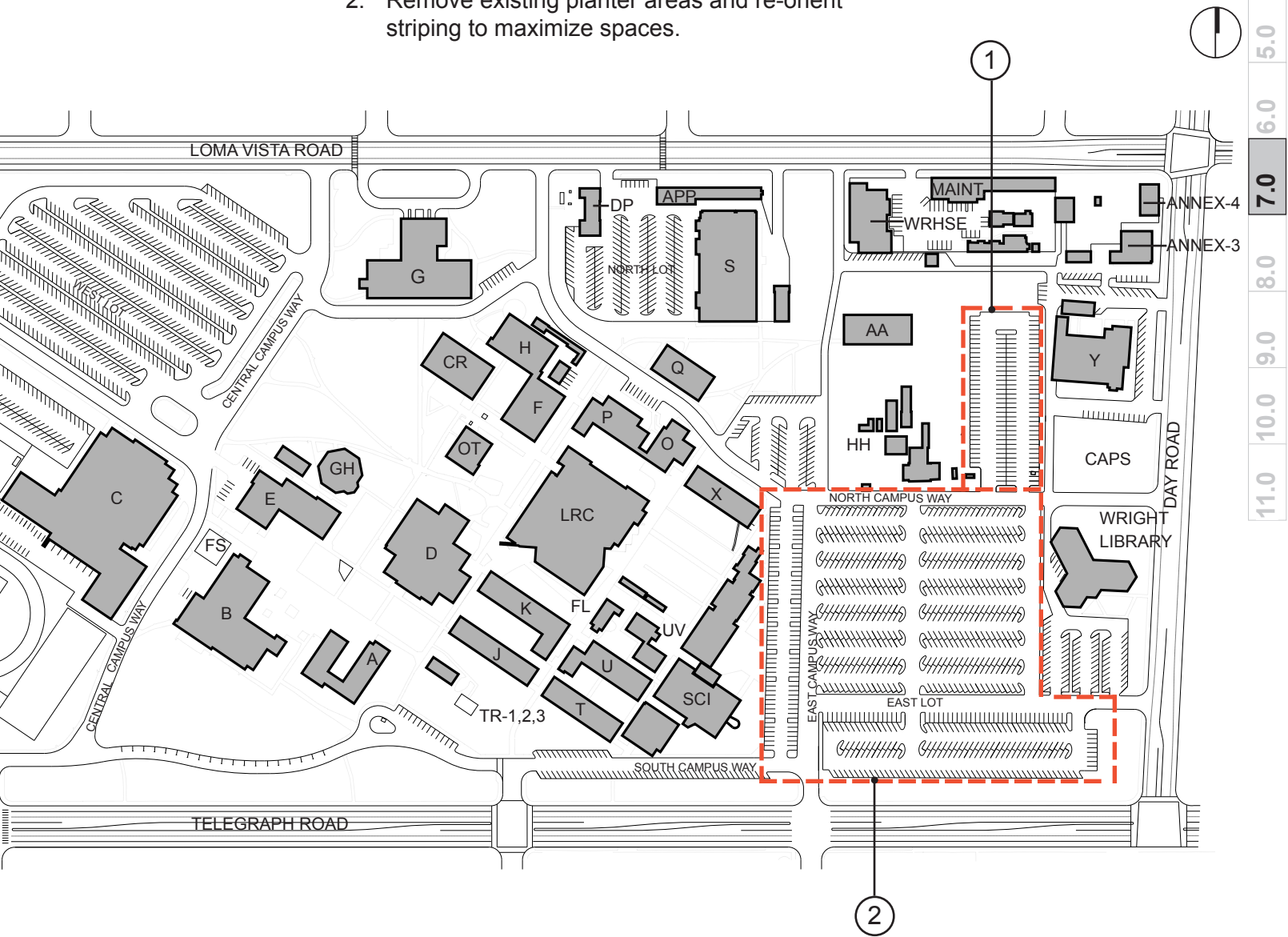
Ventura College Master Plan



- Provide a match between interim and final parking layouts so that funds expended to construct the interim parking solutions are not wasted, but rather incorporated into the final parking scheme.

The Interim Parking section includes:

1. Provide temporary parking area for approximately 135 cars.
2. Remove existing planter areas and re-orient striping to maximize spaces.



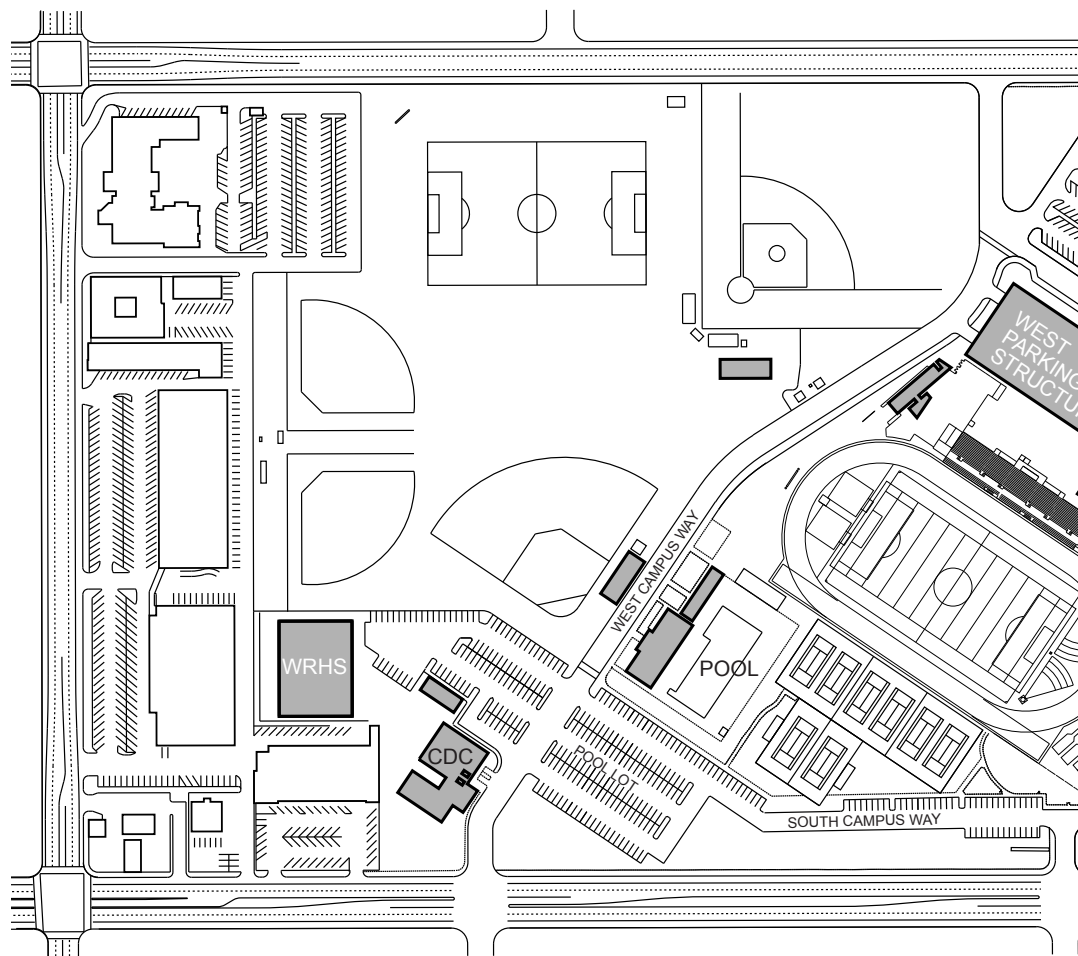
## Proposed Pedestrian Circulation

The pedestrian circulation system on the campus is one of the most important systems supporting the day-to-day life of the campus. The master plan proposes a hierarchical system of walkways:

- The main campus spine, the “Pirates Walk”, is the widest and most visible walkway; this walk is marked by tall fan palms, pole-mounted lights and this walkway connects with all other academic campus core walkways- either directly or visually.
- Medium-width campus walkways

### PROPOSED PEDESTRIAN CIRCULATION

Ventura College Master Plan

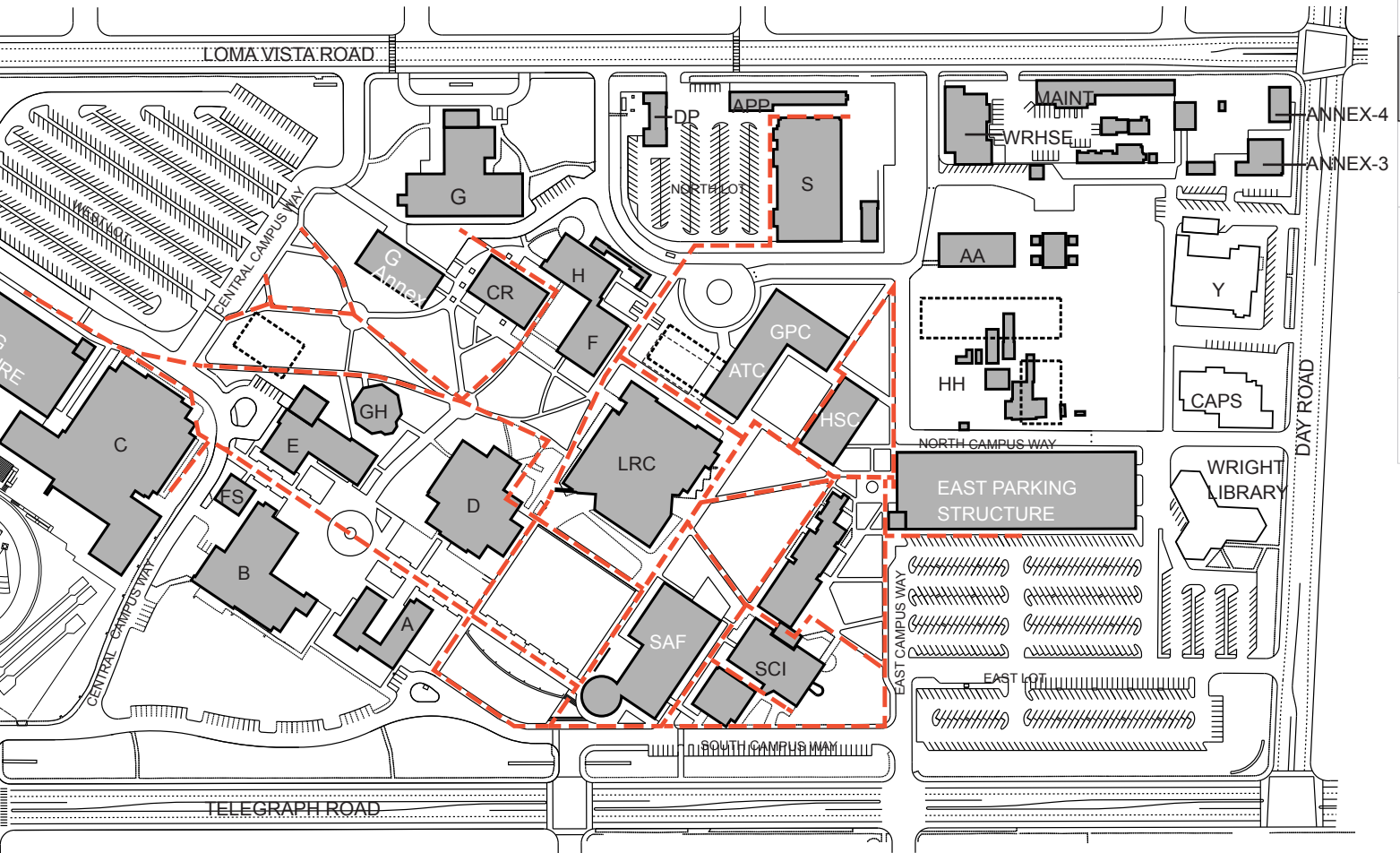




connect the major campus buildings. These walks are lit with pole-mounted fixtures and should be planned to provide direct entry-to-entry alignments between buildings as much as practical.

- Narrow walkways receive the lowest traffic on campus. These walks are lit with pole-mounted fixtures and should be planned to provide direct alignments along the paths of travel.

In all cases these walkways should be planned to be Universal Design compliant and meet the California Accessibility Regulations and Federal Guidelines



### Proposed Bicycle Parking Locations

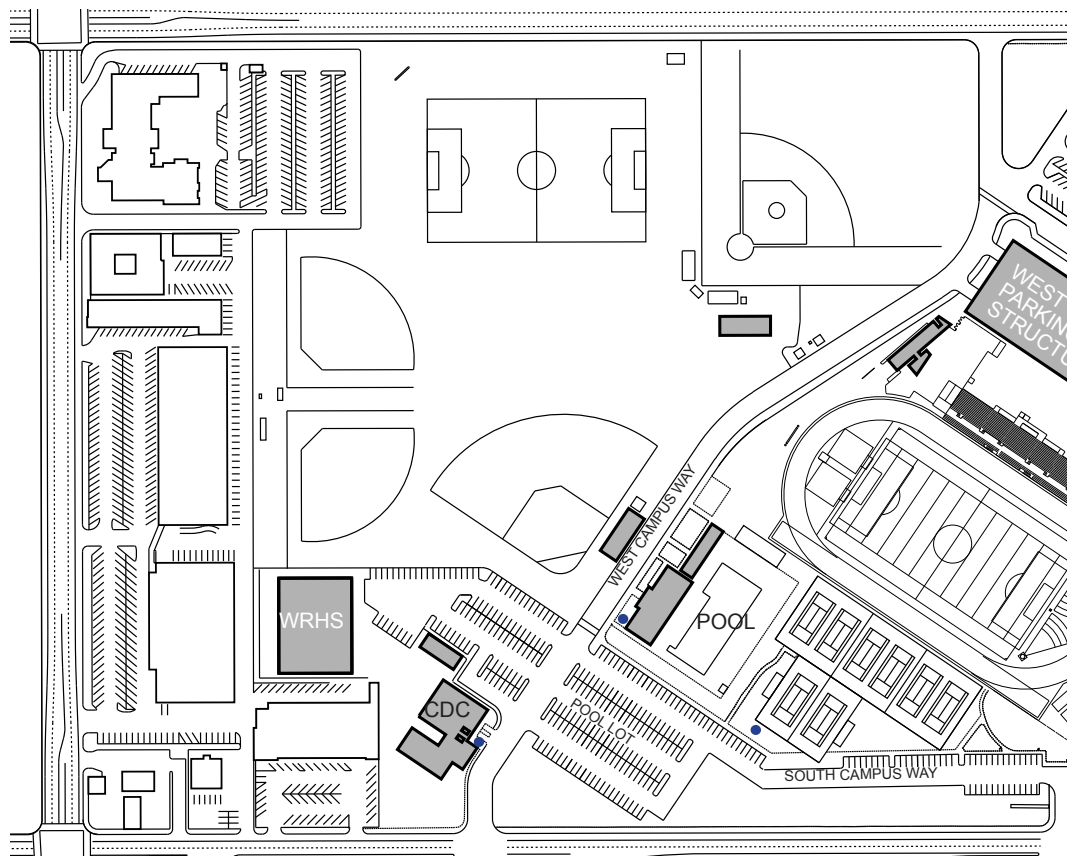
The proposed bicycle parking locations have been identified to provide convenient and well-distributed bicycle parking throughout the campus.

This plan does not attempt to indicate small bicycle parking stands, of 5 spaces or less. Small stands should be located based on requests from students and faculty, observed and anticipated needs. These small stands should be added and assessed on an on-going basis to help encourage bicycle commuting to the campus.

The master plan does not propose an on-campus bicycle circulation system, or make any comment on the utility or feasibility of such a system. On-campus bicycle circulation systems were not a goal of the master plan.

### PROPOSED BICYCLE PARKING LOCATIONS

Ventura College Master Plan



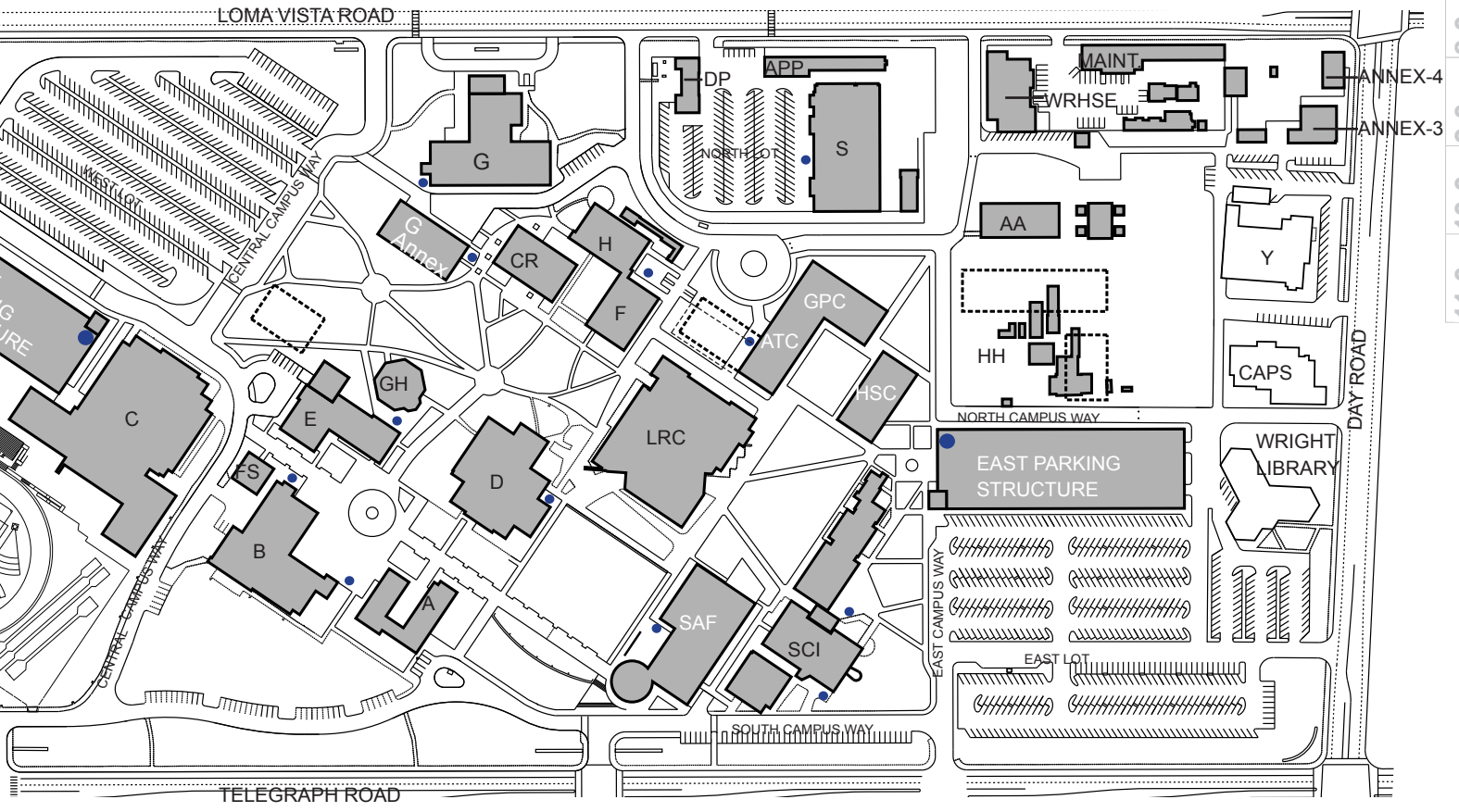
In the interest of safety, the campus should continue to restrict bicycle usage on campus pedestrian walkways, as well as other such restrictions.

The bicycle parking locations indicated on the master plan are either areas within the proposed parking structures, or areas adjacent to buildings and campus entry points. Providing spaces within the parking structures will give cyclists a covered area to park their bicycles, protected from sun and rain. This will also provide a well-lit area at night. Bicycle parking areas near buildings and campus entry points can be developed with permeable paving surfaces, such as decomposed granite, so that rainwater is absorbed into the aquifer instead of adding loads to the campus storm water systems.

Finally, the selection of bicycle racks and accessories should be made on a campus-wide standardized basis to ensure uniformity, ease of use and identity.



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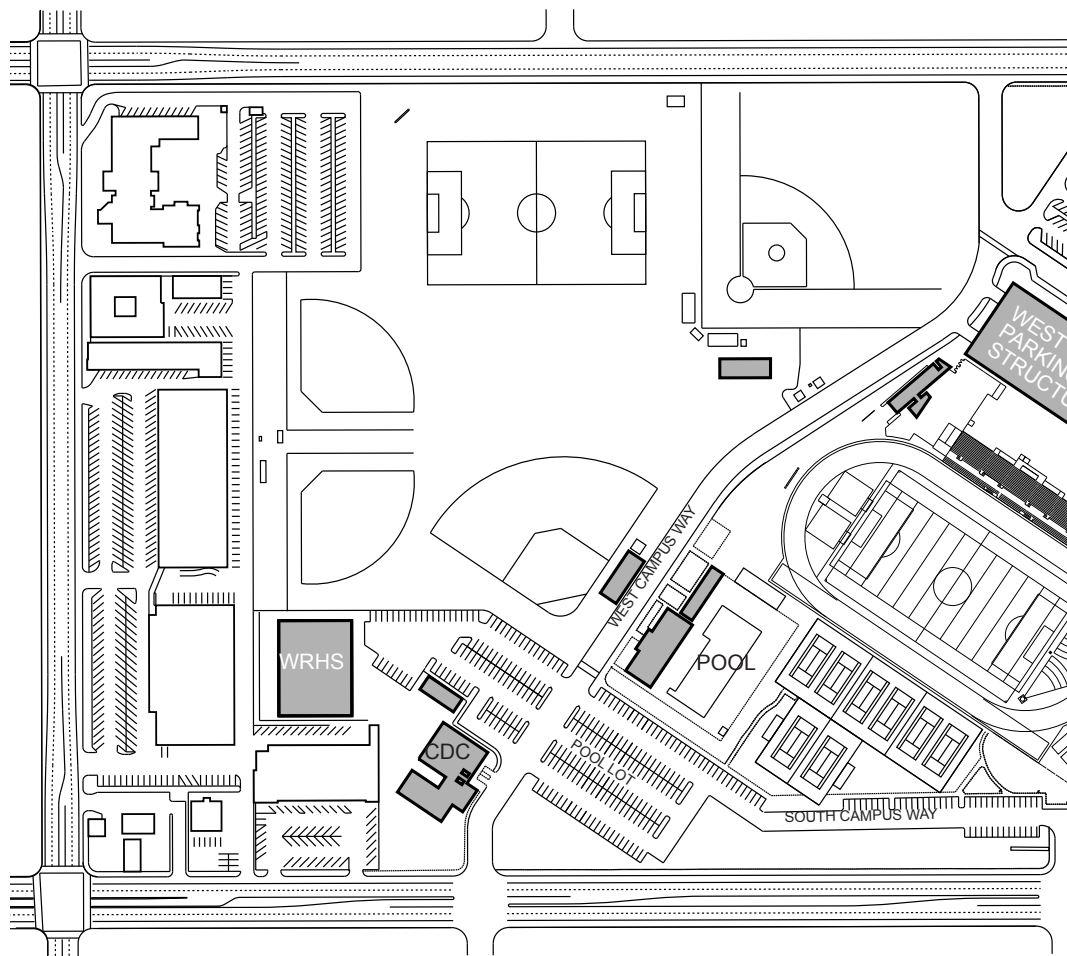


## Proposed Building Entries

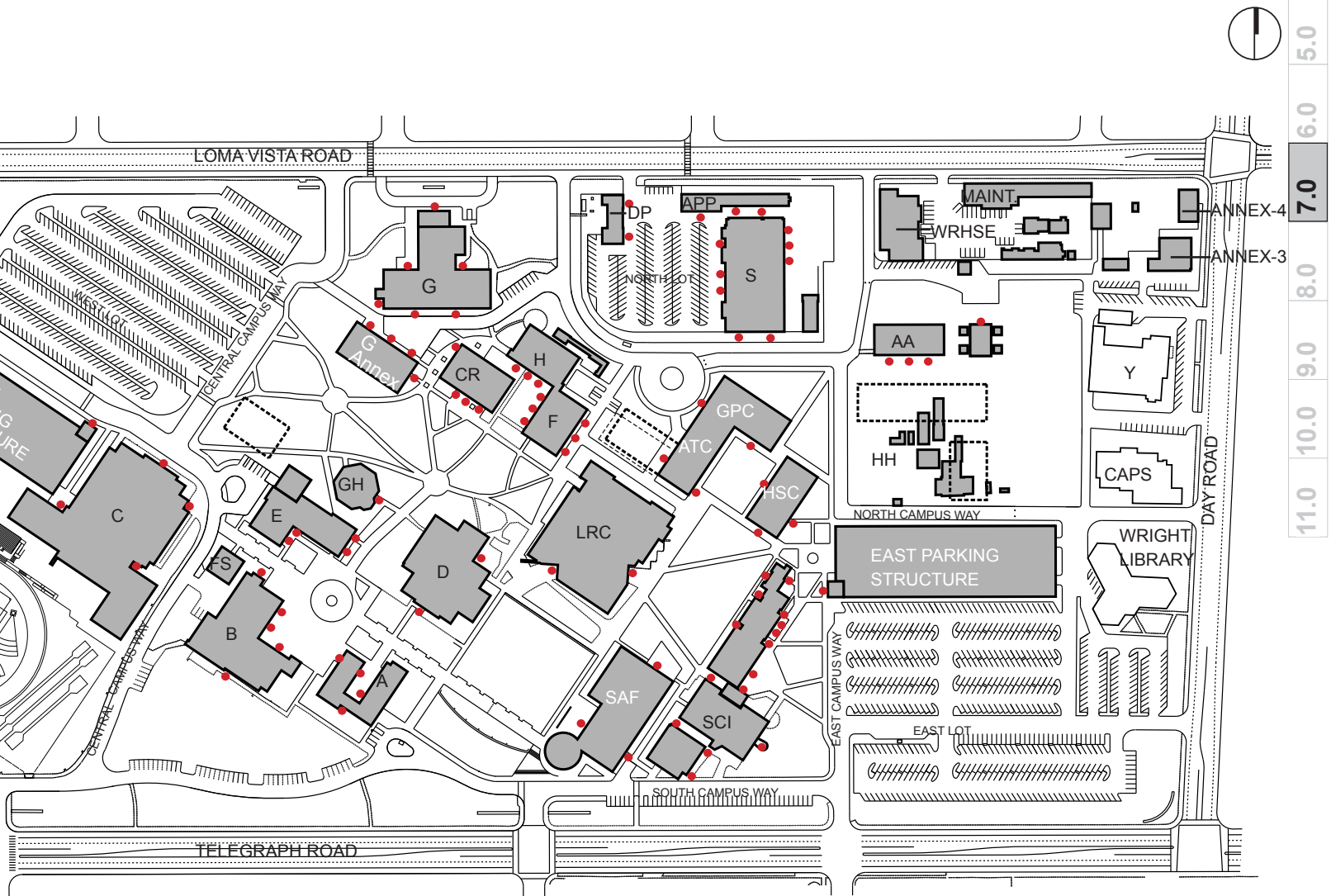
The master plan proposes a coordinated plan of existing and new building entries. This coordination is based on observations of existing building use and entry alignments and the extension of these systems into the zones identified for new construction.

### PROPOSED BUILDING ENTRIES Ventura College Master Plan

In general, patterns have been perpetuated where strong existing patterns exist, otherwise new entry patterns have been planned to provide maximum visibility and convenience to external circulation nodes and internal vertical circulation areas.



One existing campus pattern, the external circulation system, that provide entries to individual classrooms, will not be perpetuated by the master plan. The campus will therefore have a mix of older buildings with external circulation systems and newer buildings with internal circulation systems. This mix is feasible given that a number of the external circulation systems are arranged around outdoor spaces. This, in effect, makes them semi-internal.

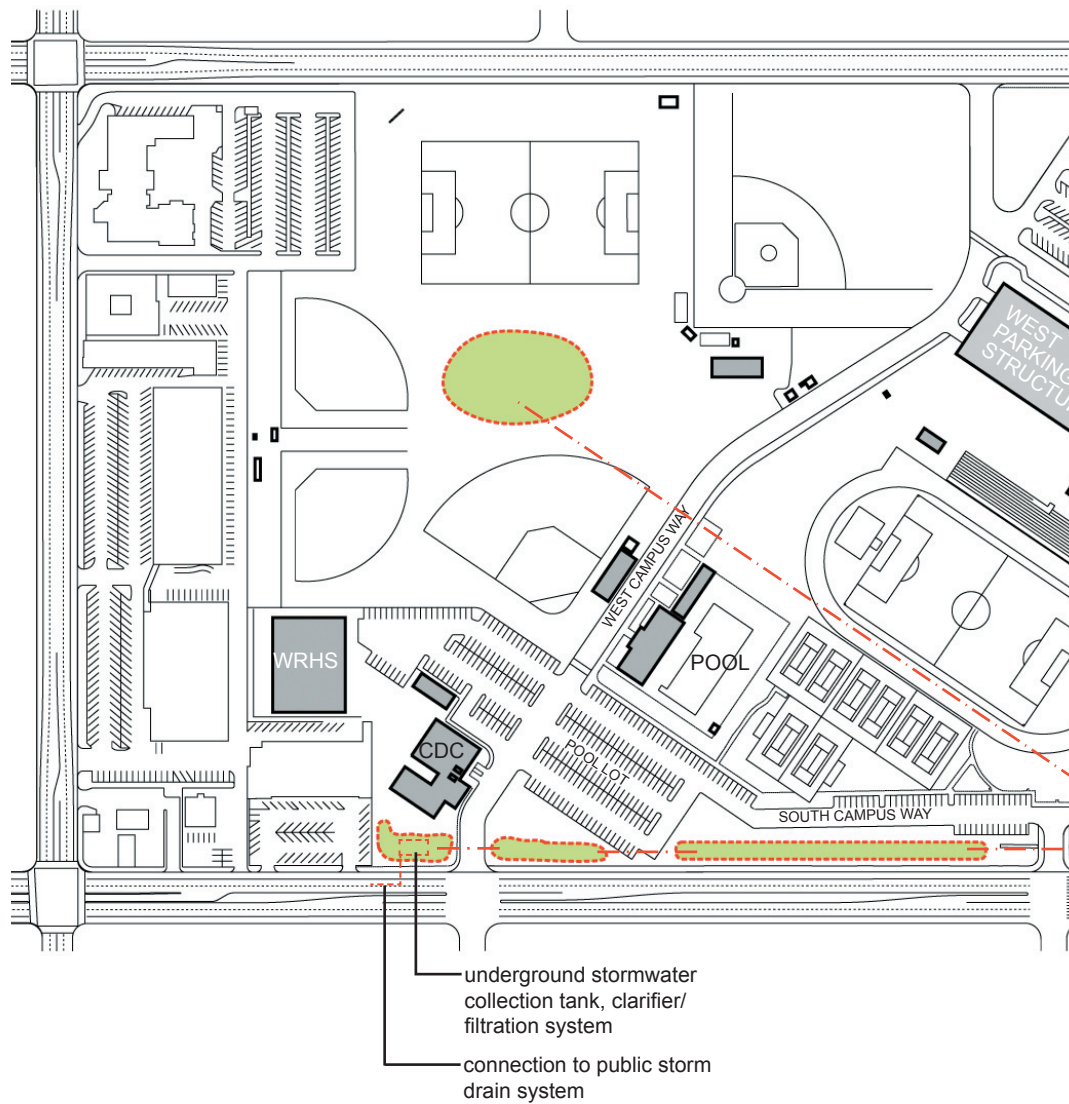


### NPDES-BMP Storm Water System

The diagram below illustrates the three principal storm water management systems considered feasible at the time of writing this report.

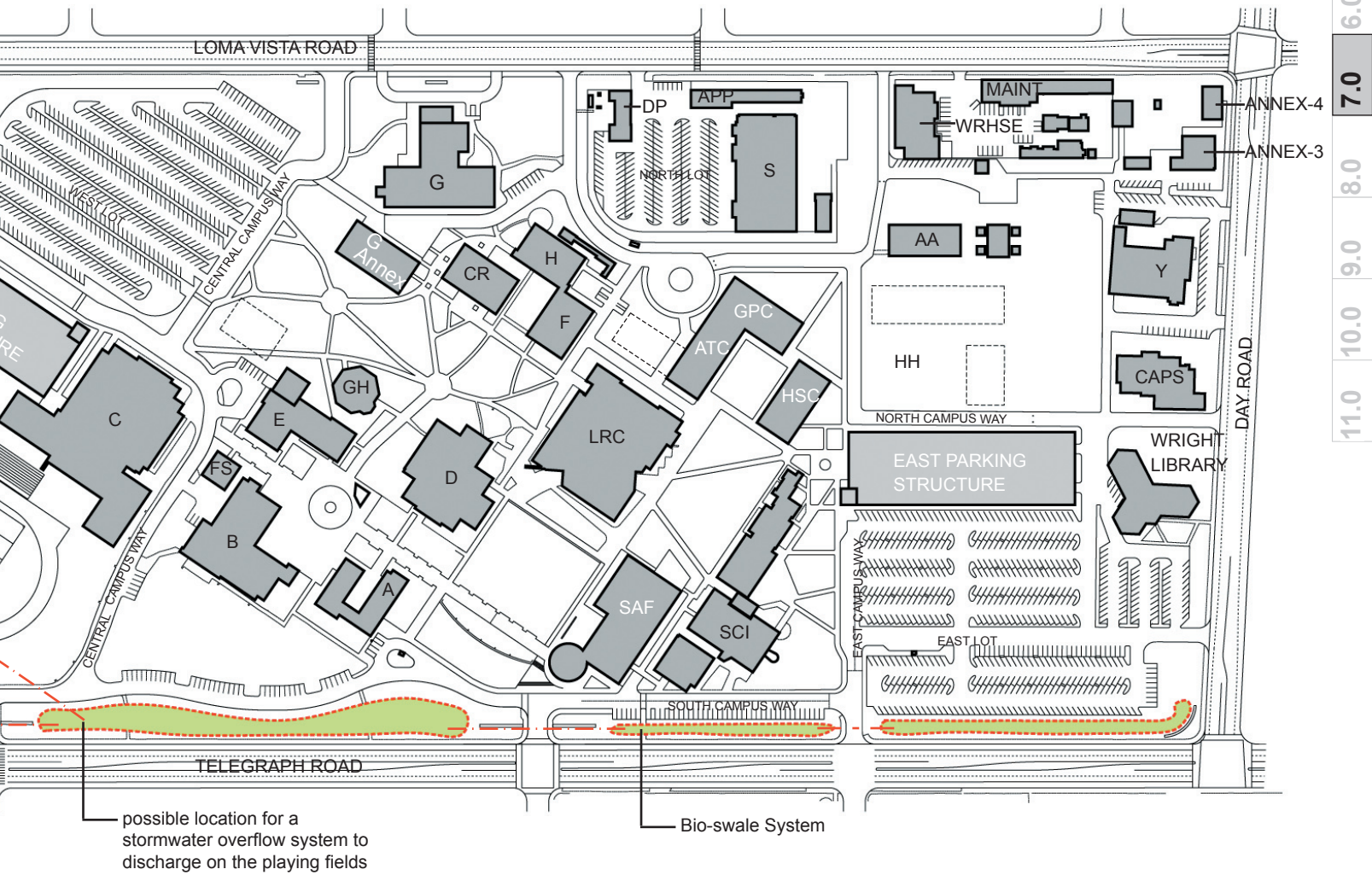
The bio-swale system is an engineered enhancement of the existing open drainage channel that runs parallel to Telegraph Road. The bio-swale will use plant materials and pervious materials to hold and filter storm water into the aquifer thus reducing storm water volumes delivered to the city storm drain.

### NPDES-BMP STORM WATER SYSTEM DIAGRAM Ventura College Master Plan



The storm drain overflow system is a conceptual proposal that requires a detailed engineering feasibility study. In concept, an underground piped storm drain would take overflow storm water from the bio-swale area and distribute it over a large area of playing fields, where it would be filtered into the soil instead of piped into the city storm drain.

The underground storage, collection, and filtration of storm water into a tank near the campus storm water system connection into the city system, would provide a location and infrastructure for the college to comply with strict storm water management regulations, which may be imposed in the future.



### NPDES Requirements

Boyle researched and reviewed the NPDES requirements for the City of San Buenaventura and the County of Ventura. The following are the pertinent NPDES requirements and information for the Ventura College renovation and expansion.

The California Regional Water Quality Control Board Order No. 00-108 requires the City of San Buenaventura to implement the NPDES Permit No. CAS004002, including the Monitoring and Reporting Program, Ventura Countywide Stormwater Quality Urban Impact Mitigation Plans (SQUIMP), and Ventura Countywide Stormwater Quality Management Plan (SMP).

The California Regional Water Quality Control Board adopted the final municipal storm water permit for Ventura County on July 27, 2000. The Board Order No. 00-108 serves as the City's permit, under the NPDES, for stormwater discharges and urban runoff within Ventura County. This Board Order will expire on July 27, 2005.

The first phase of these requirements was directed at municipal separate storm water drainage systems (MS4) serving populations of 100,000 or more and storm water discharges associated with industrial activities, including construction activities.

Projects that fall into one of eight categories are identified in the Ventura Countywide Municipal Permit as requiring Storm Water Quality Urban Impact Mitigation Plans (SQUIMPs):

- Single Family Hillside Residences
- 100,000 Square Foot Commercial Developments
- Automotive Repair Shops



- Retail Gasoline Outlets
- Restaurants
- Home Subdivisions with 10 or more housing units
- Location within or directly adjacent to or discharging to an environmentally sensitive area
- Parking Lots with 5,000 square feet or more impervious parking or access surfaces with 25 or more parking spaces and potentially exposed to storm runoff.

This project will need to implement the Storm Water Quality Urban Impact Mitigation Plan (SQUIMP) due to these following elements:

- 100,000 Square Feet Commercial Development- Any commercial development that creates at least 100,000 square feet of impermeable area, including parking areas. “Commercial Development” shall mean any development on private land that is not heavy industrial or residential. The category includes, but is not limited to: hospitals, laboratories and other medical facilities, educational institutions, recreational facilities, plant nurseries, multi-apartment buildings, etc.
- Redevelopment that results in the creation or addition of 5,000 square feet or more impervious surface area is subject to the requirements for storm water mitigation. If the creation or addition of impervious surfaces is fifty percent or more of the existing impervious surface area, then storm runoff from the entire area (existing and additions) must be considered for purposes of storm

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water mitigation. If the creation or additions is less than fifty percent of the existing impervious surface, then storm water runoff from only the addition area need mitigation.

- Parking Lots with 5,000 square feet or more of impervious parking or access surfaces or 25 or more parking spaces and potentially exposed to storm runoff
- This project will need to implement programs for construction sites due to soil disturbance of one acre or more.

Several Storm Water Quality Urban Impact Mitigation Plan (SQUIMP) requirement provisions are applicable to all eight categories are as follows:

1. Peak Storm Runoff Discharge Rates
2. Conserve Natural Areas
3. Minimize Storm Water Pollutants of Concern
4. Protect Slopes and Channels
5. Provide Storm Drain Stenciling and Signage
6. Properly Design Outdoor Material Storage Areas
7. Properly Design Trash Storage Areas
8. Provide Proof of Ongoing BMP Maintenance
9. Design Standards for Structural or Treatment Control BMPs
10. Provisions Applicable to Individual Priority Project Categories
  - A. 100,000 Square Foot Commercial Development
    - Properly Design Loading/ Unloading Dock Areas
    - Properly Design Repair/ Maintenance Bays
    - Properly Design Vehicle/ Equipment Wash Areas
  - B. Parking Lots

- Properly Design Parking Area
- Properly Design to Limit Oil Contamination and Perform Maintenance

Potential Best Management Practices (BMPs) to address the Storm Water Quality Urban Impact Mitigation Plan (SQUIMP) provisions include:

- Provide reduced width sidewalk and incorporate landscaped buffer areas between sidewalk and streets.
- Incorporate vegetated open channels with streets.
- Use permeable materials for private sidewalks, driveways, parking lots or roadways
- Reduce building density
- Direct rooftop runoff to pervious areas such as yards, open channels or vegetated areas and avoid routing rooftop runoff to the roadway or the storm water conveyance system
- Biofilters including vegetated swales and strips
- Extended/dry detention basins
- Infiltration basins
- Infiltration trenches or vaults
- Wet detention basins/wet ponds
- Constructed wetlands
- Catch Basin Inserts
- Continuous flow deflection/separation systems
- Storm drain inserts
- Media filtration
- Bioretention facility
- Foundation planting
- Catch basin screens
- Normal flow storage/separation systems
- Clarifiers
- Filtration systems
- Primary waste water treatment systems
- Dry Wells
- Cistern

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Reviewing the Potential Best Management Practices (BMPs) to address the Storm Water Quality Urban Impact Mitigation Plan (SQUIMP), we have identified the following pertinent BMPs for this project:

- Provide reduced width sidewalk and incorporate landscaped buffer areas between sidewalk and streets.
- Use permeable materials for private side walks, driveways, parking lots or roadways.
- Reduce building density.
- Direct rooftop runoff to pervious areas such as yards, open channels or vegetated areas and avoid routing rooftop runoff to the roadway or the storm water conveyance system.
- Biofilters including vegetated swales and strips
- Wet detention basins/wet ponds
- Catch Basin Inserts
- Storm drain inserts
- Catch basin screens
- Normal flow storage/separation systems  
Also, during the planning and design phase of the project, consider the following
- Control the post peak storm water runoff discharge rate to maintain or reduce pre-development downstream erosion.
- Maximize trees and other vegetation at site by planting additional vegetation, clustering tree areas and promoting the use

of native and/or drought tolerant plants

- Proper design of Loading and Unloading Areas
- Proper design of Repair / Maintenance bays
- Proper design of Outdoor Material Storage Areas
- Proper design of Trash Storage Areas
- Proper design of Parking Area
- Proper design to Limit Oil Contamination

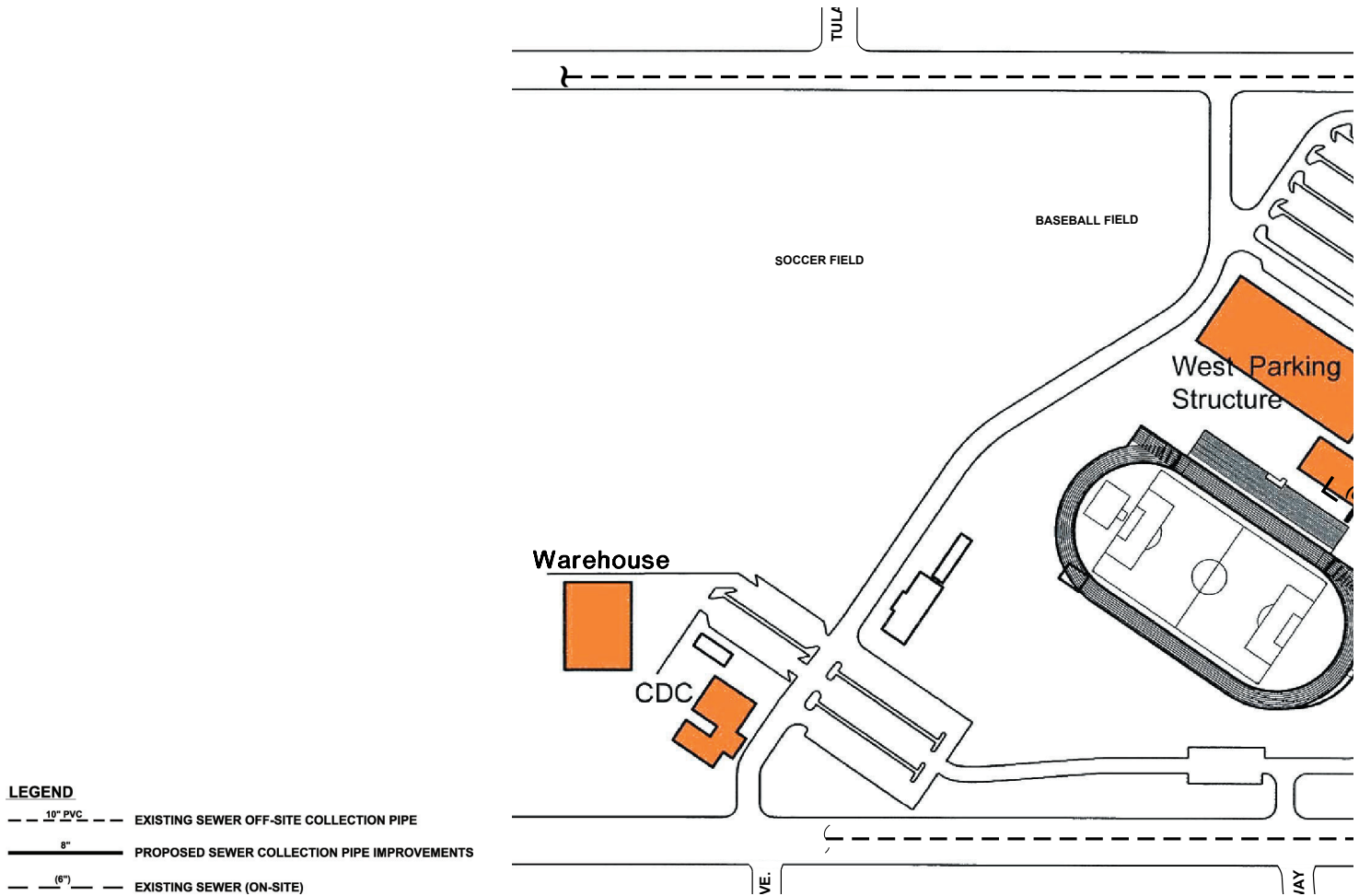
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### Proposed Sewer System

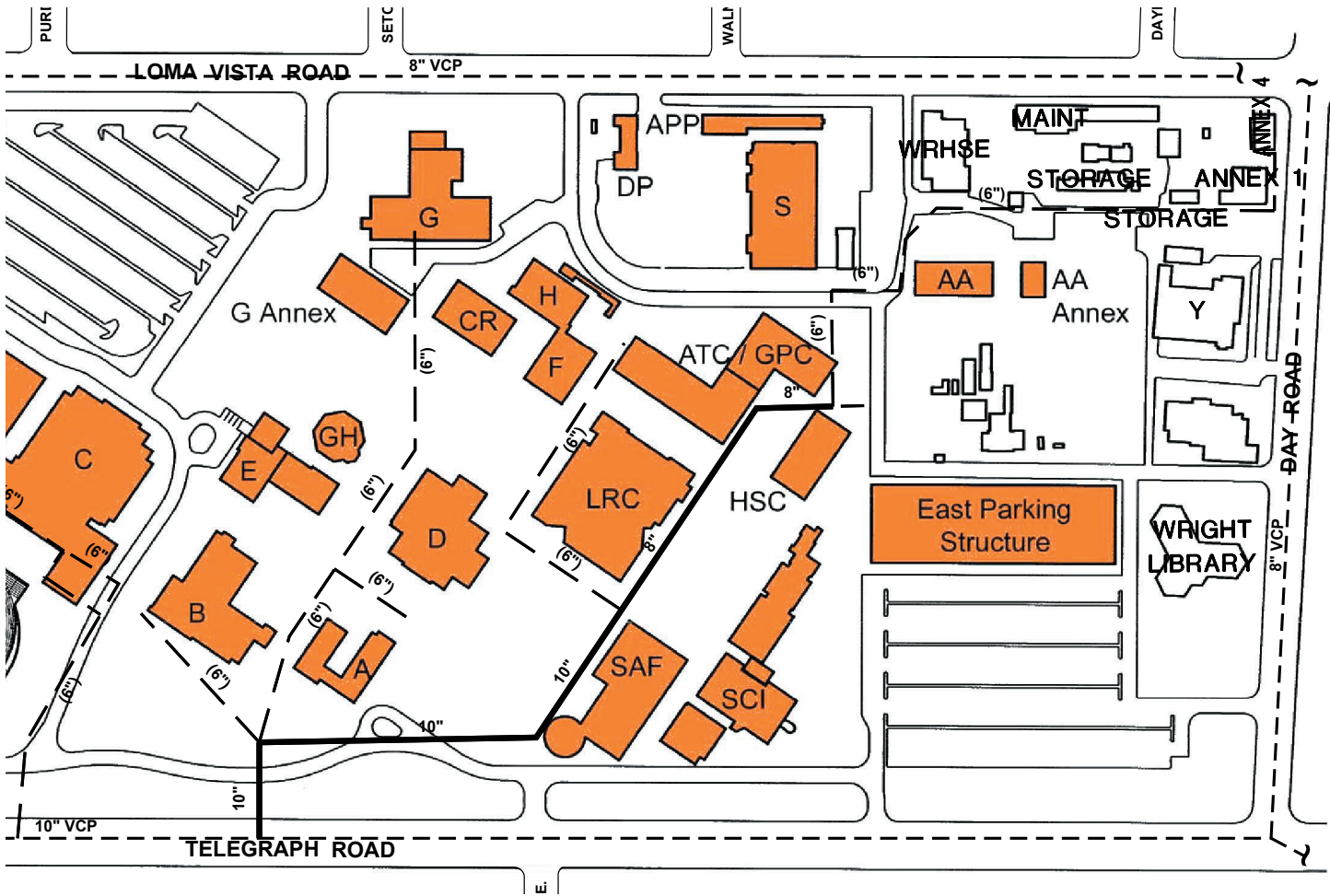
Since the existing sanitary sewer system was installed in 1955 and no video inspection of the system has been performed, a detailed understanding of the existing condition is unknown. Based on discussions with campus staff, the sewer system is vitrified clay pipe (VCP). Tree root damage is the main maintenance issue. The existing sanitary sewer pipes location and sizes diagram shows the layout of the existing campus sewer system.

The information we obtained for the sewer system is

### PROPOSED SEWER SYSTEM Ventura College Master Plan



limited so we first set out to determine the discharge flow rates for the proposed buildings. Our approach was to calculate capacity based on the fixture counts provided and increase the diameter of existing sewer pipeline sections that are over 75% capacity. Next, we gathered information on the number of existing plumbing fixtures for existing buildings that were to remain on the campus at build-out. This information is shown in the table. For sanitary sewer flow calculations, it is our understanding that the UPC provides information for residential and commercial facilities and not necessarily educational institutions. Therefore, to size the discharge piping, we assumed



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the calculated water demand would be used as the base sewer flow. For each building there was a calculated maximum day demand. It was increased by a peaking factor of 2.5 to simulate a peak hour discharge. This would be conservative to use for a discharge flow rate. Then, to determine a diameter, we used two techniques:

(1) Manning's Formula with a pipe slope of 2%, a 50% full pipe and a 0.013 "n" coefficient

(2) PC fixture count and Table 7-5 of the UPC for horizontal pipe

This table shows typical flow rates for common sewer pipe diameters

Diameter (inches)	Capacity (gpm)
4	120
6	360
8	770
10	1400
12	2270
15	4110

This table shows a comparison between the two techniques. Once a building discharge was obtained, the next building on the pipeline was added to the first and on down the system. Pipe diameters were based on total flow for a particular section. New flow was added at manholes only.

This diagram shows the proposed sewer system layout. Pipe diameters and locations are based on the future layout of the campus. We recommend that all new pipe is polyvinyl chloride (PVC) material.

The conclusions we developed were based on the assumption that the existing system condition is



generally good. With no video (CCTV) records of the existing manholes and collection piping, this may not be a correct assumption. Our improvement concept is tied to areas where capacity is going to be a concern. Our recommendation would be to perform a video inspection of the entire collection system for the campus to determine the condition of the piping/manholes. This may increase the amount of pipe that should be replaced. In addition, we did not analyze the presence of infiltration/inflow into the sewer system. Infiltration/inflow refers to the addition of groundwater or storm water into a sewer system during or after rain events due to leaks in the collection system. A broken pipe or manhole below grade (low spot) can introduce a significant amount of flow into the system, which the pipes may not have capacity to handle.

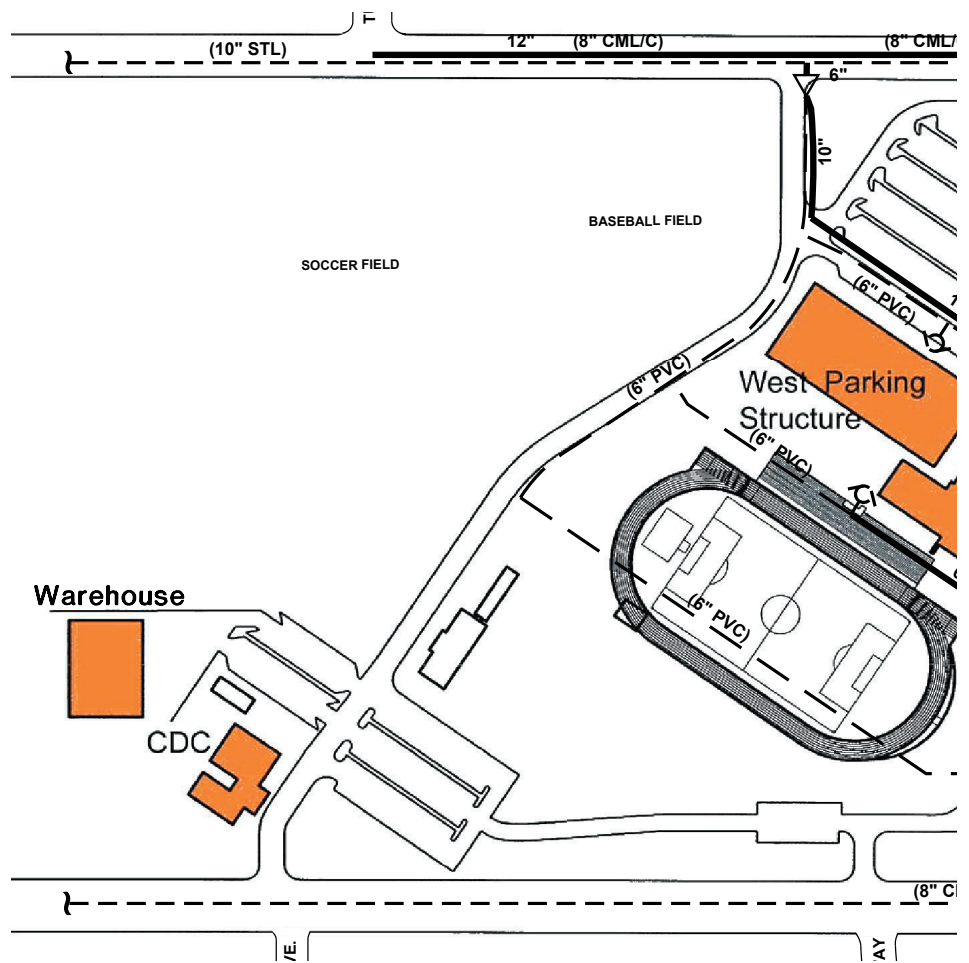
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Proposed Storm Drain System

The storm drain system was also installed in 1955 with the exception of a portion of pipe that collects run-off from the Learning Resource Center. Most of the campus does not have a collection piping system. The sports fields to the west, the parking lots (north and east), and the entire southern portion of the campus allow the storm run-off to sheet flow off of the campus. This is possible and effective mainly because the campus is on a moderate north to south slope. Most of the storm drain system is located in the central portion of the campus, as shown on the existing storm drain

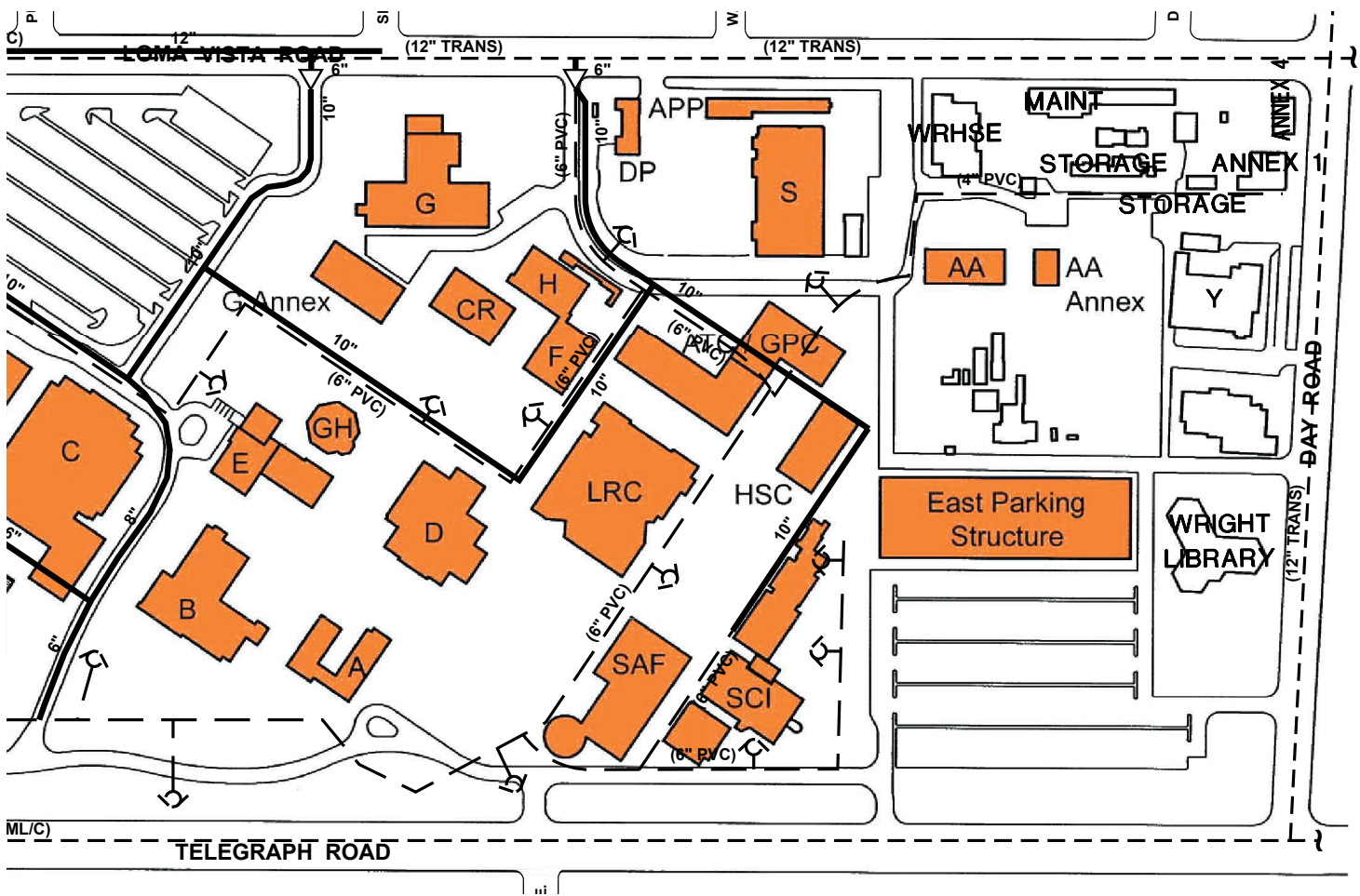
**PROPOSED STORM DRAIN SYSTEM  
DIAGRAM**

Ventura College Master Plan



pipes locations and sizes diagram. While the proposed campus layout eliminates several existing buildings and replaces them with more centralized buildings, more impervious surface will be added, which may offset the difference between existing and proposed flows. For our analysis, we assumed that no additional impervious surface was being added overall because of the increase in landscaped areas.

The first part of our analysis was to divide the campus based on areas contributing to a specific catch basin inlet. These areas are rough approximations and are based on the topography of the existing campus and



therefore, the determination of how the run-off will flow. We split the build-out campus into five drainage areas. These five approximate areas are shown on the proposed drainage areas diagram. Very limited field data was provided and no record drawing information was supplied. It was assumed that areas with no existing catch basin would be allowed to continue to operate that way in the future. This piping network was divided into sections and nodes. A numbering sequence was assigned to each pipe section.

Next, we referred to the Ventura County Hydrology Manual to obtain an average rainfall value for the campus area. It was determined that 6 inches of rainfall (10-year storm) can be expected on average in the area of the campus. We obtained our flow values for the campus by calculating the drainage area, the rainfall intensity, the percent imperviousness, and the run-off rate, and assumed the area was 50% impervious according to the manual and the formula

$$Q = [P (.95) (I) + (I-P) R] A$$

(Page IV-19, Ventura County Hydrology Manual)

where

P =	Percent Imperviousness
I =	Rainfall Intensity
R =	Run-off Rate
	Q = Flow Rate in CFS
A =	Area

For each of the five drainage areas we calculated flows using the Hydrology Manual and the previously calculated time of concentrations. The flows obtained for each area were continually added as the collection system progressed downstream and the pipeline sizing was increased. Because not much is known about the existing storm drain system, existing pipe sections in areas not to be improved were not modified. The proposed storm drain pipes location and sizes diagram shows the proposed storm drain layout for the build out

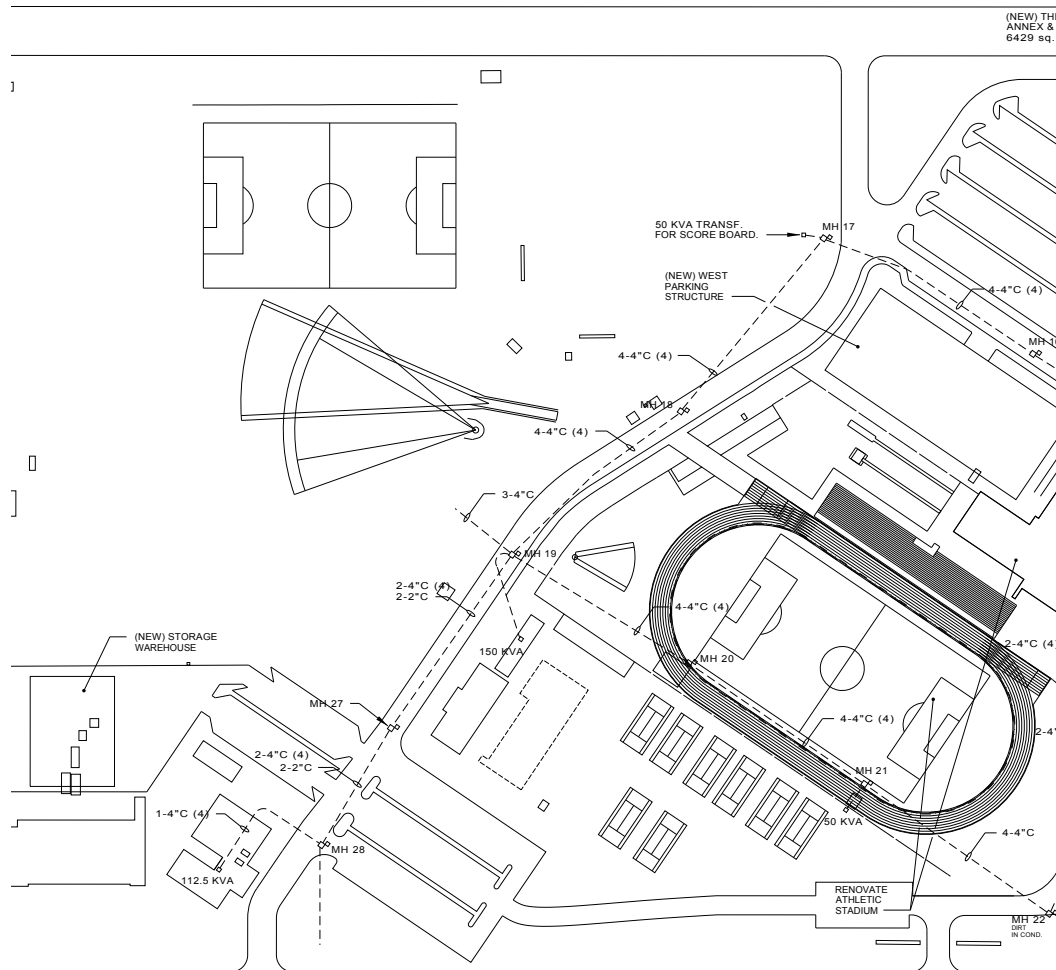
campus expansion. We did not perform any capacity analysis of the off-site (City) system. The storm drain improvements shown in our report reflect a preliminary analysis of the proposed campus. The actual design of the campus has obviously not begun and therefore, the actual amount of proposed impervious area the campus will have at build-out is unknown. There is a concept that reinstates a portion of the existing barranca watercourse, which is currently channeled into a pipeline as it enters the campus. The storm drain system has not been inspected internally since being installed. The campus should consider CCTV inspection for this utility at the same time the sewer is done. At that point, and when some major concept designs are completed, a comprehensive storm drain Master Plan should be prepared. Based on changing regulations regarding storm water run-off management, the campus will most likely be required to “manage” their run-off in times when the City piping cannot handle the addition of the campus discharge. The storm drain master plan should address treatment of the storm run-off (trash/floatable material interception, etc.) and/or drainage detention structures. The structures will most likely need to be underground because of space confinement.

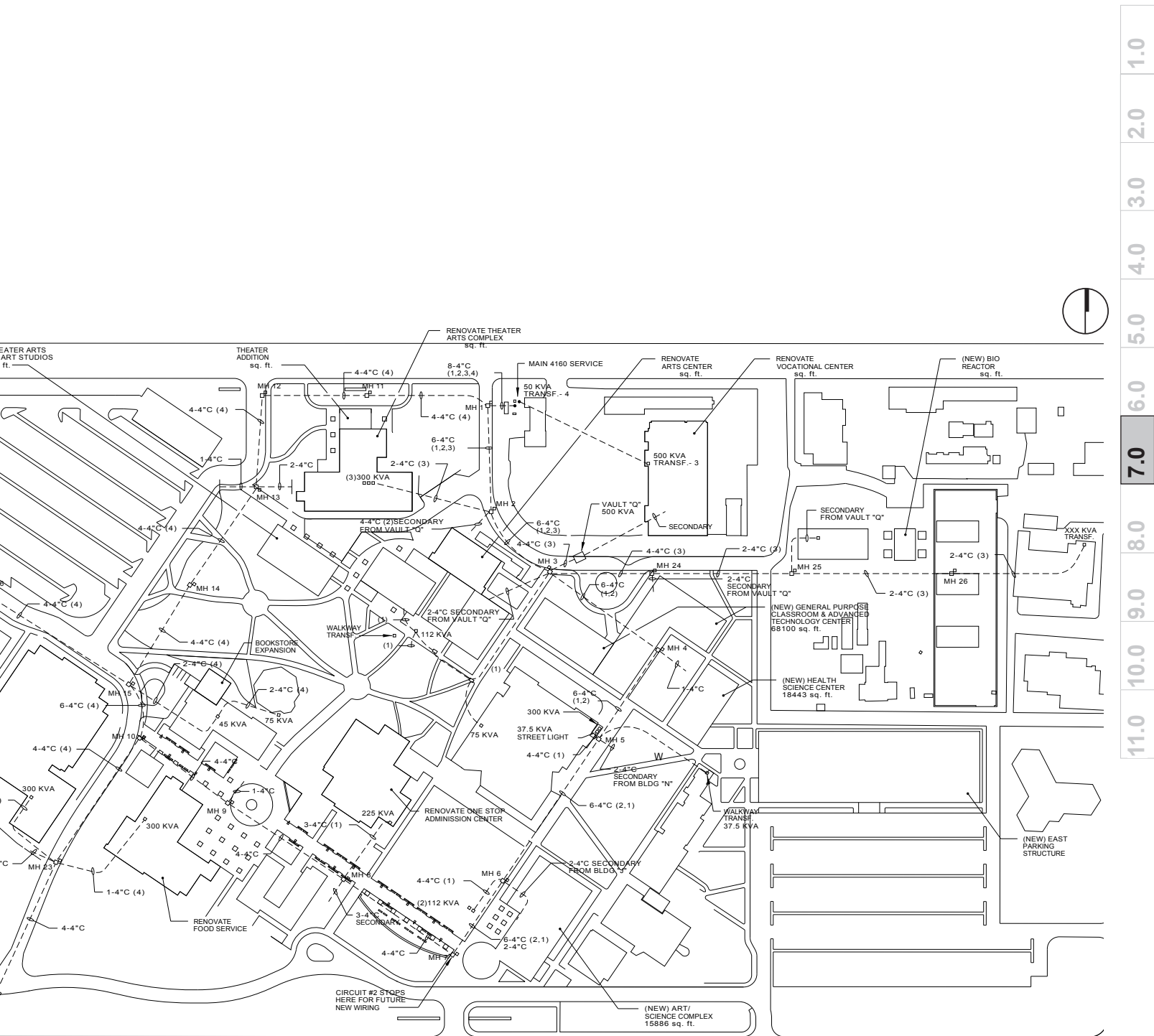
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### Proposed Site Power Distribution

New buildings added to the campus are to be connected to a new 4,160 volt feeder at an existing unit substation and extended to a transformer location. The transformer will step down the voltage to the new building's utilization level, usually 480Y/277V or 208Y/120V.

### PROPOSED SITE POWER DISTRIBUTION DIAGRAM Ventura College Master Plan

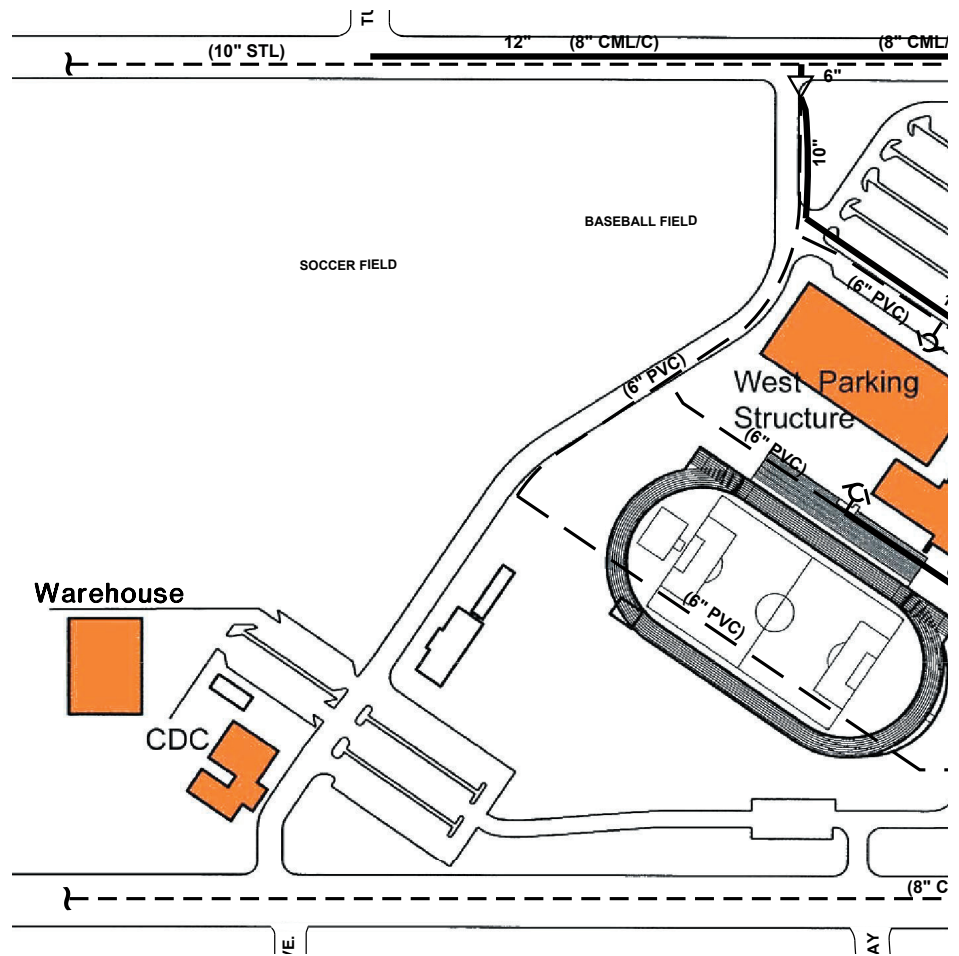




Proposed Water Distribution

The existing and proposed hydraulic functions of the campus system were analyzed assuming the maximum day and fire event demands, which is consistent with industry practice. Proposed pipes were sized to maintain 20 pounds per square inch residual (minimum during a fire flow event) in the campus system and keep flow velocities at or below 7 feet per second. No existing meter data, as-built drawings or existing model data was supplied by the campus.

**PROPOSED WATER  
DISTRIBUTION DIAGRAM**  
Ventura College Master Plan

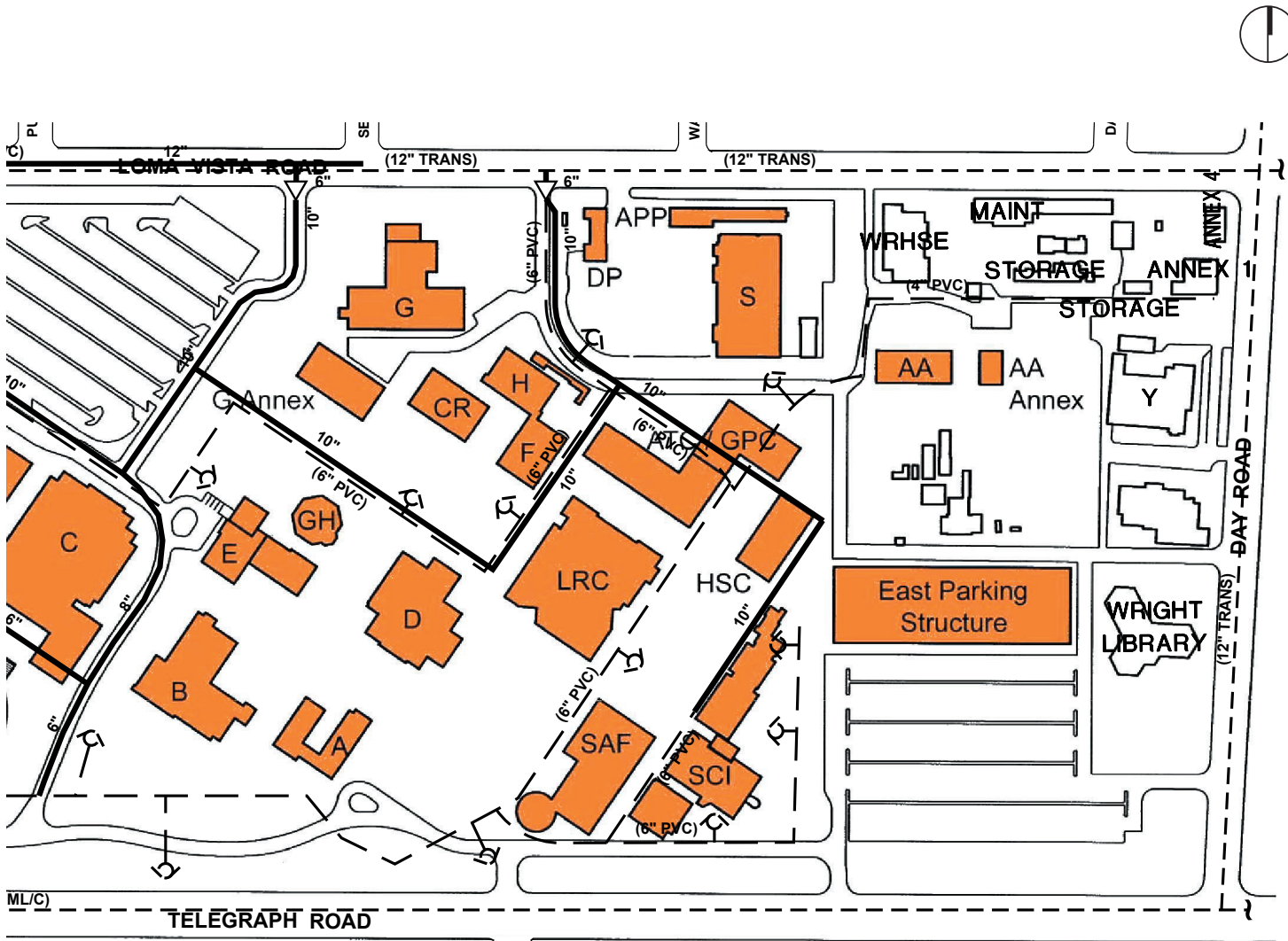




VENTURA COLLEGE  
PLUMBING FIXTURES-minimum requirements from 2001 CALIFORNIA PLUMBING CODE.

BUILDING NAME	A	B	C	D	MALE		FEMALE	LAVS	DRINKING FOUNTAIN	LAB SINKS/ CLEAN-UP SINK
	SQ. FTG. (GROSS)	EXCPT. SF. (A x 0.9)	OLF (SF/PER.)	OCCUPANCY (B/C)	WC	UR	WC			
ATHLETICS					10	10	20	40	10	
* WAREHOUSE	17,250	15,525	500	32	2	2	2	2	1	1
E (BOOKSTORE)-renovated	9,108	8,197	30	274	2	2	8	8	1	1
E (OFFICE)-renovated	6,273	5,646	100	27	1	1	3	1	1	
* G ANNEX (PERF. ARTS)	19,600	17,640	20	882	12	13	25	24	3	4
* SCIENCE/ART FACILITY	25,760	23,184	mix	621	8	9	17	16	5	1
* GENERAL PURPOSE CLASSROOM	49,035	44,132	20	2,207	28	32	60	56	18	3
* ADVANCED TECHNOLOGY CLASSROOM	49,035	44,132	20	2,207	28	32	60	56	18	3
* HEALTH SCIENCE	19,600	17,640	20	882	12	13	25	12	3	2
AGRICULTURE-ANNEX	2,400	2,160			3	3	6	9	2	2

\* AUTOMATIC FIRE SPRINKLER SYSTEM



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Fire flow requirements for the proposed campus buildings were established. In addition, the City of Ventura was contacted to confirm fire flow requirements for the existing buildings. The table on page 7.65 presents fire flow requirements for the seven largest existing buildings on the campus and the proposed new buildings. The table also summarizes the criteria used to set fire flows including the building area, requirements for sprinkled and non-sprinkled facilities, and the type of construction.

Based on the table, the large gym (C-2 building) has the highest fire flow requirement of 4500 gallons per minute from four hydrants for four hours. This building governs the minimum design criteria fire flow for the campus. According to the DHS Title 22 Regulations, a minimum residual pressure of 20 pounds per square inch is to be maintained in the distribution system while providing the required fire flow on a day of average demand.

The potable water demand for the campus was estimated using three different techniques: meter data, previous studies and building plumbing fixture summaries. The period of flow data provided by the City was from November 2001 through July 2003 and is shown in the table. The total consumption was added together for a one-year period and was divided by the number of days in the period of time. Based on that analysis, an average flow per day was calculated. The City of Ventura peaking factor of 2.22 was used to determine the maximum day demand (MDD) for the campus. The average daily demand (ADD) calculated was 74 gallons per minute (gpm) and the MDD was 164 gpm. Theoretically, this includes all water used by the campus. This value was increased for the future projected demands. We adjusted the ADD and MDD values by calculating the percent difference between the existing student population (10,961) at the time of the meter information and the projected population (11,873), which was 8.8%. The ADD was adjusted to 80 gpm (179 gpm MDD).

Next, a water consumption value was estimated using the previously prepared Ventura College Fire Flow System Evaluation Report (2001). This report was prepared to address the Learning Resource Center potable water demands on the campus. In that report, at planning level, 190 gpm for a demand was used. That was calculated based on the estimated build-out of the college (2015) and the projected weekly student contact hours (WSCH) of 164,420. Dividing by 15 average contact hours per week, this value yields the approximate number of students (10,961). Then, a water consumption/use factor of 25 gallons per day per student was used to obtain the average day demand for the college of 190 gpm. Using a peaking factor of 2.22, based on the City's Master Plan, the maximum day demand would be 422 gpm. Based on current (2015) projections, the weekly student contact hours have increased to 178,095. When this value is divided by the 15 average contact hours, it yields a full time equivalent (FTE) population of 11,873. Taking the FTE and multiplying by 25 gallons per day per student, we obtain an average day demand of 206 gpm (458 gpm MDD). Adding in an estimate of 15% for irrigation purposes, the values become 237 gpm and 527 gpm.

Finally, the potable water demand was also estimated based on plumbing fixture counts for each building. As seen in the table, total existing and total future fixture counts for each building are shown. This data was provided by Leo A Daly. Using the Uniform Plumbing Code (UPC) a demand can be calculated based on the type of fixture and quantity for a building. All of the buildings fixture counts were then added together to obtain a "campus fixture count." The average demand can then be calculated using a conversion graph listed in the UPC (Chart A-2). This analysis yields maximum day demand of 480 gpm and using the same peaking factor as before, but dividing this time, an average day demand value of 216 gpm is obtained. This does not take into account the campus irrigation. Using the same 15% for irrigation, the values become 248 gpm and 551 gpm.

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There is a discrepancy between the techniques. The total fixture count value from the UPC has certain restrictions. The tables in the UPC are based on calculations for residential and commercial buildings and it is our understanding that the tables do not necessarily reflect educational buildings. The meter data yielded a very low value. The previous report technique is a relatively conservative value and the fixture count value is close to that value. We recommend using the previous report data plus fire flow data as a basis for future demand.

Using the MDD value and the 4500 gpm (large gym) value, we analyzed the on-site campus water system. The existing water pipes location and sizes diagram shows the existing “major” water pipelines on the campus. The proposed water pipes location and sizes diagram shows the recommended pipeline sizes to provide adequate flow and pressure to the campus. The model was used to estimate what the campus needed to handle the MDD and fire scenario and maintain the regulatory 20 psi minimum (during fire events) in the system. No analysis of off-site (City) sources or distribution system was performed.

During previous conversations with City of Ventura water staff, it was clearly stated by the City that no connections to transmission pipelines in Telegraph Road would be allowed. This eliminated the possibility of a potable/fire water supply connection from Telegraph Road. As for connections to the 12-inch waterline in Day Road, the City will not allow a connection to the existing 12-inch waterline because they feel it would dominate the two existing Loma Vista connections and most of the campus supply will come from Day Road. It is for these reasons that our analysis focused on Loma Vista, the only allowable connection point for the campus to utilize to improve their supply situation.

Due to the limitations in connection points, we note that the campus will have to make some improvements

not only on-site, but in Loma Vista Road also. These improvement recommendations are based on our limited analysis. This report is not intended to be a comprehensive Master Plan. We performed a basic hydraulic analysis of the campus system. We recommend that a detailed hydraulic model be developed along with a detailed analysis of the existing water system to determine, on a campus-wide level, what improvements should be performed. A comprehensive utility Master Plan/Improvement Plan should be prepared.

### Conclusions

We recommend that the campus perform a comprehensive condition assessment/utility master plan of the utility improvements prior to or concurrent with the design of the proposed buildings. We would suggest the development of a sequence of utility improvement construction so that the campus can remain operational with as little disruption as possible.

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### Proposed Gas Distribution System

An analysis was performed to determine if the existing natural gas piping system has adequate capacity to properly supply the new buildings. The existing system is adequate for the anticipated natural gas demand at build-out based on Chapter 12 of the 2001 California Plumbing Code.

Distribution lines in North Campus Way will require re-routing due to the ATC/GPC/HSC construction and roadway re-alignment projects. The construction of the SAF building may impact the gas meter, requiring re-location.

## Academic, Athletic, and Service Areas

The campus has three major zones: academic, athletic and service areas. The athletic zone lies to the west of the academic core and the Service areas lie to the northeast of the academic core, at the corner of Loma Vista Road and Day Road.

The athletic zone has a number of improvement projects planned, including:

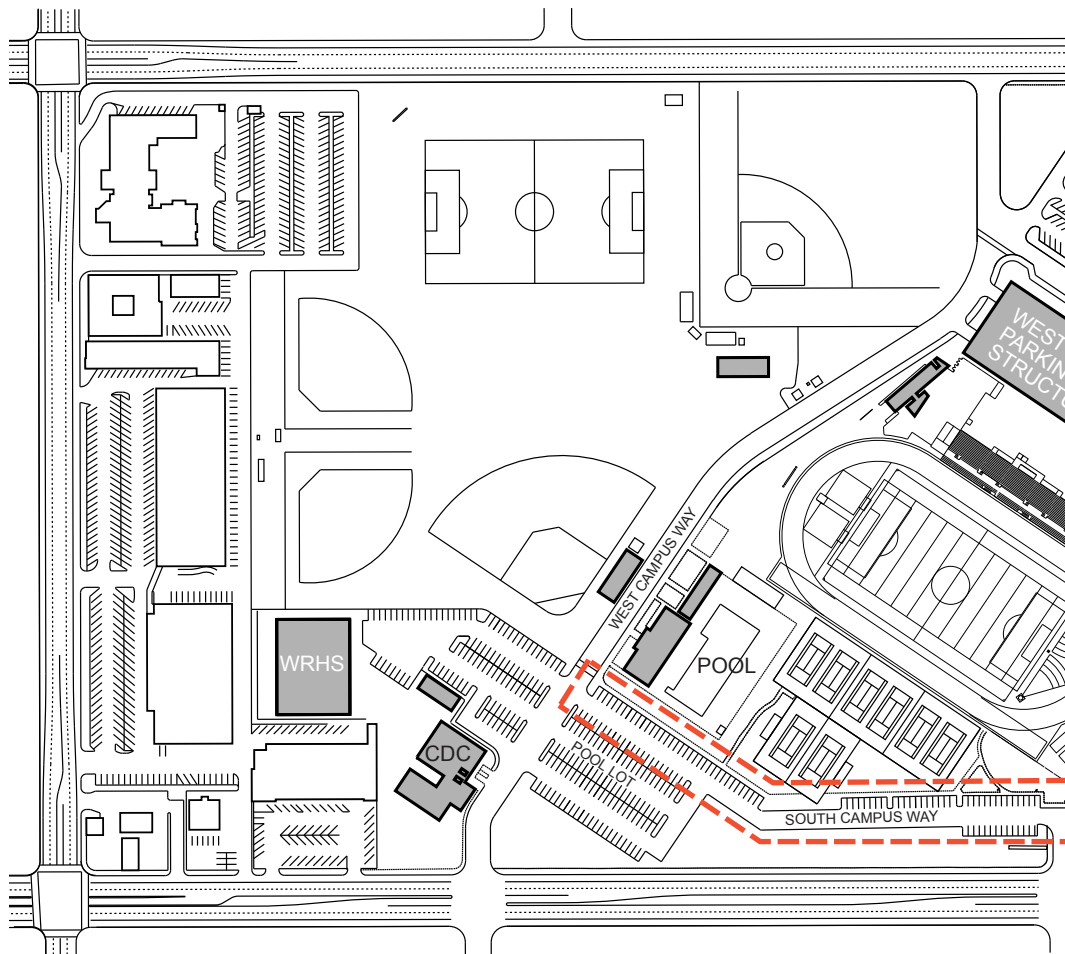
- Cosmetic repairs to the aquatic center
- Repairs to the gymnasium buildings
- A new bleacher, track and field area, including floodlighting

A new storage warehouse is proposed in the master plan, located to the north of the CDC. This building will compensate for the shortage of storage within the campus core. During the implementation of the Measure S projects, this warehouse will hold materials displaced as buildings are vacated in advance of demolition and materials displaced as the College works to maximize available space within the academic core area.

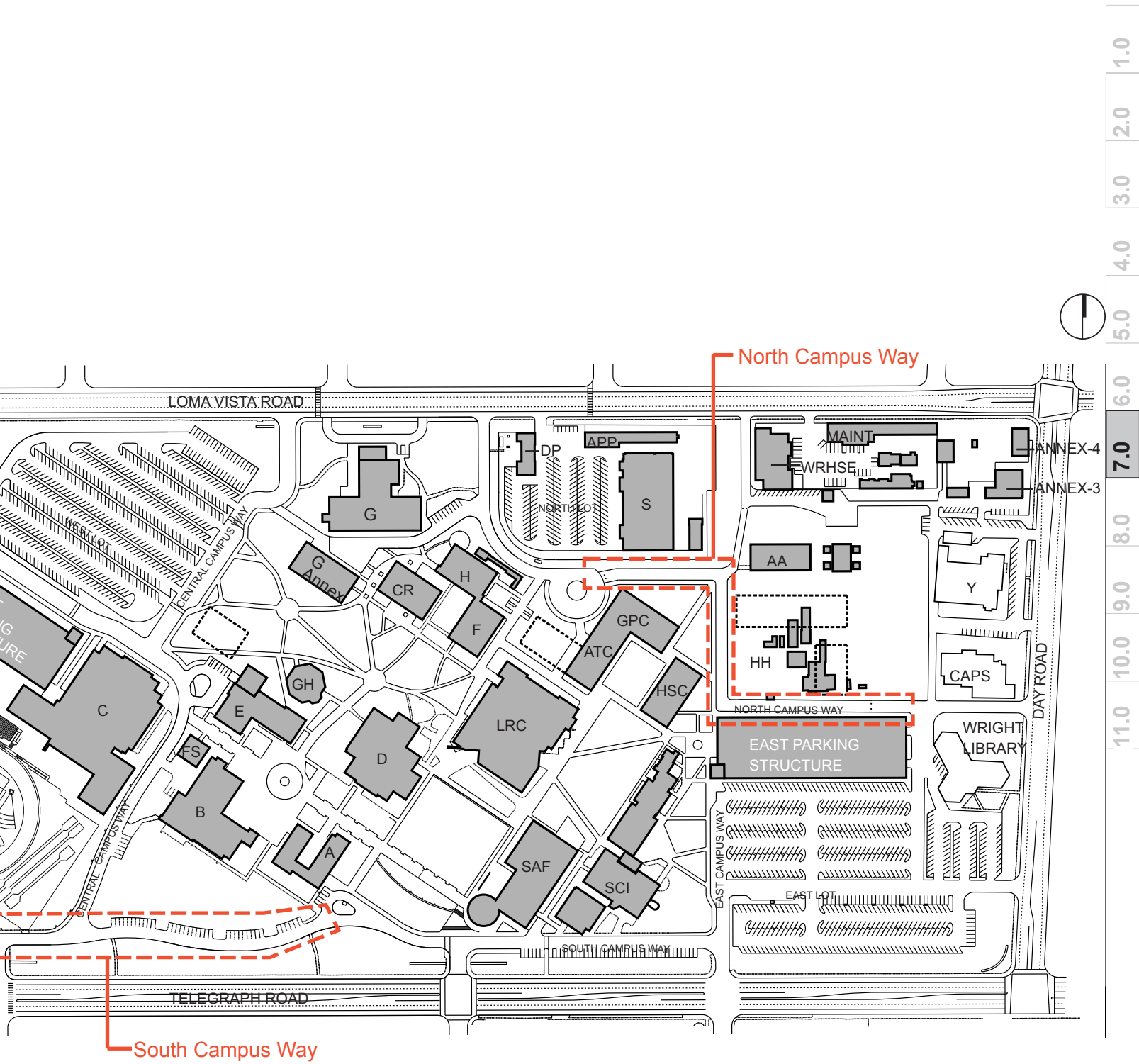
The maintenance and operations area, although some need exists for refurbishment and renewal of facilities, has postponed these works to a phase after the Measure S projects. A master plan option has been developed to re-locate the maintenance and operations area to the center of the current agriculture area. This move would release the property at the corner of Loma Vista Road and Day Road for other development. This development could follow the existing pattern of community-oriented facilities, providing expansion space or space for new facilities. In addition, the replacement of the maintenance area with community-oriented institutional use would enhance the character of this part of the campus edge, present a better face of the campus to adjacent neighborhood, and provide a convenient location for this use.

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**SERVICE CONNECTIONS**  
Ventura College Master Plan







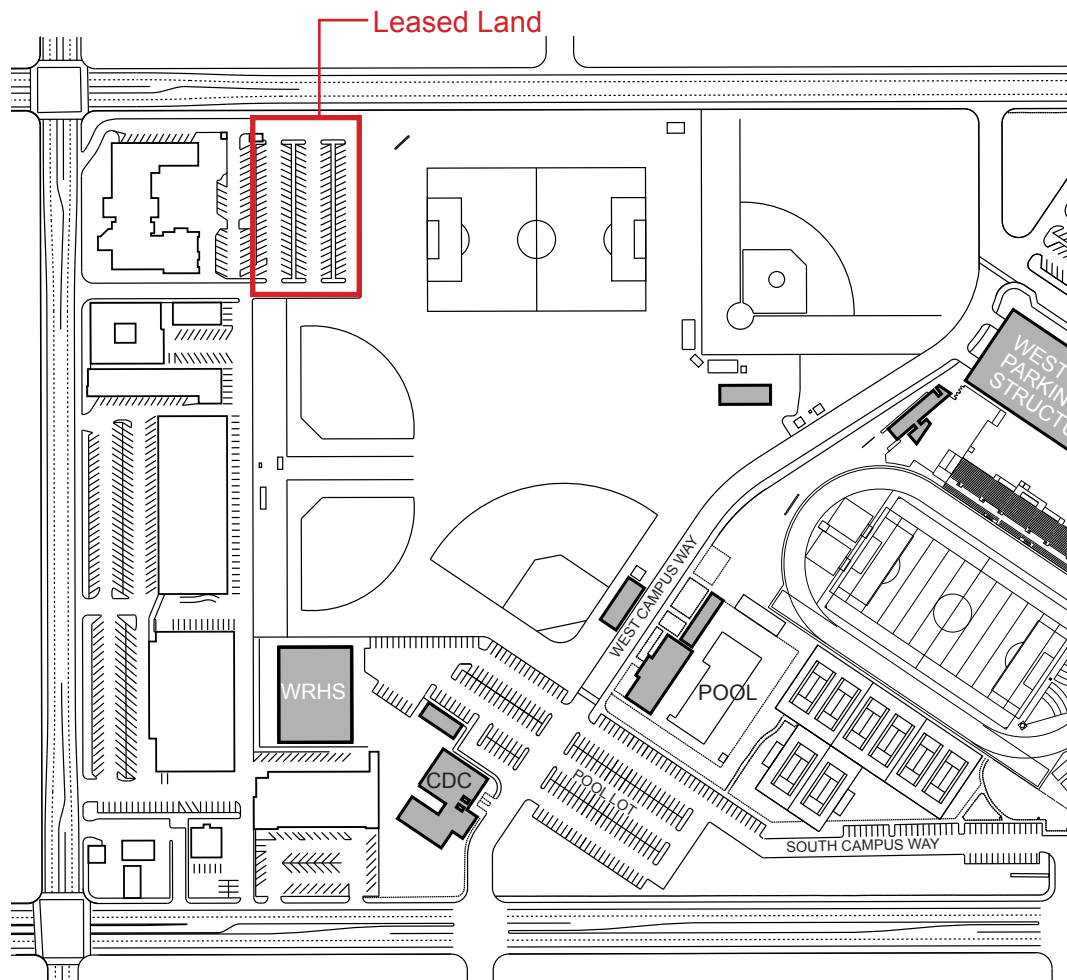
**COMMUNITY AND LEASED LAND**

The Ventura College Campus has a number of leased land and community use arrangements. The major areas affected include:

- At the extreme northwest corner of the campus a parcel is leased by the campus to the church at the corner of Ashwood Avenue and Loma Vista Road.
- Fronting onto Day Road, the Annex-3 & 4 facilities, the Y building Institute for Community

**COMMUNITY AND LEASED LAND  
DIAGRAM**

Ventura College Master Plan



and Professional Development, the future Public Access Cable Television building, and the Wright Library

- The East Parking Lot is used as an outdoor market on the weekends
- The campus outdoor spaces and athletic fields are used by the community for both organized and casual-use activities, recreation and enjoyment

