

Final Environmental Initial Study and Mitigated Negative Declaration

Palomar College, San Marcos Campus West Comet Circle Parking Lot IS/MND

Prepared For:



Palomar Community College District
1140 West Mission Road
San Marcos, California 92069

Prepared By:



AES/Mooney Planning
427 C Street, Suite 407
San Diego, California 92101

December 13, 2011

Table of Contents

| | |
|---|----|
| Comments Received on MND and Responses..... | 3 |
| Revised Landscape Plan | 11 |
| Environmental Initial Study..... | 13 |
| Mitigated Negative Declaration..... | 41 |
| Mitigation Monitoring and Reporting..... | 45 |

FIGURES

| | |
|--|----|
| Figure 1 Project Vicinity Map..... | 17 |
| Figure 2 San Marcos Campus Facilities Master Plan Projects | 18 |
| Figure 3 Engineering Site Plan | 19 |
| Figure 4 Landscape Concept Plan | 20 |
| Figure 5 Near Surface Geologic Formations | 21 |
| Figure 6 Project Design Map | 22 |
| Figure 7 Engineering Calculations..... | 23 |

ATTACHMENTS

| | |
|--|----|
| A Water Quality Technical Report | 47 |
|--|----|

Comments Received on the MND and Responses

COMMENTS RECEIVED ON THE DRAFT MND AND RESPONSES

All comments received on the Draft MND (written and verbal) have been coded to facilitate identification and tracking. Each of the comment letters received during the public comment period was assigned an identification number (Table 1). These documents were reviewed and divided into individual comments, with each comment containing a single theme, issue, or concern. Individual comments and the responses to them were assigned corresponding numbers. Each numbered comment document is the submittal of a single individual, agency, or organization. The comment number consists of two parts. The first part is the number of the document and the second is the number of the comment. Thus, Comment A-1 refers to the first comment (comment #1) of Comment Letter A. To aid the readers and commenter's, comments have been reproduced in this document together with corresponding responses on the opposite page.

Table 1. List of Comments

| No. | Commentor | Date |
|-----|--|------------------|
| A | Reed Caldwell, North County Transit District | October 25, 2011 |
| B | Susan Vandrew Rodriguez, City of San Marcos Planning | November 7, 2011 |
| | | |

**NORTH COUNTY
TRANSIT DISTRICT**



810 Mission Avenue
Oceanside, CA 92054

(760) 966-6500
(760) 967-2001 (fax)
www.gonctd.com

October 25, 2011

Brian Mooney, AICP
c/o Kelly Hudson-MacIsaac
Palomar Community College
1140 West Mission Road
San Marcos, CA 92069

Subject: Environmental Initial Study and Mitigated Negative Declaration
Palomar College, San Marcos Campus
West Comet Circle Temporary Parking Lot IS/MND

Dear Mr. Mooney:

The North County Transit District (NCTD) appreciates the opportunity to review and comment on the above-referenced document, dated October 13, 2011. As stated in the document, the project will convert three acres of vacant land on West Comet Circle to a temporary construction parking lot with an estimated 260 spaces to be used over the next 5 years for construction projects related to San Marcos Campus Facilities Master Plan.

NCTD provides the following comments:

1. During AM and PM weekday peak hours, the intersection of Mission Road and Las Posas Road is observed to be congested. NCTD is concerned that additional vehicle trips during peak periods may cause a Level of Service degradation in this area that will impact our transit services. A determination of the existing service level and resulting service level is recommended.

Should you have any questions, please contact me at rcaldwell@nctd.org or by phone at 760-966-6543.

Sincerely,

Reed Caldwell
Chief Development Officer

cc: Justin Fornelli (NCTD)

BOARD OF DIRECTORS

Chris Orlando
Mayor, City of San Marcos
District Chair

Bill Horn
Executive Council, City of San Marcos
District Vice Chair

Mark Pockard
Councilman, City of Carlsbad

Mark Hlane
Councilman, City of Escondido

Jerome Stocks
Councilman, City of Encinitas

Ed Galle
Councilman, City of Vista

Jim Wood
Mayor, City of San Diego

Dave Roberts
City Manager, City of San Diego

Steve Gromick
Councilman, City of San Diego

EXECUTIVE DIRECTOR

Matthew O. Tucker

GENERAL COUNSEL

Paula de Siqueira

Letter A – Reed Caldwell, Chief Development Officer, North County Transit District, October 25, 2011

1. No additional traffic volumes will be generated as a result of the construction of this temporary parking lot. As stated in Section 1.6 of the Initial Study: This project will not result in an increase in the number of students or faculty in any existing programs; the current construction workers are being relocated to this specifically designated parking lot.

1 Civic Center Drive
San Marcos, CA 92069-2918



Telephone
760.744.1050
FAX: 760.591.4135

November 7, 2011

Mr. Brian Mooney
AES/Mooney Planning
c/o Kelly-Hudson-MacIsaac
Palomar Community College District
San Marcos Campus
1140 West Mission Road
San Marcos, CA 92069-1487

RE: Palomar College – San Marcos Campus
West Comet Circle Temporary Parking Lot
Negative Declaration Comments

Dear Mr. Mooney:

Thank you for giving the City of San Marcos (the "City") an opportunity to comment on the Palomar College West Comet Circle Temporary Parking Lot – San Marcos Campus Initial Study/Negative Declaration (ND). The City has the following comments on the project:

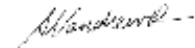
- B-1 ▪ Section 1.1: The Introduction outlines the use of the site for a temporary parking lot ("lot") over the next five years but fails to explain how the lot will be used after five years and, what, if any, of the constructed improvements, will remain in place. The City requests discussion in the ND of the anticipated future use of the lot after the first five years.
- B-2 ▪ Section 1.7 Project Description:
 - The Project Description does not clarify that this project will be addressed under its own General Construction Permit (GCP) or as part of the Master Plan project GCP.
- B-3 ○ The project will include landscape installation around the perimeter of the lot, however trees are not proposed along the interior lot line. The City requests that the landscape be provided along the entire lot perimeter, and that a below ground irrigation is provided to ensure planting survival.
- B-4 ○ Please modify the project description of the self-treating bioswales to vegetated swales per the Water Quality Technical Report (WQTR). A bio retention cross section is not provided therefore the swales do not address the pollutants of concern for the San Marcos Creek/Lake San Marcos watershed.
- B-5 ▪ Section 1.11 Other Public Agencies whose approval is required: Please add that a State General Construction Permit is required by the State Water Resources Control Board.
- B-6 ▪ Section Number 8 of the Initial Study, Hydrology and Water Quality:
 - A Water Quality Technical Report (WQTR) is referenced but not attached. Please attach the report to the ND.

Mr. Brian Mooney
Palomar Community College District
November 7, 2011
Page 2 of 2

- o The City has obtained a copy of the WQTR directly from the design engineer, Masson & Associates, and requests the following modifications to the study:
 - A calculation sheet needs to be included to show that the vegetated swale is meeting CASQA design requirements needs to be included to demonstrate that the City is not accepting polluted stormwater into its MS4 system.
 - A point should be added to the engineering plan showing the connection to the City MS4. Please also show that the water flowing to the swale area is fully captured by the vegetated swale and treated prior to surface flow out into the MS4 system.
- B-7
- B-8
- B-9
 - o There is no construction Best Management Practices proposed in the ND and no mention that the project is covered under the GCP requirements. This said, please expand the ND discussion to include how construction of the project will not result in potential violation of water quality.
- B-10
 - o Please reconcile the groundwater statements and assessments between 8(f) and 8(b) stating that the project is only partially mitigated. This does not identify how this project is fully mitigated.
- B-11
 - o The Storm Water Management Plan (SWMP) discussed in the ND is for long-term after construction is completed, and is not applicable to this project unless the intent is for the lot to be permanent.
- B-12
 - o Please identify all appropriate practices that will be applied to this project in order to address and reduce the Maximum Extent Practicable standard of the pollutants of concern in the upper San Marcos Creek. Palomar College is a listed discharge of total Maximum Daily Load pollutants by the SDRWQCB and will receive a load allocation.
- B-13
 - o The mitigation measure of Hyd-OM-1 does not address pollutants during construction or after construction of the lot. Please revise the mitigation to be specific as to how this measure will address the impact water pollutant impact prior to runoff discharge into the City MS4 system.
- B-14
 - In addition to the above the City requests that project design include a stabilized entrance to the parking lot from West Comet Circle. The City Storm Water Program Manager would also like to schedule a meeting to discuss the requested Stormwater information.

The City of San Marcos requests a response to these comments for consideration prior to the hearing date and adoption of the Final Negative Declaration. Please contact me at (760) 744-1050 extension 3237 to discuss our comments and schedule the requested meeting.

Sincerely,

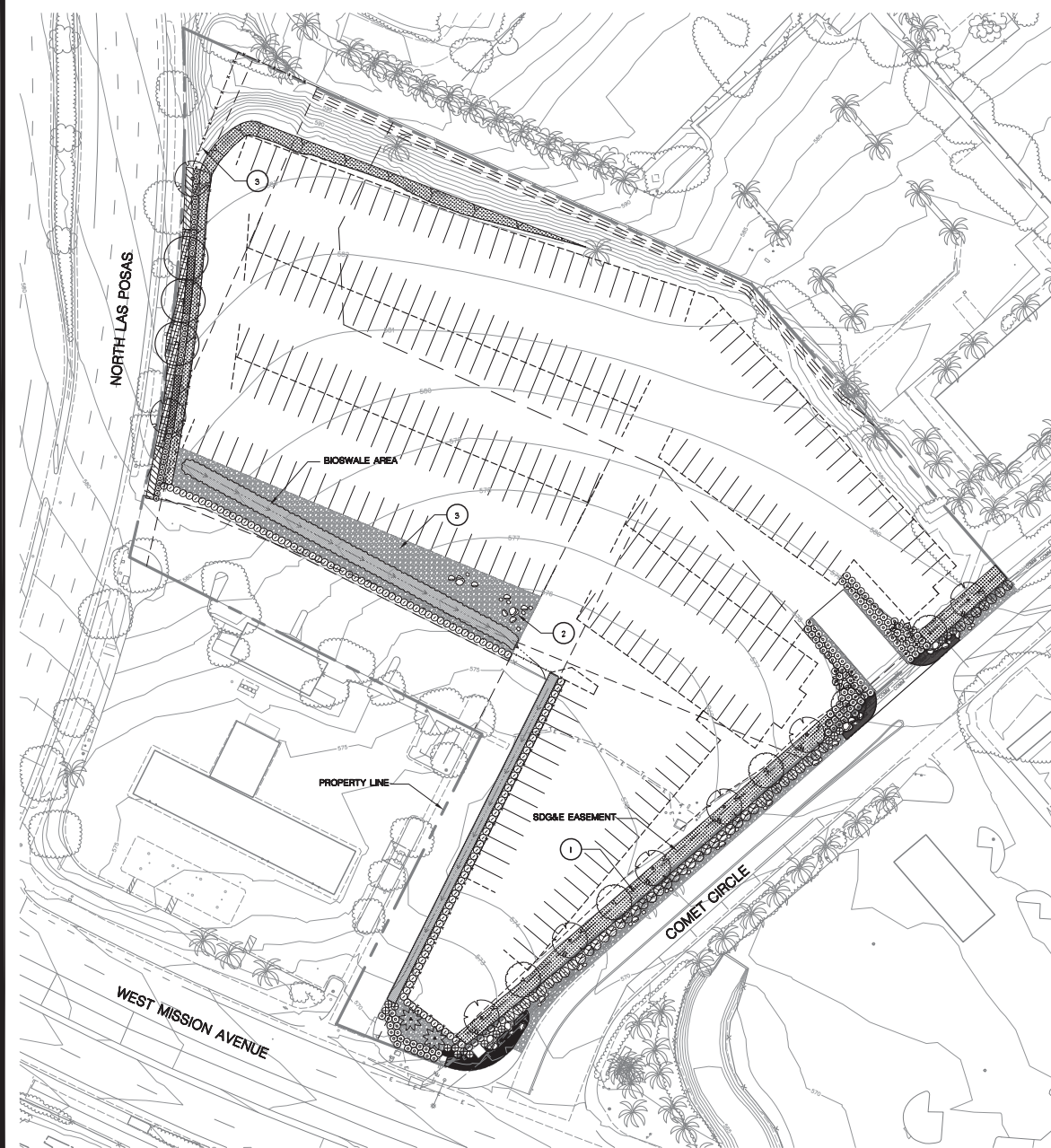

Susan Vandrew Rodriguez
Associate Planner

cc: Jerry Backoff, Planning Division Director
Michael Edwards, City Engineer
Matthew Erna, Division Chief/Fire Marshal
Erica Ryan, Stormwater Program Manager
File

1. At this time no development is proposed on the site of this temporary parking lot in accordance with the Master Plan reviewed under the Program Environmental Impact Report (PEIR). Palomar Community College District (PCCD) may request a change in uses after the five year period. Any change to the permanent use will require an amendment to the Campus Master Plan and environmental review.
2. Comment noted. PCCD will be applying for a project specific Construction General Permit (CGP).
3. Comment noted. The landscape plan has been revised (see page 11) to propose native landscaping on the south, west and east sides, with the north side containing an existing vegetated slope and a dense thicket of vegetation at the northeast corner of the site. The west (Las Posas Road) side has a low berm with trees and landscaping to complement the existing theme along Las Posas Road. The south (Mission Road) side has transplanted existing Brahea palm trees, a screening hedge, low groundcover planting, and some cobble as an inert material groundcover. The interior perimeter along the north and east sides of the gas station has a screening hedge in front of the perimeter fence. There are also vegetated bioswales on the interior side of the fence. The east (West Comet Circle) side of the parking lot has screening landscaping and trees to accentuate the vehicular corridor of West Comet Circle. Cobble and boulders are also used along the west side of West Comet Circle to discourage pedestrian traffic on that side of the road. The entire site is screened from exterior views. All of the plantings are native species and will be served by an automatic underground irrigation system that meets all state and local water conservation ordinances. Fertilizers will not be used on the native plants specified in the plan, thus creating no nutrient runoff from the site.
4. Comment noted. The Project Description has been modified to reflect the Water Quality Technical Report (WQTR) reference to vegetated bioswales. It has been determined that a bio retention cross section is not necessary because of the self-treating nature of the site.
5. Comment noted. The State Water Resources Control Board has been added as Public Agency whose approval is required. The project is within the jurisdiction of the State General Construction Discharge Permit (Order No. 2009-0009-DWQ)
6. Comment noted. Please see the WQTR as Attachment A.
7. Comment noted. See Figure 7 for details of the vegetated bioswales. The vegetated bioswale provided in the current Project Description is for backup treatment only. The 85th percentile storm will not see surface runoff leaving the site. Since the current project does not meet the criteria for a priority project and the gravel surface and new landscaping can be depicted as self treating there is no need for calculations.
8. Comment noted. Please see Figure 7 for the location of the inlet to the City MS4.
9. Comment noted. The requirement for The Best Management Practices (BMP's) is mentioned in question 8f and in the Mitigation and Monitoring Program of the IS/MND. The BMP's for the Storm Water Management Plan (SWMP) and construction practices are addressed. The BMP's are fully defined in the Program Environmental Impact Report (PEIR), which this IS/MND is tiered off of. As stated above the project is under the jurisdiction of the CGP. Therefore, the Storm Water Pollution Prevention Plan (SWPPP) that will be prepared for the project will

incorporate the good housekeeping measures stated in the permit as well as the BMP's required to keep the discharge to the quality required by the permit.

10. Comment noted on Questions 8e and 8f. Question 8f is modified to define the full mitigation of the project.
11. The project construction is short term in nature. However, the use of the site is over a five year period. This short term project still follows the guidelines in the PCCD long term SWMP.
12. The proposed project does not incorporate an increase in impermeability of the site. The gravel parking area and landscaping will mitigate potential runoff and the project has reduced the discharge to the maximum extent practicable.
13. Specific Construction BMP's as well as Post-Construction permit BMP's are outlined in the SWMP and the WQTR.
14. Comment Noted. Stabilized entrance language added. A meeting between the PCCD staff and the City of San Marcos occurred on December 5, 2011.



REVISED LANDSCAPE PLAN

PLANTING LEGEND FOR TREES

| SYMBOL | BOTANICAL NAME | COMMON NAME | SIZE | SPACING | QUANTITY | MATURE SIZE | WATER USE | DETAILS | REMARKS |
|--------|---|---------------------|----------|----------|------------|---------------------|-----------|----------------|-------------|
| | AGAVE FLEXUOSA 'AFTER DARK' | PEPPERMINT TREE | 24" BOX | AS SHOWN | 6 | 25'-35'H X 15'-30"W | L | P-2 | STD. |
| | BRAHEA ARMATA | MEXICAN BLUE PALM | 36" BOX | AS SHOWN | 2 | 20'-40'H X 12'-25"W | L | P-3 | |
| | BRAHEA ARMATA EXISTING PALM EXCAVATED ON SITE FOR RELOCATION | MEXICAN BLUE PALM | EXISTING | AS SHOWN | 2 | 20'-40'H X 12'-25"W | L | P-3 | |
| | MELALEUCA ELLIPTICA | GRANITE BOTTLEBRUSH | 24" BOX | AS SHOWN | 2 | 8'-10'H X 10'-15"W | L | P-4 | MULTI-TRUNK |
| | CHITALPA TASHKENTENSIS 'PINK DAWN' | CHITALPA | 24" BOX | AS SHOWN | 5 | 20'-30'H X 20'-30"W | M | P-2 | MULTI-TRUNK |
| | EUCALYPTUS PROFOLIA | RED-FLOWERING GUM | 24" BOX | AS SHOWN | 3 | 18'-45'H X 15'-60"W | L | P-4 | STD. |
| | OSTUS PURPUREUS | ORCHID ROCKROSE | 5 GAL | 4' O.C. | 17 | 4'H X 4'W | L | P-4, P-5 & P-6 | |
| | CAREX TUMICOLA/DIVERSA | BERKELEY SEDGE | 1 GAL | 2' O.C. | 760 | 12'-15'H X 24"W | M | P-4, P-5 & P-6 | |
| | OSTUS 'SUNSET' | ROCKROSE | 5 GAL | 5' O.C. | 262 | 2'H X 6'-8' W | L | P-4, P-5 & P-6 | |
| | COPROSMA KIRKII | COPROSMA | 5 GAL | AS SHOWN | 126 | 1'-3'H X 4'-6"W | M | P-4 & P-5 | |
| | MAHONIA 'GOLDEN ABUNDANCE' | MAHONIA | 5 GAL | AS SHOWN | 17 | 4'-6'H X 4'-5"W | M | P-4 & P-5 | |
| | HELICTOTRIDON SEMPERVIRENS | BLUE OAT GRASS | 1 GAL | 30' O.C. | 164 | 2'-3'H X 2'-3"W | M | P-4, P-5 & P-6 | |
| | GREINA OCCIDENTALIS | LAVENDER STARFLOWER | 5 GAL | AS SHOWN | 127 | 6'-10'H X 6'-10"W | M | P-4 & P-5 | |
| | ARCTOSTAPHYLOS HOWARD M. MINI | MANZANTA | 5 GAL | AS SHOWN | 42 | 4'-6'H X 6'-8"W | L | P-4 & P-5 | |
| | RHAMNUS CALIFORNICA | COFFEEBERRY | 5 GAL | AS SHOWN | 25 | 6'-10'H X 6'-5"W | L | P-4 & P-5 | |
| | PLUMBAGO ROYAL CAPE | BLUE CAPE PLUMBAGO | 5 GAL | AS SHOWN | 23 | 6'-5'H X 6'-6' W | L | P-4 & P-5 | |
| | OENOTHERA 'LONGHA' | CALIFORNIA LILAC | 5 GAL | 4' O.C. | 20 | 4'-6'H X 4'-6"W | L | P-4, P-5 & P-6 | |
| | ARCTOSTAPHYLOS 'HARMONY' | MANZANTA | 1 GAL | 3' O.C. | 70 | 2'-3'H X 4'-6"W | L | P-4, P-5 & P-6 | |
| | 3'-6" DIA. COBBLE SURFACING | | | | 5,370 S.F. | | | | |
| | BOULDERS, SIZE VARIES FROM 2' DIA. TO 6' DIA. | | | | 55 | | | | |

NOTE: NO FERTILIZERS ARE REQUIRED OR SHALL BE APPLIED TO PLANTS ON THIS PROJECT FOR PURPOSES OF OFF-SITE WATER QUALITY CONCERNS BY THE CITY OF SAN MARCOS



Key Plan

Consultant Seal



Agency Approval

| | | | |
|--|-----|-----|----|
| IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES | | | |
| APPL. | --- | | |
| AC | --- | FLS | SS |
| DATE | --- | | |

Project Title

NS BUILDING



1140 W. MISSION RD., SAN MARCOS, CA 92069
(760) 744-1150
www.palomar.com

| No. | Revisions/Submissions | Date |
|-----|-----------------------|------|
| | | |
| | | |
| | | |

Drawing Title

PLANTING LEGEND



| | | |
|-------------|-------------|----------|
| Designed: ✓ | Project No. | 11084 |
| Drawn: - | Scale: | AS NOTED |
| Checked: - | Drawing No. | L2.1 |
| Reviewed: - | | |
| Date: - | | |



Environmental Initial Study

Palomar Community College District

Environmental Initial Study

1.1 Introduction

This Initial Study/Mitigated Negative Declaration (IS/MND) assesses the potential environmental impacts associated with a project identified in the Palomar College, San Marcos Campus Facilities Master Plan. The Master Plan includes growth and development of the existing San Marcos Campus Plan from the present through 2022. The Master Plan project evaluated in this IS/MND is the conversion of vacant land on West Comet Circle to a temporary construction parking lot. It is anticipated that the parking lot will be utilized by construction workers over the next 5 years. [At this time no development is proposed on the site of this temporary parking lot in accordance with the Master Plan reviewed under the Program Environmental Impact Report \(PEIR\).](#)

The California Environmental Quality Act (CEQA) Guidelines define an MND as “a negative declaration prepared for a project when the initial study has identified potentially significant effects on the environment, but (1) revisions in the project plans or proposals made by, or agreed to by, the applicant before the proposed negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would occur, and (2) there is not substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment” (California Code of Regulations, Title 14, Division 6, Section 15369.5). This document has been prepared in accordance with CEQA and the State CEQA Guidelines, and Title 14 of the California Administrative Code, as revised.

1.2 Project Title: Palomar College, San Marcos Campus
West Comet Circle Parking Lot IS/MND

1.3 Lead Agency: Palomar Community College District, San Marcos Campus
1140 West Mission Road
San Marcos, CA 92069

1.4 Contact: Kelly Hudson-MacIsaac, Manager, Facilities Planning
Environmental Health and Safety
(760) 744-1150 x.2772

1.5 Project Location

The proposed project evaluated in this IS/MND is within the Palomar College San Marcos Campus (“campus”) which is located at 1140 West Mission Road in the city of San Marcos in northern San Diego County (Figure 1).

1.6 Purpose and Need

The purpose of the Palomar Community College District (PCCD) Master Plan (see Figure 2) is to increase on-campus capacity to accommodate the anticipated growth in student enrollment up to a maximum of 25,000 students through the year 2022. This will be accomplished via the following: infrastructure improvements; replacement of inadequate temporary space with permanent facilities; modernization of the majority of existing buildings to remain; consolidation of instructional space to minimize land development and create more open space; and facilities planning that is sensitive to topography. This Master Plan is subject to the 2009 ~~Program Environmental Impact Report (PEIR)~~. The information in this IS/MND is tiered off of this PEIR.

The proposed West Comet Circle parking lot project is being analyzed in this IS/MND. The purpose of this project is to provide a temporary parking lot for the construction workers as the PCCD continues the Master Plan build out of the Prop M Bond Series. Currently, the construction workers park in the student parking lots, therefore causing a parking shortage for students. This project will not result in an increase in the number of students or faculty in any existing programs; the current construction workers are being relocated to this specifically designated parking lot. This parking lot is an essential piece in the timely scheduling of the Master Plan projects construction.

1.7 Project Description

Figure 2 shows the location of the proposed West Comet Circle parking lot near the corner of West Mission Road and Las Posas Road within the San Marcos Campus Master Plan. The site consists of approximately 3 acres of previously graded area. Site preparation will include the removal and disposal of existing debris piles from the site. In addition, clearing of existing vegetation on the site will be necessary. A weed abatement solution will be applied to control future weeds and growth, according to PCCD standards and direction. The grading and drainage strategy incorporates and assimilates the existing topography and drainage patterns and minimizes the need for import or export. The site will be balance graded, requiring the movement of less than 2000 cubic yards. These grading and drainage improvements are anticipated to include minor contour grading to match existing elevations and maintain existing drainage patterns. ~~Although the~~ The surface of the proposed parking lot will be pervious and ~~therefore be self treating~~, two vegetated bioswales are planned as additional measures to treat stormwater runoff from the site. The West Comet Circle parking lot will be included in the PCCD Operations and Maintenance Plan to assure that no discharge will impact city roads. This project will be addressed under a project specific Construction General Permit (CGP) required by the State Water Resources Control Board.

The project includes buffer landscaping along the public right-of-way and along the easement access roads. The native landscape palette will be approved by PCCD. It appears that there are existing water service connections along the property frontage on West Mission Road and along North Las Posas Road. The point of connections for landscaping will need to be field verified and approved by PCCD early in the design phase. An addition of a black vinyl fence will connect to the existing fence (see Figure 3). This

fence and a landscaped berm around the perimeter of the lot will serve as a barrier from the adjacent Mission Road and Las Posas Road (see Figure 4). The parking rows will be delineated by railroad ties with rebar. The lot will create an estimated 260 parking spaces total. Access to the existing driveway is from both West Mission Road and North Las Posas Road. An additional [stabilized entrance](#) access point will be created on the east side of the site linking the temporary parking lot to West Comet Circle Drive. Both driveways will be fitted with automatic gates and shielded security lights.

The above and below grade existing utilities will remain in place and be protected during and after grading. No new utilities are anticipated other than the addition of electric lines to feed the automatic gates and security lighting. There is an existing water service connection and water supply line to the site that will be utilized for irrigation. There is also an existing transformer along with data transmission lines and risers within the site that will remain in place.

1.8 Background

The San Marcos Campus of the PCCD is the principal facility of seven educational sites within the District, and covers an area of approximately 200 acres. The existing campus contains educational and related facilities including classrooms, athletic training sites, library, administration complex, gallery, theater, children's center, student union and multiple parking lots. Due to the recent increase in construction projects on campus there is a need for an additional parking lot designated for construction workers.

1.9 Existing Environmental Setting

The campus property is situated along the south-facing aspect of several hillsides. Surface elevations range from approximately 580 feet above mean sea level (AMSL) near the south edge of the property to approximately 820 feet AMSL along the north/east ridge.

The climate of San Marcos is characterized by mild winters, warm dry summers, and light winds. The normal daily maximum temperature is 83.02 degrees Fahrenheit (°F) in August, and the normal daily minimum temperature is 44.0 °F in December, according to the Western Regional Climate Center. The campus is located within the San Diego Air Basin (SDAB).

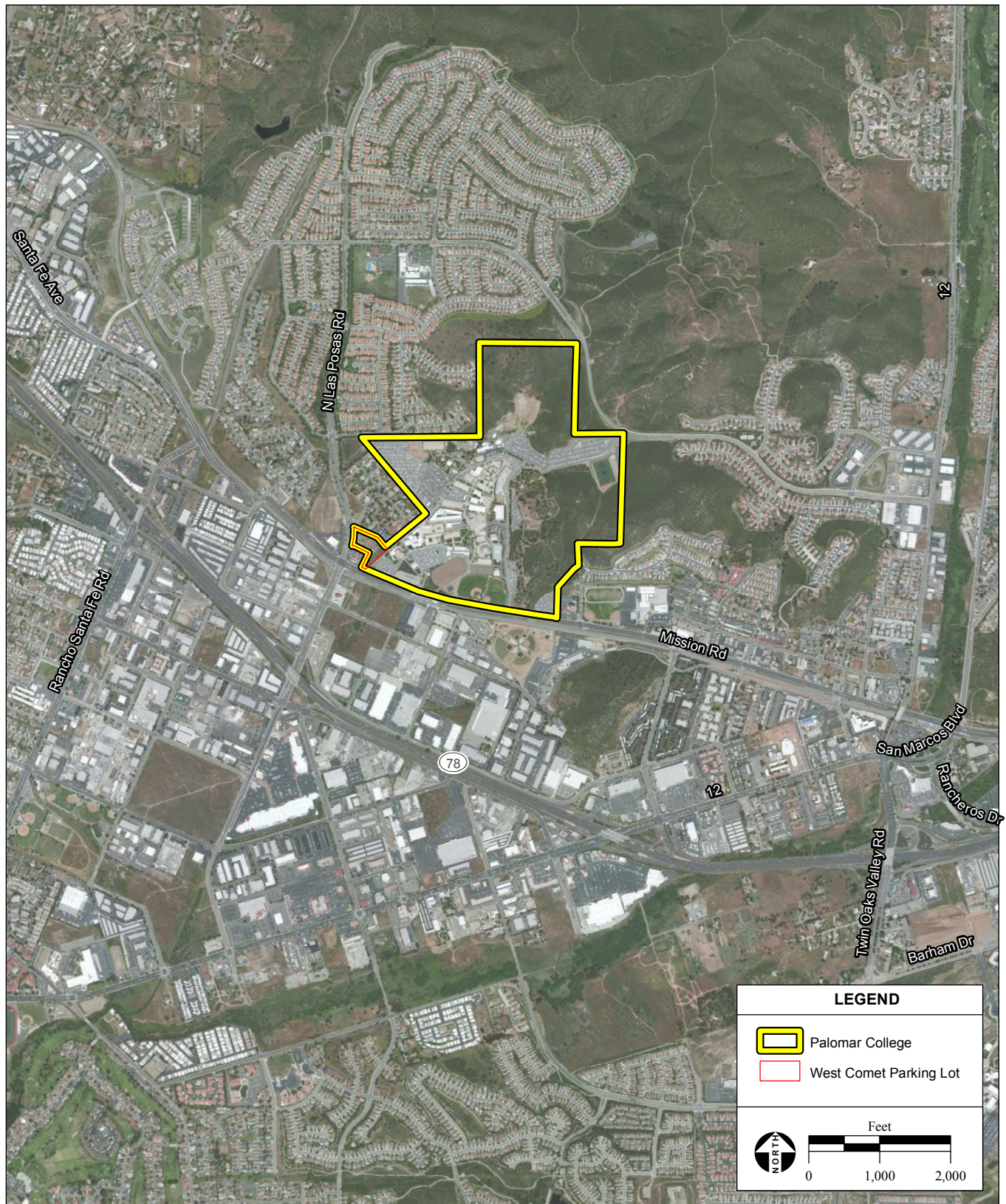
The near surface geology underlying the campus includes three formational units (shown in Figure 5):

Qya: Permeable alluvial flood plain deposits (Holocene and late Pleistocene)

Mzu: Metasedimentary and metavolcanic rocks (Mesozoic)

Kt: Coarse-grained, light gray granitic rock (mid-Cretaceous)

The campus is located within the Carlsbad Hydrologic Unit as defined in the *San Diego Basin Water Quality Control Plan (1994)*. This unit is dry with annual precipitation levels ranging from approximately 10 inches within the coastal areas to 17 inches in the mountainous inland areas. The PCCD campus averages approximately 15 inches per year.



SOURCE: Masson & Associates, 9/2011; Bing Maps Aerial Photograph, 2010; AES, 2011

Palomar College Initial Study / 211542 ■

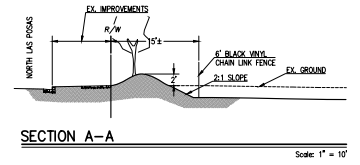
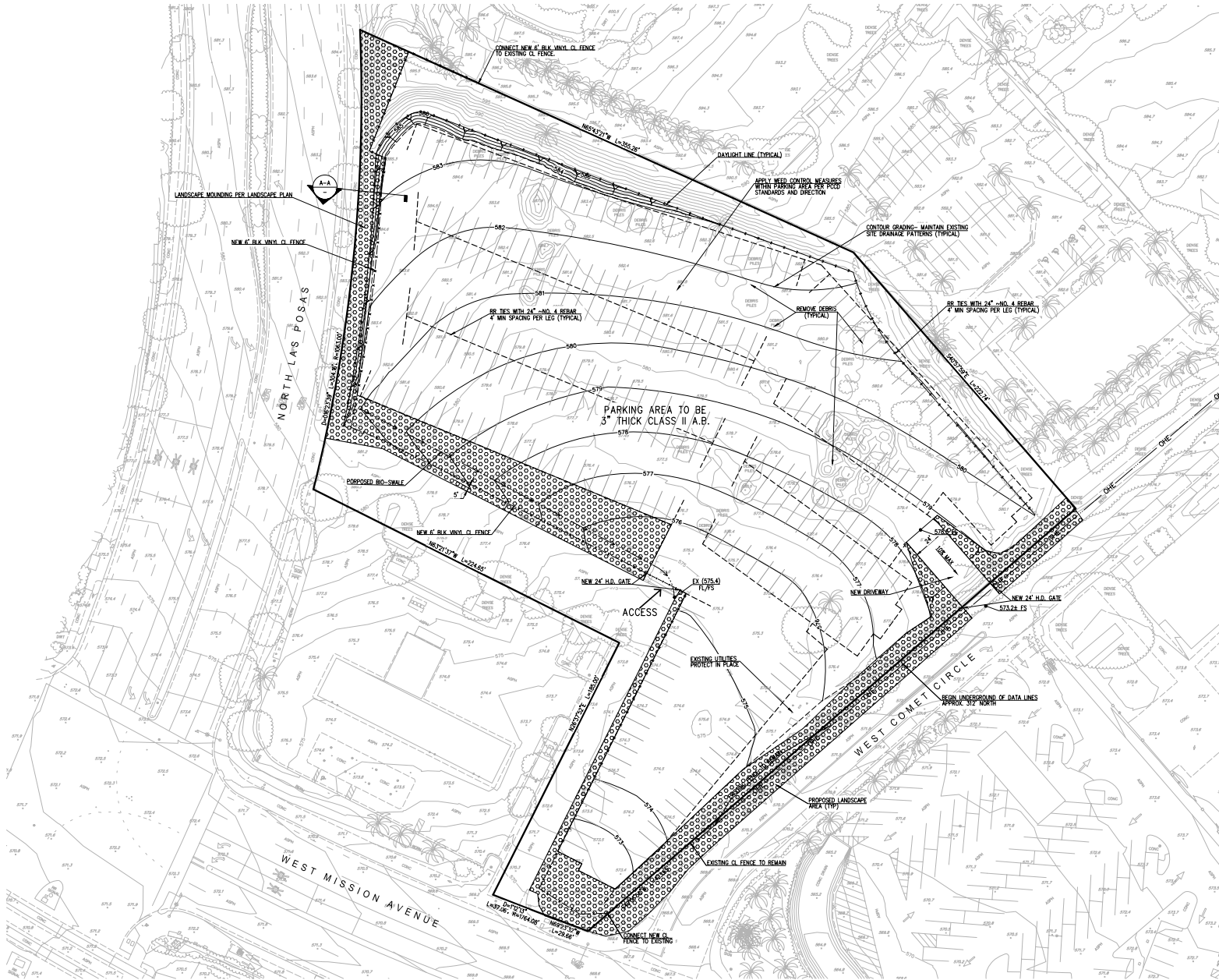
Figure 1
Site and Vicinity



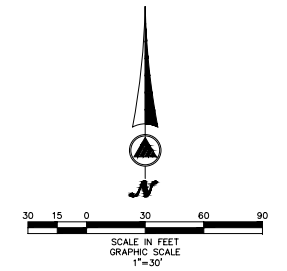
SAN MARCOS CAMPUS FACILITIES MASTER PLAN PROJECTS

FIGURE 2

WEST COMET CIRCLE PARKING LOT



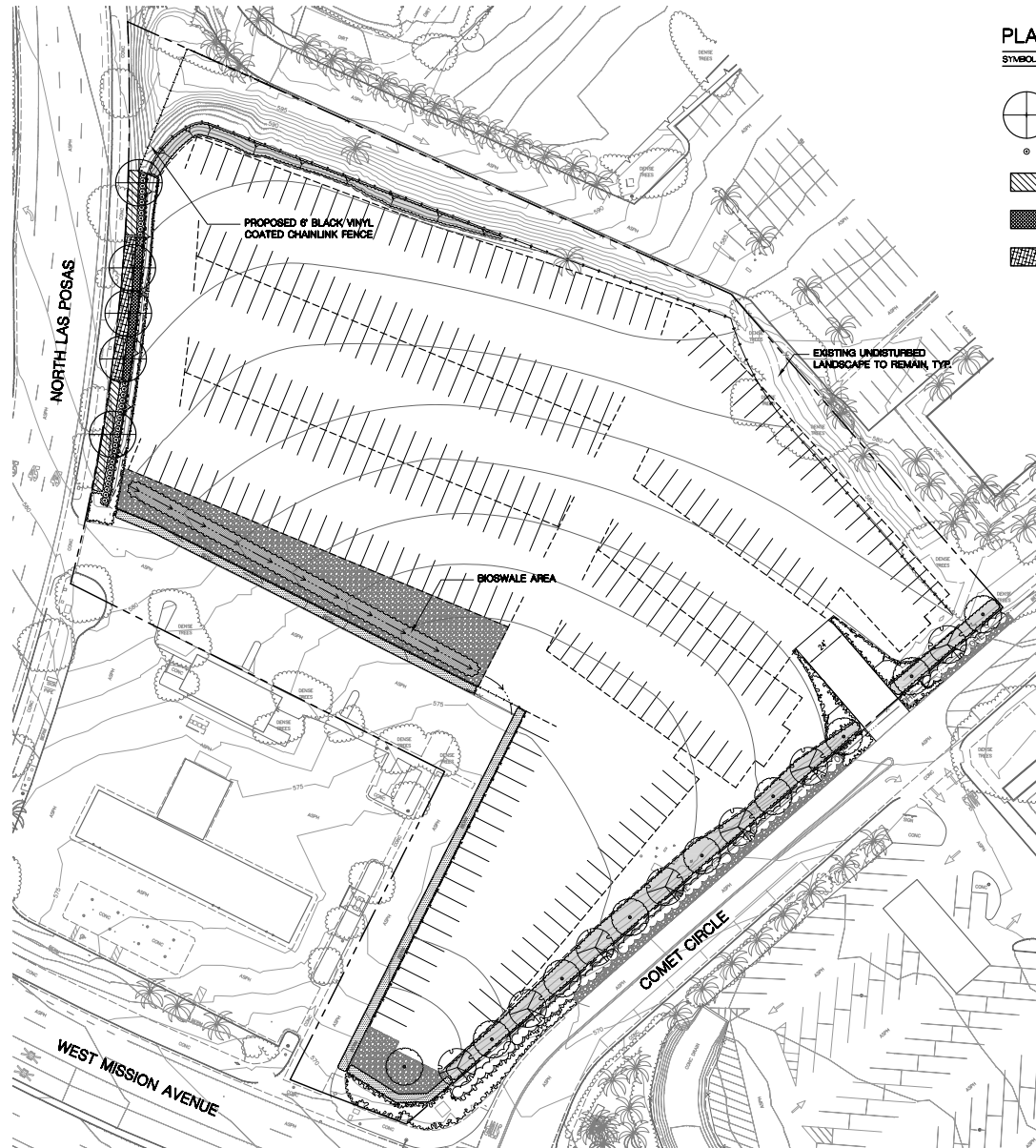
| PARKING | |
|-----------------|-----|
| STANDARD (FVIR) | 281 |
| TOTAL | 281 |



PALOMAR COLLEGE
Learning for Success

Planning • Engineering • Surveying • Telecom
MASSON & ASSOCIATES, INC.
200 East Washington Ave., Suite 200
Escondido, CA 92025
P: 760.741.8570
F: 760.741.1788
www.masson-assoc.com

WEST COMET CIRCLE PARKING LOT LANDSCAPE CONCEPT

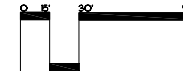


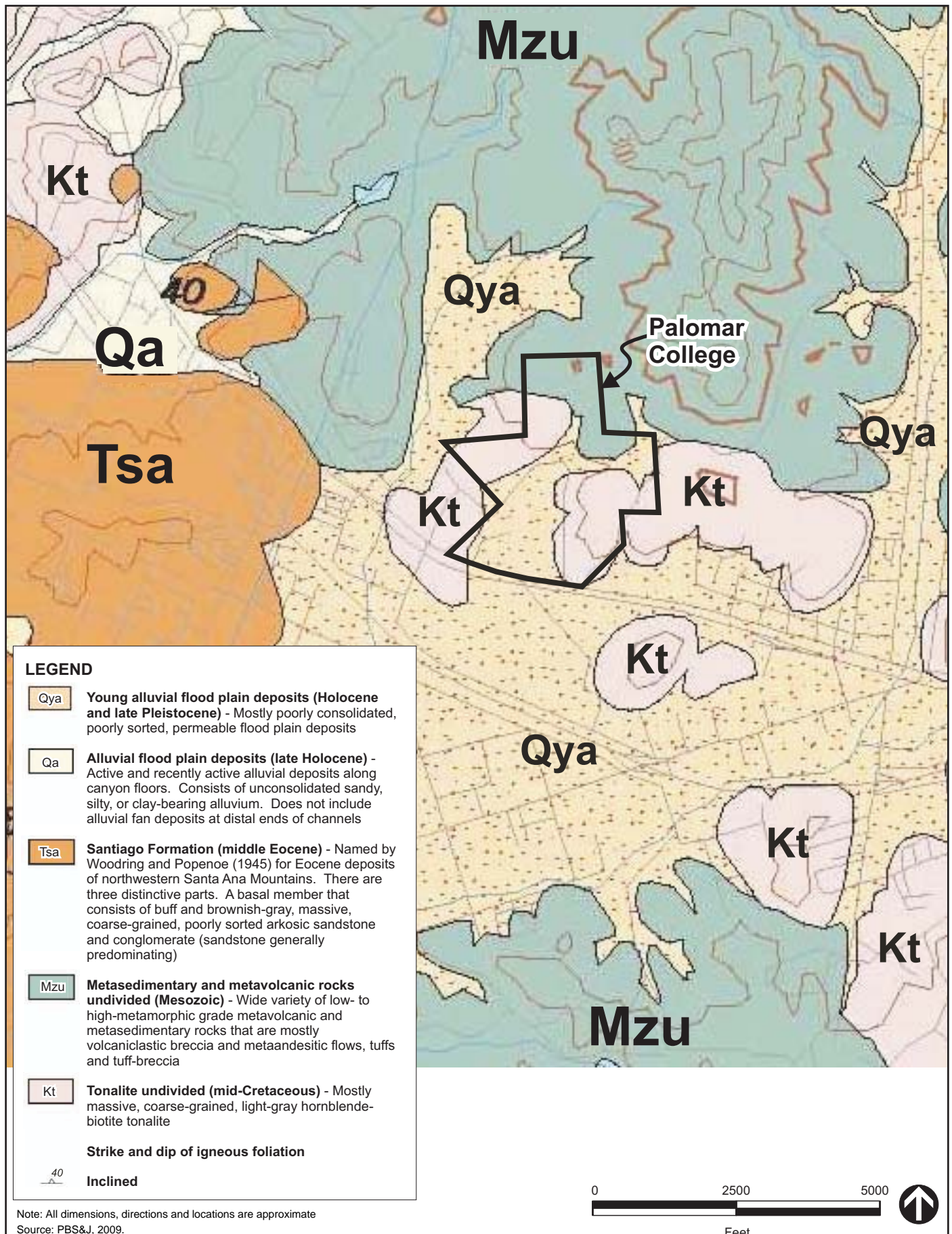
PLANTING LEGEND FOR NORTH LAS POSAS STREETSCAPE BERM

| SYMBOL | BOTANICAL NAME | COMMON NAME | SIZE | SPACING | QUANTITY | MATURE SIZE | WATER USE | DETAILS | REMARKS |
|--------|-------------------------|-------------------|---------|----------|----------|---------------|-----------|---------|---------|
| | CINNAMOMUM CAMPHORA | CAMPHOR TREE | 24" BOX | AS SHOWN | 5 | 50H X 60W | M | | |
| | NERUM PETITE PINK | OLEANDER | 5 GAL | AS SHOWN | 34 | 3'-6H X 3'-6W | L | | |
| | CALLISTEMON LITTLE JOHN | DWARF BOTTLEBRUSH | 1 GAL | 5' O.C. | 39 | 3H X 3W | M | | |
| | RHAPHIOLEPS OLARIA | INDIAN HAWTHORN | 5 GAL | 4' O.C. | 23 | 3'-5H X 3'-5W | M | | |
| | ROSA HYBRIDS | HYBRIDS ROSE | 1 GAL | 2' O.C. | 137 | 2H X 2W | M | | |

PLANT MATERIAL LEGEND FOR PARKING LOT:

| SYMBOL | BOTANICAL NAME | COMMON NAME | SIZE/SPACING |
|---|--|---|-----------------------|
| SHADE TREES SUCH AS: | | | |
| | AGONIS FLEXUOSA CINNAMOMUM CAMPHORA OLIVA EUROPAEA 'MAJESTIC BEAUTY' PISTACIA CHINENSIS QUERCUS AGROPHOLIA | PEPPERMINT TREE CAMPHOR TREE FRUITLESS OLIVE CHINESE PISTACHE COAST LIVE OAK | 24" BOX |
| FLOWERING TREES SUCH AS: | | | |
| | CASSIA LEPTORHYLLA CATALPA TASHAVENTURES JACARANDA MINUSPOLIA METROSDEROS ENCELISA PARKINSONIA ACULEATA | GOLD MEDALLION TREE CATALPA JACARANDA NEW ZEALAND CHRISTMAS TREE MEXICAN PALO VERDE | 24" BOX |
| TALL HEDGE SHRUBS SUCH AS: | | | |
| | GREVIA OCCIDENTALIS LEPTOSPERMUM GLEBY GLOW LIGULSTRUM TEXANUM | LAVENDER STARFLOWER NEW ZEALAND TEA TREE TEXAS PRIVET | 5 GAL 4' O.C. |
| LARGE SCREENING SHRUBS SUCH AS: | | | |
| | BUDDELEIA DAVIDI DODONAEA VISCOSA TECOMA 'ORANGE JUBILEE' TECOMA 'SUNRISE' | BUTTERFLY BUSH HOP BUSH YELLOW BELL YELLOW BELL | 5 GAL 4' - 6' O.C. |
| SHRUBS & GROUNDCOVER ON SLOPE SUCH AS: | | | |
| | BACCHARIS 'TWIN PEAKS' OSTIUS 'SUNSET' DODONAEA VISCOSA MYOPORUM PROSTRATUM FLUMBAGO 'ROYAL CAPE' | DWARF COYOTE BUSH ROCKROSE HOP BUSH PROSTRATE MYOPORUM CAPE PLUMBAGO | 5 GAL 6' O.C. |
| ORNAMENTAL GROUNDCOVER SUCH AS: | | | |
| | CORYDOBA KENI LANTANA 'NEW GOLD' ROSMARINUS 'HUNTINGTON CARPET' | TRAILING CORYDOBA GOLDEN YELLOW LANTANA TRAILING ROSEMARY | 5 GAL 3' - 4' O.C. |
| BIOSWALE PLANT SUCH AS: | | | |
| | CAREX PANSA LEYMUS TRICODON MULLENBERGIA REGENS | CALIFORNIA MEADOW SEDGE CREEPING WILD RYE DEER GRASS | 1 GAL |
| INERT MATERIAL SUCH AS: | | | |
| | 2'-6" DIA. COBBLE | | |





NEAR SURFACE GEOLOGIC FORMATIONS

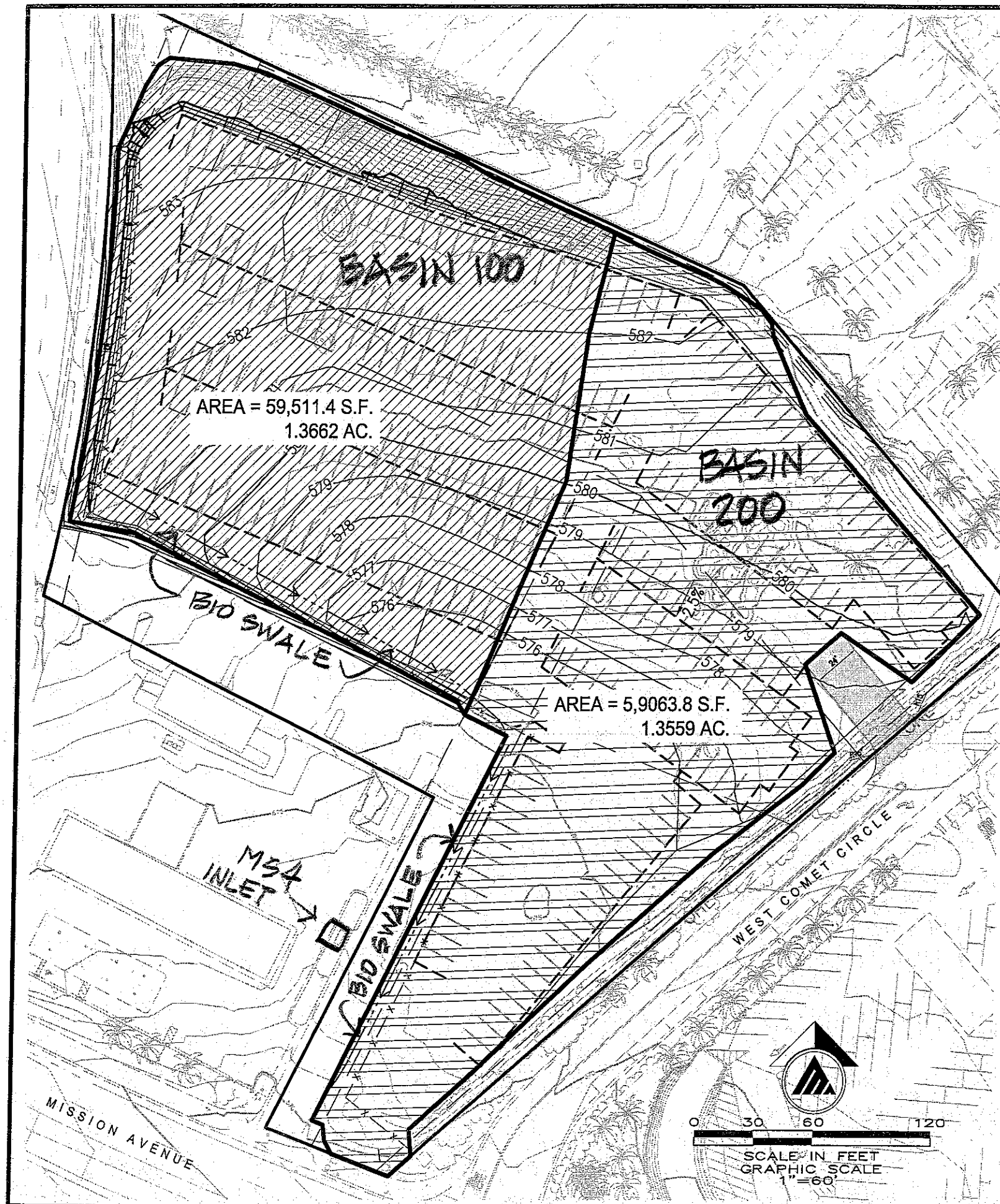
FIGURE 5



SOURCE: Masson & Associates, 9/2011; Bing Maps Aerial Photograph, 2010; AES, 2011

Palomar College Initial Study / 211542 ■

Figure 6
Project Design



Basin 100

Flow rate = 1.9 cfs Based on 10-Year Storm
 Travel time = 5.4 Minutes Exceeds 5 min.
 Slope = 2.5%
 Depth of flow = 4 in Based on 5 foot bottom depth and 4:1 side slopes
 Swale Length = 200 ft

Basin 200

Flow rate = 1.9 cfs Based on 10-Year Storm
 Travel time = 5.3 Minutes Exceeds 5 min.
 Slope = 2.5%
 Depth of flow = 4 in Based on 5 foot bottom depth and 4:1 side slopes
 Swale Length = 190 ft

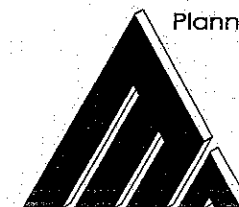
We chose swales based on the following. The Bio swales (filter strips) are densely vegetated, uniformly graded areas that treat sheet flow from adjacent impervious surfaces. Filter strips function by slowing runoff velocities, trapping particulate pollutants (suspended solids and trace metals) and providing infiltration. Swales can be natural or manmade. Vegetated swales can serve as part of a stormwater drainage system and can replace curbs, gutters and stormwater systems.

Advantages:

- If properly designed, vegetated and manmade swales can serve as an aesthetic, potentially inexpensive urban development or roadway drainage conveyance measure with significant collateral water quality benefits.
- Bio swales are best suited to treating runoff from roads, roof downspouts and small parking lots.
- Relatively simply to install.
- Relatively low-maintenance.

DATE: Nov 03, 11 5:17pm by:gwocker
 FILE: \\11\11084\PROD\C3D\11084 - PS.dwg

Planning ▲ Engineering ▲ Surveying ▲ Telecom



MASSON
 & ASSOCIATES, INC.

200 East Washington Ave., Suite 200
 Escondido, CA 92025
 P. 760.741.3570
 F. 760.741.1786

www.masson-assoc.com

southerly from the hillsides in the north portion of campus, across the valley floor, and ultimately to San Marcos Creek. Groundwater beneath the campus is presumed to flow generally in a southwesterly direction. Depths to groundwater in the area are generally 50 feet or less.

Campus storm drain facilities were updated in 2000, and included construction of two systems to divert storm water flows.

Regional access to PCCD is provided via Interstate 15 (I-15) from the east and State Route 78 (SR-78) from the south. The campus is 4.2 miles west of I-15 and approximately one-half mile north of SR-78. Direct access to campus is via Las Posas Road exit off SR-78 to either Mission Road or Avenida Azul. Indirect access to campus is provided via the Rancho Santa Fe Road or Twin Oaks Valley Road exits off SR-78 to Mission Road. Mission Road is the principal east-west access route into the south portion of campus.

Non-vehicular transportation to campus is provided by NCTD SPRINTER trains and buses, with the SPRINTER Station located on the south side of Mission Road, and the Bus Transit Station located on the north side of Mission Road. Surface parking lots are scattered throughout campus and support about 3,500 parking spaces for campus students, staff and visitors.

1.10 Surrounding Land Uses

The West Comet Circle Parking Lot is surrounded by residential land uses on the north and west sides. To the south and west is a Gas station/Mini-Mart. Also to the south are the North County Transit District Sprinter station and some light commercial buildings. Largely to the east and northeast is the PCCD campus and San Marcos Junior High School.

1.11 Other public agencies whose approval is required (ie., permits, financing approval, or participation)

The PCCD is Lead Agency under CEQA. Approval of the proposed West Comet Circle parking lot project and certification of this IS/MND is required by the PCCD Governing Board. [The State Water Resources Control Board requires approval through the Construction General Permit for the West Comet Circle parking lot.](#)

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below (☒) would be potentially affected by the proposed West Comet Circle parking lot conversion

- | | | |
|---|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Agricultural Resources | <input checked="" type="checkbox"/> Hydrology & Water Quality | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Transportation/Traffic Emergency Access/Parking |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Utilities/Service Systems/Energy |
| <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Noise | <input type="checkbox"/> Mandatory Findings of Significance |
| <input type="checkbox"/> Geology/Soils | <input type="checkbox"/> Population/Housing | |

1. AESTHETICS. Would the project:

- a. Have a substantial adverse effect on a scenic vista?**

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

No views will be obstructed as a result of the proposed parking lot because no elements will be erected on this site.

- b. Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a State scenic highway?**

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

According to the Department of Transportation website, there are no designated or eligible scenic corridors or highways in the vicinity of the campus. Therefore the proposed parking lot will not damage scenic resources.

- c. Substantially degrade the existing visual character or quality of the site and its surroundings?**

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

The existing visual character and quality of the proposed parking lot site will be maintained in its current state and will be enhanced with landscape around the site perimeter.

- d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

There will only be security lights at the entrance gates, which will be specified with required light shields. These lights will not create a source of substantial light or glare which would adversely affect day or nighttime views.

2. AGRICULTURAL RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the projects:

- a. Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency to non-agricultural use?**

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

According to the San Diego County Important Farmland 2004 Map, prepared by the California Department of Conservation (CDC), the campus is categorized as "Urban Land." As such this proposed parking lot will not convert any type of Farmland.

- b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?**

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

All Palomar Community College District (PCCD) campuses are constitutionally exempt from local zoning and land use plan/element requirements, and no portion of the San Marcos PCCD campus is under a Williamson Act contract.

- c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?**

| | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

As stated in question 2a this proposed parking lot will not result in conversion of Farmland.

3. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the projects:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Conflict with or obstruct implementation of the applicable air quality plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| The proposed parking lot would be consistent with general development assumptions for the campus as identified in the City of San Marcos General Plan/College Area Community Plan (1998) and would not conflict with or obstruct implementation of these applicable air quality plans. | | | | |
| b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| As stated in 3a the proposed parking lot will not violate any air quality standard. | | | | |
| c. Result in a cumulatively considerable net increase of any criteria pollutant for which the region is in non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| This proposed parking lot will not exceed air quality standards. | | | | |
| d. Expose sensitive receptors to substantial pollutant concentrations? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| The proposed parking lot will not expose sensitive receptors to substantial pollutant concentration because no pollutants will be used. | | | | |
| e. Create objectionable odors affecting a substantial number of people? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| There will be no objectionable odors associated with the proposed parking lot. | | | | |
| f. Result in greenhouse gas emissions that would hinder or delay the State's ability to meet the reduction targets contained in AB 32? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Construction and occupation of this proposed parking lot will not result in an increase in greenhouse gas emissions. | | | | |

4. BIOLOGICAL RESOURCES. Would the projects:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish & Game (CDFG) or U.S. Fish & Wildlife Service (USFWS)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| The proposed parking lot would not affect sensitive or special status species because this project would be located in developed portions of the campus that have already been urbanized. | | | | |
| b. Have a substantially adverse effect on any riparian habitat or other sensitive natural community identified in local or | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

regional plans, policies, regulations, or by the CDFG or USFWS?

As stated in response to question 4a this project would be located in developed portions of the campus that have already been urbanized; therefore the proposed parking lot would not affect sensitive natural community.

- c. **Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

As stated in response to question 4a this project would be located in developed portions of the campus that have already been urbanized; therefore The proposed parking lot would not have an adverse effect on federally protected wetlands.

- d. **Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?**
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

As stated in response to question 4a this project would be located in developed portions of the campus that have already been urbanized; thereforeThe proposed parking lot would not interfere with the movement of any resident or migratory fish or wildlife species.

- e. **Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

The PCCD implements a long standing procedure that involves replacement of any trees removed, or if a common species, replacement with a species that increases the diversity of trees on campus. Therefore, the proposed parking lot would not conflict with this tree preservation policy.

- f. **Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Conservation Community Plan (NCCP), or other approved local, regional, or State habitat conservation plan?**
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

The campus is not within an adopted HCP or NCCP. Therefore the proposed parking lot would not conflict with the provisions of an adopted HCP or NCCP.

5. CULTURAL RESOURCES. Would the projects:

- a. **Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?**
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

There are no historic structures on the site of the proposed parking lot, therefore the proposed conversion would not cause a substantial adverse change in the significance of a historical resource.

- b. **Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?**
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

According to the PEIR on the Master Plan (PCCD 2003), no prehistoric archaeological resources are located within the areas of the proposed parking lot. Therefore, this project would not cause a substantial adverse change in the significance of an archaeological resource.

- c. **Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?** ☐ ☐ ☐ ☒

The geologic formation underlying the proposed is mapped as "Kt," or tonalite undivided (mid-Cretaceous), which is a granitic rock material (Figure 5). This formation does not contain fossils because these granitic rocks were formed when molten lava cooled deep within the earth. Therefore, grading and excavation activities associated with this project would not indirectly or directly destroy a unique paleontological resource.

- d. **Disturb any human remains, including those interred outside of formal cemeteries?** ☐ ☐ ☐ ☒

As discussed in response to Question 5b above, no prehistoric archaeological resources are located within the areas of the proposed parking lot; therefore, this project would not disturb human remains, including those interred outside of formal cemeteries.

6. GEOLOGY AND SOILS. Would the projects:

- a. **Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:**

- i. **Rupture of a known earthquake fault, as delineated on the most recent AP Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.** ☐ ☐ ☐ ☒

The closest known fault to the campus is the Rose Canyon fault, approximately 12 miles to the southwest. Since there are no active or potentially active faults mapped in the area, the campus is not in a designated AP Fault Zone, and the proposed parking lot would not expose people or structures to potential substantial adverse effects.

- ii. **Strong seismic ground shaking?** ☐ ☐ ☐ ☒

The campus is located in the seismically active southern California region, and is likely to be subjected to some seismic ground shaking. There are no structures on this proposed site therefore ground shaking could not cause damage to the site

- iii. **Seismic-related ground failure, including liquefaction?** ☐ ☐ ☐ ☒

As discussed in response to question 6aii above there are no structures on this proposed site therefore ground shaking could not cause damage to the site.

- b. **Result in substantial soil erosion or the loss of topsoil?** ☐ ☐ ☐ ☒

| Issues and Supporting Information | Potentially Significant Impact | Less than Significant Impact with Mitigation | Less than Significant Impact | No Impact |
|-----------------------------------|--------------------------------------|---|------------------------------------|-----------|
|-----------------------------------|--------------------------------------|---|------------------------------------|-----------|

The proposed parking lot is utilizing a previously graded site; therefore, construction of these projects would not result in potential soil erosion or loss of topsoil.

- c. **Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the projects, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?** ☐ ☐ ☐ ☒

The proposed parking lot would be constructed within granitic rock formations (Figure 5). Therefore, this project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the projects, otherwise resulting in potential on- or off-campus landslides, lateral spreading, subsidence, liquefaction or collapse.

- d. **Be located on expansive soil, as defined in Table 18-a-B of the Uniform Building Code (1994), creating substantial risks to life or property?** ☐ ☐ ☐ ☒

The proposed parking lot would be constructed within granitic rock formations (Figure 5). Therefore, this project would not be located on expansive soils, otherwise resulting in substantial risks to life or property.

- e. **Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?** ☐ ☐ ☐ ☒

Sanitary sewer service to the campus is provided by the Vallecitos Water District (VWD); therefore, no septic tanks or alternative wastewater disposal systems are proposed as part of the proposed parking lot.

7. HAZARDS AND HAZARDOUS MATERIALS. Would the projects:

- a. **Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?** ☐ ☐ ☐ ☒

The proposed parking lot will not use or dispose of any hazardous materials; therefore this project will not create a significant hazard to the public or the environment.

- b. **Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?** ☐ ☐ ☐ ☒

As discussed in response to question 7a the proposed parking lot will not use or dispose of or release any hazardous materials.

- c. **Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?** ☐ ☐ ☐ ☒

As discussed in response to question 7a the proposed parking lot will not use or dispose of or emit any hazardous materials.

- d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result would it create a significant hazard to the public or the environment?**
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

As discussed in response to question 7a the proposed parking lot will not use or dispose of any hazardous materials, therefore this project will not create a significant hazard to the public or environment.

- e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the projects result in a safety hazard for people residing or working in the area?**
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

As discussed in response to question 7a the proposed parking lot will not use or dispose of any hazardous materials, therefore this project will not result in a safety hazard for people residing or working in the area.

- f. For a project within the vicinity of a private airstrip, would the projects result in a safety hazard for people residing or working in the area?**
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

The campus is not located in the vicinity of a private airstrip and would not result in an air safety hazard for people residing or working on campus.

- g. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?**
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

Construction of the proposed parking lot could not interfere with emergency response and evacuation plans on campus due to its peripheral location on campus.

- h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?**
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

The proposed parking lot would not be located in the vicinity of the fire-prone natural open space areas. Therefore, this project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires.

8. HYDROLOGY AND WATER QUALITY. Would the projects:

- a. Violate any water quality standards or waste discharge requirements?**
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

Construction of this proposed parking lot would not result in potential violation of water quality standards or waste discharge requirements.

- b. Substantially degrade groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?**
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

This proposed parking lot would not substantially degrade groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or lowering of the local groundwater table.

- c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-or off-site?**
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

The grading and drainage strategy of the proposed parking lot incorporates and assimilates the existing topography and drainage patterns. These grading and drainage improvements are anticipated to include minor contour grading to match existing elevations and maintain existing drainage patterns. Therefore, the existing drainage pattern of the site will not be altered resulting in substantial erosion.

- d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate of surface runoff in a manner which would result in flooding on-or off site?**
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

As discussed in response to question 8c the grading and drainage improvements of the proposed parking lot are anticipated to include minor contour grading to match existing elevations and maintain existing drainage patterns. Therefore this project will not substantially increase the rate of surface runoff in a manner which would result in flooding on-or off site.

- e. Create or contribute runoff which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?**
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

As discussed in response to question 8c the grading and drainage improvements of the proposed parking lot are anticipated to include minor contour grading to match existing elevations and maintain existing drainage patterns. Therefore this project will not create or contribute to runoff which would exceed the capacity of existing or planned storm water drainage systems.

- f. Otherwise substantially degrade water quality?**
- | | | | |
|--------------------------|-------------------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|--------------------------|-------------------------------------|--------------------------|--------------------------|

As a result of the ~~use of the site as a parking lot~~ design an impacts of the grease and oil drippings from cars ~~on the groundwater may occur will be mitigated through. However this impact is partially mitigated~~

by the specified pervious Class II AB base ~~specified for the parking lot~~, as well as the BMPs identified in the Water Quality Technical Report prepared by the project engineer. Two vegetated bioswales are proposed on site for backup treatment only. The bioswale planting as well as the other details specified in the engineering and landscape plans will not be fertilized. After the runoff is treated all pollutants will be removed by the vegetated bioswales before entering the City MS4. This project and environmental review is tiering off the impact analysis and mitigation measures identified in the PCCD PEIR. ~~It is appropriate to implement a~~ The campus has implemented a Storm Water Management Plan (SWMP) that ~~will~~ includes an Operations & Maintenance (O&M) Plan that has been identified in the PEIR. According to the PEIR this is required for all Low Impact Development (LID) practices and site design/source-control Best Management Practice's (BMP). It is recommended to update the BMP's to include O&M procedures for new development and redevelopment projects as they occur. The O&M Plan will address schedules, frequencies, and descriptions of inspection and maintenance activities. During the design stages for new development projects under the Master Plan, PCCD staff will review the project development plans for consistency with the applicable SWMP recommendations for post-construction storm water management and pollution prevention. Prior to issuance of a Notice of Completion for new development projects under the Master Plan, the on-site construction superintendent will perform a field inspection of the applicable site design/source-control BMPs to ensure proper construction and operation of the BMPs.

- g. Place housing within a 100-year floodplain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?** ☐ ☐ ☐ ☒

The proposed parking lot is not located within a 100-year floodplain and this project will not involve the construction of housing.

- h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?** ☐ ☐ ☐ ☒

The proposed parking lot is not located within a 100-year floodplain and this project will not place any structures on the site, therefore it will not impede or redirect flood flows.

- i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?** ☐ ☐ ☐ ☒

The closest reservoir to the campus is Lake Dixon, which is approximately 8 miles to the west. Flood flows as a result of the failure of this dam would not flow toward the campus, therefore this project would not expose people to loss, injury or death involving flooding.

- j. Inundation by seiche, tsunami, or mudflow?** ☐ ☐ ☐ ☒

The proposed parking lot is not subject to inundation by seiche, tsunami or mudflow due to the inland and urban location of the project site.

9. LAND USE AND PLANNING. Would the projects:

- a. Physically divide an established community?** ☐ ☐ ☐ ☒

| Issues and Supporting Information | Potentially Significant Impact | Less than Significant Impact with Mitigation | Less than Significant Impact | No Impact |
|-----------------------------------|--------------------------------------|---|------------------------------------|-----------|
|-----------------------------------|--------------------------------------|---|------------------------------------|-----------|

Since the establishment of the campus in 1950, the San Marcos community has developed around the campus. The proposed parking lot does not include any development outside of the campus that would result in the division of the surrounding communities.

- b. Conflict with an applicable land use plan, policy or regulation orange agency with jurisdiction over the projects (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?**
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

The PCCD is not subject to these municipal plans, policies, and zoning ordinance, therefore no conflict with an applicable land use plan (Facilities Master Plan 2022) is foreseen.

- c. Connect with any applicable HCP or NCCP**
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
- Refer to the response to question 4f above.

10. MINERAL RESOURCES. Would the projects:

- a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?**
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

The proposed parking lot would be constructed within granitic rock formations (Figure 6) that are not known to contain mineral resources. Therefore the implementation of this project would not result in the loss of availability of a known mineral resource that would be of value to the region and the the residents of the State.

- b. Result in the loss of availability of locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?**
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

The applicable land use plan for the campus is the Facilities Master Plan 2022, as the PCCD is not subject to local zoning and land use regulations. The Master Plan does not delineate a locally important mineral resource recovery site on campus.

11. NOISE. Would the projects result in:

- a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

The proposed parking lot project will not expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance.

- b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?**
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

| Issues and Supporting Information | Potentially Significant Impact | Less than Significant Impact with Mitigation | Less than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-------------------------------------|
| The proposed parking lot project will not expose persons to or generate excessive groundborne vibration. | | | | |
| c. A substantial permanent increase in ambient noise levels in the campus vicinity above levels existing without the projects? Refer to response to question 11a above. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. A substantial temporary or periodic increase in ambient noise levels in the campus vicinity above levels existing without the projects? Refer to response to question 11a above. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. For a project located within an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the projects expose people residing or working in the area to excessive noise levels? Refer to response question 7e above. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f. For a project within the vicinity of a private airstrip, would the projects expose people residing or working in the area to excessive noise levels? Refer to response to question 7f above. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

13. PUBLIC SERVICES. Would the projects result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, or the need for new or physically altered

government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services.

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Fire protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| This proposed parking lot is not expected to exceed the response time standards established by the San Marcos Fire Department, therefore no new fire protection facilities would be required to serve the proposed project. | | | | |
| b. Police protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| The proposed parking lot would maintain acceptable police service ratios, response times and other performance objectives. | | | | |
| c. Schools? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| The proposed parking lot construction will not have substantial adverse physical impacts on schools in the area because it is a temporary project. | | | | |
| d. Parks? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| The proposed parking lot construction would not result in the need for new or physically altered park facilities on or off campus. | | | | |

14. RECREATION

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Would the projects increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Refer to response to question 13d above. | | | | |
| b. Do the projects include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| The proposed parking lot would not involve construction or expansion of recreational facilities. | | | | |

15. TRANSPORTATION/TRAFFIC. Would the projects:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Cause an increase in the traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| The proposed parking lot would not generate additional commuters that would use the regional transportation system to and from campus. The additional temporary vehicle trips to be generated by the construction would not be substantial in relation to the existing traffic load and capacity of the street system, therefore it would not significantly increase traffic congestion. | | | | |
| b. Exceed, either individually or cumulatively, a level of | | | | |

| Issues and Supporting Information | Potentially Significant Impact | Less than Significant Impact with Mitigation | Less than Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-------------------------------------|
| service standard established by the county congestion management agency for designated roads or highways? Refer to response to question 15a above. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? As stated in questions 7e and 7f above, the campus is not located in close proximity to any airports, therefore the proposed parking lots would not change existing air traffic patterns or volumes in any way. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)? As stated in question 15a above the proposed parking lot would not generate additional commuters using the regional transportation system to and from campus, therefore the proposed project would not increase hazards along on or off campus circulation. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. Result in inadequate emergency access? Refer to response to question 7g above. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f. Result in inadequate parking capacity? The proposed parking lot will increase parking capacity. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g. Connect with adopted policies or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? Implementation of the proposed parking lot would not conflict with adopted policies or programs supporting alternative transportation. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

16. UTILITIES AND SERVICE SYSTEMS. Would the projects:

| | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? The proposed parking lot would not exceed wastewater treatment requirements. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Require or result in construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? The proposed parking lot will not result in the construction of new water or wastewater treatment facilities or expansion of existing facilities. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? The proposed parking lot would not require new storm water drainage facilities and/or expansion of existing facilities. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

| Issues and Supporting Information | Potentially Significant Impact | Less than Significant Impact with Mitigation | Less than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-------------------------------------|
| <p>d. Have sufficient water supplies available to serve the projects from existing entitlements and resources, or are new or expanded entitlements needed?</p> <p>Sufficient water supplies would be available to serve on-campus development per the Master Plan buildout 2022.</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>e. Result in a determination by the wastewater treatment provider which serves or may serve the projects that it has adequate capacity to serve the projects' projected demand in addition to the provider's existing commitments?</p> <p>Refer to response to question 16a above.</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>f. Be served by a landfill with sufficient permitted capacity to accommodate the projects' solid waste disposal needs?</p> <p>The proposed parking lot project will not have significant impacts on landfill capacity.</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>g. Comply with federal, State, and local statutes and regulations related to solid waste?</p> <p>Refer to response to question 16f above.</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>h. Result in wasteful, inefficient or unnecessary consumption or energy?</p> <p>The proposed parking lot will not create wasteful, inefficient or unnecessary consumption of energy.</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

17. MANDATORY FINDINGS OF SIGNIFICANCE.

- a. Do the projects have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?**
- As discussed in question 1 above this proposed parking lot project will not have a significant impact of visual character. As discussed in question 4 above, the proposed project would be constructed within a developed portion of the campus where sensitive habitats do not exist. As discussed in question 5 above there are no historic structures on the site of this proposed project. Based on these facts the proposed parking lot will not have any adverse environmental impacts that require a mandatory finding of significance.
- b. Do the projects have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of**
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

| Issues and Supporting Information | Potentially Significant Impact | Less than Significant Impact with Mitigation | Less than Significant Impact | No Impact |
|-----------------------------------|--------------------------------------|---|------------------------------------|-----------|
|-----------------------------------|--------------------------------------|---|------------------------------------|-----------|

the past projects, the effects of other current projects, and the effects of probable future projects)?

Based on the location of the proposed parking lot project within a developed area of the campus that are designed for college uses this project would not result in cumulatively considerable environmental impacts.

- c. **Do the projects have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?** ☐ ☐ ☐ ☒

The proposed parking lot project does not have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly.

References

California Department of Conservation. 2004. Farmland Mapping and Monitoring Program. San Diego County Important Farmland Map.

California Department of Transportation. 2002. *Transportation Related Earthborne Vibrations (TAV-02-01-R9201)*. February 20.

City of San Marcos. 2006. *San Marcos General Plan*. College Area Community Plan.

PBS&J. 2009. Near Surface Geologic Formations Map.

Palomar Community College District San Marcos Campus Facilities Master Plan. 2009. *Program Environmental Impact Report*, November.

Palomar Community College District Master Plan 2022. 2003. August.

State of California. 2008. Caltrans Scenic Highway Program. Available at:
http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm

State Water Resources Control Board. 1994. *San Diego Basin Water Quality Control Plan*.

Western Regional Climate Center. 2006. Historical Climate Data for San Marcos, California.

Mitigated Negative Declaration

Palomar Community College District

Mitigated Negative Declaration

Pursuant to: California Environmental Quality Act (CEQA)
(California Public Resources Code, Sections 21080(c) and (f), 21080.1, 21091, 21092, and 21157.5)

Subject: Palomar College, San Marcos Campus
West Comet Circle Parking Lot

Applicant: Palomar Community College District (PCCD)
1140 West Mission Road
San Marcos, CA 92069

I. PROJECT DESCRIPTION

The proposed project evaluated in this Initial Study/Mitigated Negative Declaration (IS/MND) are within the PCCD San Marcos campus ("campus") which is located at 1140 West Mission Road in the City of San Marcos, in northern San Diego County (Figure 1). Regional access is provided to the campus via Interstate 15 (I-15) and State Route 78 (SR-78).

The proposed West Comet Circle temporary parking lot facilitates the build out of the Palomar College San Marcos Campus Facilities Master Plan ("Master Plan"). This Master Plan is subject to the 2009 Program Environmental Impact Report (PEIR). The information in this IS/MND is tiered off of this PEIR. The purpose of this project is to provide a temporary parking lot for the construction workers as the PCCD continues the Master Plan build out the Prop M Bond Series. This parking lot is essential in order for construction of the Master Plan projects to continue as scheduled.

Refer to Section 1.7 of the attached Environmental Initial Study for a detailed description of the proposed West Comet Circle temporary parking lot project.

II. ENVIRONMENTAL SETTING

Refer to Section 1.9 of the attached Environmental Initial Study.

III. FINDINGS

In compliance with CEQA and the State CEQA Guidelines, the PCCD has prepared an Environmental Initial Study and has determined that, although the proposed West Comet Circle temporary parking lot project could have significant effects on the environment, there will not be significant effects in this case because of the Operation and Maintenance (O&M) Plan that has been incorporated into the project. Therefore, a **MITIGATED NEGATIVE DECLARATION (MND)** has been prepared.

IV. DOCUMENTATION

The attached Environmental Initial Study, compiled in accordance with CEQA, documents the reasons to support the above findings. A copy of this IS/MND and technical studies will also be available for review at the PCCD Facilities Planning and Environmental Health and Safety Office ("RS" Building). A Notice of Intent (NOI) to adopt this IS/MND and Public Hearing Notice will be published in the North County Times; and will be posted at the San Marcos Public Library. In addition, the NOI and responses to comments received on the IS/MND, will be circulated for public review between October 18, 2011, and November 7, 2011.

V. MITIGATION MEASURES

Water Quality

Additional Sources of Polluted Runoff and Water Quality Degradation

Impact: Implementation of the proposed West Comet Circle temporary parking lot project may result in additional sources of polluted runoff that could substantially degrade water quality.

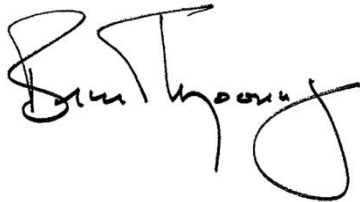
Mitigation: Hyd-OM-1

The sources of polluted runoff will be mitigated through the two proposed vegetated bioswales on site as well as the pervious Class II AB paving of the parking lot. Attachment A- The Water Quality Technical Report (WQTR) details the construction and post construction Best Management Practices (BMPs) and the Operations and Maintenance (O&M) Plan. It is appropriate to implement a campus Storm Water Management Plan-(SWMP) that will include an ~~Operations & Maintenance (O&M)~~ Plan that has been identified in the PEIR. According to the PEIR this is required for all Low Impact Development (LID) practices and site design/source-control ~~Best Management Practice's (BMP's)~~. It is recommended to update the BMP's to include O&M procedures for new development and redevelopment projects as they occur. The O&M Plan will address schedules, frequencies, and descriptions of inspection and maintenance activities. During the design stages for new development projects under the Master Plan, PCCD staff will review the project development plans for consistency with the applicable SWMP recommendations for post-construction storm water management and pollution prevention. Prior to issuance of a Notice of Completion for new development projects under the Master Plan, the on-site construction superintendent will perform a field inspection of the applicable site design/source-control BMPs to ensure proper construction and operation of the BMPs.

VI. PUBLIC REVIEW DISTRIBUTION

The following agencies and organizations will be notified this IS/MND, which will be circulated for public review between October 18, 2011 and November 7, 2011.

County of San Diego, Department of Planning and Land Use
County of San Diego Sheriff Department
City of San Marcos, Development Services Department
City of San Marcos, Public Works Department
City of San Marcos Fire Department
City of Vista
North County Transit District
Vallecitos Water District
AT&T
San Diego Gas & Electric
California State University, San Marcos
San Marcos Unified School District
Vista Unified School District



Name: Brian F. Mooney, AICP
Title: Managing Principal

October 13, 2011

Date of Draft Report

December 13, 2011

Date of Final Report

Mitigation Monitoring and Reporting Program

| Mitigation Measure | Responsibility for Monitoring & Reporting | Timing | Monitoring Activity Completed (Date) |
|--|---|--|--------------------------------------|
| Water Quality | | | |
| Additional Sources of Polluted Runoff and Water Quality Degradation | | | |
| <p>Hyd-OM-1 The sources of polluted runoff will be mitigated through the two proposed vegetated bioswales on site as well as the pervious Class II AB paving of the parking lot. Attachment A- The Water Quality Technical Report (WQTR) details the construction and post construction Best Management Practices (BMPs) and the Operations and Maintenance (O&M) Plan. It is appropriate to implement a campus Storm Water Management Plan-(SWMP) that will include an Operations & Maintenance (O&M) Plan that has been identified in the PEIR. According to the PEIR this is required for all Low Impact Development (LID) practices and site design/source-control Best Management Practice's (BMP's). It is recommended to update the BMP's to include O&M procedures for new development and redevelopment projects as they occur. The O&M Plan will address schedules, frequencies, and descriptions of inspection and maintenance activities. During the design stages for new development projects under the Master Plan, PCCD staff will review the project development plans for consistency with the applicable SWMP recommendations for post-construction storm water management and pollution prevention. Prior to issuance of a Notice of Completion for new development projects under the Master Plan, the on-site construction superintendent will perform a field inspection of the applicable site design/source-control BMPs to ensure proper construction and operation of the BMPs.</p> | PCCD Facilities Department | Prior and during construction activities | |

Attachment A

Water Quality Technical Report

WATER QUALITY TECHNICAL REPORT

PALOMAR COMMUNITY COLLEGE

WEST COMET CIRCLE TEMPORARY PARKING LOT

1140 WEST MISSION ROAD
SAN MARCOS, CALIFORNIA

Engineer:

MASSON & ASSOCIATES, INC.
200 East Washington Avenue, Suite 200
Escondido, CA 92025
(760) 741-3570

UNDER THE SUPERVISION OF: _____
Brad Sager RCE # 56564 Exp. 12-30-2011

Date Prepared: September 30, 2011

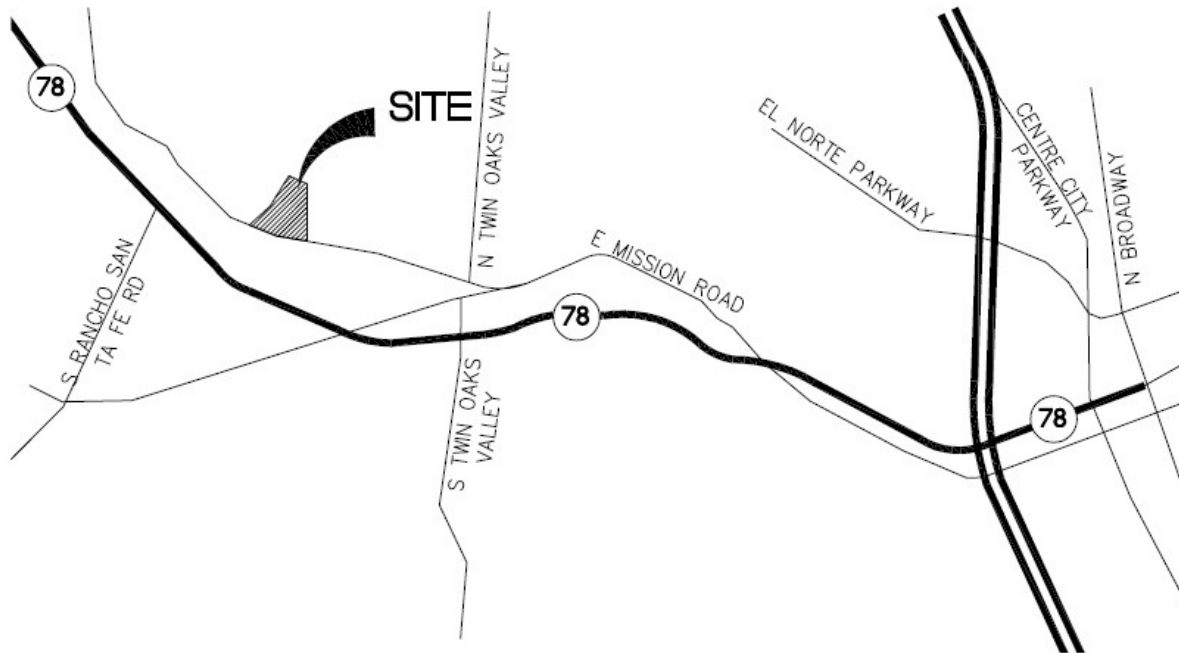
P.N. 11084

TABLE OF CONTENTS

| | |
|--|----|
| VICINITY MAP | ii |
| INTRODUCTION..... | 1 |
| 1. PROJECT DESCRIPTION..... | 1 |
| 1.1 Topography and Land Use | 1 |
| 1.2 Hydrologic Unit Contribution | 1 |
| 2. WATER QUALITY ENVIRONMENT | 1 |
| 2.1 Beneficial Uses | 1 |
| 3. Pollutants | 3 |
| 3.1 Pollutants from the project area | 3 |
| 3.2 Pollutants of concern | 3 |
| 3.3 Conditions of Concern | 3 |
| 3.4 Soil Characteristics | 4 |
| 4. MITIGATION MEASURES TO PROTECT WATER QUALITY..... | 4 |
| 4.1 Construction BMPs | 4 |
| 4.2 Post-construction BMPs..... | 5 |
| 5. OPERATION AND MAINTENANCE | 9 |
| 6. SUMMARY/CONCLUSION..... | 11 |

ATTACHMENTS AND EXHIBITS

- Exhibit A – SITE MAP
- Table 1 – Anticipated and Potential Pollutants Generated by Land Use Type
- Table 3 – Treatment Control BMP Selection Matrix
- Attachment TC-30 – Vegetated Swale
- Development Application Storm Water Standards Questionnaire
- City of San Marcos WQTR Submittal Requirement Checklist



VICINITY MAP

INTRODUCTION

The purpose of this Water Quality Technical Report (WQTR) is to address the water quality impacts from the proposed new West Comet Circle Temporary Parking Lot on the Palomar College Campus in San Marcos, California. Although the Palomar Community College District is not required to prepare and process a WQTR for this development, the District wishes to do its part in ensuring that the new project meets current water quality standards. This report was prepared utilizing the City of San Marcos format and requirements. Best Management Practices (BMPs) will be utilized to provide a long-term solution to water quality treatment and management. This WQTR is also intended to ensure the effectiveness of the BMPs through proper maintenance that is based on long-term fiscal planning. This WQTR is subject to revisions as needed by the engineer.

1.0 PROJECT DESCRIPTION

The proposed Parking Lot consists of the construction of a gravel temporary parking lot on the existing Palomar Community College San Marcos Campus. The existing dirt lot will generally keep its existing configuration with minimal grading to flatten the grades.

The proposed gravel lot will provide approximately 270 parking spaces.

1.1 Topography and Land Use

The proposed parking lot is part of the existing Palomar College Campus which consists of a multitude of classroom/instructional, lab and administration buildings. An existing road network along with parking and landscaped areas make up a good portion of the campus. The land slopes from north to south and will remain that way after construction of the proposed project.

The existing site essentially surface drains in a sheet flow manner north to south across the existing dirt lot and into an existing storm drain structure located at the southwest corner of the campus. The structure then connects to an existing public system in West Mission Avenue. San Marcos Creek is located approximately one mile south of the campus. Lake San Marcos is an impounded portion of San Marcos Creek located approximately two miles, as the crow flies, southwest of the campus.

1.2 Hydrologic Unit Contribution

The project is within Richland Hydrologic Sub-Area (904.52) of San Marcos Hydrologic Area (4.50) of the Carlsbad Hydrologic Unit (4.00) as described by the Water Quality Control Plan for San Diego Basin, adopted by the California Regional Water Quality Control Board, San Diego Region, dated September 8, 1994 and amended May 5, 1998. Runoff from this portion of the campus drains into a public system in West Mission Road and then ultimately into San Marcos Creek and eventually Lake San Marcos. Lake San Marcos outlets back into San Marcos Creek before flowing downstream to the Batiquitos Lagoon and into the Pacific Ocean.

2.0 WATER QUALITY ENVIRONMENT

2.1 Beneficial Uses

The beneficial uses for the hydrologic unit are included in Tables 2.1 and 2.2. These tables have been extracted from the Water Quality Control Plan for the San Diego Basin.

Municipal and Domestic Supply (MUN) - Includes uses of water for community, military, or individual water supply systems including, but not limited to, drinking water supply.

Agricultural Supply (AGR) - Includes uses of water for farming, horticulture, or ranching including, but not limited to, irrigation, stock watering, or support of vegetation for range grazing.

Industrial Service Supply (IND) - Includes uses of water for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well re-pressurization.

Hydropower Generation (POW) – Hydropower Generation.

Contact Water Recreation (REC-1) - Includes uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and SCUBA diving, surfing, white water activities, fishing, or use of natural hot springs.

Non-contact Water Recreation (REC-2) - Includes the uses of water for recreational activities involving proximity to water, but not normally involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.

Warm Freshwater Habitat (WARM) - Includes uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish or wildlife, including invertebrates.

Cold Freshwater Habitat (COLD) - Includes uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish or wildlife, including invertebrates.

Wildlife Habitat (WILD) - Includes uses of water that support terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.

Rare, Threatened, or Endangered Species (RARE) - Habitats necessary, at least in part, for the survival and successful maintenance of plant and animal species established under state or federal law as rare, threatened, or endangered.

2.1.1 Inland Surface Waters

Inland surface waters have the following beneficial uses as shown in Table 2.1.

Table 2.1 Beneficial Uses for Inland Surface Waters

| Hydrologic Unit Number | Mun | Agr | Ind | Pow | Rec1 | Rec2 | Warm | Cold | Wild | Rare |
|------------------------|-----|-----|-----|-----|------|------|------|------|------|------|
| 904.52 | x | x | x | x | x | X | x | x | x | x |

2.1.2 Ground Waters

Ground waters have the following beneficial uses as shown in Table 2.2.

Table 2.2 Beneficial Uses for Ground Waters

| Hydrologic Unit Number | Mun | Agr | Ind |
|------------------------|-----|-----|-----|
| 904.52 | x | x | x |

3.0 POLLUTANTS

3.1 Pollutants from the Project Area

Although the project is a parking lot on pervious material, for purposes of this report and analysis, the proposed development is categorized as a Priority Project under Parking over 5,000 sqft. The following pollutants are anticipated on the projects of this type:

Project anticipated pollutants:

- Oil and grease - from parked cars.
- Trash and debris deposited.
- Heavy Metals – from parking lots.

3.2 Pollutants of Concern

303(d) Status

According to the California 2006 303(d) list published by the San Diego Regional Water Quality Control Board (USEPA Approval Date: June 28, 2007), San Marcos Creek is listed as impaired for DDE, Phosphorus and Sediment Toxicity; San Marcos Lake is identified for Ammonia as Nitrogen, Nutrients and Phosphorus.

The project will not generate primary pollutants.

3.3 Conditions of Concern

The project site is located in the southwestern portion of the Palomar College Campus. The general direction of storm water runoff on the site will not be altered. In the existing condition as well as the post construction condition, the project site gradually slopes from north to south and into a public storm drain system in West Mission Avenue. Post construction flows will not exceed pre construction runoff flows.

The Campus is comprised of approximately 200 acres located within the Carlsbad HU. San Marcos Creek is located approximately one mile south of the campus. Lake San Marcos is an impounded portion of San Marcos Creek located approximately two miles southwest of the campus.

3.4 Soil Characteristics

This project is geotechnically compatible with an adjacent project within the campus known as the IT Building. Per Geotechnical Evaluation prepared for Palomar Community College IT Building by "Ninyo & Moore, Geotechnical and Environmental Sciences Consultants" dated June 23, 2008 the project area consists of sandy silty gravel and clay fills and granitic rock below the surface.

For more detailed geotechnical information for the area refer to the Geotechnical Evaluation prepared for Palomar Community College District by "Ninyo & Moore, Geotechnical and Environmental Sciences Consultants" dated June 23, 2008.

4.0 MITIGATION MEASURES TO PROTECT WATER QUALITY

To address water quality for the project, BMPs will be implemented during construction and post-construction. Placement of the post-construction BMPs are as noted on Exhibit A.

4.1 Construction BMPs

A detailed description of the BMPs will be shown on the Erosion Control Plan.

Typical BMPs include the following:

- Silt Fence
- Erosion Control Mats and Spray-on Applications
- Fiber Rolls
- Gravel Bags & Berms
- Sandbag Barrier
- Stockpile Management
- Solid Waste Management
- Stabilized Construction Entrance/Exit
- Vehicle and Equipment Maintenance

Construction BMPs for this project have been selected and will be constructed and maintained so as to comply with all applicable ordinances and guidance documents.

4.2 Post-Construction BMPs

Pollutants of concern as noted in Section 3 will be addressed through three types of BMPs:

- Low Impact Development (L.I.D.) and Site Design BMPs;
- Source Control BMPs;
- BMPs Applicable to Individual Priority Project Categories
- Treatment Control BMPs;

LOW IMPACT DEVELOPMENT (L.I.D.)

This project has been designed to incorporate some of the benefits of Low Impact Development (LID). Integrated Management Practices (IMP's) have been incorporated into the project design as follows:

- Driveways designed to minimum widths.
- Self-retaining / Self Treating.
- Use of pervious materials.
- Education/training to occur through printed materials including:
 - Use of fertilizers;
 - Use of pesticides.

SITE DESIGN BMPS

The project is designed to minimize the introduction of pollutants, their impact generated from site run-off to the storm water conveyance system and the potential for erosion.

Maintain Pre-Development Rainfall Runoff Characteristics.

- 1) Minimize impervious footprint.
 - Private streets and driveways will be constructed to minimum required widths;
 - Minimize the use of impervious surfaces where feasible;
- 2) Conserve natural areas.
 - The development is concentrated on an existing campus, there are no environmentally sensitive areas within the construction site;
 - The overall existing drainage patterns throughout the project will be maintained;
- 3) Minimize directly connected impervious areas.
 - Impervious sidewalks, patios, hardscape runoffs will discharge to landscape prior to discharging into storm drains or onto the existing parking areas;

- 4) Maximize canopy interception and water conservation.
 - Project landscaping will incorporate native or drought tolerant vegetation where practicable;

Protect Slopes and Channels.

- Pad grading will divert runoff away from tops of slopes.
- Slopes will be permanently stabilized with landscaping that will incorporate native or drought tolerant vegetation.
- There are no permanent channel crossings on the site.

SOURCE CONTROL BMPS

Design Outdoor Material Storage Areas to Reduce Pollution Introduction.

- No new storage areas are proposed at this time. Existing enclosures at the campus will be used on as needed basis.

Employ Integrated Pest Management (IPM) Principles

- Where feasible, pest-resistant or well-adapted plant varieties such as native plants will be planted in the landscape areas to eliminate and/or reduce the need for pesticide use.
- Distribute IPM educational materials to maintenance staff.

Use Efficient Irrigation Systems & Landscape Design.

- Rain shutoff devices will be used to prevent irrigation during and after precipitation, flow reducers and shut-off valves triggered by a pressure drop will be used to control water loss in the event of a broken sprinkler head.
- Irrigation systems will be designed to fit each area's specific needs.
- Irrigation system for landscaped areas will be monitored to reduce over irrigation.

Provide Storm Water conveyance System Stenciling and Signage.

- Any storm drain inlet located on site will be stenciled with a message warning not to dump pollutants into the drains.

BMPs APPLICABLE TO INDIVIDUAL PRIORITY PROJECT

Parking Over 5,000 SQFT

Parking Area

1) Reduce impervious land coverage of parking areas. Permeable surfaces in overflow parking or other areas may be used to meet this requirement.

All parking will be pervious surface

2) Direct runoff from paved surfaces to appropriate landscaping to infiltrate and treat stormwater.

A bioswale has been incorporated into the drainage design.

3) Treat to remove oil and petroleum hydrocarbons at parking lots that are heavily used (e.g. fast food outlets, lots with 25 or more parking spaces, sports event parking lots, shopping malls, grocery stores, discount warehouse stores).

Parking surface will be pervious. Heavy use is not anticipated.

4) Ensure adequate operation and maintenance of treatment systems particularly sludge and oil removal, and system fouling and plugging prevention control.

All parking will be pervious surface and will be maintained on a regular basis.

(5) A parking lot sweeping program shall be implemented that at a minimum provides for sweeping immediately prior to October 1, and once during the storm season (October 1-May 1). Sweep, collect, and dispose of debris and trash in a proper container. Do not sweep debris onto City streets or into catch basins. Use dry methods of sweeping and vacuuming to clean parking lots rather than hosing, pressure washing or steam cleaning. If water is used for cleaning, collect wash water and dispose of as a hazardous waste or place on site where it can evaporate. Catch basins in parking lots shall be cleaned every 6 to 12 months, or whenever the sump is half full.

Parking surface is pervious, therefore, sweeping is not applicable.

TREATMENT CONTROL BMPS

The project is categorized as a Priority Project and the treatment BMPS to be implemented by the Palomar Community College District are as follows:

- Vegetated bioswales will be implemented as part of the site development to ensure treatment of the runoff. Aggregate parking lots accept approximately 1.6 inches of the first runoff. Therefore, the proposed bio-swale will be redundant treatment.
- Bio-filtration swales are open, shallow channels with vegetation covering the side slopes and bottom that collect and slowly convey runoff flow to downstream discharge points. See attachment TC-30 "Vegetated Swale".
- Bio-filtration strips, also known as vegetated buffer strips, are vegetated sections of land over which storm water flows as overland sheet flow.
- Pollutants are removed by filtration through the grass, sedimentation, adsorption to soil particles, and infiltration through the soil. They trap suspended solids, trace metals, promote infiltration and reduce the flow velocity of stormwater runoff.

Appropriate Applications and Site Constraints:

Swales and strips should be considered where:

- site conditions and climate allow vegetation to be established;
- flow velocities are not high enough to cause scour;
- the topography is not very steep;
- to serve areas of less than 10 acres with slopes no greater than 5%;
- the area to be used for the swale is free of gullies or rills that can concentrate overland flow and cause erosion;

Where strips cannot be sited to accept directed sheet flow, vegetated areas provide treatment of rainfall and reduce the overall impervious surface.

Design and sizing guidelines per BMP Fact Sheet TC-30 California Stormwater BMP Handbook.

- longitudinal slopes should not exceed 2.5%;
- value of Manning's N coefficient 0.25;
- the bottom width should not exceed 10 feet unless dividing berm is provided;
- the swale should be not less than 100 feet in length;
- the side slopes should be no steeper than 3:1 (H:V);

All facilities shown on this site have been designed to maximize detention and treatment of the water quality flow.

Restrictions to this design are:

- Existing conditions and existing improvements;

Vegetation mixes appropriate for various climates and locations should be approved by landscape staff. Some species suggested for bio-filter plantings in southern California are listed below.

| | |
|-------------------------|----------------------------|
| Seashore bent grass | Creeping wild rye |
| California brome | Perennial rye |
| Tufted hair grass | Pygmy-leaf lupine |
| Blue wild rye | Foothill meddlers |
| Red fescue | Purple needle grass |
| Tall (fowl) manna grass | Tomcat clover |
| Meadow barley | Regreen hybrid wheat grass |

All of these species are capable of performing the design functions of the swales.

Construction Costs

The construction cost for the various swale designs are estimated to be approximately \$0.50 per square foot, which compares favorably with the other Stormwater management practices.

5.0 OPERATION AND MAINTENANCE PROGRAM

Bio-filters

The Palomar College Community College District is responsible for maintenance of the bio-swales.

The operational and maintenance needs of a bioswale are:

- Vegetation management to maintain adequate hydraulic functioning and to limit habitat for disease-carrying animals.
- Animal and vector control.
- Periodic sediment removal to optimize performance.
- Trash, debris, grass trimmings, tree pruning, and leaf collection and removal to prevent obstruction of a Swale and monitoring equipment.
- Removal of standing water, which may contribute to the development of aquatic plant communities or mosquito breeding areas.
- Erosion and structural maintenance to prevent the loss of soil and maintain the performance of the Swale.

Inspection frequency

The facility will be inspected and inspection visits will be completely documented:

- Once a month at a minimum.
- After every large storm (after every storm monitored or those storms with more than 0.50 inch of precipitation.)
- On a weekly basis during extended periods of wet weather.

Aesthetic and Functional Maintenance

- Aesthetic maintenance is important for public acceptance of stormwater facilities. Functional maintenance is important for performance and safety reasons.

Aesthetic Maintenance

The following activities will be included in the aesthetic maintenance program:

- Grass Trimming. Trimming of grass will be done within the bioswale, around fences, at the inlet and outlet structures.
- Weed Control. Weeds will be removed through either mechanical means or by hand as determined by District maintenance staff. Herbicide will not be used because these chemicals may impact the water quality monitoring.

Functional Maintenance

Functional maintenance has two components: preventative maintenance and corrective maintenance.

Preventive Maintenance

Preventive maintenance activities to be instituted at a Swale are:

- Grass Mowing. Vegetation seed mix within the Swale is designed to be kept short to maintain adequate hydraulic functioning and to limit the development of faunal habitats.
- Trash and Debris. During each inspection and maintenance visit to the site, debris and trash removal will be conducted to reduce the potential for inlet and outlet structures and other components from becoming clogged and inoperable during storm events.
- Sediment Removal. Sediment accumulation, as part of the operation and maintenance program at a Swale, will be monitored once a month during the dry season, after every large storm (0.50 inch), and monthly during the wet season. Specifically, if sediment reaches a level at or near plant height, or could interfere with flow or operation, the sediment will be removed. If accumulation of debris or sediment is determined to be the cause of decline in design performance, prompt action (i.e., within ten working days) will be taken to restore the Swale to design performance standards. Actions will include using additional fill and vegetation and/or removing accumulated sediment to correct channeling or ponding. Characterization and Appropriate disposal of sediment will comply with applicable local, county, state, or federal requirements. The swale will be regraded, if the flow gradient has changed, and then replanted with sod.
- Removal of Standing Water. Standing water must be removed if it contributes to the development of aquatic plant communities or mosquito breeding areas.
- Fertilization and Irrigation. The vegetation seed mix has been designed so that fertilization and irrigation is not necessary. Fertilizers and irrigation will not be used to maintain the vegetation.
- Elimination of Mosquito Breeding Habitats. The most effective mosquito control program is one that eliminates potential breeding habitats.

Corrective Maintenance

Corrective maintenance is required on an emergency or non-routine basis to correct problems and to restore the intended operation and safe function of a Swale. Corrective maintenance activities include:

- Removal of Debris and Sediment. Sediment, debris, and trash, which impede the hydraulic functioning of a Swale and prevent vegetative growth, will be removed and properly disposed. Temporary arrangements will be made for handling the sediments until a permanent arrangement is made. Vegetation will be re-established after sediment removal.

- Structural Repairs. Once deemed necessary, repairs to structural components of a Swale and its inlet and outlet structures will be done within 10 working days. Qualified individuals (i.e., the designers, contractors or District maintenance staff) will conduct repairs where structural damage has occurred.
- Embankment and Slope Repairs. Once deemed necessary, damage to the embankments and slopes of Swales will be repaired within 10 working days).
- Erosion Repair. Where a reseeding program has been ineffective, or where other factors have created erosive conditions (i.e., pedestrian traffic, concentrated flow, etc.), corrective steps will be taken to prevent loss of soil and any subsequent danger to the performance of a Swale. There are a number of corrective actions that can be taken. These include erosion control blankets, riprap, sodding, or reduced flow through the area. Designers or contractors will be consulted to address erosion problems if the solution is not evident.

6.0 SUMMARY/CONCLUSIONS

Although the Palomar Community College District is not required to prepare and process a WQTR for this project, the District wishes to do its part to ensure that the new project meets current water quality standards. This WQTR has been prepared in accordance with San Marcos Storm Water Standards Manual approved in March, 2008 and has evaluated and addressed the potential pollutants associated with this project and the effects on water quality. A summary of the facts and findings associated with this project and the measures addressed by this WQTR are as follows:

- Since the parking lot area is over 5,000 sqft, we have categorized this project as a priority project. However, being that the surface is aggregate and pervious the parking area will be self treating.
- The beneficial uses for the receiving waters have been identified. None of these beneficial uses will be impaired or diminished due to the construction and operation of this project.
- Slopes will be protected to reduce or eliminate sediment discharge.
- Bioswales will be utilized to enhance the already self treating areas
- The proposed BMPs address mitigation measures to protect water quality and protection of water quality objectives and beneficial uses to the maximum extent practicable.
- A combination of site design, source control and treatment BMPs are implemented to maximize the treatment of storm water runoff and to address water quality treatment.
- There are no calculations for the bioswale since this IMP will be a redundant feature.

TREATMENT CONTROL BMP SELECTION DISCUSSION

Extended Detention Basins

- Extended detention basins are designed to provide temporary storage for runoff from multiple design events.

Advantages:

- Due to the simplicity of design, extended detention basins are relatively easy and inexpensive to construct and operate.
- Widespread application with sufficient capture volume can provide significant control of channel erosion and enlargement caused by changes to flow frequency relationships resulting from the increase of impervious cover in the watershed.

Limitations:

- Require relatively large land area.
- Generally not prescribed for drainage areas smaller than 10 acres.

Conclusion:

- As a result of the site constraints and limited filtration areas available extended detention basins are not a feasible option for the project site. The site is self-treating.

Bio swales

- Bio swales (filter strips) are densely vegetated, uniformly graded areas that treat sheet flow from adjacent impervious surfaces. Filter strips function by slowing runoff velocities, trapping particulate pollutants (suspended solids and trace metals) and providing infiltration. Swales can be natural or manmade. Vegetated swales can serve as part of a stormwater drainage system and can replace curbs, gutters and stormwater systems.

Advantages:

- If properly designed, vegetated and manmade swales can serve as an aesthetic, potentially inexpensive urban development or roadway drainage conveyance measure with significant collateral water quality benefits.
- Bio swales are best suited to treating runoff from roads, roof downspouts and small parking lots.
- Relatively simply to install.
- Relatively low-maintenance.

Limitations:

- Grassed swales cannot treat a very large drainage area. Large areas may be divided and treated using multiple swales.
- A thick vegetative cover is needed for these practices to function properly;
- They are not effective and may even erode when flow velocities are high, if the grass cover is not properly maintained.

Conclusion:

- Vegetated swales are suited to this type of development and provide adequate redundant treatment.

Infiltration basins

- An infiltration basin is a shallow impoundment that is designed to infiltrate stormwater. Infiltration basins use the natural filtering ability of the soil to remove pollutants in stormwater runoff.

Advantages:

- Provides 100% reduction in the load discharge to surface waters.
- Approximation of pre-development hydrology where a significant portion of annual rainfall runoff is infiltrated rather than flushed directly into creeks.
- Can be useful for providing control of channel forming (erosion) during high frequency (generally less than the 2-year) flood events.
- As an underground BMP, trenches are unobtrusive and have little impact on site aesthetics.

Limitations:

- Infiltration basins require a minimum soil infiltration rate of 0.5 in/hr, not appropriate at sites with Hydrologic Soil Types C and D.
- Not suitable on fill sites or steep slopes.
- Difficult to restore functioning of infiltration basins once clogged.

Conclusion:

- Infiltration basins are not a feasible option for the project site. The site is self-treating.

Wet Ponds

- Wet ponds are constructed basins that have a permanent pool of water throughout the year (or at least throughout the wet season) and differ from constructed wetlands primarily in having a greater average depth.

Advantages:

- If properly designed, constructed and maintained, wet basins can provide substantial aesthetic/recreational value and wildlife and wetland habitat.
- Due to the presence of the permanent wet pool, properly designed and maintained wet basins can provide significant water quality improvements across a relatively broad spectrum of constituents including dissolved nutrients.

Limitations:

- Generally not prescribed for drainage areas smaller than 10 acres.
- Requires relatively large storage areas.
- Improperly designed or maintained ponds may result in stratification and anoxic conditions that can promote the release of nutrients and metals.

Conclusion:

- Due to the landscape of the property and proximity to residences, wet ponds are not a feasible option for the project site. The site is self-treating.

Drainage Inserts

- Drainage inserts are manufactured filters or fabric placed in a drop inlet to remove sediment and debris. There are a multitude of inserts of various shapes and configurations, typically falling to one of three different groups: socks, boxes and trays.

Advantages:

- Does not require additional space as inserts are already a component of the standard drainage systems.
- Easy access for inspection and maintenance.
- As there is no standing water, there is little concern for mosquito breeding.

Limitations:

- Performance is likely significantly less than treatment systems that are located at the end of the drainage system such as ponds and vaults.
- Usually not suited for large areas or areas with trash or leaves that can plug the insert.

Conclusion:

- Drainage inserts are not a feasible option for this project site. The site is self-treating.

Hydrodynamic Separator Systems

- Hydrodynamic separators are flow-through structures with a settling or separation unit to remove sediments and other pollutants that are widely used in storm water treatment. No outside power source is required, because the energy of the flowing water allows the sediments to efficiently separate. Depending on the type of unit, this separation may be by means of swirl action or indirect filtration. Variations of this unit have been designed to meet specific needs. Hydrodynamic separators are most effective where the materials to be removed from runoff are heavy particulates, which can be settled - or floatables -which can be captured, rather than solids with poor settleability or dissolved pollutants.

Advantages:

- May provide the desired performance in less space and therefore less cost.
- May be more cost-effective pre-treatment devices than traditional wet or dry basins.
- Mosquito control may be less of an issue than with traditional wet basins.

Limitations:

- The area served is limited by the capacity of the largest models.
- As the products come in standard sizes, the facilities will be oversized in many cases relative to the design treatment storm, increasing cost.
- The non-steady flows of stormwater decreases the efficiency of vortex separators from what may be estimated or determined from testing under constant flow.

Conclusion:

- Hydrodynamic separators are not suited to this type of development and are not used on this project site. The site is self-treating.

| Priority Project Categories | General Pollutant Categories | | | | | | | | |
|---|------------------------------|------------------|--------------|---------------------|----------------|-----------------------------|------------------|--------------------|------------------|
| | Sediment | Nutrients | Heavy Metals | Organic Compounds | Trash & Debris | Oxygen Demanding Substances | Oil & Grease | Bacteria & Viruses | Pesticides |
| Detached Residential Development | X | X | | | X | X | X | X | X |
| Attached Residential Development | X | X | | | X | P ⁽¹⁾ | P ⁽²⁾ | P | X |
| Commercial Development >100,000 ft ² | P ⁽¹⁾ | P ⁽¹⁾ | | P ⁽²⁾ | X | P ⁽⁵⁾ | X | P ⁽³⁾ | P ⁽⁵⁾ |
| Heavy industry /industrial development | X | | X | X | X | X | X | | |
| Automotive Repair Shops | | | X | X ⁽⁴⁾⁽⁵⁾ | X | | X | | |
| Restaurants | | | | | X | X | X | X | |
| Hillside Development >5,000 ft ² | X | X | | | X | X | X | | X |
| Parking Lots | P ⁽¹⁾ | P ⁽¹⁾ | X | | X | P ⁽¹⁾ | X | | P ⁽¹⁾ |
| Retail Gasoline Outlets | | | X | X | X | X | X | | |
| Streets, Highways & Freeways | X | P ⁽¹⁾ | X | X ⁽⁴⁾ | X | P ⁽⁵⁾ | X | | |

X = anticipated
 P = potential
 (1) A potential pollutant if landscaping exists on-site.
 (2) A potential pollutant if the project includes uncovered parking areas.
 (3) A potential pollutant if land use involves food or animal waste products.
 (4) Including petroleum hydrocarbons.
 (5) Including solvents.

of pollutants of concern as other feasible BMPs listed in Table 3.

Table 3. Treatment Control BMP Selection Matrix⁽¹⁾.

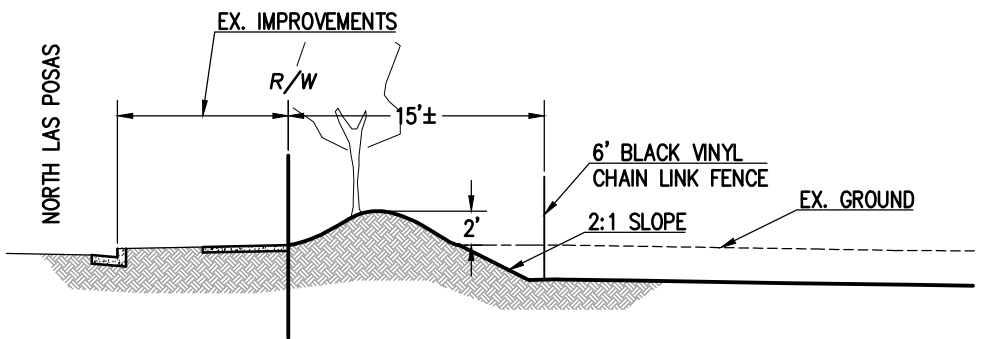
| Pollutants of Concern | BMP Types | | | | | | | |
|--|-------------------------------|-----------------------------|------------------------|--|---------------|----------------------|-------------------------|-------------------------------------|
| | Bioretention Facilities (LID) | Settling Basins (Dry Ponds) | Wet Ponds and Wetlands | Infiltration Facilities or Practices (LID) | Media Filters | High-rate biofilters | High-rate media filters | Trash Racks & Hydro-dynamic Devices |
| Coarse Sediment and Trash | High | High | High | High | High | High | High | High |
| Pollutants that tend to associate with fine particles during treatment | High | High | High | High | High | Medium | Medium | Low |
| Pollutants that tend to be dissolved following treatment | Medium | Low | Medium | High | Low | Low | Low | Low |

Notes on Treatment Control BMP Categories

All rankings are relative. Ranking of all facilities assumes proper sizing, design, and periodic maintenance. Following are general descriptions of each category.

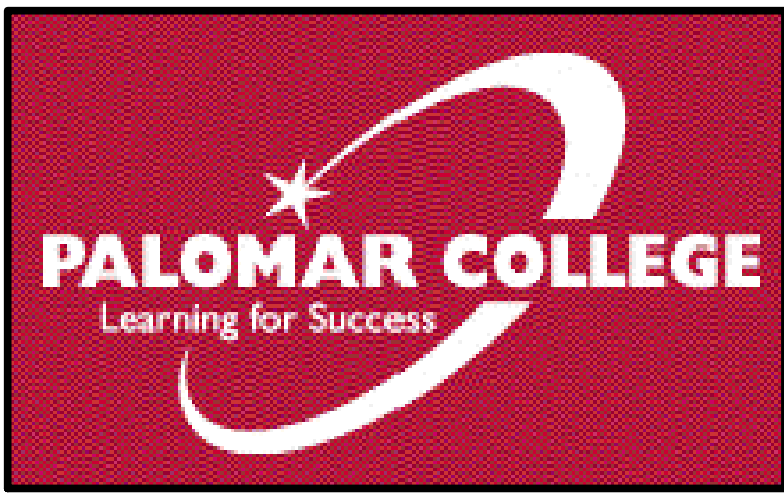
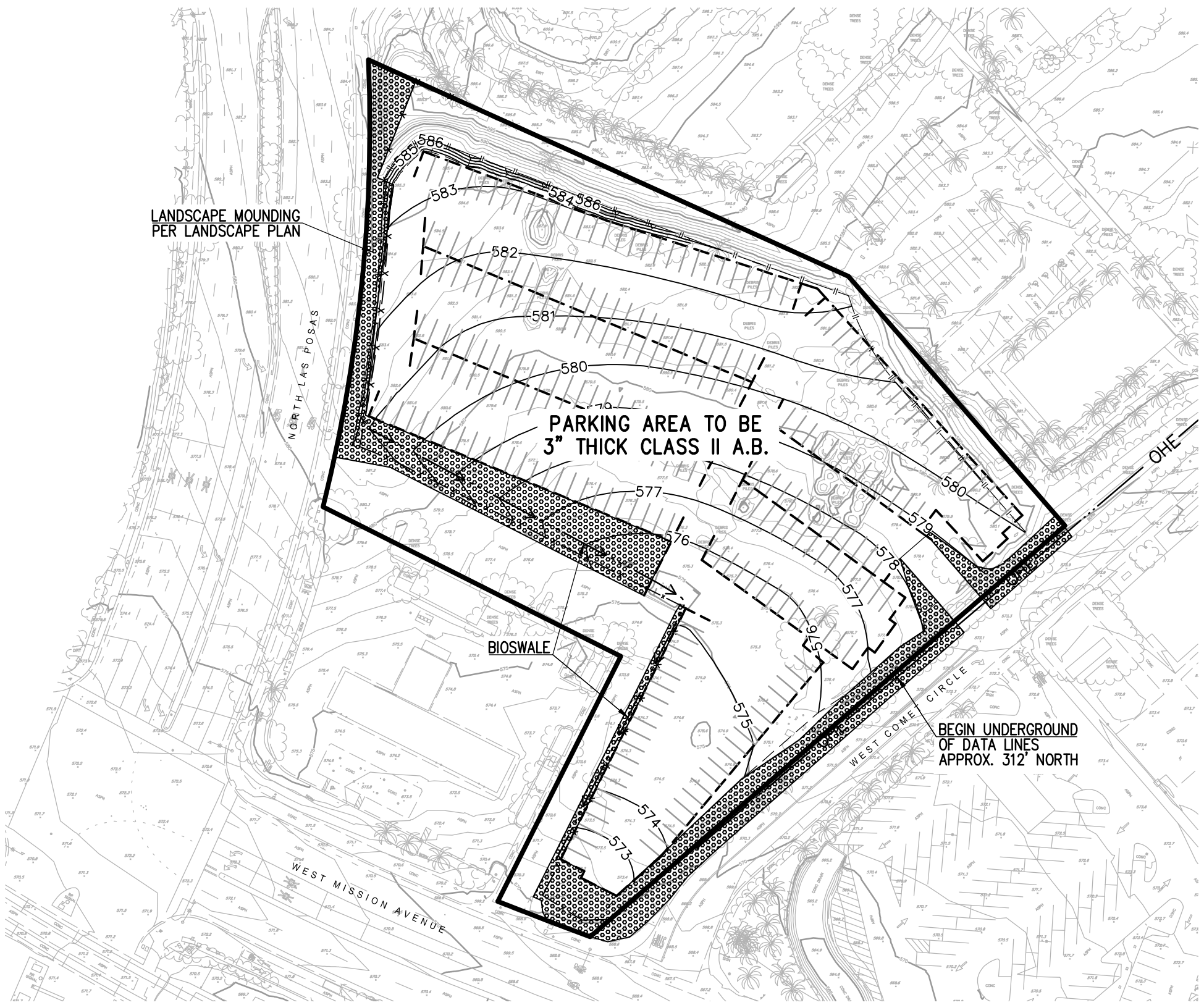
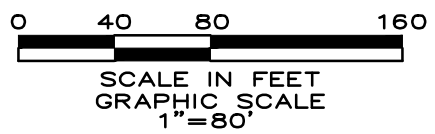
WEST COMET CIRCLE PARKING LOT

WQTR EXHIBIT



SECTION A-A

N.T.S.



Planning ▲ Engineering ▲ Surveying ▲ Telecom

MASSON
& ASSOCIATES, INC.

200 East Washington Ave., Suite 200
Escondido, CA 92025
P. 760.741.3570
F. 760.741.1786

www.masson-assoc.com