



TECHNICAL MEMORANDUM

To: Laura Shinn, Director, Facilities Planning, San Diego State University

From: Aravind Batra, P.E. P2S Engineering, Inc.

Cc: Michael Haberkorn, Gatzke, Dillon & Ballance

Subject: San Diego State University Plaza Linda Verde EIR Addendum - Energy Analysis

Date: March 24, 2014

Attachments: Figures 1–4

This memorandum provides the energy impacts analysis for proposed revisions to the previously approved San Diego State University Plaza Linda Verde project located in San Diego, California, and is prepared as part of an Addendum to the Plaza Linda Verde Final Environmental Impact Report ("EIR") (May 2011).

The memorandum is intended to (1) briefly summarize the energy impacts and significance conclusions identified in the May 2011 Final SDSU Plaza Linda Verde EIR and (2) discuss whether the proposed revisions would result in new significant environmental effects or a substantial increase in the severity of significant effects previously identified in the May 2011 Final EIR.

1.0 PROJECT LOCATION AND DESCRIPTION

The proposed project site is located on the San Diego State University (SDSU) campus, within the College Area of the City of San Diego (City), San Diego County, California (Figures 1 and 2). Specifically, the project site is located generally between Aztec Walk and Montezuma Road in the southeastern portion of campus (Figure 3).

The Plaza Linda Verde project consists of a mixed-use project that would straddle both east and west sides of College Avenue between the SDSU Transit Center/Pedestrian Bridge and Montezuma Road (Figure 4). The project would include commercial/retail uses on the first floor of several buildings and residential uses on the upper floors. A stand-alone parking structure would also be constructed west of College Avenue. The project was analyzed in the Plaza Linda Verde Environmental Impact Report (EIR), which was finalized and certified in May 2011. Table 1 provides a summary of all buildings proposed and analyzed in the May 2011 EIR.

As SDSU has proceeded with preliminary project planning and design, several modifications to the approved project are being proposed. These changes include modifications to Buildings 1, 2, and 3 (all located west of College Avenue) and are summarized in Table 2. No changes to Buildings 4, 5, 6, or 7 would occur; however, information regarding these buildings has been provided in Tables 1 and 2 for informational purposes. Additionally, no changes to the building footprints or project area are proposed.

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Table 1

Approved – May 2011 Final Plaza Linda Verde EIR

Project	Total Size	Retail	Rentable	Residential	Housing	g Units	Beds	Parking	Building
Components	(GSF)	Square Feet (GSF)	Square Feet (SF)	Square Feet (GSF)	Apartment Style	Dormitory Style		Spaces	Stories
Building 1	118,550	25,000	24,340	93,550	84	0	352	0	5
Building 2	85,640	20,000	17,975	65,640	60	0	264	0	5
Building 3 (Parking Structure)	128,925	2,000	1,815	0	0	0	0	342	4 (+1)
Building 4	123,004	23,000	13,445	100,004	63	0	256	69–110	5
Building 5	157,971	20,000	19,634	137,971	87	0	344	91–110	5
Building 6	48,070	0	0	48,070	44	0	192	0	4
Building 7	55,300	0	0	55,300	52	0	224	0	4
Total	717,460	90,000	77,209	500,535	390	О	1,632	502–562	n/a

Table 2

Revised — March 2014 Addendum to the May 2011 Final Plaza Linda Verde EIR

Project Components	Total Size (GSF)	Retail Square	Rentable Square	Residential Square Feet	Housin	g Units	Beds	Parking Spaces	Building Stories
		Feet (GSF)	Feet (SF)	(GSF)	Apartment Style	Dormitory Style			
Building 1*	139,329	20,553	19,902	119,329	85**	187	359	0	6
Building 2*	117,387	14,868	14,056	102,519	68**	158	300	0	6
Building 3 (Parking Structure)*	143,693	0	o	0	0	0	0	392	7
Building 4	123,004	23,000	13,445	100,004	63	0	256	69–110	5
Building 5	157,971	20,000	19,634	137,971	87	0	344	91–110	5
Building 6	48,070	0	0	48,070	44	0	192	0	4
Building 7	55,300	0	0	55,300	52	0	224	0	4
Total	784,754	78,421	67,037	563,193	399	345	1,675	552-612	n/a

^{*}Buildings that have changed since the May 2011 Final EIR and are the subject of the March 2014 Addendum analysis

As indicated in Table 2, the proposed changes to the previously approved project would include a change in residential units from apartment-style units to dormitory rooms. Table 2 shows the number of dormitory rooms (345) that now would be built in Buildings 1 and 2 and their associated apartment-equivalent (153). Other changes include an increase in total gross square footage from 717,460 to 784,754; a decrease in retail gross square footage from 90,000 to 78,421; an increase in residential gross square footage from to 500,535 to 563,193; an increase in overall bed count from 1,632 to 1,675; and the addition of 50 parking spaces to Building 3. The increased square footage is associated with an increase in one additional floor to Buildings 1 and 2, and an increase from four stories to seven stories in Building 3 (parking structure) .

^{**}Apartment equivalent has been calculated. The total housing units planned for Buildings 1 and 2 should be conveyed in either "apartment style" or "dormitory style" numbers, not both. For example, Building 1 would include 85 apartment style units *OR* 187 dormitory style units, not both.

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2.0 METHODS

I have reviewed the May 2011 Plaza Linda Verde Final EIR Section 3.11, Public Utilities and Services System and related materials. I also am familiar with the revisions presently proposed to the Plaza Linda Verde project relevant to analysis of the utilities and service systems.

A brief summary of the conclusions reached in the Final EIR relative to energy (electricity and natural gas) is provided below, followed by analysis of the effect, if any, of the proposed revisions to the Project and the conclusions reached in the Final EIR relating to energy use.

3.0 SUMMARY OF MAY 2011 FINAL PLAZA LINDA VERDE EIR IMPACTS AND CONCLUSIONS

3.1 Electrical System

The Plaza Linda Verde Final EIR determined that electricity to the Project would be provided by the SDSU Central Plant, which produces approximately 77 million kilowatt hours of electricity per year. (Final EIR (May 2011), pp. 3.11-69 to 3.11-72.) Based on the annual production potential of the on-campus plant, the Project would not result in the use of excessive amounts of electricity and, therefore, potential impacts would be less than significant. (*Ibid.*) Further, the Project's LEED Silver commitment will maximize energy efficiencies associated with project design and operation. (*Ibid.*)

3.2 Natural Gas System

The Plaza Linda Verde Final EIR determined that the Project would use a small percentage of the current average annual natural gas consumption of the entire campus. (Final EIR (May 2011), pp. 3.11-67 to 3.11-72.) Therefore, the Project would not result in the use of excessive amounts of natural gas and potential impacts would be less than significant. Further, the Project's LEED Silver commitment will maximize energy efficiencies associated with project design and operation. (*Ibid*.)

4.0 IMPACT ANALYSIS

4.1 Electrical System

A review of the proposed Project revisions relative to square footages for the residential units and retail spaces, and their associated calculated demands, reveals that although there will be an increase in electrical demand for the proposed facilities as a result of the proposed revisions to the Project, the demand can still be met by the electrical distribution system currently existing at the campus. Therefore, the proposed revisions would not alter the conclusions presented in the May 2011 Final EIR.

4.2 Natural Gas System

A review of the proposed Project revisions relative to square footages for the residential units and retail spaces, and their associated calculated demands, reveals that although there will be an increase in gas demand for the proposed facilities as a result of the proposed revisions to the Project, the demand can still be met by the existing SDG&E gas distribution system. Therefore, the proposed revisions would not alter the conclusions presented in May 2011 Final EIR.

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5.0 CONCLUSIONS

Based on a review of the Plaza Linda Verde Final EIR and the revisions now proposed to the approved project, it is my determination that the proposed revisions would not result in any new significant effects, nor would the revisions result in a substantial increase in the severity of significant effects previously identified in the Final EIR. Because no new significant impacts would occur, nor would there be a substantial increase in the severity of previously identified significant effects, no additional mitigation measures beyond those identified in the May 2011 Final Plaza Linda Verde EIR would be required.

Sincerely,

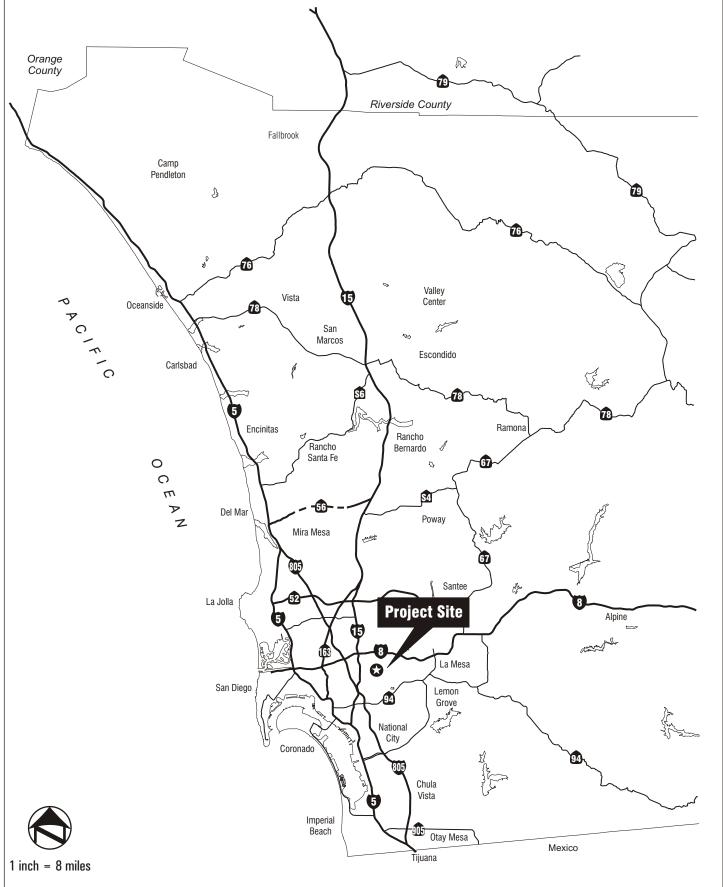
P₂S Engineering, Inc.

Aravind Batra, P.E., LC, LEED AP

Principal

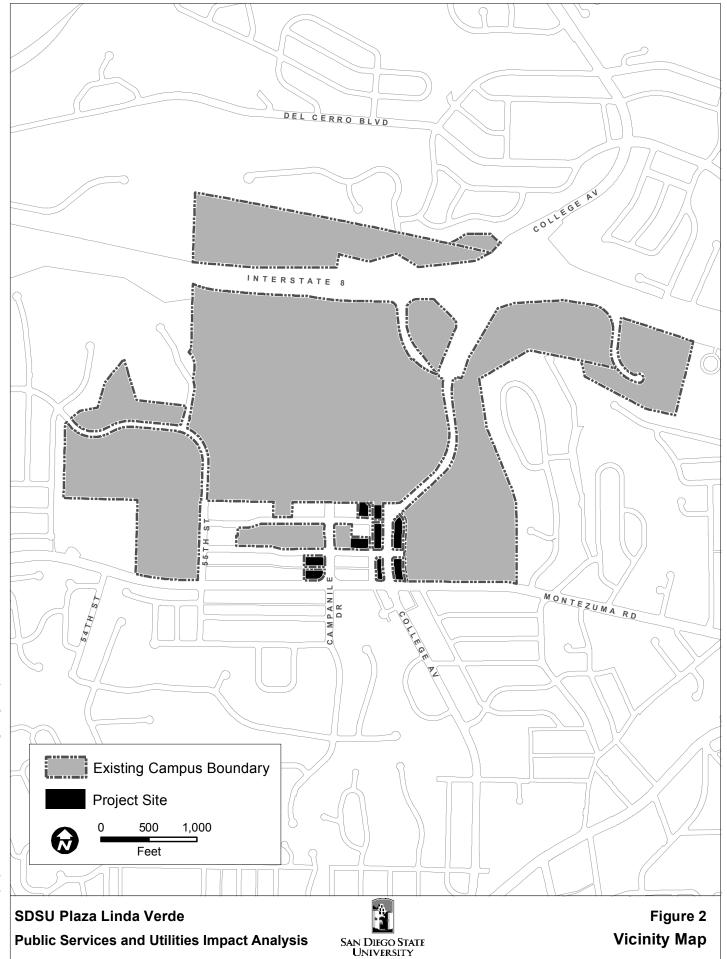
6.0 REFERENCES

SDSU Utility Master Plan



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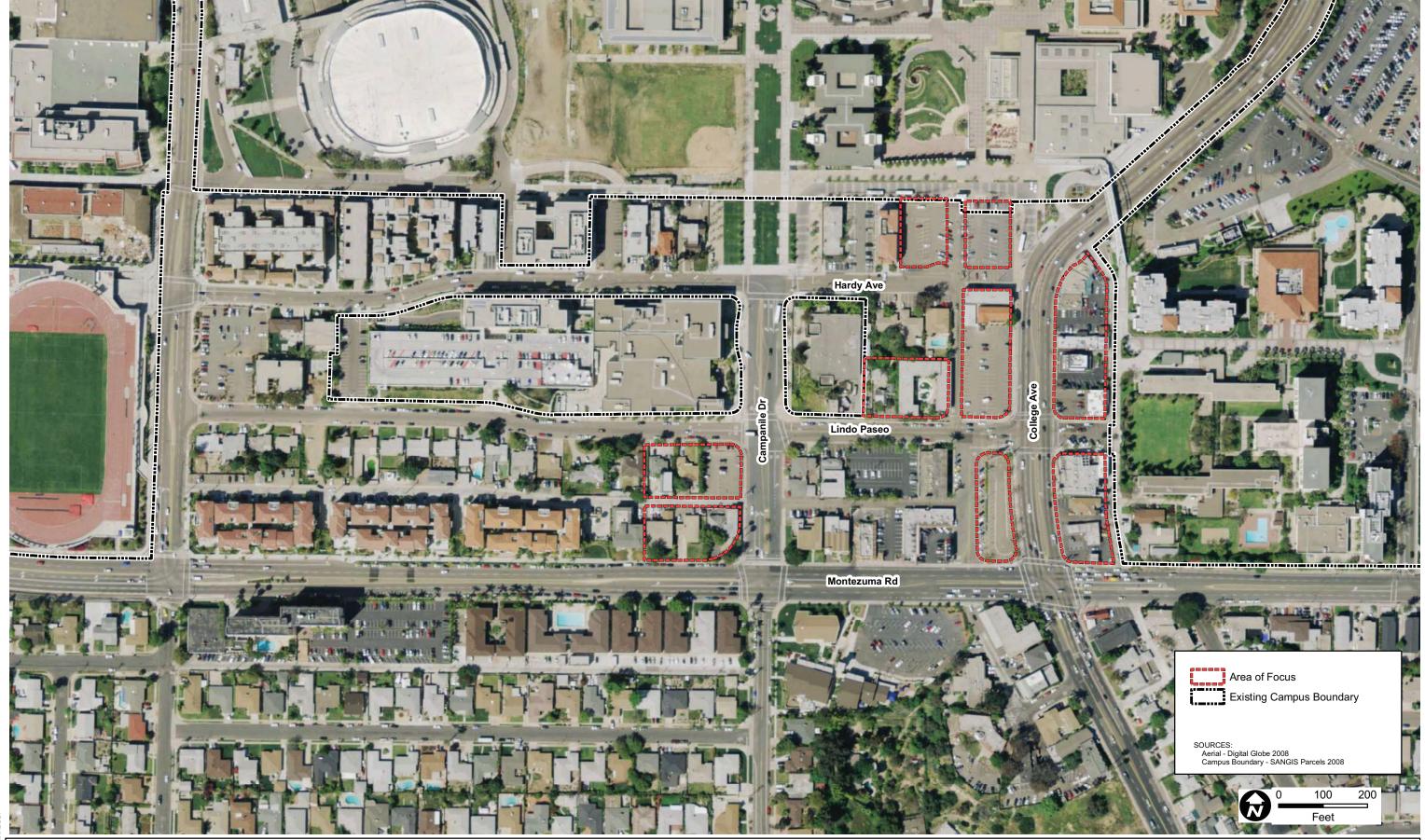








Figure 4
Proposed Site Plan

Snipes-Dye associates

William A. Snipes, P.E. Principal

William R. Dick, P.E. Principal

Louis Acuña, P.E. Principal

Matthew P. Kurtz, P.E. Project Manager

David Ambler, L.S. Survey Manager

Robert L. Bruckart, P.E. Principal Emeritus

G. Howard Dye, L.S. Retired

File: SD2913

TECHNICAL MEMORANDUM

To: Laura Shinn, Director, Facilities Planning, San Diego State

University

From: Matthew Kurtz, P.E., Project Manager, Snipes-Dye Associates

Cc: Michael Haberkom, Gatzke, Dillon & Balance Subject: San Diego State University Plaza Linda Verde EIR

Addendum – Wet Utilities Analysis

Date: March 24, 2014

Attachments: Figures 1-4

This memorandum provides the wet utilities impact analysis for proposed revisions to the previously approved San Diego State University Plaza Linda Verde project located in San Diego, California, and is prepared as part of an Addendum to the Plaza Linda Verde Final Environmental Impact Report ("EIR") (May 2011).

The memorandum is intended to (1) briefly summarize the wet utilities impacts and significance conclusions identified in the May 2011 Final SDSU Plaza Linda Verde EIR and (2) discuss whether the proposed revisions would result in new significant environmental effects or a substantial increase in the severity of significant effects previously identified in the May 2011 Final EIR.

1.0 PROJECT LOCATION AND DESCRIPTION

The proposed project site is located on the San Diego State University (SDSU) campus, within the College Area of the City of San Diego (City), San Diego County, California (Figures 1 and 2). Specifically, the project site is located generally between Aztec Walk and Montezuma Road in the southeastern portion of campus (Figure 3).

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As SDSU has proceeded with preliminary project planning and design, several modifications to the approved project are being proposed. These changes include modifications to Buildings 1, 2, and 3 (all located west of College Avenue) and are summarized in Table 2. No changes to Buildings 4, 5, 6, or 7 would occur; however, information regarding these buildings has been provided in Tables 1 and 2 for informational purposes. Additionally, no changes to the building footprints or project area are proposed.

Table 1 Approved – May 2011 Final Plaza Linda Verde EIR

Project Componen	Total Size	Retail Square	Rentabl e	Residentia 1 Square	Housing Units Apartment Style		Beds	Parkin g	Buildi ng
ts	(GSF)	Feet (GSF)	Square Feet (SF)	Feet (GSF)	Apartm ent Style	Dormito ry Style		Spaces	Stories
Building 1	118,550	25,000	24,340	93,550	84	0	352	0	5
Building 2	85,640	20,000	17,975	65,640	60	0	264	0	5
Building 3 (Parking Structure)	128,925	2,000	1,815	0	0	0	0	342	4 (+1)
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Total	717,460	90,000	77,209	500,535	390	0	1,632	502- 562	n/a

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^{*}Buildings that have changed since the May 2011 Final EIR and are the subject of the March 2014 Addendum analysis **Apartment equivalent has been calculated. The total housing units planned for Buildings 1 and 2 should be conveyed in either "apartment style" or "dormitory style" numbers, not both. For example, Building 1 would include 85 apartment style units *OR* 187 dormitory style units, not both.

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2.0 METHODS

I have reviewed the May 2011 Plaza Linda Verde Final EIR Section 3.11, Public Utilities and Services System and related materials. I also am familiar with the revisions presently proposed to the Plaza Linda Verde project relevant to analysis of the utilities and service systems.

A brief summary of the conclusions reached in the Final EIR relative to wet utilities is provided below, followed by analysis of the effect, if any, of the proposed revisions to the Project and the conclusions reached in the Final EIR relating to these utilities.

3.0 SUMMARY OF MAY 2011 FINAL PLAZA LINDA VERDE EIR IMPACTS AND CONCLUSIONS

3.1 WATER SUPPLY AND DISTRIBUTION SYSTEM

The Final EIR reported that the approved Project would result in a potentially significant impact to water distribution infrastructure because the existing water infrastructure is inadequately sized to serve the Project and because the Project would require additional capacity. (Final EIR, pp. 3.11-51 to 3.11-57.) The EIR found that this impact would be effectively mitigated through adoption of Mitigation Measure PSF-1. (Id. at p. 3.11-72.)

3.2 WASTEWATERSYSTEM

The Final EIR determined that the approved Project's wastewater generation rate likely would exceed the capacity of the existing sewer mains, assuming they are currently operating at capacity, thereby resulting in a potentially significant impact. (Final EIR, pp. 3.11-57 to 3.11-60.) The EIR found that this impact would be effectively mitigated through adoption of Mitigation Measures PSF-2 and PSF-4. (Id. at pp. 3.11-72 to 3.11-73.)

3.3 RECYCLED WATER SYSTEM

The Final EIR stated that recycled water is not available in the College Area and the City of San Diego does not have plans to extend the recycled water infrastructure from either the northern or southern service area to the College Area. (Final EIR, p. 3.11-60.) Therefore, the approved Project would not result in potentially significant impacts relate

4.0 IMPACT ANALYSIS

4.1 WATER SUPPLY AND DISTRIBUTION SYSTEM

The proposed revisions to the approved Project would result in approximately a 1-2% overall increase in water demand than what was analyzed in the Final EIR. This limited increase in demand would not result in a substantial increase in the severity of the impact previously identified in the Final EIR. Additionally, it is noted that since certification of the May 2011 Final EIR, the City of San Diego has completed water distribution system improvements in the area of the campus that will have the effect of improving distribution conditions over those considered in the Final EIR.

4.2 WASTEWATER SYSTEM

The proposed revisions to the approved Project would result in approximately a 2% increase in wastewater flow per day. This limited increase in wastewater flow would not result in a substantial increase in the severity of the potentially significant impacts previously identified in the Final EIR.

4.3 RECYCLED WATER SYSTEM

The proposed revisions to the approved Project would result in no change relative to recycled water systems. Therefore, the proposed revisions would not result in a new significant effect nor a substantial increase in the severity of a potentially significant impact previously identified in the Final EIR.

5.0 CONCLUSIONS

Based on a review of the Plaza Linda Verde Final EIR and the revisions now proposed to the approved project, it is my determination that the proposed revisions would not result in any new significant effects, nor would the revisions result in a substantial increase in the severity of significant effects previously identified in the Final EIR. Because no new significant impacts would occur, nor would there be a substantial increase in the severity of previously identified significant effects, no additional

mitigation measures beyond those identified in the May 2011 Final Plaza Linda Verde EIR would be required.

Sincerely yours,

SNIPES-DYE ASSOCIATES

Matthew P. Kurtz, P.E.

Project Manager

6.0 REFERENCES

San Diego State University, Final EIR Utility excerpt, May 2011

San Diego State University, Campus Utility Master Plan, 2009

San Diego State University, Campus Utility Master Plan Update, 2011

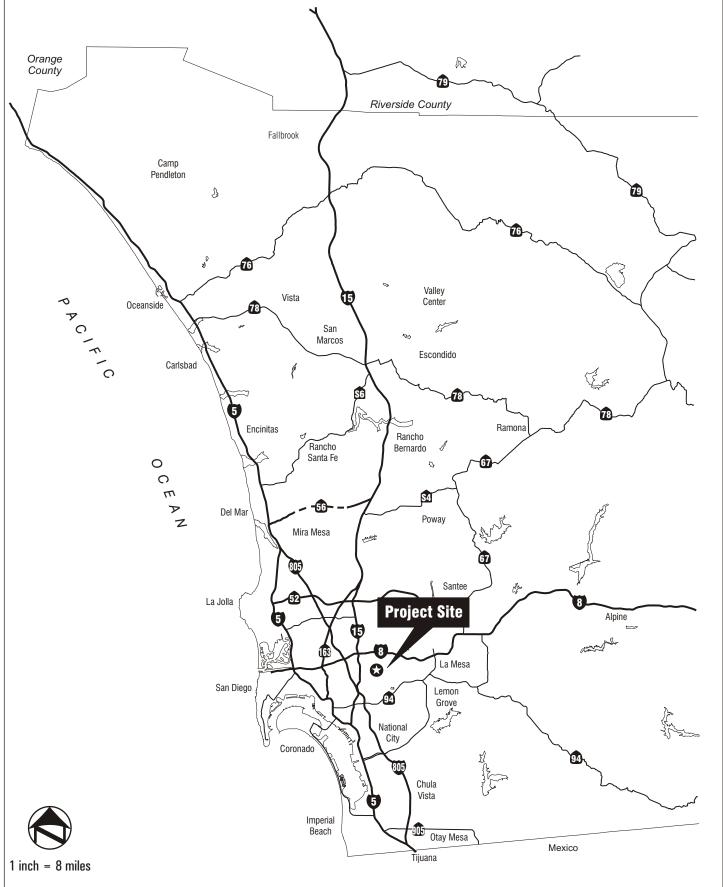
City of San Diego, Public Utilities Water Design Guide, April 2013

City of San Diego, Public Utilities, Sewer Design Guide, February 2013

City of San Diego, CIP Project Information Website

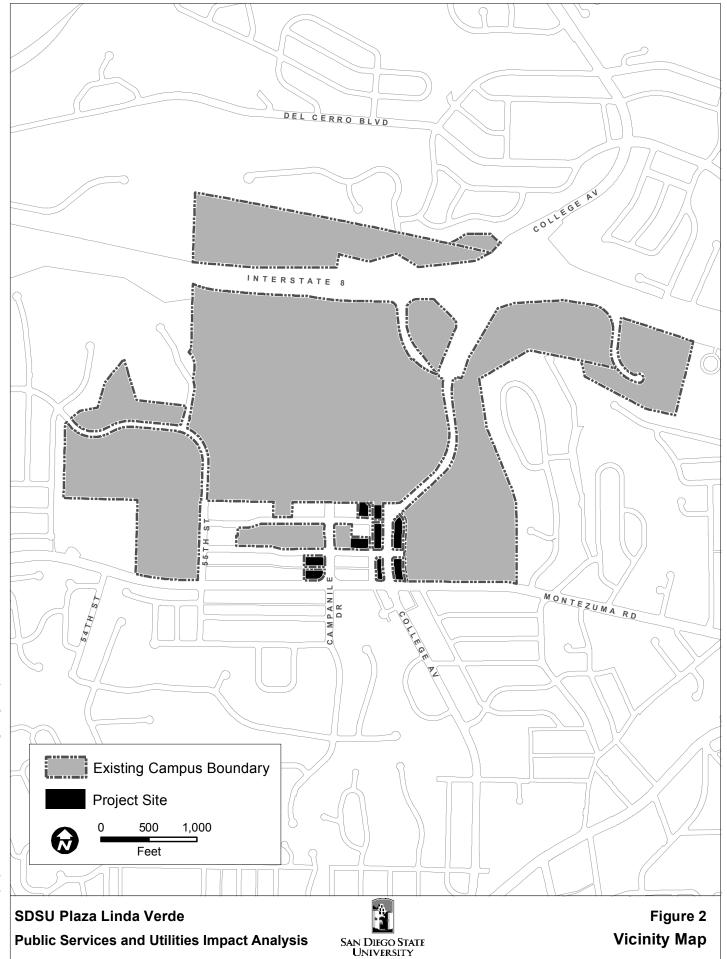
City of San Diego, Urban Water Management Plan, 2010 (via City of San Diego Website)

County Water Authority, Urban Water Management Plan, 2010 (via County Water Authority website)



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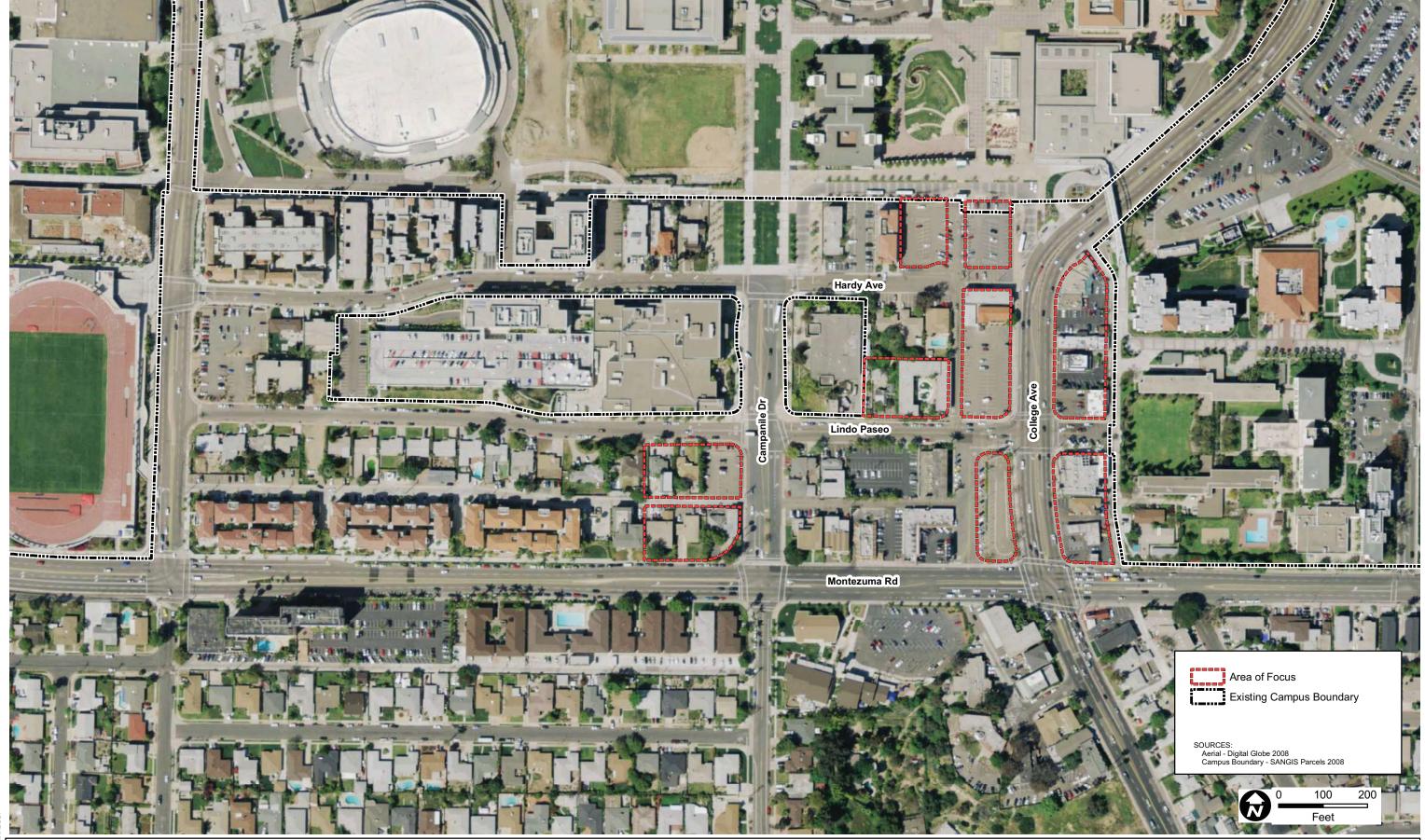








Figure 4
Proposed Site Plan