State Clearinghouse Number 2002041161

West Parcel Solar Project

Project Final Tiered EIR

Volume 3
Response to Public Comments on the Draft EIR

MT. SAN ANTONIO COLLEGE
Facilities Planning and Management
Walnut, California

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Planning . Environmental . Policy
September 2017

PROJECT FINAL TIERED EIR

WEST PARCEL SOLAR PROJECT

Response to Public Comments

SCH 2002041161

Volume 3

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West Parcel Solar Project
Response to Public Comments

September 10, 2017

Section 1.0: Evaluation of Response to Comments Guidelines

Section 15088 of the CEQA Guidelines states the following requirements:

(a) The Lead Agency shall evaluate comments on environmental issues received from persons who reviewed the Draft EIR and shall prepare a written response. The Lead Agency shall respond to comments received during the noticed comment period and any extensions and may respond to late comments.

(b) The Lead Agency shall provide a written proposed response to a public agency on comments made by that public agency at least 10 days prior to certifying an environmental impact report.

(c) The written response shall describe the deposition of significant environmental issues raised (e.g. revisions to the proposed project to mitigate anticipated impacts or objections). In particular, the major environmental issues raised when the Lead Agency's position is at variance with recommendations and objections raised in the comments must be addressed in detail giving reasons why specific comments and suggestions were not accepted. There must be a good faith, reasoned analysis in response. Conclusory statements unsupported by factual information will not suffice.

(d) The Response to Comments may take the form of a revision to the Draft EIR or may be a separate section in the Final EIR. Where the response to comments makes important changes in the information contained in the text of the Draft EIR, the Lead Agency should either:

(1) Revise the text in the body of the EIR, or
(2) Include marginal notes showing that the information is revised in the Response to Comments.

Section 2.0: Public Review Period and Public Notices

The West Parcel Solar Project Draft EIR, dated July 2017, was circulated locally for public review for forty-five days from July 28, 2017 to September 12, 2017. The Draft EIR was forwarded by the Mt. San Antonio Community College District (the "District") to the State Clearinghouse, seventeen (17) federal/state/local agencies and to three (3) interest groups.

The *Notice of Completion (NOC)* was filed with the State Clearinghouse (SCH) on July 27, 2017. The SCH review period was also from August 1, 2017 to September 14, 2017. The Governor's Office of Planning and Research correspondence of September 15, 2017 indicates the District has complied with all State Clearinghouse CEQA review requirements (Appendix F4). A list of State Agencies receiving the DEIR is provided herein.

Copies of the NOC were also forwarded to the cities of Covina, Diamond Bar, Industry, Pomona, San Dimas, Walnut, West Covina, County of Los Angeles Department of Public Works, Los Angeles Metropolitan Transit Authority, Foothill Transit Agency, Cal Poly Pomona, Walnut Valley Unified School District, South Coast Air Quality Management District and to other local concerned agencies. Copies were also sent to the Walnut Public Library, Pomona Public Library and to the Mt. San Antonio College Library.

The *Notice of Completion (NOC)* was published in two local newspapers with area geographical coverage; the Inland Valley Daily Bulletin and the San Gabriel Valley Tribune on July 28, 2017. The local agency 45-day review period extended from July 28, 2017 to September 12, 2017.The Notice of Public Hearing for October 11, 2017 was published in the same newspapers on September 29, 2017.

The *Notice of Completion of an Environmental Impact Report (NOC)* was filed with the County of Los Angeles Registrar/Recorder/Clerk on July 27, 2017. Copies of all Notices are included in Appendices A, B.

The custodian of the documents and other materials that constitute the record of proceedings for the Final EIR is Rebecca Mitchell, Manager, Facilities Planning and Management, 1100 North Grand Avenue, Walnut, California 91789. Ms. Mitchell may be reached at (909) 274-5175 or at facilitiesplanning@mtsac.edu.

The Final EIR consists of four documents, the Draft EIR (Volume 1), Draft EIR Appendices (Volume 2), Response to Public Comments (Volume 3) and Response to Comments Appendices (Volume 4).

Comments on the Draft EIR were received from the City of Walnut, and from United Walnut Taxpayers. No regional, state or federal agencies provided comments on the Draft EIR.

Section 3.0: State Agency Comments with District Responses

No comments were received from state agencies. The State Clearinghouse issues a "compliance letter" to the District dated September 15, 2017 (Appendix F4).

Section 4.0: Local Agency Comments with District Responses

4.1 South Coast Air Quality Management District, Lijin Sun, J. D., September 1, 2017

Comment 4.1.1: SCAQMD recommended the following revision to AQ-02 in the Draft EIR:

AQ-02. Project construction contracts shall prohibit vehicle and engine idling in excess of five (5) minutes and ensure that all off-road equipment is compliant with the CARB's in-use off-road diesel vehicle regulations and SCAQMD Rule 1186 and 1186.1 certified street sweepers or roadway washing trucks, and all internal combustion engines/construction equipment operating on the project site shall meet EPA-Certified Tier 4 ***2*** *emissions standards.* ~~***or higher according to the adopted project start date requirements.***~~ *A copy of each unit's certified tier specification, BACT documentation and CARB or SCAQMD operating permit shall be provided to the construction manager at the time of mobilization of each applicable unit of equipment. Facilities Planning and Management shall ensure compliance.*

Response 4.1.1: The revisions recommended by SCAQMD for AQ-02 are hereby added to the Draft EIR and to the project and master file mitigation monitoring programs.

Comment 4.1.2: SCAQMD recommended the following additional mitigation measure:

Require the use of 2010 and newer haul trucks (e.g. material delivery trucks and soil import/export). In the event that the 2010 model year or newer diesel haul trucks cannot be obtained, provide documentation as information becomes available and use trucks that meet EPA 2007 model year NOx emission requirements, at a minimum. Additionally, consider other measures such as incentives, phase-in schedules for clean trucks etc.

Response 4.1.2: The following new mitigation measure is hereby added to the Draft EIR and to the project and master file mitigation monitoring programs:

AQ-12. The District shall require the use of 2010 and newer haul trucks (e.g. material delivery trucks and soil import/export). In the event that the 2010 model year or newer diesel haul trucks cannot be obtained, provide documentation as information becomes available and use trucks that meet EPA 2007 model year NOx emission requirements, at a minimum. Facilities Planning and Management shall ensure compliance.

4.2 City of Walnut

No comments were received from the City of Walnut.

Section 5.0: Interest Group Comments with District Responses

5.1 Gabriellino Band of Mission Indians – Kizh Nation, Andrew Salas, Chairman, August 30, 2017

Comment 5.1.1: Please find this letter as a written request for consultation regarding the above-mentioned project (i.e., West Parcel Solar Project) pursuant to Public Resources Code Section, subd. (d)).

Response 5.1.1: The District has initiated consultation with the Kizh Nation concerning the West Parcel Solar project. Their correspondence is included as Appendix D1.

5.2 United Walnut Taxpayers, Layla Abou-Taleb, President, September 7, 2017

Comment 5.2.1: Aesthetic Effects

1. There are three aspects to the aesthetics review, some of which have not been known until the release of this DEIR. They include motorist views of hillside losses, solar project building pad asphalt surface, motorists views from street level south off Amar Road, and blocked views and of residents and motorists.

a. Motorist View of Building Pad and Asphalt Surface. The disclosure of an asphalt surface covering the building pad was not disclosed until this DEIR. The pictures shown below displays the hillside losses that will be experienced, and a perspective rendering based on known ground features showing the significant contrast between the natural hills versus the building pad and asphalt cover.

b. Motorists Views from Street Level. Visual aspects from street level show the hillside losses that will occur from construction, traveling in a south to north direction on Grand Avenue. The grading construction element will require a grading permit through the City of Walnut, and must comply with General Plan restrictions of a Scenic Corridor and a Park Connection Corridor along Grand Avenue from Valley Boulevard to Temple Avenue.

c. Blocked View from Motorists at Street Level. Motorists accustomed to seeing unobstructed views from Regal Canyon Drive will be blocked from views of the natural hillsides and the scenic wildlife reserve. Views would be almost completely obstructed by the building pad of the solar project.

Response 5.2.1. The comments in Item 1a are noted. The comment on asphalt surface covering the building pad is not correct. Asphalt is only used for the entrance service road. The remaining surface of the pad is ¾" crush aggregate for the solar pad. This surface is functional and minimizes weeds amongst the solar panels. Apparently, the discussion of asphalt materials standards in the Converse geotechnical report (p. 123 of the Draft EIR) was misinterpreted.

The comments in Item 1b are noted and are partially incorrect. The West Parcel Solar Project has been found by a court of law to be an energy generation facility and is exempt from City building and land use and zoning ordinances. A grading permit, if required from the City for the project, is subject to Government Code section 53097, which provides that the project is subject only to City grading ordinance concerning the review and approval of grading plans resulting drainage improvements and requiring the review and approval of grading plans as such grading ordinance provisions relate to the design and construction of onsite improvements. The City has no authority to review and approve the grading plan for the project that is contrary to Government Code section 53097. The City can include restrictions related to a future General Plan Update that is not approved and for which, no EIR has been approved by the City and violated Government Code section 53097.

The comment in Item 1c is introductory and photos of the area are provided below.

Comment 5.2.2: Motorist View of Building Pad and Asphalt Surface

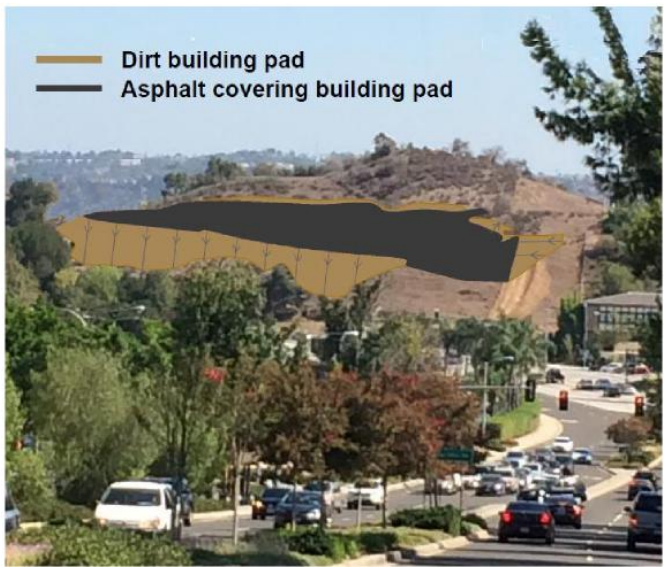
2. Visual effects of the west parcel project are seen from a number of perspectives in the City of Walnut up to a mile from the project, based on its elevated location with a large building pad and asphalt surface set within natural hillsides.

Response 5.2.1. The comment is introductory and no response is needed.

Comment 5.2.3: Viewsheds along Grand Avenue

3. Viewsheds along Grand Avenue are Significantly Changed. Massive alterations to the natural viewshed of motorists on Grand Avenue entering from the north are shown below. Viewsheds show significant losses of natural hillsides some 70 feet above Grand Avenue and land areas that will be destroyed and replaced with a sterile building pad with long linear earthfill side slopes, asphalt cover and solar installations. The Grand Avenue viewshed is experienced by 1000's of motorists a day. Similar views are seen from Mountaineer Road.

Hillside Losses from Dirt Building Pad with Asphalt Cover visible from Grand Avenue Entering



Response 5.2.3. Response 5.2.4: The photos of the project from Grand Avenue Regal Canyon Drive prior to development presents an incomplete portray of the project. Generally, pre- and post-development photos are presented for a project, so the reader can determine how the project is viewed when graded and landscaped.
The District has already presented pre- and post-project photos in Appendix J of the Draft EIR. As stated previously, the City has no viewshed or ridgeline ordinance and the District is not subject to the City's ordinances (i.e. except for possible grading permits as discussed above in Response 5.2.1). The comments seem to presume that any loss of hillsides is significant and development onsite should not proceed. This is contrary to the District's objectives and legal issues related to the project site.

Comment 5.2.4: Blocked Views of Motorists by Solar Project Building Pad

4. Regal Canyon Drive in the Willows Community. Residents traveling up Regal Canyon Drive will see the industrial looking solar facility immediately next to the roadway blocking views of the natural canyons that once existed. Hundreds of cars a day travel this route, which will change the character of the passive community into a rigid landscape at its entrance.

Hillside Losses from Solar Project Building Pad at Regal Canyon Drive

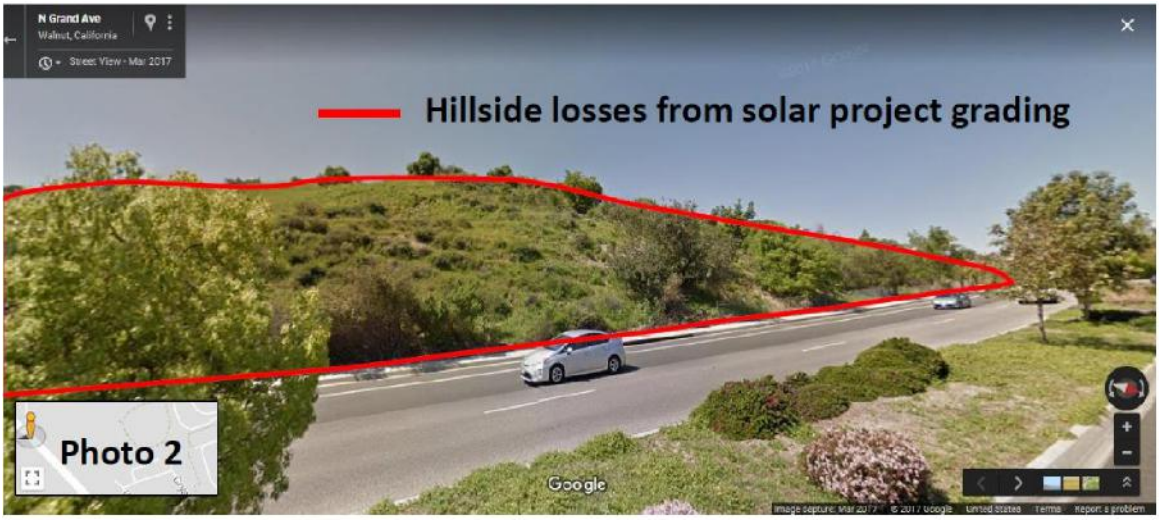
Motorists Blocked View from Solar Project at Regal Canyon Drive

Response 5.2.4: The photos of the project from Regal Canyon Drive prior to development presents an incomplete portray of the project. Generally, pre- and post-development photos are presented for a project, so the reader can determine how the project is viewed when graded and landscaped. The District has already presented pre- and post-project photos in Appendix J of the Draft EIR. The comments seem to presume that any loss of hillsides is significant and development onsite should not proceed. This is contrary to the District's objectives and legal issues related to the project site.

Comment 5.2.5: Motorists Traveling Grand Avenue Observe Mass Hillside Losses Inconsistent with General Plan

5. Motorists traveling Grand Avenue would observe loss of hillsides, which is inconsistent with the General Plan Scenic Corridor designation of the roadway. The following views of Grand Avenue (photos 1 through 3, below) traveling from south to north from Snow Creek Drive to Amar Road displays the scenic values of Grand Avenue at street level and the significant destruction of native hillsides and vegetation caused by the west parcel project.

Hillside Losses from Solar Project Traveling from Snow Creek to Amar Road



Response 5.2.5. The photos of the project frontage (photos 1 – 3) prior to development presents an incomplete portray of the project. Generally, pre- and post-development photos are presented for a project, so the reader can determine how the project is viewed when graded and landscaped. The District has already presented pre- and post-project photos in Appendix J of the Draft EIR. The comments seem to presume that any loss of hillsides is significant and development onsite should not proceed. This is contrary to the District's objectives and legal issues related to the project site.

Comment 5.2.6: General Plan Conservation, Recreation, Scenic Highways & Open Space Element

6. The General Plan Conservation, Recreation, Scenic Highways & Open Space Element, page 49, Element VI states, "Of all the existing roads within the City of Walnut, Grand Avenue possesses the most scenic value" and that "It has naturally scenic qualities south of Temple Avenue." This is precisely where Mt. SAC intends to destroy its natural hillside beauty and replace it with up to 70 feet of earthfill covered with asphalt. Further, the General Plan states, "It can be viewed as a linear open space corridor maximizing both urban and natural processes." The destruction of the natural hillsides as planned under the proposed solar project would violate the intent to the General Plan designation of Grand Avenue as a scenic highway. The Scenic Highway designation along Grand Avenue is shown on the following figure.

7. According to the City of Walnut official's, Mt. SAC's grading plan submittal will be required to comply with this Scenic Highway designation, which would be in conflict with the proposed west parcel project.

Response 5.2.6. Apparently Item 6 is quoting draft material from the City's General Plan Update. The document has not been approved and no EIR has been circulated for the General Plan Update to date. The natural scenic qualities of Grand Avenue south of Temple Avenue relate primarily to the greenbelt along the eastside of Grand Avenue and not primarily to the project site. The Landscape Plan for the project will provide ample natural scenic qualities along the project frontage, and the solar panels are not visible from the Grand Avenue frontage. The West Parcel Solar Project has been found by a court of law to be an energy generation facility and is exempt from City building and land use and zoning ordinances under Government Code sections 53091(d), (e). The City does not have the legal authority to include consideration of any scenic highway designation for Grand Avenue adopted by the City in the future in its existing review of the West Parcel grading plan application.

Comment 5.2.7: Alternatives Evaluation

8. The Mt. SAC West Parcel DEIR has preliminarily evaluated six alternatives for solar power generation at different locations, and of different configurations and generation capacity. The alternatives evaluation, however, focused almost entirely on the west parcel, affording several paragraphs of description and analysis each to the other alternatives. A broader comparative assessment of the environmental impacts of alternatives, as required under CEQA Section 15126.6, is omitted.

Response 5.2.7. The comments are noted but the conclusion is false. The comments assert a broader comparative assessment of alternative impacts is required, which is not supported by the requirements of Section 15126.6. No evidence is provided herein so the comment may be introductory to other comments below.

Comment 5.2.8: Scope of Alternatives Evaluated

9. The scope of the DEIR relies mainly on economic evaluation of the alternatives as a decision-making tool, but omits the broader scope evaluations of environmental impacts of alternatives as part of the decision-making process. The alternatives include:

a. West Parcel
b. Hillside area east of the stadium
c. Hillside area north and adjacent to Temple Avenue
d. Lot F
e. Lot A (Parking Structure J)

10. The United Walnut Taxpayers has evaluated a solar panel system on Lots B/B3 and discusses below the benefits of a parking structure initially proposed by Mt. SAC at Lot D in the 2015 SEIR.

Response 5.2.8. As stated elsewhere, the project alternatives were evaluated in the Draft EIR for both environmental issues and cost comparisons. The "broader scope evaluations" is not specified in the comments. No response is required for Item 10. It is informational only.

Comment 5.2.9: Differing Levels of Resource Inventories and Impacts Evaluation

11. Imbalanced Resource Inventories and Impact Evaluation. Other than the west parcel, none of the alternatives are subjected to a similar level of resource inventory and impacts evaluation required by CEQA. Typically, a screening process removes certain alternatives found deficient in meeting project objectives, and is described in the screening process. This process may leave one or more alternatives for more detailed evaluation and comparison. Given this limited resource inventory and impact evaluation process of all but the west parcel, a reasonable comparison of alternatives is unworkable even in the limited scope evaluation described in Table 6.6.1

12. An evaluation of three alternative sites and methods for solar power generation was evaluated in a limited scope, unpublished report, "Solar Power Options for Mt. San Antonio College" in November 2013. The alternatives included (1) a 2.0 MW ground-mounted system at the west parcel, (2) a 0.33 MW system mounted atop a parking structure at Lots A/A2, and (3) a 1.5 MW carport [canopy] type system located in student Lot F. In some limited capacity and configuration, these alternatives have been evaluated in this DEIR. This reinforces that alternative configurations and locations for solar generation are available on campus.

Response 5.2.9. The comments in Item 11 are noted. CEQA does not require the same level of analysis for project alternatives as the project (Section15126.2 of the CEQA Guidelines). The focus is on environmental issues, not primarily on cost issues. The project alternatives do not include the same level of biological resource analysis as the project site. However, information is known about the sites because of prior biological studies for the entire campus.

The comments in Item 12 are noted. The report was presented at the November 2013 Board of Trustees meeting and is public information. While other configurations and locations for solar generation are available, the advantages or disadvantages of the project alternatives have been considered in the Draft EIR.

Comment 5.2.10: Comparable Generation Capacity is Achievable at Several On-Campus Locations

13. The land area required for solar generation is estimated at 1.5 MW (2017 DEIR) over 3.4 acres at Parking Structure J or 2.3 MW per acre. An analysis of the Honolulu and Kahului Airports buildings and parking structures yields 3.1 MW per acre and for the Minneapolis-St. Paul Airport, an analysis of the parking structures yields 2.3 MW per acre. An average of the above three installations results

in 2.7 MW per acre as a planning assumption, particularity for solar panels atop parking structures. Certain canopy-type solar systems may require larger net acreage per MW.

14. The alternatives included in the DEIR consistently do not match the generating capacity of the west parcel. However, examination of land areas available at various alternative sites show that equivalent generating capacity can be developed at Lot F, Lot B/B3, Lot D/D1 and Lot M. Moreover, the latest 2017 master plan indicates approximately 40 acres of parking lots are available on the Mt. SAC campus, providing many opportunities for alternatives to the west parcel.

Response 5.2.10. The comments in Items13, 14 are noted. The scale of the parking structures at the airports cited is not comparable to parking structures on campus and the sunlight available will differ greatly. The Board Solar Memo clearly states its assumptions and projected output.

Comment 5.2.11: Premature Discarding of Alternatives

15. In the alternatives evaluation, Mt SAC has prematurely discarded viable alternatives that either individually or in combination with other campus facilities may have formed viable alternatives. For example, proper consideration of solar panels atop parking canopies could result in a solar array not readily visible to nearby residents and motorists. These examples if properly sited could dramatically reduce visual impacts and be more favorable to the public, with decreased impact on the environment and natural landscape.

Response 5.2.11. The comments are generalized and serve as an introduction to the comments below. Visibility is not the sole criteria for location of solar projects. An adequate range of alternatives is being considered in the Draft EIR. The Board of Trustees may or may not consider a specific project alternative. The Draft EIR does not reject all project alternatives.

Comment 5.2.12: Combined Parking Structure and Solar Panel Systems

16. The alternative of a parking structure and with canopy mounted solar panels atop are viable at Lot F, Lots B/B3, Lots D/D1 and Lot M, which would not present unacceptable visual impacts to the public.

17. The time students must walk to certain parking structures configured with canopy-mounted solar systems is not objectionable. The walking time from Lot B near the Primary Instructional area compared to the furthest walking distance to Lot F or Lot M amounts to only 3 additional minutes. Based on Google maps walking rates for this flat terrain, the total walking times at 2.5 miles per hour walking rates are:

    a. Centroid of Lot F = 1889 feet (7.5 minute)
    b. Centroid of Lot M = 2100 feet (8.4 minutes)
    c. Centroid of Lot H = 1600 feet (6.3 minutes)
    d. Centroid of Lot B = 1200 feet (4.8 minutes)
    e. Centroid of Lot A = 800 feet (3.1 minutes)

Response 5.2.12. The comments on canopy-mounted solar systems in various parking lots, including the acceptability of such systems in Lot H and Lot A by UWT is noted.

Comment 5.2.13: Specific Comments on Alternatives

18. Motivation for West Parcel Project is for Campus Dirt Disposal. The report "Solar Power Options for Mt. San Antonio College", November 2013, states, "The use of the site for solar generation also provides an opportunity for the college to transfer soil from other construction projects on campus", likening the natural hillsides and canyons of the west parcel to a disposal zone. It is believed that the motivating factor and singular reason for the import of fill to the west parcel site is for disposal of dirt from the stadium hill and not the installation solar panels as much as 70 feet above street level. This was an unsound motivation, which has driven poor decision-making affecting surrounding residents, and the quality life and public safety in the City of Walnut.

    a. Hillside Alternatives in Agricultural Zone Unacceptably Impact the Natural Environment

    The hillside alternatives east of the stadium and north of Tempe Avenue result in significant impacts the natural environment. These two alternatives would be fixed ground mounted solar panels on native hillsides surrounding the college, which would result in similar impacts to hillsides as experienced on the west parcel. The UWT organization has not requested the evaluation of these alternatives. The destruction of the natural hillsides and agricultural zone is unacceptable.

    The alternatives evaluation for the hillside sites rely on prorated costs of earthwork. Because of the variable topography in hillside areas, the quantities of earthwork cannot be reliably estimated through prorated quantities. The costs of a linear or uniformly sized facility on flat ground may be prorated to a degree; however, earthwork quantities on variable topography cannot be prorated or relied upon for decision-making.

    b. Lot F is the Environmentally Preferred Alternative and Offers Combined Parking Structure/Solar Panel Benefits

    If located in areas less visible to the public, a parking structure with solar panel system atop would combine the uses of a solar panel system and parking structure, meeting the needs of both, saving land space, and possibly reducing public criticism.

    Table 6.6.3 states further states that Parking Lot F is the Environmentally Superior alternative, before mitigation, which is a valid conclusion based on no impacts to habitats, and no aesthetic impacts to native hillsides. Remarkably, this conclusion is inconsequential since decision-making has been based solely on economic benefits, at the exclusion of environmental values.

    At a 5.7-acre useable area estimated through Google maps, Lot F site is capable of supporting over 2 MW peak generation capacity with solar panel installations based on our estimate of 2.7 MW per acre, whereas the DEIR has limited Lot F to 1.5 MW peak capacity. From examination of land areas available, equivalent generating capacity to the west parcel can be developed.

    c. Lot A (Parking Structure J) Confirms Planning Assumptions of 2.7 MW per Acre for Solar Installations

    Based on area availability of 3.4 areas at Lot A, the 1.5 MW DEIR estimates of peak capacity at this location would be accomplished at 2.3 acres per MW. Considering this and results at other parking areas, UWT has used a planning assumption of 2.7 acres per MW.

    d. Lot B/B3 (a United Walnut Taxpayer's proposal)

Significant Earthwork Costs Omitted from West Parcel Cost Estimate. The DEIR states that Lot B/B3 is not available because it is reserved for structured parking and is more costly than the west parcel. Should a parking structure be implemented near this area, consideration could be given to canopy mounted panels or solar panels atop a parking structure that could combine land use functions and be less visible from street level. The DEIR conclusion that a canopy mounted panel system is more costly than a west parcel system is false for the following reasons.

DEIR Earthwork Costs. Significant earthwork costs have been omitted from the total cost of the west parcel. For a reasonable cost estimate comparison of the west parcel to canopy mounted solar panels systems, proper grading costs must be included in the west parcel. Specifically, Table 6.6.1 included total grading costs of $1,813,800 and an export saving credit of $1,500,000 if avoiding earthwork exports off-site, for a net earthwork cost to the project of $313,800.

Documented Earthwork Quantifies. Earthwork quantifies of at least 477,500 CV are documented or characterized in the DEIR, including on-site grading (cut/fill) ($177,500 (CV), import from the stadium hill (139,000 CV), landslide removal based on Converse test pit cross sections including bulking (103,000 CV) and a stability key to help stabilize fill slopes including bulking (58,000 CV).

Earthwork Unit Prices. Given the above, it would be necessary to perform all earthworks on the project (477,500 CV) for a cost of $313,800 or at a unit price of $0.66 per cubic yard. This is unrealistic, since the representative unit costs of similar earthwork would be $13-$14 per CV, based on a survey of known contractor bids for similar work (see below).

Applying a realistic unit price of $14 per cubic yard to earthwork quantities of 477,500 CV yields a grading cost of $6,685,000 making the west parcel significantly more costly than solar panels mounted atop parking canopies or parking structures.

e. Lot D/D1 Described in 2015 SEIR May Function More Efficiently as a Combined Parking Structure./Solar Generation System

The 2015 SEIR discusses the benefits of a parking structure on Lot D to “provide parking for vehicles arriving from the south, west or east” and because of close proximity to the campus Primary Instructional zone. Solar panels atop the parking structure favorably combine land use functions of two facilities over a common land area. Solar panels are also less visible if elevated from street level. See the figure below depicting a parking structure with canopy solar panels at the top-level. The facility in the figure covers a 3.7-acre area and at 2.7 MW per acre would generate peak power of approximately 1.4 MW, but is expandable to the east or west to increase generation capacity.

The weight of the canopy structure and solar panels atop the parking structure are within CSB load requirements and require no additional strengthening in the parking structure (telecom. Sassi, 2017), such that costs per acre would be similar to canopy mounted panels at ground level.

Response 5.2.13. The comments in Item 18 are noted. The District has multiple objectives fo the project; including use of a vacant site, exporting of earth, development of a solar project, a commitment to clean energy and energy cost savings.

The comments in Item 18a, indicating opposition to Project Alternative 4 is noted. Pro-rating of grading costs for Alternative 4 is appropriate for this level of analysis, and represents a "worse case" scenario since the site does not have significant terrain differentials.

The comments in Item 18b are noted. Environmental considerations are one factor in deciding which projects the District initiates. The Draft EIR ranked Alternative 4 lower because it is needed for grazing for the agricultural program and may be developed in the long-term. The lower solar generation for Alternative 4 was based on consultation with the civil engineers on the parcel size and terrain differentials.

The assumptions in Item 18c are noted. The 0.33 MW system evaluated in the 2013 Solar Power Options for Mt. SAC (Appendix S1) was a roof-mounted solar system, and did not occupy the entire parcel. It is not clear if the comment addresses a roof-top or ground mounted system.

Item 18d proposes an additional project alternative for a solar system in Lot B/B3. The location is not suitable for a ground-mounted system since it precludes future development. A parking lot solar system would be highly visible from both Grand and Temple Avenues.

Item 18d again asserts the cost data in the 2013 Board Solar Memo is erroneous. The comments do not invalidate the prior analysis. The cost data is this comment is developed by UWT in Items 28 – 30. Please refer to these comments and Responses 5.2.15.

Item 18e continues the comments on the new Lot B/B3 alternative. The comments acknowledge the advantage of roof-mounted panels versus a parking canopy system.

Comment 5.2.14: Certain Alternatives Comparisons on Table 6.6.3 are False or Misleading

19. Loss of Non-Native Grasslands. Table 6.6.3 states the west parcel would result in the loss of no nonnative gasses. This is false. The West Parcel Solar Project Biological Technical Report, May 2017, indicates the west parcel is substantially covered with non-native grasses, while other alternatives (excepting hillside alternatives) have no impacts to non-native grasses.

20. Adverse Impact. Table 6.6.3 makes the over-generalized and questionable statement that the west parcel alternative has no adverse impacts, while all other alternatives have adverse impacts. The west parcel exhibits significant impacts to non-native grasslands, coastal sage scrub, aesthetic impacts as demonstrated above, public safety issues demonstrated by active landslides, and co-mingling truck haul routes with public roadways. These are clearly adverse impacts.

21. Environmentally Superior Alternative. Table 6.3.3 states that the Parking Lot F is the environmentally superior alternative before mitigation, which is a valid conclusion based on no impacts to habitats, and no aesthetic impacts to native hillsides. However, this conclusion is inconsequential since all decision-making is based on economic benefits, at the exclusion of environmental values.

22. Conflicts with Campus Habitat Mitigation Plans (CBW/LUMA). This impact category correctly states that Lot F would not have impacts to the California Black Walnut Management Plan (CBW) and Land Use Management Areas (LUMA).

23. Earth Import Possible. This impact category implies that alternatives that dispose of dirt on the west parcel have beneficial impacts. Specifically, the west parcel project encourages disposal of dirt on its land areas from throughout the campus, which maximizes impacts to native habitats, and to public safety demonstrated by active landslides and co-mingling truck haul routes with public roadways.

Depiction of Lot D Parking Structure with Solar Panel Canopies at Roof Level

Response 5.2.14. The comments in Item 19 are noted. The citation given appears to be an error. Appendix G1 of the Draft EIR included a May 2015 biological technical report, which classifies areas of the project site as Extensive Agriculture (Figure 5, Appendix G1). While non-native grassland (oats and brome) is one of the species within the parcel (Section 3.3.1 C), since the parcel was used for grazing, 12.43 acres was classified as extensive agriculture in Table 3.3.1 of the Draft EIR, not as non-native grassland. Other species onsite include forbs, mustards, Italian thistle, bur clover and tumbleweed. Since Project Alternative 5 has no non-native grassland the entire row is hereby deleted from Table 6.6.3. It provided no meaningful comparisons among the alternatives.

The comments in Item 20 are noted. Because the project site was used regularly for grazing, it is classified as Extensive Agriculture (Section 3.1.3 of Appendix G1, and Figure 5), not as non-native grassland. The remaining issues cited in Item 20 have been mitigated to Less than Significant with Mitigation Incorporated.

The comments in Item 21 are noted. The ranking in Table 6.6.3 is based on a combination of factors, not solely cost. Items 3 – 6 are not cost related.

No response is required for Item 22.

The comments in Item 23 are noted. The west parcel does benefit other projects and the campus as a whole. Some projects, like the Physical Education Project, require earth export to other locations. The project has a less than significant impact with mitigation incorporated on native habitats. The assertions of traffic hauling safety concerns are unsubstantiated. While Terrestrial Solutions Inc. asserts they are unresolved landslide risks, the assertions are not substantiated. Removal and re-compaction in accordance with the final grading plan will address any landslide risk onsite. The Draft EIR has evaluated both issues comprehensively. Grading and re-compaction is the solution for any potential landslide risk and the traffic hauling plan has fully evaluated earth import operations.

Comment 5.2.15: Cost Evaluation

24. Summary. The DEIR provides no back up information for the alternatives costs, makes cost adjustments generally beneficial to the west parcel costs but not to other alternatives, and when summing grading costs and export savings reduces grading costs to near zero. UWT has developed independent unit costs of grading which can be applied to major grading quantities and has developed costs of solar panels materials and installation, which together comprises the majority of project costs.

DEIR Assumptions and Cost Adjustments

25. Sensitivity of Cost Assumptions. Certain cost assumptions in Table 6.6.1 are highly sensitive to overall cost and in most cases will change the ranking of the alternatives. The most relevant assumptions and adjustments follow:

    a. Sunk Costs Should be Applicable to All Solar Generation Alternatives. Table 6.6.1 applied sunk costs to all but the west parcel. These costs should be applied to the west parcel as well, since they represent $1.5 million in legal fees of west parcel litigation.

    b. Costs to Export Stadium Hill Dirt Can be Avoided. The assumption that remaining dirt at the stadium hill must be hauled away at a cost to the project could well be erroneous. The remaining dirt, consisting mainly of good quality silty sand with some clay, may be used by contractors for off-site grading and hauled at no cost to the project. Sand and gravel suppliers and truckers may seek sources of earth borrow for customers and haul the dirt free of charge (telecom. WCSG, 2016, 2017).In any case, a realistic effort should be made to have dirt removed at no cost and not assume it must be hauled at project cost. This assumption significantly changes relative costs of the west parcel versus solar panels mounted atop canopies or parking structures.

    c. Cost of the Landslide Identified by Converse (2017) Must be Included in Total Costs. Removal and replacement of large quantities of landslide materials at the west parcel must be included in project costs. If not properly removed and replaced, these areas could experience landslides during construction or operation of the project.

    d. SCE Incentives Should be Applied all Solar Alternatives. The cost incentives offered by SCE is a significant benefit to project costs and substantially affects the ranking of alternatives. The DEIR statement that SCE Incentives have been assured to the west parcel project appears to be false. SCE representatives have indicated the Net Energy Metering (NEM 1.0) program that the project is benefitting from expired on July 1, 2017, and has now become the NEM 2.0 Program. Unless applicants had their solar project installed and inspected by July 1, 2017, they will be required to reapply under the NEM 2.0 program. On this basis, any solar installation alternatives has been assumed to receive SCE solar incentive under the new NEM 2.0 program.

26. Prorated Costs of Hillside Grading are Unreliable. Prorated values are legitimate when estimates are made on uniform horizontal installations on relatively flat ground, but lose validity when applied to variable hillside topography where construction requires reasonably accurate cost estimates.

27. Costs of Grading are Unrealistic. Table 6.6.1, Solar Alternative Cost Estimates, states the cost of earthwork on the west parcel is $1,813,800, and that importing stadium hill dirt to the west parcel will result in an export savings of (-) $1,500,000 . The net earthwork costs are therefore $1,813,000 (-) $1,500,000 = $313,800, which given at least 477,500 CV of project grading discussed below results in an unrealistic unit cost around $0.66 per cubic yard.

28. Evaluation of Reliable Earthwork Unit Prices. Based on the unrealistic grading unit prices in the DEIR, an evaluation of grading unit costs based on contractor bid prices was performed to provide reasonably reliable unit costs and total grading costs of the project. The evaluation estimated (1) a mass grading import unit price of $13.76 per CV and (2) a salvage and replacement (cut/fill) earthwork unit price of $14.01 per CV (see below).

Mass Earthwork Import			
Quantity (CV)	Job No.	Contractor Bids Received	Contractor Bid Average Unit Price
70,000 CV	DWR/KSN Job. 1500- 0140, July 2013	ASTA, Tiechert, Robert Burns, Granite, San Raphael, AM Stephens, Cal-Nevada, Ford	$10.26 per ton ($14.36 per CV @ 2013 price levels)
201,900 CV	DWR/MBK Job No. 2028- 08-12-1	Asta, A.M. Stephens, Robert Burns, Dutra, Mass X, MCI,	$8.91 per ton ($12.48 per CV @ 2012 price levels)
191,900 CV	WGI, 2007	Washington Group, Intl.	$13 per CV @ 2007 price levels ($14.45 per CV @ 2016 price levels)
		AVERAGE UNIT PRICE	$13.76 per CY

Salvage, Stockpile and Replace Dirt On-Site			
Quantity (CV)	Job No.	Contractor Bids Received	Contractor Bid Average Unit Price
337,485 CV	WGI, 2006/MWD Task Order, 2006	Washington Group, Intl.	$14.45 per CV ($17.20 @ 2016 price levels (excavation, haul to stockpile + haul from stockpile, spread, compact)
1,318, 753 CV	LACPWD, 2015, Job No. FCC00001147	W.A. Rasic Construction, C.A. Rasmussen, Griffith, Ames Construction, Pulice Construction, Shimmick, Myer and Sons	$6.09 per CV @ 2015 price levels (excavation, haul to stockpile)
337,485 CV	WGI, 2006	Washington Group, Intl.	$4.45 per CV @ 2006 price levels ($4.92 per CV @ 2015 price levels) (haul from stockpile, spread, compact)
		AVERAGE UNIT PRICE	$14.01 per CY

29. Total Project Grading Cost: Total project grading costs are composed of the following elements:

Grading Quantities

A description of the grading quantities for construction of the west parcel earthfill is provided in the following table. The quantities were (1) identified in the 2017 DEIR documents and (2) estimated within landslide areas to depths of at least 20 feet (Terrestrial Solutions, Inc. (TSI), June 2017) by D. Majors, P.E. (2017). Background data was reviewed in Converse Consultants study reports (2014, 2017). Streambed materials were recommended for removal and replacement to similar depths (TSI, 2017) and quantities estimated as a separate line item, below (D. Majors, 2017).

Summary of Earthwork Quantities		
Description	Quantity	Source
On-site hillside cut	177,500 CV	DEIR, 2017
Imported fill from stadium hill	139,000 CV	DEIR, 2017
On-site landslide removal, stockpile and replacement fill with 15% bulking, in addition to DEIR 55 feet cut on central hill (consulted DEIR Psomas/Converse mapping, 2017)	103,000 CV	TSI, UWT, 2017
On-site excavation, stockpile and replacement for stability key with 15% bulking (consulted DEIR Converse mapping, 2017)	58,000 CV	TSI, UWT, 2017
TOTAL EARTHWORK QUANTITIES WITH LANDSLIDE REMOVALS	477,500 CY	
On-site streambed excavation, stockpile and replacement fill with 15% bulking (consulted TSI, 2017)	109,000 CV	TSI, UWT, 2017
TOTAL EARTHWORK QUANTITIES WITH LANDSLIDE/STREAMBED REMOVALS	586,500 CY	

Grading Costs

30. Given realistic unit prices in the range of $14 per cubic yard, and earthwork quantities described above, the total grading cost was determined to be $6,685,000 (see below), making the west parcel significantly more costly than solar panels mounted atop parking canopies or parking structures.

Summary of Earthwork Costs			
Description	Quantity	Unit Price	Cost
On-site hillside cut and fill (SEIR, 2012)	177,500 CY	$14/CY	$2,485,000
Imported fill from stadium hill (DEIR, 2017)	139,000 CY	$14/CY	$1,946,000
On-site landslide removal, stockpile and replacement fill (est. from Converse, 2017)	103,000 CY	$14/CY	$1,442,000
On-site excavation, stockpile and replacement for stability key (TSI, 2017)	58,000 CY	$14/CY	$812,000

TOTAL WITH LANDSLIDE REMOVALS			$6,685,000
On-site streambed excavation, stockpile and replacement fill (TSI, 2017)	109,000 CY	$14/CY	1,526,000
TOTAL WITH LANDSLIDE & STREAMBED REMOVALS			$8,211,000

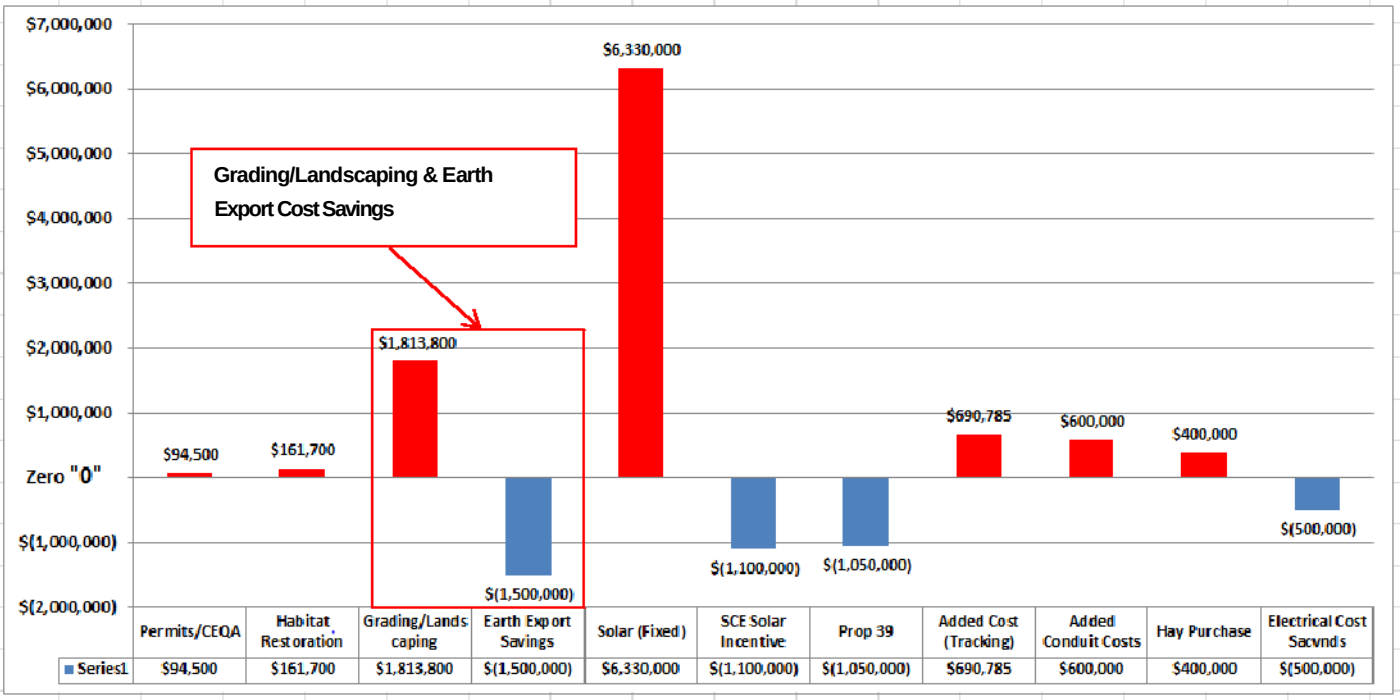
Examination of West Parcel Costs

31. The first chart shows the raw WPSP costs in the DEIR. It includes the various costs adjustments and credits applied by Mt. SAC after the construction costs are developed. The third vertical bar is the grading cost. The fourth bar is grading savings (a negative cost) if the stadium hill dirt is exported to the west parcel and not off-site.

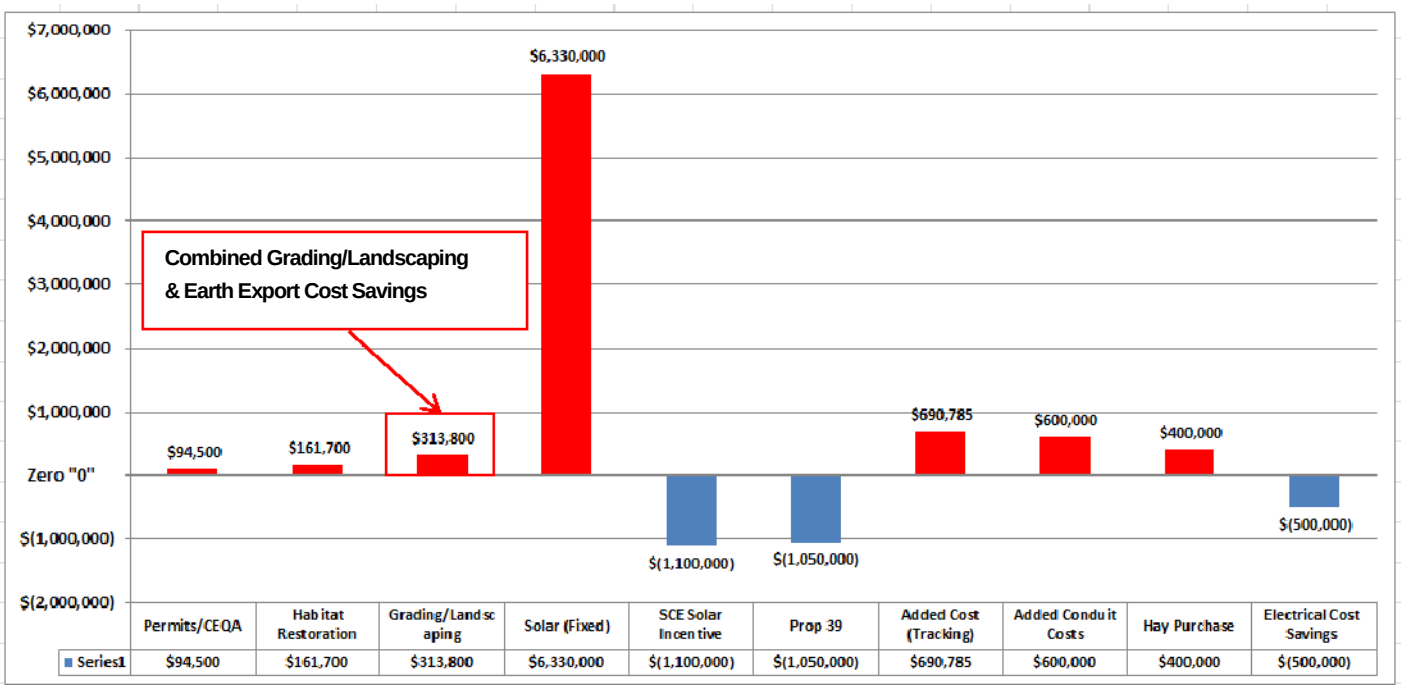
32. The second chart shows what happens when the grading cost and the export savings are combined into a net grading cost. The cost of grading virtually disappears because of combining a positive and a negative cost. As indicated above, it may not be necessary to export dirt off site, which eliminates the export cost savings and results in a further increase to west parcel costs.

33. These costs also do not account for possible additional remediation of landslides associated with High Landslide Potential lands identified on the LA County Engineer mapping for the City of Walnut General Plan and on the California Geological Survey CGS 88-21 Map No. 12 for this region, designating most lands at the west parcel at “close to their stability limits”.

Total Project Cost – West Parcel (DEIR)
Grading/Landscaping & Earth Export Savings



Total Project Cost – West Parcel (DEIR)
Combined Grading/Landscaping & Earth Export Savings



Response 5.2.15. The comments regarding sunk costs in Item 25a are noted. However, legal costs were not part of the original consideration of the benefits of the project versus other alternatives in the 2013 Solar Power Options for Mt. SAC (Appendix S1) report. If sunk costs are included in Table 6.6.2 of the Draft EIR, the relative ranking and conclusions of project alternatives would not change.

The comments in Item 25b are noted. However, there is no guarantee that soil export costs will be zero, or other contractors need earth concurrent with the project schedule. Again, if the soil export cost is zero or $1 million, the relative ranking and conclusions of project alternatives in Table 6.6.2 would not change.

The comments in Item 25c are noted and construction bids will include the total grading costs.

The comments in item 25 d are noted**.**

The comments in Item 26 – 28 are noted. Pro-rated costs are appropriate for a general analysis, and the construction bids will provide specific information. The Draft EIR is not required to include the same level of cost analysis others may use for actual construction costs. Item 27 is an inappropriate comparison for unit grading cost.

Given the comments in Item 26, the same situation may occur in Item 28. The final bid cost for grading is the only relevant statistic and the District secures competitive bids and has a rigorous review and recommendation process for contracts being considered by the Board of Trustees. The project has a historical chronology of multiple decisions and it is not appropriate to now strive to consider past decisions as if they can all be made at the present moment. Business, government or citizens cannot erase past considerations in considering current decisions. The comments presume a "clean slate" is appropriate for current and future decisions.

The comments in Item 29 are noted. It is not readily apparent if the earth quantities stated are appropriate or not. Converse Consultants will review and respond to the Terrestrial Solutions comments later in this text. There may be some double counting in the estimated earth quantities between the EIR estimates and the later estimates by Converse and Terrestrial Solutions.

The comment in Item 30 is noted. Table 6.6.1 states a $1,813,800 estimate for grading/landscaping for the project. It is highly unlikely that the $ 8.2 million estimate for earthwork cost is reliable.

The comments in Items 31 – 34 primarily are explanations of the assumptions used in the following table. The first table (Series 1) displays the data included in Table 6.6.1 in the Draft EIR and the second table is similar, except it combines the grading/landscaping estimate and the earth export cost saving estimate. No new information is provided by the two tables.

5.2.16: Comparative Cost Studies of Alternatives

<u>General</u>

35. DEIR Table 6.6.1 presents what appears to be first costs of the west parcel at price levels varying from 2012 to 2016, referencing previous cost estimates with no supporting cost data, solar power installations of differing electrical output, which would make it necessary to compare alternatives on a cost per MW basis.

36. To simplify the comparisons, a representative 2.2 MW peak capacity project at the west parcel is compared to a 2.2 MW peak capacity system of canopy mounted solar panel systems generally near Lot B/B3 or Lots D/D1. In this way, the cost of these alternatives can be compared based on total cost. Either canopy mounted solar systems or solar panels atop

parking structures have been shown to fit within these parking areas within or near the Primary Instructional Zone.

37. The alternative that generally ranked above others is the parking canopy mounted solar panels, which is understandable since it requires no grading, substantially eliminates environmental permits, and requires no import of export of dirt, whereas to the contrary, the west parcel requires all of these cost elements.

38. At equivalent electrical output, the principal cost elements to be evaluated are the grading costs and the cost of acquisition and installation of the solar panels, which amount to at least 80% of overall project costs.

Response 5.2.16: The sources of the data for Table 6.6.1, 6.6.2 are identified in the Draft EIR and the 2013 Solar Power Options for Mt. SAC (Appendix S1). This constitutes the supporting data and Appendix S identified the assumptions used therein. As stated in the DEIR, the information considered by the Board of Trustees in its initial review of project alternatives is not a comparison of 2016 costs for the alternatives included in Tables 6.6.12, 6.6.2.

The costs for canopy mounted solar panel systems and the prior alternatives are not meaningful since they assume all actions concerning the project alternatives occur today. It is not appropriate to disregard the history of the project and ignore project related costs, which now include legal costs, which have occurred to date. The Draft EIR considered canopy mounted solar panel systems as an alternative and rejected them because of the land lost for future facilities. None of the UWT comments on project costs deals with the land cost loss if parking lot solar systems were developed.

While item 37 may be generally true, it simplifies the analysis and ignores the disadvantages of canopy mounted solar panels discussed in the Draft EIR.

While item 38 is generally true, the issues related to the project cannot be simplified to this issue only. The primary issue for the Draft EIR is a comparison of environmental impacts, not costs.

5.2.17: Table 6.6.1 Alternatives Cost Comparison (Sensitivity of Cost to Mt. SAC Assumptions)

39. The total project costs depicted on Table 6.6.1 of the DEIR provides inadequate back-up information to evaluate the project costs. As such and as shown above, the development of costs for grading and for canopy-mounted solar arrays have been developed by UWT for comparison purposes.

40. In the chart below, there are 6 pairs of vertical cost bars, each with a red bar (west parcel) and blue bar (parking canopy panels). Per DEIR Table 6.6.1 assumptions, the parking canopies include sunk cost and Prop 39 incentives, but no SCE incentives. In the last column, the effects of adding in SCE Incentives to the parking canopies are shown. Per Table 6.6.1, the west parcel includes no sunk costs, no hay purchase, an export savings credit, Prop 39 incentives and SCE incentives, but virtually no earthwork costs when combining grading/landscaping with earth export savings. Sunk costs, hay purchase costs, grading costs and SCE incentives are progressively added into the cost chart to show the sensitivity of these cost items to total costs and ranking. See the Vertical Bar pairs A, B, C, D, E, and F, which displays this process.

a. Vertical Bars A. The red bar is the west parcel DEIR data. The blue bar is an equivalent power canopy type solar panel option developed by Sunvalley/RBI Solar, 2016 under supervision of H. Sassi, P.E.

b. Vertical Bars B. Sunk cost and hay cattle feed replacement for loss of hillside grass are added to the red bar, which were left off the west parcel in Table 6.6.1.

c. Vertical Bars C. West parcel earthwork, landslide removal and dirt import from the stadium, identified in or characterized in the DEIR, are added to the red bar costs. The third set of bars shows the effects to grading costs by including published earthwork quantities in the DEIR and estimates of landslide removal, multiplied by historical earthwork unit prices locally and statewide. This amounts to at least 477,500 CY and over $6,685,000 in additional costs.

d. Vertical Bars D. Additional earthwork consisting of streambed materials removal and replacement, recommended by Terrestrial Solutions, Inc. (TSI) are added to the red bar.

e. Vertical Bars E. Offsite export savings (a reduction in costs applied to the west parcel) are removed from the red bar since methods are available to disposed of stadium hill dirt free of charge though the needs of regional contractors .

f. Vertical Bars F. A credit is added to the blue bar for a SCE incentive program (a reduction in cost) since a new SCE Net Energy Metering (NEM 2.0) program was initiated on July 1, 2017.

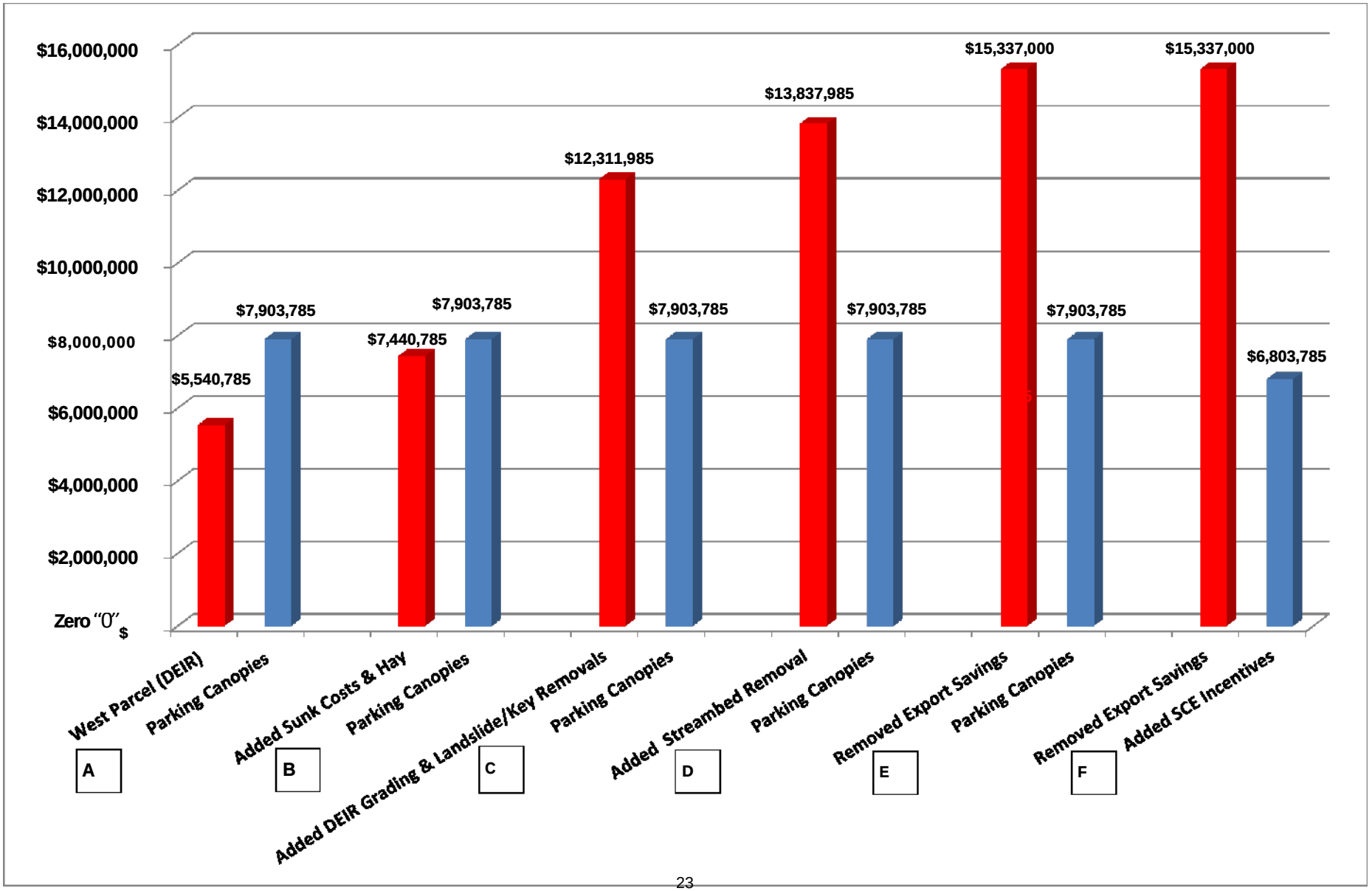
Response 5.2.17: The comments related to Table 6.6.1 are noted and are primarily an explanation of how Table 6.6.1 was constructed. As discussed previously, the premise underlying all of UWT cost discussion is the project has no history, costs are the primary consideration and all cost estimates are based on their current analysis. The comparison in Vertical Bar A is meaningless than it compares past historical cost data for the project with current data. The projected cost for grading is included in the current bids obtained by the District. The earthwork included in Vertical Bar D has not been verified and may or may not be appropriate. There is no guarantee that cost free disposal of earth in Vertical Bar E will be available and coincide with the project schedule. The comments do not address the primary environmental issues related to the project and again assume construction cost is the primary criteria for comparing project alternatives.

Comment 5.2.18: Total Project Costs

41. Within the following table, the total west parcel cost in Vertical Bars C is $12,311,985. This cost includes the cost adjustments and credits applied by Mt. SAC, which if excluded, would yield the hard dollar construction costs of the project equal to $13,271,300. This cost is based on grading quantities from Psomas grading plans and landslide removals characterized in the DEIR. When multiplying these quantities by unit costs of local and statewide contractor bids for similar work and quantities, it produces the $13,271,300 value. This value compares favorably to the $13,723,645 Total Project Budget including Site Improvements and Earthwork identified in the Mt. SAC Board of Trustees Action for Professional and Design and Consulting – added Services (contract Amendments), page 37, October 12, 2016.

42. Economic studies to assess ROI & Payback (Table 6.6.2) have been based on the west parcel project Net Cost of $5,440, 785. Because these costs are considered unreliable as noted above, they should not be relied upon for development of ROI & Payback studies or for decision-making.

Total Project Costs
West Parcel (DEIR) vs. Parking Canopy Mounted Solar Pa



Response 5.2.18. The comment in Item 41 regarding the $13,723,645 Total Project Budget including Site Improvements and Earthwork identified in the Mt. SAC Board of Trustees Action for Professional and Design and Consulting – added Services (contract Amendments), page 37, October 12, 2016 is noted.

The comments in Item 42 are noted. Since UWT regards the $5.54 costs for the project as unreliable there is little value in the comparisons made in their Total Project Cost table. The comments ignore the cost comparisons presented in Tables 6.6.1, 6.6.2 in the Draft EIR and present no written evidence that contradicts the information provided therein. Tables 6.6.1, 6.6.2 present relevant comparisons of ROI, project payback and cost per watt that the UWT comments have not refuted.

However, as stated previously, construction cost is not the sole criteria used to compare the benefits of the project and a canopy mounted systems. All of UWT cost comparisons ignore the opportunity costs for future facilities that cannot be built in land devoted to a canopy solar system and do not comment on the environmental issue comparisons for project alternatives, as shown in Table 6.6.3 of the Draft EIR.

Comment 5.2.19: Comments from Terrestrial Solutions on District Geotechnical Reports

Although the comments from Terrestrial Solutions on geotechnical issues are included in the UWT Comments, they will be addressed as distinct separate comments by Converse Consultants as follows:

Comments 5.3.1 ff - Geotechnical Review of Proposed Grading of the West Parcel Site for Mt. San Antonio College, June 2017 (p. 19 ff)

Comments 5.4.1 ff - Geotechnical Review of Converse Report Concerning the West Parcel Landslide, Mt. San Antonio College, West Parcel Solar Project, August 2017 (p. 40 ff)

Comments 5.5.1 ff. - Response to EIR Section 3.5 Geology and Soils, West Parcel Area, Mt. San Antonio College, August 2017 (p. 49 ff)

Please note that the June 20, 2017 comments prepared by Terrestrial Solutions, Inc. are similar to those forwarded by United Walnut Taxpayers during the Scoping Session on June 7, 2017. The comments were titled: *Written Comments to Scoping Meeting for West Parcel Solar Project, June 7, 2017: United Walnut Taxpayers Preliminary Review of Negative Geotechnical and Geological Aspects of Constructing Earthfill Pad for a Solar Farm on the West Parcel – Draft, June 6, 2017*. The UWT June 7, 2017 correspondence was included in Appendix X-7 of the Draft EIR and is not included herein.

The June 7, 2017 comments were reportedly prepared by a licensed Engineering Geologist retained by UWT to review the Converse Consultants report dated December 19, 2014 but the geologist was not identified. When required, the June 7, 2017 comments were addressed in the Draft EIR in Section 3.5.

Appendix F1: Comments 5.3.1 ff - Geotechnical Review of Proposed Grading of the West Parcel Site for Mt. San Antonio College, June 2017 (p. 19 ff)

Appendix F1 - DRAFT RESPONSE TO TERRESTRIAL SOLUTIONS INC. (TSI) DRAFT ENVIRONMENTAL IMPACT REPORT REVIEW COMMENTS - GEOTECHNICAL REVIEW OF PROPOSED GRADING OF THE WEST PARCEL SITE DATED JUNE 29, 2017 - Mt. San Antonio College West Parcel Solar Project

INTRODUCTION

Converse Consultants (Converse) presents this draft response to review comments received from the United Walnut Taxpayers (UWT) and their geologic consultant Terrestrial Solutions Inc. (TSI) Draft Environmental Impact Report (DEIR) review comments concerning geotechnical review of proposed grading of the West Parcel Solar Project site at Mt. San Antonio College in Walnut, California. This response report provides additional information for the Draft Environmental Impact Report (DEIR).

The field exploration work to further evaluate the road cut landslide and project site was stopped on June 12, 2017 due to reported concerns for the California Gnatcatcher habitat areas and breeding season. The West Parcel site field investigation work was stopped and was not completed pending further environmental evaluation of the Gnatcatcher habitat areas. Additional geotechnical studies, recommendations and reports are planned for the landslide repair and project site including slope stability analyses, temporary and permanent cut slope evaluations, keyway designs, subdrain system designs, geosynthetic reinforcements, buttress fills, slope stabilization fills, remedial removals and site grading.

The June 29, 2017 Terrestrial Solutions Inc. review report includes 12 pages of text, 7 figures and 2 pages of photographs. The Converse responses are directed to Section 3.0 of the TSI report entitled “Deficiencies and Consequences” presented on pages 9, 10 and 11 of the report.

RESPONSE TO REVIEW COMMENTS

TSI Comment 5.3.1: “Geologic Model – Insufficient surface and subsurface information is available to determine/model the earth materials that are present, and the geologic structure throughout the site.”

Converse Response 5.3.1: The December 19, 2014 Geotechnical Study Report prepared by Converse Consultants presented the findings of 22 exploratory borings drilled, logged and sampled on the West Parcel site. The boring logs are presented in Appendix A of the report, titled Field Exploration. Nineteen (19) of the 22 exploratory borings encountered the various bedrock types on site including sandstone, conglomerate, siltstone and claystone bedrock materials. Two (2) of the borings (BH-1 and BH-2) were drilled to 21.5 feet below ground surface and did not encounter bedrock, only alluvium. Boring BH-13 did not encounter siltstone bedrock. The various soil and sedimentary bedrock types are identified on the boring logs based on material classifications and depths encountered. Geologic contacts between the differing geologic materials are shown on the borings logs. Sampling blow counts for each sample taken in the bedrock materials are presented on the boring logs.

The Geologic Map of the San Dimas and Ontario Quadrangles by Thomas Dibblee, Jr., DF-91, dated 2002, and other published maps do not show bedding attitudes on the West Parcel site. Bedding attitudes are shown on off-site areas some distance from the project site and do not represent the West Parcel site bedding attitudes and geologic structure. The bedding attitudes presented by Converse are based on direct field measurements performed on the West Parcel site. The bedding attitudes were measured on undisturbed bedrock materials located on the project site. Additional bedding attitudes have been measured around the perimeter or the Road Cut Landslide and in four (4) exploratory test pits excavated along the toe of the landslide along Grand Avenue. These bedding attitudes are similar to the previously measured bedding attitudes and bedrock structure.

No evidence of faulting was found on the West Parcel site. Published maps by the California Geologic Survey (CGS) and Thomas Dibblee, Jr. do not show or mention faults on or near the West Parcel site. No evidence of faulting was found on the project site during the field investigation.

Sampling blow counts for each sample taken in the 22 exploratory borings in the soil and bedrock materials were presented on the boring logs. The strength of the soil and bedrock materials varied depending on several factors, including material type, rock type, degree of weathering and depth of burial. The deeper alluvium and bedrock materials provided high Ring sampler and Standard Penetration Test (SPT) blow counts and refusals to sampler penetration. The underlying alluvium and sedimentary bedrock materials will provide suitable support for the proposed fill soils and solar pad as it does throughout th local site area for residential hillside homes, highways, roads, businesses and colleges.

The proposed grading of the West Parcel Solar Project will improve overall site stability by placing engineered compacted fills in the low-lying canyon areas and lowering the hilltop slopes. The grading of the West Parcel Solar Project will remove the areas of “Low Landslide Potential”, “Medium Landslide Potential” and “High Landslide Potential” as shown on the 1974 County Engineer Landslide Potential Map - Plate II, during grading and then become an “Urbanized Zone” classification with the landslide potential removed during proposed grading for the West Parcel project. As stated in the 1974 County Engineers Report, “*modifications to the topography by grading would greatly affect landslide potential. For example, subdivisions graded under present engineering geologic technology would become areas of low landslide potential and therefore could be zoned as “Urbanized: Landslide Potential Removed During Grading”.*

TSI Comment 5.3.2: “A discussion of existing, and potential landslides at the site including mitigation was not presented in the Converse report.”

Converse Response 5.3.2: The unstable Road Cut Landslide was recognized on the central hillside above Grand Avenue on the project site. The Road Cut landslide occurred in the late 1970’s as the result of previous grading activities by others to widen Grand Avenue. No slope drainage control devices (brow ditches, terrace drains, down drains, catch basins, etc.) were constructed on the hillside cut slope to control surface runoff. Multiple landslide failures were reported to have occurred on the road cut slope. The landslides were likely triggered by three (3) years of above normal rainfall between 1977 and 1980. The landslide was not repaired, but left to gradually increase in size during the past 38 years resulting in significant damage to the West Parcel property and posing a continued threat of slope instability and sudden ground movement to Grand Avenue.

The proposed grading for the West Parcel Solar Project will completely remove the unstable landslide deposits and replace them with engineered compacted fills that are keyed and benched into the underlying undisturbed bedrock materials. The proposed grading will remove and lower the hillside with the Road Cut Landslide down approximately 54 feet to an approximate elevation of 761 feet. The remaining landslide materials will then be completely removed down to undisturbed bedrock. The size, width and depth of the keyways and slope benches will be increased as needed during grading to remove all the disturbed landslide deposits and support the new engineered compacted fill soils on undisturbed bedrock materials. The new engineered compacted fills will be keyed and benched into the underlying undisturbed bedrock materials during grading of the West Parcel Solar Project.

Hillside slope areas in the environmentally sensitive habitat areas of the West Parcel site were not investigated. No grading is planned for these areas. The environmental habitat areas will be kept in their natural conditions.

Additional geotechnical studies, recommendations, and reports are planned for the Road Cut Landslide and West Parcel site including slope stability analyses, temporary and permanent cut slope evaluations, keyway designs, subdrain system designs, geosynthetic reinforcements, buttress fills, slope stabilization fills, remedial removals and site grading.

TSI Comment 5.3.3: "General slope stability modelling and discussion was not provided, especially regarding the slope along Grand Avenue, the proposed cut slope below the existing homes, and the natural slopes of the project."

Converse Response 5.3.3: Field exploration work to further evaluate the Road Cut Landslide and West Parcel site was stopped on June 12, 2017 due to reported concerns for the California Gnatcatcher habitat areas and breeding season. The West Parcel site field investigation work was stopped and was not completed pending further environmental evaluation of the Gnatcatcher habitat areas. Additional geotechnical studies, recommendations, and reports are planned for the landslide repair and project site including slope stability analyses, temporary and permanent cut slope evaluations, keyway designs, subdrain system designs, geosynthetic reinforcements, buttress fills, slope stabilization fills, remedial removals and site grading.

TSI Comment 5.3.4: "Liquefaction was only discussed in relation to the southern canyon area and one boring within this canyon. The northern canyon is larger and has deeper alluvium than the southern canyon leaving significant deficiencies in the liquefaction analysis."

Converse Response 5.3.4: An additional soil boring was drilled by Leighton Consulting on June 12, 2017 to further evaluate the potential liquefaction hazard in the northern alluvial filled canyon near Grand Avenue. Leighton performed a limited independent geotechnical and geologic study of the site relative to the proposed designs presented in Psomas' current plan. Preliminary results of the soil boring were presented in Leighton's September 11, 2017 Draft Geotechnical Review. Subsurface exploration was planned to also include several large-diameter borings and test pits on site, however, the site exploration was stopped on June 12, 2017 due to reported concerns for the California Gnatcatcher habitat areas and breeding season.

Leighton logged and sampled an 8-inch diameter hollow stem auger boring, LB-1, located in the northern canyon near Grand Avenue. Boring LB-1 was drilled to a depth of approximately 45 feet below ground surface and reported to have encountered approximately 40 feet of alluvium consisting of clayey and silty sand with gravel, gravel with sand, and sand with gravel overlaying sedimentary bedrock consisting of siltstone interbedded with sandstone. The Standard Penetration Tests (SPT) met sampling refusal at all the sample depth intervals below 20 feet indicating very dense alluvial soil materials. Groundwater was encountered at a depth of approximately 37 feet below the existing ground surface.

Leighton conducted liquefaction analysis on Boring LB-1 based on the subsurface data encountered in the boring and considered the observations made by Converse in Borings BH-1, BH-2, and BH-7, which were all located in the northern canyon. Leighton assumed alluvium to be 40 feet thick based on conditions observed in Boring LB-1, and assumed the highest historical groundwater of 16 feet below ground surface as encountered in Converse Boring BH-2. The seismic parameters used for the Leighton liquefaction analysis were based on the results of the U.S. Geological Survey's U.S. Seismic Design Maps and Unified Hazard Tool online applications. The Leighton liquefaction analysis used a Peak Horizontal Acceleration (PGAm) of 0.77g and an earthquake magnitude of Mw-6.7.

Leighton concluded, based on the assumptions described above, the soil conditions at Boring LB-1 are considered non-liquefiable due to the dense soil conditions below the assumed highest groundwater level. Leighton also performed analyses to estimate the potential for seismically induced settlement using the method of Tokimatsu and Seed (1987), and based on Martin and Lew (1999), considering the maximum considered earthquake (MCE) peak ground acceleration (PGAm). The results of the analyses suggest that the onsite soils are susceptible to approximately 0.9-inch of seismic settlement based on the MCE. These conditions are reported by Leighton to be suitable for site development.

TSI Comment 5.3.5: "Remedial removals were discussed however, estimated depths of removal and the criteria to determine when removals are sufficient were not provided."

Converse Response 5.3.5: Additional geotechnical studies, recommendations and reports are planned for the landslide repair and project site that will include depths of remedial removals for the canyon areas. Loose, disturbed or unsuitable alluvial soils encountered in the drainage canyons shall be removed to firm natural soils and/or bedrock and then replaced as engineered compacted fill. Loose and unsuitable alluvial soils shall be cleaned out of the canyon bottoms prior to the placement of compacted fills and canyon bottom subdrains.

Four (4) exploratory test pit trenches were excavated along the toe of the Road Cut Landslide on June 9 and June 12, 2017. The purpose of the four (4) exploratory test pit trenches was to determine the depth and extent of landslide deposits along the toe of the landslide along Grand Avenue. The exploratory test pit trenches were excavated with a large Kobelco SK210-9 track-mounted excavator. The bedrock exposed in the bottom of Test Pit Nos.1 through 3 encountered hard intact bedrock materials beneath the disturbed landslide materials. The excavator had to scrape and chip the bedrock exposed at the bottom of the trench during excavation. The trench sidewalls and bottoms were then cleaned off by hand to obtain bedding attitudes. The undisturbed bedrock exposures in the bottom of the trenches were hard and intact when struck by a geologic hammer. There was no evidence observed in the bottom of the trenches to indicate that additional slip planes existed below the bottom depths of the trench excavations. The bedrock exposed in the bottom of the trenches was undisturbed, hard and intact.

There has been no observed evidence of ground movement or displacement observed along the sidewalk and street surface on the west side of Grand Avenue below the road cut landslide.

The depths of the keyways along Grand Avenue for the landslide repair are anticipated to range from 5 to 15 feet below the Grand Avenue sidewalk grades. The excavations for the keyways will be safely set back from the sidewalk, street and buried utility lines for lateral support. The keyway bottoms will be leveled, stepped and back tilted for improved buttress stability. The deepest excavations for the keyways will be made along the back-cut slopes of the keyway and for the subdrain systems that will be safely set back from the sidewalk and street along the west side of Grand Avenue.

TSI Comment 5.3.6: "Remedial removal depths can affect many other issues including total and differential settlement, potential collapse, and the stability of existing slopes.

Converse Response 5.3.6: Additional geotechnical studies, recommendations and reports are planned for the landslide repair and project site that will include depths of remedial removals for the canyon areas, slopes and landslide area. Loose, disturbed or unsuitable alluvial soils and bedrock materials encountered in the canyons or on the slopes shall be removed to firm and unyielding natural soils and/or bedrock and then replaced as engineered compacted fill. Loose and unsuitable alluvial soil and bedrock materials shall be cleaned out of the canyon bottoms prior to placement of compacted fills and canyon bottom subdrains. Bedrock cut pad areas will be over-excavated and recompacted.

Grading will be performed in accordance with current grading codes. Grading observations and monitoring will be performed during project grading to verify that suitable bottom materials are reached and the compacted fills are placed in accordance with project plans and specifications and applicable grading codes. These mitigation measures will reduce the potential for differential settlement, potential collapse and instability to negligible and/or acceptable levels.

Comments 5.4.1 ff - Geotechnical Review of Converse Report Concerning the West Parcel Landslide, Mt. San Antonio College, West Parcel Solar Project, August 2017 (p. 40 ff)

Appendix F2 - DRAFT RESPONSE TO TERRESTRIAL SOLUTIONS INC. (TSI) DRAFT ENVIRONMENTAL IMPACT REPORT REVIEW COMMENTS - DEIR PLANNING SESSION COMMENTS DATED AUGUST 31, 2017 - Mt. San Antonio College West Parcel Solar Project

INTRODUCTION

Converse Consultants (Converse) presents this draft response to review comments received from the United Walnut Taxpayers (UWT) and their consultant's Terrestrial Solutions Inc. (TSI) Draft Environmental Impact Report (DEIR) review comments concerning Section 3.5 (Geology/Soils) of the proposed West Parcel Solar Project, Tiered Project Draft EIR to 2012 Facilities Master Plan Program EIR (SCH 2002041161) prepared by Mt. San Antonio College, California. This response report provides additional information for the Draft Environmental Impact Report (DEIR).

The field exploration work to further evaluate the road cut landslide and project site was stopped on June 12, 2017 due to reported concerns for the California Gnatcatcher habitat areas and breeding season. The West Parcel site field investigation work was stopped and was not completed pending further environmental evaluation of the Gnatcatcher habitat areas. Additional geotechnical studies, recommendations and reports are planned for the landslide repair and project site including slope stability analyses, temporary cut slope evaluations, keyway designs, subdrain system designs, geosynthetic reinforcements, buttress fills, slope stabilization fills, remedial removals and site grading.

RESPONSE TO REVIEW COMMENTS

TSI Comment 5.4.1 : "Page 91: Second Paragraph"

Converse Response 5.4.1 : Acknowledged.

TSI Comment.5.4.2: "Pages 91 and 92: Executive Summary, Bullet #6-While a liquefaction analysis was conducted for the site. This analysis was based on a boring that was not in one of the two areas of potential liquefaction as identified by the State of California."

Converse Response 5.4.2: An additional soil boring was drilled by Leighton and Associates, Inc. on June 12, 2017 to further evaluate the potential liquefaction hazard in the northern alluvial filled canyon near Grand Avenue. Leighton performed a limited independent geotechnical and geologic study of the site relative to the proposed designs presented in Psomas' current plan. Preliminary results of the soil boring were presented in Leighton's September 11, 2017 Draft Geotechnical Review. Subsurface exploration was planned to also include several large-diameter borings and test pits on site, however, the site exploration was stopped on June 12, 2017 due to reported concerns for the California Gnatcatcher habitat areas and breeding season.

Leighton and Associates logged and sampled an 8-inch diameter hollow stem auger boring, LB-1, located in the northern canyon near Grand Avenue. Boring LB-1 was drilled to a depth of depth of approximately 45 feet below ground surface (bgs) and encountered approximately 40 feet of alluvium consisting of clayey and silty sand with gravel, gravel with sand, and sand with gravel overlaying sedimentary bedrock consisting of siltstone interbedded with sandstone. The Standard Penetration Tests (SPT) met sampling refusal at all the sample depth intervals below 20 feet indicating very dense soil materials. Groundwater was encountered at a depth of approximately 37 feet below the existing ground surface.

Leighton and Associates conducted liquefaction analysis on Boring LB-1 based on the subsurface data encountered in the boring and considered the observations made by Converse in Borings BH-1, BH-2, and BH-7, which were all located in the northern canyon. Leighton assumed alluvium to be 40 feet thick based on conditions observed in Boring LB-1, and assumed the highest historical groundwater of 16 feet below ground surface as encountered in Converse Boring BH-2. The seismic parameters used for the Leighton liquefaction analysis were based on the results of the U.S. Geological Survey's U.S. Seismic Design Maps and Unified Hazard Tool online applications. The Leighton liquefaction analysis used a Peak Horizontal Acceleration (PGAm) of 0.77g and an earthquake magnitude of Mw-6.7.

Leighton concluded, based on the assumptions described above, the soil conditions at Boring LB-1 are considered non-liquefiable due to the dense soil conditions below the assumed highest groundwater level. Leighton also performed analyses to estimate the potential for seismically induced settlement using the

method of Tokimatsu and Seed (1987), and based on Martin and Lew (1999), considering the maximum considered earthquake (MCE) peak ground acceleration (PGAm). The results of the analyses suggest that the onsite soils are susceptible to approximately 0.9-inch of seismic settlement based on the MCE. These conditions are reported by Leighton to be suitable for site development.

TSI Comment 5.4.3: "Pages 91 and 92: Executive Summary, Bullet #8-Remedial Grading of the site has not been well defined in either report."

Converse Response 5.4.3: Additional geotechnical studies, recommendations and reports are planned for the landslide repair and project site that will include depths of remedial removals for the canyon areas. Loose, disturbed or unsuitable alluvial soils encountered in the drainage canyons shall be removed to firm natural soils and/or bedrock and then replaced as engineered compacted fill. Loose and unsuitable alluvial soils shall be cleaned out of the canyon bottoms prior to the placement of compacted fills and canyon bottom subdrains.

TSI Comment 5.4.4: "Pages 91 and 92: Executive Summary, Bullet #9- The statement regarding reducing the existing slope to a gradient less than 2:1 is misleading"

Converse Response 5.4.4: The proposed cut and fill slopes on the project will not be graded steeper than 2 units horizontal to 1 unit vertical slope gradients. This is the standard slope configuration requirement for grading projects performed in most cities and counties in southern California. The 2:1 slope configuration is a grading industry standard and requirement. The fill slopes will be buttressed and supported on engineered compacted fills keyed and benched into firm natural soils and/or bedrock. Keyways with a minimum width of 25 feet and minimum depth of 5 feet will be graded along the base of the slope. The size, width and depths of the keyways and slope bench cuts will be increased during grading to remove all the disturbed landslide materials and unsuitable slope materials. Compacted fill soils will be keyed and benched into the underlying undisturbed soils and bedrock materials in accordance with project specifications and current grading codes and requirements.

TSI Comment 5.4.5: "Section 3.5.2 Geology/Soil Impacts, Item No.1-The conclusion is correct, although the Converse report does not provide the correct distance to the closest active fault."

Converse Response 5.4.5: Acknowledged. The San Jose Fault is currently not mapped as an active fault by the California Geologic Survey (CGS). Alquist-Priolo Earthquake Fault Zones for active faults have not been mapped on the current San Dimas Quadrangle by CGS.

TSI Comment 5.4.6: "Section 3.5.2 Geology/Soil Impacts, Item No.2- Liquefaction: As discussed above and in TSI's referenced report (2017a), liquefaction has not been appropriately addressed."

Converse Response 5.4.6: Refer to response for TSI Comment: Pages 91 and 92: Executive Summary, Bullet #6 presented above.

Leighton and Associates performed a limited independent geotechnical study of the site that included logging and sampling of hollow stem auger Boring LB-1 located in the northern alluvial filled canyon near Grand Avenue. Leighton and Associates conducted a liquefaction analysis on Boring LB-1 based on the subsurface data encountered in the boring and considered the groundwater depth of 16 feet encountered in Converse Boring BH-2.

Leighton concluded, based on the assumptions for the project site location, that the soil conditions at Boring LB-1 are considered non-liquefiable due to dense soils below the assumed highest groundwater level of 16 feet below ground surface (bgs).

Based on the Converse study and the independent Leighton study findings for Boring LB-1, the project site is not considered to be susceptible to liquefaction and seismically-induced settlement is anticipated to be negligible.

TSI Comment 5.4.7: “Section 3.5.2 Geology/Soil Impacts, Item No.3-There is not a specific section in the Converse reports that addresses mass movements and/or landsliding in general.

Converse Response 5.5.7: The proposed grading for the West Parcel Solar Project will remove and lower the hillside with the road cut landslide down approximately 54 feet to an approximate elevation of 761 feet. The remaining landslide materials will be completely removed down to undisturbed bedrock. The size, width and depth of the keyways and slope benches will be increased during grading as necessary to remove all the disturbed landslide deposits and support the new engineered compacted fill soils on undisturbed bedrock materials. The new engineered compacted fills will be keyed and benched into the underlying undisturbed bedrock materials during grading of the West Parcel Solar Project.

Stabilization fills will be graded for cut slopes with factors-of-safety less than 1.5 once slope stability analyses have been performed to model the temporary and permanent slope configurations and determine which slopes require additional mitigation measures.

Grading will be performed in accordance with current grading codes. Slopes will be graded in accordance with current grading code requirements with permanent slope gradients no steeper than 2 units horizontal to 1 unit vertical. Canyon bottom subdrain systems will be installed in the canyon bottoms to provide subsurface drainage and prevent buildup of hydrostatic pressure. The engineered compacted fill soils will fill the low-lying channel areas and will stabilize and buttress the surrounding upslope hillside areas and improve overall slope stability when filled to the solar pad grade of elevation 761 feet. The graded slope areas and pad will be constructed with non-erosive drainage control devices (including brow ditches, terrace drains, down drains, catch basins, etc.) to control surface runoff, reduce infiltration into the slopes and direct surface runoff to suitable disposal points.

TSI Comment 5.4.8: “Section 3.5.2 Geology/Soil Impacts, Item No.4 – There is a large landslide that exists on the site that was not identified by Converse in 2014.”

Converse Response 5.4.8: The road cut landslide occurred in the late 1970’s as a result of previous activity by others to widen Grand Avenue. The road cut landslide is located on a natural hillside slope on the central portion of the West Parcel site along Grand Avenue. Evidence of the landslide on the road cut slope above Grand Avenue was visible in historic aerial photographs staring in 1979. The road cut landslide was not repaired and has continued enlarge and creep downslope to Grand Avenue during the past 38 years. The unstable landslide deposits threaten Grand Avenue with slope instability and sudden ground movement. The landslide needs to be repaired.

The proposed grading for the solar pad will remove and lower the hilltop and landslide down 54 feet to approximate elevation 761 feet. The remaining landslide deposits will then be removed to expose undisturbed bedrock materials. The fill slope will be buttressed with engineered compacted fills that are keyed and benched into the undisturbed bedrock materials. The size, width and depths of the keyways and slope benches will be increased as necessary during grading to remove all of the disturbed landslide deposits and support the new compacted fill soils on undisturbed bedrock materials. The unstable landslide deposits will be completely removed during grading and replaced with engineered compacted fills. Grading observations and monitoring will be performed during project grading to verify that suitable bottom materials are reached and that the compacted fills are placed in accordance with project plans, specifications and grading code requirements.

TSI Comment 5.4.9: “Comments from June 7, 2017 meeting:”

Converse Response 5.4.9: Converse did not attend the June 7, 2017 meeting and is not familiar with the statements reported to have been made by others.

Additional geotechnical studies, recommendations, and reports are planned for the landslide repair and project site including slope stability analyses, temporary cut slope evaluations, keyway designs, subdrain system designs, geosynthetic reinforcements, buttress fills, slope stabilization fills, remedial removals and site grading.

TSI Comment 5.4.10: "N10. Additional Trenching Investigation"

Converse Response: Response to Terrestrial Solutions, Inc. review comments concerning the findings of four (4) exploratory test pit trenches excavated along the toe of the road cut landslide are presented in a separate response letter. The purpose of the four (4) exploratory test pit trenches was to determine the depth and extent of the landslide deposits along the toe of the landslide along Grand Avenue and to evaluate the sedimentary bedrock structure and material properties. This preliminary report provided information and data for the DEIR.

Comments 5.5.1 ff. - Response to EIR Section 3.5 Geology and Soils, West Parcel Area, Mt. San Antonio College, August 2017 (p. 49 ff)

APPENDIX F3 **-** DRAFT RESPONSE TO TERRESTRIAL SOLUTIONS INC. (TSI) DRAFT ENVIRONMENTAL IMPACT REPORT REVIEW COMMENTS - DEIR PLANNING SESSION COMMENTS DATED AUGUST 31, 2017 - Mt. San Antonio College West Parcel Solar Project

INTRODUCTION

Converse Consultants (Converse) presents this draft response to review comments received from the United Walnut Taxpayers (UWT) and their consultant's, Terrestrial Solutions Inc. (TSI), Draft Environmental Impact Report (DEIR) review comments concerning the findings of four (4) exploratory test pit trenches excavated along the toe of an existing road cut landslide that occurred during previous grading work to widen Grand Avenue in the late 1970's. The road cut landslide is located on a natural hillside slope on the central portion of the West Parcel site along Grand Avenue. The road cut landslide has continued to enlarge and creep downslope to Grand Avenue during the past 38 years. The unstable landslide deposits threaten Grand Avenue with slope instability and sudden ground movement. The unstable landslide deposits will be completely removed during grading and replaced with engineered compacted fills keyed and benched into the underlying undisturbed bedrock materials during grading for the West Parcel Solar Project.

The purpose of the four (4) exploratory test pit trenches was to determine the depth and extent of landslide deposits along the toe of the landslide along Grand Avenue and to evaluate the sedimentary bedrock structure and material properties. The four (4) exploratory test pit trenches were excavated with a Kobelco SK210-9 track-mounted excavator on June 9 and June 12, 2017. The field exploration work to further evaluate the road cut landslide and project site was stopped on June 12, 2017 due to reported concerns for the California Gnatcatcher habitat areas and breeding season. The West Parcel site field investigation work was stopped and was not completed pending further environmental evaluation of the Gnatcatcher habitat areas.

The approximate location of the four (4) exploratory test pit trenches were presented in Converse's July 27,2017 West Parcel - Landslide Toe Test Pit Trench Study and are shown on Drawing No. 1, *Road Cut Landslide Evaluation.* The four (4) test pit trench logs are presented on Drawing Nos. 1a through 1d*, Road Cut Landslide Toe - Test Pit No. 1, No. 2, No. 3, and No. 4*. This preliminary report provided information and data for the Draft Environmental Impact Report (DEIR). Additional geotechnical studies, recommendations and reports are planned for the landslide repair and restoration including slope stability analysis, temporary cut slopes, keyway designs, subdrain system designs, geosynthetic reinforcements, buttress fills, slope stabilization fills, remedial removals and site grading.

BACKGROUND

The road cut landslide occurred in the late 1970's as a result of previous grading activity by others to widen Grand Avenue. Evidence of the landslide on the road cut slope above Grand Avenue was visible in historic aerial photographs starting in 1979. No drainage control devices (brow ditches, terrace drains, down drains, catch basins, etc.) were observed or constructed on the hillside cut slope at the time it was graded to collect

and control surface runoff on the slope face. The landslide was likely triggered by three (3) years of above normal rainfall between 1977 and 1980. Dozer cuts were made at the top of the hillside which directed surface runoff directly into the head scarp of the landslide.

A public records information request was made to the City of Walnut, Office of the City Clerk, on June 21, 2017 for records and information pertaining to the road cut landslide along Grand Avenue and no information responsive to the request was reported to be in the City Clerk's possession.

The road cut landslide was not repaired or restored once it occurred. The unrepaired landslide has gradually grown over the past 38 years since it occurred. The landslide growth over the years has caused significant damage to the West Parcel property. The southern toe of the landslide has moved eastward to the western edge of the Grand Avenue sidewalk. The landslide deposits are vulnerable to further sliding, ground movement and downslope creep. The landslide presents a continued hazard of slope instability and has a potential for sudden ground movement following wet weather periods along Grand Avenue and needs to be repaired.

RESPONSE TO REVIEW COMMENTS

TSI Comment 5.5.1: "No slip plane attitudes are presented on the test pit logs."

Converse Response 5.5.1: The four exploratory test pits were located along the toe of the landslide. No well-developed "slip plane" was expected at the toe of the landslide where the downslope movement and force of the landslide was stopped by the resistance of the intact slope materials resulting in a crumble zone of disturbed slope materials. The contact between the overlying disturbed landslide deposits and the underlying undisturbed bedrock materials was clearly visible in the test pits and is shown on the test pit logs. The test pits revealed that a clear and distinct "slip plane" was not encountered along the toe of the landslide. The geologic exposures in the test pits were quite consistent and characteristic of a crumple zone that commonly occurs at the toes of landslides.

Larger diameter borings and down hole logging were planned for the landslide study; however, the work was stopped over concerns for the Gnatcatcher habitat and breeding season.

TSI Comment 5.5.2: "Converse states that the bedrock bedding attitudes found in the four test pits are "similar to the previously measured bedding attitudes measured for the site"

Converse Response 5.5.2: The undisturbed bedrock bedding attitudes measured in the four test pits are similar to those encountered in Boring BH-13. The undisturbed bedding attitudes are dipping to the northwest and north. The undisturbed bedrock bedding attitudes were not measured to be dipping to the east. It would be unrealistic to expect the undisturbed bedrock bedding attitudes to be exactly the same at different bedrock exposure locations across the site.

TSI Comment 5.5.3: "TSI conducted brief mapping of the area above the landslide where Converse mapped bedding that strikes north 15 to 25 degrees east (similar to the previous report)."

Converse Response 5.5.3: The bedding attitudes measured at the top of the landslide were dipping northwest and north and are similar to the bedding attitudes and structure measured in Boring BH-13 that was down hole logged. Some variations in the bedrock bedding attitudes due to folding and deformation in the sedimentary bedrock units will occur across the project site. Grading for the West Parcel Solar project will remove and lower the hilltop and landslide down approximately 54 feet to Elevation 761 feet. The remaining landslide deposits will be completely removed during grading. The remaining bedrock bedding attitudes with out-of-slope and downslope components of dip exposed in the temporary back cut slopes of the landslide repair will be buttressed with engineered compacted fills keyed and benched into the underlying undisturbed bedrock materials.

TSI Comment5.5.4: "The Converse report does not indicate that the out-of-slope bedding is a contributing factor to the landsliding that occurred, yet it is a likely a significant contributing factor".

Converse Response 5.5.4: Larger diameter borings with down hole logging were planned for the central portion of the road cut landslide, however, the work was stopped over concerns for the Gnatcatcher habitat and breeding season. The road cut landslide has moved downslope in an easterly direction toward Grand Avenue while the undisturbed bedrock bedding attitudes exposed at the near surface indicate northwest and northward bedding dips. The contribution of the apparent out-of-slope and downslope components of bedding dip cannot not be determined at this time and is speculative.

TSI Comment 5.5.5: "The hill near the landslide exposes bedrock that consists of interbedded siltstone, claystone and sandstone, yet also visible at the top of hill and to the south are conglomeratic bedrock materials".

Converse Response 5.5.5: The sedimentary bedrock materials underlying the project site consist of interbedded sandstone, conglomerate, siltstone and claystone. Drawing No. 1, *Road Cut Landslide Evaluation*, was prepared to show the location of the four (4) test pits excavated along the toe of the landslide. Drawing No. 1 and the West Parcel-Landslide Toe Test Pit Trench Study report was focused on the toe of the road cut landslide and only presented information and data on the exploratory test pits.

No evidence of ground movement or displacement has been observed along the sidewalk and street surface on the west side of Grand Avenue below the road cut landslide. No grading work is proposed on Grand Avenue. No subsurface field exploration was performed on Grand Avenue.

TSI Comment 5.5.6: "Test Pit No. 4 (Drawing 1d) indicates the presence of landslide debris in the upper portion of the test pit and along the back wall of the excavation".

Converse Response 5.5.6: Terrestrial Solutions, Inc. (TSI) has misinterpreted the information presented on Drawing No. 1, *Road Cut Landslide Evaluation*, and Drawing No. 1d, *Road Cut Landslide Toe – Test Pit No. 4*. The landslide debris (Qls) shown in Test Pit No. 4 has been disturbed by landslide movement. Review of Drawing No. 1, *Road Cut Landslide Evaluation*, shows clear evidence of a disturbed and mounded ground surface that has produced a topographic anomaly and break along the toe of the landslide at the Test Pit No. 4 location. No well-developed slip plane was observed in Test Pit No. 4; however, the observed geologic exposures were characteristic of a creep affected crumple zone that commonly occurs along the toes of landslides. The (Qls) landslide materials were loose and disturbed and provided a dull thud when struck with a hammer when compared to the underlying undisturbed bedrock. The undisturbed bedrock units were striking north 75 to 88 degrees west and dipping 17 to 20 degrees north. The rear wall of the Test Pit No. 4 trench excavation did have an out-of-slope component of bedding dip with respect to the rear trench wall and its orientation.

TSI Comment 5.5.7: "The logs for test pits No. 1 through 3 indicate that bedrock was encountered in the bottom of each excavation. TSI is concerned that there may be additional slip planes below the depth of excavation."

Converse Response 5.5.7: The four (4) exploratory test pits were excavated with a large Kobelco SK210-9 track-mounted excavator. The bedrock exposed in the bottom of Test Pit Nos. 1 through 3 encountered hard intact bedrock materials. The Kobelco SK210-9 excavator encountered significant resistance to excavation in the undisturbed bedrock at the bottom of the three trench excavations. The excavator had to scrape and chip the bedrock at the bottom of the trench during excavation. The trench sidewalls and bottoms were then cleaned off by hand to obtain bedding attitudes. The bedrock exposed in the bottom of the trenches was hard and intact when struck by a geologic hammer. There was no evidence observed in the bottom of the trenches to indicate that additional slip planes existed below the depth of the trench excavations.

No evidence of ground movement or displacement has been observed to date along the sidewalk and street surface on the west side of Grand Avenue below the road cut landslide.

TSI Comment 5.5.8: "The sequence of how the landslide(s) occurred as described by Converse is not consistent with the information provided by the former Mayor of the City of Walnut (TSI, 2017)" (Ms. June Wentworth).

Converse Response 5.5.8: The sequence of landslide failures on the road cut made to widen Grand Avenue in the late 1970's is approximate based on available information. No records and information on the road cut landslide failures was made available from the City of Walnut, Office of the City Clerk, during our review. The date of the first road cut landslide is unknown. The approximate date of the second landslide that was left unrepaired for the past 38 years was observed on historical aerial photographs starting as early as May 11, 1979.

TSI Comment 5.5.9: "Converse's statements that the landslide continues to enlarge and represents a continued hazard to Grand Avenue, is not supported by specific evidence or slope stability analysis in their report."

Converse Response 5.5.9: Converse's statements that the landslide continues to enlarge and represents a continued hazard to Grand Avenue is based on direct field observations, mapping and experience. As shown on Drawing No. 1, *Road Cut Landslide Evaluation*, the southern toe of the landslide has moved and creeped down slope to the edge of the sidewalk and fence along the west side of Grand Avenue. Utility companies have had to clear away the fallen landslide materials off the tops of their buried vaults which run along the sidewalk. The toe of the landslide is clearly bulging out of the slope surface along the base of the landslide. The landslide presents a continued hazard of slope instability to Grand Avenue and needs to be repaired.

5.6 United Walnut Taxpayers, Layla Abou-Taleb, President, September 8, 2017 (Version 4) Sent at 9:57 pm on September 12, 2017.

Comment 5.6.1: The letter is generally a duplicate of 5.2.

Response 5.6.1: These comments were forwarded via e-mail at 9:50 pm on September 12, 2017, following the close of the 45-day public review period at 5:00 pm. The District is not required by the CEQA Guidelines to respond to late comments (Sections 15088 (a), 15207) following the close of a 45-day public review period. The late comments, which generally duplicate the prior submittal, are included as Appendix C2. The comments are dated September 8, but should be dated September 12, 2017. The comments were received (time stamped) by the District's computer system on September 12, 2017 at 10:14 pm.

The forwarding e-mail from Layla Abou-Taleb to Rebecca Mitchell at Facilities Planning and Management stated: *Attached is our updated comments to the West Parcel DEIR. Please disregard prior submission as this is more complete. (See attached file: Comments on WPSP DEIR 9-5-17_v4.pdf)*

The additional new information in Version 4.0 appears to include a resume and company qualifications for Terrestrial Solutions Inc. Only minor formatting changes were observed in the other UWT comments. Therefore, the District responses to UWT comments in Section 5.2 remain valid and responsive.

Section 6.0: Individual's Comments with District Responses

6.1 Denise and Sham Khan, 21262 Stockton Pass Road, Walnut, CA, August 9, 2017

Comment 6.1.1: *We strongly oppose Mt. Sac's solar farm on the corner of Grand & Amar.* ***(****This correspondence was received after the second Scoping Session and is not a comment on the Draft EIR. However, it is included herein for disclosure purposes).*

Response 6.1.1: Your opposition to the West Parcel Solar project is noted. No new environmental issue is included in the comments. Their correspondence is included as Appendix E1.

Section 7.0: New Information Added to the Draft EIR

7.1 Consolidation of all District court cases before the Superior Court of Los Angeles County

The Superior Court has consolidated all lawsuits filed by the City of Walnut and the United Walnut Taxpayers Associates against the District as Case (BC 576587).

7.2 Extension of student transportation fees with Foothill Transit District

The Board of Trustees extended the agreement with Foothill Transit Agency for September 1, 2017 to August 3, 2018. The District agrees to pay the Agency $0.60 per ride, with a not to exceed amount of fees collected for full-time credit students of $8.00 or $8.00 for part-time credit students. The fees are collected for the Fall and Winter terms, with the former including the Spring term and the latter including the Summer term.

7.3 New mitigation measure for haul truck air quality emissions

AQ-12. The District shall require the use of 2010 and newer haul trucks (e.g. material delivery trucks and soil import/export). In the event that the 2010 model year or newer diesel haul trucks cannot be obtained, provide documentation as information becomes available and use trucks that meet EPA 2007 model year NOx emission requirements, at a minimum. Facilities Planning and Management shall ensure compliance.

7.4 New staff contact for the South Coast Air Quality Management District and the Kizh Nation in Section 9.0 of the Draft EIR

Lijin Sun, J. D., SCAQMD, Program Supervisor, CEQA IGR, Planning, Rule Development & Area Sources

Ryan Banuelos, CSAQMD, Air Quality Specialist, CEQA Section

Brandy Salas, Gabriellino Band of Mission Indians - Kizh Nation

7.5 Leighton Associates Review of Converse Geo-Technical Report

On September 12, Layla Abou-Taleb, President, United Walnut Taxpayers, requested a document from Rebecca Mitchell of Facilities Planning and Management via e-mail, which stated: Please provide me with the independent geological peer review conducted on the Converse report of the West Parcel.

The request is not a response to comment on the Draft EIR. However, the reference is to a report prepared by Leighton Associates for the District, (September 11, 2017) which is now included in Appendix G1. The Leighton report included review of UWT comments of May 8, 2016 on the December 29, 2014 and July 27, 2014 Converse Geotechnical reports. The Converse reports were including in the Draft EIR as Appendices L1, L2. The UWT May 8, 2016 comments were included in Appendix X-1 of the Draft EIR. The annotated responses from Leighton to UWT comments provides specific references in the specific geotechnical issues raised by UWT.

Leighton Associates also performed a limited independent geotechnical and geologic study of the site relative to the design plans presented in the South Campus Site Improvements – West prepared by Psomas. The Leighton independent review includes one new hollow stem boring in the canyon in the northern portion of the site and review of four exploratory test pits (Test Pit Number 1-4) completed by Converse at the toe of the existing landslide.

This Response to Comments document does not identify any new significant impacts of the project or identify any additional new mitigation measures that must be implemented for potential project impacts.

Section 8.0: Revised Information Added to the Draft EIR

8.1 Clarification of requirement in Mitigation Measure AQ-9 in Master MMP File

AQ-09. All off-road diesel-powered construction equipment greater than 50 hp (e.g., excavators, graders, dozers, scrappers, tractors, loaders, etc.) used during construction of PEP (Phase 1) shall comply with EPA-Certified Tier IV emission controls where **commercially** available. The requirements shall be placed in construction contracts. Facilities Planning and Management shall ensure compliance.

8.2 SCAQMD recommended revision to Mitigation measure AQ-02

AQ-12. The District shall require the use of 2010 and newer haul trucks (e.g. material delivery trucks and soil import/export). In the event that the 2010 model year or newer diesel haul trucks cannot be obtained, provide documentation as information becomes available and use trucks that meet EPA 2007 model year NOx emission requirements, at a minimum. Facilities Planning and Management shall ensure compliance.

None of the revisions made to the Draft EIR identify new significant environmental impacts of the project.

8.3 Revision in Table 6.6.3: Project Alternatives Comparisons

In Table 6.6.4, Loss of Nonnative Grassland (i.e. the entire row) is omitted. Project Alternative 5 does not include non-native grassland. Therefore, all responses are “No” and the entire row is deleted. The project site includes areas of Extensive Agriculture, not non-native grassland (Figure 5, Appendix G1).

Section 9: Appendices (see Volume 4)

A. Notices

B. City of Walnut Comments

C. UWT Comments

D. AB 52 Consultation

E. Citizen Comments

F. Other Correspondence

G. New Project Information

H. 2017 West Parcel Solar Final MMP

I. 2018 Master Facility Plan MMP