Rancho Santiago Community College District
Sustainable RSCCD Committee

November 18, 2026

Zoom Meeting: https://rsccd-edu.zoom.us/j/88373352078
3:00 – 4:00 p.m.

Agenda

1. Introductions
2. Meeting Notes of September 16, 2026 – Alcala
3. Sustainable RSCCD Committee Field Trips – Alcala
4. Sustainability Updates – Alcala
   - Fusion Energy Reporting
   - Dashboard
   - SCC Microgrid
5. College Updates
   - Santiago Canyon College – Gonzalez
   - Santa Ana College – Kennedy
6. Other

Next Meeting:
March 17, 2027
3:00 p.m.
Zoom or TBD

Mission Statement

The Rancho Santiago Community College District aspires to provide equitable, exemplary educational programs and services in safe, inclusive, and supportive learning environments that empower our diverse students and communities to achieve their personal, professional, and academic goals.

Santa Ana College inspires, transforms, and empowers a diverse community of learners.

Santiago Canyon College is an innovative learning community dedicated to intellectual and personal growth. Our purpose is to foster student success and to help students achieve these core outcomes: to learn, to act, to communicate and to think critically. We are committed to maintaining standards of excellence and providing the following to our diverse community: courses, certificates and degrees that are accessible, applicable, and engaging.

sustainable rsccd

Rancho Santiago Community College District

Sustainable RSCCD Committee

Meeting Notes

September 16, 2026

Members:	Carri Matsumoto	Present
	Iris Ingram	Absent
	Linda Melendez	Absent
	Joanne Armstrong	Absent
	Jim Kennedy	Present
	Kelvin Leeds	Present
	Claudia Ruesga	Present
	Vanessa Engstrom	Present
	Daniel Oase	Present
	Alejandro Alcala	Present
	Jaime Vejar	Present
	Ambar Nakagami	Present
	Simone Wolfe	Present
	Nithin Tolety	Present
Guests:	Joe Melendez	Present
	Hugo Curiel	Absent
	David Nakagami	Present
	Francisco Gonzalez	Present
	Lisa Imai	Present
	Conor McKenzie	Present

Asst. Vice Chancellor, Carri Matsumoto convened the meeting at 3:04 p.m.

1. **Introductions**
   Committee members and guests introduced themselves.

2. **Sustainable RSCCD Committee Purpose and Responsibilities**
   Ms. Matsumoto presented purpose and responsibilities for the committee. She noted this is an ad-hoc committee, presented the information and asked for feedback/comments. Committee had no changes.

3. **Sustainable RSCCD Committee Membership**
   Ms. Matsumoto discussed the committee membership and how it is comprised of different representatives from both colleges and the District. Committee had no changes.

4. **Meeting Notes of May 20, 2026**
   Ms. Matsumoto noted the meeting notes from the May 20, 2026 meeting were attached to the agenda for today's meeting and asked the committee if they had any questions, comments or edits. There were no changes.

5. **Sustainable RSCCD Committee Field Trips**
   Mr. Alcala noted the purpose of the field trips and how they relate to the District's Sustainability Master Plan. He encouraged the committee to provide future field trip recommendations. Mr. Alcala announced the next field trip to the Mt. SAC Wildlife Sanctuary and reminded members to submit their availability in the field trip poll.

6. **Sustainability Updates**
   Mr. Alcala presented the sustainability flyers. Ms. Matsumoto posed a question to the colleges about the process of posting flyers. Both colleges confirmed the flyers need to be stamped by ASG before they can be posted on campus. The flyers will be shared with committee members and can be distributed to fellow peers. Ms. Matsumoto suggested to Mr. Alcala to review the current sustainability landing page to host the flyers.

   Mr. Alcala presented the sustainability dashboard and gave an overview of the different tabs. Some of the faculty members expressed interest in utilizing the data in some of their courses and asked when the dashboard will be available. Ms. Matsumoto informed them the data will be published on the sustainability webpage before the end of the year so it can be publicly available to everyone.

   Mr. Alcala provided an overview of the SCC Microgrid Study and the purpose of the study. Ms. Matsumoto recommended to provide slideshow of the SCC Microgrid for the next SRC agenda.

   Ms. Matsumoto discussed water conservation efforts and how district is working on continued efforts for water conservation/compliance with the state requirements.

7. **College Updates**
   Mr. Gonzalez noted efforts taken by SCC relating to irrigation and HVAC repairs to reduce their energy and water consumption at the campus.

   Mr. Kennedy noted no updates for SAC.

8. **Other**
   Ms. Matsumoto noted about stormwater preparation work for potential stormwater events.

9. **Next Meeting Date**
   The next meeting will be held on Wednesday, November 18, 2026, at 3:00 p.m. via Zoom.

Meeting Adjournment: 3:54 p.m.

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Community College District

Santiago Canyon College
What happens here matters.

Microgrid and HVAC Feasibility Presentation

Santiago Canyon College

November 18, 2026

Project Overview and Objectives

PROJECT OVERVIEW



Microgrid + Central Utility Plant





Rising grid reliability concerns



Aging mechanical infrastructure & consolidation



District & statewide sustainability mandates

PROJECT OBJECTIVES



Increase energy resilience



Achieve decarbonization & emissions reduction



Save $ on energy spend & reduce utility rate exposure



Align with District Facilities Master Plan (2022) & Addendum (2024)



Modernize & consolidate mechanical systems

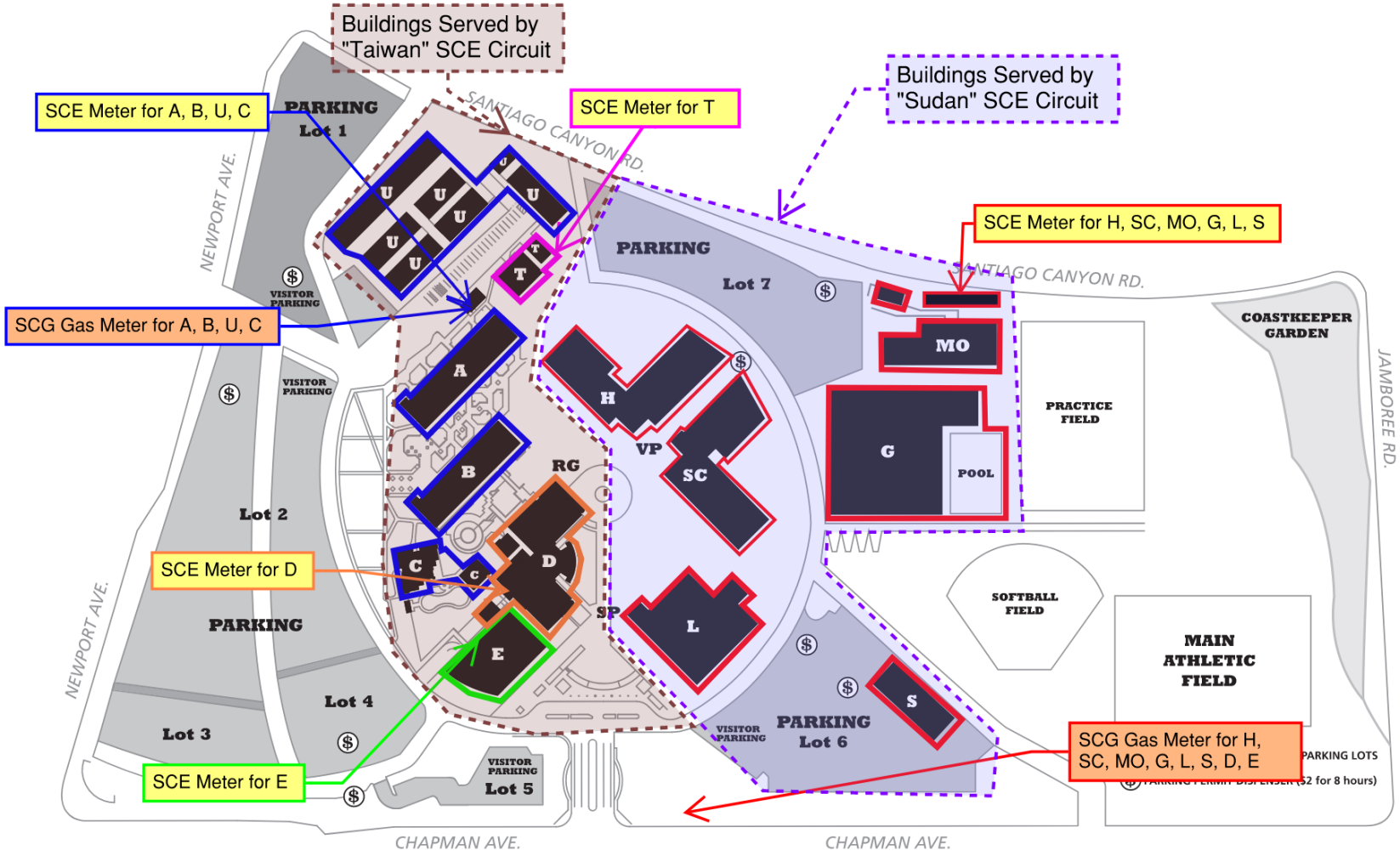


Consolidate meters & infrastructure



Phase work for incremental, no-regrets decisions as funding allows

Existing Campus Infrastructure



ELECTRIC CIRCUITS

2 separate SCE circuits

"Taiwan" · "Sudan"

ELECTRIC METERS

5 SCE meters

Bldgs ABCU · Bldg D · Bldg E
Bldg T · Bldgs H, SC, L, G, S, MO

GAS

2 SCG gas meters

Southern California Gas (SCG) service

Existing Campus Energy Use

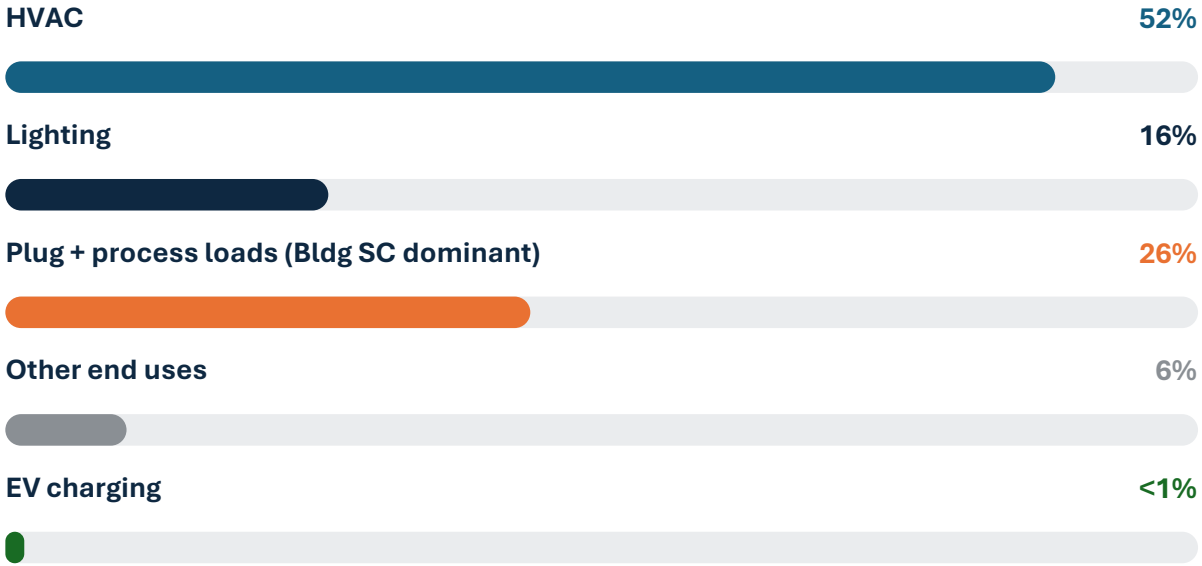
4.07M kWh
Annual electricity use
FY 2024–2025

2,067 kW
Campus peak demand
Non-coincident

1,408 kW
Main 12 kV meter peak
Bldgs H, SC, MO, G, L, S

ELECTRICITY END USES

Current share of total consumption by end use



DAILY DEMAND

11 AM – 4 PM peak on summer weekday afternoons
Weekends run 30–50% of weekday peaks
Cooling load drives the afternoon peak

SEASONAL SWING

Summer electricity peaks with cooling loads
Winter gas peaks Nov–Mar for heating
Opposing electric and gas cycles

Quick Aside: Microgrid Primer

A microgrid is a local energy system that lets Santiago Canyon College generate, store, manage, and distribute its own electricity while staying connected to the utility grid — **integrating on-site solar, battery storage, EV charging, and future building controls into one coordinated network.**

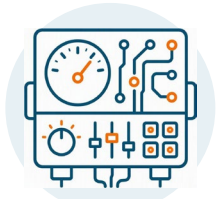
Core Components



Solar PV Systems



Battery Storage (BESS)



Microgrid Controller



EV Charging



Building & HVAC Controls



Utility Interconnection

How It Works

1 Everyday operation (Operational Savings)

Runs in parallel with SCE; solar and batteries cut purchases, demand charges, and peak-period costs.

2 Smart control (Operational Savings)

A microgrid controller balances solar, battery, EV, and building loads automatically in real time.

3 Island mode (Resiliency)

In a utility outage it disconnects and keeps critical campus operations running on solar and storage.

4 Reconnect (Return to Normal)

When utility service returns, the microgrid reconnects and resumes normal operation.

CUP Findings & Recommendations

BENEFITS

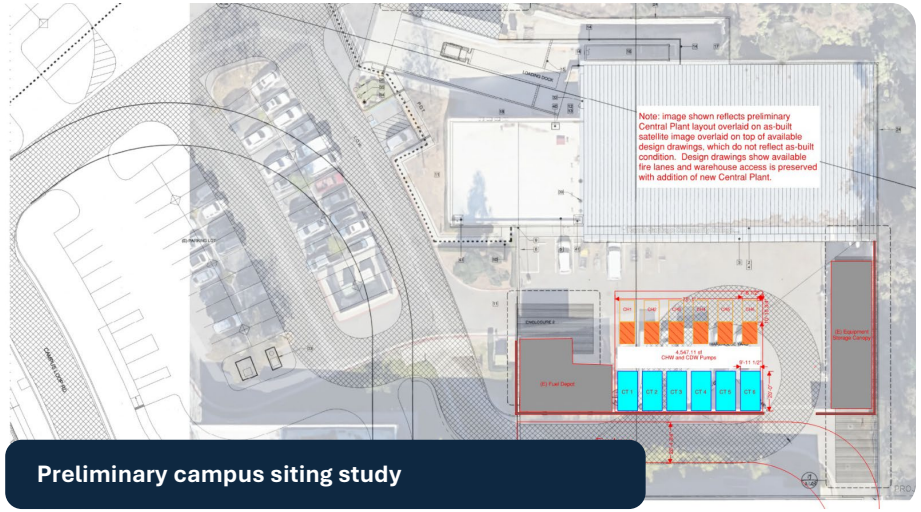
- Centralizes production; cuts redundant equipment across campus
- Expandable heating & cooling supports campus growth
- Opens the door to district decarbonization & electrification
- A foundation for broader energy modernization

CHALLENGES

- Significant upfront capital vs. building-level upgrades
- Requires major planning, distribution & coordination
- Value is realized as a long-term, not standalone, project
- Complex phasing with other campus improvements

RECOMMENDED ROLE

- Pursue microgrid, solar & storage as the near-term priority
- Preserve the CUP as a long-term campus vision
- Evaluate CUP with major renovations or expansion
- Keep future energy projects CUP-compatible



Preliminary campus siting study

How We Get There: Executive Summary of Results

A phased path to a decarbonized, consolidated campus — six phases, 2026–2035.

PHASE I
2026–2027

EST. COST
$7.9M

SCOPE THIS PHASE
- Solar
- BESS
- EV Charging

Solar, BESS & EV charging only — no meter or HVAC work.

PHASE II
2029

EST. COST
$17.6M

SCOPE THIS PHASE
- Central Plant

Water-cooled central plant lifts efficiency (kW/ton).

PHASE III
2031

EST. COST
$8.4M

SCOPE THIS PHASE
- Meter
- Solar
- EV Charging
- Central Plant

Solar offsets D&E load moving to CUP meter; new EV canopy.

PHASE IV
2033

EST. COST
$21.8M

SCOPE THIS PHASE
- Central Plant

Central plant carries full G/H/D/E load; old gear retired.

PHASE V
2034

EST. COST
$4.6M

SCOPE THIS PHASE
- Meter
- Solar
- EV Charging
- Central Plant

ABC/U&T consolidation; solar for new loads; new EV canopy.

PHASE VI
2035

EST. COST
$6.4M

SCOPE THIS PHASE
- Meter
- BESS

Final consolidation — one campus meter; new BESS added.

TOTAL PROGRAM COST **$64.6M** · *Soft + Hard + Contingency*

**The estimated years of completion and phasing timelines indicated herein are preliminary recommendations based strictly on initial client guidance. These schedules are provided for high-level planning and logistical purposes only.*

Expected Project Benefits

FINANCIAL
Utility cost reduction

$9.9–10.7M

Cumulative lifetime savings and reduced exposure to future SCE rate increases.

RESILIENCE
Outage protection

2–3 hours

Backup power from the initial 700 kW / 1,400 kWh BESS, growing with future phases. Covers typical grid outages

SUSTAINABILITY
Reduced emissions

432 - 611 $MTCO_2e$

Phase 1 to Phase 3–5 — equal to taking 103 homes off the grid for a year.

SUSTAINABILITY
CCCCO goals

25% / 50% / 100%

Supports EUI reduction targets by 2030 and 2035 and 100% renewable energy by 2035.

OPERATIONS
Improved energy management

One platform

Central cooling, meter consolidation, solar, BESS, EV charging and microgrid controls.

GROWTH
Supports future expansion

No stranded assets

Every phase stays part of the ultimate microgrid and expands without replacement.

Key Takeaways

Five key findings from the campus microgrid feasibility study.



A campus microgrid is technically feasible.

Site loads, interconnection, and equipment all support a workable microgrid design at SCC.

1



Solar PV and battery storage form the foundation of the strategy.

On-site solar paired with battery storage anchors generation, storage, and demand management.

2



The recommended approach improves resilience and energy independence.

Critical operations can ride through outages while reducing reliance on the utility grid.

3



A phased implementation approach minimizes risk and capital burden.

Sequencing investment across phases spreads cost and avoids stranded assets.

4



SCC can begin taking meaningful actions immediately.

No-regrets Phase 1 steps deliver value now, independent of later phases.

Phase 1 will require funding (~$8M). Currently there is no available funding.

5

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Santiago Canyon College

What happens here matters.

APPENDIX

Solar PV Strategy

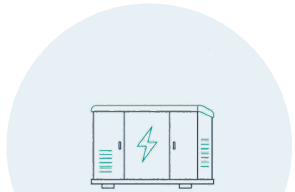
SOLAR PV

STRATEGIC TAKEAWAY

Solar PV is the cornerstone of SCC's energy strategy — every future scenario, from a modest savings project to a full campus microgrid, begins with solar generation.



Battery Energy Storage Strategy



BATTERY STORAGE

STRATEGIC TAKEAWAY

Battery storage delivers immediate financial benefits today while serving as a core building block for future campus resilience.



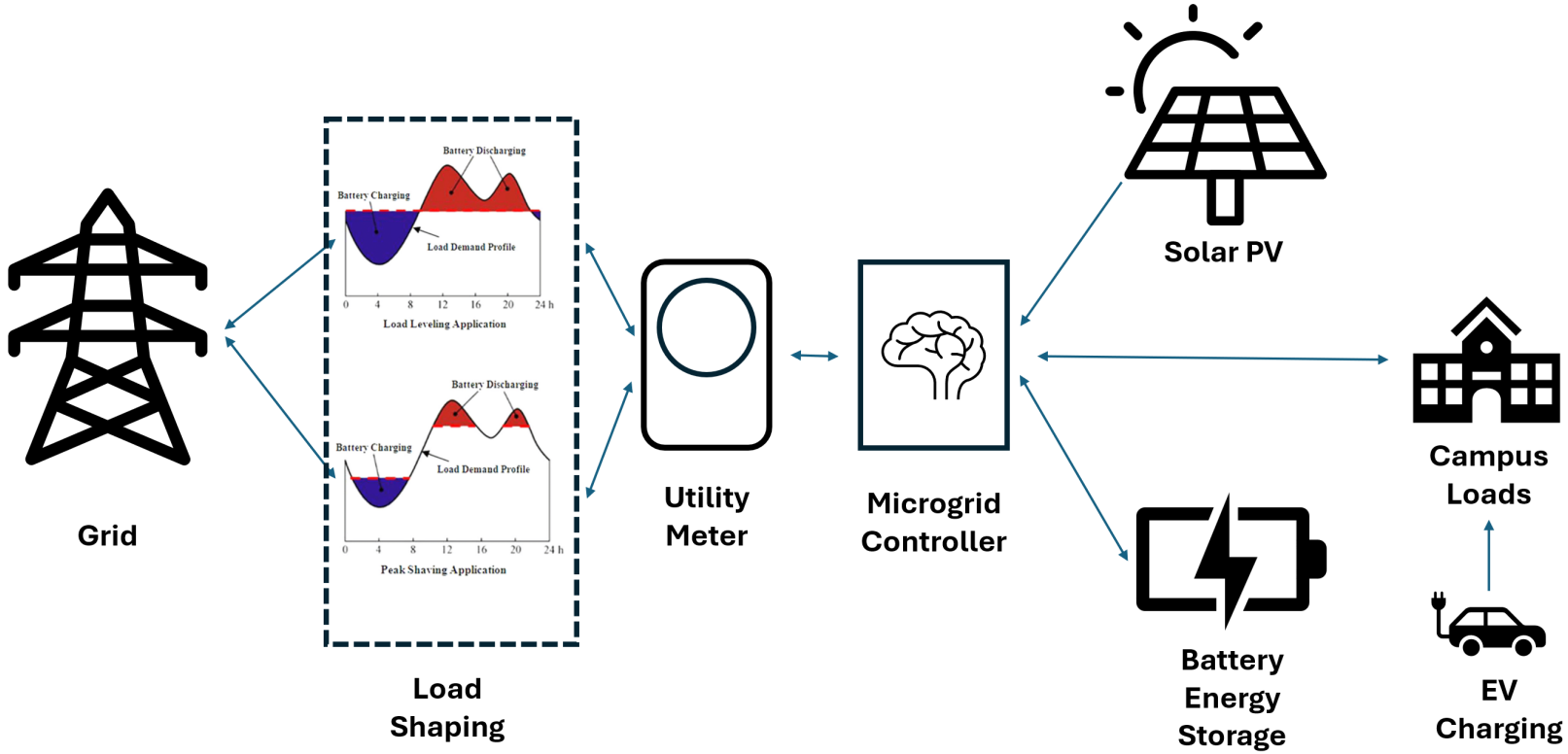
Resilience Strategy



RESILIENCE

STRATEGIC TAKEAWAY

The microgrid is not a single project — it is the long-term vision connecting SCC's solar, battery, resiliency, and electrification investments into one coordinated strategy.



Fleet Electrification & EV Charging Strategy

EV & FLEET

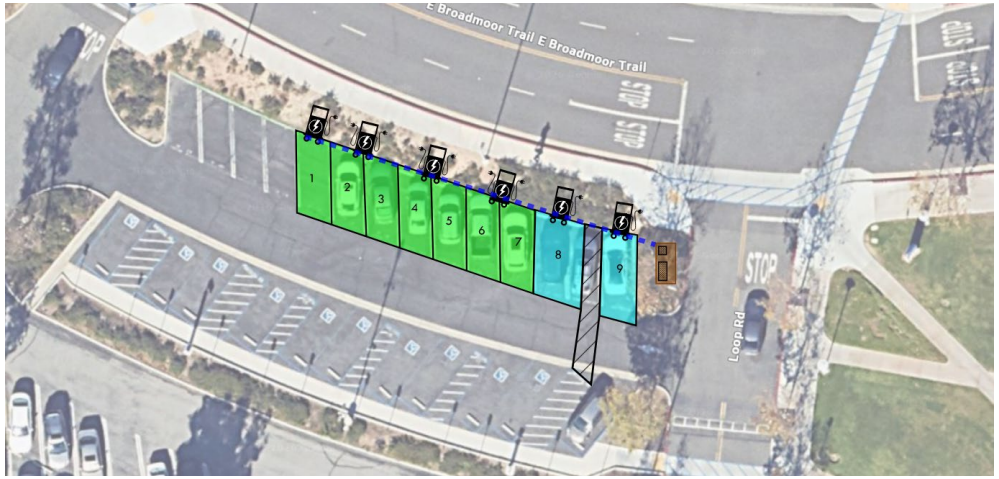
STRATEGIC TAKEAWAY

Planning EV charging as part of a broader energy strategy lets SCC support transportation electrification while controlling costs and avoiding future infrastructure constraints.

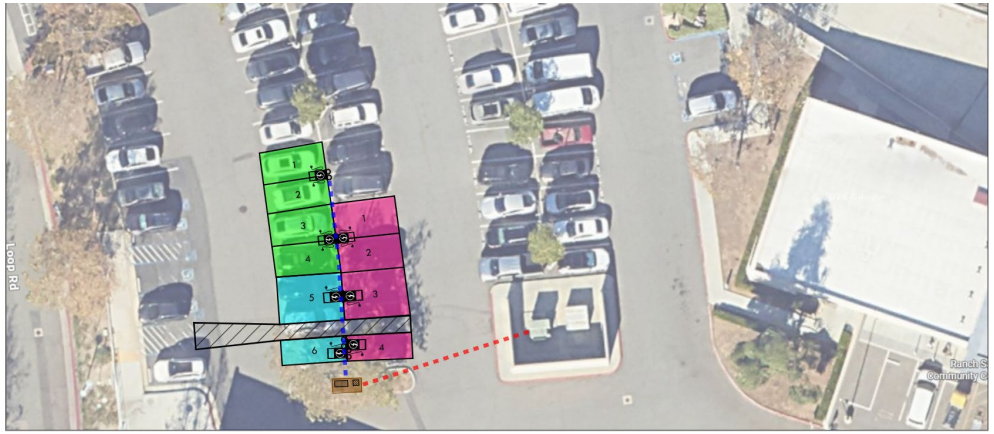
Lot 1 (Phase 1)



Lot 2a (Phase 5)



Lot 7 (Phase 3)

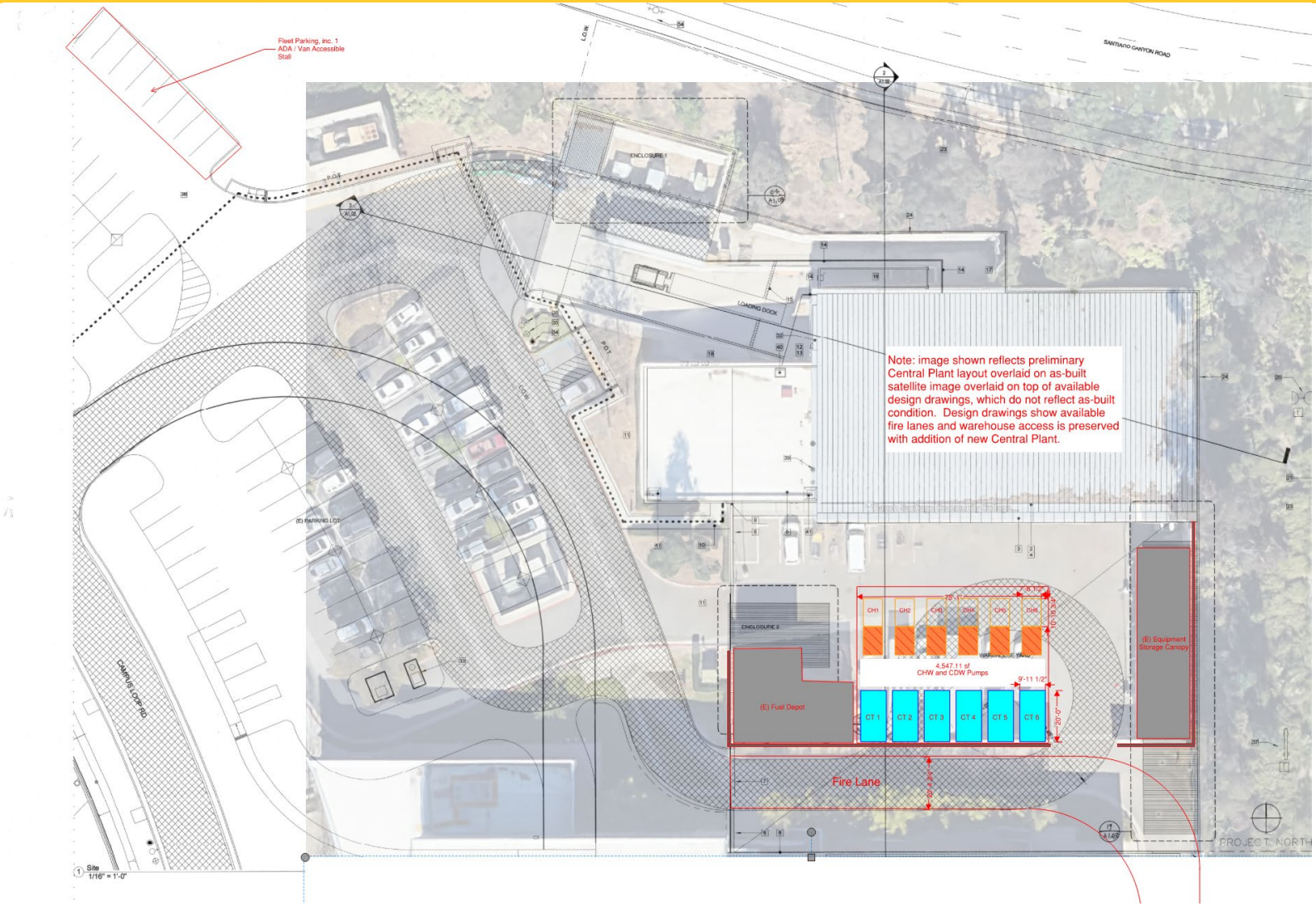


Central Plant Strategy

Central Utility Plant

STRATEGIC TAKEAWAY

A CUP is technically feasible and, combined with microgrid infrastructure projects, can help guide SCC to a sustainable future. Buildout can occur in conjunction with major renovations and capital expenditures.



Greenhouse Gas Emission Reductions

