



City of Sunnyvale

Notice and Agenda - Final Planning Commission

Monday, July 22, 2019

6:00 PM

Council Chambers and West Conference
Room, City Hall, 456 W. Olive Ave.,
Sunnyvale, CA 94086

Special Meeting - Study Session - 6:00 PM | Special Meeting - Public Hearing - 7:00 PM

6:00 PM STUDY SESSION

1 Call to Order in the West Conference Room

2 Roll Call

3 Study Session

- A. [19-0724](#) City Hall Schematic Design Presentation for Comment and Input
- B. [19-0757](#) **Proposed Project:** Facade modifications to a previously-approved hotel, approved under 2016-7521.
Location: 1120 Innovation Way (APN: 110-27-027)
File #: 2019-7496
Zoning: MPI (Moffett Park Industrial)
Applicant / Owner: DES Architects + Engineers (Applicant) / Moffett Place LLC (Owner)
Environmental Review: The project is exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15301 (a)
Project Planner: Margaret Netto, (408) 730-7628, mnetto@sunnyvale.ca.gov

4 Public Comment on Study Session Agenda Items

5 Adjourn Study Session

7:00 PM PLANNING COMMISSION MEETING

CALL TO ORDER

Call to Order in the Council Chambers

SALUTE TO THE FLAG**ROLL CALL****ORAL COMMUNICATIONS**

This category provides an opportunity for members of the public to address the commission on items not listed on the agenda and is limited to 15 minutes (may be extended or continued after the public hearings/general business section of the agenda at the discretion of the Chair) with a maximum of up to three minutes per speaker. Please note the Brown Act (Open Meeting Law) does not allow commissioners to take action on an item not listed on the agenda. If you wish to address the commission, please complete a speaker card and give it to the Recording Secretary. Individuals are limited to one appearance during this section.

CONSENT CALENDAR**PUBLIC HEARINGS/GENERAL BUSINESS**

2. [19-0557](#) **Proposed Project:** General Plan Amendment Initiation request to study changing the General Plan designation from Commercial to Medium Density Residential on a 2.3 acre site (Sunnyvale Lumber)
 Location: 870 W. Evelyn Street (APN:165-16-004)
 File #: 2019-7298
 Zoning: C4 (Service Commercial)
 General Plan: Service Commercial
 Applicant / Owner: Trumark Homes
 Environmental Review: The project is exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15378(a).
 Project Planner: Margaret Netto, (408) 730-7628, mnetto@sunnyvale.ca.gov

3. [19-0529](#) **Proposed Project:** General Plan Amendment Initiation request to study changing the General Plan designation of the site from Low Medium Density Residential to High Density Residential.
Location: 828 Morse Avenue & 560 E. Ahwanee Avenue (APN: 204-08-027 & 204-08-029)
File #: 2019-7301
Zoning: R-3/PD
Applicant / Owner: FNZ Architects Inc. (applicant) / Sia Vassoughi (owner)
Environmental Review: The project is exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15378(a).
Project Planner: Ryan Kuchenig, (408) 730-7431, rkuchenig@sunnyvale.ca.gov
4. [19-0703](#) Forward a recommendation to City Council to Adopt a Resolution to Adopt the Climate Action Playbook, including the greenhouse gas reduction targets, Make the Findings Required by CEQA and Accept the Addendum to the LUTE EIR.
5. [19-0790](#) **Selection of Chair**
6. [19-0791](#) **Selection of Vice Chair**
7. [19-0792](#) **Selection of Seats**

STANDING ITEM: CONSIDERATION OF POTENTIAL STUDY ISSUES

NON-AGENDA ITEMS AND COMMENTS

-Commissioner Comments

-Staff Comments

ADJOURNMENT*Notice to the Public:*

Any agenda related writings or documents distributed to members of the Planning Commission regarding any open session item on this agenda will be made available for public inspection in the Planning Division office located at 456 W. Olive Ave., Sunnyvale CA 94086 during normal business hours, and in the Council Chambers on the evening of the Planning Commission meeting pursuant to Government Code §54957.5.

Agenda information is available by contacting Bonnie Filipovic at (408) 730-7440. Agendas and associated reports are also available at sunnyvaleca.legistar.com or at the Sunnyvale Public Library, 665 W. Olive Ave., 72 hours before the meeting.

Planning a presentation for a Planning Commission meeting?

To help you prepare and deliver your public comments, please review the "Making Public Comments During City Council or Planning Commission Meetings" document available on the City website.

PLEASE TAKE NOTICE that if you file a lawsuit challenging any final decision on any public hearing item listed in this agenda, the issues in the lawsuit may be limited to the issues which were raised at the public hearing or presented in writing to the City at or before the public hearing.

PLEASE TAKE FURTHER NOTICE that Code of Civil Procedure section 1094.6 imposes a 90-day deadline for the filing of any lawsuit challenging final action on an agenda item which is subject to Code of Civil Procedure section 1094.5.

Pursuant to the Americans with Disabilities Act, if you need special assistance in this meeting, please contact the Planning Division at (408) 730-7440. Notification of 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting. (28 CFR 35.160 (b) (1))



City of Sunnyvale

Agenda Item A

19-0724

Agenda Date: 7/22/2019

PLANNING COMMISSION STUDY SESSION

Subject

City Hall Schematic Design Presentation for Comment and Input

Background

On September 25, 2018 Council adopted a resolution to:

- Certify the EIR;
- Adopt the Civic Center Master Plan; and,
- Directed City Staff to proceed with design for a Net Zero Energy City Hall Building (RTC No. 18-0799).

On December 4, 2018, Council voted to award the Phase 1 contract for design to SmithGroup (RTC 18-1008).

Phase I comprises the following building and site components:

- A new City Hall building which locates staff in the South Annex, Annex, and Sunnyvale Office Complex in one building;
- An addition to the Department of Public Safety Building, housing an emergency operations center (EOC);
- Renovation of portions of the Public Safety Building supporting the current needs and technical functions of the Public Safety Officers; and,
- Demolition of the existing City Hall and Office Center and creation of a six-acre Civic Park

Discussion

City Staff will present the Civic Center Schematic Design to the Planning Commission for discussion and comment at a Study Session. Renderings and a brief description of the design has been provided ahead of the meeting for review.

City Hall

Carrying the vision of the Master Plan, a four-story, 119,000 square-foot City Hall will be located near the corner of West Olive Avenue and South Mathilda Avenue. The new City Hall will replace the existing city hall which is in several single-story buildings on site and thus consolidating numerous City services into a central, easy-to-access location and will free up room on the campus for more usable open space. The building will be zero net energy as well as being a LEED Platinum-certified building.

The Master Plan as approved by Council envisioned a partially wood clad building which maximizes natural light with walls of windows and a transparent canopy to accentuate the front entrance (a “treehouse” design). The schematic design fulfills this vision, and seeks to mimic the theme of nature within the building and throughout the campus. Since any exterior wood cladding would require

continuous maintenance, it would not be ideal material for a civic building. To keep the theme of treehouse, mass timber can be used for the interior mullion of the façade so that the warmth of the wood can be read from both inside and outside the building without any maintenance issue.

As part of the Master Plan, a new south plaza will be created at the current location of the City Hall. This new plaza will be an extension of the new green space being developed on the north campus. The new City Hall will be situated in the middle of the two plaza areas and will serve as the key connection point. The middle section of the City Hall building was configured to provide transparency and connection between the north and south plaza areas. The ground floor lobby space will become an extension of the outdoor space, blurring the boundary between interior and exterior. A skylight above the central staircase will allow filtered light to penetrate the lobby space.

Two types of photovoltaic panels will be utilized on the building. Panels overhanging the building are transparent, allowing views of the sky from down below. Over the roofing areas, panels are opaque, providing high efficiency solar gain.

Department of Public Safety Building

A two-story, 12,946-square-foot addition will be constructed adjacent to the existing Department of Public Safety (DPS) Headquarters building. The planned addition will provide dedicated space for an Emergency Operations Center and additional space for the crime lab, briefing room, evidence storage and locker rooms.

The design of the new DPS addition is contemporary with simple form. The material palette relates to the existing building and provide the security necessary for the work being performed inside.

The shape of the building is rectangular in nature and is connected to the existing building with a glass corridor. Terracotta rainscreen system is used for the exterior cladding material to work in harmony with the brick façade of the exiting Public Safety Building.

A concrete planter is used as a barrier on the north and east façade to prevent cars from accidentally hitting the building. A new equipment yard housing the emergency generator will be located along South Pastoria Avenue and will be disguised by green screens mounted on block walls to create a pleasant backdrop for pedestrians.

Project Site

The landscape architecture for Phase 1 of the Civic Center Master Plan, is composed of roughly 6 acres of open space around the new City Hall, as well as its on-structure gardens and outdoor rooms, and the site work around the new DPS addition. The planting for this new open space will primarily be native species, with irrigation by zone.

Anticipated Outcome

The goal of the meeting is to allow the Planning Commission to review the project, ask questions, and provide comments and input for the City Council consideration. The focus of the discussion is to be on site planning and architecture.

Staff

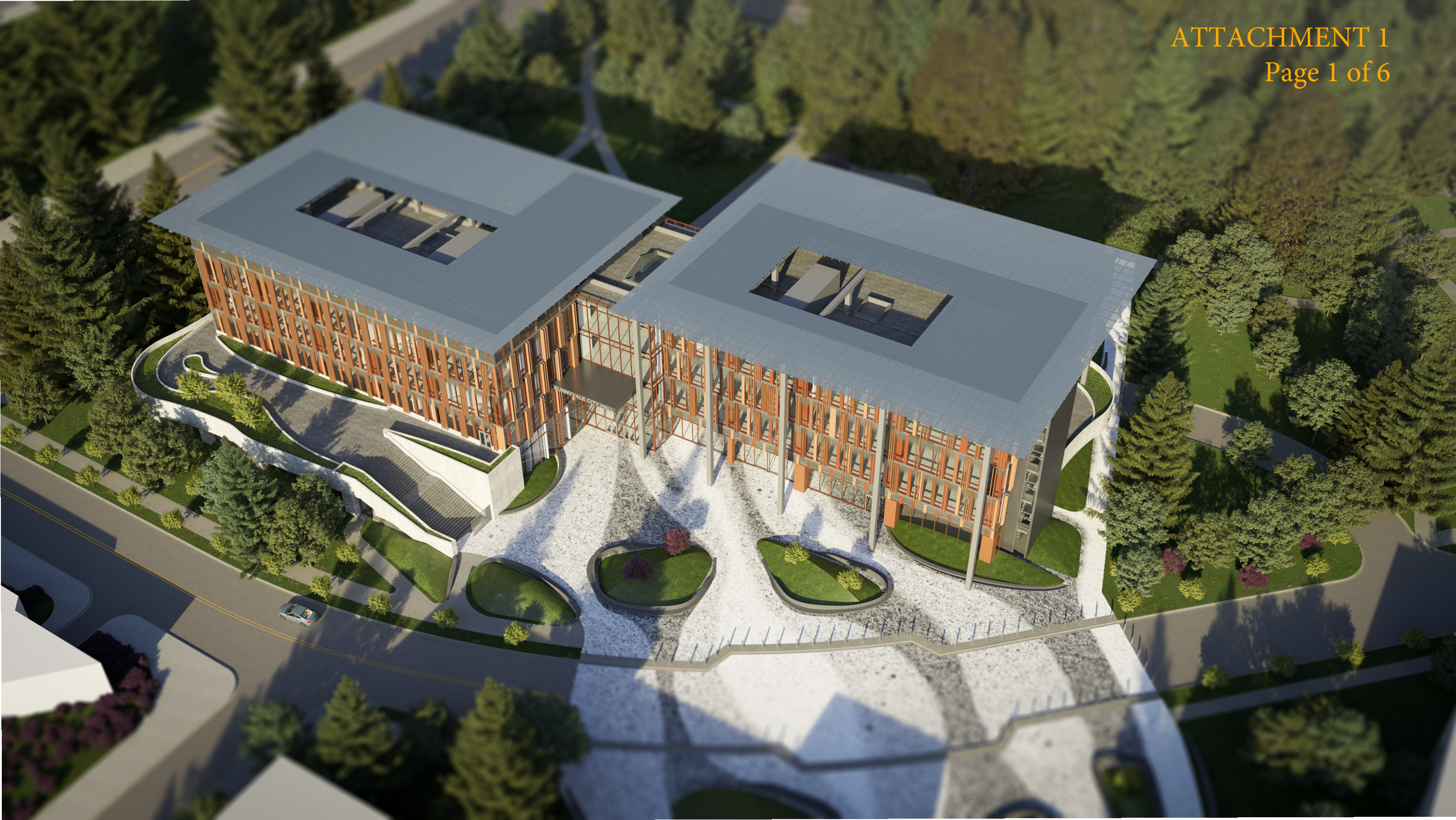
Prepared by: Allison Boyer, Assistant City Engineer

Reviewed by: Jennifer Ng, Assistant Director of Public Works

Approved by: Chip Taylor, Director of Public Works

Attachments

1. City Hall Renderings
2. EOC Renderings























City of Sunnyvale

Agenda Item B

19-0757

Agenda Date: 7/22/2019

REPORT TO PLANNING COMMISSION

SUBJECT

Proposed Project: Facade modifications to a previously-approved hotel, approved under 2016-7521.

Location: 1120 Innovation Way (APN: 110-27-027)

File #: 2019-7496

Zoning: MPI (Moffett Park Industrial)

Applicant / Owner: DES Architects + Engineers (Applicant) / Moffett Place LLC (Owner)

Environmental Review: The project is exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15301 (a)

Project Planner: Margaret Netto, (408) 730-7628, mnetto@sunnyvale.ca.gov



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3	Entry View
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7	View From Innovation Way
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9	Context View from N Mathilda
10	Entry View Comparison
11	Street View Comparison





















ENTRY VIEW
PREVIOUS DESIGN



GREEN
SCREEN

GFRC
PILASTERS

GFRC W/
RANDOM
REVEAL
PATTERN

CONTRASTING
HORIZONTAL
METAL PANEL
BAND

METAL
PANEL

GFRC

METAL CLAD
COLUMNS AT
BALCONY

STREET VIEW
CURRENT DESIGN



GREEN
SCREEN

STONE
AND
PAINTED
STUCCO
PILASTERS

PAINTED
STUCCO

PAINTED
STUCCO
HORIZONTAL
BAND

PAINTED
STUCCO

METAL CLAD
COLUMNS AT
BALCONY

STREET VIEW
PREVIOUS DESIGN

INNOVATION HOTEL

1120 INNOVATION WAY
SUNNYVALE, CALIFORNIA

MPP SUBMITTAL
JUNE 21, 2019



VICINITY MAPS



CONTACT

ARCHITECTS
DES ARCHITECTS + ENGINEERS
399 BRADFORD STREET
REDWOOD CITY, CALIFORNIA 94063
PHONE: (650) 364-6453
FAX: (650) 364-2618
WEBSITE: WWW.DES-AE.COM
CONTACT: C. THOMAS GILMAN/DONA SHAH

CLIENT/OWNER
JAY PAUL COMPANY
FOUR EMBARCADERO CENTER, SUITE 3620
SAN FRANCISCO, CALIFORNIA 94111
PHONE: (415) 263-7400
FAX: (415) 362-0698
WEBSITE: WWW.JAYPAUL.COM
CONTACT: JANETTE D'ELIA

PROJECT DATA

A. ZONING DESIGNATION:	MOFFETT PARK SPECIFIC PLAN
B. SITE AREA:	71,775 SF (1.65 ACRES)
C. PROPOSED BUILDING USE:	HOTEL (180 ROOMS TOTAL)
D. BUILDING HEIGHT:	7 STORIES +ROOF GARDEN/FITNESS/AMENITIES +BASEMENT PARKING LEVEL (1103'-0" TO TOP OF ELEVATOR TOWER)
E. BUILDING AREA:	113,550 SF (7 STORIES) + 4,170 SF (ROOF GARDEN/FITNESS/AMENITIES LEVEL)
	AMENITIES INDEPENDENT RESTAURANT: 4,500 SF KITCHEN/BOH: 4,560 SF LOBBY/CHECK-IN: 1,675 SF ADMIN/OFFICE: 1,870 SF BALLROOM: 1,755 SF + 740 SF BALCONY PRE-FUNCTION: 1,580 SF BOARD RM/MTG RM: 1,445 SF MTG RM BOH: 670 SF FITNESS: 1,145 SF SERVICE ROOMS: 2,100 SF (1ST-7TH)
	HOTEL ROOMS KING ROOMS (132): 330 SF TYP. QUEEN ROOMS (39): 330 SF TYP. SUITES (13): 525 SF + 135 SF BALCONY (INCLUDING 8 ROOMS WITH MOBILITY FEATURES)
	FLOOR AREAS FIRST FLOOR: 16,722 SF SECOND FLOOR: 16,177 SF THIRD, FOURTH, FIFTH AND SIXTH FLOORS EACH: 16,407 SF SEVENTH FLOOR: 15,023 SF BASEMENT LEVEL: 53,880 SF ROOF TERRACE: 4,170 SF
F. OCCUPANCY GROUP:	R-I, A-2, B & S-2
G. CONSTRUCTION TYPE:	TYPE I-B & TYPE I-A
H. LOT COVERAGE:	26% (17,913 SF = 16,722 SF 1ST FLR + 1,191 SF SERVICE ENCLOSURES)
I. PROPOSED FAR:	1.59
J. TOTAL OPEN SPACE (HARDSCAPE + LANDSCAPE)	74% (53,862 SF = 38,049 SF HARDSCAPE + 15,273 SF LANDSCAPE)
K. TOTAL PARKING REQUIRED (8.5' X 18'):	144 + 41 = 185 SPACES (INC. 6 ACC + 2 VAN ACC) (0.8 PER ROOM + 9/1000 SF FOR INDEPENDENT RESTAURANT + BAR)
L. TOTAL PARKING PROVIDED:	BASEMENT: 134 STALLS (INC. 4 ACC + 1 VAN ACC) SURFACE: 51 STALLS (INC. 2 ACC + 1 VAN ACC) TOTAL: 185 STALLS (INC. 6 ACC + 2 VAN ACC)
M. BICYCLE PARKING PROVIDED:	CLASS I: 9 (IN BASEMENT) CLASS II: 2 (ON SITE)
N. PREFERRED STALLS:	CARPPOOL: 10 STALLS (INC. EV/EV READY)
O. EV/EV READY STALLS:	EV INSTALLED: 6 STALLS (3% OF 185 STALLS, INC. ADA/EV STALLS) EV READY: 3 STALLS TOTAL EV: 9 STALLS

SHEET INDEX

1	PROJECT DATA, VICINITY MAPS AND SHEET INDEX
2	EXISTING SITE PLAN
3	PRELIMINARY SITE PLAN
4	1ST AND 2ND FLOOR PLANS
5	3RD TO 7TH FLOOR PLANS
6	PENTHOUSE FLOOR AND ROOF PLAN
7	BASEMENT LEVEL PARKING PLAN
8	BUILDING ELEVATIONS
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11	BUILDING ELEVATIONS
12	NOT USED
13	BUILDING SECTIONS
14	SERVICE ENCLOSURE PLAN AND ELEVATIONS
15	EXHAUST SHAFT & TRASH ENCLOSURE PLANS AND ELEVATIONS



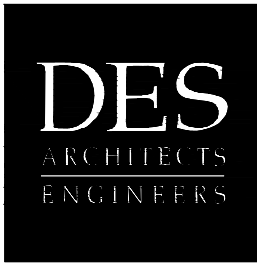
INNOVATION HOTEL

1120 INNOVATION WAY, SUNNYVALE, CA.

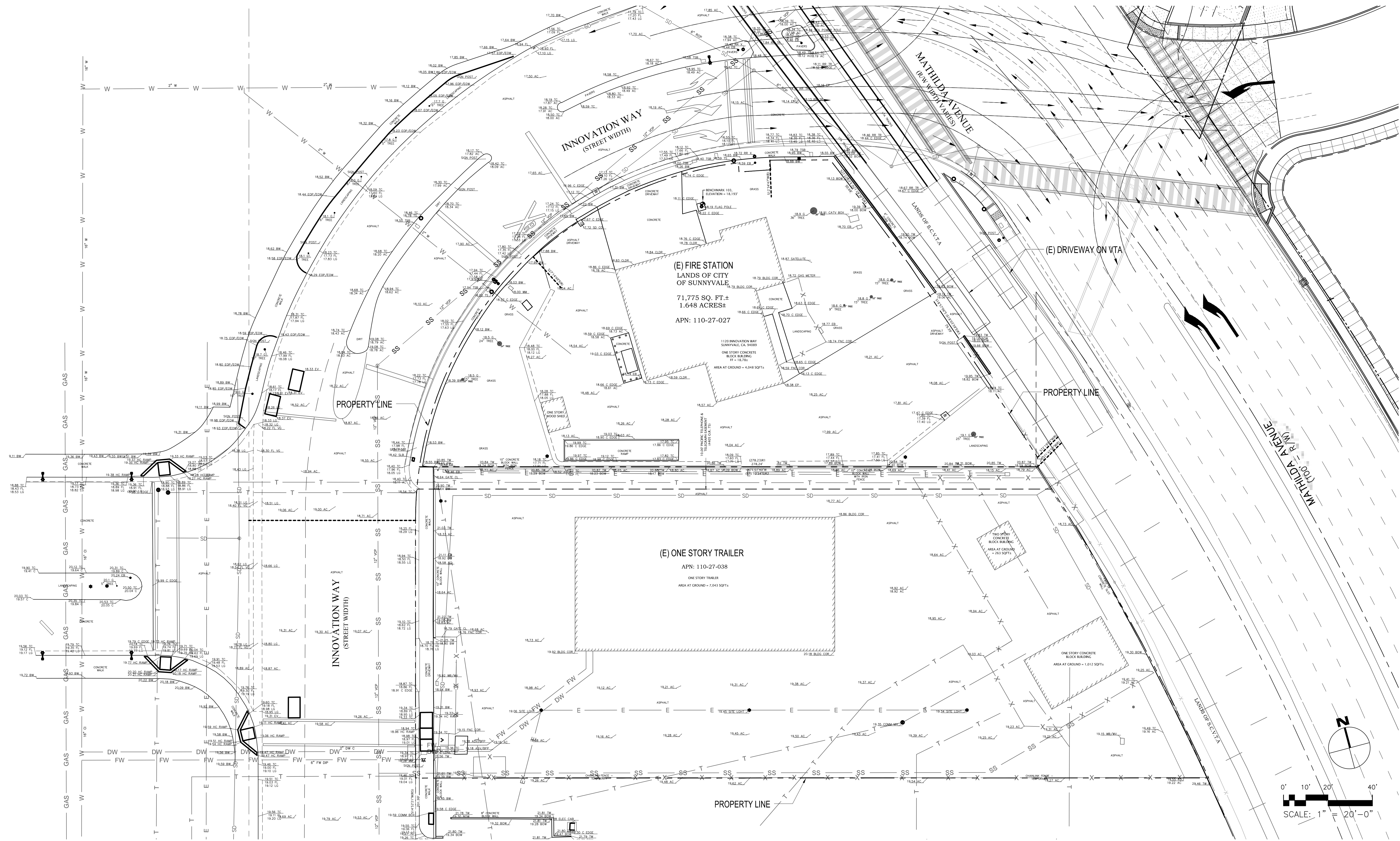
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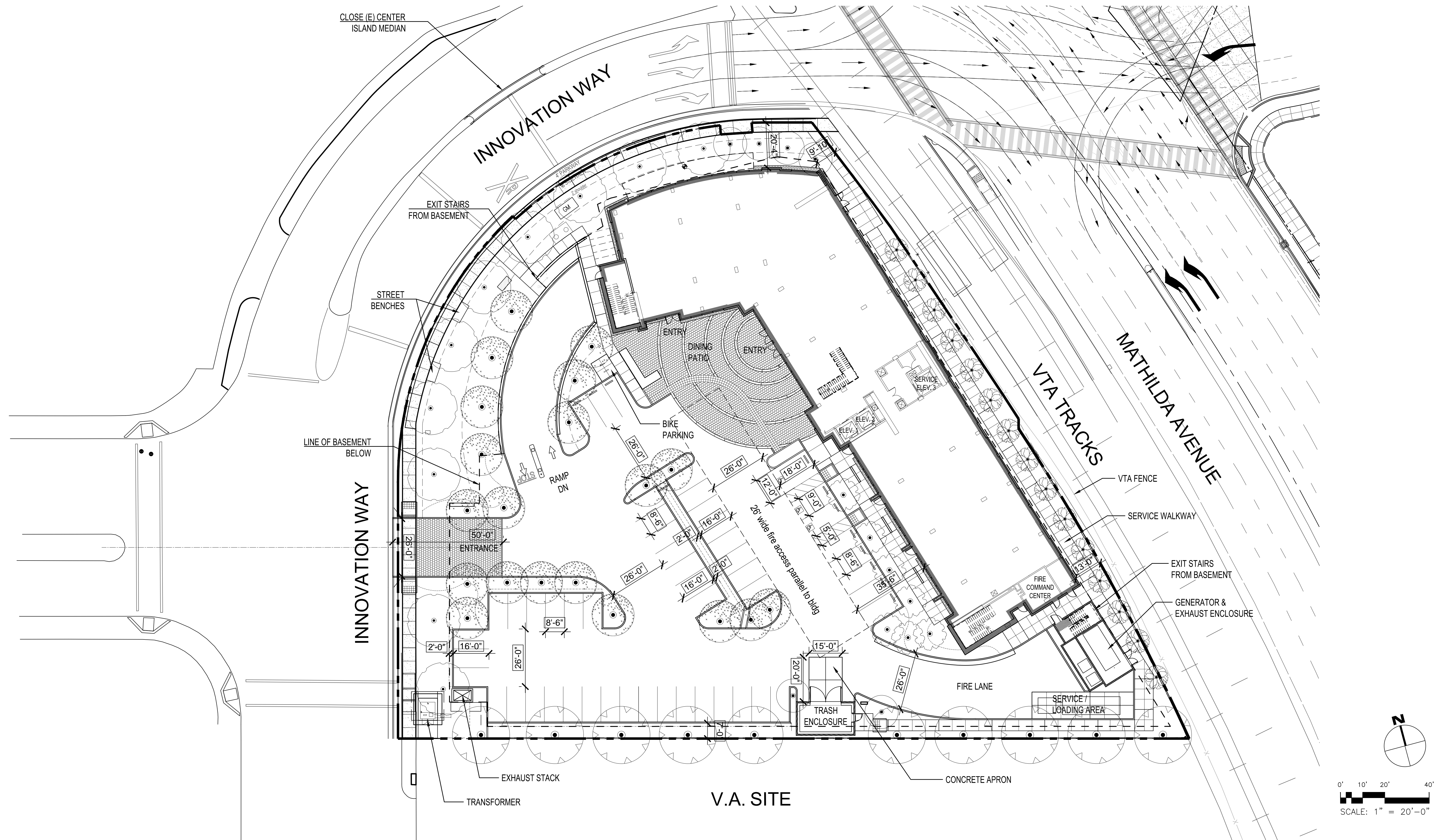
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RESUBMITTAL	05.22.2017
RESUBMITTAL	10.12.2017
RESUBMITTAL	12.12.2017
RESUBMITTAL	02.20.2018
MPP SUBMITTAL	06.21.2019

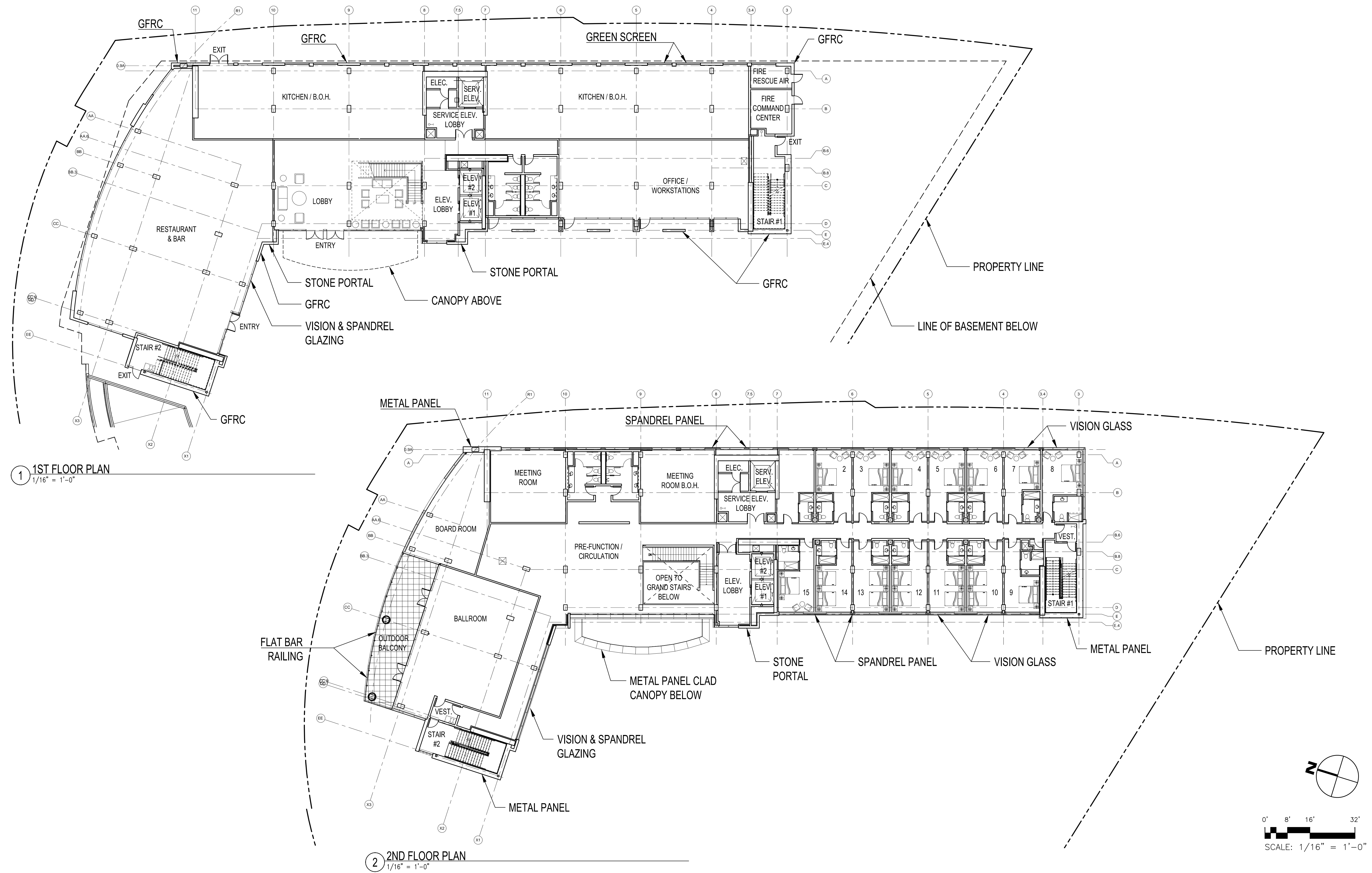
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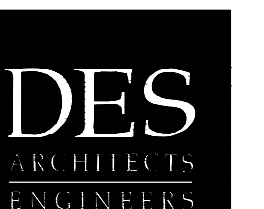
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1120 INNOVATION WAY, SUNNYVALE, CA.

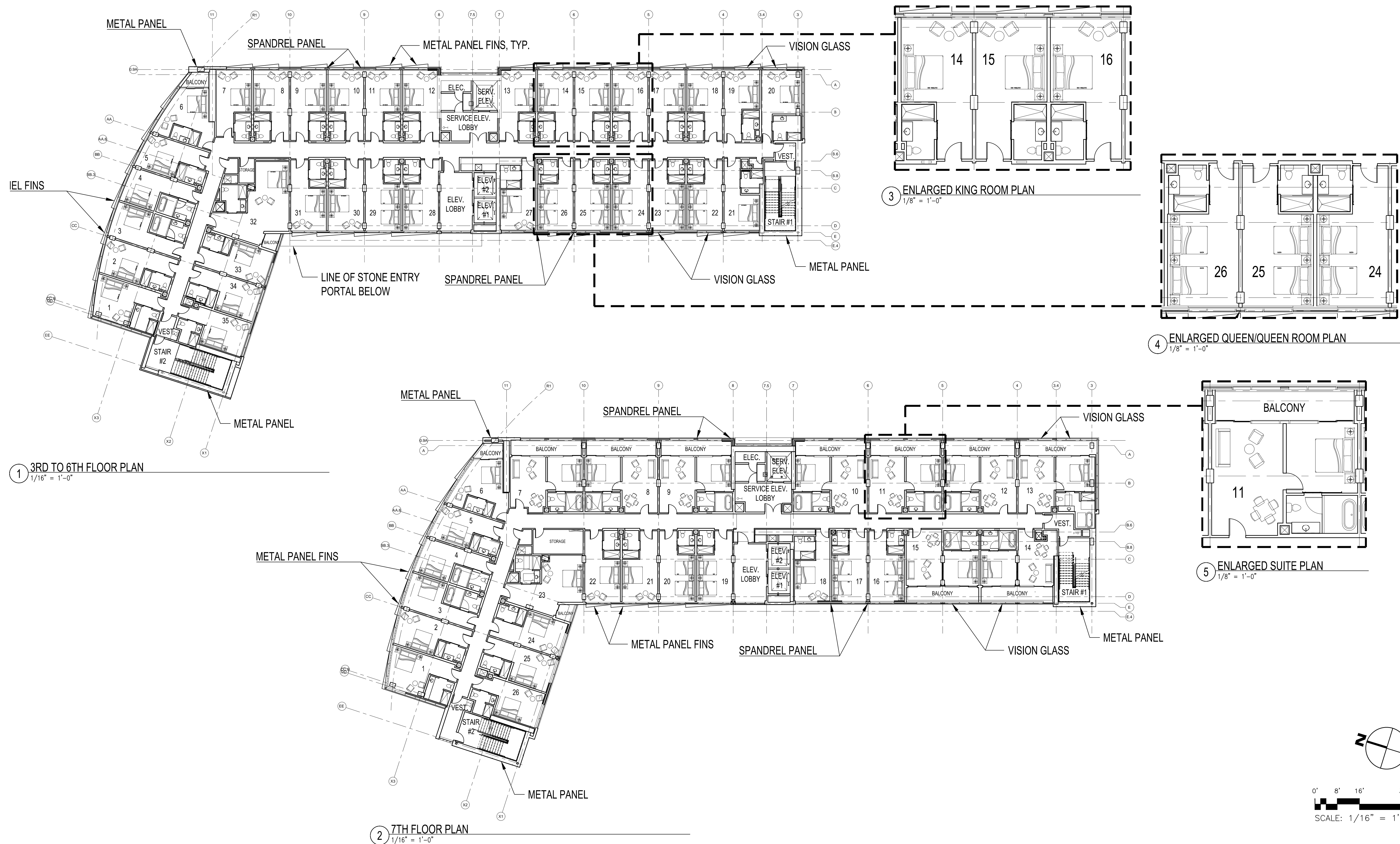
1ST AND 2ND FLOOR PLANS

08.16.2016
RESUBMITTAL 05.22.2017
RESUBMITTAL 10.12.2017
RESUBMITTAL 12.12.2017
RESUBMITTAL 02.20.2018
MPP SUBMITTAL 06.21.2019

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INNOVATION HOTEL

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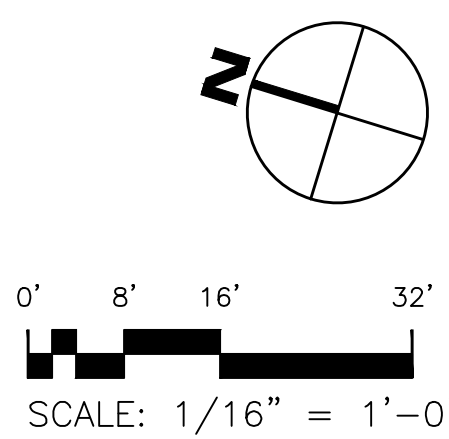
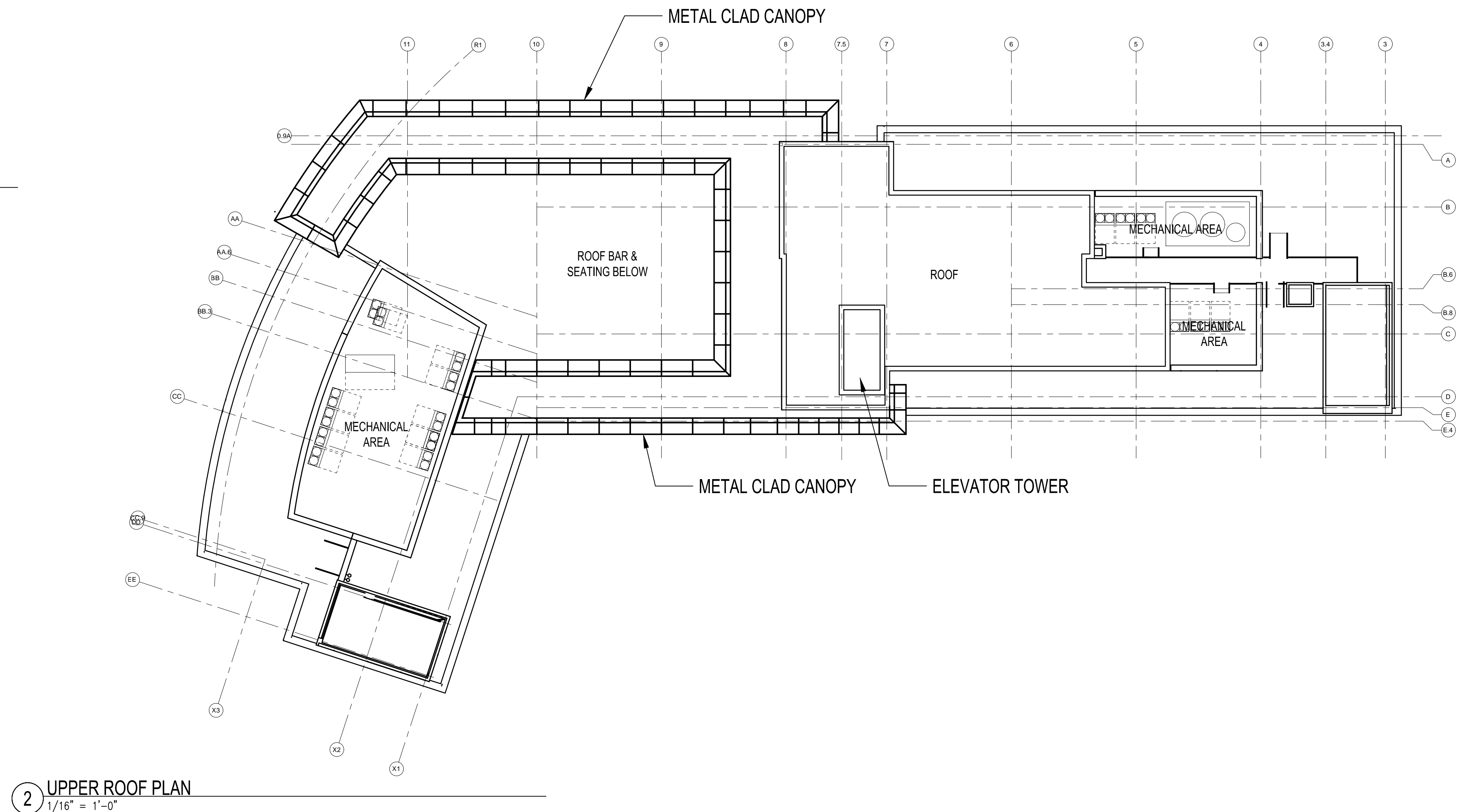
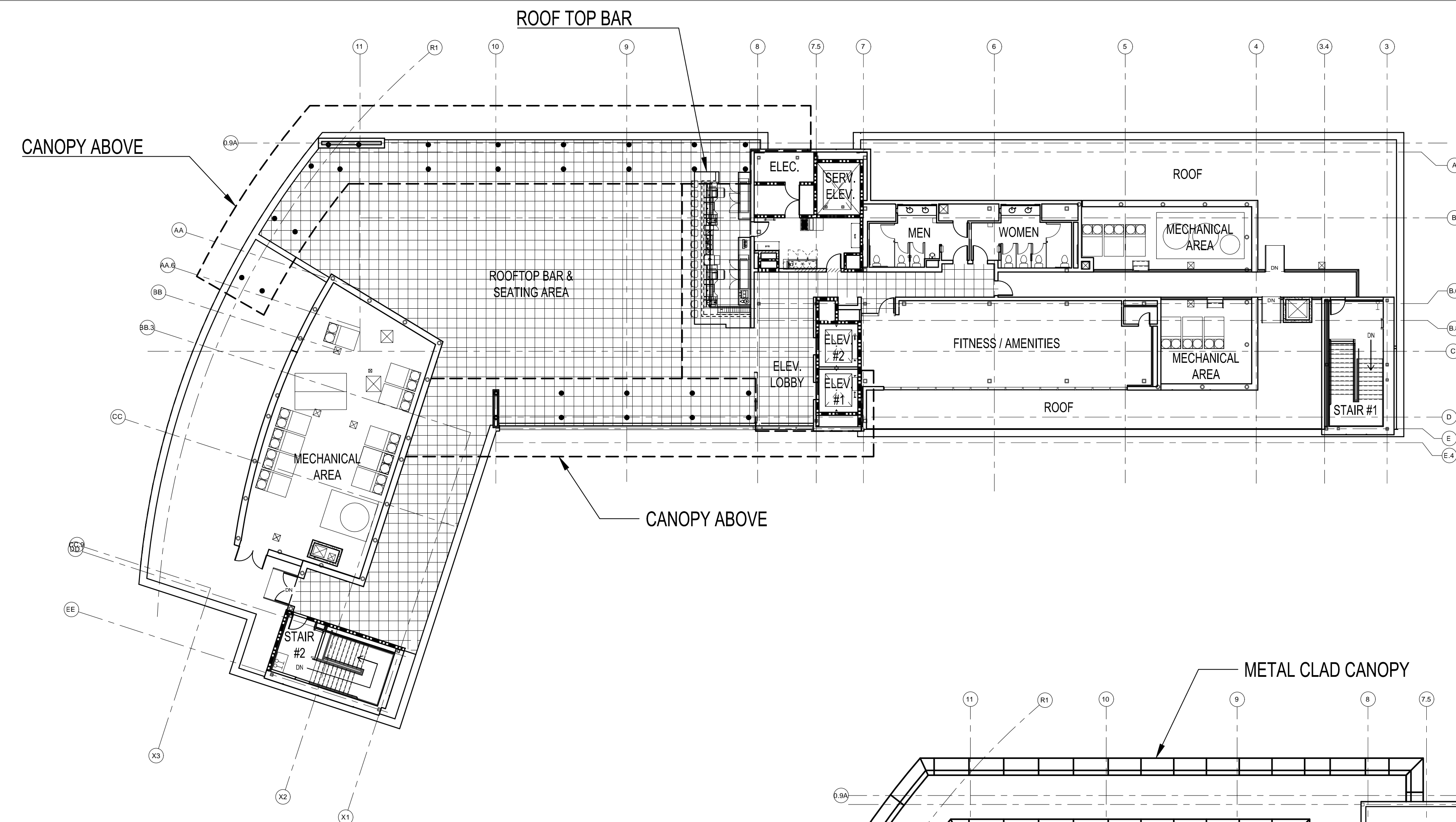
3RD TO 7TH FLOOR PLANS

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RESUBMITTAL 02.20.2018
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1120 INNOVATION WAY, SUNNYVALE, CA.

PENTHOUSE FLOOR AND ROOF PLAN

RESUBMITTAL	08.16.2016
RESUBMITTAL	05.22.2017
RESUBMITTAL	10.12.2017
RESUBMITTAL	12.12.2017
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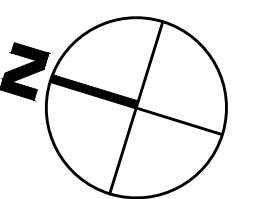
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1 BASEMENT LEVEL-1
1/16" = 1'-0"



0' 8' 16' 32'
SCALE: 1/16" = 1'-0"



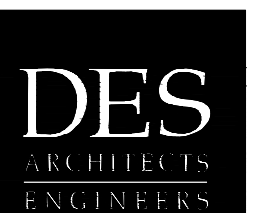
INNOVATION HOTEL

1120 INNOVATION WAY, SUNNYVALE, CA.

BASEMENT LEVEL PARKING PLAN

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RESUBMITTAL	05.22.2017
RESUBMITTAL	10.12.2017
RESUBMITTAL	12.12.2017
RESUBMITTAL	02.20.2018
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1 SOUTHWEST ELEVATION
3/32" = 1'-0"

0' 3/64' 3/32' 3/16'
SCALE: 3/32" = 1'-0"



INNOVATION HOTEL

1120 INNOVATION WAY, SUNNYVALE, CA.

BUILDING ELEVATIONS - SOUTHWEST ELEVATION

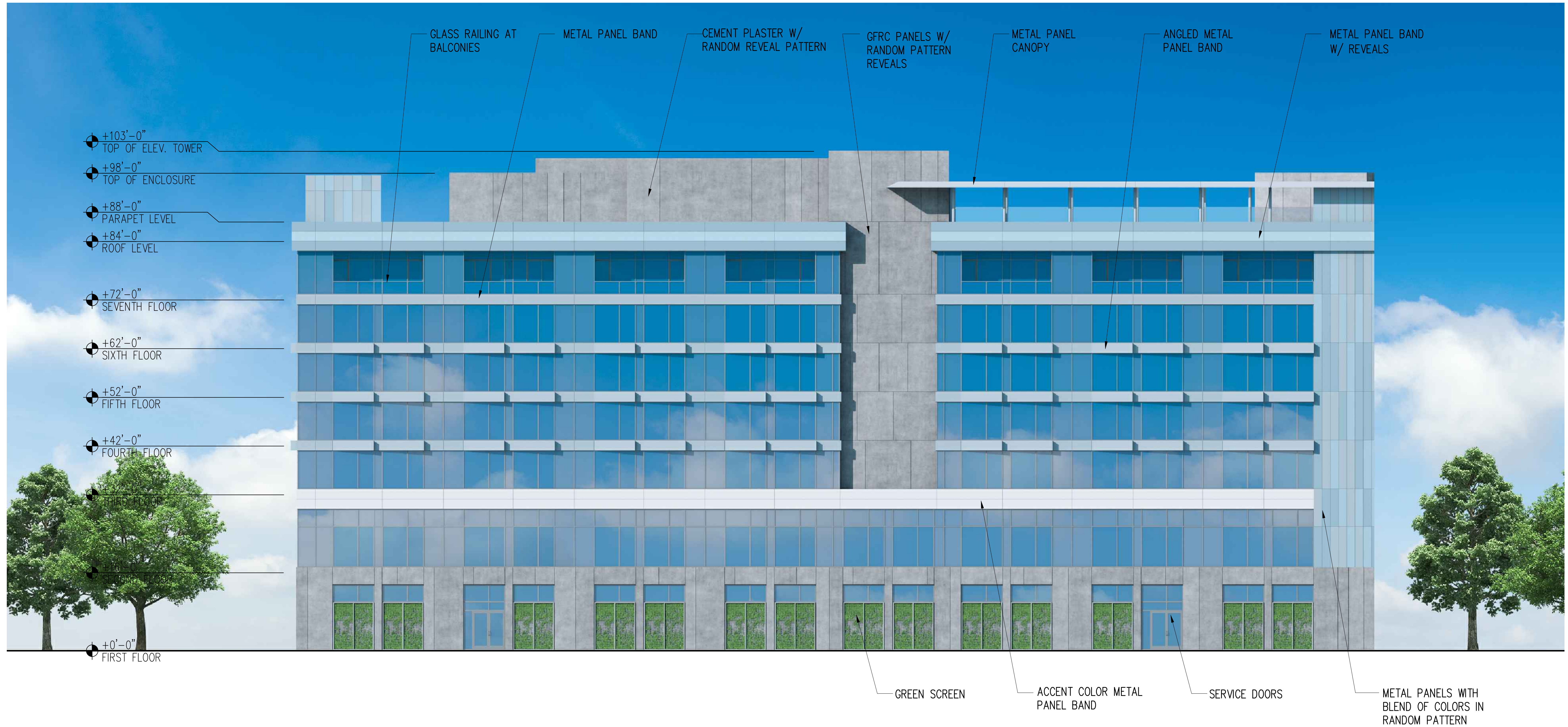
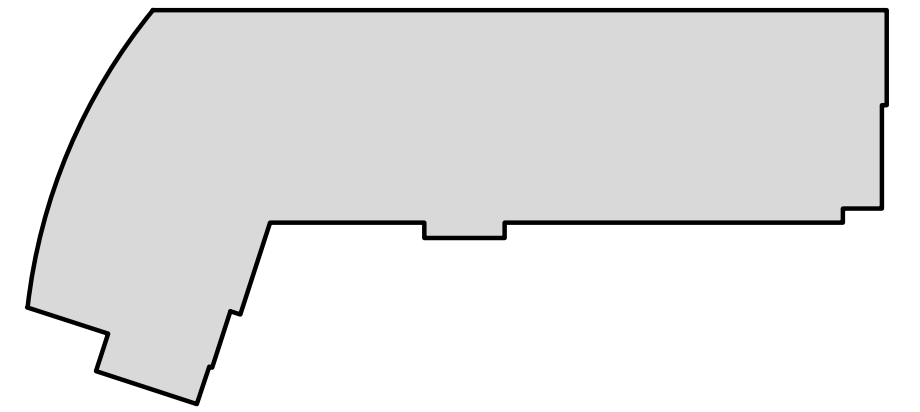
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2



2 NORTHEAST ELEVATION
3/32" = 1'-0"

0' 3/64' 3/32' 3/16'
SCALE: 3/32" = 1'-0"



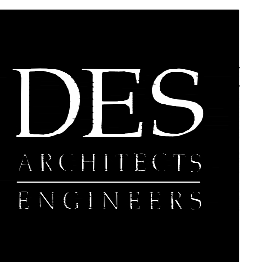
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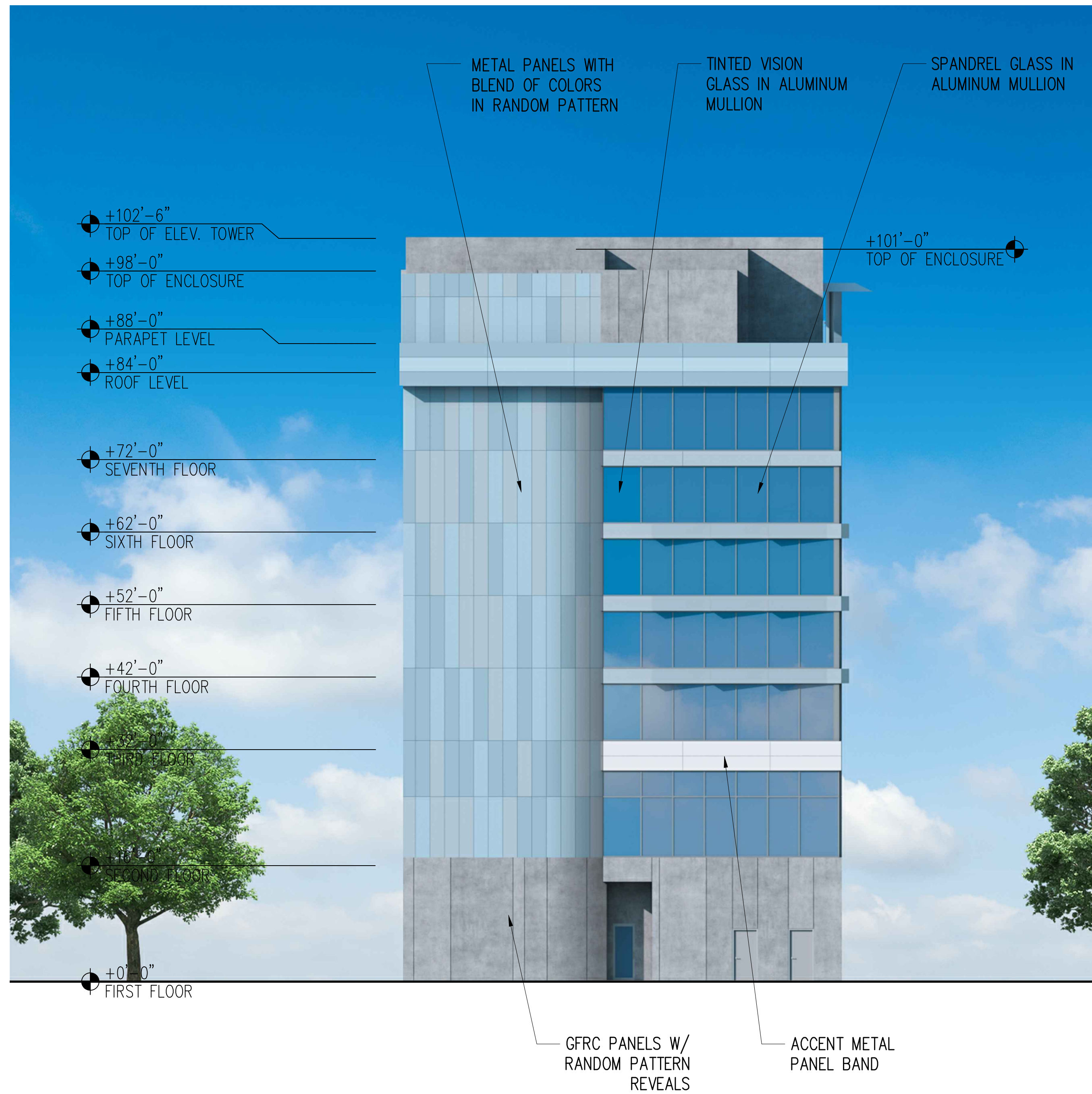
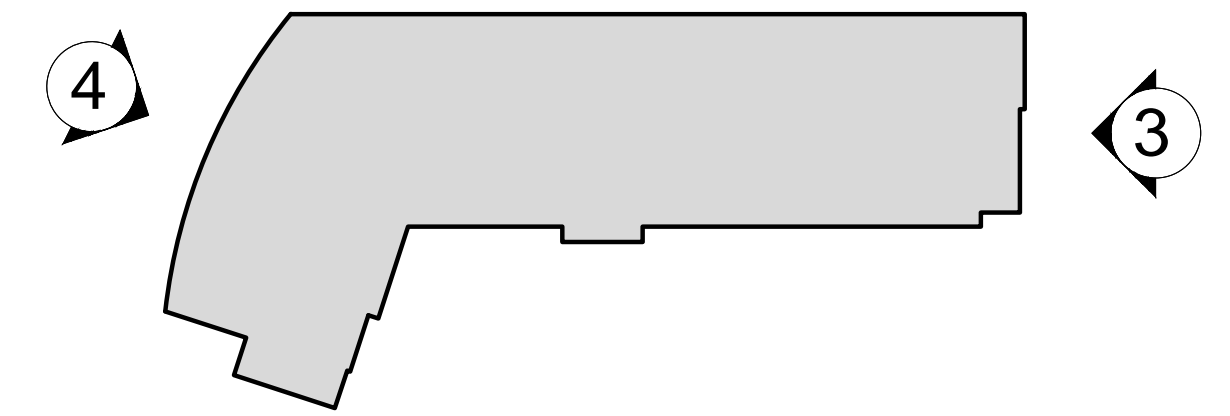
BUILDING ELEVATIONS

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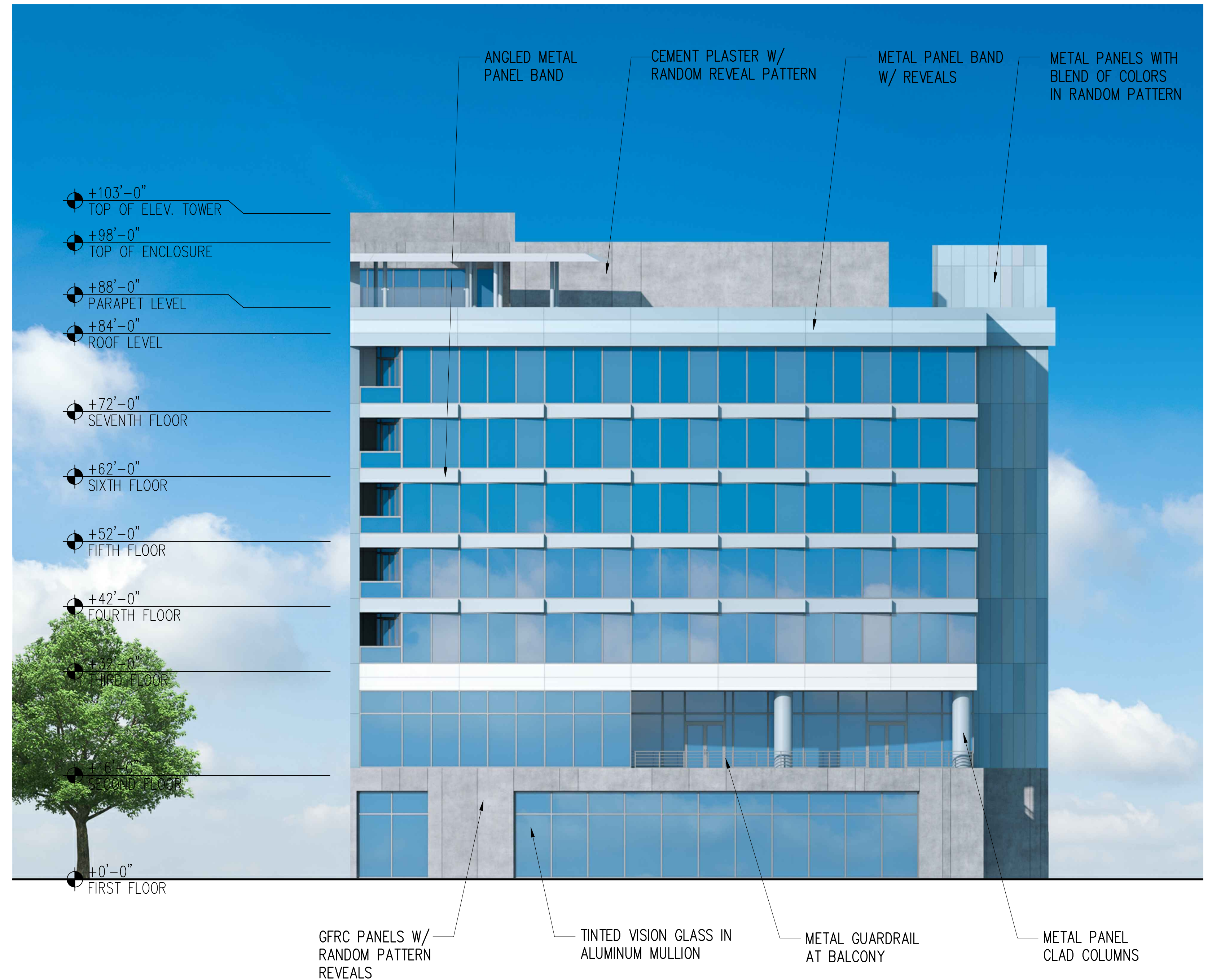
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3 SOUTHEAST ELEVATION
3/32" = 1'-0"



4 NORTH ELEVATION
3/32" = 1'-0"

0' 3/64' 3/32' 3/16'
SCALE: 3/32" = 1'-0"



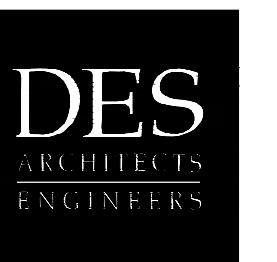
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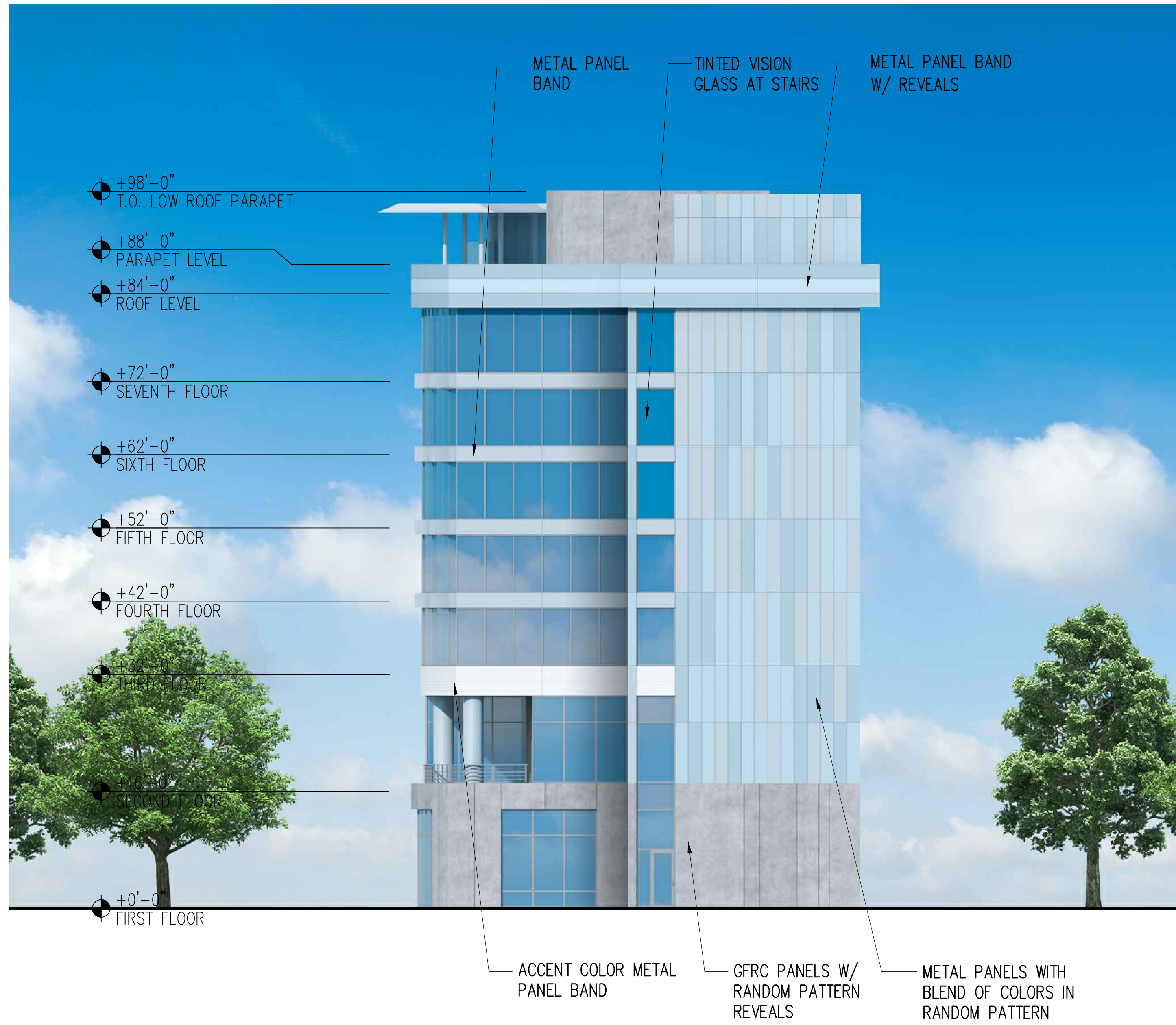
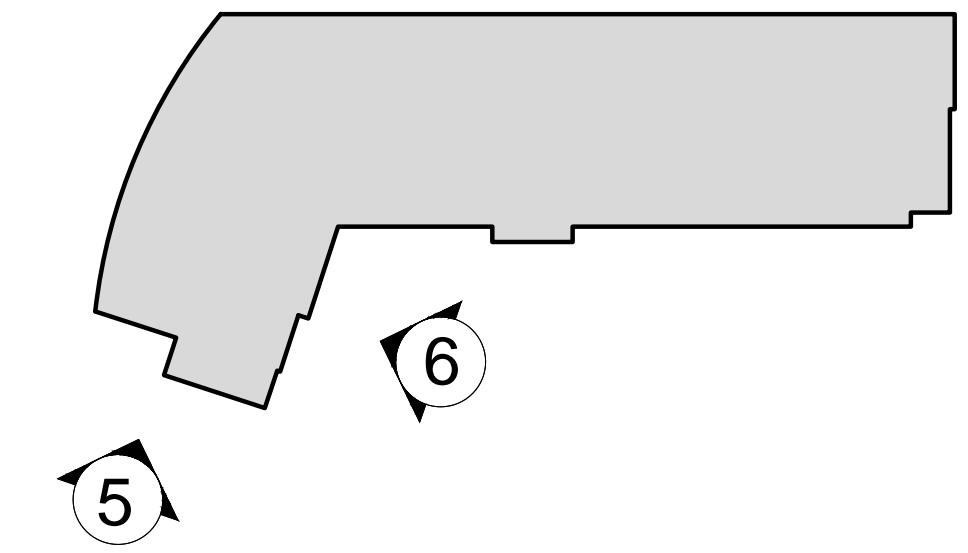
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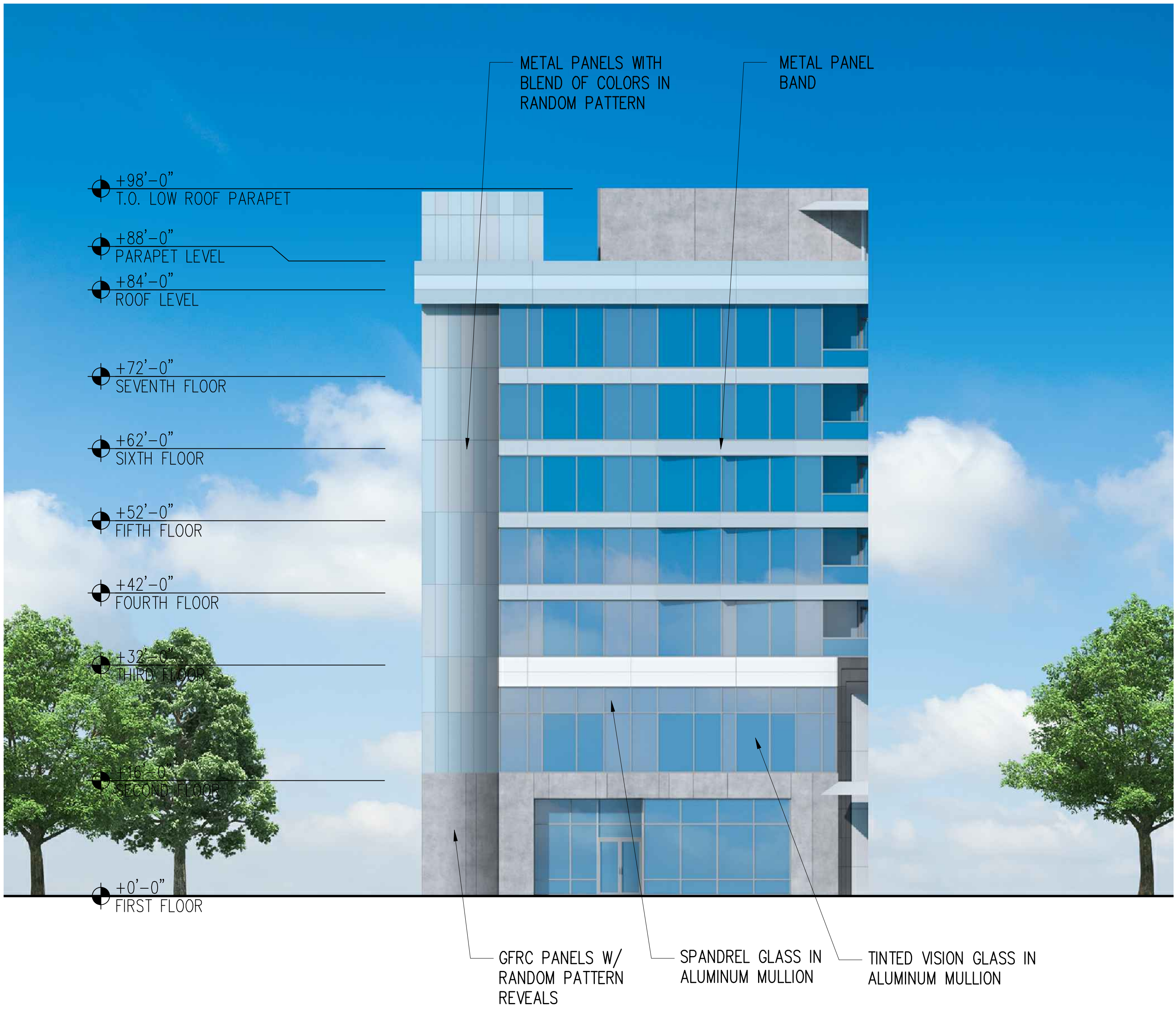
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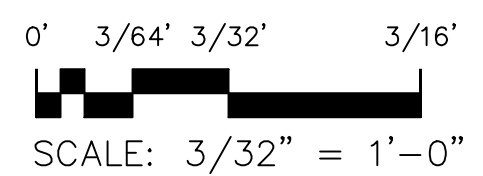
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5 WEST ELEVATION
3/32" = 1'-0"



6 SOUTH ELEVATION
3/32" = 1'-0"



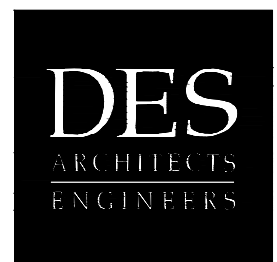
INNOVATION HOTEL

1120 INNOVATION WAY, SUNNYVALE, CA.

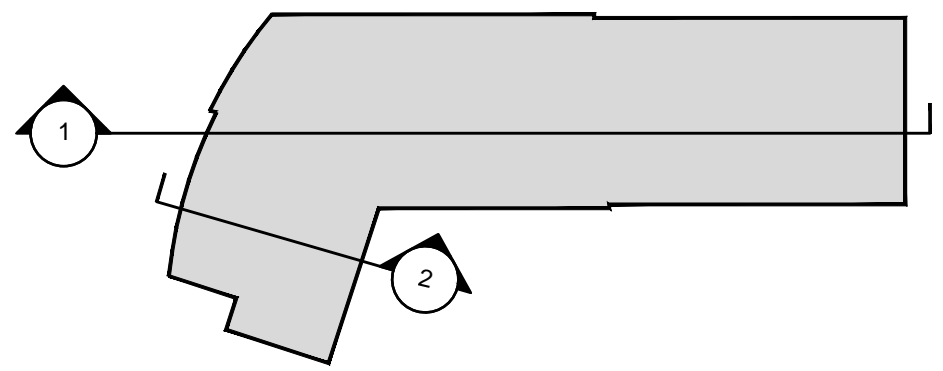
BUILDING ELEVATIONS

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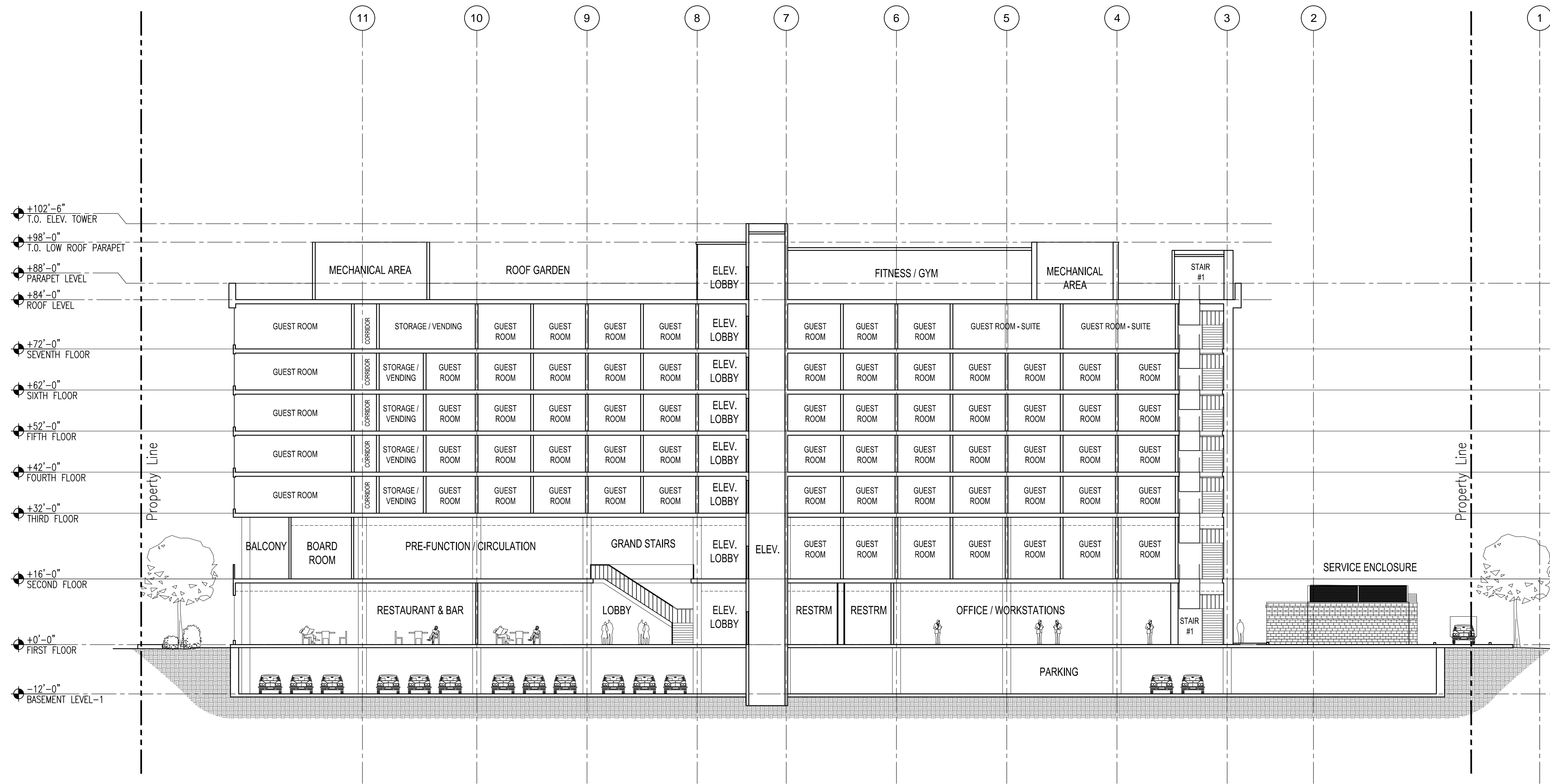
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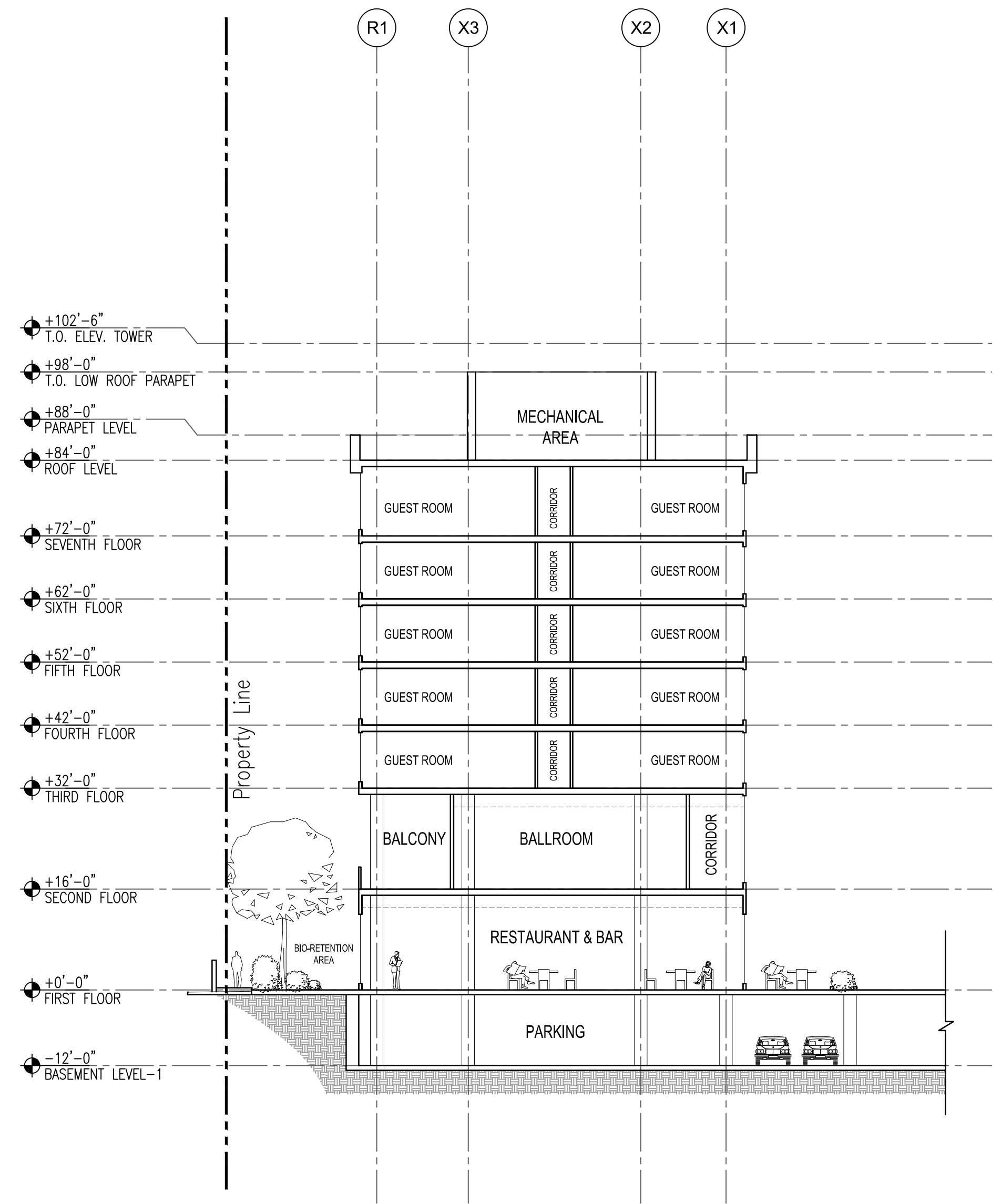
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KEY PLAN



1 SECTION-1
1/16" = 1'-0"



2 SECTION-2
1/16" = 1'-0"

0' 8' 16' 32'
SCALE: 1/16" = 1'-0"



INNOVATION HOTEL

1120 INNOVATION WAY, SUNNYVALE, CA.

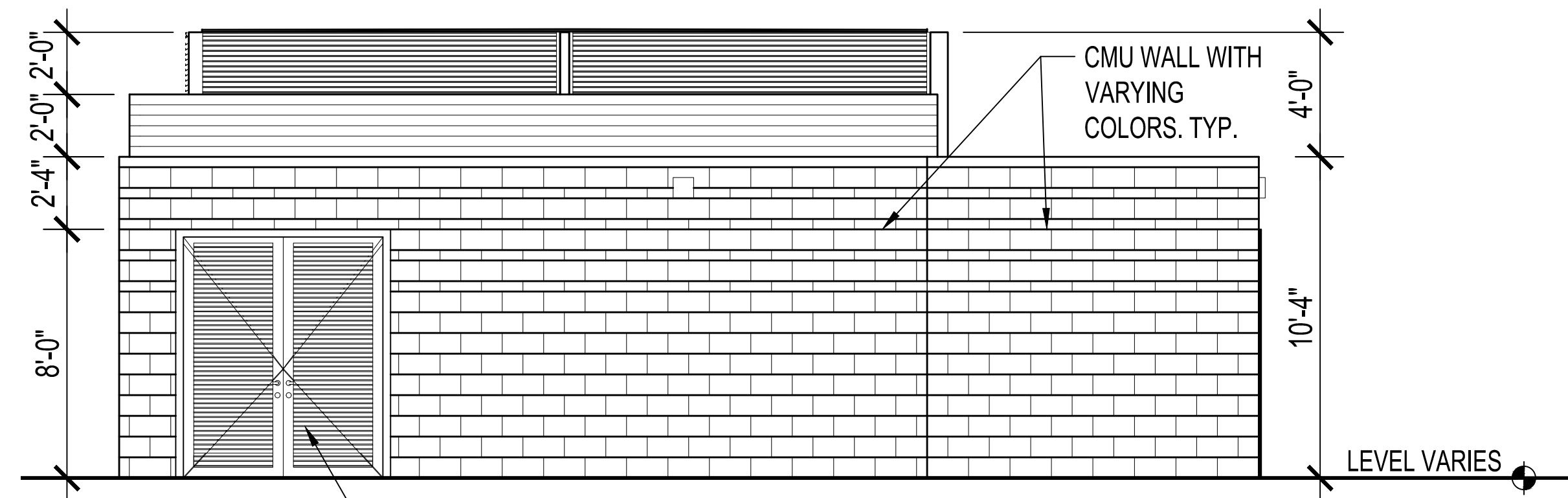
BUILDING SECTIONS

RESUBMITTAL 08.16.2016
RESUBMITTAL 05.22.2017
RESUBMITTAL 10.12.2017
RESUBMITTAL 12.12.2017
RESUBMITTAL 02.20.2018
MPP SUBMITTAL 06.21.2019

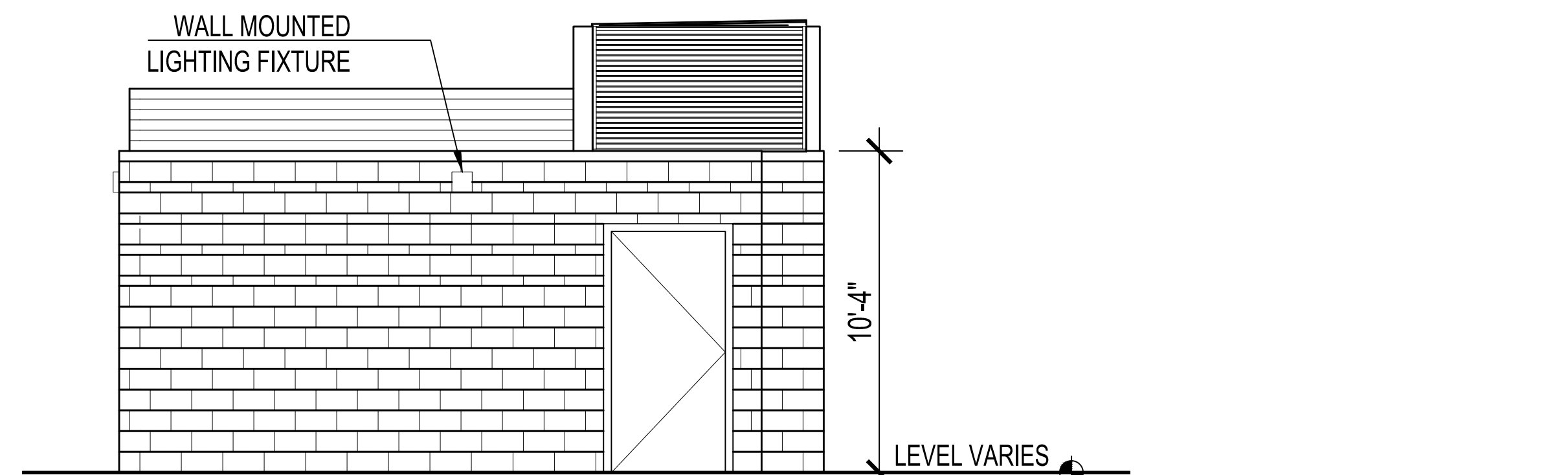
13



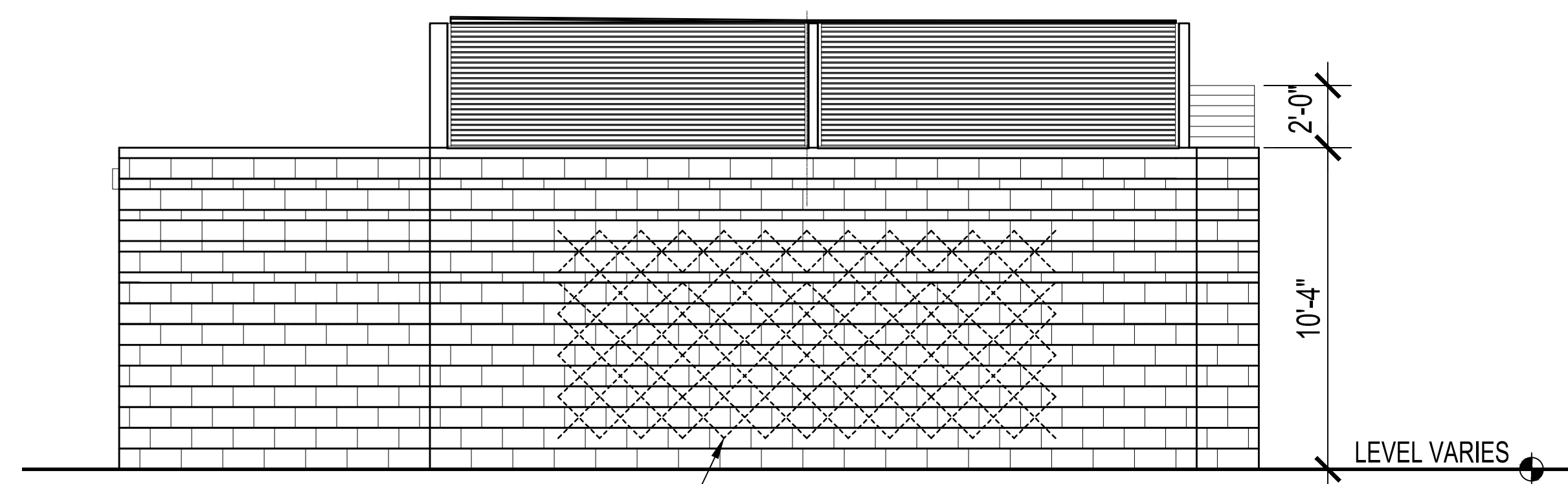
© 2019
Project Number: 9948.002



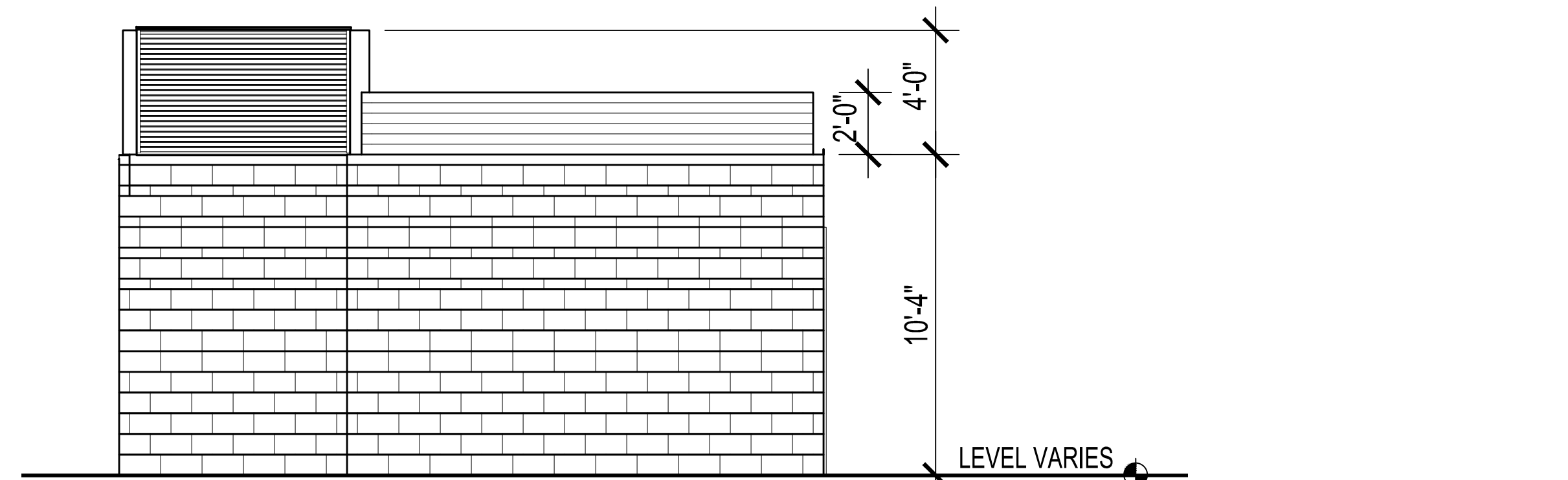
② SERVICE ENCLOSURE ELEVATION - EAST
1/4" = 1'-0"



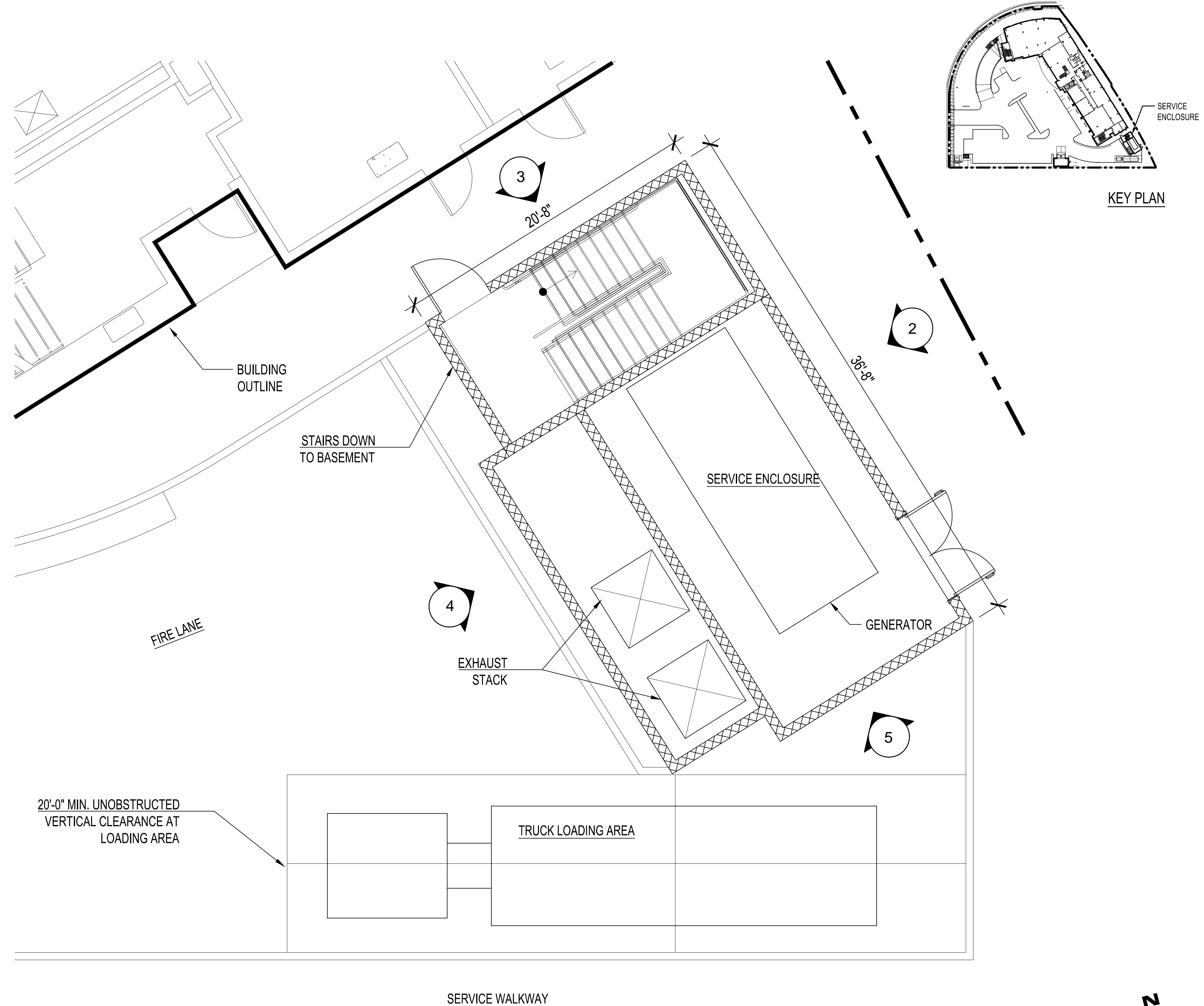
③ SERVICE ENCLOSURE ELEVATION - NORTH
1/4" = 1'-0"



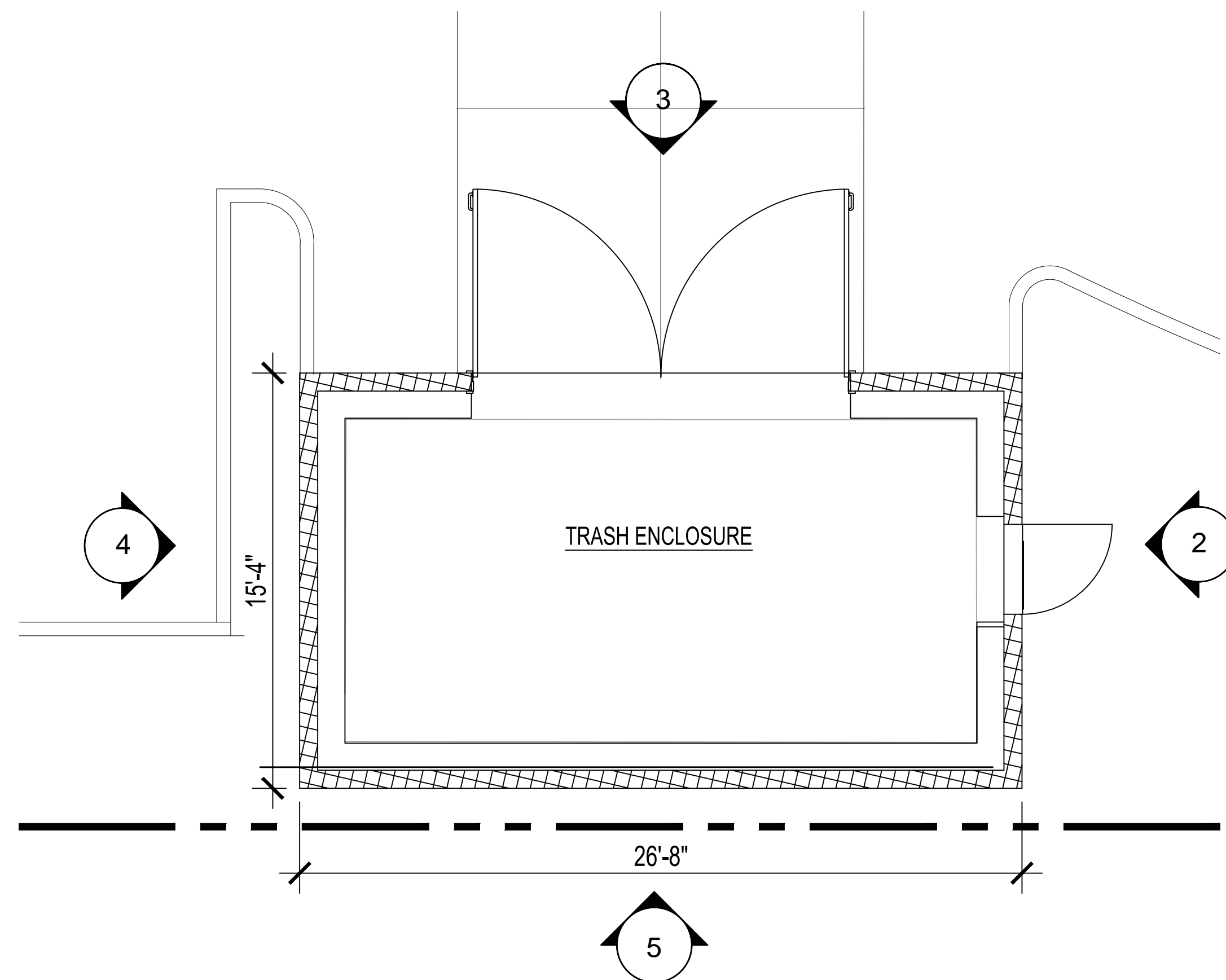
④ SERVICE ENCLOSURE ELEVATION - WEST
1/4" = 1'-0"



⑤ SERVICE ENCLOSURE ELEVATION - SOUTH
1/4" = 1'-0"



① SERVICE ENCLOSURE PLAN
1/4" = 1'-0"



1 TRASH ENCLOSURE PLAN
1/4" = 1'-0"

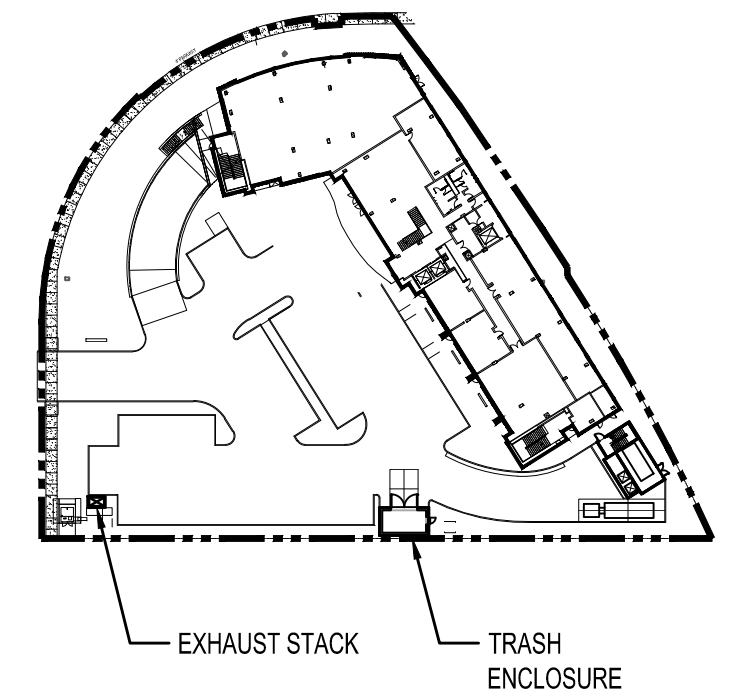
TRASH CAPACITY CALCULATIONS

Hotel Rooms: 180
Hotel Projected weekly waste volume: 0.17 CYD/ROOM/WEEK (this assumes inclusion of 1 hotel restaurant)
Weekly volume: 180 ROOMS x 0.17 CYD/ROOM = 31 CYD

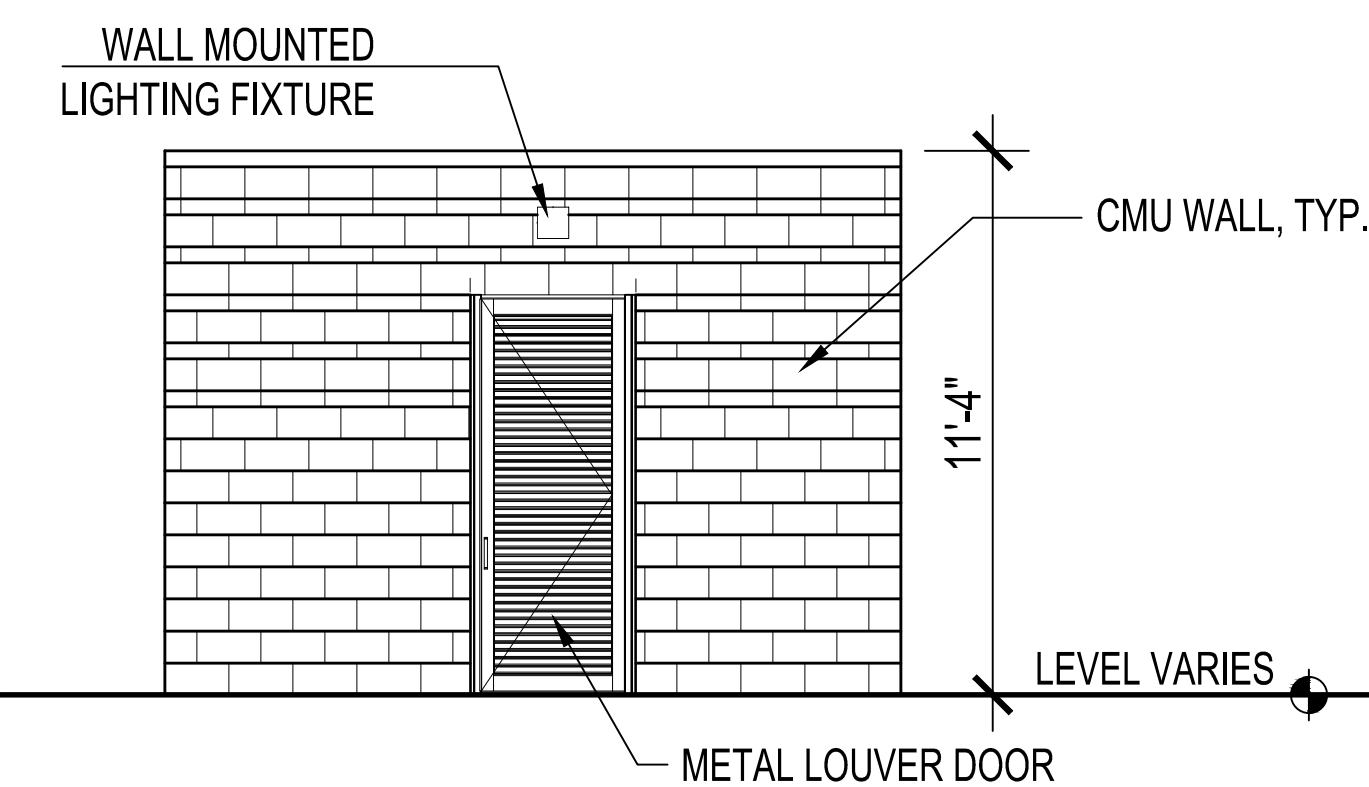
Additional Full Service Restaurant: 4,500 SF
projected weekly volume: 4 cyd garbage & 3 cyd recycling

Total Hotel Trash weekly volume = 31 CYD + 7 CYD = 38 CYD
3 times a week service: 38 CYD / 3 = **13 CYD**

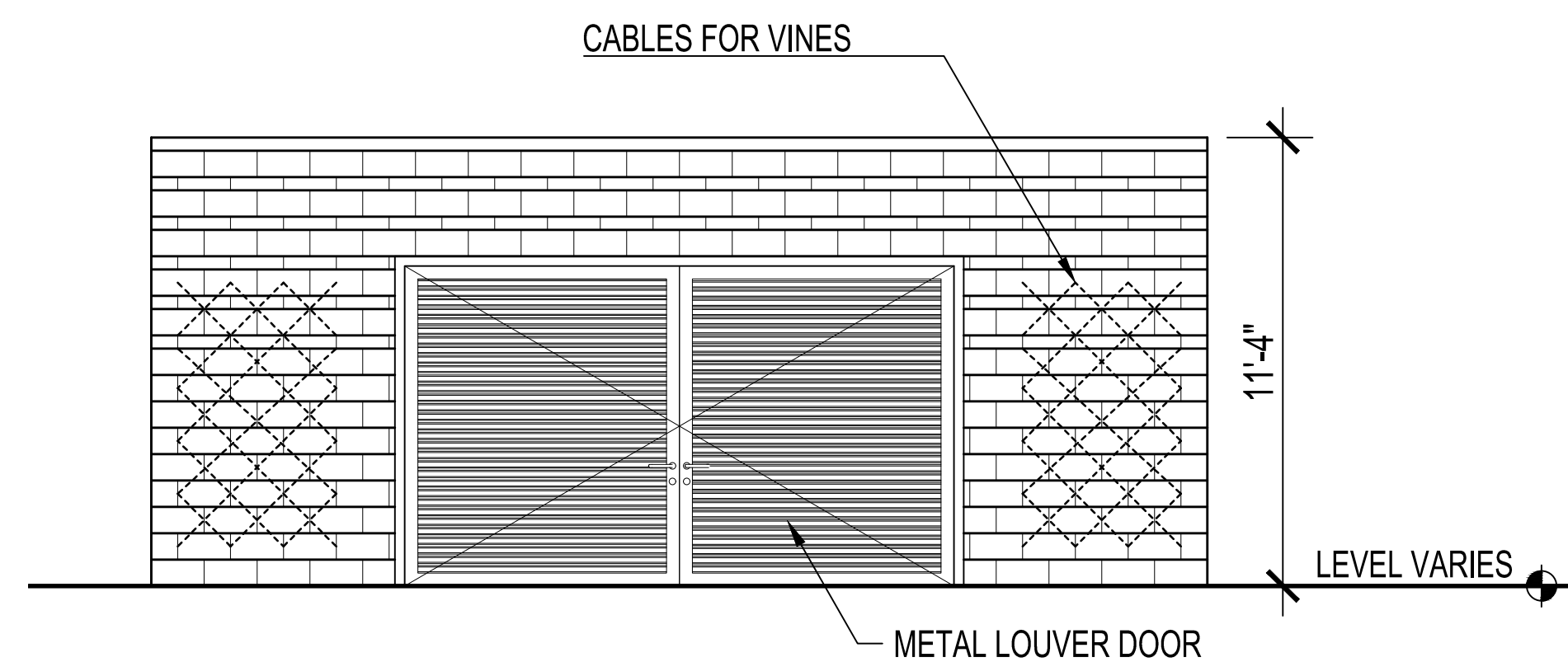
TOTAL TRASH CAPACITY REQUIRED: 13 CYD
TOTAL TRASH CAPACITY PROVIDED: (5) - 3 cyd bins
TOTAL TRASH CAPACITY PROVIDED: 15 cyd



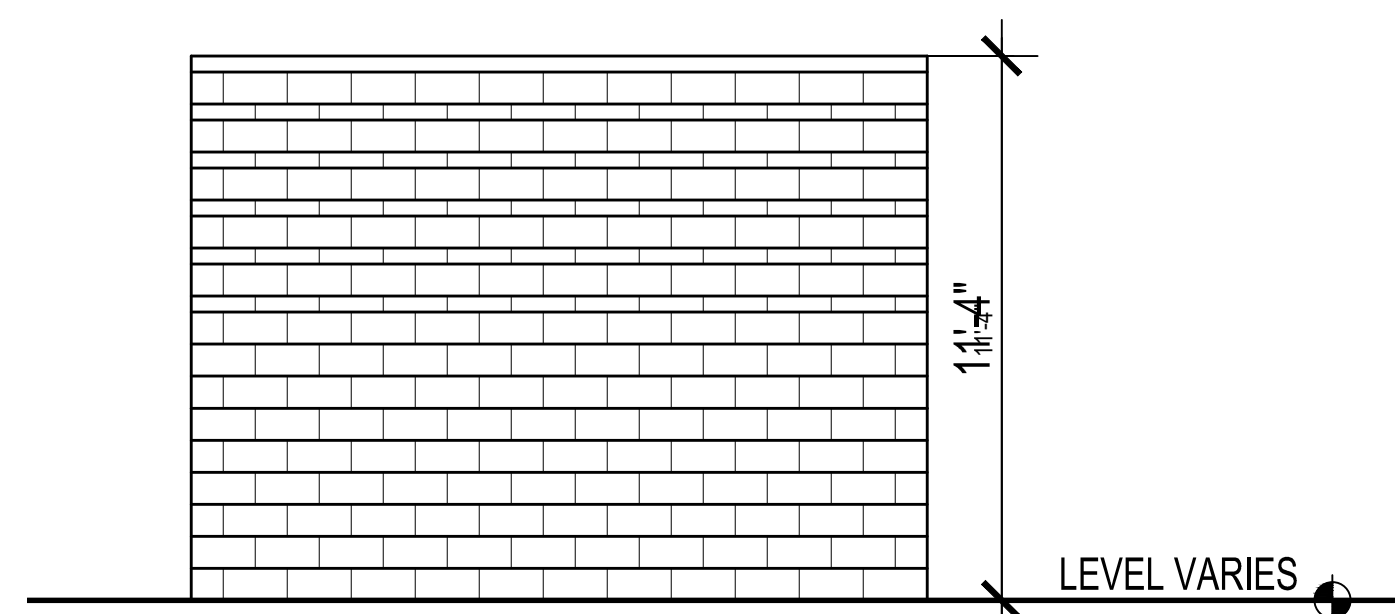
KEY PLAN



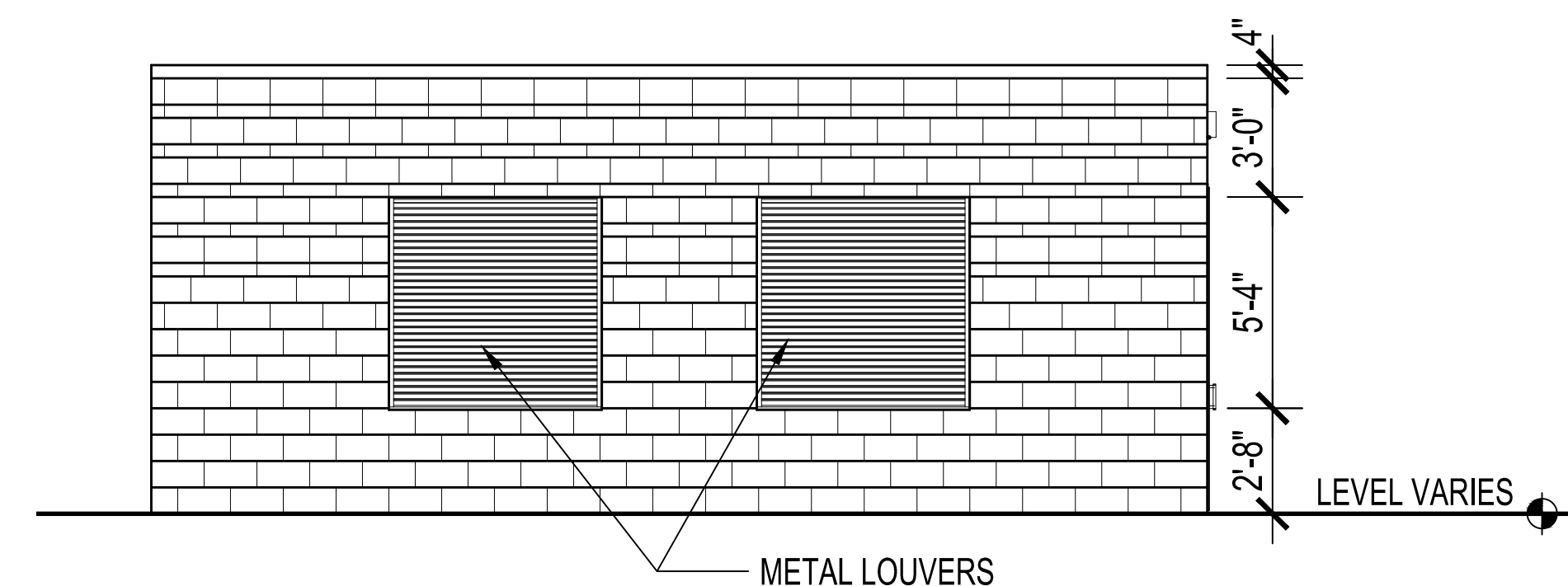
2 TRASH ENCLOSURE ELEVATION - EAST
1/4" = 1'-0"



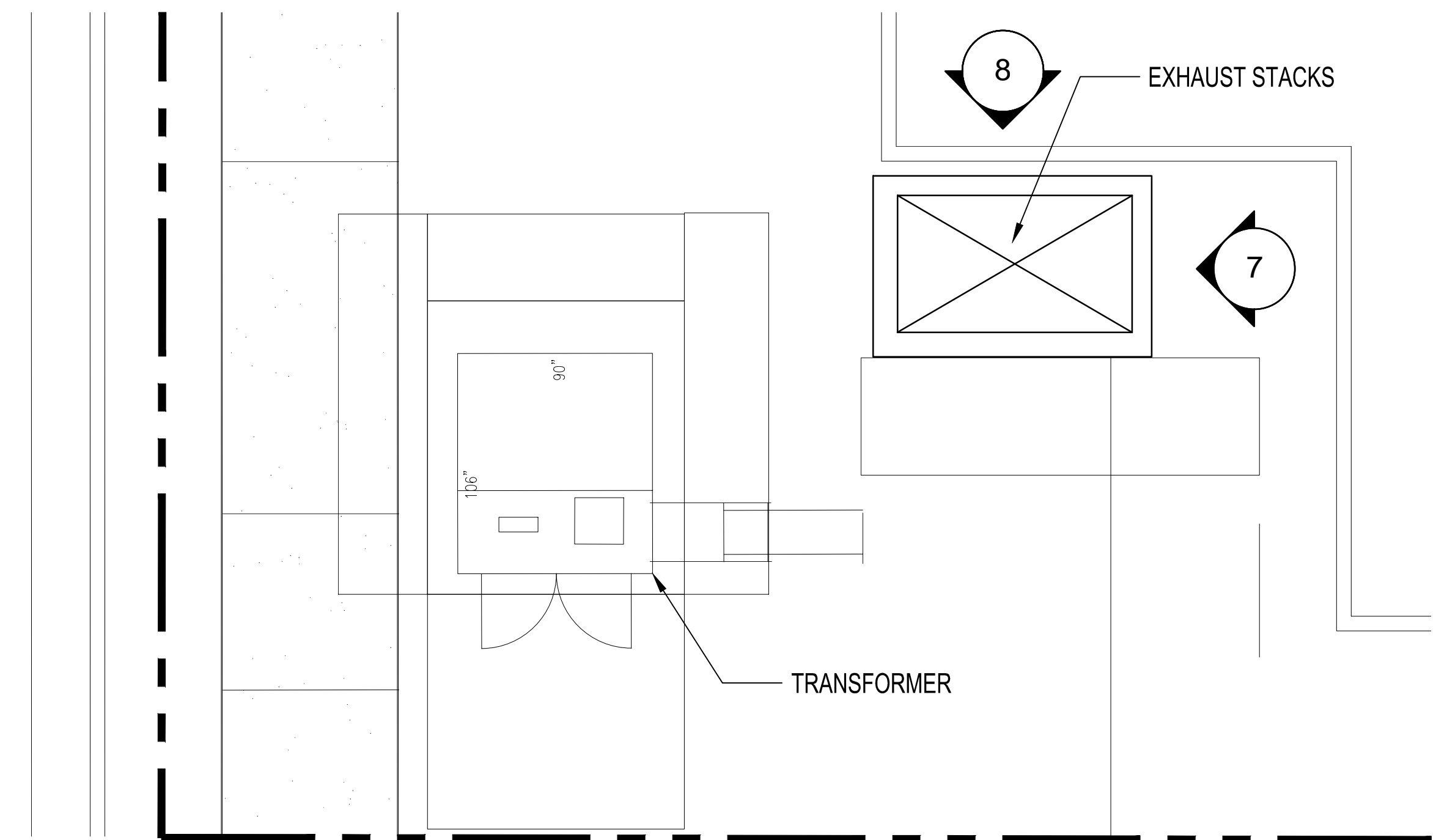
3 TRASH ENCLOSURE ELEVATION - NORTH
1/4" = 1'-0"



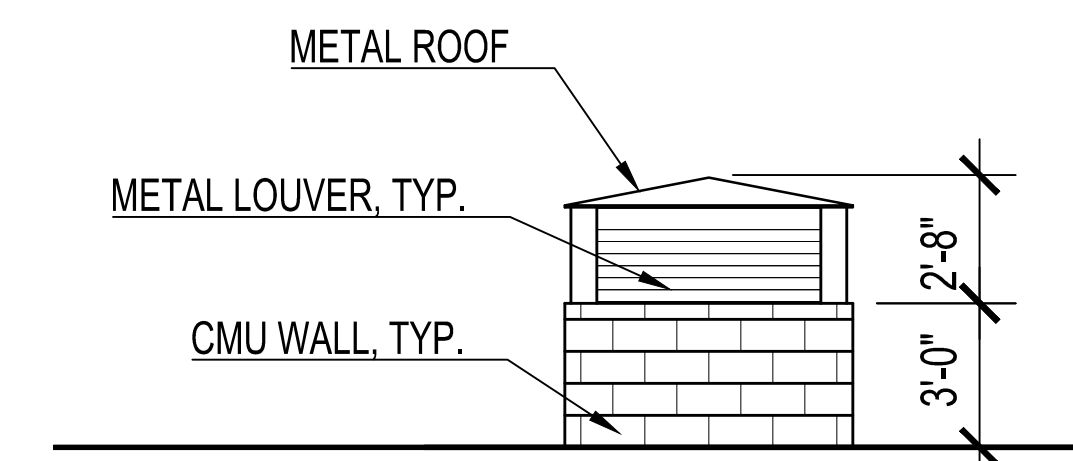
4 TRASH ENCLOSURE ELEVATION - WEST
1/4" = 1'-0"



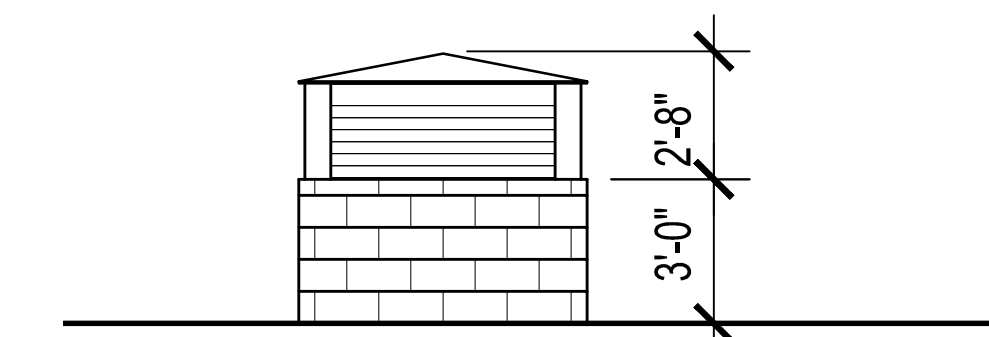
5 TRASH ENCLOSURE ELEVATION - SOUTH
1/4" = 1'-0"



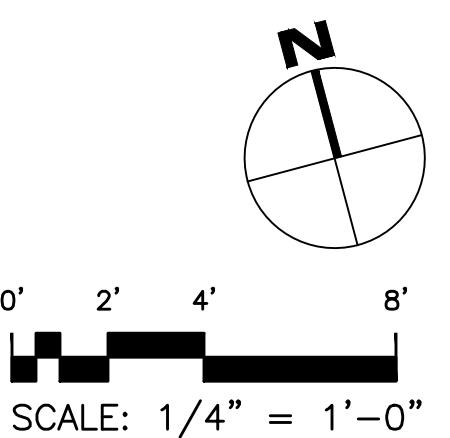
6 EXHAUST STACK & TRANSFORMER PLAN
1/4" = 1'-0"



7 EXHAUST STACK ELEVATION - EAST / WEST
1/4" = 1'-0"



8 EXHAUST STACK ELEVATION - NORTH / SOUTH
1/4" = 1'-0"



INNOVATION HOTEL

1120 INNOVATION WAY, SUNNYVALE, CA.

TRASH ENCLOSURE & EXHAUST STACK PLANS AND ELEVATIONS

RESUBMITTAL	08.16.2016
RESUBMITTAL	05.22.2017
RESUBMITTAL	10.12.2017
RESUBMITTAL	12.12.2017
RESUBMITTAL	02.20.2018
MPP SUBMITTAL	06.21.2019

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Project Number: 9948.002



City of Sunnyvale

Agenda Item 2

19-0557

Agenda Date: 7/22/2019

REPORT TO PLANNING COMMISSION

SUBJECT

Proposed Project: General Plan Amendment Initiation request to study changing the General Plan designation from Commercial to Medium Density Residential on a 2.3 acre site (Sunnyvale Lumber)

Location: 870 W. Evelyn Street (APN:165-16-004)

File #: 2019-7298

Zoning: C4 (Service Commercial)

General Plan: Service Commercial

Applicant / Owner: Trumark Homes

Environmental Review: The project is exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15378(a).

Project Planner: Margaret Netto, (408) 730-7628, mnetto@sunnyvale.ca.gov

REPORT IN BRIEF

General Plan Amendment Initiation (GPI) requests are considered on a quarterly basis through a recommendation from the Planning Commission and then action by the City Council. The process for considering a General Plan amendment begins with a written request from a property owner or applicant (Attachment 2). If the City Council approves the GPI, a formal application for a General Plan Amendment (GPA) may be filed by the property owner/applicant. The City Council must approve the GPA and related rezoning (RZ) before the specific project is scheduled for a Planning Commission hearing.

Staff received a GPI request from the applicant on April 15, 2019 requesting to change the General Plan designation for the 2.3 acre Sunnyvale Lumber site at 870 West Evelyn Avenue from Service Commercial to Medium Density Residential to allow a residential development at a maximum of 24 dwelling units per acre. For purposes of discussion regarding this GPI request, the applicant has submitted a site plan (Attachment 3) that shows conceptually how 50 three-story townhomes could be designed at a density of 21.36 dwelling units per acre on this site.

Staff understands the importance of balancing an increase in the housing supply in the City and the need to preserve service commercial and industrial zoning for smaller service businesses. The City has taken several steps to increase the number of units in the City. The following are current and past efforts to increase the housing supply in the City:

- The 2017 Land Use and Transportation Element (LUTE) planned for growth of **12,800** housing units throughout the city.
 - There are currently over **5,000** net new housing units in the development pipeline (inclusive of applications with pending Planning approval, projects which recently were approved, applications in building permit plan check and projects under construction);

- Several area plans located at significant transit locations are under review that will further increase the number of residential units in the City, especially at transit-rich locations. The maximum number of units being considered for addition to the plans (above the currently adopted 12,800 in the General Plan and Specific Plans) include:
 - **Downtown Specific Plan** update: **750** additional units
 - Lawrence Station Area Plan update: 2,323 units allowed in adopted plan and LUTE, plus an additional **3,607** being studied for a total of 5,930;
 - **El Camino Real Specific Plan** update: The 2017 Land Use and Transportation Element (LUTE) would allow an additional 4,200 housing units over existing along El Camino Real; the “Residential Plus” alternative will consider a potential of **2,700** additional residential units along this transit corridor;
 - **Moffett Park Specific Plan** update: will consider adding residential units to the plan area.

Staff is recommending that the Planning Commission forward a recommendation to the Council not to initiate the requested GPI. As discussed further in this report, it is important to maintain a balanced economic base and encourage land uses that may have a difficult time relocating within the City while also being sensitive to preserving a balance with other community needs, such as housing. Staff recommends maintaining the C-4 zoning district, which would allow the existing and similar uses.

The City Council is scheduled to consider this item on August 13, 2019.

BACKGROUND

In August 2014, the Council approved a GPI request to allow for consideration of changing the General Plan land use designation for the stretch of Evelyn Avenue west of the proposed site between Mary Avenue and Bernardo Avenue. That study would have considered residential densities from Low-Medium Density Residential (RLM 7-14 dwelling units per acre) to Medium Density Residential (RMED 14-27 dwelling units per acre). As part of the approval motion, Council directed staff to analyze opportunities for affordable housing within the subject area, to explore opportunities for streetscape improvements, and to evaluate opportunities for new public open space and/or increased park in-lieu fees. Additionally, the Council directed staff to include a market analysis study to evaluate the impact on the City due to displacement of the existing businesses.

In 2014 the Council considered expanding the study area to the east to include all properties along W. Evelyn Avenue between Bernardo Avenue and Pastoria Avenue; however, the Council did not include that block of properties in the approval of the prior GPI request. The current application for a GPI is within the eastern area that was not included as part of the prior study initiation.

In March 2016, a formal General Plan Amendment (GPA) application was submitted for the 2014 GPA initiation, but was withdrawn shortly afterwards by the applicant; the 2014 GPI has since expired.

The stretch of C-4 zoned land between S. Mary Avenue and S. Pastoria Avenue are the only properties that are zoned C-4 in the City. In 2007, Council considered rezoning selected M-S (Industrial and Service) property to C-4 (Service Commercial) zoning designation to preserve opportunities for necessary service uses (such as auto repair, machine shops and assembly shops)

because of economic and real estate market trends and redevelopment of other sites which had previously contained these uses. After conducting research, the Council decided not to rezone any new properties to C-4; Council acknowledged the fact that these types of commercial service businesses are limited in where they are permitted in the City.

EXISTING POLICY

The General Plan is the primary policy plan that guides the physical development of the City. When used together with a larger body of City Council policies, it provides direction for decision-making on City services and resources. The 2017 adopted Land Use and Transportation LUTE Chapter within the General Plan created an integrated set of policies to guide land use, development, and transportation choices with a horizon year of 2035. The LUTE has several policies to improve the jobs-to-housing ratio, promote increases in housing development, support new office and industrial uses, and ensure coordinated development with community benefits. The subject property was not considered an opportunity site for residential uses.

LAND USE AND TRANSPORTATION CHAPTER

Goal LT-4: An Attractive Community for Residents and Businesses

Policy LT-4.2: Encourage nodes of interest and activity, public open spaces, well-planned development, mixed-use projects, signature commercial uses, and buildings and other desirable uses, locations, and physical attractions.

Goal LT-7: Diverse Housing Opportunities- Ensure the availability of ownership and rental housing options with a variety of dwelling types, sizes, and densities that contribute positively to the surrounding area and the health of the community

Policy LT-7.3: Encourage the development of housing options with the goal that the majority of housing is owner-occupied.

Goal LT-11: Supportive Economic Development Environment

Policy LT-11.3: Promote business opportunities and business retention in Sunnyvale.

Goal LT-12: A Balanced Economic Base

Policy LT-12.4: Attract and retain a diversity of commercial enterprises and industrial uses to sustain and bolster the local economy and provide a range of job opportunities.

Policy LT-12.5: Encourage land uses that generate revenue while preserving a balance with other community needs, such as housing.

GOAL LT-14: Special and Unique Land Uses to Create a Diverse and Complete Community Community Benefits

Policy LT-14.8: Ensure that development projects provide appropriate improvements or resources to meet the City's future infrastructure and facility needs, and provide development incentives that result in community benefits and enhance the quality of life for residents and workers.

General Plan Land Use Map and Zoning

The property has a General Plan designation of Service Commercial and is zoned C-4. The C-4

zoning district allows for commercial service types of uses. Attachments 6 and 7 include vicinity maps of General Plan land use and Zoning Districts of this area.

ENVIRONMENTAL REVIEW

The decision to initiate a General Plan Amendment study does not require environmental review under the California Environmental Quality Act (CEQA) because the mere initiation of a study does not constitute a project under CEQA pursuant to CEQA Guidelines Section 15378(a) as it has no potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment. If initiated, the proposed GPA and associated RZ would be subject to the provisions of CEQA.

DISCUSSION

The subject site is bounded by W. Evelyn Avenue to the north, Sunset Drive to the west, Muender Drive to the south, and currently operates as a lumber yard. The site has two frontages, one on W. Evelyn Avenue and one on Muender Drive. The surrounding land uses are summarized in Table 1 below:

Table 1-Surrounding Land Uses

Direction	Existing uses	Zoning	General Plan Designation
North (across Evelyn Avenue)	Caltrain corridor	N/A	Industrial
West	Single-family houses	C4	Commercial
South (across Muender Drive)	Single-family houses	R-2	Low Medium Density Residential
East	Auto Repair	C4	Commercial

Applicant's Request

The applicant has indicated a desire to pursue a residential development at R-3 density, which is consistent with a General Plan designation of Medium Density Residential. Should the Council initiate this request, a rezoning to R-3 would be considered at the same time. It is likely the applicant will request a Planned Development (PD) combining district, which allows modifications to zoning standards to meet special conditions and situations concerning properties within such zoning districts that cannot otherwise be handled satisfactorily. This combining district is also intended to provide opportunities for creative development approaches and standards that will achieve superior community design, environment preservation and public benefit such as deviations from development standards (see Attachment 2 and 3).

A conceptual project proposal was submitted with the GPI application to illustrate the requested land use (see Attachment 4). The applicant's preliminary design proposal considers a 4-story massing along W. Evelyn Avenue to allow building heights to reach 55-feet where deemed appropriate. The R-3 zoning district limits townhouse heights to 35-feet or 3-stories. The PD combining district could allow for a greater height, typically based on either hardship or superior project design. An additional five feet in height is also possible with the Green Building incentives.

The block is also located between two train stations (0.89 mile to Sunnyvale and 2.2 miles to Mountain View). Although not considered within standard walking distance, these transit sites are conveniently located for potential new commuters who have drop-off or who may bicycle the distance.

The site is near business centers in both Sunnyvale and Mountain View. Peery Park is located less than half a mile to the north. Moffett Park is approximately 1.5 miles and is north of Peery Park. Downtown Sunnyvale is located one mile east (see Attachment 5).

There may be merit to evaluating residential uses in the project area as the site is already bordered by other residential uses and new residential uses may be a more compatible neighbor to the existing residents. Although it is near the railroad, the City has permitted other residential projects along the railroad corridor with appropriate mitigation for noise.

Other Residential Options to Consider

In-lieu of medium density, a range of General Plan residential densities could be considered for the site during this study, including Residential Low Medium Density (RLM 7-14 dwelling units per acre), Residential Medium Density (RMED 14-27 dwelling units per acre, proposed) and Residential High Density (RHI 27-45 dwelling units per acre). The range of units within the three possible study densities would range from 27 to 81 units for the proposed property. Opportunities for affordable units would be available either through the City's Below Market Rate program or because of the state density bonus law. It is typically easier to mitigate noise impacts from the railroad through building design with higher densities.

The following densities and number of dwelling units would be allowed for each Low Medium, Medium, High and Very High residential zoning designation for site.

Zoning District	Max. Units/Acre	Units Allowed (for entire site)
R-2 (low-medium)	12	27
R-3 (medium)	24	54
R-4 (high)	36	81
R-5 (very-high)	45	104

Low-Medium Density Residential

There are three zoning districts under the Low-medium density residential general plan designation: R-1.5, R-1.7/PD, and R-2. The Low-Medium Residential General Plan designation supports small lot single-family, duplex, and smaller multi-family neighborhoods, designed around parks or schools, and located along neighborhood streets or residential collector streets. The R-2 district is often thought of as a duplex district but can also result in small lot single-family homes, and lower density townhouse developments. The subject site is bordered on the north, west and south by properties with Low Medium Density (see Attachment 6 and 7).

Medium Density Residential

Townhomes, apartments, and condominiums are typical within the Medium Density Residential

General Plan designation. Medium density neighborhoods and developments are appropriate along arterials and residential collector streets and may also be located near industrial or commercial areas.

High Density Residential

This designation also provides for densities consistent with apartments or condominiums but at higher densities than the medium density designation. High density neighborhoods and developments are typically located next to expressways, major arterial roads, or freeways. The primary purpose of this designation is to provide for high-density residential uses; however, mixed-use development (combining commercial with residential) is encouraged when sites are located near public transit (e.g., Santa Clara Valley Transportation Authority light rail, Caltrain, or a major bus route) and where commercial uses would be beneficial to create a Village Center or meet a need for service in a residential or commercial neighborhood.

Very High Density Residential

The very high density residential category is supported by the R-5 high density residential and office zoning district and is reserved for the construction, use and occupancy of not more than forty-five dwelling units per acre alone or in combination with hotels or motels.

Mixed Use Residential and Commercial

Both R-4 and R-5 zoning districts allow (but do not require) retail. If mixed use is desired, then the Mixed Use combining district could be considered (and could be combined with R-3, R-4 or R-5 zoning districts), which would then require that at least 10% FAR (or up to 25% FAR) of commercial uses be provided. Most C-4 uses would not be permitted.

Modified Study Area Options

GPI requests for a specific property that is a part of a larger area with the same General Plan and zoning designations are usually included in a General Plan Amendment study to maintain a consistent and cohesive plan. Three options are described below:

Muender Study Area

This option would maintain the C-4 zoning district along W. Evelyn Avenue (the 1.15-acre north portion of the property), and consider changing the south portion of the subject site along Muender Avenue to residential uses. This study could result in enabling 13 to 41 dwelling units (depending on the residential density studied) on the site adjacent to existing residential uses, while still preserving the other half of the site (1.15 acres) for Service Commercial uses (See Attachment 8 for a map of this option). A 1.15-acre property would allow an approximately 35,000 square foot building which meets the zoning code standards. This option would promote the City's General Plan Policy of encouraging a diversity of residential development in Sunnyvale while also preserving some of the Service Commercial property.

Pastoria Avenue to Sunset Avenue Study Area

The applicant's proposed 2.3-acre study area represents only a portion of the Pastoria Avenue to Mary Avenue block (all of which is currently zoned C-4), the result of which would create a residential pocket in between properties zoned C-4. A study option would expand the study area to include all properties along Evelyn Avenue from Pastoria Avenue to Sunset Avenue. The total land area would be approximately 3.5 acres. If ultimately approved, the expanded area would include requirements to

ensure that new residential development in this block would be planned with the appropriate amenities such as improved sidewalks and bike lanes as well as other residential-focused improvements. Attachment 8 shows the study area this expanded option would cover. A drawback of this expanded study area is that it includes several very small properties which may not be feasible for redevelopment unless combined with other properties.

Pastoria Avenue to Mary Avenue Study Area

This more extensive option would include all properties along West Evelyn Avenue with the Service Commercial General Plan designation (and the C-4 zoning district designation). The total area of this portion of West Evelyn Avenue is approximately 5.2 acres, which would allow between 103-310 residential units depending on the land use designation. Studying the entire stretch of Service Commercial along West Evelyn Avenue would ensure a consistent land use pattern along the street, but could remove all service commercial-type uses in this portion of the city. If Council initiates this expanded area (see Attachment 8), staff recommends requiring the applicant to pay for a fiscal and marketing study to evaluate whether sufficient land is available, citywide, for commercial service uses and whether or not these existing uses could relocate in Sunnyvale.

Current City-wide Planning Efforts to Increase Housing Units

The City has a long-standing record of increasing the housing numbers in the City; updates to area plans near quality transit options supports that commitment. The City also has strived to maintain a balance of land uses in the City. The City has over 5,000 housing units that are either under review, approved, in building plan check, or under construction. The types of units range from single family homes to multifamily projects in all sizes, densities, and income levels. Currently, Sunnyvale is on target to meet the goals outlined in the Housing Element of the General Plan. See Attachment 9 for the most recently approved residential projects and does not include those under review or planned as part of area plan updates.

FISCAL IMPACT

There are no fiscal impacts associated with a General Plan Initiation request.

PUBLIC CONTACT

Public contact regarding this item was made through the following ways:

1. Posting the Agenda for the Planning Commission on the City's official-notice bulletin board outside City Hall and by making the agenda and report available at the Sunnyvale Public Library and on the City's website;
2. Publication in the Sun newspaper, at least 10 days prior to the hearing;
3. 663 notices mailed to property owners and residents within 300 feet of the project site; and
4. E-mail notification of the hearing dates sent to all interested parties and neighborhood associations.

Staff has not received any correspondence or phone calls from members of the community at the time of report preparation.

See Attachment 5 for Vicinity and Noticing Map.

ALTERNATIVES

Forward a Recommendation to the City Council:

1. Initiate the General Plan Amendment study for the property at 870 West Evelyn Avenue for a Residential Medium Density designation and require the applicant to pay for all studies associated with the request, including marketing, economic, noise, air quality, environmental, and traffic studies (*applicant's request*).
2. Alternative 1, except initiate a General Plan Amendment study for the property at 870 West Evelyn Avenue to study only the southern half of the project fronting Muender Avenue as Residential Medium Density and maintain the northern portion fronting West Evelyn Avenue as Service Commercial.
3. Alternative 1, except initiate the General Plan Amendment study for an expanded study area and specify the boundaries of the study area.
4. Any of the above alternatives to include a range of residential densities with direction on what densities to study.
5. Do not initiate the General Plan Amendment study.

STAFF RECOMMENDATION

Recommend to the City Council, Alternative 5: Do not initiate the General Plan Amendment study.

Sunnyvale is experiencing change in many areas of the city, and some change results in the loss or relocation of businesses utilized by community members. Any change to the General Plan must consider the services a community uses and the need to maintain a balanced economic base. This consideration must be balanced by the need for more housing in the city.

Staff notes that the City of Sunnyvale has been doing an excellent job of increasing the housing numbers in the city. As noted in the report, there are over 5,000 net new residential units in the development pipeline in the city, along with nearly 7,000 units being considered as part of area plan updates (Downtown, El Camino Real and Lawrence Station) and an unknown number in Moffett Park. Staff finds it important to maintain the C-4 zoning district, and the important uses within this district as they have limited ability to relocate to other zoning districts in the City.

Given the value to the community and limited number of properties with the Service Commercial designation as well as the number of residential units currently in the pipeline, staff does not recommend the General Plan Initiation request. Additionally, attention for future residential options should be focused on locations closer to valuable transit locations.

If the City Council finds that a study is desirable, it should be noted that the staff time available to work on the study is limited and that applications for projects that comply with existing zoning and general plan designations may delay the progress of a GPA study of this site.

Staff

Prepared by: Margaret Netto, Project Planner

Reviewed by: Amber Blizinski, Principal Planner

Reviewed by: Andrew Miner, Assistant Director of Community Development

Reviewed by: Trudi Ryan, Director of Community Development

Reviewed by: Teri Silva, Assistant City Manager

Approved by: Kent Steffens, City Manager

ATTACHMENTS

1. *Reserved for Report to Council*
2. Applicant's GPI Letter
3. Applicant's Justification Letter
4. Applicant's Conceptual Site Plan
5. Vicinity and Noticing Map
6. General Plan Map of site and vicinity
7. Zoning Map of site and vicinity
8. Study Area Map
9. Recently Approved Large Residential Projects

ATTACHMENT 1

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Project Description: General Plan Initiation Application – Sunnyvale Lumber

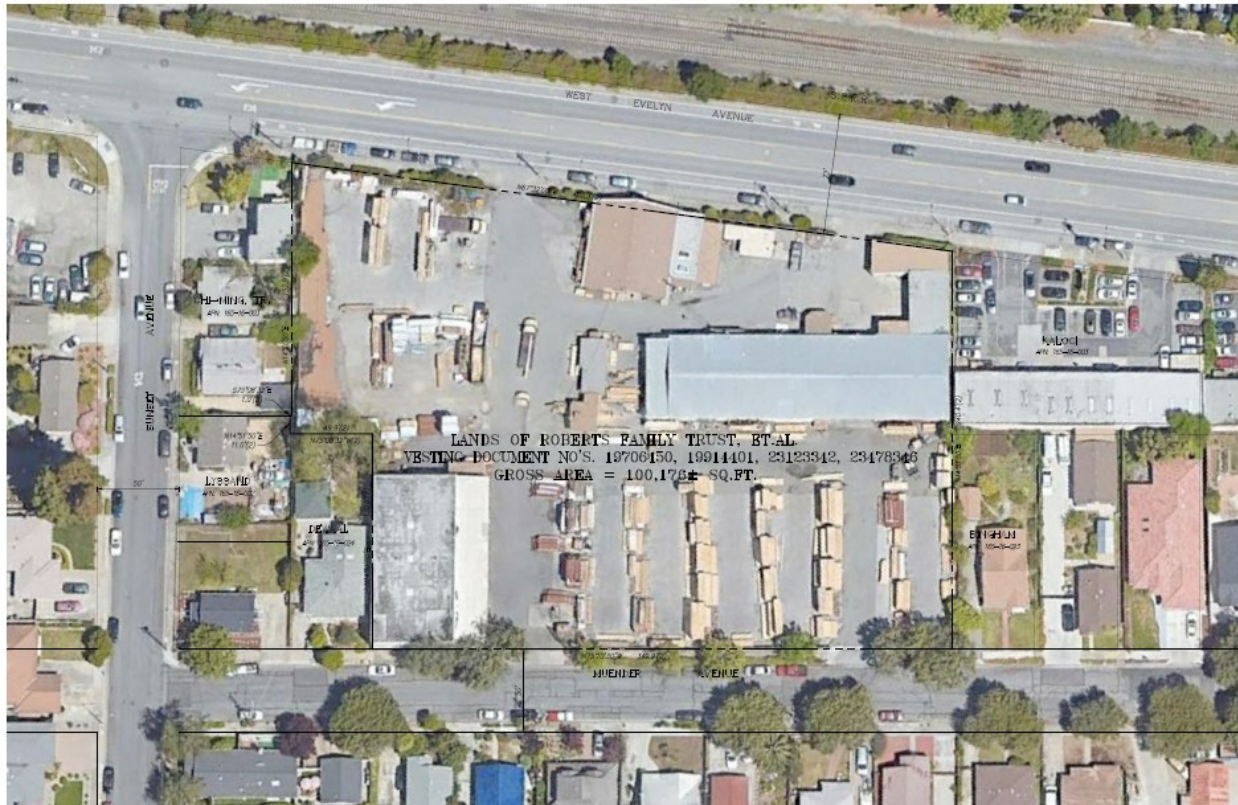
Property Address: 870 West Evelyn Avenue

APN#: 165-16-004

Lot Size: 2.25 Acres

General Plan: Commercial COM to MDR Medium Density Residential

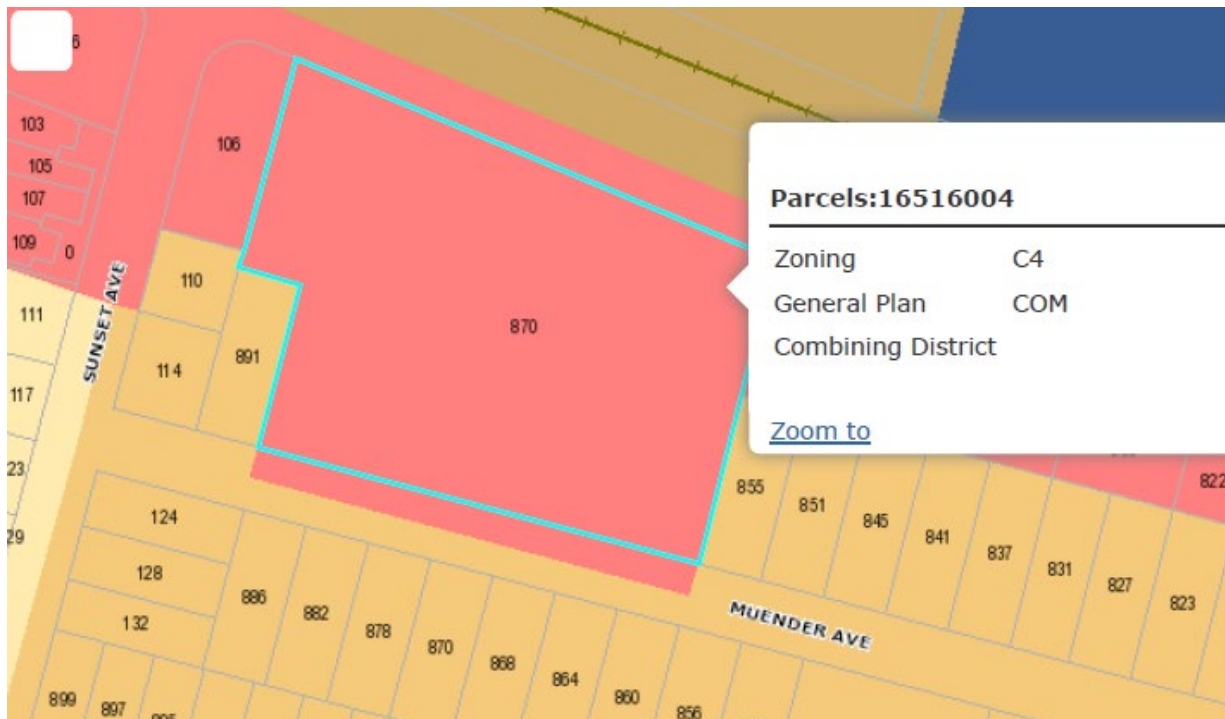
Zoning: Commercial C4 to Residential R3-PD



Trumark Homes is pleased to request the initiation of the General Plan Amendment process regarding the current Sunnyvale Lumber site at 870 West Evelyn Avenue. The lumber yard operators consolidated their operations and the property owner has partnered with Trumark Homes to request a conversion to a higher and better land use.

Approximately 65% of the site is currently adjacent to Residential Low-Medium (RLM) General Plan land use, and Residential R2 Zoning. The current Commercial land use values are far below residential land values due to the location. This location is considered a “C” commercial market location due to low visibility on a collector level street. This commercial location has failed to keep pace with comparable businesses in the region located on major arterial streets. The competition can offer better prices for services due to increased business volume directly related to visibility, ease of access, and ample parking. Furthermore, the location does not

share a large enough walkable radius to keep pace with neighborhood retail values due to the CalTrain Rail Corridor cutting off 50% of potential clientele. Poor visibility, limited access, located adjacent to residential houses on two sides confirms this site is not being utilized at its highest and best use as a commercial property.



2018 saw the 8th straight year of increased housing costs due the under-supply of housing in a region leading the nation in job growth. The current need for housing coupled with the low commercial land use value supports this request to initiate a General Plan Amendment process.

Proposed Use: Residential R3-PD:

Trumark Homes understands the General Plan process will study numerous factors influencing this site along with community needs. At this time, Trumark believes R3-PD zoning is the most appropriate residential density and massing for this site. The regional need for housing would ask this site to be studied for the higher end of allowed densities. However, a one-step jump up from the adjacent R2 zoned properties is more reasonable but not overly aggressive for compatibility. 3 story homes next to 2 story homes seems most compatible. Due to the Collector Street edge condition along Evelyn, it seems reasonable to consider 4-story massing on that edge. This would require the R3 zoning to include a Planned Development (PD) zoning to allow building heights to reach 4-stories or 55' where deemed appropriate.

Attached to this letter please find conceptual architectural plans and massing elevations, project data, and other submittal materials supporting this General Plan Initiation request. These materials support the idea conceptually, we look forward to working with you to create the highest and best land use for this property.

Regards,

TRUMARK HOMES
Garrett Hinds
Director of Architecture

The following are answers to questions found on the application form:

Proposed use: Residential MDR, R3-PD

Hours of Operation: Residential

List of Tenants: Future Home Owners

Number of Employees: Home Owners Association appointed board members

Previous Use: Retail Lumber Sales, Storage and Operations

Use Permit / Special Development Permit Justifications

Project Description: General Plan Initiation Application – Sunnyvale Lumber

Property Address: 870 West Evelyn Avenue

APN#: 165-16-004

Lot Size: 2.25 Acres

General Plan: Commercial COM to MDR Medium Density Residential

Zoning: Commercial C4 to Residential R3-PD

The Sunnyvale Municipal code states that at least one of the following two justifications must be met before granting the Use Permit or Special Development Permit. The information below shows how the project meets at least one of the following criteria:

1. The proposed use will meet many of the objectives and purposes of the General Plan of the City of Sunnyvale as the project will achieve the following General Plan policies:
 - a. Goal 5.1.1-G2 General Plan policies that address changing community conditions or values.
 - b. Goal HE-1 Adequate Housing – assist in the provision of adequate housing to meet the diverse needs of Sunnyvale’s households of all income levels.
 - c. Policy 5.3.1-P8 Work with property owners to improve or redevelop underutilized and vacant properties.
 - d. Policy 5.3.1-P23 Maintain adequate separation between Specified Regulated Businesses and existing and planned residential and school uses, and other Specified Regulated Businesses.
 - e. Policy 5.3.1-P29 Encourage design of new development to be compatible with, and sensitive to, nearby existing and planned development, consistent with other applicable General Plan policies.
 - f. Policy 5.3.2-G2 A variety of housing types, sizes, location and tenure in order to maintain social and economic diversity in the City.
 - g. Policy 5.3.2-P1 Encourage the annual construction of the housing units necessary to meet the City’s regional housing needs assessment by reducing constraints to housing finance and development.
 - h. Policy 5.3.2-P11 Maintain the existing character and integrity of establish neighborhoods through infill development that is in keeping with the scale, mass and setbacks of existing or planned adjacent development.

- i. Policy 5.3.2-P21 Encourage new housing developments to incorporate design features, programs and incentives for increased transit ridership and decreased parking demand.
 - j. Policy LT-4.1 Preserve and enhance and attractive community, with a positive image, a sense of place, landscaping, and a human scale.
 - k. Policy LT-4.3 Enforce design review guidelines and zoning standards that ensure the mass and scale of new structures are compatible with adjacent structures, and also recognize the city's vision of the future for transition areas such as neighborhood Village Centers and El Camino nodes.
 - l. Policy LT-4.4 Avoid monotony and maintain visual interest in newly developing neighborhoods, and promote appropriate architectural diversity and variety. Encourage appropriate variations in lot sizes, setbacks, orientation of homes, and other site features.
 - m. Policy LT-7.2 Determine the appropriate residential density for a site by evaluating the site planning opportunities and proximity of services.
 - n. Policy CC-3.2 Place a priority on quality architecture and site design, which will enhance the image of Sunnyvale and create a vital and attractive environment for businesses, residents and visitors, and reasonably balanced with the need for economic development to assure Sunnyvale's economic prosperity.
 - o. Policy CC-3.2 Ensure site design is compatible with the natural and surrounding built environment.
 - p. Policy 5.3.3-P15 Discourage auto-oriented uses, such as repair shops and service stations, from properties abutting residential uses and in areas with a pedestrian or mixed-use emphasis.
2. The proposed use ensures that the general appearance of proposed structures, or the uses to be made of the property to which the application refers, will not impair either the orderly development of, or the existing uses being made of, adjacent properties as...
- a. Policy 5.3.1-P29 Encourage design of new development to be compatible with, and sensitive to, nearby existing and planned development, consistent with other applicable General Plan policies.
 - b. Policy 5.3.2-P11 Maintain the existing character and integrity of establish neighborhoods through infill development that is in keeping with the scale, mass and setbacks of existing or planned adjacent development.
 - c. Policy LT-4.1 Preserve and enhance and attractive community, with a positive image, a sense of place, landscaping, and a human scale.
 - d. Policy LT-4.4 Avoid monotony and maintain visual interest in newly developing neighborhoods, and promote appropriate architectural diversity and variety. Encourage appropriate variations in lot sizes, setbacks, orientation of homes, and other site features.
 - e. Policy LT-7.2 Determine the appropriate residential density for a site by evaluating the site planning opportunities and proximity of services.

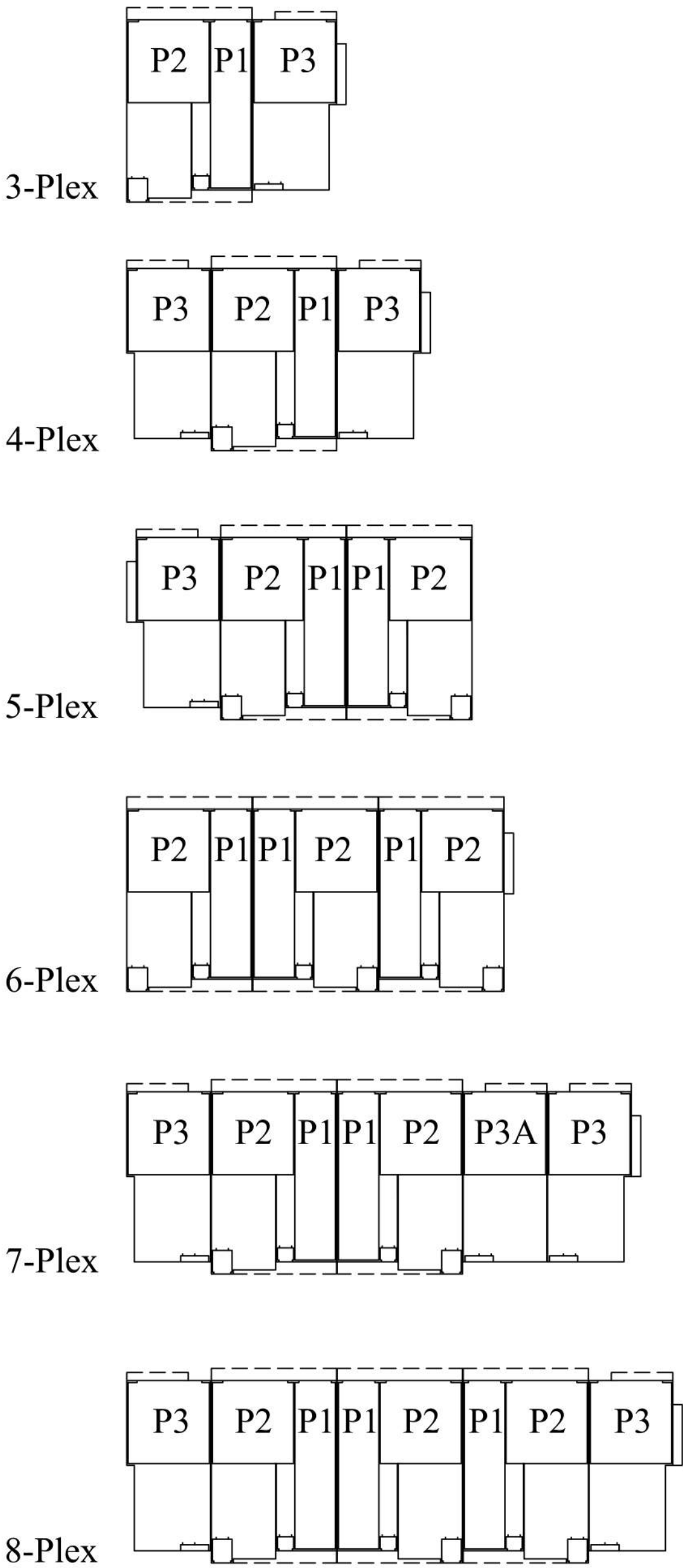
- f. Policy CC-3.2 Place a priority on quality architecture and site design, which will enhance the image of Sunnyvale and create a vital and attractive environment for businesses, residents and visitors, and reasonably balanced with the need for economic development to assure Sunnyvale's economic prosperity.
- g. Policy CC-3.2 Ensure site design is compatible with the natural and surrounding built environment.
- h. Policy 5.3.3-P15 Discourage auto-oriented uses, such as repair shops and service stations, from properties abutting residential uses and in areas with a pedestrian or mixed-use emphasis.

Regards,

TRUMARK HOMES
Garrett Hinds
Director of Architecture



BUILDING TYPES:



SITE SUMMARY

City: Sunnyvale
Zoning: R3 - PD
Site Area: 2.34 Acres (101,811 S.F.)
Type: 3-Story Condos - R-2 Occupancy with NFPA 13.

Unit Mix:

Plan 1	1500 N.S.F.	19 Units
Plan 2	1750 N.S.F.	19 Units
Plan 3	2050 N.S.F.	11 Units*
Plan 3Alt	2050 N.S.F.	1 Units
Total Units:		50 Units

*Accessible 10% 5 Units
Gross Square Footage: 111,359 G.S.F.
Density: 21.36 Du/Ac
Bldg. Coverage: 39% (40% Allowed)

Parking Summary:

Spaces Provided:
Garage Spaces: 100 Spaces -19 Tandem Garages
On-Site Spaces: 24 Spaces
Total Spaces: 124 Spaces

Open Spaces Required:
2 Bedroom with 2 car = 19 Units x 0.40 sp = 8 open spaces req'd
3 Bedroom with 2 car = 31 Units x 0.50 sp = 16 open spaces req'd
Total Open Spaces Required = 24 Spaces

Accessible Spaces Required:
24 Open Spaces X 5% = 1.25 Spaces / 2 Spaces Provided

Open Space Summary:

Useable Open Space: 21,780 S.F. (435 S.F./Unit)

Shaded Areas (12'-0" Min.) and Private Deck Area on Unit Plans

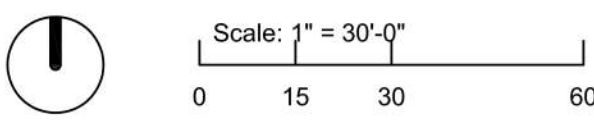


Architecture + Planning
888.456.5849
ktgy.com



SUNNYVALE LUMBER
SUNNYVALE, CA # 2019-0077

SCHEMATIC DESIGN
APR 17, 2019



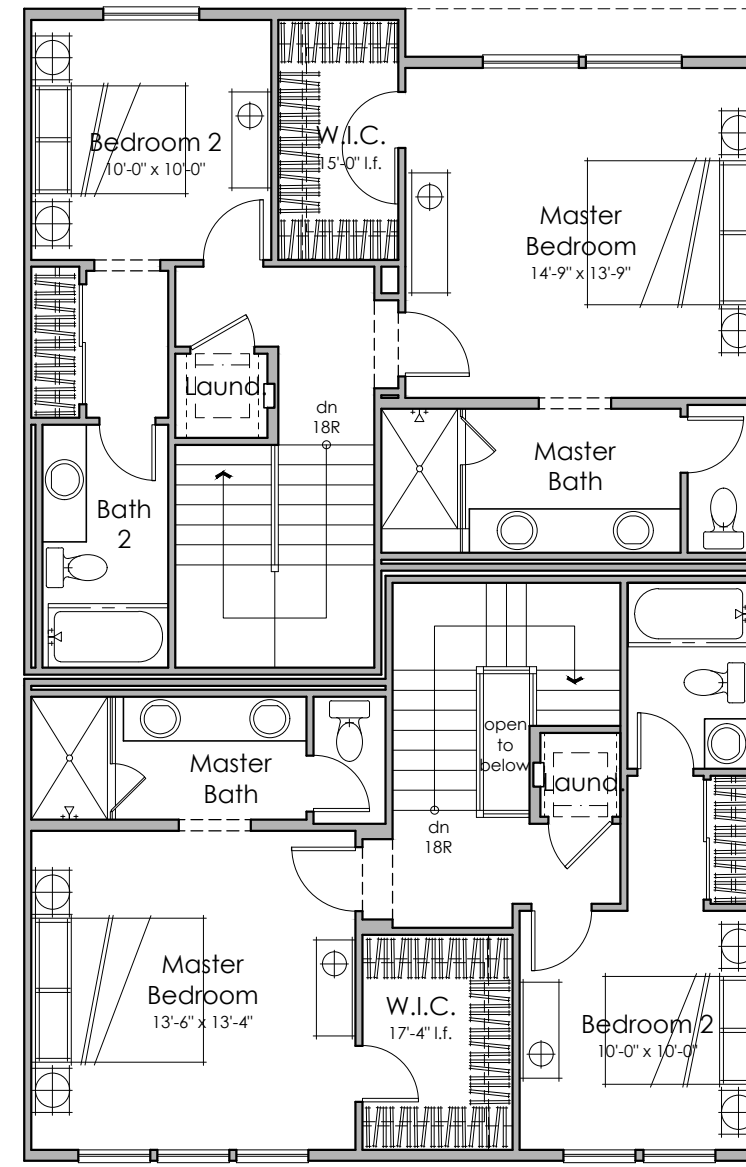
CONCEPTUAL SITE PLAN

A1.0

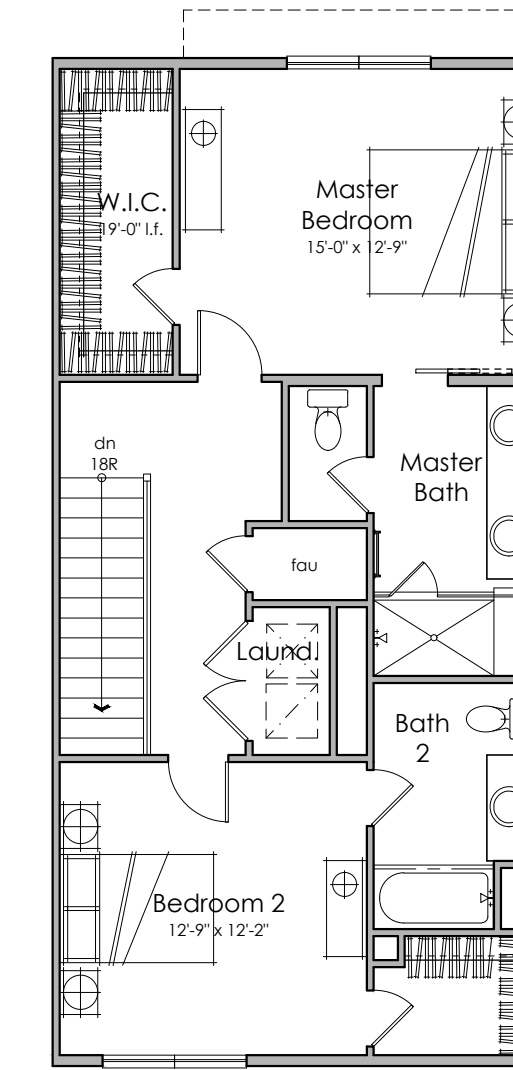
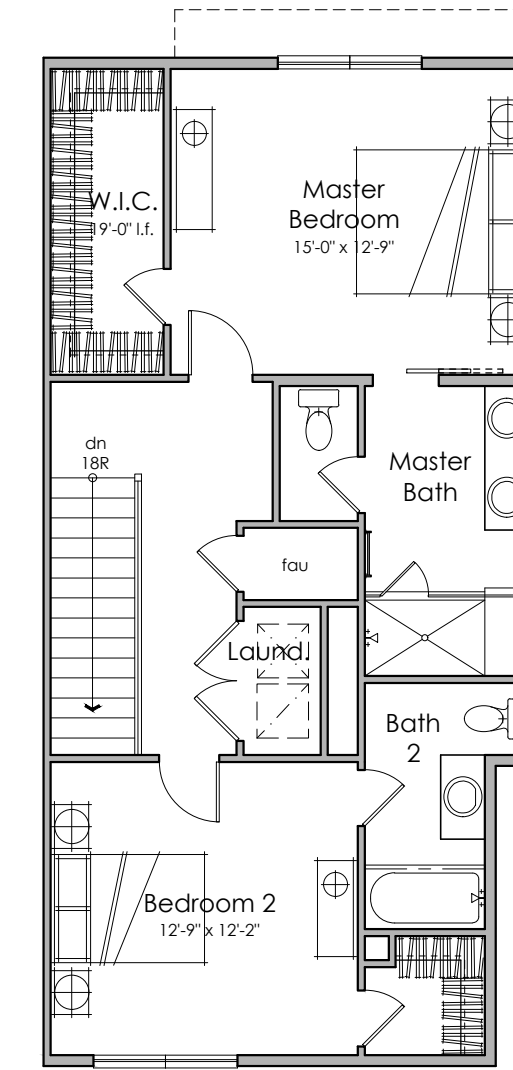




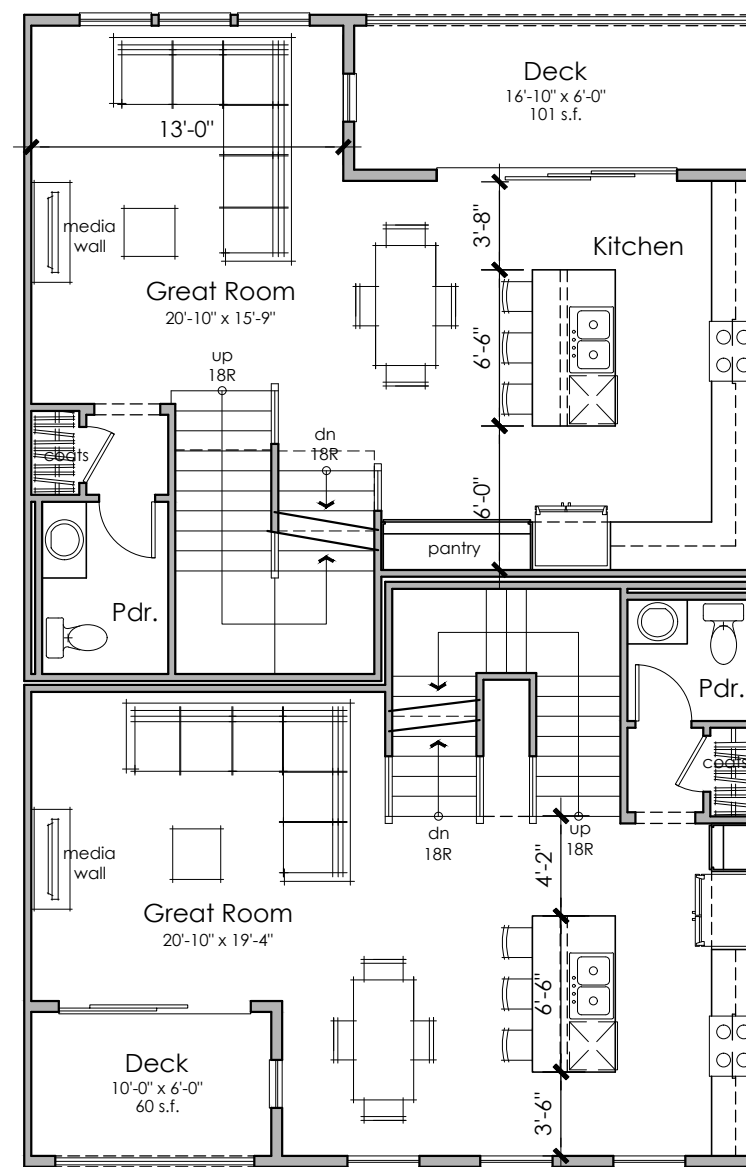
Third Floor



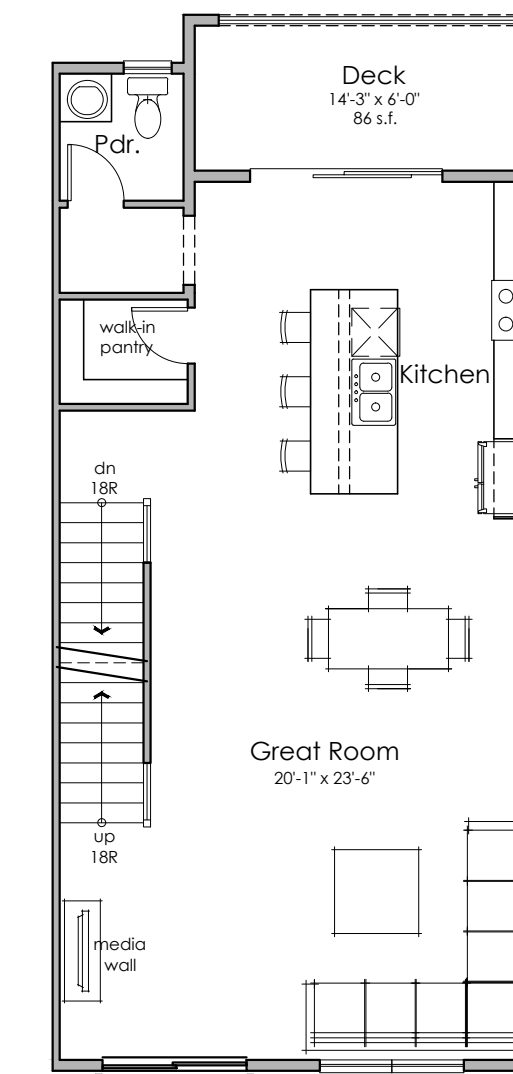
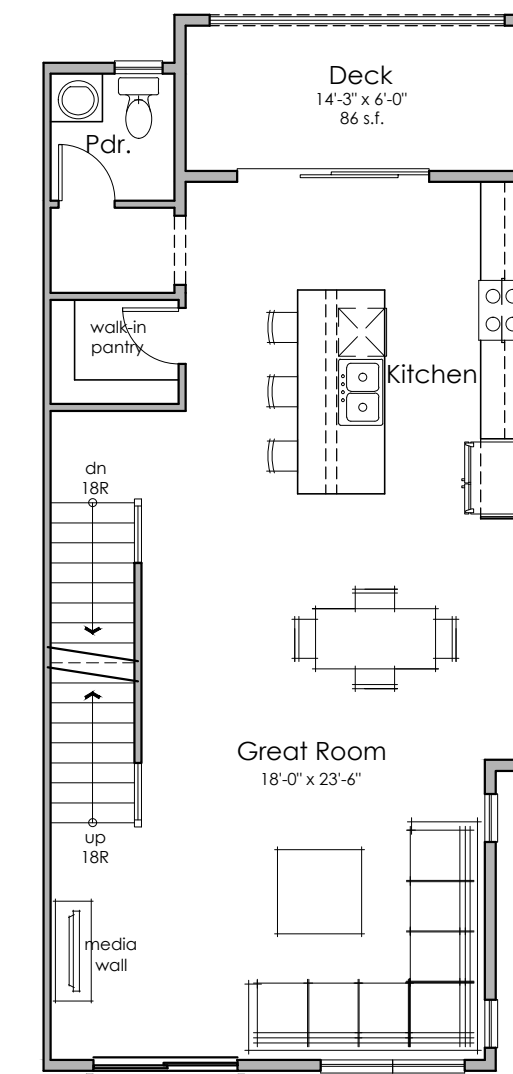
Third Floor



Second Floor

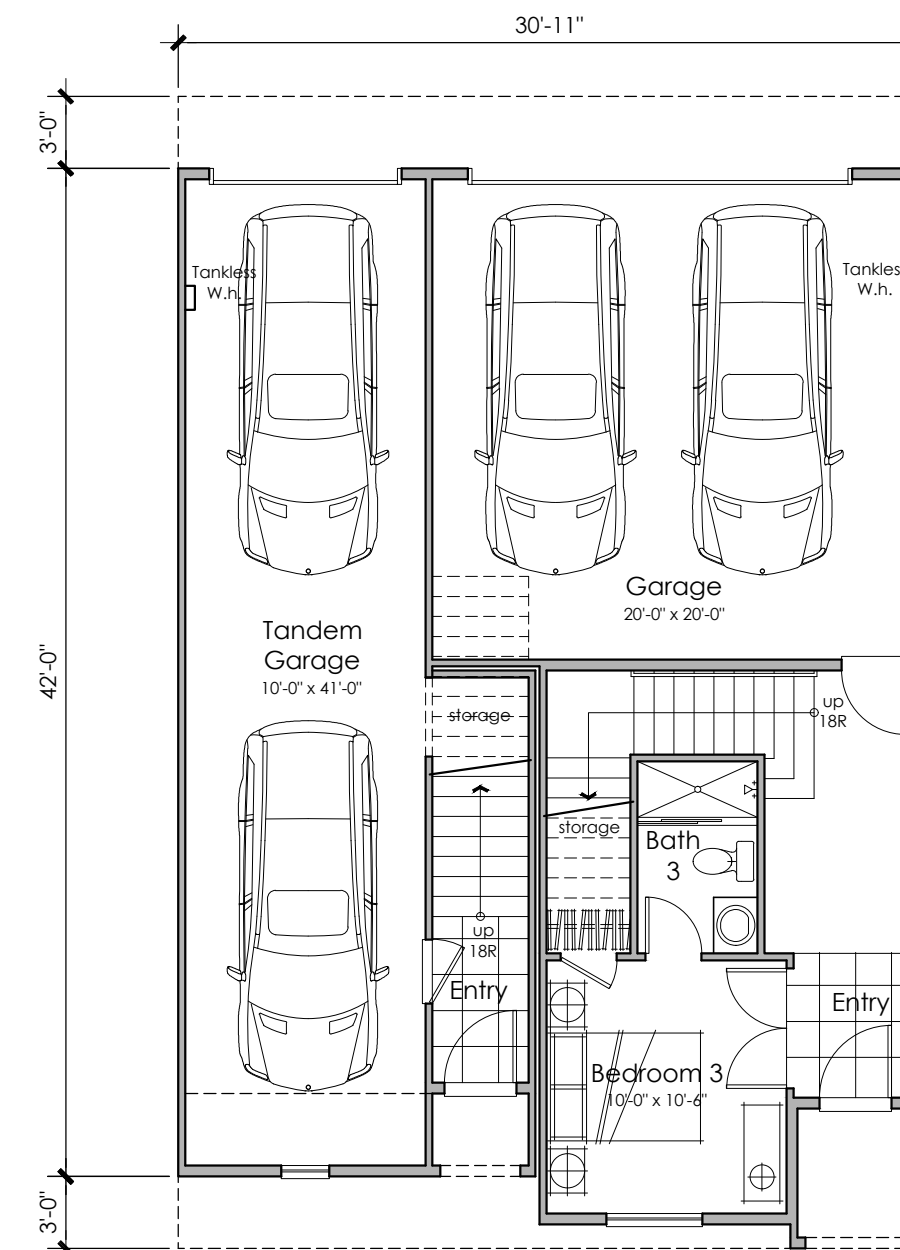


Second Floor



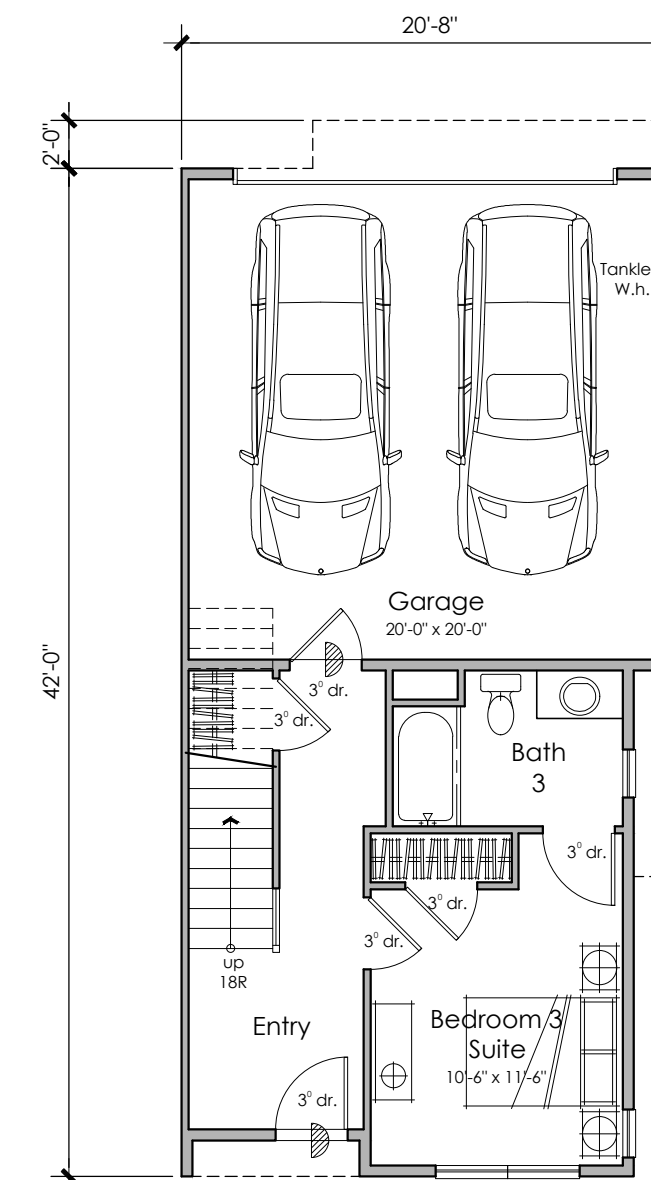
PLAN 1
Floor Plan
2 Bedrooms
2.5 Baths
1500 n.s.f.

First Floor

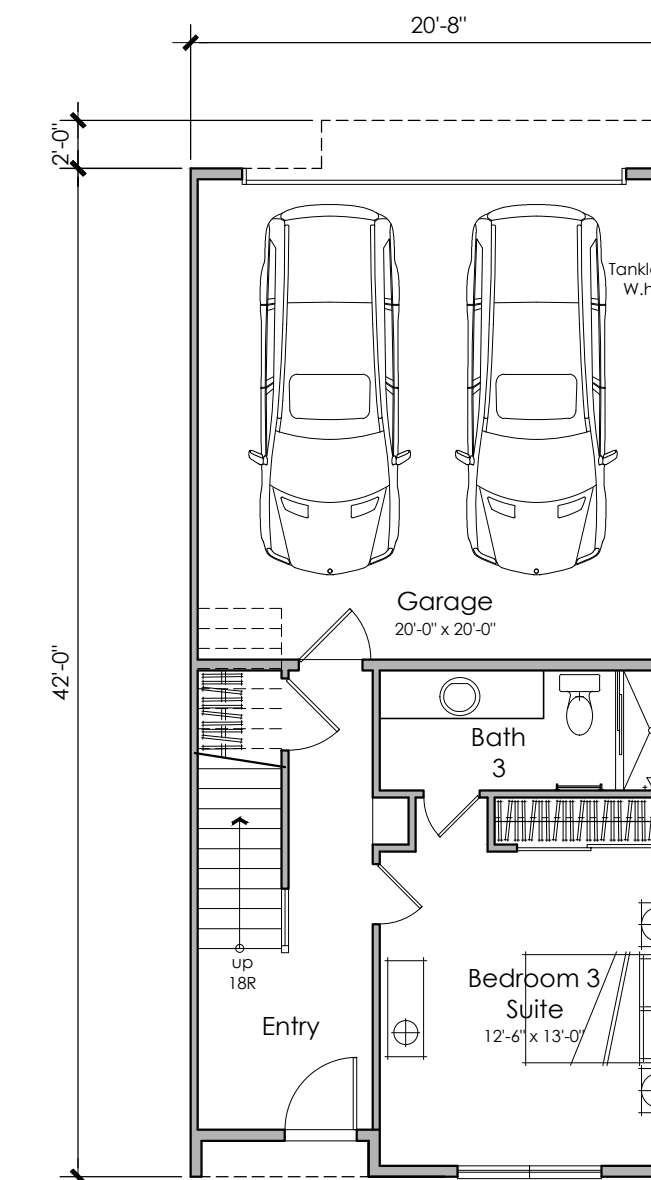


PLAN 2
Floor Plan
3 Bedrooms
3.5 Baths
1750 n.s.f.

First Floor



PLAN 3 (Accessible)
Floor Plan
3 Bedrooms
3.5 Baths
2050 n.s.f.



PLAN 3ALT
Floor Plan
3 Bedrooms
3.5 Baths
2050 n.s.f.

Note: All garages are
400 n.s.f. minimum.

BASIS OF BEARINGS

THE BEARING BETWEEN THE FOUND MONUMENTS ALONG EVELYN AVENUE, AS SHOWN ON THE MAP ENTITLED "PARCEL MAP FOR GILMORE ASSOCIATES", FILED IN BOOK 442 OF PARCEL MAPS AT PAGE 24, RECORDS OF SANTA CLARA COUNTY, TAKEN AS N67°32'00"W FOR THE BASIS OF BEARINGS FOR THIS MAP.

LEGAL DESCRIPTION

ALL OF PARCEL "A" SHOWN ON THE "PARCEL MAP FOR GILMORE ASSOCIATES" RECORDED MAY 24, 1979, PARCEL MAP BOOK 442, PAGE 24 OF SANTA CLARA COUNTY RECORDS.

REFERENCES:

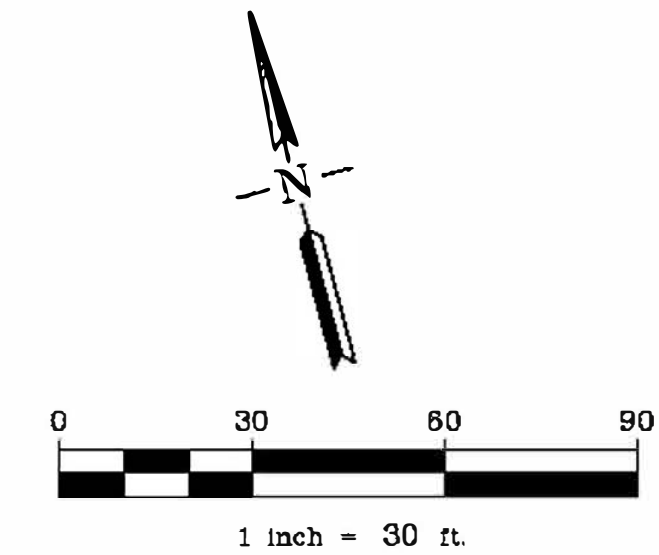
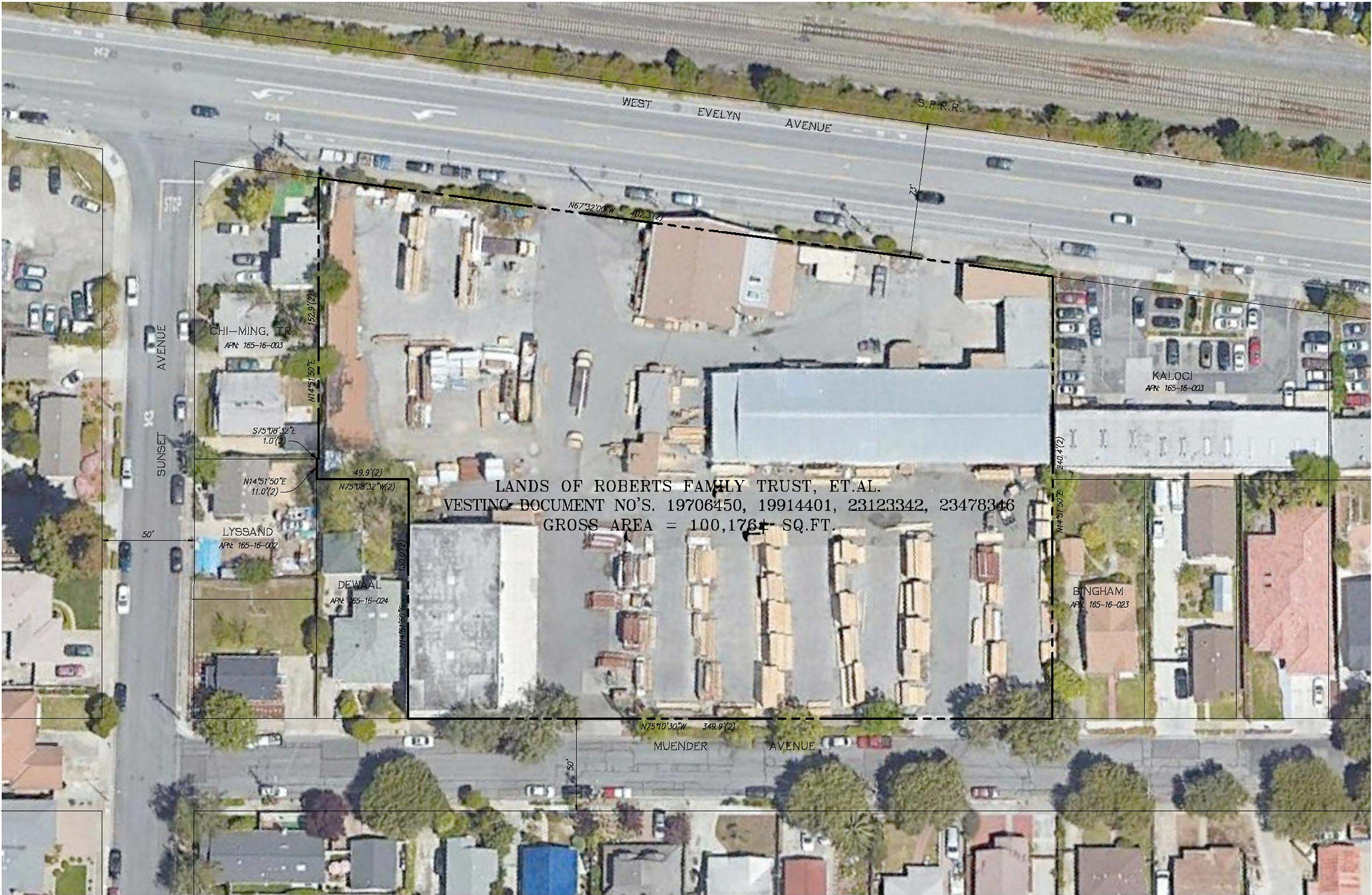
- (1) MAP OF THE MUENDER SUBDIVISION NO. 1 - BOOK L MAPS PAGE 83.
(2) PARCEL MAP FOR GILMORE ASSOCIATES - BOOK 442 PARCEL MAPS PAGE 24.

PRELIMINARY TITLE REPORT EASEMENT EXCEPTIONS

#	PURPOSE	DOCUMENT #	PLOTTED	COMMENTS
2	PRIVATE SEWER EASEMENT	BOOK 1796, PAGE 141, O.R.	NON-PLOTTABLE	SEE NOTE NO. 1
3	EASEMENTS BY COURT ORDER	DOCUMENT NO. 22355191 O.R.	NON-PLOTTABLE	SEE NOTE NO. 2

NOTES:

1. THIS PRIVATE SEWER EASEMENT (NOT DIMENSIONED) WAS RESERVED DURING AN OWNERSHIP TRANSFER OVER AN INTERNAL PORTION OF THE PROPERTY. IT APPEARS TO HAVE MERGED OUT DUE TO COMMON OWNERSHIP. TITLE COMPANY SHOULD CONFIRM IF THIS EASEMENT IS APPLICABLE.
2. THIS THIRD PARTY EASEMENT (NOT DIMENSIONED) GRANTED BY THE COURT MAY OR MAY NOT AFFECT THIS PROPERTY. IT APPEARS TO BE ASSOCIATED WITH THE RAILROAD RIGHT OF WAY ACROSS WEST EVELYN AVENUE. TITLE COMPANY SHOULD VERIFY IF THIS EASEMENT AFFECTS THIS PARCEL.

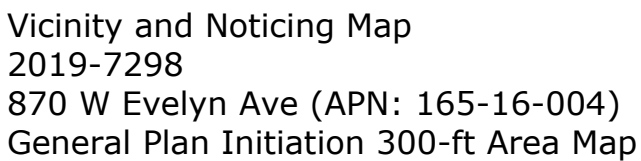


LEGEND

---	BOUNDARY LINE
---	ADJACENT PROPERTY LINE
XXX.X'(X)	REFERENCE INFORMATION AND NUMBER
SQ.FT.	SQUARE FEET

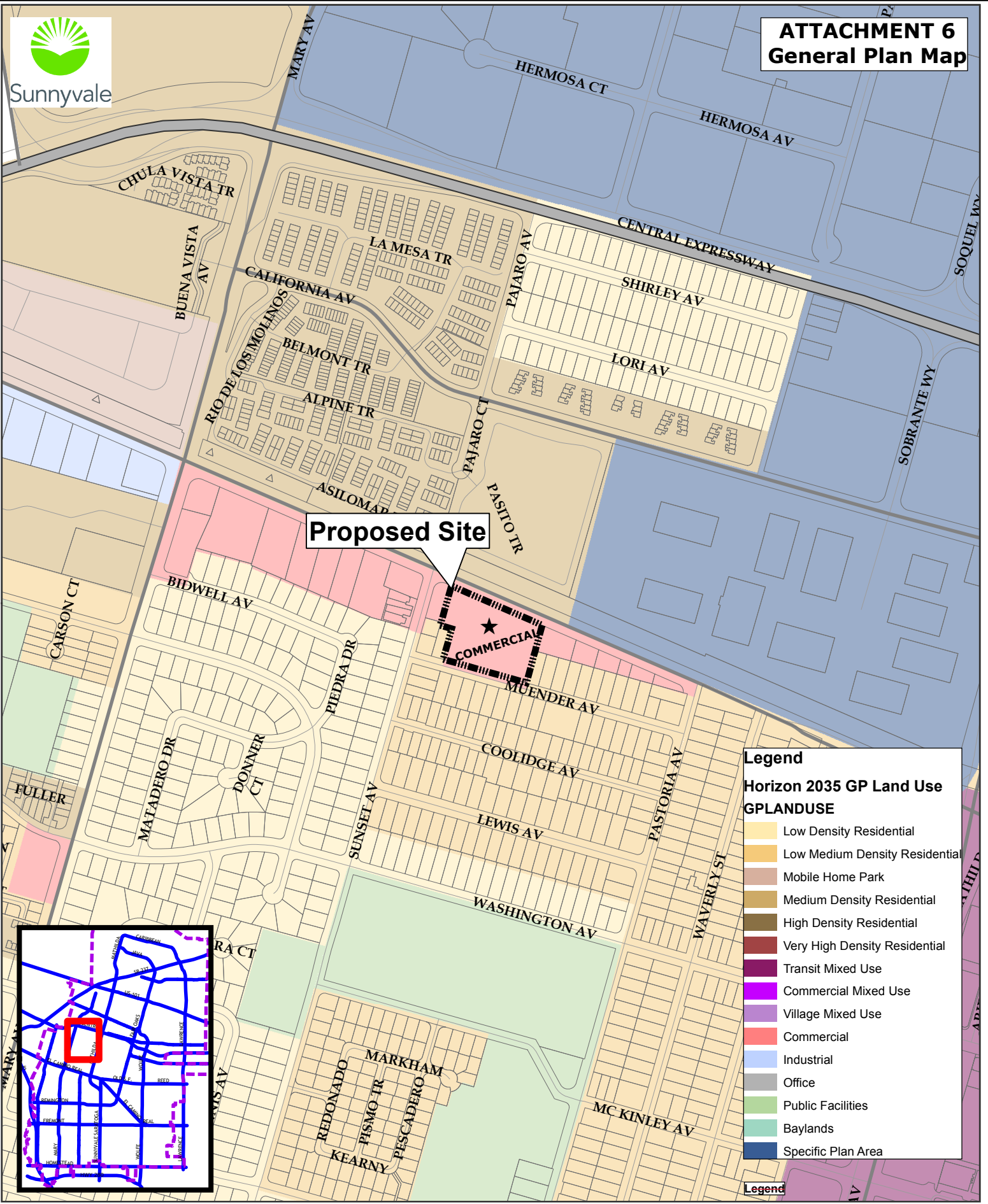
RECORD BOUNDARY
PARCEL "A", 442 PM 24, SANTA CLARA RECORDS
870 WEST EVELYN AVENUE
CITY OF SUNNYVALE, SANTA CLARA COUNTY, CALIFORNIA
FOR: TRUMARK HOMES, LLC

RJA
RUGGERI-JENSEN-AZAR
ENGINEERS • PLANNERS • SURVEYORS
4690 CHABOT DRIVE, SUITE 200 PLEASANTON, CA 94588
PHONE: (925) 227-9100 FAX: (925) 227-9300





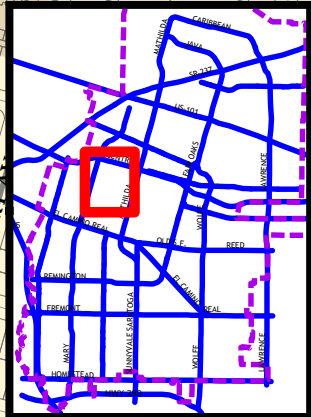
ATTACHMENT 6
General Plan Map



Proposed Site

COMMERCIAL

- Legend**
- Horizon 2035 GP Land Use**
GPLANDUSE
- Low Density Residential
 - Low Medium Density Residential
 - Mobile Home Park
 - Medium Density Residential
 - High Density Residential
 - Very High Density Residential
 - Transit Mixed Use
 - Commercial Mixed Use
 - Village Mixed Use
 - Commercial
 - Industrial
 - Office
 - Public Facilities
 - Baylands
 - Specific Plan Area



General Plan Initiation from Commercial to Medium-Density Residential





ATTACHMENT 7 Zoning Map

Proposed Site

SERVICE
COMMERCIAL

Legend

- R1 - Low Density Residential
- R0 - Low Density Residential
- R1.5 - Low Medium Density Residential
- R1.7 - Low Medium Density Residential
- R2 - Low Medium Density Residential
- R3 - Medium Density Residential
- R4 - High Density Residential
- R5 - High Density Residential and Office District
- RMH - Residential Mobile Home
- MS - Industrial and Service
- M3 - General Industrial
- MPT - Moffett Park TOD
- MPI - Moffett Park Industrial
- MPC - Moffett Park Commercial
- O - Administrative and Professional Office
- C1 - Neighborhood Business
- C2 - Highway Business
- C3 - Regional Business
- C4 - Service Commercial
- PF - Public Facilities
- DSP - Downtown Specific Plan
- LSP - Lakeside Specific Plan

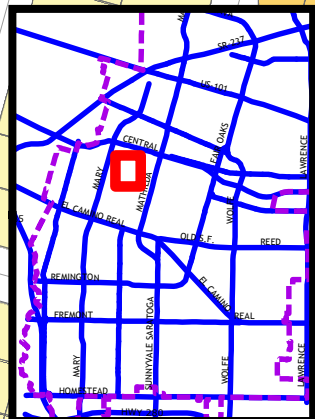
- R1 - Low Density Residential
- R0 - Low Density Residential
- R1.5 - Low Medium Density Residential
- R1.7 - Low Medium Density Residential
- R2 - Low Medium Density Residential
- R3 - Medium Density Residential
- R4 - High Density Residential
- R5 - High Density Residential and Office District
- RMH - Residential Mobile Home
- MS - Industrial and Service
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- C1 - Neighborhood Business
- C2 - Highway Business
- C3 - Regional Business
- C4 - Service Commercial
- PF - Public Facilities
- DSP - Downtown Specific Plan
- LSP - Lakeside Specific Plan

- PD - Planned Development
- S - Single Story
- O - Office
- O-PD - Office/Planned Development
- HH - Heritage Housing
- ECR - El Camino Real
- POA - Places of Assembly
- POA/PD - Places of Assembly/Planned Development
- FAR50 - 50% FAR
- FAR55 - 55% FAR
- FAR70 - 70% FAR
- PD70 - 70% FAR/PD
- FAR100 - 100% FAR
- PD100 - 100% FAR/PD
- ITRR1.7 - Industrial to Residential (Low-Medium)
- ITRR3 - Industrial to Residential (Medium)
- ITRR4 - Industrial to Residential (High)

Common Areas Combining

Combining Districts

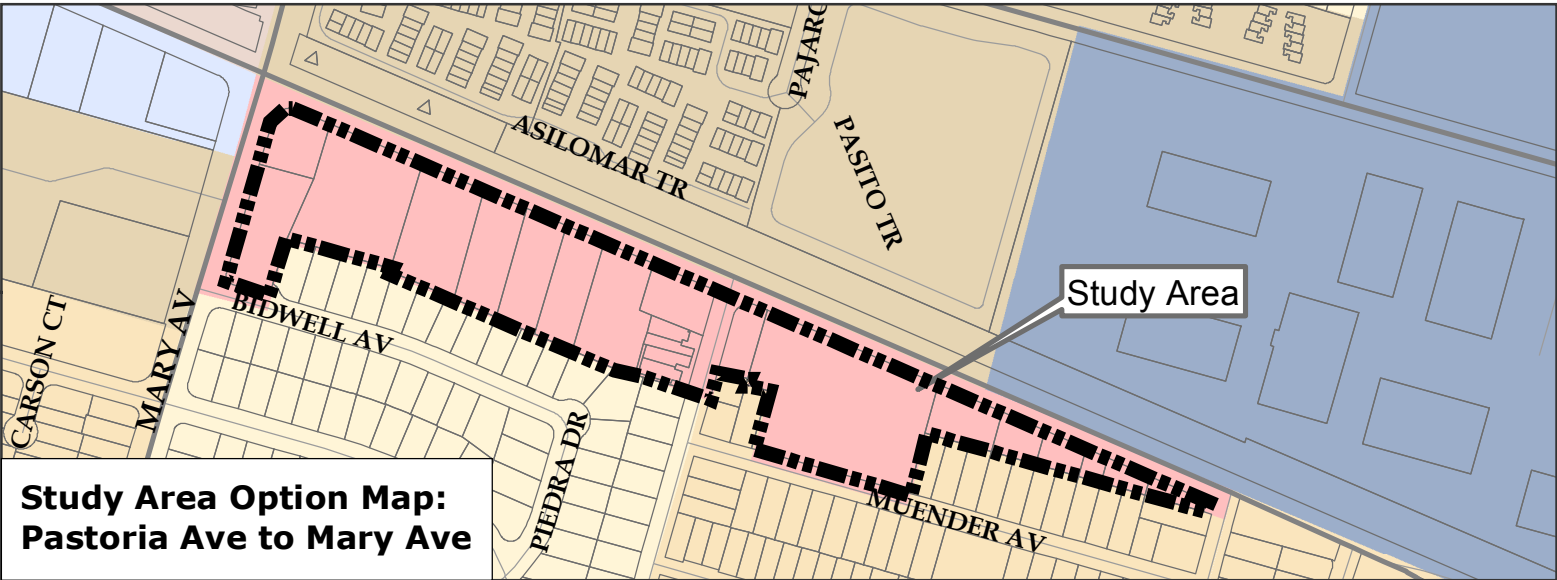
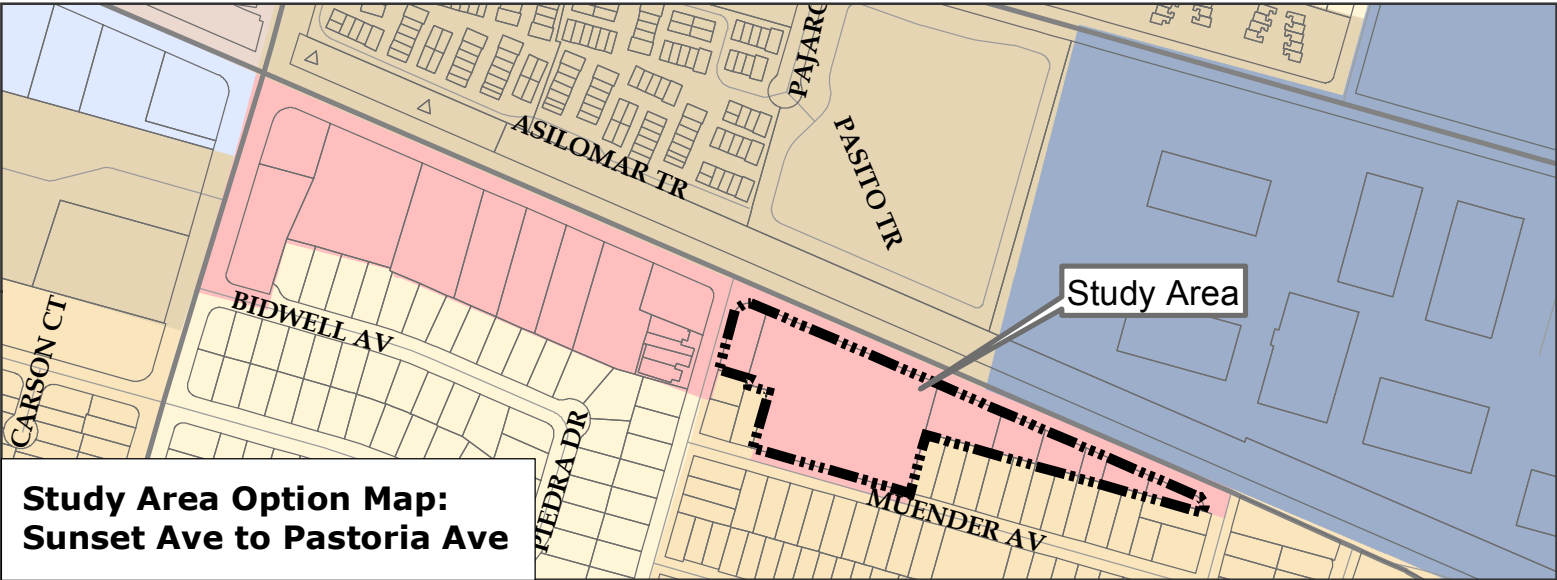
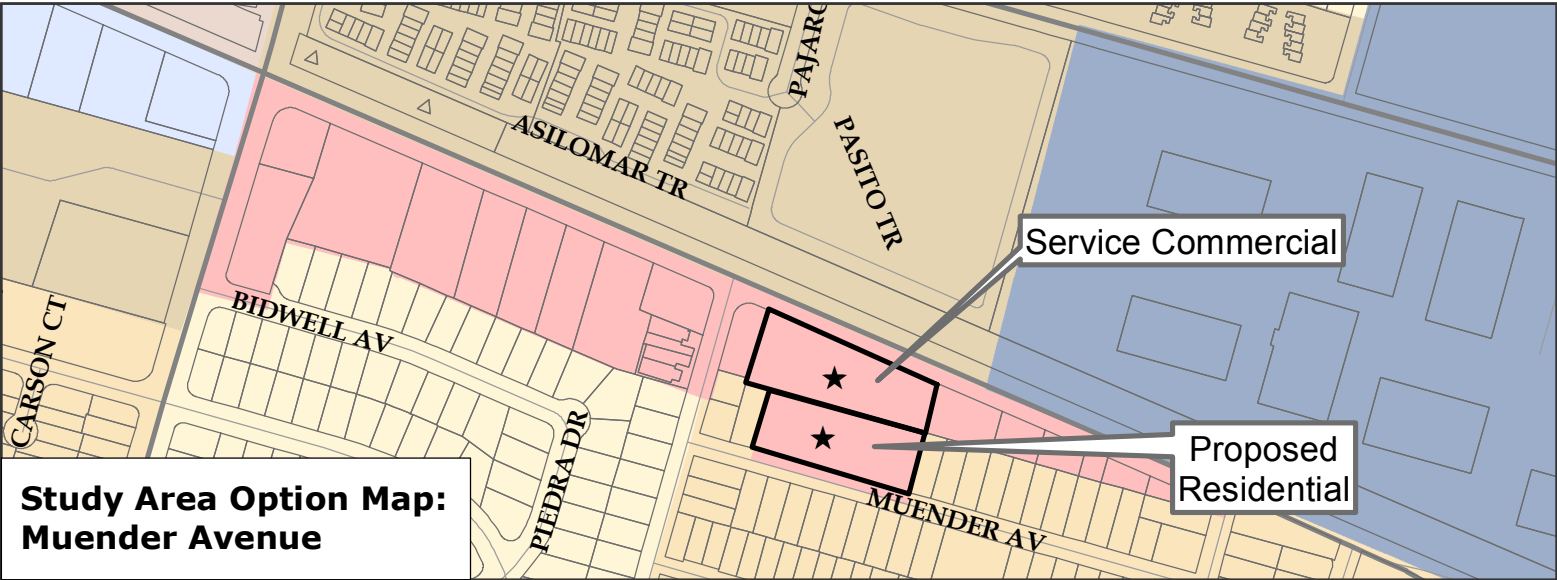
- PD - Planned Development
- S - Single Story
- O - Office
- O-PD - Office/Planned Development
- HH - Heritage Housing
- ECR - El Camino Real
- POA - Places of Assembly
- POA/PD - Places of Assembly/Planned Development
- FAR50 - 50% FAR
- FAR55 - 55% FAR
- FAR70 - 70% FAR
- PD70 - 70% FAR/PD
- FAR100 - 100% FAR
- PD100 - 100% FAR/PD
- ITRR1.7 - Industrial to Residential (Low-Medium)
- ITRR3 - Industrial to Residential (Medium)
- ITRR4 - Industrial to Residential (High)



Proposed Rezone from C-4 (Service Commercial) to R-3 (Medium-Density Residential)

0 95 190 380 Feet





ATTACHMENT 9

The table below shows the most recently approved residential projects and does not include those under review or planned as part of area plan updates.

Project Name	City Location	Number of Units		Project Status
The Vale	East Sunnyvale	450	Multi-family	Partially completed
Irvine/AMD	East Sunnyvale	1,051	Multi-family	Under construction
St. Anton	El Camino Real	108	Multi-family	Under construction
Vidovich/Hollenbeck	El Camino Real	49	Both	Under construction
Greystar	Lawrence Station	520	Multi-family	Under construction
Cityline	Downtown	94	Multi-family	Planning approved
Denny's site- Mathilda	Downtown	75	Multi-family	Planning approved
Corn Palace	East Sunnyvale	56	Single family	Planning approved
Butcher's Corner	El Camino Real	128	Multi-family	Planning approved
Lakeside Specific Plan	Lakeside Specific Plan	250	Multi-family	Planning approved
Calstone	Lawrence Station	741	Multi-family	Planning approved
Taylor Morrison	Peery Park- San Aleso	118	Multi-family	Planning approved
Toll Brothers	Peery Park- San Aleso	65	Multi-family	Planning approved
Sobrato/Karlstadt	Tasman Crossing	250	Multi-family	Planning approved

3,955 Units



City of Sunnyvale

Agenda Item 3

19-0529

Agenda Date: 7/22/2019

REPORT TO PLANNING COMMISSION

SUBJECT

Proposed Project: General Plan Amendment Initiation request to study changing the General Plan designation of the site from Low Medium Density Residential to High Density Residential.

Location: 828 Morse Avenue & 560 E. Ahwanee Avenue (APN: 204-08-027 & 204-08-029)

File #: 2019-7301

Zoning: R-3/PD

Applicant / Owner: FNZ Architects Inc. (applicant) / Sia Vassoughi (owner)

Environmental Review: The project is exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15378(a).

Project Planner: Ryan Kuchenig, (408) 730-7431, rkuchenig@sunnyvale.ca.gov

REPORT IN BRIEF

General Plan Amendment Initiation (GPI) requests are heard on a quarterly basis through a recommendation from the Planning Commission and then action by the City Council. The process for considering a General Plan amendment begins with a written request from a property owner or applicant. If City Council approves the GPI, a formal application for a General Plan Amendment (GPA) can be filed by the property owner/applicant. While staff is processing the GPA application, the applicant may also file a project application and related items as applicable for concurrent processing. However, the City Council would need to approve the GPA and related rezoning before a project could be scheduled for a Planning Commission hearing.

Staff received a GPI request from the applicant on April 17, 2019 to change the General Plan designation from Low Medium Density Residential to High Density Residential to allow residential development at a maximum of 36 dwelling units per acre. Through the state's density bonus law, an additional 35% increase in units can be requested. And finally, an additional 5% density bonus may also be requested if the project meets the voluntary incentive requirements through the City's Green Building program.

Staff is recommending that the Planning Commission forward a recommendation to the City Council to initiate a General Plan Amendment to study a range of Residential Medium to High density provided a Development Agreement is filed at the same time as the formal General Plan Amendment application. As discussed further in the report, redevelopment would allow for reinvestment in the site. Additionally, the Development Agreement could be used to facilitate the applicant's commitment to allowing existing residents to remain on site as the new development is phased. Compatibility concerns of varying densities with adjacent properties could be addressed through appropriate building design and layout.

The City Council is scheduled to consider this item on August 13, 2019.

BACKGROUND

In 1999, the site was rezoned from R-4/PD to R-3/PD through a Citywide rezoning study that changed the zoning designation of the subject property and several nearby properties (to the west) along E. Ahwanee. At the time, the General Plan designation of the properties remained at Residential High Density. In 2011, through the General Plan consolidation effort, the General Plan designation was modified to Low-Medium Residential. No history is available to explain the rationale of this General Plan land use map change. The Low-Medium designation was reaffirmed in 2017 through the Land Use & Transportation Element update.

The site includes two existing combined apartment complexes that total 124 units, (32.3 dwelling units per acre), which exceeds the allowable density under the current R-3 zoning (maximum 24 units per acre). Through the City's green building program incentives and state density bonus laws, a comparable density could be achieved as part of a redevelopment. The site was developed when the site was zoned R-4/PD; therefore, the current development is legal non-conforming for density.

EXISTING POLICY

The General Plan is the primary policy plan that guides the physical development of the City. When used together with a larger body of City Council policies, it provides direction for decision-making on City services and resources. The recently adopted Land Use and Transportation Chapter within the General Plan created an integrated set of policies to guide land use, development, and transportation choices with a horizon year of 2035.

LAND USE AND TRANSPORTATION CHAPTER

Goal LT-6: Protected, Maintained, and Enhanced Residential Neighborhoods - Ensure that all residential areas of the City are maintained and that neighborhoods are protected and enhanced through urban design which strengthens and retains residential character.

Policy LT-6.2: Limit the intrusion of incompatible uses and inappropriate development in and near residential neighborhoods, but allow transition areas at the edges of neighborhoods.

Goal LT-7: Diverse Housing Opportunities - Ensure the availability of ownership and rental housing options with a variety of dwelling types, sizes, and densities that contribute positively to the surrounding area and the health of the community.

Policy LT-7.2: Determine the appropriate residential density for a site by evaluating the site planning opportunities and proximity of services (such as transportation, open space, jobs, and supporting commercial and public uses).

Policy LT-7.3: Encourage the development of housing options with the goal that the majority of housing is owner-occupied.

Policy LT-7.5: Consider the impacts of all land use decisions on housing affordability and on the housing needs of special needs groups within Sunnyvale.

HOUSING ELEMENT CHAPTER

Goal HE-1: Adequate Housing - Assist in the provision of adequate housing to meet the diverse needs of Sunnyvale's households of all income levels.

Policy HE-1.2: Facilitate the development of affordable housing through regulatory incentives and concessions, and/or financial assistance.

Policy HE-1.3: Utilize the Below Market Rate (BMR) Housing requirements as a tool to integrate affordable units within market rate developments, and increase the availability of affordable housing throughout the community.

Goal HE-4: Adequate Housing Sites - Provide adequate sites for the development of new housing through appropriate land use and zoning to address the diverse needs of Sunnyvale's residents and workforce.

Policy HE-4.1 Provide site opportunities for development of housing that responds to diverse community needs in terms of density, tenure type, location and cost.

ENVIRONMENTAL REVIEW

The decision to initiate a General Plan Amendment study does not require environmental review under the California Environmental Quality Act (CEQA) because the mere initiation of a study does not constitute a project under CEQA pursuant to CEQA Guidelines Section 15378 (a) as it has no potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment. If initiated, the proposed GPA and associated Rezoning (RZ) would be subject to the provisions of CEQA.

DISCUSSION

This is a request to amend the General Plan designation for two parcels located at 828 Morse Avenue and 560 E. Ahwanee Avenue from Low-Medium Density to High Density Residential (refer to Attachments 2 and 3). The subject site is bounded by E. Ahwanee (& 101) to the north, Morse Avenue to the west, single family residential to the south and a mobile home park (Fair Oaks Mobile Home Lodge) to the east. The City Council may approve a General Plan Amendment upon finding that the amendment, as proposed, changed, or modified is deemed to be in the public interest.

A property adjacent to the site on Morse Avenue, occupied by a single-family home, is also zoned R-3/PD and shares the same General Plan designation of Low-Medium. To the southeast, a vacant parcel (zoned R-4/PD), owned by the mobile home park, is located between a portion of the subject site and single family homes; however, this parcel maintains a Low Density General Plan designation.

The existing apartment buildings were constructed in the early 1960's and have been largely unchanged since that time. Only minor building permits and landscaping improvements occurred in the 1980s and 90s. The combined apartment developments include 10 one-story buildings and one two-story building. The applicant notes that the complex has provided low-cost housing for more than 40 years with 20% of the existing tenants living on the site for an average of ten years. As part of a potential future redevelopment, the owner intends to continue to provide low-cost housing for a new apartment development. As noted in the justification letter for the General Plan Initiation request, the applicant plans to relocate existing tenants interested in remaining in a new development. The plans also indicate that a density bonus would be requested through the provisions of state law for providing affordable housing. As part of a formal application, a below market rate development

agreement with the City would be required to ensure that moderate to very-low income housing is provided per the applicant's proposal.

The property at 828 Morse Avenue has 80 existing apartment units on approximately 2.42 acres (105,603 square feet, the Riviera Apartments), while the property at 560 E. Ahwanee has 44 existing apartment units on 1.42 acres (62,028 square feet - Eden Roc Apartments). The combined area of the two parcels is approximately 3.85 acres (167,618 square feet) and 124 units, which equals a density of approximately 32.3 units per acre. The current R-3 zoning allows up to 24 units per acre, or 92 units. It should be noted that a public right-of-way dedication for sidewalk and bicycle lane improvements may be required as part of future development applications for the site, which would slightly reduce the overall site area and ultimately decrease the maximum number of units the site could contain.

The existing site density is consistent with the requested High Density General Plan designation (R-4 zoning) that allows up to 36 units per acre. If the General Plan designation were High Density, further increases through density bonuses could allow about 50 units per acre.

Conceptual Development Proposal

As part of the GPI proposal, the applicant has submitted a letter (Attachment 2), which describes a proposal to build a new higher density apartment development in phases. Phasing the project allows for the relocation of existing tenants that currently reside in the Riviera Apartments complex into the first phase of the new development once completed. The project design would attempt to address concerns of the interface between a new higher density project next to the existing single family neighborhood through appropriate building layout and massing. The project has been preliminarily designed with two stories along the southern half of the site, while three story construction would be positioned within the northern half of the site. A partially underground parking garage throughout the site would raise the building approximately four feet above the ground. The planned closest two-story building is located approximately 34 feet from the rear property line with most the development set further back from the south boundary (See Attachment 3 for Site and Elevation-Massing Plans).

If the site was to be rezoned to R-4, the maximum base density for the overall site would allow up to 138 units. Through the state density bonus law for providing moderate to very-low income units, a 35% density bonus could be achieved along with the potential for an additional 5% density bonus if the project meets the voluntary incentive requirements of the City's green building program. These density bonuses could allow up to 55 additional units (193 units total). Staff would need to further evaluate a formal development application in accordance with all applicable zoning standards and design guidelines, which could result in changes to the layout and reduction to the maximum number of units. Furthermore, necessary public right-of way dedications for street improvements may reduce the site area and development potential. A full development review of the proposal through a Special Development Permit application would be conducted if the GPI request is approved. Necessary environmental and traffic review would be conducted with the General Plan Amendment and project applications.

Potential General Plan Designations

Based on the existing land use patterns and General Plan goals and policies, there are several General Plan designations that could be considered, including studying the proposed High Density Residential designation (R-4 zoning designation) as proposed by the applicant. Other alternatives include: changing the designation to Medium Density (R-3 zoning) or Very High Density residential

designation (R-5 zoning).

The following densities and number of dwelling units would be allowed for Low Medium, Medium and High Density Residential zoning designations for the site:

Zoning District	Max. Units/Acre	Max units based on site	w/ 35% Density Bonus	w/ 5% Green Building Bonus
R-1.5 (low-medium)	10	38	52	53
R-1.7/PD (low-medium)	14	53	72	74
R-2 (low-medium)	12	46	63	65
R-3 (medium)	24	92	125	129
R-4 (high)	36	138	187	193
R-5 (high w/ office)	45	173	233	241

Unit yields are based on the approximate current site area (3.85 acres). Potential public right-of-way dedication for sidewalk and bicycle lane improvements could decrease development area thereby reducing allowable units.

Low-Medium Density Residential

This designation typically includes small lot single-family, duplex, and smaller multi-family neighborhoods, designed around parks or schools, and located along neighborhood streets. There are three zoning districts under the Low-Medium density residential general plan designation: R-1.5, R-1.7/PD, and R-2. The current site's designation of Low-Medium Residential provides a transition to the Low Density residential uses to the south; however, only up to 53 units (74 w/ density bonus) could be built if the site was redeveloped. This designation is not consistent with the current zoning and existing uses on the property; which is legal as Sunnyvale's City charter does not require consistency in Zoning and the General Plan and consequently it is exempt from any statutory consistency requirements.

Medium Density Residential

The current development is zoned R-3/PD, which falls under the Medium Density General Plan designation. Townhomes, apartments, and condominiums are typical within the Medium Density Residential General Plan designation. Medium density neighborhoods and developments are appropriate along arterials and residential collector streets, and may also be located near industrial or commercial areas. The subject site is bordered on the west by similarly zoned R-3 properties; however, these parcels maintain a High Density General Plan designation (see Attachments 5 and 6). The current development exceeds the maximum number of units allowed for this designation; however, a similar number of units could be achieved through available state density and green building bonuses.

High Density Residential (Proposed Request)

The proposed designation of High Density Residential would allow for increased density over current conditions, as illustrated in the table above. This designation also provides for densities consistent with apartments or condominiums but at higher densities than the medium density designation. High-density neighborhoods and developments are typically located next to expressways, major arterial roads, or freeways. High density designated uses are located across Morse Avenue along E.

Ahwanee Avenue and across 101 to the northeast along E. Weddell Avenue. This designation typically supports the R-4 zoning district; however, the General Plan acknowledges that the R-5 zoning district could also apply. The applicant intends to apply to rezone the site to R-4/PD zoning if the General Plan Initiation is approved. As stated previously, the subject site was zoned R-4 prior to 1999 and was originally developed as an R-4/PD zoned property. Due to the location of the site near single family uses, specific design attention would need to be given to address the compatibility of architectural massing and privacy impacts of any new redevelopment. Since the project is adjacent to U.S. Highway 101, there is ample opportunity to position taller buildings to the north end of the site.

Very High Density Residential

A designation of Very High Density Residential would allow up to 45 units per acre or more as approved in a specific plan. This designation provides for densities consistent with large-scale apartments or condominiums typically found in the downtown, transit or corridor mixed-use areas and can also be implemented with the R-5 zoning district. Such very high density areas are primarily located within specific plan areas. This site does not meet those characteristics.

Site Redevelopment Concerns and Development Agreement Option

A portion of the site was originally developed for military housing. The units are small and offer lower (more affordable) rents. Based on the age and original purpose of the units, it may be time for significant reinvestment in the site. Redevelopment of the site could place 124 households without a place to live. This situation has been discussed with the property owner who had indicated a desire to relocate tenants on site as units are vacated or rebuilt. This program would result in less disruption to tenants. It was further discussed with the property owner that a way to allow this long-term implementation and better assure tenant protection could be with a formal Development Agreement with the City.

FISCAL IMPACT

There are no fiscal impacts associated with a General Plan Initiation request.

PUBLIC CONTACT

Public contact regarding this item was made through the following ways:

1. Posting the Agenda for the Planning Commission on the City's official-notice bulletin board outside City Hall and by making the agenda and report available at the Sunnyvale Public Library and on the City's website;
2. Publication in the Sun newspaper, at least 10 days prior to the hearing;
3. 392 notices mailed to property owners and residents within 300 feet of the project site; and
4. E-mail notification of the hearing dates sent to all interested parties and neighborhood associations.

ALTERNATIVES

Recommend that the City Council:

1. Initiate the GPI request to analyze changing the land use designation from Low Medium Density to Medium or High Density Residential for the subject properties located at 828 Morse Avenue and 560 E. Ahwanee Avenue, provided an application for a Development Agreement is filed at the same time as the General Plan Amendment application. Applicant to pay all application fees and for any studies.
2. Initiate the GPI request to analyze changing the land use designation from Low Medium

Density to High Density Residential for the subject properties located at 828 Morse Avenue and 560 E. Ahwanee Avenue (applicant's original request).

3. Initiate the GPI request to analyze changing the land use designation from Low Medium Density to Medium Density Residential for the subject properties at 828 Morse Avenue and 560 E. Ahwanee Avenue.
4. Deny the GPI request and retain the land use designation for the subject properties as Low Medium Density.

STAFF RECOMMENDATION

Alternative 1: Recommend that the City Council initiate the GPI request to analyze changing the land use designation from Low Medium Density to Medium or High Density Residential for the subject properties located at 828 Morse Avenue and 560 E. Ahwanee Avenue, provided an application for a Development Agreement is filed at the same time as the General Plan Amendment application.

Staff supports the study of the site up to High Density Residential. The site is already developed at the high-density range and modifying the General Plan could reduce the potential for a net loss of units if the site were to be redeveloped. If approved, it would allow for increased housing opportunities for a site at the edge of a residential neighborhood that is also in close proximity to transit (within 0.4 miles of a major bus route along N. Fair Oaks Ave.). A potential redevelopment would allow for reinvestment of a site that has largely remained in its original form since the early 1960s. Staff has previously communicated concerns about the current workload and the capacity to work on other General Plan Amendment studies. The requested General Plan land use density is the same as the current use of the property (over 36 dwelling units per acre), this is a small site comparatively speaking and the study would not require as many specialized studies (such as fiscal and market analysis). As this study is a legislative action and not subject to State permit streamlining requirements, the study could be subject to delays to assure other applications are processed within State required timelines.

Staff has significant concerns about the displacement of existing tenants at the complex, especially given the lower cost for rent at the property and longevity of some tenants. Staff supports the applicant's commitment to offer affordable units to new and existing tenants within the existing development. A Development Agreement to ensure that existing residents are provided the opportunity to relocate within the planned new development should be considered as part of the formal development application to ensure tenant protections are provided. As demonstrated with the tentative plans, appropriate site design and building massing can help mitigate visual and privacy impacts of a higher density project adjacent to lower density properties.

Prepared by: Ryan Kuchenig, Acting Principal Planner

Reviewed by: Amber Blizinski, Principal Planner

Reviewed by: Andrew Miner, Assistant Director, Community Development

Reviewed by: Trudi Ryan, Director of Community Development

Reviewed by: Teri Silva, Assistant City Manager

Approved by: Kent Steffens, City Manager

ATTACHMENTS

1. Reserved for Report to Council
2. Applicant's GPI Request Letter

3. Applicant's Conceptual Site and Massing Plans
4. Vicinity and Noticing Map
5. General Plan Map of the Site and Vicinity
6. Zoning Map of the Site and Vicinity

ATTACHMENT 1

This page intentionally left blank. Reserved for Report to Council.

LETTER OF JUSTIFICATION

Apr 17, 2019

Ryan Kuchenig, Senior Planner
Department of Community Development
City of Sunnyvale
(408) 730-7431
rkuchenig@sunnyvale.ca.gov

Re: GPI – Application for a higher density R-4 development in R-3 zoned lots while maintaining the physical appearance of the current R-3 zoning by adhering to the regulation for R-3 physical characteristics, height, site coverage and setbacks.

Hi Ryan:

The proposed development is located at 828 Morse Ave and 560W Ahwanee Ave., Sunnyvale, CA and will replace the existing low density cinder block 1950s apartment complex.

The justification for higher density is to provide much needed housing, in particular low cost housing in the Bay Area's growing housing shortage. The existing complex has been providing low cost housing for more than 40 years. 20% of the existing tenants have been living there on an average of 10 years. The Owner would like to keep these tenants as much as possible. Therefore, the Owner intends to continue to provide low cost housing in the new development. A large percentage of the new apartments shall be for low cost housing.

The proposed development is comprised of seven separate apartment buildings that will be built in phases over the years. The first phase is to build a new building on an empty piece of land on the site. Next phases will be to relocate tenants in existing buildings to the newly completed buildings, prior to demolishing and rebuilding new buildings. This development in phases will minimize disruption to the existing tenants.

The impact of the proposed higher density development to its context is mitigated by adhering to the height, setback and lot coverage of the current R-3 zoning. The adjacent land use are highway 101 across the frontage road (Ahwanee Ave) at the northside, an R-4 zone occupied by mobile home park and empty piece of land (Carolina Ave) at the east side, single family housing at the south side, 2 stories apartment buildings across Morse Ave at the west side.

To respect the existing neighboring single family zone, the height of the proposed buildings will step down from 3 stories at the side facing Ahwanee Ave to 2 stories at the side adjacent to the single family buildings.

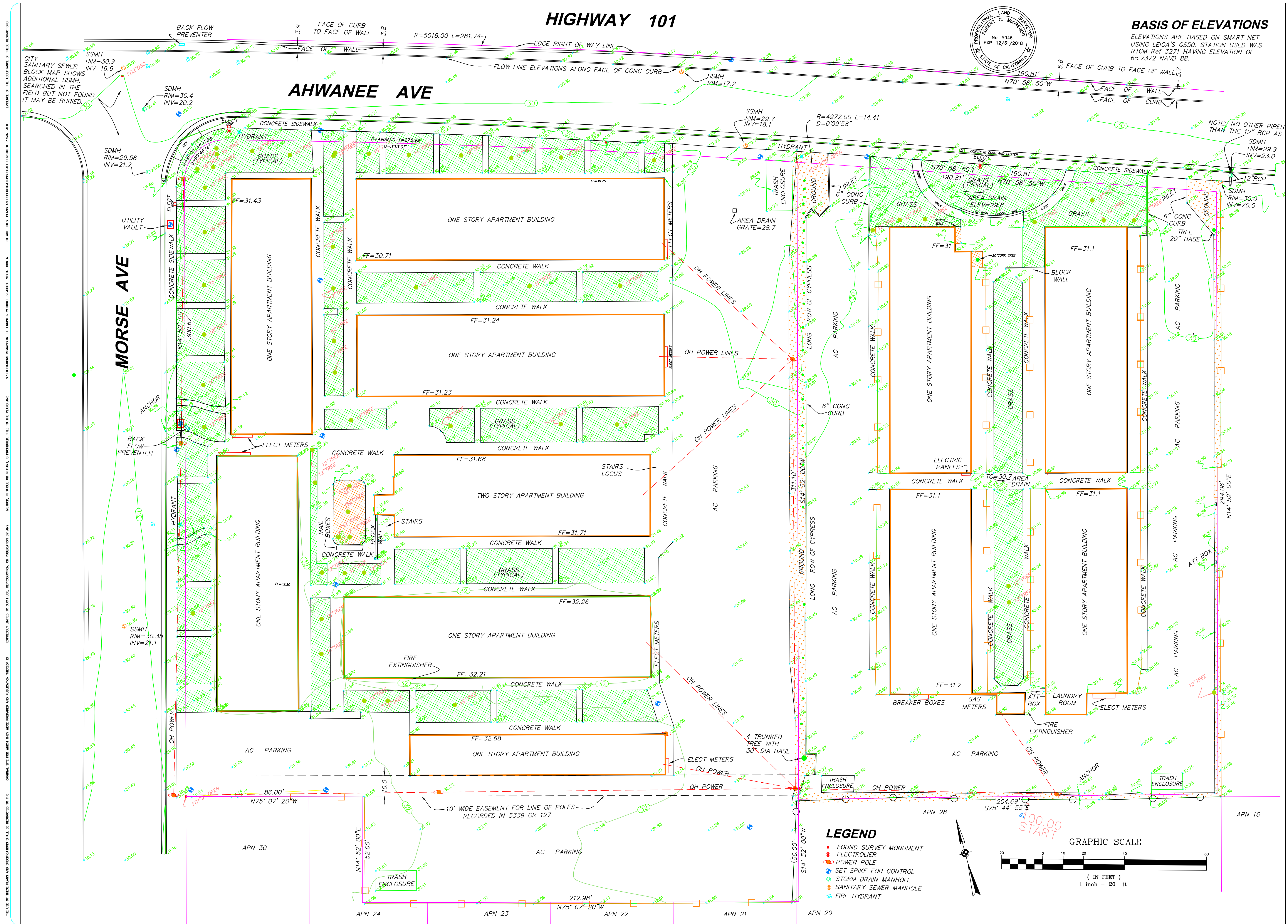
There are R-4 zone lots in the close proximity of the subject property at the intersection of Fair Oaks and Highway 101.

Please feel free to call if you have any question or would like to discuss in further detail.

Sincerely:



Queen Mein Foo, Principal Architect



REVISIONS	
AHWANEE AVE FACE OF SOUND WALL, SURVEYED SEPT 24, 2018	
DESIGNED BY	
DRAWN BY	
DATE:	
EXP:	

MCGREGOR LAND SURVEYS
P.O. BOX 903
CAPITOLA, CA 95010
(831) 479-1953

APN 204-8-27 & 29

TOPOGRAPHIC MAP
828 MORSE AND 560 AHWANEE
SUNNYVALE, CA

PREPARED FOR: GREG CLOSE

SCALE:	AS NOTED
DATE:	JULY 2018
SHEET:	1 OF 1
WO:	5232

828 MORSE + 562 AHWANEE AVENUES, SUNNYVALE, CA 94085

[illegible]

A1.1

FNZ

ARCHITECTS

671 ALBERTA AVE, SUNNYVALE, CA 94087
T: 408.375.7296



**828 MORSE + 562 AHWANEE
LANDS**

GENERAL PLAN AMENDMENT (GPI)
REZONING

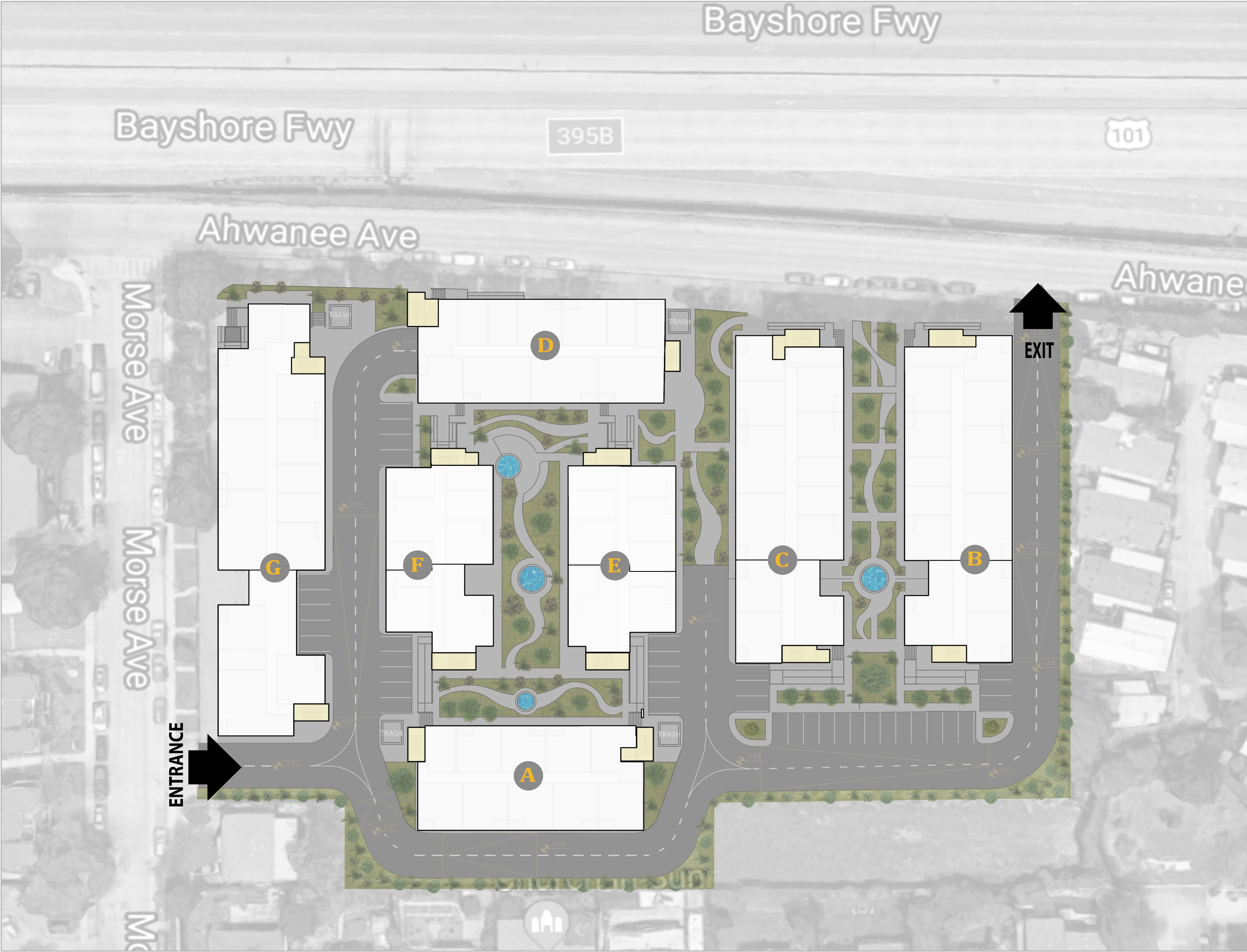
828 MORSE + 562 AHWANEE AVENUES, SUNNYVALE, CA 94085

REV.	DATE	DESCRIPTION
	04.17.2019	GPI - REZONING SUBMITTAL

DATE 04.16.2019
PROJECT NO. F19.1
SHEET TITLE

**SITE ENTRANCE / EXIT
PLAN**

SHEET NO. **A1.2**





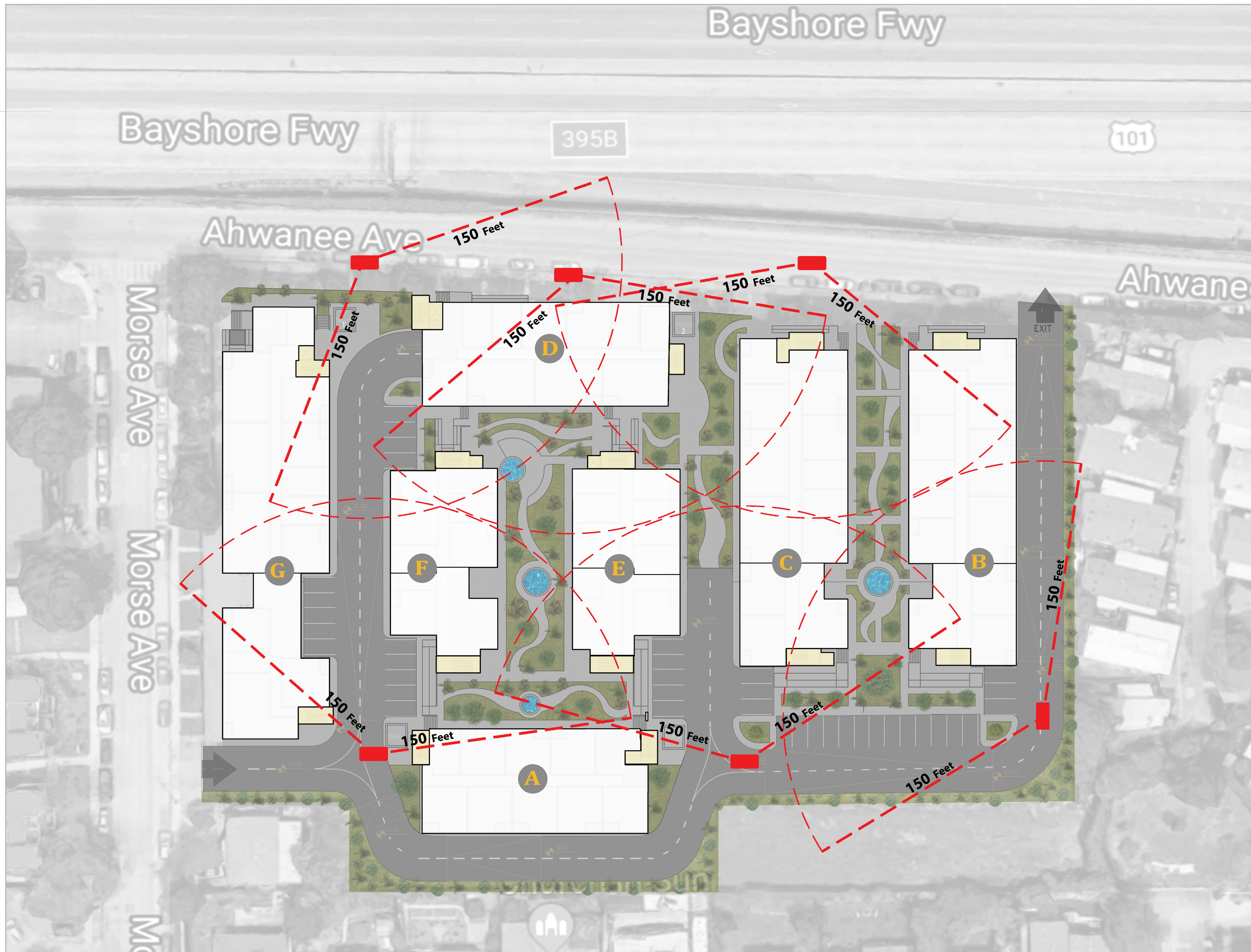
828 MORSE + 562 AHWANEE AVENUES, SUNNYVALE, CA 94085

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FIRE ACCESS PLAN

SHEET NO.

A1.3



828 MORSE + 562 AHWANEE AVENUES, SUNNYVALE, CA 94085

REV.	DATE	DESCRIPTION
	04.17.2019	GPI - REZONING SUBMITTAL
DATE		04.16.2019
PROJECT NO.		F19.1
SHEET TITLE		

TRASH LOCATION PLAN

SHEET NO.

A1.4

828 MORSE + 562 AHWANEE AVENUES, SUNNYVALE, CA 94085

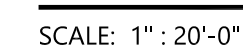
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DATF		04.16.2019
PROJECT NO.		F19.1
SHEET TITLE		

SHEET NO.

A1.5

828 MURSE + 562 AHWANEE AVENUES, SUNNYVALE, CA 94085

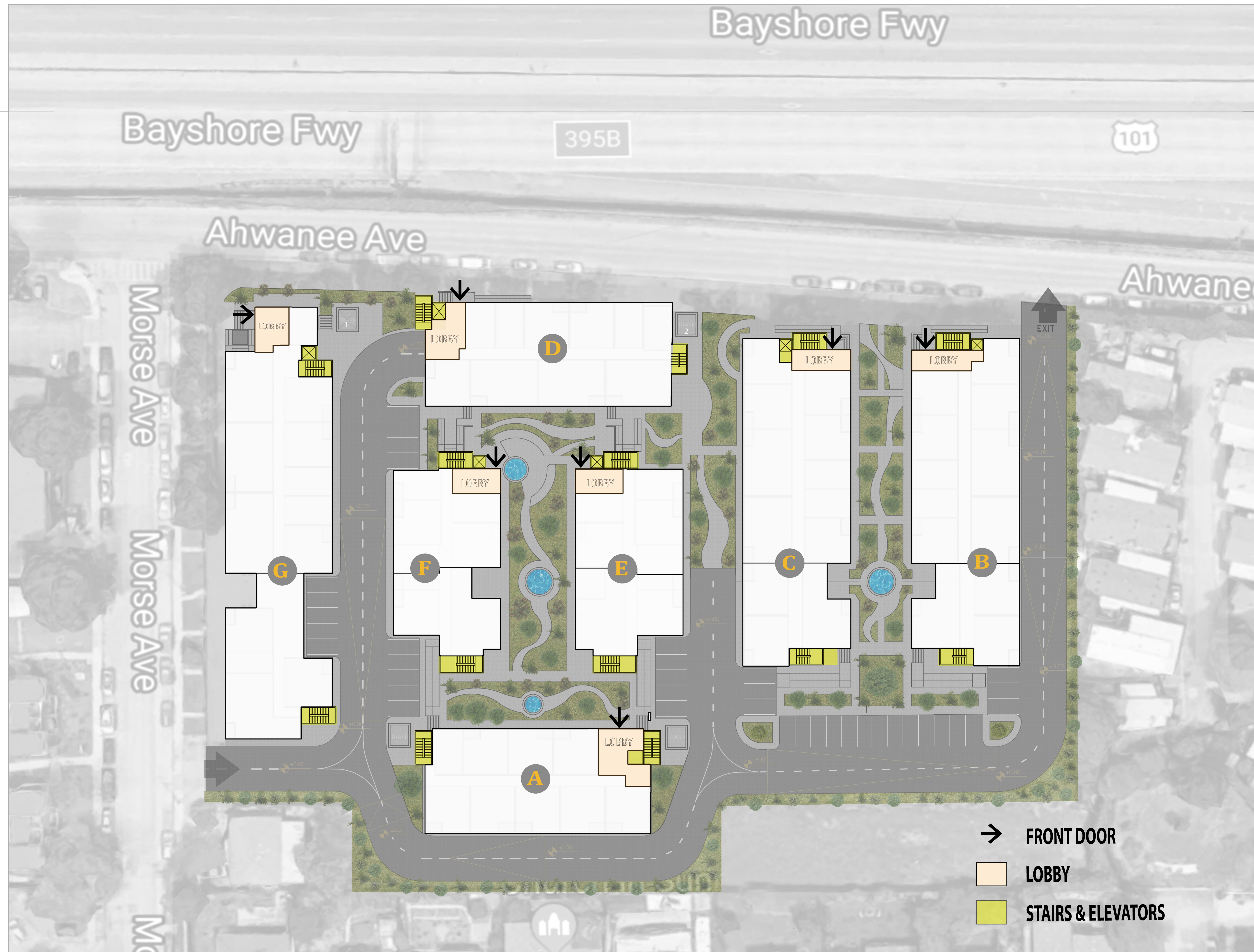
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828 MORSE + 562 AHWANEE AVENUES, SUNNYVALE, CA 94085

DATE	04.16.2019
PROJECT NO.	F19.1
SHEET TITLE	

SHEET NO. **A1.7**





**828 MORSE + 562 AHWANEE
LANDS**

GENERAL PLAN AMENDMENT (GPI)
REZONING

828 MORSE + 562 AHWANEE AVENUES, SUNNYVALE, CA 94085

REV.	DATE	DESCRIPTION
	04.17.2019	GPI - REZONING SUBMITTAL

DATE	04.16.2019
PROJECT NO.	F19.1
SHEET TITLE	

SITE-FIRST FLOOR PLAN

SHEET NO.

A1.8





**828 MORSE + 562 AHWANEE
LANDS**

GENERAL PLAN AMENDMENT (GPI)
REZONING

828 MORSE + 562 AHWANEE AVENUES, SUNNYVALE, CA 94085

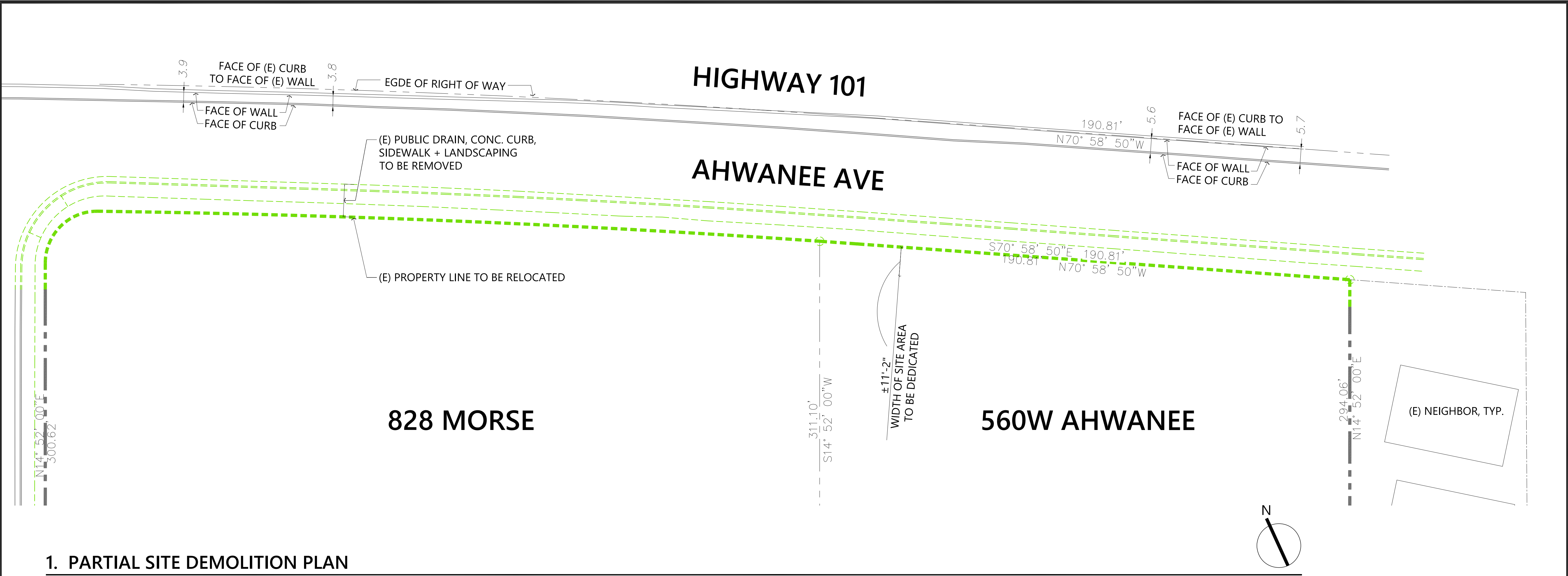
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	04.17.2019	GPI - REZONING SUBMITTAL

DATE 04.16.2019
PROJECT NO. F19.1
SHEET TITLE

PARTIAL SITE PLANS

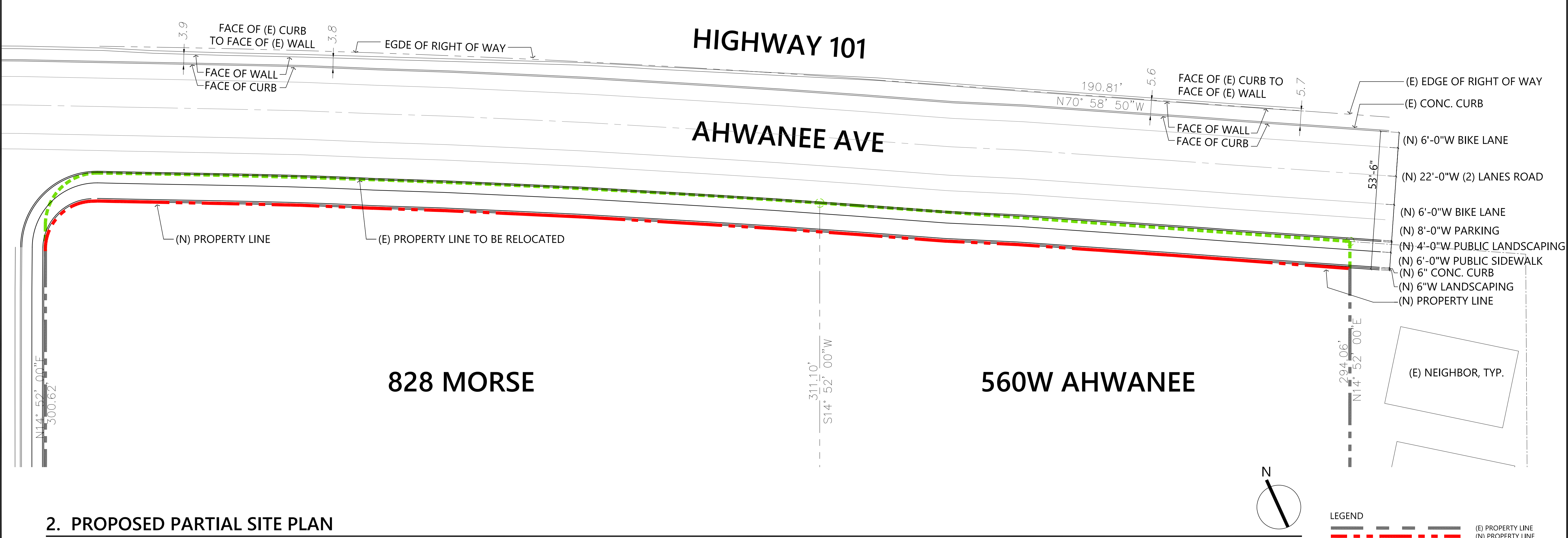
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A1.8A



1. PARTIAL SITE DEMOLITION PLAN

SCALE: 1" = 20'-0"



2. PROPOSED PARTIAL SITE PLAN

SCALE: 1" = 20'-0"



**828 MORSE + 562 AHWANEE
LANDS**

GENERAL PLAN AMENDMENT (GPI)
REZONING

828 MORSE + 562 AHWANEE AVENUES, SUNNYVALE, CA 94085

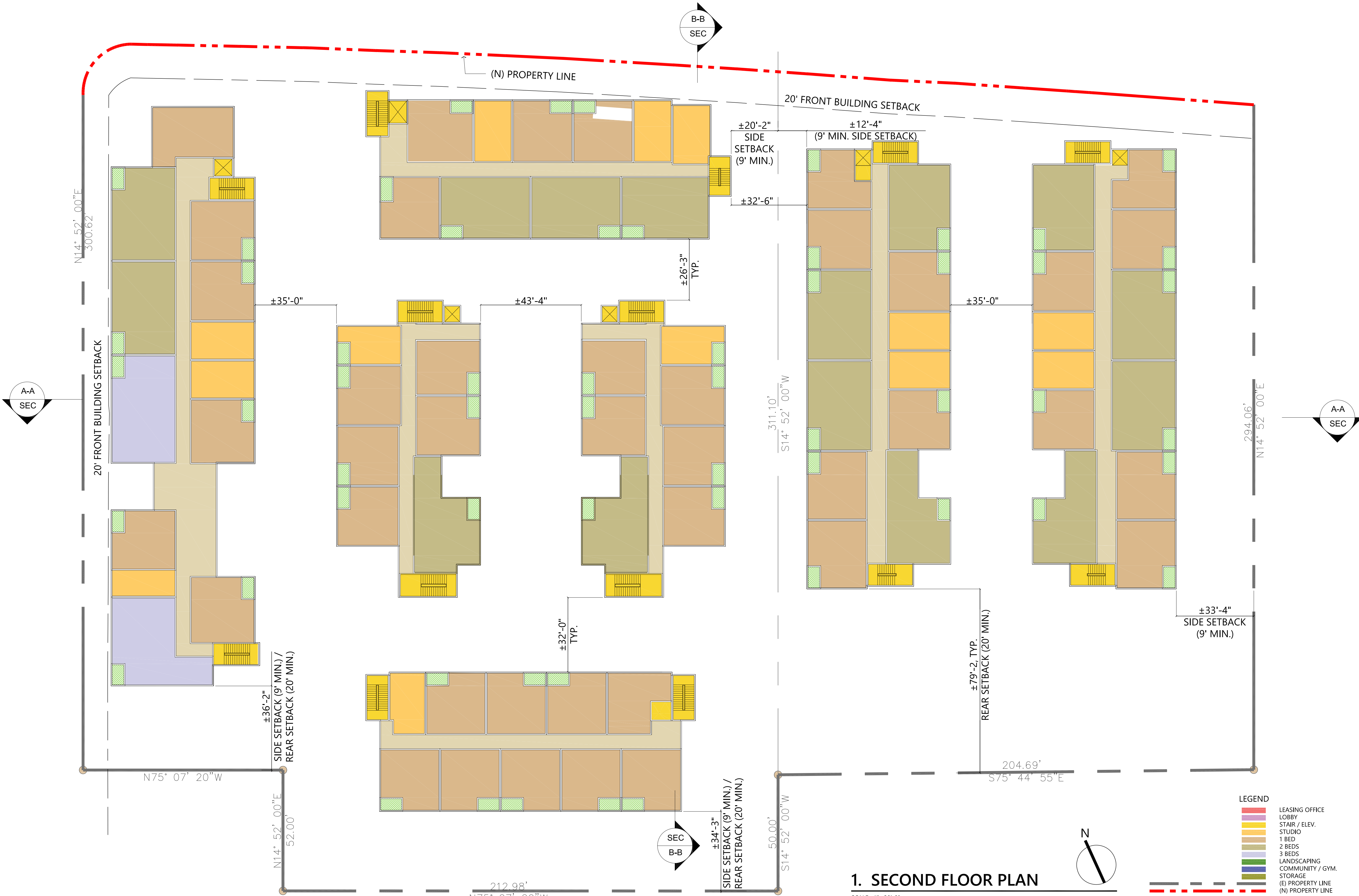
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	04.17.2019	GPI - REZONING SUBMITTAL

DATE	04.16.2019
PROJECT NO.	F19.1
SHEET TITLE	

SECOND FLOOR PLAN

SHEET NO.

A1.9





**828 MORSE + 562 AHWANEE
LANDS**

GENERAL PLAN AMENDMENT (GPI)
REZONING

828 MORSE + 562 AHWANEE AVENUES, SUNNYVALE, CA 94085

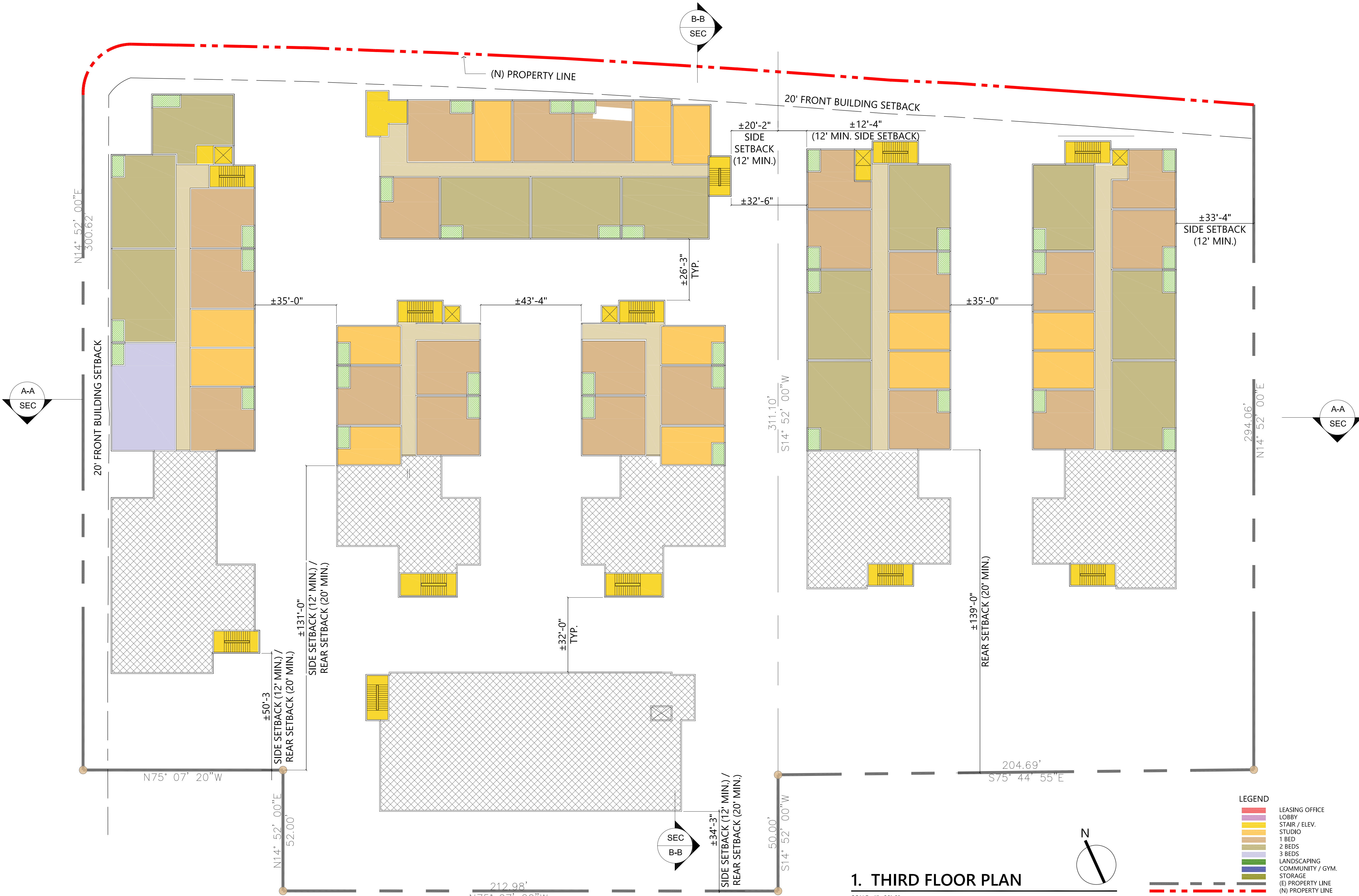
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	04.17.2019	GPI - REZONING SUBMITTAL

DATE	04.16.2019
PROJECT NO.	F19.1
SHEET TITLE	

THIRD FLOOR PLAN

SHEET NO.	
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A1.10



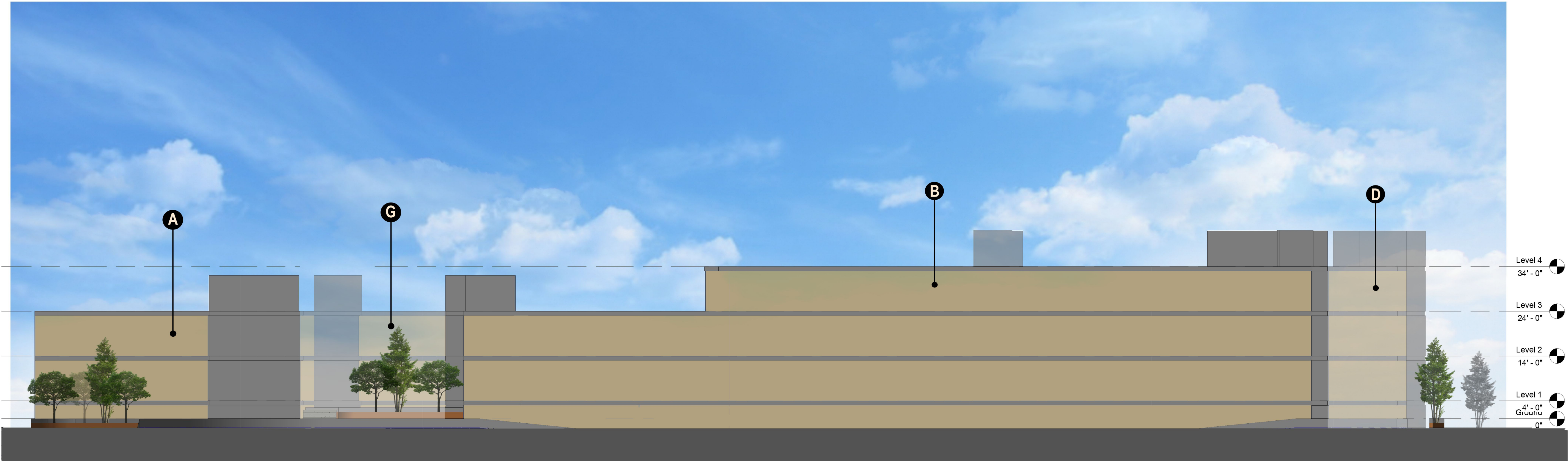
1. THIRD FLOOR PLAN

SCALE: 1" = 20'-0"

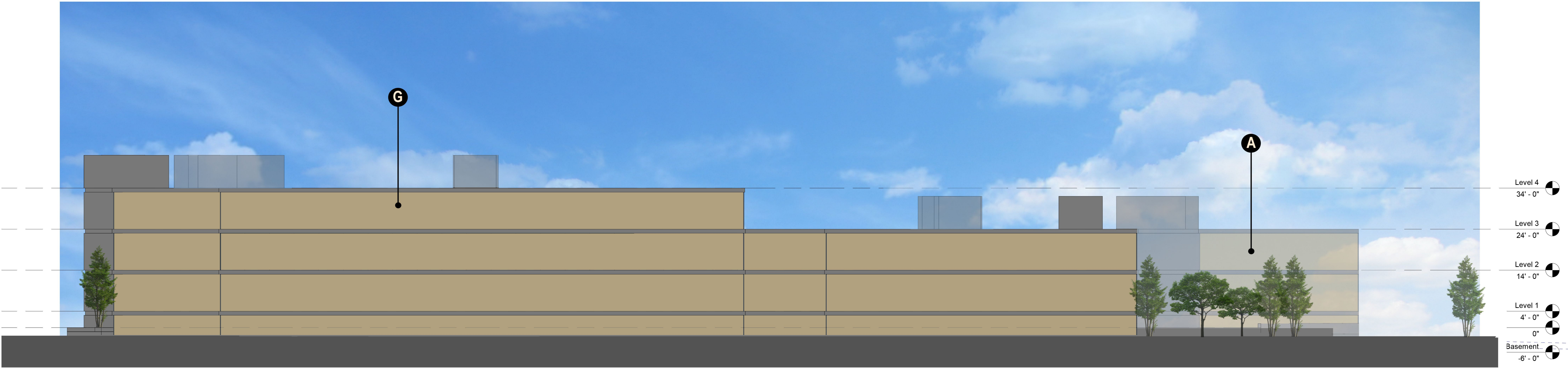
FNZ

ARCHITECTS

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EAST ELEVATION



WEST ELEVATION

**828 MORSE + 562 AHWANEE
LANDS**

GENERAL PLAN AMENDMENT (GPI)
REZONING

828 MORSE + 562 AHWANEE AVENUES, SUNNYVALE, CA 94085

REV.	DATE	DESCRIPTION
	04.17.2019	GPI - REZONING SUBMITTAL

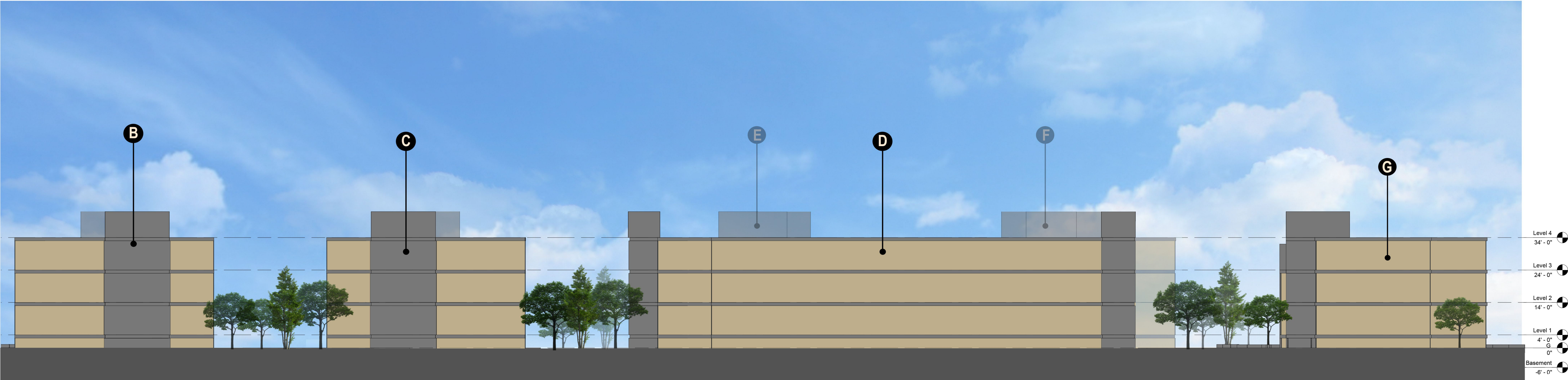
DATE	04.16.2019
PROJECT NO.	F19.1
SHEET TITLE	

EXTERIOR ELEVATIONS

FNZ

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NORTH ELEVATION



SOUTH ELEVATION

**828 MORSE + 562 AHWANEE
LANDS**

GENERAL PLAN AMENDMENT (GPI)
REZONING

828 MORSE + 562 AHWANEE AVENUES, SUNNYVALE, CA 94085

REV.	DATE	DESCRIPTION
	04.17.2019	GPI - REZONING SUBMITTAL

DATE 04.16.2019
PROJECT NO. F19.1
SHEET TITLE

EXTERIOR ELEVATIONS



828 MORSE + 562 AHWANEE AVENUES, SUNNYVALE, CA 94085

A3.1

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GENERAL PLAN AMENDMENT (GPI) REZONING

This aerial view shows the proposed development at 828 Morse Avenue. The building footprint is a large, multi-story structure with a complex, stepped design, featuring a mix of light beige and white facades. It is situated in a residential neighborhood with single-family homes and mature trees. A red location pin marks the site, and a label "828 Morse Avenue" is visible. The surrounding area includes a mix of residential and commercial buildings, with a large parking lot to the right. A Google map inset in the bottom right corner provides a street-level view of the site, showing the intersection of Morse Avenue and Bayshore Fwy, and the surrounding neighborhood layout.

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SHEET NO.

A4.1

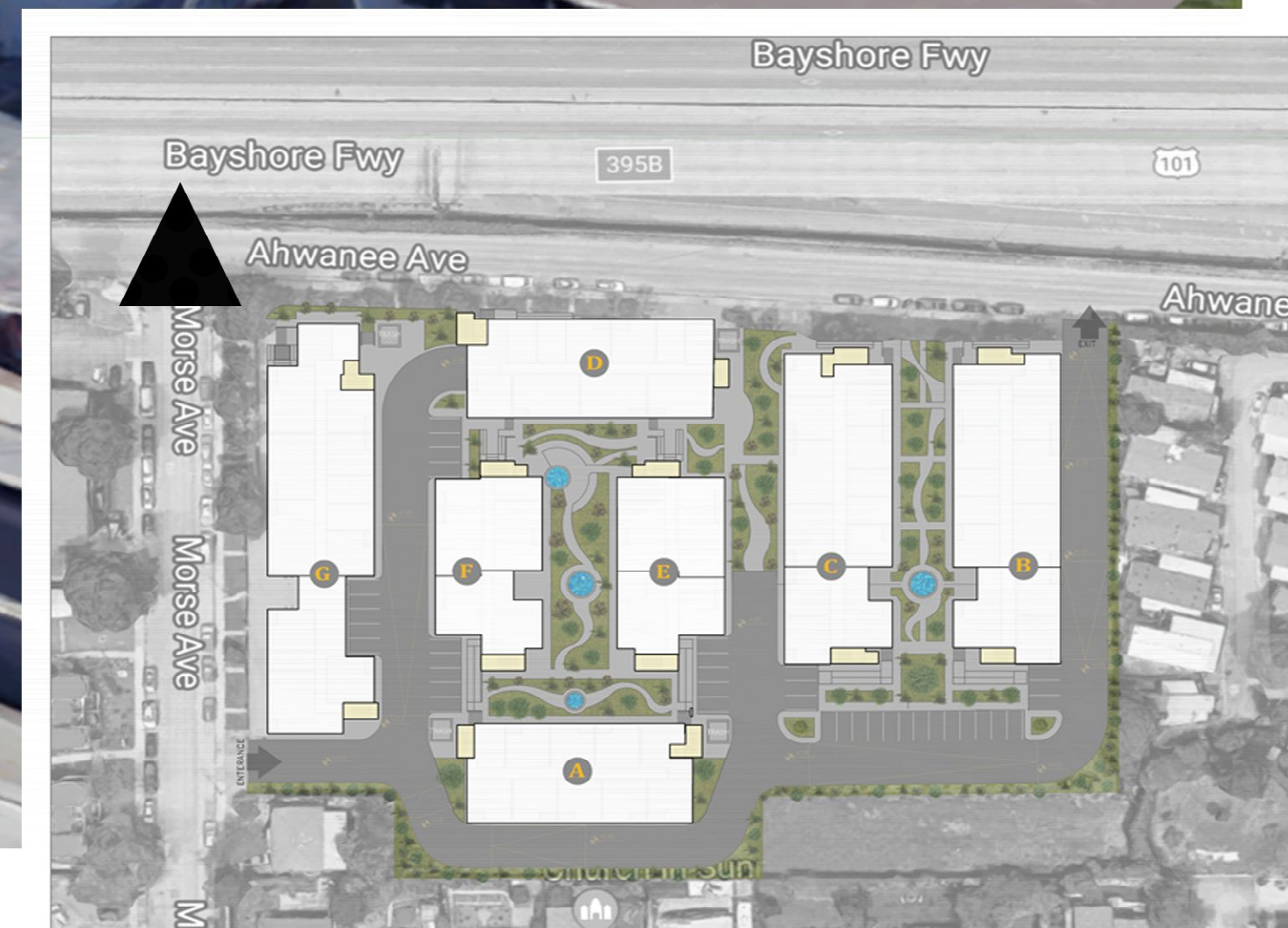
828 MORSE + 562 AHWANEE AVENUES, SUNNYVALE, CA 94085

REV.	DATE	DESCRIPTION
	04.17.2019	GPI - REZONING SUBMITTAL
DATE		04.16.2019
PROJECT NO.		F19.1
SHEET TITLE		

SHEET NO.

A4.2





828 MORSE + 562 AHWANEE AVENUES, SUNNYVALE, CA 94085

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A4.3

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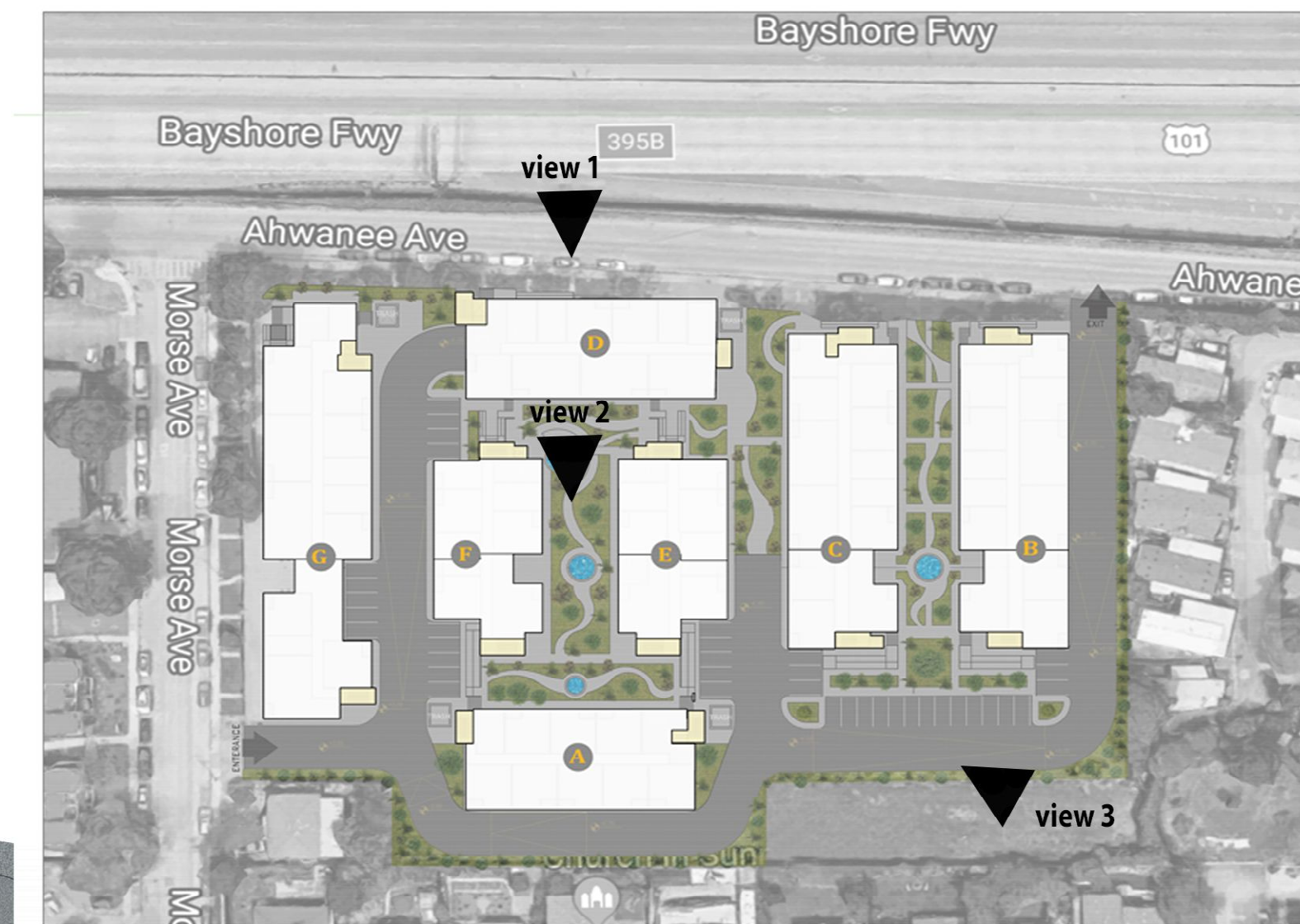
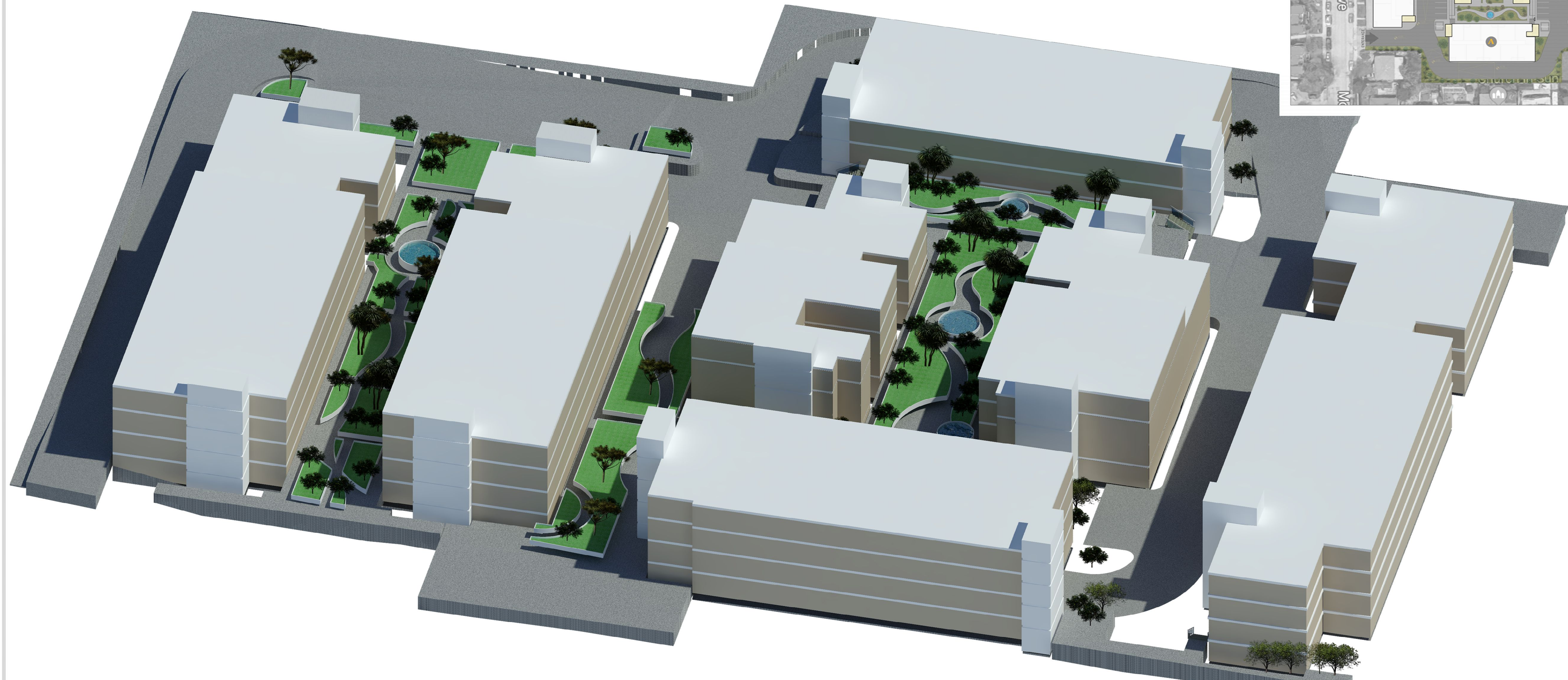


828 MORSE + 562 AHWANEE AVENUES, SUNNYVALE, CA 94085

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SHEET NO.

A4.4



view 2

An architectural rendering of a courtyard. A winding, light-colored path leads through a green lawn. Several palm trees and smaller trees are planted in the courtyard. The courtyard is bordered by modern, multi-story buildings with light-colored facades and horizontal bands. The sky is blue with some clouds.



Sunnyvale

WEDDELL DR

JENNA

S AV

GLENDALE AV

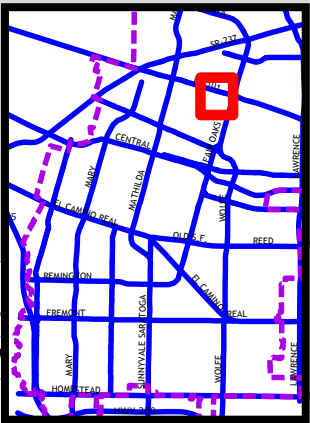
GEORGIA AV

CAROLINA AV

FERNDALE AV

PRADO TR

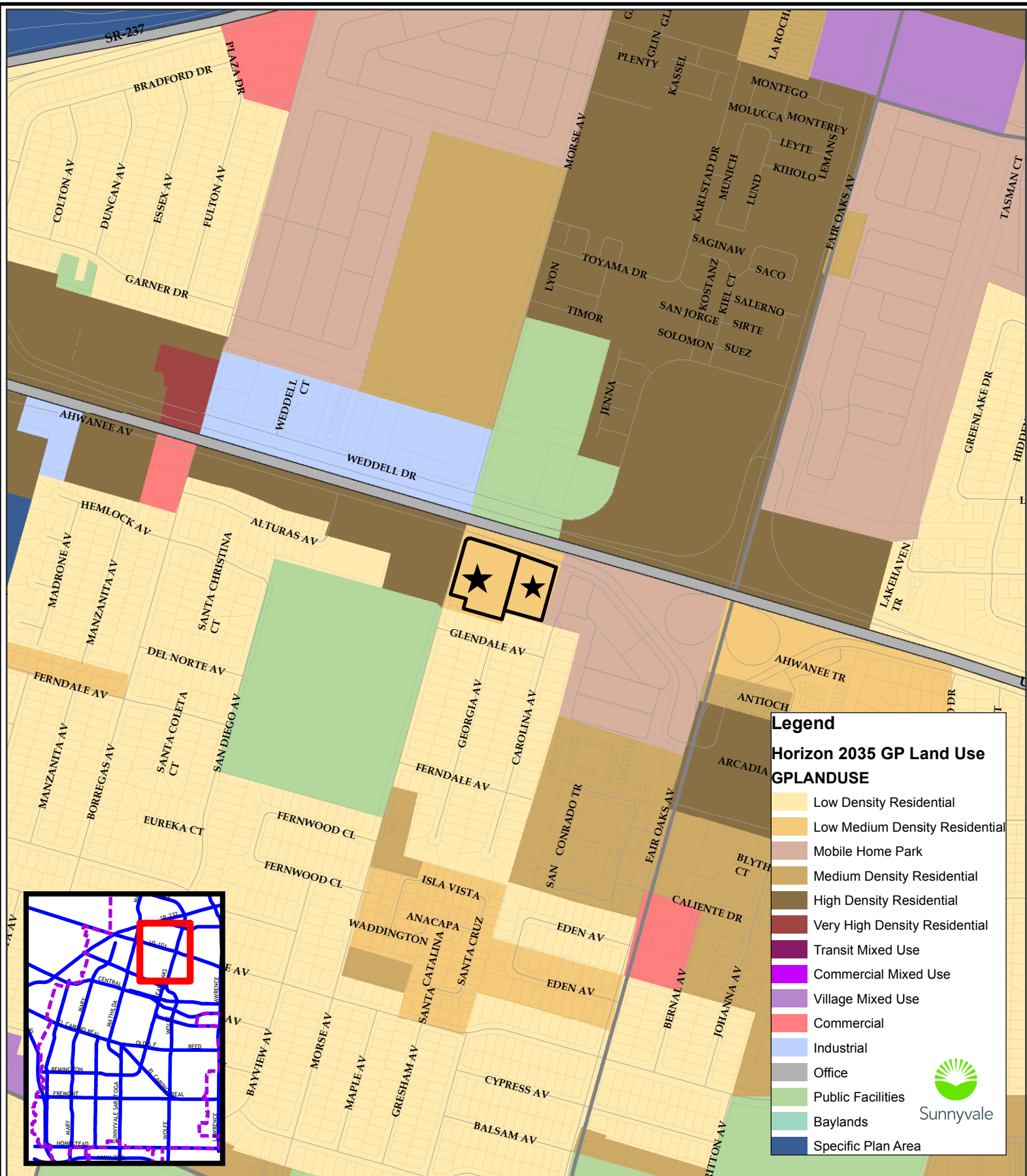
ROAKS AV



2019-7301
 General Plan Initiation for 828 Morse Ave (APN: 204-08-027)
 and 560 E Ahwanee Ave (APN: 204-08-029)
 300-ft Area

0 110 220 440 Feet

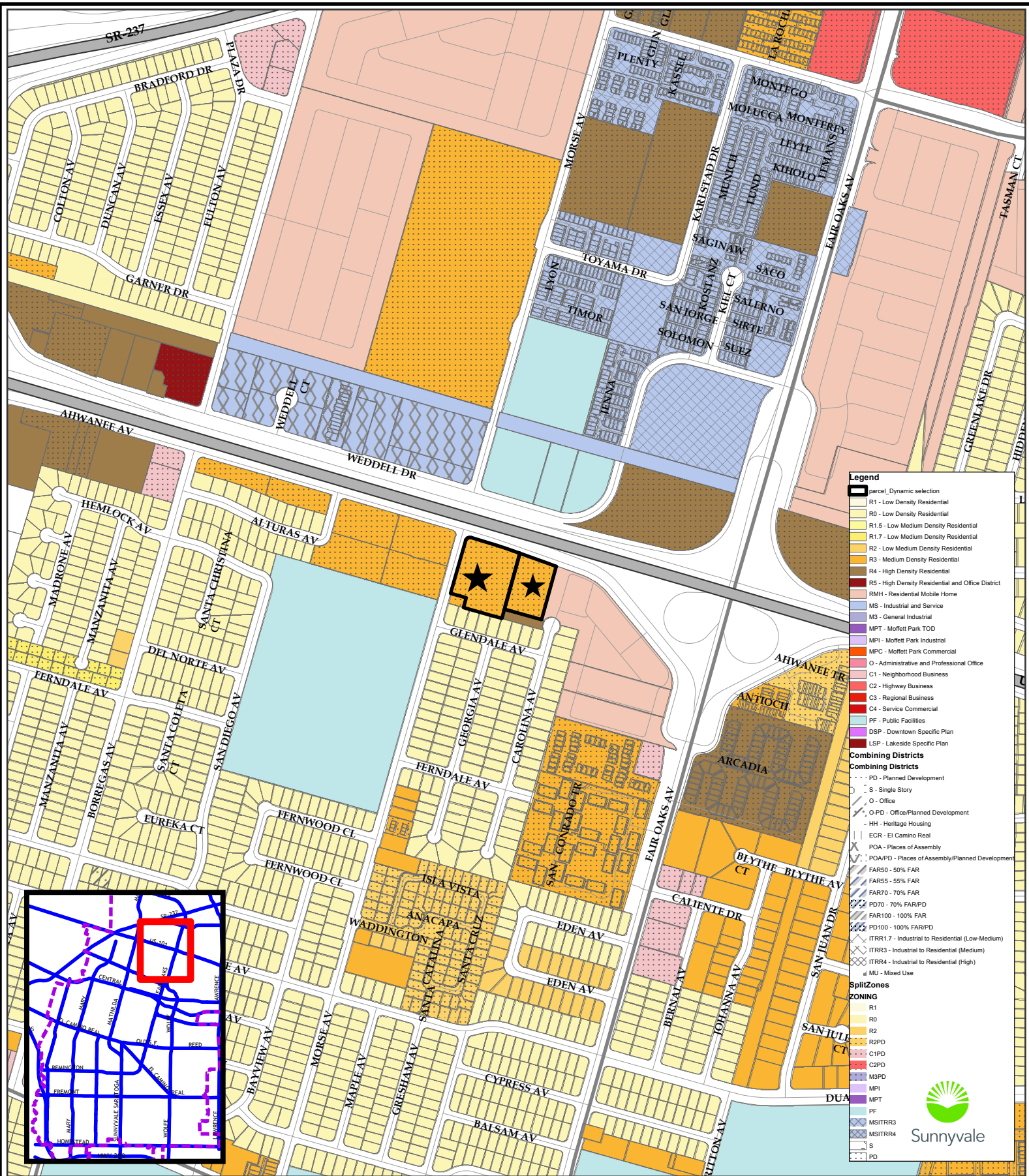




General Plan
 2019-7301
 828 Morse Ave (APN: 204-08-027)
 560 E Ahwanee Ave (APN: 204-08-029)

0 250 500 1,000 Feet





Zoning Districts

2019-7301

828 Morse Ave (APN: 204-08-027)

560 E Ahwanee Ave (APN: 204-08-029)

0 250 500 1,000 Feet





City of Sunnyvale

Agenda Item 4

19-0703

Agenda Date: 7/22/2019

REPORT TO PLANNING COMMISSION

SUBJECT

Forward a recommendation to City Council to Adopt a Resolution to Adopt the Climate Action Playbook, including the greenhouse gas reduction targets, Make the Findings Required by CEQA and Accept the Addendum to the LUTE EIR.

REPORT IN BRIEF

The City of Sunnyvale's Climate Action Plan (CAP 1.0) was adopted in 2014. It laid the foundation for the City's efforts to achieve greenhouse gas (GHG) reductions and address climate change. With the implementation of CAP 1.0, as of 2016, the City had achieved its 2020 emissions reduction target four years ahead of schedule. However, CAP 1.0 was not designed to achieve the State of California's longer term targets of a 40 percent reduction in emissions below 1990 levels by 2030 (SB 32) and an 80 percent reduction in emissions below 1990 levels by 2050 (S-3-05).

City Council adopted *Accelerating Climate Action* as a Policy Priority in 2017 and directed staff to work on Climate Action Plan 2.0 (CAP 2.0). The goal of the CAP 2.0 Initiative was to update CAP 1.0 to meet or exceed the State's longer term targets. Working with a consultant team and the Council-appointed CAP 2.0 Advisory Committee, staff conducted a technical analysis, gathered extensive community input, and developed the Draft Climate Action Playbook (Playbook).

The Playbook proposes to achieve longer-term targets of a 55 percent reduction in emissions below 1990 levels by 2030 (more ambitious than the State target) and an 80 percent reduction in emissions below 1990 levels by 2050. While not strictly defined, an 80 percent reduction in community greenhouse gas emissions is considered to be equivalent to carbon neutrality by many leading cities (e.g., Portland, Vancouver, Sydney, Seattle) that are a part of the Carbon Neutral Cities Alliance and have committed to achieving carbon neutrality by 2050. The Playbook contains six core Strategies and 18 Plays that are designed to guide the City to achieve the 2050 target. It also includes a Game Plan 2022 of "Next Moves" or specific actions for the City and community to focus on in the next three years. Moving forward, updated Game Plans will be developed in five-year cycles.

Community input was critical to develop the Playbook. A large workshop with more than 160 participants was held in March 2018 to gather creative, innovative ideas from the community, which were subsequently used to shape the Strategies, Plays, and Next Moves presented in the Playbook. A public review draft was released in March 2019 and feedback was gathered through April 2019. The final Playbook incorporates changes based on community feedback.

Initial implementation of the Playbook's Game Plan 2022 is estimated to require additional funding of \$1.64 million in one-time costs and approximately \$500,000 per year in ongoing costs. The Playbook is aligned with ongoing initiatives, including the updates to the Integrated Bicycle, Pedestrian, and Safe Routes to School Plan and the Green Building Program.

Staff recommends that the Planning Commission forward a recommendation to City Council to adopt a resolution to adopt the Climate Action Playbook, make the findings required by the California Environmental Quality Act (CEQA) and accept the Addendum to the Land Use and Transportation Element (LUTE) EIR.

BACKGROUND

The City of Sunnyvale's Climate Action Plan (CAP 1.0), adopted in 2014, outlines the City's path toward mitigating climate change while fostering a sustainable, healthy, and livable community. CAP 1.0 summarized Sunnyvale's greenhouse gas (GHG) emissions for year 2008 (baseline year) and identified mitigation strategies for reducing emissions. The goal of CAP 1.0 was to: (a) achieve the State of California's target of reducing GHG emissions by 15 percent below 2008 levels by the year 2020 (per AB 32), which is deemed equivalent to 1990 emissions; and (b) make progress towards the State's target of 80 percent below 1990 levels by the year 2050 (per Governor's Executive Order S-3-05).

CAP 1.0 Biennial Progress Reports were accepted by City Council in May 2016 and June 2018. These reports concluded that Sunnyvale's 2014 communitywide emissions were equivalent to 1990 levels, and 2016 communitywide emissions were 12 percent below 1990 levels. Thus, the City had achieved and exceeded the State's 2020 target ahead of schedule. However, CAP 1.0 was not designed to meet the State targets of 40 percent GHG reduction by 2030 (adopted by the Legislature via SB 32 in 2016) or the longer-term target of 80 percent by 2050. In addition, new approaches and technologies continue to emerge, which offer opportunities to further modernize Sunnyvale's approach to climate action.

At a November 2016 Council Study Session, the City Council and the Sustainability Commission discussed options for advancing climate action and setting broader goals for GHG reductions. In January 2017, City Council added *Accelerating Climate Action* as a Council Policy Priority. In response, staff developed and implemented the Climate Action Plan 2.0 (CAP 2.0) Initiative. The objective of this Initiative is to conduct the research, analysis, and community engagement necessary to support Council policy setting and resource allocation for advancing and accelerating climate action. The expected outcome was an updated climate action framework that would enable Sunnyvale to achieve or exceed the State's longer-term targets.

In June 2017, Council approved funding for the CAP 2.0 project and directed the formation of a community advisory committee, known as the CAP 2.0 Advisory Committee (CAC), to guide the development of the plan. Appointed by the Council, the CAC consisted of 11 members (and three alternate members) representing residents, businesses, developer/real estate firms, volunteer or non-profit groups, and three Commissions (Sustainability, Planning, and Bicycle and Pedestrian).

Staff engaged a consultant team consisting of DNV-GL, Fehr & Peers, IDEO, and Acterra. With consultant support, staff engaged the community in sourcing ideas for the updated plan; evaluated prospective scenarios to meet or exceed the State's 40 percent by 2030 and 80 percent by 2050 reduction targets; and designed a new climate action framework including key strategies and an approach to future work planning and resource planning. The result of this effort is the Climate Action Playbook (Playbook) (see Attachment 3; a redline version can be found at bit.ly/sunnyvaleplaybook), which establishes a framework for achieving and exceeding the State's long-term targets and

identifies a focused set of specific actions and associated funding needed to implement them in the next three years.

The Playbook is being presented to three Commissions (Sustainability, Planning, and Bicycle and Pedestrian) and the CAC for recommendation to the City Council. The Playbook was presented to the Sustainability Commission and CAC on July 15, 2019, and to the Bicycle and Pedestrian Commission on July 18, 2019.

The City Council is scheduled to consider this item on August 13, 2019.

EXISTING POLICY

General Plan

Chapter 2: Community Vision - Citywide Vision Goals

- *Vision: It is the aspiration of the people of Sunnyvale to build upon the attributes which the City currently enjoys, so that Sunnyvale of the future will become ... A regional leader in environmental sustainability ... advocating to reduce dependence on non-renewable resources by providing greater transportation options, reducing waste, protecting our natural resources, and promoting alternative energy usage and research. We take environmental preservation and protection seriously and consider how each action will affect Sunnyvale for future generations.*
- *Citywide Vision Goal III, Environmental Sustainability: To promote environmental sustainability and remediation in the planning and development of the City, in the design and operation of public and private buildings, in the transportation system, in the use of potable water and in the recycling of waste.*

Chapter 3: Land Use and Transportation

- *Goal LT-2: Environmentally Sustainable Land Use and Transportation Planning and Development - Support the sustainable vision by incorporating sustainable features into land use and transportation decisions and practices.*
 - *Greenhouse Gas Reduction Policy LT-2.2 Reduce greenhouse gas emissions that affect climate and the environment through land use and transportation planning and development.*

Chapter 5: Housing

- *Goal HE-6: Sustainable Neighborhoods - Maintain sustainable neighborhoods with quality housing, infrastructure and open space that fosters neighborhood character and the health of residents*
 - *Policy HE-6.6 Encourage use of sustainable and green building design in new and existing housing.*

ENVIRONMENTAL REVIEW

The adoption of a Climate Action Plan is a “project” within the meaning of the California Environmental Quality Act (CEQA). Although Climate Action Plans are intended to benefit the environment, CEQA requires the agency to evaluate and disclose whether any aspect of the plan will actually have a significant environmental effect. In this case, the Playbook is being adopted in order to implement a mitigation measure required by the Environmental Impact Report (EIR) for the 2017 LUTE (State Clearinghouse No. 2015062013). Mitigation Measure 3.13.3 of the LUTE EIR required the City to update the Climate Action Plan to account for new LUTE growth projections. The LUTE

EIR was a program EIR that can be used as a CEQA document for subsequent projects under Sections 15168 and 15183 of the CEQA Guidelines.

The City has reviewed the Playbook to determine whether the project's impacts were addressed in the certified LUTE EIR, and to ensure that the Playbook incorporates all applicable performance standards and mitigation measures of the LUTE EIR. The City used an environmental checklist (Attachment 2) to determine whether the adoption of the Playbook will have any significant environmental impacts that require further environmental review as outlined in CEQA Guidelines Section 15183:

- (1) Are peculiar to the project or the area in which the project would be located,
- (2) Were not analyzed as significant effects in the LUTE EIR,
- (3) Are potentially significant off-site impacts and cumulative impacts which were not addressed in the LUTE EIR, or
- (4) Are previously identified significant effects which, are determined to have a more severe adverse impact than discussed in the LUTE EIR based on substantial new information that was not known at the time the LUTE EIR was certified.

Based on the analysis presented in the checklist, adoption of the Playbook will not have any significant environmental impacts that would require additional environmental review under CEQA. The City has therefore prepared an Addendum to the LUTE EIR (Attachment 2) that incorporates the Playbook as part of the LUTE. Sections 15162 and 15164 of the CEQA Guidelines provide that an agency may prepare an addendum to a previously-adopted EIR as long as there are no substantial changes proposed in the project that would require major revisions of the EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects. An addendum does not need to be circulated for public review but must be considered by the decision-making body prior to making a decision on the project.

DISCUSSION

The Climate Action Playbook is the City's plan to reduce GHG emissions and achieve or exceed the State's longer term GHG targets. The development of the Playbook began in 2017, and the final Playbook will be presented to City Council on August 13, 2019.

Community Engagement

The development of the Playbook engaged diverse stakeholders to ensure it was created by and for the Sunnyvale community. Community engagement was supported by consultants IDEO and Acterra and included gathering community ideas via an online platform; an all-day Ideation Workshop in March 2018 with more than 165 community attendees; a Pitch Event to celebrate and recognize selected community ideas; and extensive publicity through community meetings, social media, and other avenues.

Inter-Departmental Engagement

The CAP 2.0 Initiative was led by the City's Environmental Services Department (ESD). However, as with CAP 1.0, strategies in the Playbook will be implemented by multiple departments and be aligned with citywide programs, policies, and plans. To ensure that the Playbook reflected a comprehensive

approach, a CAP 2.0 Executive Team was formed, which included the City Manager and leadership staff from the Department of Public Works, Community Development Department, Office of the City Manager, Information Technology Department, Department of Public Safety, and Finance Department.

One-on-one interviews were conducted with lead staff within these departments to understand their perspective as well as the operational challenges and opportunities for integrating the Playbook into departmental priorities or plans. ESD will continue to engage the CAP 2.0 Executive Team for ongoing implementation of the Playbook to ensure a cohesive approach to implementing its strategies as well as for data gathering and reporting.

Technical Analysis

Sunnyvale's 2016 communitywide GHG emissions were used as a starting point for the technical analysis supporting the Climate Action Playbook. The City's 2016 emissions were approximately at 12 percent below 1990 levels. The most notable action from CAP 1.0 was the formation and launch of Silicon Valley Clean Energy (SVCE), a community choice aggregation agency, which began providing carbon-free electricity to 13 communities in Santa Clara County in 2017. If the full impact of SVCE were factored into 2016 emissions, communitywide emissions are estimated to be 28 percent below 1990 levels. The primary sources of Sunnyvale's remaining emissions are on-road transportation (54 percent) and natural gas use in commercial and residential buildings (30 percent), as shown in Figure 1.

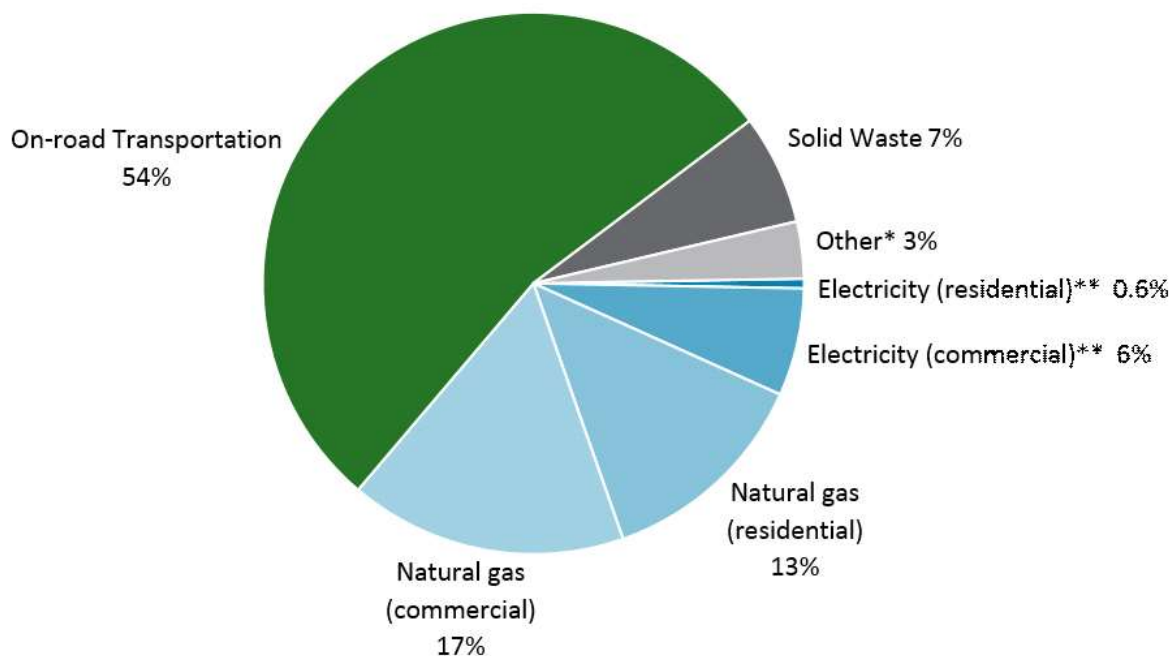


Figure 1. Sunnyvale's 2016 Communitywide Emissions with SVCE Lens

*"Other" represents emissions associated with water, wastewater, off-road motorized equipment and Caltrain.

**In 2016, prior to the launch of SVCE, residential electricity made up 4 percent of total emissions and commercial electricity made up 20 percent of total emissions.

A technical analysis was conducted by DNV-GL and Fehr & Peers to identify targets for reducing greenhouse gas emissions and the path to achieve those targets. As a basis for this analysis, Sunnyvale's emissions were forecasted for (Figure 2):

- Business-as-usual or BAU (no action);
- BAU with State policies (accounting for the impact of State policies already in place);
- BAU with State policies and CAP 1.0 implementation (including SVCE impact and implementation of ongoing CAP 1.0 actions); and
- Target reduction path (i.e., the path needed to get to reductions for 2030 and 2050 from our current emissions level).

The BAU forecast utilizes Sunnyvale-specific growth projections from the City's LUTE, adopted in 2017. These growth projections are available through 2035 when the City is projected to achieve complete buildout. This BAU forecast, however, assumes continued growth in the absence of future projections between 2035-2050.

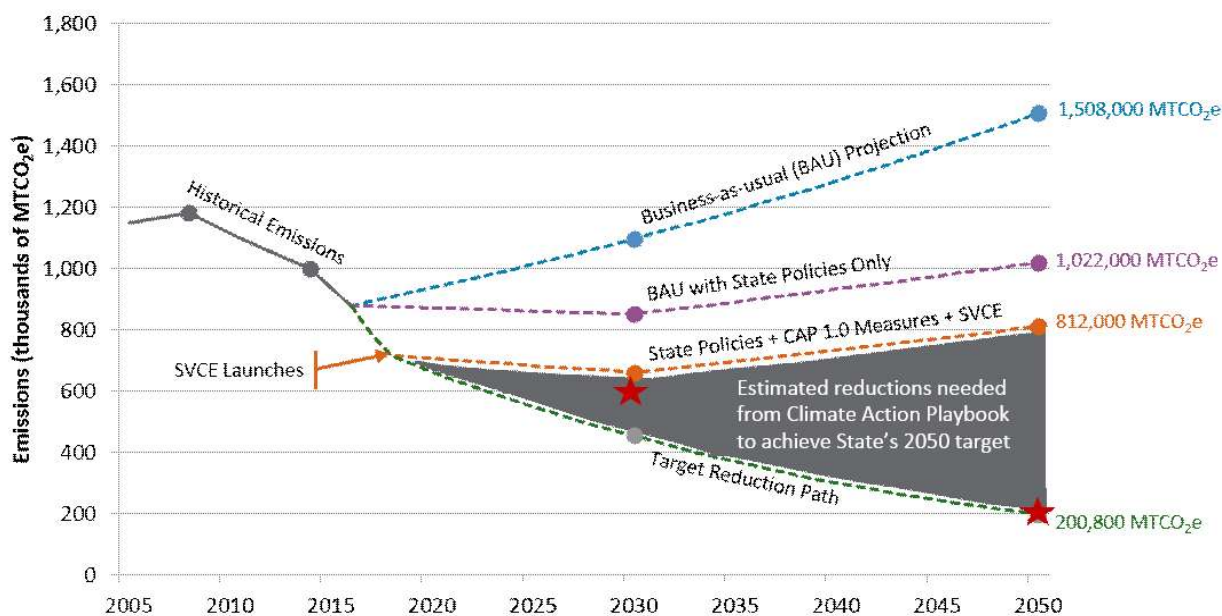


Figure 2. End Game 2050 and Target Path

Using DNV-GL's Climate Scenario Analysis Tool (Climate Tool), potential scenarios were evaluated for 2030 and 2050 to examine how targets for these years could be achieved through actions in four main sectors: natural gas; electricity; transportation; and waste. For transportation, projections of vehicle miles traveled (VMT) were obtained for each 2030 and 2050 using Fehr & Peers' TrendLab tool.

The results of the technical analysis established the following targets for Sunnyvale:

- 55 percent by 2030 (55x30)
- 80 percent by 2050 (80x50)

Sunnyvale's selected 2030 target was designed to achieve reductions sooner than the State's target of reducing emissions by 40 percent below 1990 levels by 2030, recognizing that early action now would be essential to achieving longer term reductions essential for meeting the 80x50 target.

The technical analysis also identified the reductions needed from the four sectors (Figure 3 and Table

1). This formed the rationale for the selection of the core strategies in the Playbook.

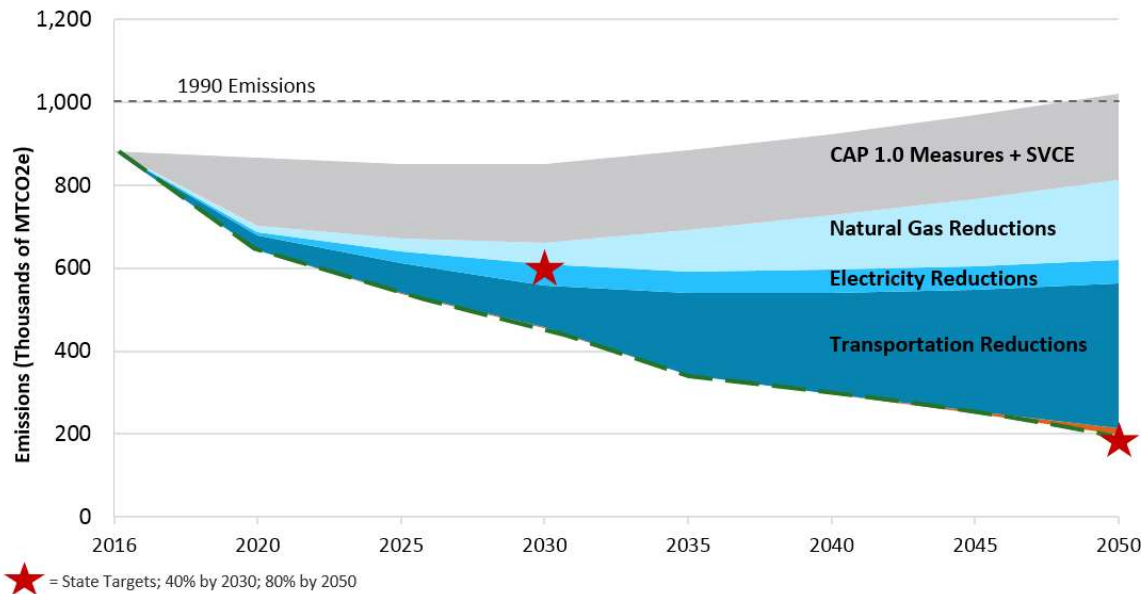


Figure 3. Emissions Reductions from Climate Action Playbook by Sector

GHG reductions in the waste sector (orange sliver below Transportation) constitute <3 percent of total emissions reductions needed to achieve 80x50.

Table 1. Current and Projected GHG Emissions by Sector with Climate Action Playbook Implementation

GHG Emissions	2030 Emissions (MTCO ₂ e)	2050 Emissions (MTCO ₂ e)
Emissions after State policies + CAP 1.0	662,055	812,012
Reductions Achieved from Climate Action Playbook		
Natural Gas Strategies	-52,328	-191,166
Electricity Strategies	-50,748	-58,215
Transportation Strategies	-99,764	-348,351
Waste Strategies	-3,191	-14,822
Emissions after Playbook Implementation	456,023 (55% below 1990)	199,458 (80% below 1990)

Climate Action Playbook Overview

The Playbook lays out six Strategies that provide the overarching approach for bold climate action to achieve the end game of 80x50. These are:

- Strategy 1: Promoting Clean Electricity
- Strategy 2: Decarbonizing Buildings
- Strategy 3: Decarbonizing Transportation & Sustainable Land Use
- Strategy 4: Managing Resources Sustainably
- Strategy 5: Empowering Our Community
- Strategy 6: Adapting to a Changing Climate

Within each Strategy, there are several Plays that identify areas for action and measurable targets to define progress. See the At-a-Glance: Pathway to 2050 (Attachment 4) for a summary view of Strategies, Plays, and targets. These Strategies and Plays are designed to achieve the proposed

targets of 55 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050 proposed targets.

The Playbook also includes a Game Plan 2022 of “Next Moves,” or specific actions that the City and community can collectively take in the short term to reduce carbon emissions and improve resilience to climate impacts. See Attachment 5 for an At-A-Glance view of Game Plan 2022 (“Next Moves” through 2022). The Game Plan addresses implementation for the next three years, and it will be revised every five years thereafter. It is intended to be dynamic and evolve with changes in state or federal regulations, new technologies, and emerging behavior trends and needs in our community.

Public Review of Draft Climate Action Playbook

The Draft Climate Action Playbook (Draft Playbook) was released in early March 2019 and public feedback was gathered through the end of April 2019 primarily through:

- Community meetings, at which staff provided an overview of the March Draft Playbook and obtained feedback through live polling (via mobile devices) and dot voting exercises. Outreach meetings targeted different audiences, including the CAC, general public, developers, businesses, and three Commissions.
- City Council Study Session on March 26, 2019 at which staff presented the Draft Playbook and received comments from the Council and the general public. A Study Session Summary can be found in RTC No. 19-0652.
- An online survey via Open City Hall, which provided survey respondents with a short survey option or a longer, more detailed two-part option.

Staff advertised the Draft Playbook and public outreach meetings through the City’s website, City e-newsletters, social media ads, newspaper ads, online ads, email blasts to targeted listservs, neighborhood associations and volunteer groups.

A total of 119 people attended the public outreach meetings. A total of 152 responses were received via the online survey. The community was generally supportive of the overarching long-term targets proposed in the Draft Playbook, with a comparable number of individuals indicating that the targets were not ambitious enough. Some written comments expressed concerns about the City spending resources on climate action.

The community was largely supportive of the Plays in the Draft Playbook, as shown in Figure 4. Even Plays that the community was least excited about (e.g., Play 4.4) received an overall favorable rating (67 responses indicating “high enthusiasm” vs. 45 responses indicating low enthusiasm).

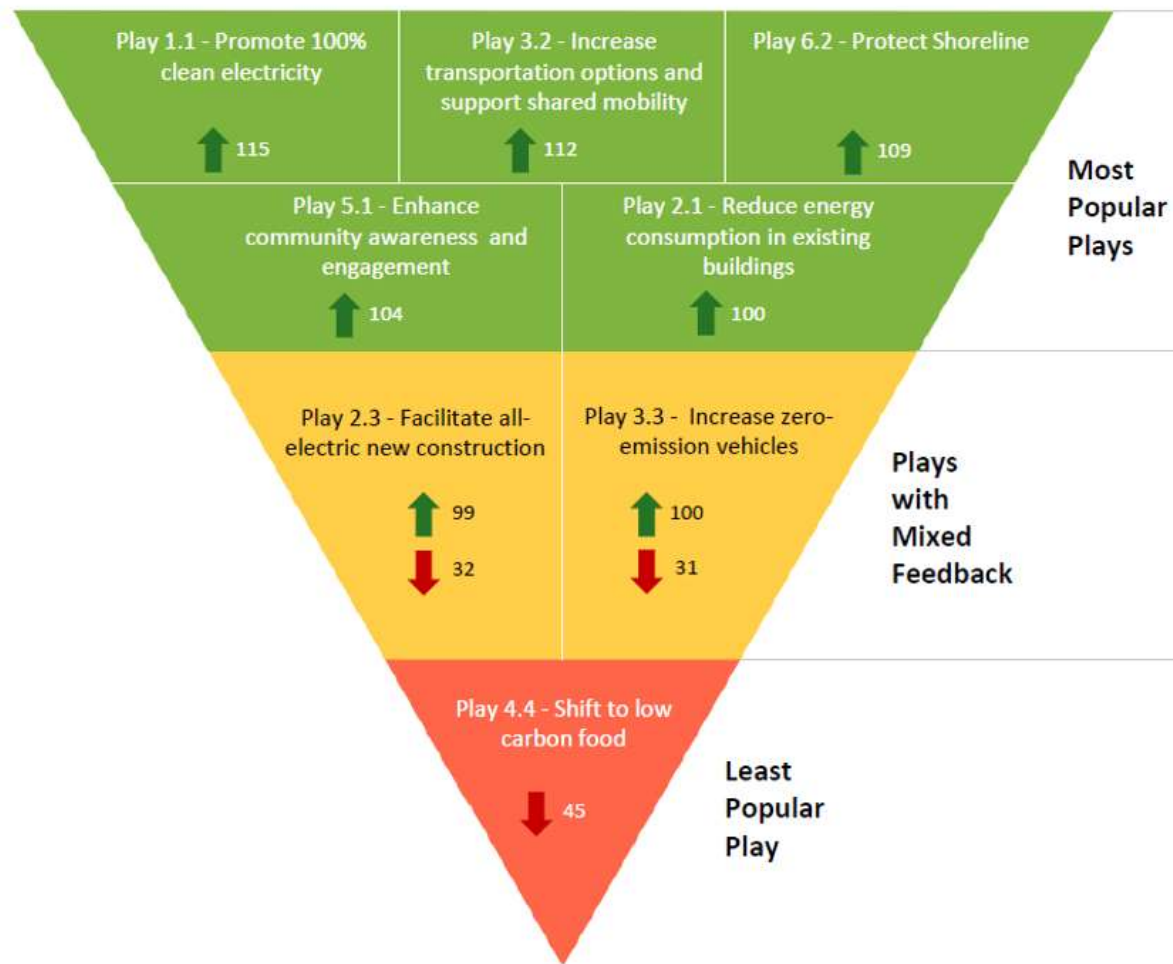


Figure 4. Community Support and Concerns Related to the Playbook

Of the 46 Next Moves in Game Plan 2022, only two Moves received less than one-third support as expressed by low enthusiasm ratings. These were:

- Move 3.B - Identify areas that are most appropriate for parking strategies that discourage vehicle use, such as pricing, time limits, and supply restrictions.
- Move 3.I - Monitor autonomous vehicle testing and deployment to inform proactive policy.

Of note is that Move 3.A (Plan for additional housing, with the goal of diverse housing, to reduce long-distance commutes) had mixed feedback as it appeared within the top five Moves with both the most excitement as well as the top five Moves with the lowest excitement.

A snapshot of the public review feedback from surveys and meetings is presented in Attachment 6 and a full compilation of the feedback is presented in Attachment 7.

Key Changes to Draft Playbook

Based on the feedback gathered, the following revisions were made and are reflected in the final Playbook (Attachment 3):

- *Emphasize battery storage*

New Play 1.3 added to reflect the important role of local battery storage in enhancing availability of clean electricity supply and resilience.

- *Accelerate all-electric new buildings*

2030 target for Play 2.3 revised to 100 percent all-electric new buildings, versus previous target of 2050 for all-electric new buildings.

- *Adjust vehicle miles targets downward*

Targets for vehicle miles travelled per person scaled downward to align better to related Plays, such that the targets are ambitious and also attainable. New targets are 13 percent reduction in vehicle miles per person by 2030 (previously 37 percent reduction by 2030) and 25 percent reduction in vehicle miles per person by 2050 (previously 47 percent reduction by 2030), measured relative to 2016 vehicle miles per person.

- *Simplify Zero Waste target*

Revised the language for Zero Waste Play 4.1 and its targets to specify a per person waste reduction goal rather than a communitywide diversion rate.

- *Revise Play and Move related to food choices*

Play 4.4 and Move 4.H revised to clarify terminology and to emphasize personal choice.

- *2030 GHG target revised*

With the change to the target date for all-electric buildings (which enhanced GHG reductions for 2050) and the dialing down of reduction targets for vehicle miles (which decreased GHG reductions achieved for both 2030 and 2050), the net result is that the GHG reduction target for 2030 decreases from 60 percent to 55 percent below 1990 levels. This 2030 target is still markedly higher than the 40 percent State target. The 2050 target remains at 80 percent.

Strong consideration was given to the following feedback, but changes are not proposed for the Playbook as described below.

- *Increase zero-emission vehicle targets*

Feedback received indicated a preference to dial up the zero-emission vehicle targets (25 percent of all vehicles are zero-emission by 2030 and 75 percent of all vehicles are zero-emission by 2050) to reflect the anticipated rapid market adoption of such vehicles and alleviate expectations on sharp reductions in driving patterns reflected in the targets for Plays 3.1 and 3.2. Based on consultant team expertise, increasing the 75 percent zero emission vehicles target for 2050 would be unrealistic. Therefore, the zero emission vehicle targets were not modified from the Draft Playbook.

- *Consider adopting a “carbon neutral” by 2045 target to align with Executive Order B-55-18*

Feedback received requested consideration for adopting the “carbon neutral by 2045” target

for Sunnyvale to align with Executive Order B-55-18. The Executive Order was signed by former Governor Brown in September 2018 during the development of the Playbook and does not define “carbon neutral” as a numerical target. For the purposes of the Playbook, the City assumes “carbon neutral” is equivalent to an 80 percent reduction in emissions. Staff recommends adopting the proposed target of carbon neutral (80 percent) by 2050.

FISCAL IMPACT

Implementation of the Playbook will occur through 2050. Staff has identified the resources needed for the implementation of Game Plan 2022, which covers fiscal years 2019/20 through 2021/22. Funding for the Playbook’s Game Plan 2022 is available in Project 821290 - Climate Action Plan Implementation. This Project includes:

- One-time costs of \$1.64 million, covering consultant services, temporary staffing, and infrastructure needs
- Ongoing costs of approximately \$500,000 per year to fund three new positions: 1.0 FTE Transportation Planner in Public Works, 1.0 FTE Environmental Programs Specialist in Environmental Services, and funding for a Sustainability Fellow in Environmental Services

Funding needs for the Climate Action Playbook will be refined as needed and considered as part of the annual budget process. In the near term, staff will be working with SVCE to identify opportunities to leverage SVCE’s territory-wide initiatives and programs for Sunnyvale residents and businesses. Staff will also work on studying the potential revision of utility user tax rates as a potential revenue source and incentive for electrification. In addition, staff will continue to monitor for grant opportunities to support climate action programs.

PUBLIC CONTACT

Public contact regarding this item was made through the following ways:

1. Posting of the agenda for the Planning Commission on the City’s official-notice bulletin board, City’s website, and at the Office of the City Clerk.
2. Sustainability Commission and CAP 2.0 Advisory Committee public hearings at a joint meeting on July 15, 2019.
3. Bicycle and Pedestrian Advisory Commission public hearing on July 18, 2019.

Community Engagement

During the development of the Playbook, the consultant team conducted extensive outreach to engage the community in contributing ideas for reducing GHG emissions. An ideation workshop was held in March 2018 with more than 165 attendees. A public platform was created to crowdsource ideas and, ultimately, more than 240 ideas were evaluated. In addition, a Pitch Event was held at LinkedIn on July 30, 2019, to recognize selected ideas contributed by the community. The ideas from the community were used to shape the core Strategies and Plays of the Playbook.

Public Outreach for Draft Playbook

To share the Draft Playbook and gather public comments, staff engaged the community through:

1. An online survey hosted on Open City Hall;
2. Social media posts on Facebook and Nextdoor;
3. Seven community outreach meetings during March and April;
4. Paid online and newspaper advertisements;
5. E-mail notifications to selected e-mail lists; and

6. Announcements in the City's e-newsletters.

ALTERNATIVES

Recommend that the City Council:

1. Adopt a Resolution to Adopt the Climate Action Playbook, including the greenhouse gas reduction targets of 55 percent by 2030 and 80 percent by 2050, make the findings required by CEQA and accept the Addendum to the LUTE EIR.
2. Adopt a Resolution to Adopt the Climate Action Playbook, including the greenhouse gas reduction targets of 55 percent by 2030 and 80 percent by 2050, make the findings required by CEQA and accept the Addendum to the LUTE EIR, with modifications.
3. Other recommendation provided by the Commission.

RECOMMENDATION

Recommend Alternative 1 to City Council: Adopt a Resolution to Adopt the Climate Action Playbook (Attachment 8 of the report), including the greenhouse gas reduction targets of 55 percent by 2030 and 80 percent by 2050, make the findings required by the California Environmental Quality Act and accept the Addendum to the Land Use and Transportation Element (LUTE) EIR (Attachment 2).

The Climate Action Playbook provides a pathway to exceed the State's 2030 target by achieving a 55 percent reduction below 1990 levels, and achieve the State's 2050 target. The Playbook identifies six core Strategies, 18 Plays, and targets to enable the City to reduce GHG reductions. The Playbook also includes a Game Plan that outlines 46 Next Moves for implementation in the next three years.

Adoption of the Playbook also completes Study Issue ESD 18-01 (Encouraging Heat Pump Water and Space Heating), which was presented to the City Council at a Study Session on November 27, 2019 (See Study Session Summary Report RTC No. 18-1084). The Study Issue presentation covered an overview of heat pump technologies; their potential to reduce greenhouse gas emissions in Sunnyvale; their cost-effectiveness for different building types, appliances, and scenarios; methods to encourage the adoption of heat pump technology including outreach, incentives, and policy approaches; and SVCE's proposed pilot program design. Council expressed interest in exploring the possibility of requiring heat pumps or having all-electric requirements for new construction and expressed support for staff's next steps to include heat pumps as a part of the Playbook. In alignment with the Council direction provided at this Study Session, staff has committed to pursuing the expansion of heat pump technologies via Move 2.C (Develop a program to accelerate the adoption of heat pump water heaters and space heaters) of Game Plan 2022.

The Playbook represents bold targets that are aimed to inspire and guide the City and community in achieving significant GHG reductions. It demonstrates a broad commitment to collaboration across the City organization, with and within the community, and across agencies. It is aligned with ongoing efforts, including the updates to the Integrated Bicycle, Pedestrian, and Safe Routes to School Plan, and the recently adopted Green Building Program.

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Reviewed by: Trudi Ryan, Director, Community Development Department

Reviewed by: Chip Taylor, Director, Department of Public Works

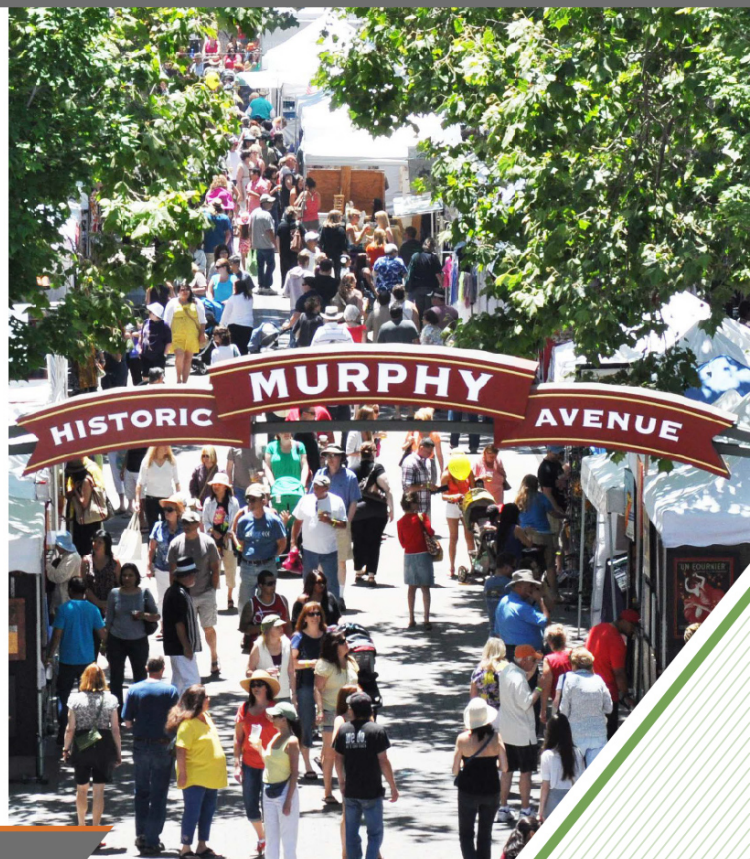
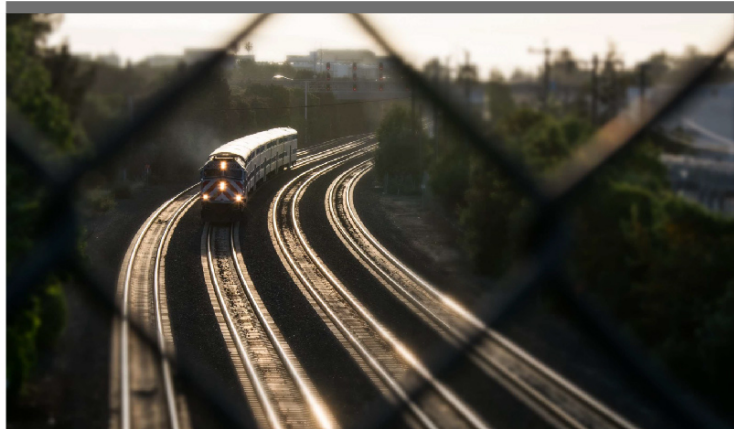
Reviewed by: Teri Silva, Assistant City Manager

Approved by: Kent Steffens, City Manager

ATTACHMENTS

1. Reserved for Report to Council
2. Addendum to LUTE EIR
3. Climate Action Playbook (with appendices)
4. At-A-Glance: Pathway to 2050
5. At-A-Glance: Game Plan 2022 ("Next Moves")
6. Snapshot of Public Review Feedback
7. Compilation of Public Review Feedback
8. Resolution

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CITY OF SUNNYVALE

Climate Action Playbook Project LUTE Final EIR Addendum



Sunnyvale

Climate Action Playbook Project

Final EIR Addendum

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July 2019

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LIST OF ABBREVIATIONS

AB	Assembly Bill
ABAG	Association of Bay Area Governments
AFY	acre-feet per year
BAAQMD	Bay Area Air Quality Management District
BAU	Business-as-usual
BMP	best management practices
CAP 1.0	City of Sunnyvale Climate Action Plan
CARB	California Air Resources Board
CBC	California Building Code
CCA	Community Choice Aggregation
CEQA	California Environmental Quality Act
CLUP	Comprehensive Land Use Plan
EIR	Environmental Impact Report
EV	electric vehicle
GHG	greenhouse gas
LID	low impact design
LOS	levels of service
LUTE	Land Use and Transportation Element
MPO	metropolitan planning organizations
MRP	Municipal Regional Stormwater Permit
MTCO ₂ e	metric tons of carbon dioxide equivalent
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
PG&E	Pacific Gas and Electric
Playbook	Climate Action Playbook
PPV	peak particle velocity
PRC	Public Resources Code
PV	photovoltaics
SB	Senate Bill
SCS	sustainable community strategies
SVCE	Silicon Valley Clean Energy
SWPPP	stormwater pollution prevention plan
TAC	toxic air contaminants
TDM	Transportation Demand Management
VMT	vehicle miles traveled
WSA	Water Supply Assessment
ZNE	Zero Net Energy

Addendum to the Land Use and Transportation Element Final Environmental Impact Report

State Clearinghouse No. 2012032003

BACKGROUND AND ACTION TRIGGERING THE ADDENDUM

This document serves as an addendum to the Final Environmental Impact Report (Final EIR) for the City of Sunnyvale's Land Use and Transportation Element (LUTE). As discussed in Section 3.13, "Greenhouse Gases and Climate Change," of the Final EIR, the LUTE could result in comparable greenhouse gas (GHG) emissions efficiencies anticipated by the Climate Action Plan (CAP) 1.0 for 2035 and meet GHG reduction percentages specified in the CAP 1.0. However, the GHG modeling used in the EIR included different assumptions and inputs than the activity-based modeling used in CAP 1.0, and results of the analysis cannot be equivalently compared to demonstrate compliance with 2035 GHG reduction targets outlined in CAP 1.0. To demonstrate compliance with 2020 and 2035 GHG reduction targets, the LUTE EIR resulted in the adoption of Mitigation Measure 3.13.1 which required the City to update the CAP 1.0 to include the new LUTE growth projections. To implement Mitigation Measure 3.13.1, the City of Sunnyvale prepared the Climate Action Playbook (Playbook) which identifies six key Strategies and eighteen Plays that specify a plan of action to reduce GHG emissions across all sectors. The Playbook outlines a pathway to achieve GHG emission reductions of 55 percent below 1990 levels by 2030 (exceeding the State's interim target) and 80 percent below 1990 levels by 2050. Consistent with the LUTE EIR Mitigation Measure 3.13.1, the Playbook's GHG emissions forecast uses Sunnyvale-specific growth projections from the LUTE. These Strategies and Plays complement the policy framework in the LUTE by promoting clean electricity, decarbonizing transportation and buildings, encouraging sustainable land use and resource management, enhancing community awareness, and enhancing community resilience to climate change.

As the lead agency under the California Environmental Quality Act (CEQA), the City of Sunnyvale has determined that, in accordance with Section 15164 of the State CEQA Guidelines, the adoption and implementation of the proposed Playbook warrants the preparation of an addendum.

PREVIOUS ENVIRONMENTAL ANALYSIS

The environmental process for the LUTE involved the preparation of the following documents that are relevant to the consideration of the proposed Playbook.

- ▶ Land Use and Transportation Element, April 2017
- ▶ Draft EIR for the Land Use and Transportation Element, August 2016
- ▶ Final EIR for the Land Use and Transportation Element, January 2017

For the purposes of this addendum the LUTE EIR consists of the Draft EIR and the Final EIR. The Final EIR incorporates the Draft EIR by reference and it also includes responses to comments on the Draft EIR and any corrections to the Draft EIR.

CALIFORNIA ENVIRONMENTAL QUALITY ACT GUIDELINES REGARDING AN ADDENDUM TO AN ENVIRONMENTAL IMPACT REPORT

Altered conditions, changes, or additions to the description of a project that occur after certification of an EIR may require additional analysis under CEQA. The legal principles that guide decisions regarding whether additional environmental documentation is required are provided in the State CEQA Guidelines, which establish three mechanisms to address these changes: a subsequent environmental impact report (SEIR), a Supplement to an EIR, and an Addendum to an EIR.

Section 15162 of the State CEQA Guidelines describes the conditions under which a SEIR would be prepared. In summary, when an EIR has been certified for a project, no Subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in light of the whole record, one or more of the following:

- (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects;
- (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, shows any of the following:
 - (A) The project will have one or more significant effects not discussed in the previous EIR;
 - (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measures or alternatives; or
 - (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Section 15163 of the State CEQA Guidelines states that a lead agency may choose to prepare a supplement to an EIR rather than a Subsequent EIR if:

- (1) any of the conditions described above for Section 15162 would require the preparation of a SEIR; and
- (2) only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.

An addendum is appropriate where a previously certified EIR has been prepared and some changes or revisions to the project are proposed, or the circumstances surrounding the project have changed, but none of the changes or revisions would result in significant new or substantially more severe environmental impacts, consistent with CEQA Section 21166 and State CEQA Guidelines Sections 15162, 15163, 15164, 15168, and 15183.

This addendum is intended to evaluate and confirm CEQA compliance for the proposed Playbook, which would be a change relative to what is described and evaluated in the LUTE EIR. This addendum is organized as an environmental checklist, and is intended to evaluate all environmental topic areas for any changes in circumstances or the project description, as compared to the certified LUTE EIR, and determine whether such changes were or were not adequately covered in the certified LUTE EIR. This checklist is not the traditional CEQA Environmental Checklist, per Appendix G of the CEQA Guidelines. As explained below, the purpose of this checklist is to evaluate the checklist

categories in terms of any "changed condition" (i.e., changed circumstances, project changes, issues that are peculiar to the project, or new information of substantial importance) that may result in a different or new environmental impact significance conclusion from the EIR. The column titles of the checklist have been modified from the Appendix G presentation to help answer the questions to be addressed pursuant to CEQA Section 21166 and State CEQA Guidelines Section 15162, 15163, 15164, 15168, and 15183.

1 INTRODUCTION AND PROJECT HISTORY

The City of Sunnyvale Climate Action Plan (CAP 1.0), adopted by the City Council in May 2014, outlines the City's path toward mitigating the effects of climate change while fostering a sustainable, healthy, and livable community. CAP 1.0 identifies sources of greenhouse gas (GHG) emissions within the city's boundary and establishes strategies for reducing GHG emissions from each contributing sector including energy transportation, land use, water, and solid waste. The GHG reduction strategies were designed to achieve a reduction target of 15 percent below 2008 levels by the year 2020 (equivalent to 1990 levels), consistent with Assembly Bill (AB) 32, and initiate a path towards achieving a GHG emission reduction target of 80 percent below 1990 levels by 2050, consistent with Executive Order S-3-05. Implementation of the CAP 1.0 enabled the City to decrease GHG emissions by 12 percent below 1990 in 2016, surpassing the City's goal of reaching 1990 levels of emissions by 2020. Although implementation of CAP 1.0 helped the City exceed the state's 2020 GHG emissions reduction target, it was not designed to address state reduction targets for 2030 and 2050. In addition, the CAP 1.0 growth predictions were based on land use designations in the City's 1997 Land Use and Transportation Element (LUTE). As discussed in more detail below, the City updated the LUTE in 2017. This update increased the City's population growth projection by approximately 13,400 residents and its total employment by approximately 14,500 jobs as compared to projections in the previous LUTE (City of Sunnyvale 2016).

The Sunnyvale City Council adopted the updated LUTE of the General Plan in April 2017. The LUTE establishes the fundamental framework of how streets and buildings in the City of Sunnyvale will be laid out and how various land uses, developments, and transportation facilities will function together. The LUTE and accompanying policies were developed to help guide decision-making regarding land use and transportation for an approximate 20-year horizon—a time frame that is referred to as *Horizon 2035*. The LUTE land use policies provide guidance for the amount, location, and direction of future change. In addition, the LUTE's policy framework encourages the City to promote sustainable growth and maintain a CAP that supports the LUTE by establishing specific measures to put the City in a regional leadership role regarding its GHG emissions reductions.

The City prepared and certified an Environmental Impact Report (EIR) (State Clearinghouse No. 2015062013) for the LUTE that evaluated the environmental impacts associated with development of land uses and implementation of transportation planning efforts in Sunnyvale as regulated and guided by the LUTE. As discussed in Section 3.13, "Greenhouse Gases and Climate Change," of the EIR, the LUTE could result in comparable GHG emissions efficiencies anticipated by the CAP 1.0 for 2035 and meet GHG reduction percentages specified in the CAP 1.0. However, the LUTE has different growth projections than the CAP 1.0. The GHG modeling used in the EIR included different assumptions and inputs than the activity-based modeling used in CAP 1.0, and results of the analysis cannot be equivalently compared to demonstrate compliance with 2035 GHG reduction targets outlined in CAP 1.0. To demonstrate compliance with 2020 and 2035 GHG reduction targets, the LUTE EIR resulted in the adoption of Mitigation Measure 3.13.1 which required the City to update the CAP 1.0 to include the new LUTE growth projections. Therefore, the development of an updated climate action plan that incorporates the new LUTE growth projections is an implementation action of the LUTE.

The City of Sunnyvale's updated climate action plan, called the Climate Action Playbook (Playbook), was released for public review in March 2019. The Playbook outlines a pathway to achieve GHG emission reductions of 55 percent below 1990 levels by 2030 (exceeding the State's interim target) and 80 percent below 1990 levels by 2050. Consistent with the LUTE EIR Mitigation Measure 3.13.1, the Playbook's GHG emissions forecast uses Sunnyvale-specific growth projections from the LUTE. The Playbook identifies six key Strategies and eighteen Plays that specify a plan of action to reduce GHG emissions across all sectors. These Strategies and Plays complement the policy framework in the LUTE by promoting clean electricity, decarbonizing transportation and buildings, encouraging sustainable land use and resource management, enhancing community awareness, and enhancing community resilience to climate change.

The LUTE EIR (consisting of the Draft EIR and Final EIR) was a program EIR that considered the environmental effects from the 2035 buildout scenario of the LUTE. Consistent with Public Resources Code (PRC) Section 21083.3(b) and State CEQA Guidelines (CEQA Guidelines) Section 15168 and 15183 the LUTE EIR can be used as the CEQA document

for subsequent projects (public and private) consistent with the LUTE. As projects are proposed, such as the Playbook, they are evaluated to determine whether the actions proposed fall within the scope of the LUTE, whether project impacts are addressed in the certified LUTE EIR, and whether the project incorporates all applicable performance standards and mitigation measures identified therein. Should subsequent projects not be consistent with the approved LUTE, or if there are specific significant effects that are peculiar to the project and cannot be addressed by uniformly applied policies or standards, additional environmental review through the subsequent review provisions of CEQA for changes to previously-reviewed and approved projects may be warranted.

Consistent with the process described, the City is evaluating the project application to determine if additional environmental review would be required. This environmental checklist has been prepared to determine whether the environmental impacts of the Playbook meet any of the following four conditions:

- (1) Are peculiar to the project or the area in which the project would be located,
- (2) Were not analyzed as significant effects in the LUTE EIR,
- (3) Are potentially significant off-site impacts and cumulative impacts which were not addressed in the LUTE EIR, or
- (4) Are previously identified significant effects which, are determined to have a more severe adverse impact than discussed in the LUTE EIR based on substantial new information that was not known at the time the LUTE EIR was certified.

If an impact is not peculiar to the project, has been addressed as a significant effect in the LUTE EIR, or can be substantially mitigated by the imposition of uniformly applied policies or standards, then an additional EIR need not be prepared for the project solely on the basis of that impact.

2 PROJECT DESCRIPTION

2.1 PROJECT OVERVIEW

The City of Sunnyvale, as the lead agency, proposes to adopt a comprehensive GHG reduction plan, called the Climate Action Playbook, including key Strategies, Plays, and Moves that would apply to all property located within the City. The Playbook does not include any development proposals and would not directly result in physical environmental effects due to the construction and operation of facilities.

2.2 PROJECT LOCATION

As shown in Figure 2-1, the City of Sunnyvale is located within northwest Santa Clara County, in the greater San Francisco Bay Area. The City of Sunnyvale is almost surrounded by the cities of Santa Clara, Cupertino, Los Altos, and Mountain View, and the San Francisco Bay.

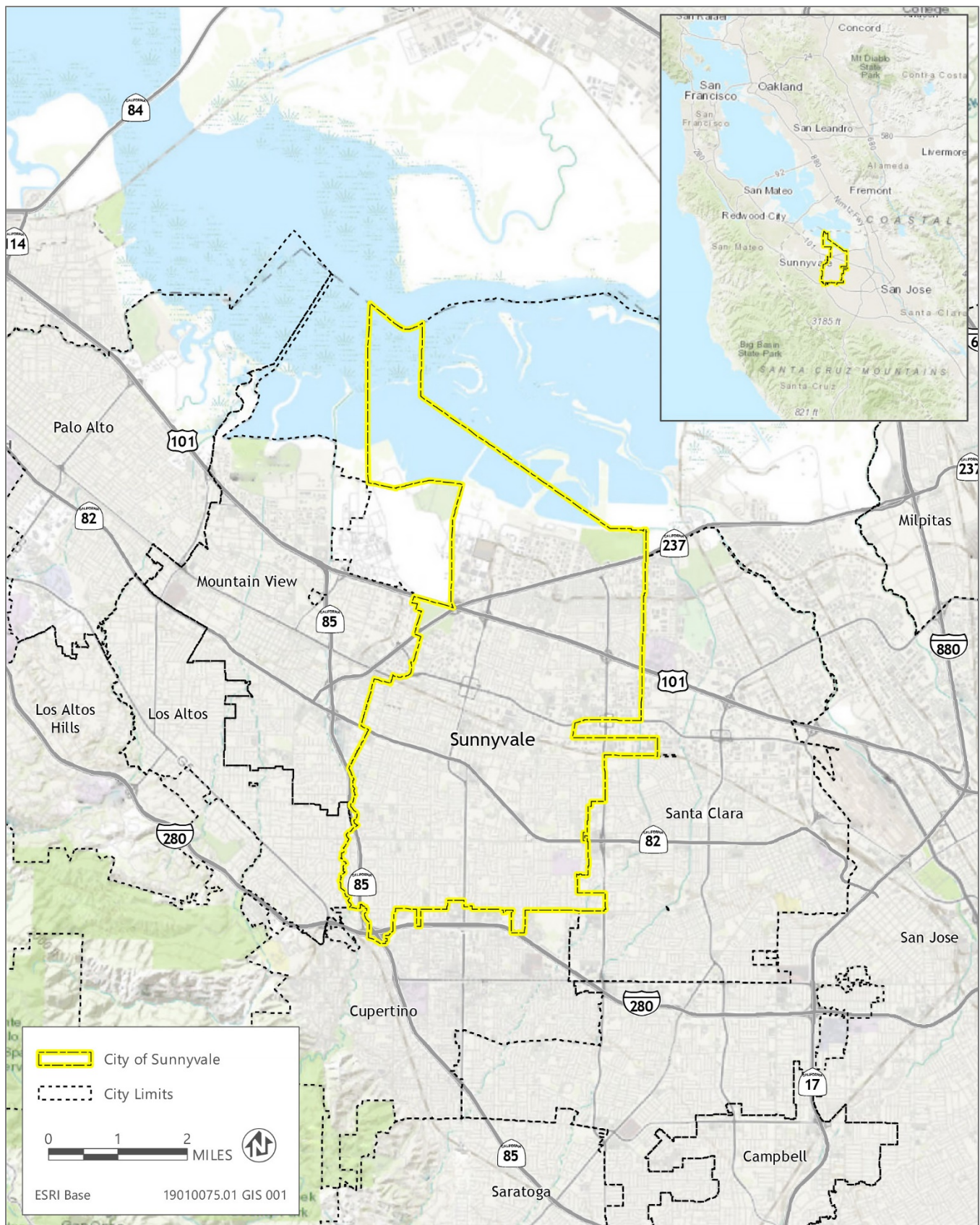
The planning area for the Playbook is the same planning area that was considered by the 2017 LUTE which encompasses approximately 24 square miles, as shown in Figure 2-2. This includes the City's sphere of influence.

2.3 DESCRIPTION OF PROPOSED PROJECT

Reducing GHG emissions in California has been the focus of the state government for approximately two decades (State of California 2018). GHG emission targets established by the state legislature include reducing statewide GHG emissions to 1990 levels by 2020 (Assembly Bill [AB] 32 of 2006) and to 40 percent below 1990 levels by 2030 (Senate Bill [SB] 32 of 2016). Executive Order S-3-05 calls for reducing statewide GHG emissions to 80 percent below 1990 levels by 2050. Executive Order B-55-18 calls for California to achieve carbon neutrality by 2045 and to achieve and maintain net negative GHG emissions thereafter. These targets are in line with the scientifically established levels needed in the United States to limit the rise in global temperature to no more than 2 degrees Celsius, the warming threshold at which major climate disruptions, such as super droughts and rising sea levels, are projected; these targets also pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius (United Nations 2015:3).

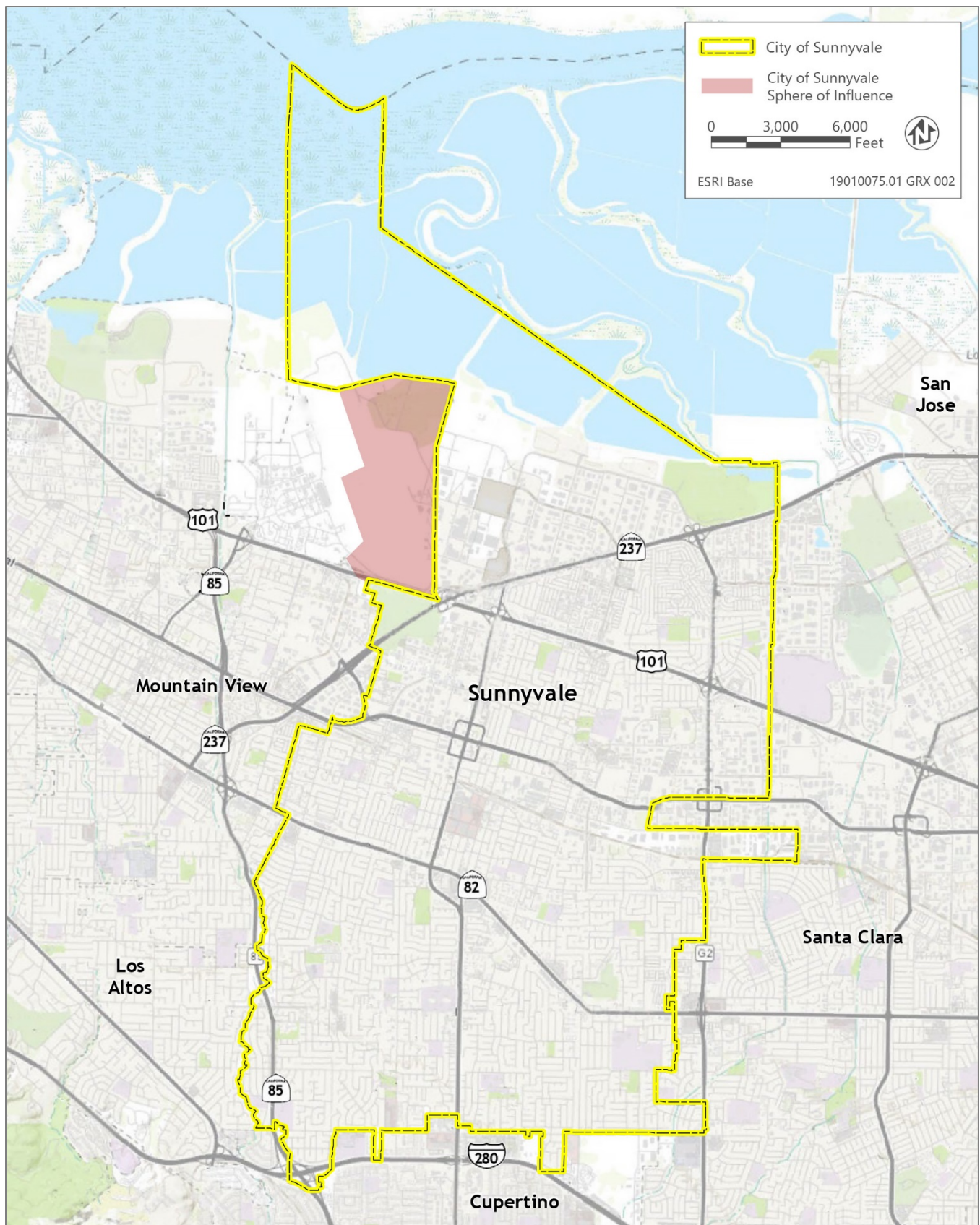
The City of Sunnyvale adopted the CAP 1.0 in 2014 and through implementation of both local actions and state policies, the City has already achieved its 2020 GHG emissions target ahead of schedule. The City of Sunnyvale also played an integral role in the launch of Silicon Valley Clean Energy (SVCE), a community choice aggregator that provides carbon-free electricity to most of the City and surrounding communities. Since SVCE's launch in 2017, it has provided clean electricity to 97 percent of Sunnyvale residents and businesses. Although CAP 1.0 helped the City exceed the state's 2020 GHG emissions reduction target, it was not designed to address state reduction targets for 2030 and 2050. The Playbook builds upon the policy framework established by CAP 1.0 and serves as a guide to achieve or exceed the state's 2030 and 2050 GHG emissions reduction targets.

The following sections describe the project, including the contents of the Playbook.



Source: Adapted by Ascent Environmental in 2019

Figure 2-1 Regional Location



Source: Adapted by Ascent Environmental in 2019

Figure 2-2 Planning Area

2.3.1 Climate Action Playbook

The Playbook is being developed to be consistent with state legislation and policies that are aimed at reducing statewide GHG emissions. This includes:

- ▶ AB 32, which established a target of reducing statewide GHG levels to 1990 levels by 2020;
- ▶ SB 32, which established a mid-term target of reducing statewide GHG levels to 40 percent below 1990 levels by 2030; and
- ▶ Executive Order S-3-05, which recommends a 2050 statewide longer-term GHG reduction goal of reducing GHG emissions 80 percent below 1990 levels.

To develop the Strategies, Plays, and Next Moves in the Playbook, the City analyzed its baseline 2016 GHG emissions, forecasted future emissions while accounting based on growth projections aligned with the LUTE, applied moderating impacts of existing policies and programs, and determined future scenarios for emissions to estimate how emissions can be reduced through climate action. Based on this analysis, the Playbook aims to achieve the following GHG reduction targets:

- ▶ 55 percent below 1990 levels by 2030, and
- ▶ 80 percent below 1990 levels by 2050.

To achieve these GHG reduction targets, the Playbook accounts for actions taken by state and federal agencies and existing City initiatives including continued implementation of CAP 1.0 reduction measures, SVCE's clean electricity supply, and FoodCycle (food scraps collection) program. The Playbook identifies several sector-based Strategies, Plays, and Next Moves that can be implemented locally by the City or others. The City plans to initiate the first cycle in 2022 with subsequent cycles occurring every five years. At the close of each cycle, the City will review progress on implementation of the moves and on the future projections for communitywide emissions to determine the best Next Moves for the subsequent cycle.

CAP CONTENTS

The Playbook contains six chapters which are briefly summarized below:

- ▶ **Executive Summary:** Summarizes the key information contained in the Playbook.
- ▶ **At-a-Glance: Pathway to 2050:** Provides a comprehensive list of proposed key Strategies and Plays.
- ▶ **The Playing Field:** This chapter describes the purpose and context of the plan, provides a detailed accounting of GHG emissions within the City, and established a baseline inventory with 2016 GHG emissions from all sectors. Future GHG emission projections are described and the estimated reductions needed to achieve the state's 2050 target are calculated.
- ▶ **Six Climate Strategies for the Win:** This chapter outlines the Strategies and Plays to be implemented by the City to achieve its GHG reduction targets. The Strategies and Plays focus on locally-based actions to reduce GHG emissions in various categories as a complement to actions taken by state and federal agencies and ongoing City initiatives including CAP 1.0 reduction measures, SVCE's clean electricity supply, and FoodCycle program.
- ▶ **Game Plan: Our Next Moves:** This chapter identifies Next Moves or actions to be implemented by the City to ensure continued progress toward achieving GHG reduction targets. Each move corresponds to a specific Strategy and Play.
- ▶ **Future Work Planning and Resources:** This chapter describes the implementation cycles, potential financing Strategies, and reporting program.

GHG EMISSIONS INVENTORY

A community GHG emissions inventory is an estimate of a defined set of gases emitted to the atmosphere from local or regional sources that contribute to climate change. The City prepared a baseline GHG emissions inventory for the 2008 calendar year as part of the CAP 1.0 planning effort. The 2008 inventory identified and quantified the sources and amounts of GHG emissions that were generated from activities within the City. The 2008 inventory provided a baseline of GHG emissions to be established, against which future changes could be compared. The City's 2008 GHG inventory was guided by the protocols outlined in the U.S. Community Protocol for Accounting and Reporting Greenhouse Gas Emissions (ICLEI 2013). In accordance with the two-year reporting cycle committed to in the CAP 1.0 implementation plan, the City prepared subsequent GHG emission inventories for calendar years 2014 and 2016.

In 2016, Sunnyvale emitted 880,000 metric tons of carbon dioxide equivalent (MTCO₂e), representing a 12 percent decrease in emissions below 1990 levels. Prior to the implementation of SVCE, electricity and natural gas consumption in buildings were the largest source of emissions (48 percent), followed by on-road transportation (44 percent) and other sources. Following the implementation of SVCE in 2017, 98 percent of Sunnyvale's residents and businesses were purchasing carbon-free electricity from SVCE. To reflect the impact of SVCE's clean electricity, a modified 2016 GHG emissions inventory was created to estimate the GHG emissions impact as if the complete launch of SVCE had occurred in 2016. The 2016 modified inventory is shown in Table 2-1 below.

Table 2-1 2016 GHG Emissions Inventory with SVCE Lens

Emissions Sector	2016 with SVCE Lens (MTCO ₂ e/year)	Percent
Electricity (residential)	4,165	0.6
Electricity (commercial)	46,385	6
Natural gas (residential)	92,999	13
Natural gas (commercial)	119,659	17
On-road transportation (gasoline)	331,074	46
On-road transportation (diesel)	55,154	8
Water and wastewater	3,202	0.5
Solid waste	47,409	7
Off-road equipment	19,173	3
Caltrain	1,197	0.2
Total	720,418	100

Note: Columns may not add to totals due to rounding.

MTCO₂e = metric tons of carbon dioxide equivalent

Source: City of Sunnyvale 2019, *Draft Climate Action Playbook*, Appendix C.

As illustrated in Table 2-1, communitywide emissions are estimated to be 720,418 MTCO₂e. The largest source of these emissions is transportation (54 percent), with 46 percent from gasoline vehicles and 8 percent from diesel vehicles. Emissions from natural gas contribute nearly 30 percent to communitywide emissions, with consumption commercial buildings accounting for 17 percent and residential buildings accounting for 13 percent. Residential electricity consumption accounted for less than 1 percent of the City's emissions in 2016, due to clean electricity from SVCE. Therefore, to achieve the Playbook reduction targets, the City must take action to reduce emissions from four key sectors; natural gas, electricity, transportation, and waste.

GHG EMISSIONS FORECASTS

GHG emissions forecasts for a community are used to estimate future emissions levels in the absence of climate action measures. The following four scenarios were developed to support the Playbook:

- ▶ **Business-as-usual (BAU) forecast:** analyzes how emissions will grow if per capita consumption trends and efficiencies remain at their 2016 level, while the number of jobs households, and people in Sunnyvale continues to grow. The BAU analyses incorporates the demographic projections included in the LUTE through 2035. In the absence of further growth projections through 2050, the BAU forecast assumes that the same rate of growth continues between 2035 and 2050.
- ▶ **BAU with state policies forecast:** analyzes how emissions will change under the moderating impact of state and federal policies currently in place that are expected to significantly reduce GHG emissions in Sunnyvale.
- ▶ **BAU with state policies and CAP 1.0 measures:** represents the most likely emissions trajectory for Sunnyvale in the absence of new climate action. This forecast considers ongoing implementation of the City's CAP 1.0, including the launch of SVCE.
- ▶ **Target reduction path (Playbook):** identifies the path to meet the state's 2050 GHG reduction target of 80 percent below 1990 levels. This path assumes a GHG reduction greater than 40 percent must be achieved by 2030 in order to meet the 2050 target. Emissions reductions achieved in the short-term (i.e., through 2030) will better position the City to meet its longer-term 80 percent reduction by 2050 target. Therefore, it is very important that the City exceed the state's interim target by meeting a 55 percent reduction by 2030 to stay on the pathway to 2050.

Projected 2030 and 2050 GHG emissions under each forecast scenario are shown in Table 2-2 below.

Table 2-2 City of Sunnyvale Projections (MTCO₂e/year)

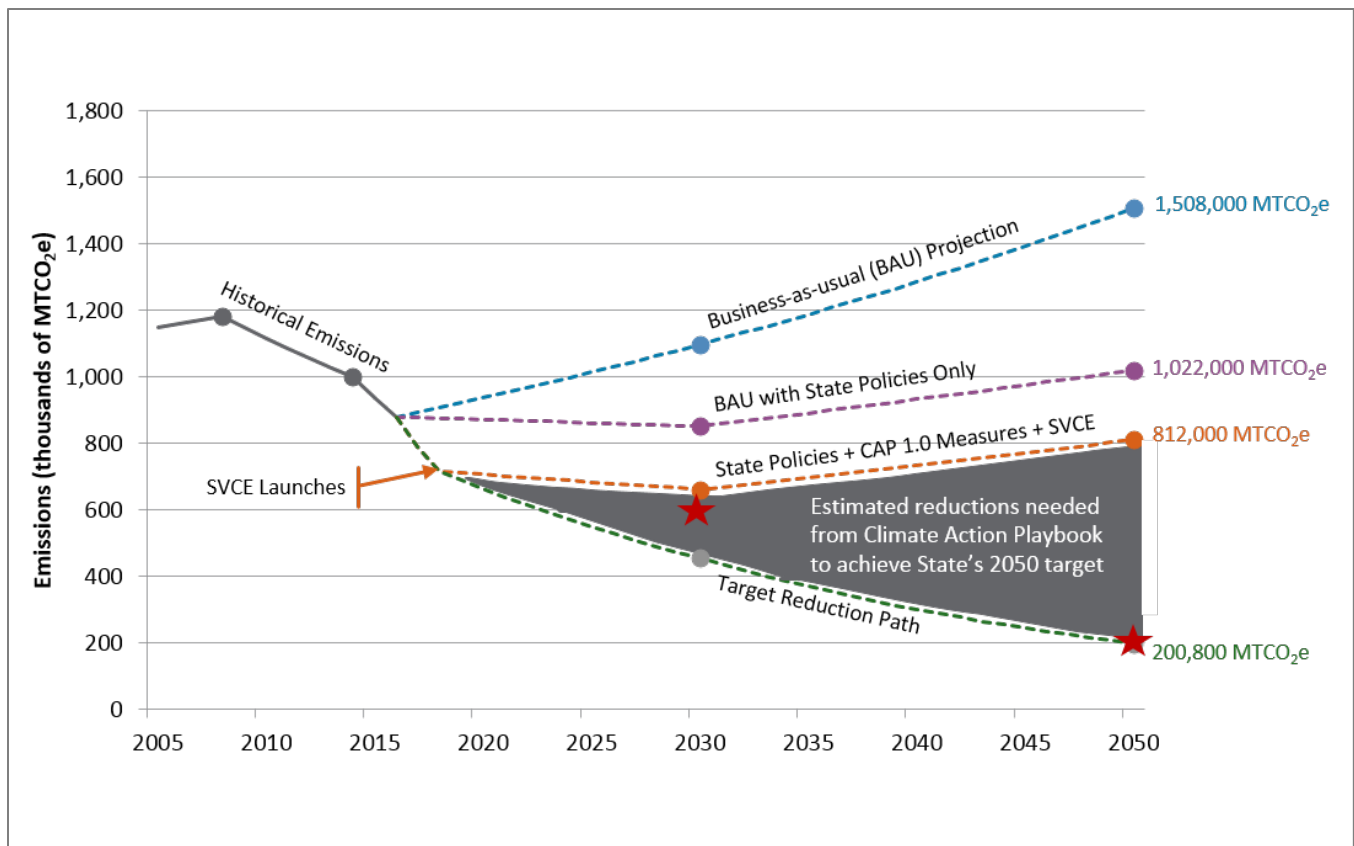
Emissions Forecast	2030	2050
BAU	1,096,716	1,507,877
BAU with State Policies	852,550	1,021,498
BAU with State Policies and CAP 1.0	662,055	812,012
Playbook Reduction Target	396,246	200,839
GHG Gap ^a	265,809	611,173

Notes: BAU = Business as usual, MTCO₂e/year = metric tons or carbon dioxide equivalent per year

^a. The value was calculated by taking the difference between the BAU with state policies and CAP 1.0 forecast and the Playbook reduction target forecast.

Source: City of Sunnyvale 2019, *Climate Action Playbook*, Appendix C

The Playbook contains key Strategies, Plays, and moves that are designed to address the GHG gap between the Playbook reduction target forecast and the BAU forecast that accounts for the state policies and CAP 1.0, as shown in Figure 2-3 below.



Source: City of Sunnyvale, Climate Action Playbook, 2019

Figure 2-3 Historical and Forecasted GHG Emissions

KEY STRATEGIES, PLAYS, AND MOVES

The Playbook includes a strategic framework that lays out the pathway to achieve the 2030 and 2050 targets. The framework includes the following elements:

- ▶ Key Strategies: six key Strategies for Sunnyvale to reduce communitywide GHG emission, as well as enhance resilience and adapt to climate change.
- ▶ Plays: eighteen Plays associated with key Strategies that specify a plan of action. Where possible, Plays are associated with measurable targets, which will be tracked and reported in progress reports.
- ▶ Game Plan: a compilation of Next Moves or more specific actions to be taken by the City in the next three years i.e., through 2022. The Game Plan of Next Moves will be revised every five years to ensure the City stays on track with the Plays and Strategies.

Refer to Tables 2-3 and 2-4 for a complete set of Strategies, Plays, and moves included in the Playbook.

2.4 POTENTIAL PERMITS AND APPROVALS RERQUIRED

The project would require the following actions by the City.

- ▶ approval of Climate Action Playbook

Table 2-3 Playbook Strategies and Plays

Key Strategies, Plays, and Moves
<p>Strategy 1: Promoting Clean Electricity</p> <p>Play 1.1: Promote 100% clean electricity. The City is committed to working with Silicon Valley Clean Energy to expand 100% clean energy services to 100% of our community. Supporting and protecting this clean electricity supply is critical to other Strategies from this Playbook that rely on decarbonization (namely, Strategies 2 and 3).</p> <p>Play 1.2: Increase distributed solar photovoltaics (PV) and storage. Targeted incentives, regulations and educational resources will be essential to increasing adoption of solar-plus-storage resources in Sunnyvale.</p> <p>Play 1.3: Increase distributed electricity storage. Pursue opportunities for electricity storage at the building scale, separate from the utility-scale storage that SVCE plans to invest in as a part of its Decarbonization Roadmap. Promote and encourage the use of distributed (or behind-the-meter) electricity storage at commercial and residential buildings in Sunnyvale. Local electricity storage provides opportunities to lower peak electricity demand periods and improve grid resilience; improve cost-effectiveness of electricity for the consumer as time-of-use rates go into effect (anticipated in 2020); and supply emergency backup power for limited periods during power outages.</p>
<p>Strategy 2: Decarbonizing Buildings</p> <p>Play 2.1: Reduce energy consumption in existing buildings. Increasing efficiency will mean continued program outreach and incentives to residents and businesses to encourage efficient designs for new construction and retrofits in existing buildings. System efficiencies such as insulation and upgrades to electric heat pump technologies are top priorities.</p> <p>Play 2.2: Support electrification of existing buildings. Building energy optimization includes an innovative focus on installing efficient, electric systems to heat water and heat/cool interiors. Space and heat pump water heaters are high-efficiency alternatives to natural gas systems and have the added benefit of being powered by clean electricity.</p> <p>Play 2.3: Achieve all-electric new construction. While the state requires moving toward Zero Net Energy (ZNE) for new construction, the City will also incentivize and promote all-electric new construction options for deep decarbonization.</p>
<p>Strategy 3: Decarbonizing Transportation & Sustainable Land Use</p> <p>Play 3.1: Balance land use supply and enhance urban form. The City is committed to creating places to live that are less dependent on automobiles, through ensuring access to nearby services and activity centers. Furthermore, Sunnyvale seeks to provide housing options for all incomes and lifestyles, particularly near transit corridors and Caltrain stations, to support alternative modes of transportation.</p> <p>Play 3.2: Increase transportation options and support shared mobility. Multimodal transportation choices need to be enhanced to offer a variety of travel options in and around the city that are connected to regional transportation systems and destinations. Advocating for and increasing transportation options and shared mobility will create safer, healthier and more convenient movement throughout Sunnyvale.</p> <p>Play 3.3: Increase zero-emission vehicles. Shifting to electric or alternatively fueled (e.g., hydrogen) vehicles has significant potential to reduce GHG emissions related to transportation. Since SVCE provides 100% carbon-free electricity, promoting a shift to electric vehicles away from fossil fuels would significantly reduce emissions. Other priorities include electrification of public transportation, car sharing, and electric bikes and scooters, and also improving availability of alternative fueling stations (e.g., EV charging facilities, hydrogen fueling stations).</p>
<p>Strategy 4: Managing Resources Sustainably</p> <p>Play 4.1: Achieve zero waste goals for solid waste. Diverting waste away from landfills, either to recycling, energy recovery or composting facilities, is critical for the City to realize its Zero Waste goals as outlined in its Zero Waste Strategic Plan. This can be accomplished by waste prevention—consuming and throwing away less—and being smarter about the items that must be thrown away. Expanding Sunnyvale’s food scraps collection program (FoodCycle) will help to increase the amount of organic material diverted away from the landfill. However, state laws and policies limit access to diversion technologies so that 75% diversion is the current limit. Increasing diversion to 90% will require changes at the state level to allow use of technologies that recover energy from unrecyclable resident waste, primarily plastic and paper.</p> <p>Play 4.2: Ensure resilience of water supply. As the region faces water supply challenges driven by recurring droughts and population growth, it will be critical to find ways to reduce the amount of water consumed and increase the sustainability of water supplies. Water conservation and water reuse, in the form of recycled and purified water, will help Sunnyvale reduce the stress placed on Northern California’s water resources.</p> <p>Play 4.3: Enhance natural carbon sequestration capacity. The natural environment, including plants and soil, have an immense capacity to store carbon dioxide that would otherwise be released into the atmosphere. Through implementation of the City’s Urban Forest Management Plan and Green Stormwater Infrastructure Plan, Sunnyvale can continue to capture carbon by expanding its urban tree canopy and designing landscape features to address stormwater pollution and flood risk.</p>

Table 2-3 Playbook Strategies and Plays

Key Strategies, Plays, and Moves
<p>Play 4.4: Promote sustainable food choices. The process of raising livestock, particularly methane emissions from cattle, are a major source of GHG emissions. Reducing consumption of carbon-intensive foods, such as meat or dairy, is a way for community members to directly lower their personal carbon footprints. Additionally, encouraging the production of food in local gardens can help reduce the emissions associated with transporting foods over long distances.</p>
<p>Strategy 5: Empowering Our Community</p>
<p>Play 5.1: Enhance community awareness and engagement. The City is committed to collaborating with the community for immediate and effective climate action through outreach and engagement programs. The City will provide tools, education, and resources (e.g., programs) to enable residents, businesses, corporations, and other stakeholders to work towards mitigating emissions across the Strategies in this Playbook.</p>
<p>Strategy 6: Adapting to a Changing Climate</p>
<p>Play 6.1: Assess climate vulnerabilities for Sunnyvale. The first step in addressing climate impacts is to assess our community's vulnerability to climate change. The City will continue to work with partners to develop tools and resources that enable a better understanding of the vulnerability of our social, environmental, economic, and physical resources to varied climate stressors.</p>
<p>Play 6.2: Protect shoreline area from sea level rise and coastal flooding. The City will continue to plan for and protect the shoreline area under its control against sea-level rise, working with Valley Water (formerly Santa Clara Valley Water District) and other regional partners to do so. Sunnyvale will explore the possible use of traditional levees as well as natural mitigation efforts to protect both its coastal infrastructure, including the City's Water Pollution Control Plant and closed landfill, as well as the natural and built land area along the Bay.</p>
<p>Play 6.3: Strengthen community resiliency. City departments will continue to collaborate with local volunteer and community groups to develop stronger social support systems to improve communication during emergencies and peer-to-peer education of preparedness and response. Pre-emptive rather than reactive strategies are needed to minimize exposure and improve resilience, particularly among the most vulnerable populations in Sunnyvale.</p>
Key Strategies, Plays, and Moves
<p>Move 1.A: Continue to support and steer Silicon Valley Clean Energy (SVCE) in providing clean power and decarbonization programs.</p>
<p>Move 1.B: Collaborate with SVCE to target direct access customers to shift to 100% clean electricity.</p>
<p>Move 1.C: Research a mandatory solar roof ordinance for new commercial developments.</p>
<p>Move 1.D: Collaborate with SVCE to evaluate opportunities for energy storage to maximize utilization of local solar supply and enhance resiliency.</p>
<p>Move 2.A: Research energy disclosure and energy benchmarking requirements for commercial and multi-family residential buildings to encourage property owners and managers to invest in energy efficiency upgrades and building information systems</p>
<p>Move 2.B: Advocate to regional providers of energy efficiency programs (such as Bay Area Regional Energy Network or BayREN, Silicon Valley Energy Watch or SVEW) that their offerings are more aggressively promoted to Sunnyvale residents and businesses.</p>
<p>Move 2.C: Develop a program to accelerate the adoption of heat pump water heaters and space heaters.</p>
<p>Move 2.D: Electrify municipal buildings upon rebuild or significant remodel, including the Civic Center</p>
<p>Move 2.E: Evaluate code and permitting processes to streamline building electrification.</p>
<p>Move 2.F: Investigate the potential for implementing a differential Utility Use Tax that is at least revenue neutral, such that local taxes on electricity are lower than on natural gas, to incentivize electrification.</p>
<p>Move 2.G: Continue to incentivize energy efficient and high-performance buildings through the Green Building Program updates.</p>
<p>Move 3.A: Plan for additional housing, with the goal of diverse housing, to reduce long-distance commutes.</p>
<p>Move 3.B: Identify areas that are most appropriate for parking strategies that discourage vehicle use, such as pricing, time limits and supply reductions.</p>
<p>Move 3.C: Enhance City Transportation Demand Management (TDM) program implementation and monitoring to facilitate further reductions in single-occupant automobile trips, citywide.</p>
<p>Move 3.D: Advocate that regional service providers implement high quality transit service and a robust set of first-and last-mile strategies in over two-thirds of the cross-city corridors.</p>
<p>Move 3.E: Update and implement the Integrated Bicycle, Pedestrian and Safe Routes to School Plan to achieve a connected, safe and active network. Transitioning away from car dependency requires</p>
<p>Move 3.F: Pilot and evaluate shared bicycle and scooter programs.</p>
<p>Move 3.G: Pilot shuttle service in Peery Park and consider options for expansion of a similar service in other areas undergoing redevelopment.</p>

Table 2-3 Playbook Strategies and Plays

Key Strategies, Plays, and Moves
<p>Move 3.H: Develop design standards for streets and parking lots to accommodate increased pick-up and drop-off for rideshare passengers and apply as appropriate.</p> <p>Move 3.I: Monitor autonomous vehicle testing and deployment to inform proactive policy.</p>
<p>Move 3.J: Develop a Community Electric Vehicle Readiness and Infrastructure Plan.</p> <p>Move 3.K: Promote and seek incentives for community adoption of electric vehicles.</p> <p>Move 3.L: Electrify Municipal Fleet as vehicles are replaced and continue to seek incentives for electric vehicles and charging infrastructure.</p>
<p>Move 4.A: Implement and expand food scraps diversion programs to include additional businesses and multi-family residences.</p> <p>Move 4.B: Consider solid waste collection and processing improvements to increase waste diversion away from landfills as a part of service provider and facility transition planning.</p> <p>Move 4.C: Implement campaigns for waste prevention.</p>
<p>Move 4.D: Promote and seek incentives for making water conservation a way of life and set a water reduction target consistent with new statewide requirements.</p> <p>Move 4.E: Partner with Valley Water to evaluate opportunities to expand water reuse.</p>
<p>Move 4.F: Implement the City's Urban Forest Management Plan and continue to protect and expand tree canopy.</p> <p>Move 4.G: Implement the City's Green Stormwater Infrastructure Plan.</p>
<p>Move 4.H: Promote consumer awareness of sustainable food choices.</p> <p>Move 4.I: Work with large businesses to identify best practices for implementing local food gardens.</p>
<p>Move 5.A: Pilot a targeted grassroots community engagement strategy (e.g., Cool Blocks Program¹²) to create stronger connections between neighbors to advance climate action and emergency preparedness.</p> <p>Move 5.B: Evaluate opportunities for the City to provide online resources and tools for community and small business climate action (e.g., resource center for retrofit electrification, online tool or app to track individual carbon emissions).</p> <p>Move 5.C: Create a stronger social media and web presence for Sunnyvale climate action.</p> <p>Move 5.D: Implement the Sustainability Speaker Series¹³.</p> <p>Move 5.E: Pilot and evaluate a program for youth engagement on climate, building on current engagement with school classrooms and green teams.</p> <p>Move 5.F: Build relationships with largest employers to collaborate on climate action, such as: (a) engaging employees to participate in sustainability initiatives; (b) encouraging and facilitating investment in climate action programs or projects.</p>
<p>Move 6.A: Review and summarize assessment products developed by the County's Silicon Valley 2.0 project and by the State.</p> <p>Move 6.B: Participate in regional forums on climate vulnerability and adaptation.</p>
<p>Move 6.C: Collaborate with Valley Water to advance a shoreline protection project with the US Army Corps of Engineers or other partners.</p> <p>Move 6.D: Identify shoreline protection solutions as part of Moffett Park Specific Plan update.</p>
<p>Move 6.E: Update existing emergency preparedness and response plans to address climate-related impacts such as heat events, air quality issues and flooding.</p> <p>Move 6.F: Develop a community resilience plan.</p>

3 ENVIRONMENTAL CHECKLIST FOR SUPPLEMENTAL ENVIRONMENTAL REVIEW

3.1 EXPLANATION OF CHECKLIST EVALUATION CATEGORIES

The LUTE EIR was prepared as a program EIR consistent with the requirements of California Environmental Quality Act (CEQA). The analysis considered the environmental impacts of policy implementation and development buildout that could occur under the LUTE (assumed to be year 2035). The LUTE EIR consists of two documents: the Draft EIR and the Final EIR. The Final EIR incorporates the Draft EIR by reference and it also includes responses to comments on the Draft EIR and any corrections to the Draft EIR. For purposes of this checklist the references to the LUTE EIR are found in the document labeled Draft EIR, unless (the term Final EIR is used to refer to the Final EIR document where changes were made to the Draft EIR).

As discussed in Chapter 1, the project is consistent with the LUTE policies and is considered an implementation action of the LUTE. CEQA Guidelines Section 15183 dictates that, in circumstances such as these, a lead agency “shall not require additional environmental review, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site.” Section 15183 further indicates that an initial study or other analyses should be prepared by a lead agency to determine the scope of environmental review in light of this prohibition. The purpose of this process is to streamline the review of covered projects and reduce the need for the preparation of repetitive environmental studies.

Under Section 15183, the lead agency’s initial study checklist is used to determine whether the following types of impacts may merit additional environmental analysis:

1. Significant impacts that are peculiar to the project or area in which the project would be located,
2. Significant impacts that were not analyzed in a prior EIR on the zoning action, general plan or community plan with which the project is consistent,
3. Potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR prepared for the general plan, community plan or zoning action, or
4. Previously identified significant effects which, as a result of substantial new information, were not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR.

Unless an environmental effect satisfies one of these criteria, the lead agency can rely upon its previously certified EIR (CEQA Guidelines Section 15183[c]).

The purpose of this checklist is to evaluate the categories listed in CEQA Guidelines 15183 to determine whether, in light of the LUTE EIR, there are any significant environmental effects requiring additional environmental analysis. The row titles of the checklist include the full range of environmental topics, as presented in Appendix G of the State CEQA Guidelines. The column titles of the checklist have been modified from the Appendix G presentation to help answer the questions to be addressed pursuant to PRC Section 21083.3(b) and State CEQA Guidelines Section 15183. A “no” answer does not necessarily mean that there are no potential impacts relative to the environmental category, but that there is no change in the condition or status of the impact because it was analyzed and addressed with mitigation measures in the LUTE EIR. For instance, the environmental categories might be answered with a “no” in the checklist because the impacts associated with the project were adequately addressed in the LUTE EIR, and the environmental impact significance conclusions of the LUTE EIR remain applicable. The purpose of each column of the checklist is described below.

Where Impact was Analyzed?

This column provides a cross-reference to the pages of the LUTE EIR where information and analysis may be found relative to the environmental issue listed under each topic.

Any Peculiar Impact?

Pursuant to CEQA Guidelines Sections 15183(b)(1) and 15183(f), this column indicates whether the project could result in a peculiar impact, including a physical change that belongs exclusively or especially to the project or that is a distinctive characteristic of the project or the project site and that peculiar impact is not substantially mitigated by the imposition of uniformly applied development policies or standards.

Any Impact Not Analyzed as Significant Effect in LUTE EIR?

Pursuant to CEQA Guidelines Section 15183(b)(2), this column indicates whether the project would result in a significant effect that was not analyzed as significant in the LUTE EIR. A new EIR is not required if such a project impact can be substantially mitigated by the imposition of uniformly applied development policies or standards.

Any Off-Site or Cumulative Impact Not Analyzed as Significant Effect in LUTE EIR?

Pursuant to CEQA Guidelines Section 15183(b)(3), this column indicates whether the project would result in a significant off-site or cumulative impact that was not discussed in the LUTE EIR. A new EIR is not required if such an off-site or cumulative impact can be substantially mitigated by the imposition of uniformly applied development policies or standards.

Any Adverse Impact More Severe Based on Substantial New Information?

Pursuant to CEQA Guidelines Section 15183(b)(4), this column indicates whether there is substantial new information that was not known at the time the LUTE EIR was certified, indicating that there would be a more severe adverse impact than discussed in the LUTE EIR. A new EIR is not required if such an impact can be substantially mitigated by the imposition of uniformly applied development policies or standards.

Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/Resolve Impacts?

This column indicates whether the LUTE EIR and adopted CEQA Findings provide mitigation measures to address effects in the related impact category. In some cases, the mitigation measures have already been implemented. This column also indicates whether uniformly applied development standards or policies address identified impacts. A "yes" response will be provided if the impact is addressed by a LUTE mitigation measure or uniformly applied development standards or policies. If "NA" is indicated, this Environmental Checklist Review concludes that there was no impact, the adopted mitigation measures are not applicable to this project, or the impact was less-than-significant and, therefore, no mitigation measures are needed.

3.2 DISCUSSION AND MITIGATION SECTIONS

Discussion

A discussion of the elements of the checklist is provided under each environmental category to clarify the answers. The discussion provides information about the particular environmental issue, how the project relates to the issue, and the status of any mitigation that may be required or that has already been implemented.

Mitigation Measures

Applicable mitigation measures from the prior environmental review that would apply to the project are listed under each environmental category. New mitigation measures are included, if needed.

Conclusions

A discussion of the conclusion relating to the need for additional environmental documentation is contained in each section.

4 ENVIRONMENTAL CHECKLIST

4.1 AESTHETICS

ENVIRONMENTAL ISSUE AREA	Where Impact Was Analyzed in the LUTE EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/ Resolve Impacts?
I. Aesthetics.						
Except as provided in Public Resources Code section 21099 (where aesthetic impacts shall not be considered significant for qualifying residential, mixed-use residential, and employment centers), would the project:						
a) Have a substantial adverse effect on a scenic vista?	LUTE EIR Section 3.12, Impact 3.12.1 and 3.12.5	No	No	No	No	NA, no impact would occur.
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	LUTE EIR Section 3.12, Impact 3.12.2 and 3.12.5	No	No	No	No	NA, no impact would occur.
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	LUTE EIR Section 3.12, Impact 3.12.3 and 3.12.5	No	No	No	No	NA, impact remains less than significant.
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	LUTE EIR Section 3.12, Impact 3.12.4 and 3.12.5	No	No	No	No	NA, impact remains less than significant.

4.1.1 Discussion

No substantial change in the environmental and regulatory settings related to aesthetics, described in the LUTE Draft EIR Section 3.12, "Visual Resources and Aesthetics," has occurred since certification of the EIR in April 2017.

a) Have a substantial adverse effect on a scenic vista?

The City of Sunnyvale does not have any designated scenic vistas. Impact 3.12.1 of the LUTE EIR determined that no significant project or cumulative impacts (Impact 3.12.5) on scenic vistas would occur. Therefore, no project impact would occur under the LUTE or the Playbook.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

There are no officially designated state scenic highways in Sunnyvale, and no portions of the city encompass the viewshed of a state scenic highway. Impact 3.12.2 of the LUTE EIR determined that no significant impact to scenic resources within a state scenic highway would occur. Therefore, no project impact would occur under the LUTE or the Playbook

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Impact 3.12.3 of the LUTE EIR identifies that new development under the LUTE would mostly be concentrated around transit nodes and other areas that are visually appropriate for increased development intensities in regards to densities and structure height similar to existing developed conditions. The LUTE would result in new urban uses that would complement the city's existing urban character. The LUTE policies and associated actions require compliance with design guidelines for future development subsequent to the LUTE adoption and would maintain compatibility with existing surrounding neighborhoods. These guidelines would further support the direction provided in the Citywide Design Guidelines. The LUTE EIR identified that no significant project or cumulative impacts (Impact 3.12.5) on visual character would occur.

Implementation of the Playbook does not include any development proposals that would directly result in physical changes to the existing visual character in the City of Sunnyvale, conflict with zoning, or other regulations adopted to protect scenic quality. Implementation of the Playbook, could support future photovoltaic (PV) solar installations (Play 1.2), multimodal transportation improvements (Play 3.2), electric vehicle (EV) charging stations (Play 3.3), reducing landfilled waste (Play 4.1), and expansion of the City's tree canopy (Play 4.3) within the existing developed conditions of the City and would appear similar to existing urban conditions. These activities would be consistent with LUTE Policies LT-2.3, LT-2.7, LT-3.1, and LT-11.5. PV solar installations would be required to comply with the City of Sunnyvale Design Guideline 2.B3 and Municipal Code Chapter 19.56, "Alternative Energy Systems." Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding visual character remain valid and no further analysis is required.

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

Impact 3.12.4 of the LUTE EIR identifies that future development under the LUTE would not result in substantial increases in existing daytime glare or nighttime lighting conditions in the City. Citywide Design Guideline 3.B9 provides guidance on reducing light impacts and associated glare. Guideline 2.E3 provides design considerations to address glare, such as avoiding large expanses of highly reflective surfaces and mirror glass exterior walls. Furthermore, compliance with Sunnyvale Municipal Code Chapter 19.42.050 regarding restrictions on lighting would ensure that all lights, spotlights, floodlights, reflectors, and other means of illumination are shielded or equipped with special lenses in such a manner as to prevent any glare or direct illumination on any public street or other property. The LUTE EIR identified that no significant project or cumulative impacts (Impact 3.12.5) from glare and nighttime lighting would occur.

Implementation of the Playbook does not include any development proposals that would directly result in the construction and operation of facilities, including new sources of light or glare. Implementation of the Playbook, could support future PV solar installations (Play 1.2), multimodal transportation improvements (Play 3.2), EV charging stations (Play 3.3), reducing landfilled waste (Play 4.1), and expansion of the City's tree canopy (Play 4.3) within the

existing developed conditions of the City and would appear similar to existing urban conditions. These activities would be consistent with LUTE Policies LT-2.3, LT-2.7, LT-3.1, and LT-11.5. PV solar installations would be required to comply with the City of Sunnyvale Design Guideline 2.B3 and Municipal Code Chapter 19.56, "Alternative Energy Systems." Additionally, contemporary PV solar installations are typically designed to be nonreflective. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding light and glare remain valid and no further analysis is required.

Mitigation Measures

No significant aesthetic impacts were identified in the LUTE EIR, and no mitigation measures were required.

CONCLUSION

There are no significant impacts that are peculiar to the project. No new impacts have occurred nor has any new information been found requiring new analysis or verification. The project would not have any potentially significant impacts or cumulative impacts that were not discussed in the LUTE EIR. Therefore, the conclusions of the LUTE EIR remain valid and approval of the project would not require additional environmental review.

4.2 AGRICULTURE AND FOREST RESOURCES

Environmental Issue Area	Where Impact Was Analyzed in the LUTE IER.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/ Resolve Impacts?
II. Agriculture and Forest Resources.						
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland.						
In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.						
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	Scoped out at Notice of Preparation stage. Resources do not exist in the City.	No	No	No	No	NA
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	Scoped out at Notice of Preparation stage. No agricultural zoning or Williamson Act contracted lands exist in the City.	No	No	No	No	NA
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	Scoped out at Notice of Preparation stage. Resources do not exist in the City	No	No	No	No	NA
d) Result in the loss of forest land or conversion of forest land to non-forest use?	Scoped out at Notice of Preparation stage. Resources do not exist in the City.	No	No	No	No	NA

Environmental Issue Area	Where Impact Was Analyzed in the LUTE EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/ Resolve Impacts?
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	Scoped out at Notice of Preparation stage. Resources do not exist in the City.	No	No	No	No	NA

4.2.1 Discussion and Conclusion

Agricultural and forestry impacts were scoped out of the LUTE EIR at the Notice of Preparation stage as these resources do not exist in the City. The project site does not contain any of these resources and would also have no impact.

4.3 AIR QUALITY

Environmental Issue Area	Where Impact Was Analyzed in the LUTE EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/ Resolve Impacts?
III. Air Quality.						
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied on to make the following determinations.						
Are significance criteria established by the applicable air district available to rely on for significance determinations?						
Would the project:						
a) Conflict with or obstruct implementation of the applicable air quality plan?	LUTE EIR Section 3.5, Impact 3.5.1	No	No	No	No	NA, impact remains less than significant.
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	LUTE EIR Section 3.5, Impact 3.5.2, 3.5.3, and 3.5.8	No	No	No	No	NA, but impact remains significant and unavoidable.
c) Expose sensitive receptors to substantial pollutant concentrations?	LUTE EIR Section 3.5, Impact 3.5.4, 3.5.5, 3.5.6, and 3.5.8	No	No	No	No	NA, but impact remains significant and unavoidable.
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	LUTE EIR Section 3.5, Impact 3.5.7	No	No	No	No	NA, impact remains less than significant.

4.3.1 Discussion

There have been changes in the regulatory setting related to Air Quality, described in LUTE Draft EIR Section 3.5, Air Quality, has occurred since certification of the EIR in April 2017; however, these changes do not result in any new or more severe significant effects than were analyzed in the LUTE EIR. These changes are discussed below.

The Bay Area Air Quality Management District (BAAQMD) adopted the 2017 Clean Air Plan on April 19, 2017. Similar to the 2010 Clean Air Plan, the 2017 Clean Air Plan provides a regional strategy to protect public health and protect the climate. The 2017 Clean Air Plan includes an update to the Bay Area ozone plan, the 2010 Clean Air Plan, pursuant to air quality planning requirements defined in the California Health & Safety Code. Consistent with the state ozone planning requirements, the 2017 control strategy includes all feasible measures to reduce emissions of ozone precursors—reactive organic gases and nitrogen oxides—and reduce transport of ozone and its precursors to

neighboring air basins. In addition, the 2017 Clean Air Plan builds on the BAAQMD's efforts to reduce emissions of fine particulate matter and toxic air contaminants.

BAAQMD updated its CEQA Guidelines in May 2017. All CEQA impact thresholds applicable to land use development, such as the development contemplated by the LUTE, remain unchanged from the 2011 CEQA Guidelines.

a) Conflict with or obstruct implementation of the applicable air quality plan?

Impact 3.5.1 evaluated whether implementation of the LUTE would conflict with or obstruct implementation of the 2010 Clean Air Plan. The 2010 Clean Air Plan includes various control strategies to reduce emissions of local and regional pollutants and promote health and energy conservation. As discussed in Impact 3.5.1, the LUTE establishes a policy framework that supports the 2010 Clean Air Plan strategies by accommodating anticipated growth in a compact urban form, including mixed-use development, and focusing development along transit corridors. Therefore, this impact is considered less than significant.

Implementation of the Playbook does not include any development proposals that would increase development potential beyond what was assumed and analyzed in the LUTE EIR or result in changes to existing land use and zoning designations. In addition, the Playbook includes Play 3.1, which encourages the City to provide housing options near transit corridors to reduce long-distance commutes and associated mobile air pollutant emissions consistent with LUTE Policy LT-1.6. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR concerning consistency with an air quality plan remain valid and no further analysis is required.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Impact 3.5.8 of the LUTE EIR determined that the LUTE's contribution to air quality impacts would be cumulatively considerable. However, the BAAQMD recommended significance thresholds, as applied to each project, would be used to determine whether an individual project's contribution to a significant impact to air quality would be cumulatively considerable.

Implementation of the Playbook does not include any development proposals that would increase emissions of criteria air pollutants and precursors associated with construction and operation of facilities beyond what was considered and evaluated in the LUTE EIR because the proposed strategic framework would not result in direct construction of new facilities or alternations to existing facilities. Implementation of the Playbook could support future PV solar installations (Play 1.2), multimodal transportation improvements (Play 3.2), EV charging stations (Play 3.3), reducing landfilled waste (Play 4.1), and expansion of the City's tree canopy (Play 4.3) within the existing developed conditions of the City that may generate construction air pollutant emissions. These activities would be minor and not expected to exceed BAAQMD recommended CEQA thresholds contained in their CEQA Guidelines and would not result in a cumulative considerable impact. Furthermore, solar energy systems are subject to Chapter 19.56, "Alternative Energy Systems," of the City's Municipal Code. In addition, the Playbook includes Play 1.1 and 1.2 which promote the use of clean energy would contribute to a reduction of air pollutant emissions consistent with LUTE Policy LT-2.7. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR remain valid and no further analysis is required.

c) Expose sensitive receptors to substantial pollutant concentrations?

Impacts 3.5.4, 3.5.5, 3.5.6, and 3.5.8 of the LUTE EIR evaluated whether construction and operational activities would expose sensitive receptors to substantial pollutant concentrations of toxic air contaminants (TACs). Sensitive receptors

within the City of Sunnyvale include residences, schools, medical facilities, family day cares, and places of worship. Construction-related TACs potentially affecting sensitive receptors include off-road diesel-powered equipment, and operational TACs include mobile and stationary sources of diesel particulate matter. Both of these impacts are identified in the LUTE EIR as potentially significant.

Implementation of the Playbook does not include any development proposals that would increase pollutant concentrations beyond what was considered and evaluated in the LUTE EIR because the proposed strategic framework would not result in direct construction of new facilities or alternations to existing facilities. Implementation of the Playbook, could support future PV solar installations (Play 1.2), multimodal transportation improvements (Play 3.2), EV charging stations (Play 3.3), reducing landfilled waste (Play 4.1), and expansion of the City's tree canopy (Play 4.3) within the existing developed conditions of the City that may generate construction air pollutant emissions. These activities would be consistent with LUTE Policies LT-2.3, LT-2.7, LT-3.1, and LT-11.5 and would not involve large amounts of labor or extensive use of construction equipment. Maintenance activities would be minimal and would consist of occasional inspection and cleaning of facilities. Further, PV solar installations would be required to comply with Municipal Code Chapter 19.56, "Alternative Energy Systems." In addition, the Playbook includes Plays 1.1, 1.2, and 1.3, which promote the use of clean energy would contribute to a reduction of air pollutant emissions consistent with LUTE Policy LT-2.7. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR remain valid and no further analysis is required.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Impact 3.5.7 of the LUTE EIR determined that the LUTE EIR could create objectionable odors affecting a substantial number of people. However, the LUTE EIR concluded that implementation Mitigation Measure 3.5.7 would reduce this impact to less than significant.

Implementation of the Playbook does not include development proposals or long-term uses that would generate sources of objectionable odors (e.g., landfill, wastewater treatment plant) because the proposed strategic framework would not result in direct construction of new facilities or alternations to existing facilities. The Playbook promotes clean energy (Plays 1.1, 1.2, and 1.3), reduction of GHG emissions (all Plays), and encourages multi-modal transportation options (Plays 3.2 and 3.3) consistent with the LUTE Policies LT-1.6, -2.1, -2.7, and -3.1. These activities would not result in new sources or contribute to existing sources of objectionable odors. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR related to odors remain valid and no further analysis is required.

Mitigation Measures

Mitigation Measure MM 3.5.3 was referenced in the LUTE EIR; however, the Playbook does not include development proposals that would require grading permits, building permits, or the use of off-road diesel-fueled equipment. Therefore, this Mitigation Measure is not applicable to the project.

CONCLUSION

There are no significant impacts that are peculiar to the project. As discussed above, the project would not have any potentially significant impacts or cumulative impacts that were not discussed in the LUTE EIR. Therefore, the conclusions of the LUTE EIR remain valid and approval of the project would not require additional environmental review.

4.4 BIOLOGICAL RESOURCES

Environmental Issue Area	Where Impact Was Analyzed in the LUTE EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/Resolve Impacts?
IV. Biological Resources.						
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	LUTE EIR Section 3.9, Impact 3.9.1 and 3.9.5	No	No	No	No	NA, impact remains less than significant.
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	LUTE EIR Section 3.9, Impact 3.9.2 and 3.9.5	No	No	No	No	NA, impact remains less than significant.
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	LUTE EIR, Section 3.9, Impact 3.9.2 and 3.9.5	No	No	No	No	NA, impact remains less than significant.
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	LUTE EIR Section 3.9, Impact 3.9.3 and 3.9.5	No	No	No	No	NA, impact remains less than significant.
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	LUTE EIR Section 3.9, Impact 3.9.4 and 3.9.5	No	No	No	No	NA, impact remains less than significant.

Environmental Issue Area	Where Impact Was Analyzed in the LUTE EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/Resolve Impacts?
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	LUTE EIR Section 3.9, Impact 3.9.4, and 3.9.5	No	No	No	No	NA, impact remains less than significant.

4.4.1 Discussion

No new information pertaining to biological resources has become available since the LUTE EIR was certified in April 2017.

- a) **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?**

As discussed in LUTE EIR Impact 3.9.1, the urbanized portions of the city are largely built out and do not include large areas of natural habitat. Ruderal grassland areas could support special-status species such as the western burrowing owl and Congdon's tarplant. Urban parks, open space, and riparian areas could support nesting birds. Future construction of private development projects and/or public projects within these areas could result in direct impacts on special-status species. The LUTE includes policies and actions that direct the City to protect the natural and human environment within Sunnyvale. The City of Sunnyvale is also required to comply with all applicable federal and state laws and regulations pertaining to species and habitat protection. Thus, the LUTE EIR concluded that implementation of the LUTE would result in a less than significant under project and cumulative conditions (Impact 3.9.5).

Implementation of the Playbook does not include development proposals that could result in direct impacts on special-status species because the proposed strategic framework would not result in ground disturbing activities. Implementation of the Playbook could support future PV solar installations (Play 1.2), multimodal transportation improvements (Play 3.2), EV charging stations (Play 3.3), reducing landfilled waste (Play 4.1), and expansion of the City's tree canopy (Play 4.3) within the existing developed conditions of the City. These activities would be consistent with LUTE Policies LT-2.3, LT-2.7, LT-3.1, and LT-11.5. In addition, the proposed Playbook does not propose ground-disturbing activities that would result in modifications to natural habitats that support special-status species. Thus, the Playbook would not result in a substantial adverse effect on special-status species. The project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR concerning special-status species remain valid and no further analysis is required.

- b) **Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?**

LUTE EIR Impact 3.9.2 and 3.9.5, determined that subsequent projects under the LUTE are required to comply with all applicable federal and state laws and regulations pertaining to species and habitat protection in addition to LUTE policies and actions and the City's Municipal Code Section 12.60.010. This impact was identified as less than significant under project and cumulative conditions (Impact 3.9.5).

Implementation of the Playbook does not include development proposals that could result in direct impacts on riparian habitat or other sensitive natural community because the proposed strategic framework would not result in ground disturbing activities. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding biological impacts remain valid and no further analysis is required.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

LUTE EIR Impact 3.9.2 and 3.9.5 determined that subsequent projects under the LUTE are required to comply with all applicable federal and state laws and regulations pertaining to species and habitat protection in addition to LUTE policies and actions and the City's Municipal Code Section 12.60.010. This impact was identified as less than significant under project and cumulative conditions (Impact 3.9.5).

Implementation of the Playbook does not include development proposals that could result in direct impacts on wetland resources because the proposed strategic framework would not result in ground disturbing activities. Implementation of the Playbook could support future PV solar installations (Play 1.2), multimodal transportation improvements (Play 3.2), EV charging stations (Play 3.3), reducing landfilled waste (Play 4.1), and expansion of the City's tree canopy (Play 4.3) within the existing developed conditions of the City. These activities would be consistent with LUTE Policies LT-2.3, LT-2.7, LT-3.1, and LT-11.5. In addition, the proposed Playbook does not propose ground-disturbing activities that would result in modifications to wetland areas. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding wetlands and waters of the United States remain valid and no further analysis is required.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

LUTE EIR Impact 3.9.3 and 3.9.5 determined that no significant impacts to wildlife movement would result from implementation of the LUTE because planned development would occur within existing developed areas of the city and would not extend into wetlands and open space areas along San Francisco Bay that provide habitat and movement corridors for wildlife species in the region. In addition, creek and waterway corridors within the City (Stevens Creek, Calabazas Creek, and Moffett Channel) would be retained in their current condition under the LUTE. This impact was identified as less than significant under project and cumulative conditions (Impact 3.9.5).

Implementation of the Playbook does not include development proposals that could result in direct impacts on wildlife movement and native wildlife nursery sites because the proposed strategic framework would not result in direct construction of new facilities or alternations to existing facilities. Implementation of the Playbook could support future PV solar installations (Play 1.2), multimodal transportation improvements (Play 3.2), EV charging stations (Play 3.3), reducing landfilled waste (Play 4.1), and expansion of the City's tree canopy (Play 4.3) within the existing developed conditions of the City. These activities would be consistent with LUTE Policies LT-2.3, LT-2.7, LT-3.1, and LT-11.5. In addition, the proposed Playbook does not propose ground-disturbing activities that would result in modifications to areas within wildlife movement corridors. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding wildlife movement and use of native wildlife nursery sites remain valid and no further analysis is required.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

As discussed in Impact 3.9.4, the LUTE includes policies that support key objectives in the Bay Plan to preserve open space adjacent to San Francisco Bay, protect water quality of the bay, and increase public access to the bay and associated shoreline. Additionally, the LUTE would not conflict with tree protection provisions of the City's Municipal Code Chapter 19.94. Thus, no significant impacts were identified.

Implementation of the Playbook does not include development proposals that would conflict with local policies or ordinances adopted to protect biological resources. In addition, the Playbook includes Play 4.3, which encourages the implementation of the City's Urban Forest Management Plan and Stormwater Infrastructure Plan, both of which promote the expansion of the City's tree canopy and green landscape features consistent with LUTE Policy LT-2.3. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR remain valid and no further analysis is required.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The City is not located in a habitat conservation plan area. As a result, the LUTE EIR determined there would be no conflict with an adopted habitat conservation plan would occur, and no impact would result. Therefore, no significant impact was identified under project or cumulative conditions.

No new conservation plans have been adopted in the City since approval of the LUTE. Therefore, there are no (1) specific impacts, (2) impacts not analyzed in the LUTE EIR, (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR concerning conflicts with adopted conservation plans remain valid and no further analysis is required.

Mitigation Measures

No significant biological resource impacts were identified in the LUTE EIR, and no mitigation measures were required.

CONCLUSION

There are no significant impacts that are peculiar to the project. As discussed above, the project would not have any potentially significant impacts or cumulative impacts that were not discussed in the LUTE EIR. Therefore, the conclusions of the LUTE EIR remain valid and approval of the project would not require additional environmental review.

4.5 CULTURAL RESOURCES

Environmental Issue Area	Where Impact Was Analyzed in the LUTE EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/Resolve Impacts?
V. Cultural Resources.						
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	LUTE EIR Section 3.10, Impact 3.10.1 and 3.10.3.	No	No	No	No	NA, impacts would remain significant and unavoidable.
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	LUTE EIR Section 3.10, Impact 3.10.2.	No	No	No	No	NA, impacts would remain less than significant.
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	LUTE EIR Section 3.10, Impact 3.10.2.	No	No	No	No	NA, impacts would remain less than significant.

4.5.1 Discussion

No new information pertaining to cultural resources has become available since the LUTE EIR was certified in April 2017.

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

As discussed in LUTE EIR Impact 3.10.1, identified that the City includes numerous buildings that have historical value and future actions under the LUTE have the potential to directly (i.e., demolition) or indirectly (i.e., adverse effects to historical setting from adjacent construction) impact historic buildings and structures that qualify as historic resources under CEQA. The Community Character chapter of the Sunnyvale General Plan includes various policies addressing this issue. Policy CC-5.1 states that the City will preserve existing landmarks and cultural resources and their environmental settings, Policy CC-5.3 seeks to identify and work to resolve conflicts between the preservation of historic resources and alternative land uses, and Policy CC-5.4 states that the City will seek out, catalog, and evaluate heritage resources that may be significant. However, the LUTE EIR concluded that the implementation of the LUTE would result in significant and unavoidable impacts under project and cumulative conditions (Impact 3.10.3).

The Playbook does not include development proposals that could result in direct impacts to historic resources. Implementation of the Playbook could support future PV solar installations (Play 1.2), multimodal transportation improvements (Play 3.2), EV charging stations (Play 3.3), reducing landfilled waste (Play 4.1), and expansion of the City's tree canopy (Play 4.3) within the existing developed conditions of the City. These activities would be consistent with LUTE Policies LT-2.3, LT-2.7, LT-3.1, and LT-11.5. These activities would also be required to comply with General Plan policies pertaining to the preservation of historic resources including Policy CC-5.1, CC-5.3, CC-5.4 and Municipal Code Section 19.96.090 which would require construction activities not result in impacts detrimental to a designated landmark. Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding historical resources remain valid and no further analysis is required.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

LUTE EIR Impact 3.10.2 determined that implementation of the LUTE could impact buried archaeological resources during construction activities. The LUTE EIR determined that implementation of Action LT-1.10f, included below, would ensure that impacts to archaeological resources and human remains (in combination with Health and Safety Code Section 7050.5[b]) are reduced to a less-than-significant level under project and cumulative conditions (Impact 3.10.3).

LT-1.10f: Continue to condition projects to halt all ground-disturbing activities when unusual amounts of shell or bone, isolated artifacts, or other similar features are discovered. Retain an archaeologist to determine the significance of the discovery. Mitigation of discovered significant cultural resources shall be consistent with Public Resources Code Section 21083.2 to ensure protection of the resource.

Implementation of the Playbook would not result in direct impacts to buried archaeological resources or human remains because the proposed strategic framework does not include development proposals that would result in ground disturbing activities. Implementation of the Playbook could support future PV solar installations (Play 1.2), multimodal transportation improvements (Play 3.2), EV charging stations (Play 3.3), reducing landfilled waste (Play 4.1), and expansion of the City's tree canopy (Play 4.3) within the existing developed conditions of the City. These activities would be consistent with LUTE Policies LT-2.3, LT-2.7, LT-3.1, and LT-11.5. These activities would also be required to comply with General Plan Policy LT-1.10f that requires protection and mitigation of discovered archaeological resources. Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding archaeological resources remain valid and no further analysis is required.

c) Disturb any human remains, including those interred outside of formal cemeteries?

See analysis provided in Item b) above.

Mitigation Measures

No significant cultural resource impacts were identified in the LUTE EIR, and no mitigation measures were required.

CONCLUSION

There are no significant impacts that are peculiar to the project. As discussed above, the project would not have any potentially significant impacts or cumulative impacts that were not discussed in the LUTE EIR. Therefore, the conclusions of the LUTE EIR remain valid and approval of the project would not require additional environmental review.

4.6 ENERGY

Environmental Issue Area	Where Impact Was Analyzed in the LUTE EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/Resolve Impacts?
VI. Energy.						
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	LUTE EIR Section 3.11, Impact 3.11.4.1.	No	No	No	No	NA, impact remains less than significant.
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	LUTE EIR Section 3.11, Impact 3.11.4.1	No	No	No	No	NA, impact remains less than significant.

4.6.1 Discussion

Since completion of the LUTE EIR, the City of Sunnyvale as well as the cities of Campbell, Cupertino, Gilroy, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Saratoga, and unincorporated Santa Clara County became members of Silicon Valley Clean Energy (SVCE), which serves as the Community Choice Aggregation (CCA) for its member communities. SVCE works in partnership with Pacific Gas and Electric (PG&E) to deliver direct, renewable electricity to customers within its member jurisdictions. Consistent with State law, all electricity accounts within the city of Sunnyvale were automatically enrolled in SVCE; however, customers can choose to opt out or remain with PG&E. According to the Sunnyvale Climate Action Plan Biennial Progress Report released in 2018, 98 percent of residential and commercial accounts received carbon-free electricity from SVCE (City of Sunnyvale 2018). Electricity is supplied to the city using infrastructure built and maintained by PG&E.

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

As discussed in Impact 3.11.4.1, implementation of the LUTE would increase energy consumption within the City of Sunnyvale. However, subsequent development would be required to comply with Building Energy Efficiency Standards included in Title 24 of the California Code of Regulations and implement the energy efficiency requirements of the City's CAP 1.0. This would include obtaining carbon-free electricity from SVCE. Implementation of the LUTE would also result in an improvement in vehicle miles traveled (VMT) per capita as compared to citywide VMT under the previous General Plan. The LUTE EIR determined the impact would be less than significant under project and cumulative conditions.

Implementation of the Playbook would not increase energy consumption because the proposed strategic framework does not include development proposals and would not induce population growth. The Playbook builds upon the policy framework established by CAP 1.0 and serves as a guide to achieve or exceed the state's 2030 and 2050 GHG emissions reduction targets. In addition, the Playbook Strategies and Plays complement the policy framework in the LUTE by promoting clean electricity, decarbonizing transportation and buildings, encouraging sustainable land use and resource management, enhancing community awareness, and assessing climate vulnerabilities for Sunnyvale. Specifically, proposed Play 1.1 which encourages the City to collaborate with SVCE to provide Sunnyvale residents with direct access 100 percent clean energy, Play 1.2 encourages the City to support installation of energy efficient systems in existing buildings, Play 1.3 enhances local electricity storage, Play 2.1 to reduce energy consumption in

existing buildings, Play 2.2 which supports electrification of existing buildings, and Play 2.3 which aims to achieve all-electric new construction. Further, Plays within Strategy 3, such as Play 3.2 to encourage the City to increase multi-modal transportation options, and Play 3.3, which encourages the City to promote a shift to electric or alternative fueled vehicles, can further reduce energy use from fossil fuels. Implementation of the proposed Plays would encourage efficient use of energy resources consistent with the policy framework included in both the LUTE and CAP 1.0. Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding energy efficiency remain valid and no further analysis is required.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency

See discussion in a) above.

Mitigation Measures

No mitigation measures were identified in for the certified LUTE EIR regarding energy, nor are any additional mitigation measures required the project.

CONCLUSION

There are no significant impacts that are peculiar to the project. As discussed above, the project would not have any potentially significant impacts or cumulative impacts that were not discussed in the LUTE EIR. Therefore, the conclusions of the LUTE EIR remain valid and approval of the project would not require additional environmental review.

4.7 GEOLOGY AND SOILS

Environmental Issue Area	Where Impact Was Analyzed in the LUTE EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/Resolve Impacts?
VII. Geology and Soils.						
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	LUTE EIR Section 3.7, Impact 3.7.1	No	No	No	No	NA, impact remains less than significant.
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)						
ii) Strong seismic ground shaking?						
iii) Seismic-related ground failure, including liquefaction?						
iv) Landslides?						
b) Result in substantial soil erosion or the loss of topsoil?	LUTE EIR Section 3.7, Impact 3.7.2	No	No	No	No	NA, impact remains less than significant.
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	LUTE EIR Section 3.7, Impact 3.7.3	No	No	No	No	NA, impact remains less than significant.
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?	LUTE EIR Section 3.7, Impact 3.7.3	No	No	No	No	NA, impact remains less than significant.

Environmental Issue Area	Where Impact Was Analyzed in the LUTE EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/Resolve Impacts?
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	LUTE EIR Section 3.7, page 3.7-14	No	No	No	No	NA, impact remains less than significant.
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	LUTE EIR Section 3.7, Impact 3.7.4	No	No	No	No	NA, impact remains less than significant.

4.7.1 Discussion

No substantial change in the environmental and regulatory settings related to geology and soils, described in the LUTE Draft EIR Section 3.7 Geology, Soils, and Paleontological Resources, has occurred since certification of the LUTE EIR. The regional and local settings remain the same as stated Section 3.7.

Since preparation of the LUTE EIR, a California Supreme Court decision (California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369, 377) has clarified CEQA with regard to the effects of existing environmental conditions on a project's future users or residents. The effects of the environment on a project are generally outside the scope of CEQA unless the project would exacerbate these conditions. Local agencies are not precluded from considering the impact of locating new development in areas subject to existing environmental hazards; however, CEQA cannot be used by a lead agency to require a developer or other agency to obtain an EIR or implement mitigation measures solely because the occupants or users of a new project would be subjected to the level of hazards specified. Previous discussions of effects of the environment related to geology and soils is included herein for disclosure purposes.

- a) **Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:**
 - i) **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)**
 - ii) **Strong seismic ground shaking?**
 - iii) **Seismic-related ground failure, including liquefaction?**
 - iv) **Landslides?**

As discussed in LUTE EIR Impact 3.7.1, the City's Municipal Code Chapter 16.16.020 adopted the California Building Code (CBC) by reference, with changes and modifications providing a higher standard of protection. All new development and redevelopment would be required to comply with the current adopted CBC, which includes design criteria for seismic loading and other geologic hazards. Compliance with the CBC requires that new developments

incorporate design criteria for geologically induced loading that governs sizing of structural members and provides calculation methods to assist in the design process. The LUTE EIR concludes that impacts related to landslides would be less than significant under project and cumulative conditions.

Implementation of the Playbook would not expose people or structures to adverse effects resulting from geological hazards because the Playbook's strategic framework does not include development proposals. Implementation of the Playbook could support future PV solar installations (Play 1.2), multimodal transportation improvements (Play 3.2), EV charging stations (Play 3.3), reducing landfilled waste (Play 4.1), and expansion of the City's tree canopy (Play 4.3) within the existing developed conditions of the City. These activities would be consistent with LUTE Policies LT-2.3, LT-2.7, LT-3.1, and LT-11.5. These activities would also be required to comply with provisions for geological stability established by Municipal Code Chapter 16.16.020. In addition, the Playbook would not amend, revise, or be inconsistent with any existing regulations related to geology and soils. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the findings of the certified LUTE EIR regarding geologic hazards remain valid.

b) Result in substantial soil erosion or the loss of topsoil?

As discussed in Impact 3.7.2, implementation of the LUTE would allow new development, redevelopment, and infrastructure improvements. Grading and site preparation activities associated with such development could temporarily remove buildings and pavement, which could expose the underlying soils to wind and water erosion. Ground-disturbing activities would be required to comply with CBC Chapter 70 standards, which would ensure implementation of appropriate site-specific measures during grading activities to reduce and control soil erosion. Additionally, any development involving clearing, grading, or excavation that causes soil disturbance of one or more acres would be required to prepare and comply with a stormwater pollution prevention plan (SWPPP), which provides a schedule for the implementation and maintenance of erosion control measures and a description of the erosion control practices, including appropriate design details and a time schedule. In addition, the City's grading standards (Municipal Code Section 18.12.110) specify that when grading will create a nuisance or hazard to other properties, public way, or public facilities due to erosion from storm runoff or rainfall, grading cannot commence or continue without specific consent in writing from the Director of Public Works or the Director of Community Development. The grading standards also regulate gradients for cut-and-fill slopes. The LUTE EIR concluded that impacts from soil erosion and loss of topsoil would be less than significant under both project and cumulative conditions (Impact 3.7.5).

Implementation of the Playbook would contribute to soil erosion or loss of topsoil because the Playbook's strategic framework does not include development proposals that would result in ground disturbing activities. Implementation of the Playbook could support future PV solar installations (Play 1.2), multimodal transportation improvements (Play 3.2), EV charging stations (Play 3.3), reducing landfilled waste (Play 4.1), and expansion of the City's tree canopy (Play 4.3) within the existing developed conditions of the City. These activities would be consistent with LUTE Policies LT-2.3, LT-2.7, LT-3.1, and LT-11.5. These activities would also be required to comply with provisions for soil and geological stability established by Municipal Code Chapter 16.16.110 and 16.16.020. In addition, the Playbook would not amend, revise, or be inconsistent with any existing regulations related to geology and soils. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the findings of the certified LUTE EIR regarding soil erosion remain valid.

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

The LUTE EIR determined that future structures and improvements that could be developed in the City under the LUTE could experience stresses on various sections of foundations and connected utilities, as well as structural failure

and damage to infrastructure if located on expansive or unstable soils (Impact 3.7.3). The City requires preparation of geotechnical reports for all development projects, which include soil sampling and laboratory testing to determine the soil's susceptibility to expansion and differential settlement and would provide recommendations for design and construction methods to reduce potential impacts, as necessary. The LUTE EIR concluded that impacts from geologic instability would be less than significant under both project and cumulative conditions (Impact 3.7.5).

Implementation of the Playbook would not expose people or structures to adverse effects resulting from soil instability because the Playbook's strategic framework does not include development proposals that would site future structures on unstable or expansive soils. Implementation of the Playbook could support future PV solar installations (Play 1.2), multimodal transportation improvements (Play 3.2), EV charging stations (Play 3.3), reducing landfilled waste (Play 4.1), and expansion of the City's tree canopy (Play 4.3) within the existing developed conditions of the City. These activities would be consistent with LUTE Policies LT-2.3, LT-2.7, LT-3.1, and LT-11.5. These activities would also be required to comply with provisions for geological stability established by Municipal Code Chapter 16.16.020. In addition, the Playbook would not amend, revise, or be inconsistent with any existing regulations related to geology and soils. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the findings of the certified LUTE EIR regarding soil erosion remain valid.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?

See analysis under item c) above.

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

As described in the LUTE EIR, the City's Municipal Code Section 12.08.010 requires sewer connections for all new development in the City. Implementation of the Playbook would not require the use of septic systems. The project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the findings of the certified LUTE EIR regarding waste water disposal systems where sewers are not available remain valid and no further analysis is required.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

LUTE EIR Impact 3.10.2 determined that implementation of the LUTE could impact undiscovered paleontological resources during construction activities. The LUTE EIR determined that implementation of Action LT-1.10f, included below, would ensure that impacts to paleontological resources are reduced to a less-than-significant level under project and cumulative conditions (Impact 3.10.3).

LT-1.10f: Continue to condition projects to halt all ground-disturbing activities when unusual amounts of shell or bone, isolated artifacts, or other similar features are discovered. Retain an archaeologist to determine the significance of the discovery. Mitigation of discovered significant cultural resources shall be consistent with Public Resources Code Section 21083.2 to ensure protection of the resource.

Implementation of the Playbook would not result in direct impacts to undiscovered paleontological resources because the proposed strategic framework does not include development proposals that would result in ground disturbing activities. Implementation of the Playbook could support future PV solar installations (Play 1.2), multimodal transportation improvements (Play 3.2), EV charging stations (Play 3.3), reducing landfilled waste (Play 4.1), and expansion of the City's tree canopy (Play 4.3) within the existing developed conditions of the City. These activities would be consistent with LUTE Policies LT-2.3, LT-2.7, LT-3.1, and LT-11.5. These activities would also be required to

comply with General Plan Policy LT-1.10f that requires protection and mitigation of discovered paleontological resources. Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding paleontological resources remain valid and no further analysis is required.

Mitigation Measures

No significant geologic impacts were identified in the LUTE EIR, and no mitigation measures were required.

CONCLUSION

There are no significant impacts that are peculiar to the project. As discussed above, the project would not have any potentially significant impacts or cumulative impacts that were not discussed in the LUTE EIR. Therefore, the conclusions of the LUTE EIR remain valid and approval of the project would not require additional environmental review.

4.8 GREENHOUSE GAS EMISSIONS

Environmental Issue Area	Where Impact Was Analyzed in the LUTE EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/Resolve Impacts?
VIII. Greenhouse Gas Emissions.						
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	LUTE EIR Section 3.13, Impact 3.13.1	No	No	No	No	NA, impact remains less than significant.
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	LUTE EIR Section 3.13, Impact 3.13.1	No	No	No	No	NA, impact remains less than significant.

4.8.1 Discussion

The City tracks the progress of the CAP 1.0 through biennial progress reporting. According to the Sunnyvale Climate Action Plan Biennial Progress Report released in 2018, communitywide GHG emissions in 2016 were approximately 12 percent less than 1990 levels and that an estimated 28 percent less than 1990 levels is achievable by 2017 if the full impact of clean electricity from SVCE was applied (City of Sunnyvale 2018). According to the report, the City is ahead of schedule in meeting its GHG reduction goals.

There have been several new or updated GHG executive orders, plans, policies, or regulations issued since certification of the LUTE EIR, but none of these new items, which are part of the regulatory setting, constitute substantial information indicating that the project would have a significant impact not analyzed in the LUTE EIR. For references, updates to the regulatory setting are briefly summarized below:

- ▶ Executive Order B-55-18: Executive Order B-55-18, signed September 10, 2018, sets a goal “to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter.”
- ▶ Scoping Plan Update: Executive Order B-30-15 and SB 32 require CARB to prepare another update to the Scoping Plan to address the 2030 target for the state. On December 24, 2017, the California Air Resources Board (CARB) approved the 2017 Climate Change Scoping Plan Update, which outlines potential regulations and programs, including strategies consistent with AB 197 requirements, to achieve the 2030 target.
- ▶ 2017 Update to the SB 375 Targets: Under SB 375, CARB is required to update the emission reduction targets for the metropolitan planning organizations (MPOs) every eight years. CARB adopted the updated targets and methodology in March 2018 and subsequent sustainable community strategies (SCSs) adopted after this date are subject to these new targets.
- ▶ Senate Bill 100: SB 100 raises California’s RPS requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also establishes a state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045. Under the bill, the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon free electricity target.
- ▶ Building Energy Efficiency Standards: Energy conservation standards for new residential and non-residential buildings were adopted by the California Energy Resources Conservation and Development Commission (now

the CEC) in June 1977 and most recently revised in 2016 (Title 24, Part 6, of the California Code of Regulations). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. The 2019 Building Energy Efficiency Standards, which were recently adopted on May 9, 2018, go into effect starting January 1, 2020.

- ▶ CALGreen Updates: CALGreen established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The recently adopted 2019 Standards will take effect on January 1, 2020. Each iteration of the CALGreen standards improves the energy efficiency and sustainability of new development from the prior iteration.

The Playbook outlines a pathway to achieve GHG emission reductions of 55 percent below 1990 levels by 2030 (exceeding the State's interim target) and 80 percent below 1990 levels by 2050. Consistent with the LUTE EIR Mitigation Measure 3.13.1, the Playbook's GHG emissions forecast uses Sunnyvale-specific growth projections from the LUTE. The Playbook is being developed to be consistent with the state legislation and policies, listed above, that are aimed at reducing statewide GHG emissions.

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

LUTE EIR Impact 3.13.1 evaluated the projected GHG emissions associated with implementation of the LUTE (176,672 MTCO_{2e} per year at buildout in 2035). The LUTE is intended to implement local land use and transportation planning efforts in a manner consistent with the adopted CAP 1.0 and MTC's Sustainable Communities Strategy (Plan Bay Area) and seeks to reduce the environmental impact (including GHG emissions) of land use development as described above.

However, the LUTE has different growth projections than what were utilized in the CAP 1.0. The GHG estimates presented in the LUTE EIR included different assumptions and inputs than the activity-based modeling used in CAP 1.0, and results of the analysis cannot be equivalently compared to demonstrate compliance with 2035 GHG reduction targets outlined in CAP 1.0. To demonstrate compliance with 2020 and 2035 GHG reduction targets, the LUTE EIR resulted in the adoption of Mitigation Measure 3.13.1, which required the City to update the CAP 1.0 to include the new LUTE growth projections. Therefore, the development of an updated climate action plan that incorporates the new LUTE growth projections is an implementation action of the LUTE.

As previously noted, the Playbook outlines a pathway to achieve GHG emission reductions of 55 percent below 1990 levels by 2030 (exceeding the State's interim target) and 80 percent below 1990 levels by 2050. Consistent with the LUTE EIR Mitigation Measure 3.13.1, the Playbook's GHG emissions forecast uses Sunnyvale-specific growth projections from the LUTE. The Playbook identifies six key Strategies and eighteen Plays that specify a plan of action to reduce GHG emissions across all sectors. These Strategies and Plays complement the policy framework in the LUTE by promoting clean electricity, decarbonizing transportation and buildings, encouraging sustainable land use and resource management, enhancing community awareness, and enhancing community resilience to climate change. Therefore, implementation of the Playbook would not contribute to GHG emissions but rather would help the City achieve 2030 and 2050 GHG reduction targets. There are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding GHG emissions remain valid and no further analysis is required.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

See discussion in a) above.

Mitigation Measures

Adoption and implementation of the Playbook implements LUTE EIR Mitigation Measure 3.13.1, which required the City will update the Climate Action Plan to include the new growth projections of the LUTE and make any necessary adjustments to the CAP to ensure year 2020 and 2035 greenhouse gas emission reduction targets are attained.

CONCLUSION

There are no significant impacts that are peculiar to the project. As discussed above, the project would not have any potentially significant impacts or cumulative impacts that were not discussed in the LUTE EIR. Therefore, the conclusions of the LUTE EIR remain valid and approval of the project would not require additional environmental review.

4.9 HAZARDS AND HAZARDOUS MATERIALS

Environmental Issue Area	Where Impact Was Analyzed in the LUTE EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/Resolve Impacts?
IX. Hazards and Hazardous Materials.						
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	LUTE EIR Section 3.3, Impact 3.3.1	No	No	No	No	NA, impacts would remain less than significant
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?	LUTE EIR Section 3.3, Impact 3.3.2	No	No	No	No	NA, impacts would remain less than significant
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	LUTE EIR Section 3.3, Impact 3.3.3	No	No	No	No	NA, impacts would remain less than significant
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	LUTE EIR Section 3.3, Impact 3.3.2	No	No	No	No	NA, impacts would remain less than significant
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	LUTE EIR Section 3.3, Impact 3.3.4	No	No	No	No	NA, impacts would remain less than significant
f) Impair implementation of or physically interfere with an adopted emergency response plan or	LUTE EIR Section 3.3, Impact 3.3.5	No	No	No	No	NA, impacts would remain less than significant

Environmental Issue Area	Where Impact Was Analyzed in the LUTE EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/Resolve Impacts?
emergency evacuation plan?						
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	LUTE EIR page 3.3-15 No Impact	No	No	No	No	NA, no impact would occur.

4.9.1 Discussion

No substantial change in the environmental and regulatory settings related to hazards and hazardous materials, described in LUTE EIR Section 3.3, Hazards and Human Health, has occurred since certification of the LUTE EIR.

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Impact 3.3.1 in the LUTE EIR determined that implementation of the LUTE hazardous materials use would not be expected to expand appreciably because the types of new businesses that would be expected would not involve extensive use of hazardous materials, as has occurred historically, but rather primarily green technology and office/R&D uses. The analysis also stated that the transport, storage, use, and storage of hazardous materials in land use activities associated with the LUTE would be required to comply with all applicable federal, state, and local regulations during construction and operation. Facilities that use hazardous materials are required to obtain permits and comply with appropriate regulatory agency standards designed to avoid hazardous materials releases. Compliance with federal, state, and local regulations and implementation of LUTE policies (Policy LT-11.5, Policy LT-13.8, Action LT-13.8c, and Policy LT-14.5, Action LT-14.5b) would ensure that the LUTE would have less-than-significant impacts related to creating a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials and that the LUTE would make a less than cumulatively considerable contribution to significant cumulative impacts (Impact 3.3.6).

Implementation of the Playbook would not create a significant hazard or expose the public or the environment to hazards or hazardous materials because the Playbook's strategic framework would not amend, revise, or be inconsistent with any existing regulations related hazards and hazardous materials. In addition, the Playbook would not result in development proposals that would require the use or transport of hazardous materials. Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding impacts from the routine transport, use, or disposal of hazardous materials remain valid and no further analysis is required.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?

As discussed in Impact 3.3.2, implementation of the LUTE policies and actions would provide for land uses that would involve the transportation, storage, use, and disposal of hazardous materials. These activities could result in the release of hazardous materials into the environment and exposure of the public to hazardous materials as a result of inadvertent releases or accidents. The analysis states that the transport, storage, and use of hazardous materials by developers, contractors, business owners, and others must occur in compliance with local, state, and federal regulations. Facilities that store or use hazardous materials are required to obtain permits and comply with

appropriate regulatory agency standards designed to avoid hazardous material releases. Special regulations apply to operations that may result in hazardous emissions or use large quantities of regulated materials to ensure accidental release scenarios are considered and measures included in project design and operation to reduce the risk of accidents. In addition, transportation of hazardous materials into and within the City of Sunnyvale is regulated to reduce the potential for transportation accidents involving hazardous materials. The LUTE EIR concludes that such impacts would be less than significant under project conditions and less than cumulatively considerable under cumulative conditions (Impact 3.3.6).

Implementation of the Playbook would not create a significant hazard to the public or the environment hazardous materials because the Playbook's strategic framework would not result in development or provide for land uses that would involve the transportation, storage, use, or disposal of hazardous materials. In addition, the Playbook would not amend, revise, or be inconsistent with any existing regulations related hazards and hazardous materials. Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR related to hazardous materials handling remain valid and no further analysis is required.

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

Impact 3.3.3 in the LUTE EIR analyzes the potential for implementation of the LUTE to locating schools in the vicinity of land uses involving the use, transport, disposal, or release of hazardous materials. The LUTE EIR concludes that such impacts would be less than significant under project conditions and less than cumulatively considerable under cumulative conditions (Impact 3.3.6).

Implementation of the Playbook would not emit hazardous emissions because the strategic framework would not result in development or land uses that would handle hazardous materials. Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR related to hazardous materials handling remain valid and no further analysis is required.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?

See discussion under b) above.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

LUTE EIR Impact 3.3.4 evaluated the potential for hazards associated with exposing additional workers and visitors to aircraft-related safety hazards by locating additional development within the approach path of the Moffett Federal Airfield. The analysis noted that the Moffett Federal Airfield Comprehensive Land Use Plan (CLUP) includes land use policies and height restrictions for construction and new structures near the airfield. The LUTE also contains several policies and actions that would assist in reducing airport hazards (Policy LT-1.8 and associated Actions LT-1.8a and LT-1.8d). In the LUTE EIR, this impact was determined to be less than significant because compliance with FAA regulations and Santa Clara County Airport Land Use Commission requirements, including CLUP restrictions, as well as implementation of LUTE policies and actions would reduce airport safety hazards. The LUTE EIR concludes that the LUTE's contribution to aircraft-related safety hazards would be less than cumulatively considerable under cumulative conditions (Impact 3.3.6).

Implementation of the Playbook would not result in development projects that would be located within CLUP boundaries. Implementation of Play 1.2 could support future PV solar installations. PV solar installations would be required to comply with CLUP Policy G-6 which prohibits uses that may cause a hazard to aircraft in flight from increased glare (ALUC 2016). Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR related to airport safety hazards remain valid and no further analysis is required.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

LUTE EIR Impact 3.3.5 determined that the proposed roadway system in the LUTE would improve city roadway conditions from existing conditions, allowing better emergency vehicle access to residences as well as evacuation routes for area residents. Thus, impacts from implementation of the LUTE would result in a less-than-significant impact under project conditions and would make a less than cumulatively considerable contribution under cumulative conditions related to interference with an adopted emergency response plan or emergency evacuation plan.

Implementation of the Playbook would not modify the existing roadway network in the City in a manner that would obstruct emergency access. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the findings of the certified LUTE EIR related to impacts from interference with emergency plans remain valid and no further analysis is required.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

As identified on page 3.3-15 in the LUTE EIR, the LUTE was determined to have no impact under project or cumulative conditions related to this threshold.

No changes to the location of the project have occurred and no changes to the risks from wildfires has occurred since approval of the LUTE. The project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the findings of the certified LUTE EIR related to impacts from wildland fires remain valid and no further analysis is required.

Mitigation Measures

No significant hazard impacts were identified in the LUTE EIR, and no mitigation measures were required.

CONCLUSION

There are no significant impacts that are peculiar to the project. As discussed above, the project would not have any potentially significant impacts or cumulative impacts that were not discussed in the LUTE EIR. Therefore, the conclusions of the LUTE EIR remain valid and approval of the project would not require additional environmental review.

4.10 HYDROLOGY AND WATER QUALITY

Environmental Issue Area	Where Impact Was Analyzed in the LUTE EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/Resolve Impacts?
X. Hydrology and Water Quality.						
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	LUTE EIR Section 3.8, Impact 3.8.1 and 3.8.4	No	No	No	No	NA, impacts would remain less than significant.
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	LUTE EIR Section 3.11, Impact 3.11.1.1 and 3.11.1.2	No	No	No	No	NA, impacts would remain less than significant.
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:						
i) Result in substantial on- or offsite erosion or siltation;	LUTE EIR Section 3.8, Impact 3.8.1 and 3.8.4	No	No	No	No	NA, impacts would remain less than significant.
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	LUTE EIR Section 3.8, Impact 3.8.1 and 3.8.4	No	No	No	No	NA, impacts would remain less than significant.
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	LUTE EIR Section 3.8, Impact 3.8.1 and 3.8.4	No	No	No	No	NA, impacts would remain less than significant.

Environmental Issue Area	Where Impact Was Analyzed in the LUTE EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/Resolve Impacts?
iv) Impede or redirect flood flows?	LUTE EIR Section 3.8.2 and 3.8.5	No	No	No	No	NA, impacts would remain less than significant.
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	LUTE EIR Section 3.8, Impact 3.8.3	No	No	No	No	NA, impacts would remain less than significant.
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	LUTE EIR Section 3.1 and 3.8, Impacts 3.1.2, 3.8.1 and 3.8.4	No	No	No	No	NA, impacts would remain less than significant.

4.10.1 Discussion

No substantial change in the environmental and regulatory settings related to hydrology and water quality, described in LUTE EIR Section 3.8, Hydrology and Water Quality, has occurred since certification of the LUTE EIR.

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

As discussed in LUTE EIR Impact 3.8.1, construction activities associated with development of projects allowed under the LUTE would include grading, demolition, and vegetation removal which would disturb and expose soils to water erosion, potentially increasing the amount of silt and debris entering downstream waterways. In addition, refueling and parking of construction equipment and other vehicles onsite during construction could result in oil, grease, or related pollutant leaks and spills that may discharge into storm drains. Subsequent development projects would be required to comply with Municipal Code Chapter 12.60 Stormwater Management, as well as implement best management practices (BMPs) for the prevention of erosion and the control of loose soil and sediment, to ensure that construction does not result in the movement of unwanted material into waters within or outside the plan area. Municipal Code Chapter 12.60 requires project applicants to comply with the City's National Pollutant Discharge Elimination System (NPDES) permit requirements, implement a SWPPP, perform monitoring of discharges to stormwater systems to ensure compliance with State regulations, and General Plan Policy EM-8.5 which requires implementation of construction site inspections and a control program to prevent soil erosion. The LUTE EIR determined that construction impacts would be less than significant under project and cumulative conditions (Impact 3.8.4).

Implementation of the Playbook would not violate water quality standards or waste discharge requirements because the Playbook's strategic framework would not result in ground disturbing activities that would contribute to soil erosion or water quality issues. Implementation of the Playbook could support future PV solar installations (Play 1.2), multimodal transportation improvements (Play 3.2), EV charging stations (Play 3.3), reducing landfilled waste (Play 4.1), and expansion of the City's tree canopy (Play 4.3) within the existing developed conditions of the City. These activities would be consistent with LUTE Policies LT-2.3, LT-2.7, LT-3.1, and LT-11.5. These activities would also be required to comply with Municipal Code Chapter 12.60, "Stormwater Management," as well as implement BMPs for the prevention of erosion and the control of loose soil and sediment, to ensure that construction does not result in the movement of unwanted material into waters. Municipal Code Chapter 12.60 also requires project applicants to comply with the City's NPDES permit requirements. Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The

findings of the certified LUTE EIR related to impacts from conflicts with water quality standards and waste discharge requirements remain valid and no further analysis is required.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The LUTE EIR determined that implementation of subsequent projects by the LUTE would have little or no effect on groundwater recharge because the City is largely built out and would not reduce the amount of permeable surfaces. The City has historically relied on groundwater to meet between 4 and 11 percent of its total demand (approximately 1,000–2,700 acre-feet per year [AFY]). Currently, the City projects producing approximately 1,000 AFY from the groundwater basin through 2035 (LUTE EIR page 3.11-5). Groundwater production is not expected to increase beyond 1,000 acre-feet per year except in multiple dry year conditions and is actively managed by the Santa Clara Valley Water District to avoid groundwater overdraft through its conjunctive use efforts. The LUTE EIR concludes that impacts related to groundwater would be less than significant under project conditions and less than cumulatively considerable under cumulative conditions (Impact 3.11.1.3). No mitigation was required.

Implementation of the Playbook would not decrease water supply because the Playbook's strategic framework does not include projects that would reduce the amount of permeable surfaces or require the use of groundwater. In addition, the Playbook includes Play 4.2, which encourages the City to promote water conservation and increase the sustainability of water supplies consistent with LUTE Policy LT-1.9. Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR related to groundwater impacts remain valid and no further analysis is required.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial on- or offsite erosion or siltation;

See discussion under a) above.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

As discussed in LUTE EIR Impact 3.8.2, Municipal Code Chapter 16.62 provides standards for construction in 100-year flood hazard areas. The standards for construction generally require that the lowest floor of any structure be elevated to or above the base flood elevation, anchoring, and the use of flood damage-resistant materials and methods. Municipal Code Section 12.60.160 requires project applicants to demonstrate that the project would not increase runoff over pre-project rates and durations. In addition, General Plan Policy EM-9.1 requires that the City maintain and operate the storm drain system so that stormwater is drained from 95 percent of the streets within one hour after a storm stops. For flood-prone locations, Policy EM-10.2 requires incorporation of appropriate controls to detain excess stormwater. Compliance with the existing regulations contained in the City's Municipal Code would reduce potential impacts associated with flooding and stormwater drainage to a level that is less than significant for the LUTE under project and cumulative conditions (Impact 3.8.5). With respect to groundwater, the LUTE EIR determined that implementation of subsequent projects by the LUTE would have little or no effect on groundwater recharge because the City is largely built out and would not reduce the amount of permeable surfaces.

Implementation of the Playbook would not increase the rate or amount of surface runoff because the Playbook's strategic framework would not result in development within flood hazard areas, designated floodways, or result in alterations to existing storm drain systems. In addition, the Playbook includes Play 4.3, which encourages implementation of the City's Stormwater Infrastructure Plan which promotes the expansion of the City's urban tree

canopy and landscape features to address stormwater pollution and flood risk, consistent with LUTE Policy LT-2.3. Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR related to flooding impacts remain valid and no further analysis is required.

iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

See discussion under item a) and d) above.

iv) Impede or redirect flood flows?

See discussion under item d) above.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

As discussed in LUTE EIR Impact 3.8.3, seiches and tsunamis would not be expected to affect areas developed as part of the LUTE. There are no published maps or hazard information on seiche hazards in the Bay Area. Tsunamis would only be expected to affect low-lying marsh areas and bayward portions of sloughs. Mudflow (a type of landslide) would not be a hazard in Sunnyvale because of the city's generally flat terrain and distance from hilly or mountainous areas. The LUTE EIR determined that impacts related to inundation by seiche, tsunami, or mudflow would be less than significant under project conditions. The LUTE would not exacerbate the likelihood for inundation by seiche, tsunami, or mudflow.

Implementation of the Playbook would not result in inundation by flood hazard, seiche, or tsunami because the Playbook's strategic framework would not result in development within flood hazard areas or in marsh areas of the bay. Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR related to impacts from inundation by flood hazard, seiche, and tsunami remain valid and no further analysis is required.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

As discussed in LUTE EIR Impact 3.8.1, all private development projects would be required to include appropriate features to meet applicable regional Municipal Regional Stormwater Permit (MRP) Provision C.3 requirements and implement low impact design (LID). Common LID strategies that would be appropriate for the plan area would include treatment methods such as bio-retention basins and flow-through planters, green roofs, media filtration devices, and pervious surfaces. These features would be included within individual sites on a project-by-project basis. Compliance with existing requirements of Chapter 12.60 of the Municipal Code, the City's Municipal Code Chapter 12.60, the City of Sunnyvale Urban Runoff Management Plan, and MRP Provision C.3 requirements, along with implementation of General Plan policies EM-8.6, EM-10.1, and EM-10.3, would reduce surface water quality impacts associated with occupancy of projects in the LUTE to a less than significant level under project and cumulative conditions (Impact 3.8.4). With respect to groundwater, the LUTE EIR determined that implementation of subsequent projects by the LUTE would have little or no effect on groundwater recharge because the City is largely built out and would not reduce the amount of permeable surfaces. Therefore, the LUTE would not conflict with a sustainable groundwater management plan.

As discussed in LUTE EIR Impact 3.1.2, the LUTE would support key San Francisco Bay Plan objectives of preserving open space adjacent to San Francisco Bay, protecting the water quality of the bay, and increasing public access to the bay and associated shoreline. All lands in the Planning Area under the City's jurisdiction adjacent to San Francisco Bay would remain designated as parks or open space and thus would be protected from extensive development and

remain accessible to the public. The LUTE EIR determined that impacts related to consistency with applicable land use plans, policies, and regulations adopted for the purpose of avoiding or mitigating environmental effects would be less than significant under project and cumulative conditions (Impact 3.1.5).

Implementation of the Playbook would not conflict or obstruct with a water quality control plan or sustainable groundwater management plan because the Playbook's strategic framework would not require the use of groundwater or result in ground disturbing activities that would contribute to soil erosion or water quality issues. Implementation of the Playbook could support future photovoltaic (PV) solar installations (Play 1.2), multimodal transportation improvements (Play 3.2), electric vehicle (EV) charging stations (Play 3.3), reducing landfilled waste (Play 4.1), and expansion of the City's tree canopy (Play 4.3). These activities would be consistent with LUTE Policies LT-2.3, LT-2.7, LT-3.1, and LT-11.5. These activities would also be required to comply with Municipal Code Chapter 12.60, "Stormwater Management," as well as implement best management practices (BMPs) for the prevention of erosion and the control of loose soil and sediment, to ensure that construction does not result in the movement of unwanted material into waters. Municipal Code Chapter 12.60 also requires project applicants to comply with the City's NPDES permit requirements, implement a SWPPP, perform monitoring of discharges to stormwater systems to ensure compliance with State regulations. In addition, the Playbook includes Play 4.2 which encourages the City to promote water conservation and increase the sustainability of water supplies consistent with LUTE Policy LT-1.9. Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR related to water quality and groundwater management remain valid and no further analysis is required.

Mitigation Measures

No significant hydrology impacts were identified in the LUTE EIR, and no mitigation measures were required.

CONCLUSION

No new circumstances or project changes have occurred nor has any new information been found requiring new analysis or verification. Therefore, with the application of uniformly applied development standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there are no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The conclusions of the LUTE EIR regarding impacts to hydrology and water quality remain valid and the project does not require additional analysis under CEQA.

4.11 LAND USE AND PLANNING

Environmental Issue Area	Where Impact Was Analyzed in the LUTE EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/Resolve Impacts?
XI. Land Use and Planning.						
a) Physically divide an established community?	LUTE EIR Section 3.1, Impact 3.1.1 and 3.1.5	No	No	No	No	NA, this impact would remain less than significant.
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	LUTE EIR Section 3.1, Impact 3.1.2, 3.1.3, and 3.1.5	No	No	No	No	NA, this impact would remain less than significant.

4.11.1 Discussion

No substantial change in the environmental and regulatory settings related to land use and planning, described in LUTE EIR Section 3.1, Land Use, has occurred since certification of the LUTE EIR.

a) Physically divide an established community?

Impact 3.1.1 of the LUTE EIR, identifies that the LUTE does not include large-scale infrastructure projects such as new freeways or high-volume roadways that would divide an established community. Likewise, critical transportation infrastructure linking one neighborhood to another would not be removed as part of the LUTE. Implementation of the policy provisions of the LUTE would ensure integration and compatibility of new development with existing land use conditions. This impact was determined to be less than significant under project and cumulative conditions (Impact 3.1.5).

Implementation of the Playbook would not divide an established community because the strategic framework would not result in development projects that would alter local land use patterns or obstruct movement through established neighborhoods. Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, and (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR pertaining to the physical division of established communities remain valid and no further analysis is required.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

LUTE EIR Impact 3.1.2 and 3.1.3 determined that the LUTE would be consistent with adopted City and regional land use plans and policies and concluded that the LUTE's impact would be less than significant under project and cumulative conditions (Impact 3.1.5).

Implementation of the Playbook would not conflict with applicable land use plan, local policies and regulations because the strategic framework would not amend, revise, or be inconsistent with regulations related to land use planning and development because it is a policy level document that promotes clean electricity, decarbonizing transportation and buildings, encourages sustainable land use and resource management, enhancing community

awareness, and assessing climate vulnerabilities for Sunnyvale. Further, consistent with LUTE EIR Mitigation Measure 3.13.1, the Playbook GHG emissions forecast uses Sunnyvale-specific growth projections from the LUTE. Therefore, the Playbook is an implementation action of the LUTE and is, therefore, consistent with the City's adopted land use plan. The project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding consistency with applicable land use plans, policies, and regulations adopted for the purpose of avoiding or mitigating environmental effects remain valid and no further analysis is required.

Mitigation Measures

No mitigation measures were needed for the LUTE regarding land use. No additional mitigation measures are required for project for this topic.

CONCLUSION

There are no significant impacts that are peculiar to the project. No new impacts have occurred nor has any new information been found requiring new analysis or verification. The project would not have any potentially significant impacts or cumulative impacts that were not discussed in the LUTE EIR. Therefore, the conclusions of the LUTE EIR remain valid and approval of the project would not require additional environmental review.

4.12 MINERAL RESOURCES

Environmental Issue Area	Where Impact Was Analyzed in the LUTE EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/Resolve Impacts?
XII. Mineral Resources.						
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	LUTE EIR Section 3.7, Scoped out of impact analysis.	No	No	No	No	NA, no impact would occur.
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	LUTE EIR Section 3.7, Scoped out of impact analysis.	No	No	No	No	NA, no impact would occur.

4.12.1 Discussion and Conclusion

As discussed in LUTE EIR Section 3.7, there are no active mines and no known areas with mineral resource deposits or resources of statewide importance in the city. Therefore, no impact to availability of a known mineral resource would result. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR pertaining to mineral resources remain valid and no further analysis is required.

4.13 NOISE

Environmental Issue Area	Where Impact Was Analyzed in the LUTE EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/Resolve Impacts?
XIII. Noise.						
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?	LUTE EIR Section 3.6, Impact 3.6.1	No	No	No	No	NA, impact remains less than significant.
b) Generation of excessive groundborne vibration or groundborne noise levels?	LUTE EIR Section 3.6, Impact 3.6.3	No	No	No	No	NA, impact remains less than significant.
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	LUTE EIR page 3.6-28, Scoped out of impact analysis	No	No	No	No	NA, no impact would occur.

4.13.1 Discussion

No substantial change in the environmental and regulatory settings related to noise and vibration, described in LUTE EIR Section 3.6, Noise, has occurred since certification of the EIR. No new substantial noise sources have been introduced near the project since the LUTE EIR was prepared.

- a) **Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?**

LUTE EIR Impact 3.6.1 determined less significant impacts related to subsequent development generating noise levels that exceed City noise standards.

Implementation of the Playbook would not exceed City noise standards set forth in the City's Municipal Code because the strategic framework does not include development of stationary noise sources. Implementation of the Playbook could support future photovoltaic (PV) solar installations (Play 1.2), multimodal transportation improvements (Play 3.2), electric vehicle (EV) charging stations (Play 3.3), reducing landfilled waste (Play 4.1), and expansion of the City's tree canopy (Play 4.3). These activities would be consistent with LUTE Policies LT-2.3, LT-2.7, LT-3.1, and LT-11.5. These activities also would require some mechanical equipment and worker trips. Because of the scale and nature of the potential improvements, which are generally small, localized, and because the installation would require little use of heavy-duty construction equipment, excessive construction-related noise would not be anticipated. Furthermore, solar

installations would be consistent with the City's General Plan noise standards and Municipal Code Chapter 19.42, "Operating Standards," that provide additional requirements. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the findings of the certified LUTE EIR pertaining to exposure of persons to noise in excess of applicable standards remain valid and no further analysis is required.

b) Generation of excessive groundborne vibration or groundborne noise levels?

LUTE EIR Impact 3.6.3 evaluated the potential for construction activities to generate excess groundborne vibration and identified that damage to older buildings can occur at 0.25 inches per second of peak particle velocity (PPV) and at 0.5 for conventional buildings. This impact was identified as potentially significant. Mitigation Measure 3.6.3 requires noise and vibration reducing pile-driving techniques shall be employed during construction and will be monitored to ensure no damage to nearby structures occurs (i.e., vibrations above PPVs of 0.25 inch per second at nearby structures). The LUTE EIR identified that implementation of this mitigation measure would reduce the construction vibration impact to a less-than-significant level.

Implementation of the Playbook would not exceed City noise standards set forth in the City's Municipal Code because the strategic framework does not include development projects that would result in groundborne vibration or groundborne noise levels. Implementation of the Playbook could support future photovoltaic (PV) solar installations (Play 1.2), multimodal transportation improvements (Play 3.2), electric vehicle (EV) charging stations (Play 3.3), reducing landfilled waste (Play 4.1), and expansion of the City's tree canopy (Play 4.3). These activities would be consistent with LUTE Policies LT-2.3, LT-2.7, LT-3.1, and LT-11.5. Implementation of these Plays could require construction equipment that would generate groundborne vibration. Because of the scale and nature of the potential improvements, solar installations would be consistent with the standards set forth in Mitigation Measure 3.6.3. Furthermore, these activities would be required to comply with the City's General Plan noise standards and Municipal Code Chapter 19.42, "Operating Standards." Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR pertaining to groundborne vibration and noise remain valid and no further analysis is required.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

LUTE EIR Impact 3.6.5 determined that compliance with the Comprehensive Land Use Plan (CLUP) for Moffett Field Airfield and with the City's normally acceptable noise level standards effectively reduces potential aircraft noise impacts. As identified in LUTE EIR page 3.6-28, there are no private airfields located near the city and thus there would be no impact.

Implementation of the Playbook would not result in development projects that would be located within CLUP boundaries. No private airstrips have been developed in the project area since certification of the LUTE EIR. Therefore, there are no new circumstances or new information requiring new analysis or verification. The project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding exposure of people to excessive noise from airports remain valid and no further analysis is required.

Mitigation Measures

Mitigation Measure MM 3.6.3 was referenced in the LUTE EIR; however, the Playbook does not include development proposals that would generate new construction noise and vibration that was not evaluated in the LUTE EIR. Therefore, this Mitigation Measure is not applicable to the project.

CONCLUSION

There are no significant impacts that are peculiar to the project. As discussed above, the project would not have any potentially significant impacts or cumulative impacts that were not discussed in the LUTE EIR. Therefore, the conclusions of the LUTE EIR remain valid and approval of the project would not require additional environmental review.

4.14 POPULATION AND HOUSING

Environmental Issue Area	Where Impact Was Analyzed in the LUTE EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/Resolve Impacts?
XIV. Population and Housing.						
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	LUTE EIR Section 3.2, Impact 3.2.1 and 3.2.3	No	No	No	No	NA, impacts would remain less than significant.
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	LUTE EIR Section 3.2, Impact 3.2.2 and 3.2.4	No	No	No	No	NA, impacts would remain less than significant.

4.14.1 Discussion

No substantial change in the regulatory settings related to population and housing, described in LUTE EIR Section 3.2, Population, Housing, and Employment, has occurred since certification of the LUTE EIR.

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

LUTE EIR Impact 3.2.1 evaluated whether new development in Sunnyvale under the LUTE would induce new growth. The analysis noted that the number of additional jobs that would be generated by the LUTE would be within the overall employment growth projections identified by the Association of Bay Area Governments (ABAG). The LUTE does not propose any new housing and would not directly induce population growth in the area under project or cumulative conditions (Impact 3.2.3).

Implementation of the Playbook would not induce population growth directly or indirectly because it does not propose changes to policies or regulations related to land use or residential zoning. The Playbook includes Strategies that would encourage the City to promote clean energy, decarbonize buildings, and encourage multi-modal transportation options. Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR pertaining to population growth remain valid and no further analysis is required.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

As discussed in LUTE EIR Impact 3.2.3, the intent of the LUTE is to accommodate anticipated growth through a compact urban form that seeks to make efficient use of existing infrastructure and public services, thus minimizing the need for new or significantly expanded infrastructure that could be the impetus for the removal of housing units and/or businesses. Because most of Sunnyvale has been developed with urban uses, the LUTE focuses on

redeveloping existing properties. It is not expected that residential uses would convert to nonresidential uses. The LUTE EIR concludes that impacts related to displacement of people are less than significant under project conditions and less than cumulatively considerable under cumulative conditions (Impact 3.2.4).

Implementation of the Playbook would not remove existing housing or displace existing populations because it does not propose changes to policies or regulations related to land use or residential zoning. The Playbook includes Strategies that would encourage the City to promote clean energy, decarbonize buildings, and encourage multi-modal transportation options. Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR pertaining to population growth remain valid and no further analysis is required.

Mitigation Measures

No mitigation measures were needed for the certified LUTE EIR regarding population and housing. No additional mitigation measures are required for the project for this issue.

CONCLUSION

No new circumstances or project changes have occurred nor has any new information been found requiring new analysis or verification. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The conclusions of the LUTE EIR pertaining to population and housing remain valid and no further analysis is required.

4.15 PUBLIC SERVICES

Environmental Issue Area	Where Impact Was Analyzed in the LUTE EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/Resolve Impacts?
XV. Public Services.						
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:						
Fire protection?	LUTE EIR Section 4.0, Impacts 4.1.1 and 4.1.2	No	No	No	No	NA, Impact remains less than significant.
Police protection?	LUTE EIR Section 4.0, Impacts 4.2.1 and 4.2.2	No	No	No	No	NA, Impact remains less than significant.
Schools?	LUTE EIR Section 4.0, Impacts 4.3.1 and 4.3.2	No	No	No	No	NA, Impact remains less than significant.
Parks?	LUTE EIR Section 4.0, Impacts 4.4.1 and 4.4.2	No	No	No	No	NA, Impact remains less than significant.

4.15.1 Discussion

No substantial change in the regulatory settings related to public services, described in LUTE EIR Chapter 4, Public Services, has occurred since certification of the LUTE EIR.

- a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

Fire protection?

LUTE EIR Impact 4.1.1 determined that population and employment growth resulting from implementation of the LUTE would increase the demand for fire protection services. LUTE Policy LT-14.8 directs the City to ensure that

development projects provide appropriate resources to meet facility needs of the City and the Sunnyvale General Plan contains Policies SN-3.1 and SN-5.1 which address maintaining timely response to emergencies and ensuring adequate equipment and facilities are maintained. Additionally, Impact 4.1.2 notes that development under the LUTE would be subject to developer fees, which would provide sufficient resources to serve the projected needs of the Sunnyvale Department of Public Safety Bureau of Fire Services (Fire Bureau) under cumulative conditions. The LUTE EIR concludes that implementation of the LUTE would result in a less-than-significant impact under project conditions and be less than cumulatively considerable impact under cumulative conditions (Impact 4.1.2).

Implementation of the Playbook would not directly affect the provision of public services, nor contribute to population growth that could result in an increase for demand for public services. The strategic framework would not result in development proposals with a population-generating component. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the findings of the certified LUTE EIR pertaining to fire protection services remain valid and no further analysis is required.

Police protection?

LUTE EIR Impact 4.2.1 determined that population, the number of housing units, and increase in employment resulting from implementation of the LUTE would increase the demand for law enforcement services. The LUTE includes Policy LT-14.8 directs the City to ensure that development projects provide appropriate resources to meet facility needs of the City and the Sunnyvale General Plan contains Policy SN-3.1 that addresses maintaining timely response to emergencies. Implementation of the LUTE would result in a less-than-significant impact under project conditions and be less than cumulatively considerable under cumulative conditions (Impact 4.2.2).

Implementation of the Playbook would not directly affect the provision of law enforcement services, nor contribute to population growth that could result in an increase for demand for law enforcement services. The strategic framework would not result in development proposals with a population-generating component. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the findings of the certified LUTE EIR pertaining to law enforcement services remain valid and no further analysis is required.

Schools?

LUTE EIR Impact 4.3.1 determined that subsequent development under the LUTE, including residential and commercial development, would be subject to school facility fees to pay for additional school facility needs. With payment of school facility fees, this impact from buildout of the LUTE would be less than significant under project conditions and less than cumulatively considerable under cumulative conditions (Impact 4.3.2).

Implementation of the Playbook would not directly affect the provision of school services, nor contribute to population growth within the local school districts' service areas that could result in an increase in student enrollment in local schools. The strategic framework would not result in development proposals with a population-generating component. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the findings of the certified LUTE EIR pertaining to schools remain valid and no further analysis is required.

Parks?

See discussion under items a) and b) in Section 4.16, "Recreation."

Mitigation Measures

No mitigation measures were needed for the certified LUTE EIR regarding public services. No additional mitigation measures are required for the project.

CONCLUSION

No new circumstances or project changes have occurred nor has any new information been found requiring new analysis or verification. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The conclusions of the LUTE EIR pertaining to public services remain valid and no further analysis is required.

4.16 RECREATION

Environmental Issue Area	Where Impact Was Analyzed in the LUTE EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/Resolve Impacts?
XVI. Recreation.						
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	LUTE EIR Section 4.4, Impact 4.4.1 and 4.4.2	No	No	No	No	NA, impact remains less than significant
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	LUTE EIR Section 4.4, Impact 4.4.1 and 4.4.2	No	No	No	No	NA, impact remains less than significant.

4.16.1 Discussion

- a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

See discussion under item b) below.

- b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

LUTE EIR Impact 4.4.1 and 4.4.2 evaluated whether the increase in employees and residents from implementation of the LUTE would increase demand for public parks. Per the City's Municipal Code Chapter 18.10, new residential development would also be required to dedicate land, pay a fee in lieu thereof, or both, for park or recreational purposes at a ratio of 5 acres per 1,000 residents. These fees may be used to upgrade existing park facilities. The LUTE EIR also programmatically evaluated the environmental impacts of upgrading existing parks and the development of new park facilities as part of the overall development analyzed in the EIR (LUTE EIR page 4.0-17), and therefore the impact conclusions in the LUTE EIR capture the impacts from construction of new parks and recreational facilities. The LUTE EIR concludes that the LUTE's impact on recreational facilities and parks would be less than significant under project conditions and less than cumulatively considerable under cumulative conditions (Impact 4.4.2).

Implementation of the Playbook would not directly require the construction or expansion of recreational facilities, nor contribute to population growth as that could result in an increase the use of existing neighborhood parks, regional parks, or other recreational facilities. The strategic framework would not result in development proposals with a population-generating component. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the findings of the certified LUTE EIR pertaining to recreation remain valid and no further analysis is required.

Mitigation Measures

No mitigation measures were identified in for the certified LUTE EIR regarding recreation, nor are any additional mitigation measures required the project.

CONCLUSION

The project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. Therefore, the conclusions of the LUTE EIR pertaining to recreation remain valid and no further analysis is required.

4.17 TRANSPORTATION

Environmental Issue Area	Where Impact Was Analyzed in the LUTE EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/Resolve Impacts?
XVII. Transportation.						
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	LUTE EIR Section 3.4, Impacts 3.4.1, 3.4.2, 3.4.3, 3.4.4, and 3.4.7	No	No	No	No	NA, impacts remains significant and unavoidable.
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	LUTE EIR Section 3.4.3-	No	No	No	No	NA
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	LUTE EIR Section 3.4, Impact 3.4.5	No	No	No	No	NA, impact remains less than significant.
d) Result in inadequate emergency access?	LUTE EIR Section 3.4, Impact 3.4.6	No	No	No	No	NA, impact remains less than significant.

4.17.1 Discussion

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

LUTE EIR Impact 3.4.7 determined that implementation of the LUTE could result in substantial contributions to a number of intersections and freeway segments within the City and the region resulting in unacceptable levels of service (LOS). These operational impacts would also significantly impact transit travel times (Impact 3.4.2). The EIR identifies a number of mitigation measures to reduce these impacts; however, because implementation of some of these mitigation measures is uncertain or infeasible some impacts would remain significant and unavoidable (mitigation measures MM 3.4.7a and MM 3.4.7b were determined to be feasible). The analysis also identifies LUTE policies (e.g., Policy LT-3.5, LT-3.6, LT-3.7, LT-3.13, and LT-11.4) that constitute elements of a Transportation Demand Management (TDM) program, which is a combination of services, incentives, facilities, and actions that reduce single-occupant vehicle trips to help relieve traffic congestion. Implementation of a TDM program helps proposed developments to meet City requirements for reducing vehicle trips by 20 to 35 percent, depending on the proposed land use and its location. The LUTE EIR concluded that Impact 3.4.2 and 3.4.7 were significant and unavoidable for project and cumulative conditions.

Implementation of the Playbook does not include any development proposals that would adversely impact multimodal transit facilities or conflict with an adopted program, plan, or ordinance. In addition, the Playbook includes Play 3.1, which encourages balanced land use to reduce driving, and Play 3.2, which advocates for enhancing multimodal transportation options in the City consistent with LUTE Policy LT-3.1 and LT-3.21. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an

impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR remain valid and no further analysis is required.

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3(b), which pertains to vehicle miles travelled?

LUTE EIR Section 3.4.3 disclosed the potential for implementation of the LUTE to increase VMT. The LUTE EIR determined that implementation of the LUTE would improve the City of Sunnyvale and Santa Clara County VMT per capita conditions as compared to the current LUTE in 2035.

Implementation of the Playbook would establish a plan of action to reduce of GHG emissions, encourage multi-modal transportation options, and promote the use of alternatively fueled vehicles consistent with LUTE Policies LT-1.6, LT-3.1, and LT-11.5. In addition, the Playbook does not include any development proposals that would increase VMT. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR remain valid and no further analysis is required.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

LUTE EIR Impact 3.4.5 evaluated the potential for implementation of the LUTE to increase the risk of vehicle and bicycle/pedestrian conflicts and intensify urban uses in areas adjacent to the Caltrain tracks. Proposed LUTE policies incorporated a "complete streets" approach for circulation planning that accommodates all travel modes and improves safety. The LUTE EIR also notes that the anticipated circulation improvements in the LUTE would help reduce the potential for pedestrian/bicycle and vehicle conflicts and all roadway and pedestrian/bicycle facilities would be designed in accordance with City standards. The LUTE EIR concludes that hazard impacts from design features would be less than significant under project conditions and less than cumulatively considerable under cumulative conditions.

Implementation of the Playbook not include any development proposals that would result in changes to roadways. In addition, the Playbook includes Play 3.1, which encourages balanced land use to reduce driving, and Play 3.2, which advocates for enhancing multimodal transportation options in the City consistent with LUTE "complete streets" including LT-3.1 and LT-3.21. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR remain valid and no further analysis is required.

d) Result in inadequate emergency access?

As discussed in LUTE EIR Impact 3.4.6, LUTE policies incorporate a complete streets approach for circulation planning that accommodates all travel modes as well as improves safety and access. Complete streets are designed and operated to enable safe and convenient access for all users. Additionally, all improvements would be required to meet City of Sunnyvale roadway design standards. The LUTE EIR concludes that impacts related to inadequate emergency access would be less than significant under project conditions and less than cumulatively considerable under cumulative conditions.

Implementation of the Playbook not include any development proposals that would directly obstruct or result in inadequate emergency access. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR remain valid and no further analysis is required.

Mitigation Measures

Mitigation Measure 3.4.7a was referenced in the LUTE EIR; however, the Playbook does not include development proposals that would require participation in the transportation impact fee program. Therefore, this Mitigation Measure is not applicable to the project.

CONCLUSION

There are no significant impacts that are peculiar to the project. As discussed above, the project would not have any potentially significant impacts or cumulative impacts that were not discussed in the LUTE EIR. Therefore, the conclusions of the LUTE EIR remain valid and approval of the project would not require additional environmental review.

4.18 TRIBAL CULTURAL RESOURCES

Environmental Issue Area	Where Impact Was Analyzed in the LUTE EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/Resolve Impacts?
XVIII. Tribal Cultural Resources.						
Has a California Native American Tribe requested consultation in accordance with Public Resources Code section 21080.3.1(b)?						
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:						
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	LUTE EIR Section 3.10, Impact 3.10.1 and 3.10.3.	No	No	No	No	NA, impacts would remain significant and unavoidable.
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	LUTE EIR page 3.10-11	No	No	No	No	NA, there would be no impact

4.18.1 Discussion

AB 52, signed by the California Governor in September of 2014, established a new class of resources under CEQA: "tribal cultural resources." It requires that lead agencies undertaking CEQA review must, upon written request of a California Native American tribe, begin consultation once the lead agency determines that the application for the project is complete, prior to the issuance of a Notice of Preparation (NOP) of an EIR or notice of intent to adopt a negative declaration or mitigated negative declaration. This requirement took effect on July 1, 2015. The revised NOP for the LUTE EIR was published on June 17, 2015, prior to the effective date of this requirement.

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- a) **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?**

As discussed in LUTE EIR Impact 3.10.1, identified that the City includes numerous buildings that have historical value and future actions under the LUTE have the potential to directly (i.e., demolition) or indirectly (i.e., adverse effects to historical setting from adjacent construction) impact historic buildings and structures that qualify as historic resources under CEQA. The Community Character chapter of the Sunnyvale General Plan includes various policies addressing this issue. Policy CC-5.1 states that the City will preserve existing landmarks and cultural resources and their environmental settings, Policy CC-5.3 seeks to identify and work to resolve conflicts between the preservation of historic resources and alternative land uses, and Policy CC-5.4 states that the City will seek out, catalog, and evaluate heritage resources that may be significant. However, the LUTE EIR concluded that the implementation of the LUTE would result in significant and unavoidable impacts under project and cumulative conditions (Impact 3.10.3).

Implementation of the Playbook would not result in direct impacts to tribal cultural resources because the proposed strategic framework does not include development proposals that would result in ground disturbing activities. Implementation of the Playbook could support future photovoltaic (PV) solar installations (Play 1.2), multimodal transportation improvements (Play 3.2), electric vehicle (EV) charging stations (Play 3.3), reducing landfilled waste (Play 4.1), and expansion of the City's tree canopy (Play 4.3) within the existing developed conditions of the City. These activities would be consistent with LUTE Policies LT-2.3, LT-2.7, LT-3.1, and LT-11.5. These activities would also be required to comply with General Plan Policy LT-1.10f that requires protection and mitigation of discovered resources. Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding historical resources remain valid and no further analysis is required.

- b) **A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?**

As discussed on page 3.10-11 of the LUTE EIR, in 2010 the City initiated a consultation process with Native American tribes pursuant to SB 18. Similar to AB 52, SB 18 requires the city must consult with Native American tribes with respect to the possible preservation of, or the mitigation of impacts on, specified Native American places, features, and objects located within that jurisdiction. No request for consultation was received by the City.

Implementation of the Playbook would not result in direct impacts to buried tribal cultural resources because the proposed strategic framework does not include development proposals that would result in ground disturbing activities. Implementation of the Playbook could support future photovoltaic (PV) solar installations (Play 1.2), multimodal transportation improvements (Play 3.2), electric vehicle (EV) charging stations (Play 3.3), reducing landfilled waste (Play 4.1), and expansion of the City's tree canopy (Play 4.3) within the existing developed conditions of the City. These activities would be consistent with LUTE Policies LT-2.3, LT-2.7, LT-3.1, and LT-11.5. These activities would also be required to comply with General Plan Policy LT-1.10f that requires protection and mitigation of discovered resources. Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new

information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding historical resources remain valid and no further analysis is required.

Mitigation Measures

No significant tribal cultural resource impacts are expected as identified in the LUTE EIR, and no mitigation measures were required.

CONCLUSION

There are no significant impacts that are peculiar to the project. As discussed above, the project would not have any potentially significant impacts or cumulative impacts that were not discussed in the LUTE EIR. Therefore, the conclusions of the LUTE EIR remain valid and approval of the project would not require additional environmental review.

4.19 UTILITIES AND SERVICE SYSTEMS

Environmental Issue Area	Where Impact Was Analyzed in the LUTE EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/Resolve Impacts?
XIX. Utilities and Service Systems.						
a) Require or result in the relocation or construction of construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	LUTE EIR Section 3.8 and 3.11, Impacts 3.8.1, 3.11.1.2, 3.11.2.2, and 3.11.4.1	No	No	No	No	NA, impact remains less than significant.
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	LUTE EIR Section 3.11, Impacts 3.11.1.1 and 3.11.1.3	No	No	No	No	NA, impact remains less than significant.
c) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?	LUTE EIR 3.11, Impacts 3.11.2.2 and 3.11.2.3	No	No	No	No	NA, impact remains less than significant.
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	LUTE EIR Section 3.11, Impacts 3.11.3.1 and 3.11.3.3	No	No	No	No	NA, impact remains less than significant.
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	LUTE EIR Section 3.11, Impact 3.11.3.2	No	No	No	No	NA, impact remains less than significant.

4.19.1 Discussion

No substantial change in the settings related to water supply, described in LUTE EIR Section 3.11, "Utilities and Service Systems, has occurred since certification of the LUTE EIR.

Since completion of the LUTE EIR, the City of Sunnyvale as well as the cities of Campbell, Cupertino, Gilroy, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Saratoga, and unincorporated Santa Clara County became members of SVCE, which serves as the CCA for its member communities. SVCE works in partnership with PG&E to deliver direct, renewable electricity to customers within its member jurisdictions. Consistent with State law, all electricity accounts within the city of Sunnyvale were automatically enrolled in SVCE; however, customers can choose to opt out or remain with PG&E. According to the Sunnyvale Climate Action Plan Biennial Progress Report released in 2018, 98 percent of residential and commercial accounts received carbon-free electricity from SVCE (City of Sunnyvale 2018). Electricity is supplied to the city using infrastructure built and maintained by PG&E.

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?

LUTE Impact 3.11.1.2 and 3.11.2.2 determined that the City's wastewater collection system has the capacity to convey sewage and industrial wastes generated when the city is fully developed in accordance with the development potential (with an approximately 55.7 million gallons per day [mgd] collection capacity) of the City. The LUTE EIR concludes that impacts related to construction of wastewater treatment facilities would be less than significant under project conditions and less than cumulatively considerable under cumulative conditions (Impact 3.11.2.3). LUTE EIR Impact 3.8.1 determined that the amount and type of runoff generated by various projects under the LUTE would be greater than that under existing conditions due to increases in impervious surfaces. These impacts would be reduced through compliance with existing regulatory programs, including the City's Municipal Code Chapter 12.60, and the City's Urban Runoff Management Plan. Implementation of the LUTE would result in a less-than-significant impact under project conditions and would be less than cumulatively considerable under cumulative conditions (Impact 3.8.4). With respect to utility services, LUTE EIR Impact 3.11.4.1 determined that implementation of the LUTE would increase the consumption of energy. However, subsequent development would comply with Building Energy Efficiency Standards included in Title 24 of the California Code of Regulations and implement the energy efficiency requirements of the City's CAP. This would include obtaining carbon-free electricity from SVCE. Implementation of the LUTE would also result in an improvement in VMT per capita as compared to citywide VMT under the previous General Plan. This impact was identified as less than significant under project and cumulative conditions.

Implementation of the Playbook would not result in the relocation or construction of new or expanded utility services systems because the proposed strategic framework does not include development proposals that would increase demand for services nor contribute to population growth. In addition, the Playbook Strategies and Plays complement the policy framework in the LUTE by promoting clean electricity, decarbonizing transportation and buildings, encouraging sustainable land use and resource management which would reduce the reliance on electrical power and promote water conservation. Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding energy efficiency remain valid and no further analysis is required.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

As described in LUTE EIR Impact 3.11.1.1 and 3.11.1.3, cumulative development in Sunnyvale would result in a net additional water demand of 2,274 acre-feet per year. The LUTE Water Supply Assessment (WSA) identifies that there is adequate water supply available to meet build out of the City in year 2035 under normal, single-dry and multiple-dry years. This impact was identified as less than significant under project and cumulative conditions.

Implementation of the Playbook does not exceed existing water capacity because the proposed strategic framework does not include development projects that would directly contribute to population growth. In addition, the Playbook includes Play 4.2, which promotes water conservation consistent with LUTE Policy LT-11.5. Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding energy efficiency remain valid and no further analysis is required.

c) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?

LUTE EIR Impact 3.11.2 determined identifies that the City's wastewater collection system has the capacity to convey sewage and industrial wastes generated when the city is fully developed in accordance with the development potential (with an approximately 55.7 mgd collection capacity) of the City. The City's Wastewater Collection System Master Plan and Capital Improvement Program identify the conveyance improvements projects including improvements to lift stations, pump stations 1 and 2, and pipeline improvements. Wastewater treatment capacity is addressed under a) above. This impact was identified as less than significant under project and cumulative conditions.

Implementation of the Playbook does not exceed existing wastewater capacity because the proposed strategic framework does not include development projects that would directly contribute to population growth. Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding energy efficiency remain valid and no further analysis is required.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

LUTE EIR Impact 3.11.3.1 and 3.11.3.3 determined that the City would generate approximately 54,020 tons annually of solid waste at buildout. The LUTE EIR identifies that there is available combined remaining capacity of 32.8 million tons at three local landfills. This includes the Waste Management-owned Guadalupe Landfill, which has 11,055,000 tons of remaining capacity. By 2035, approximately 412,979 pounds (206.49 tons) of solid waste would be generated per day in Sunnyvale (including the LUTE, Peery Park Specific Plan, and Lawrence Station Area Plan). This amount of waste represents approximately 12.6 percent of the permitted daily throughput of the Kirby Canyon Landfill or 5.9 percent of the throughput at the Monterey Peninsula Landfill. This impact was identified as less than significant under project and cumulative conditions.

Implementation of the Playbook does not exceed existing solid waste capacity because the proposed strategic framework does not include development projects that would directly contribute to population growth. In addition, the Playbook includes Play 4.1, which encourages the diversion of waste from landfills consistent with LUTE Policy LT-11.5. Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding energy efficiency remain valid and no further analysis is required.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

As discussed in LUTE EIR Impact 3.11.3.2, Sunnyvale had a waste diversion rate of 66 percent as of 2011, and under current methods for tracking progress with AB 939, the per capita disposal rates are less than the targets. The City has developed its new Zero Waste Strategic Plan, intended to identify the new policies, programs, and infrastructure that will enable the City to reach its Zero Waste goals of 75% diversion by 2020 and 90 percent diversion by 2030.

Additionally, the City of Sunnyvale has committed to the waste reduction programs, plans, and policies that would apply to new development. Construction of subsequent projects under the LUTE that would result in demolition or renovation of existing structures would generate solid waste, and the City requires the recycling and reuse of materials to reduce landfill disposal. Therefore, implementation of the LUTE would not conflict with a federal, state, or local statute or regulation related to solid waste disposal. This impact would be less than significant under project conditions and less than cumulatively considerable under cumulative conditions (Impact 3.11.3.3).

Implementation of the Playbook does not conflict with solid waste regulations or exceed existing solid waste capacity because the proposed strategic framework does not include development projects that would directly contribute to population growth. In addition, the Playbook includes Play 4.1, which encourages the diversion of waste from landfills consistent with LUTE Policy LT-11.5. Therefore, there are no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR regarding energy efficiency remain valid and no further analysis is required.

Mitigation Measures

No mitigation measures were identified in for the certified LUTE EIR regarding utilities or energy, nor are any additional mitigation measures required the project.

CONCLUSION

There are no significant impacts that are peculiar to the project. As discussed above, the project would not have any potentially significant impacts or cumulative impacts that were not discussed in the LUTE EIR. Therefore, the conclusions of the LUTE EIR remain valid and approval of the project would not require additional environmental review.

4.20 WILDFIRE

Environmental Issue Area	Where Impact Was Analyzed in the LUTE EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/Resolve Impacts?
XX. Wildfire.						
Is the project located in or near state responsibility areas or lands classified as high fire hazard severity zones?						
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:						
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	LUTE EIR Section 3.3, Scoped out of impact analysis.	No	No	No	No	NA, no impact would occur.
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	LUTE EIR Section 3.3, Scoped out of impact analysis.	No	No	No	No	NA, no impact would occur.
c) Require the installation of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	LUTE EIR Section 3.3, Scoped out of impact analysis.	No	No	No	No	NA, no impact would occur.
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	LUTE EIR Section 3.3, Scoped out of impact analysis.	No	No	No	No	NA, no impact would occur.

4.20.1 Discussion and Conclusion

As discussed in Section 3.3, there are No Fire Hazard Severity Zones or state responsibility areas or Very High Fire Hazard Severity Zones or local responsibility areas located in or adjacent to Sunnyvale (CAL FIRE 2012). The city is urbanized and not adjacent to large areas of open space or agricultural lands that are subject to wildland fire hazards. The LUTE EIR determined that no impacts associated with exposure to wildland fire would result. Therefore, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, (3) significant off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR. The findings of the certified LUTE EIR pertaining to wildfire risk remain valid and no further analysis is required.

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

Environmental Issue Area	Where Impact Was Analyzed in the LUTE EIR.	Any Peculiar Impact?	Any Impact Not Analyzed as Significant Effect in LUTE EIR?	Any Significant Off-Site or Cumulative Impact Not Analyzed?	Any Adverse Impact More Severe Based on Substantial New Information?	Do EIR Mitigation Measures or Uniformly Applied Development Policies or Standards Address/Resolve Impacts?
XXI. Mandatory Findings of Significance.						
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?	LUTE EIR Sections 3.9, "Biological Resources," and 3.10, "Cultural Resources."	No	No	No	No	Yes, but impact remains significant and unavoidable
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	LUTE EIR Sections 3.1 through 3.13, and Sections 4.1 through 4.4	No	No	No	No	Yes, but impact remains significant and unavoidable
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	LUTE EIR Sections 3.3, "Hazards and Human Health," 3.5, "Air Quality," and 3.6, "Noise"	No	No	No	No	Yes, but impact remains significant and unavoidable

CONCLUSION

As noted throughout the checklist, there have been several changes to the regulatory setting since certification of the LUTE EIR. However, these regulatory changes would not affect the analysis or conclusions of the LUTE EIR. Regarding the above-listed mandatory findings of significance, with the application of uniformly applied regulatory standards and policies, the project would have no (1) peculiar impacts, (2) impacts not analyzed in the LUTE EIR, or (3) significant

off-site impacts and cumulative impacts not discussed in the LUTE EIR, and (4) there is no substantial new information indicating that an impact would be more severe than discussed in the LUTE EIR.

All applicable mitigation measures in the LUTE EIR would continue to be implemented with the project. Therefore, no new significant impacts would occur with implementation of the project.

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5 LIST OF PREPARERS AND PERSONS CONSULTED

5.1 LIST OF PREPARERS

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Claudia García	Environmental Planner
Gayiety Lane	Publishing Specialist
Lisa Merry	GIS/Graphics Specialist

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CLIMATE ACTION PLAYBOOK



Sunnyvale's Climate Action Playbook created by and for the Community

This is the proposed final Climate Action Playbook document. To view a redlined version of the Draft Climate Action Playbook, please visit [<URL>](#).

City Manager's Note



The City of Sunnyvale is pleased to release the Draft Climate Action Playbook – a plan for how our community can reduce greenhouse gas emissions and address climate change.

In 2017, the City and community began work to update Sunnyvale's Climate Action Plan (adopted 2014). The Draft Climate Action Playbook is the result of this effort to identify how Sunnyvale will reach the state's ambitious 2050 climate target. Just as a sports playbook identifies a team's winning strategies for achieving success on the field, our Playbook contains winning strategies for how to cut back our carbon emissions.

And just as a sports team relies on the support of its fans, this Playbook represents a collaborative effort between the City and our community. We owe a huge thanks to all who contributed to the process – your creativity and enthusiasm generated a wealth of climate action solutions for our community. Many of your ideas have been incorporated into the Playbook to ensure that it reflects our community's needs and aspirations. Ideas that were not incorporated this time around have been preserved (see *Appendix A: Ideas Roster*), so that we can continue to draw on them for inspiration as we implement the Playbook in the coming years.

Sunnyvale has demonstrated its leadership in climate action through progressive City policies and active community engagement. Yet much remains to be done to reduce our emissions and enhance our resilience to the threats of climate change. The Playbook is the next step to help us take bolder climate actions.

The Playbook is available at the following link:

bit.ly/sunnyvaleplaybook

We look forward to working with you all to take climate action and help Sunnyvale achieve its 2050 target.

A handwritten signature in blue ink that reads "Kent Steffens".

Kent Steffens
City Manager

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Executive Summary

Executive Summary

The Climate Action Playbook sets a vision for the City of Sunnyvale to reduce carbon emissions by 2050. As a sustainability leader, Sunnyvale adopted its first Climate Action Plan (CAP 1.0) in 2014 and has already achieved its 2020 greenhouse gas (GHG) emissions target. Now, the State of California has set new targets that move the ball further down the field for deeper emissions reductions of 40% below 1990 levels by 2030 (“40x30”) and 80% below 1990 levels by 2050 (“80x50”).

This Sunnyvale Climate Action Playbook (hereafter “Playbook”) builds upon our past success and integrates new, bold, breakthrough ideas generated by our community. It paves the path for meeting or exceeding the state’s emissions targets of 40x30 and 80x50. To develop the Playbook, we sourced more than 120 ideas from our community (see *Appendix A: Ideas Roster*), worked closely with the CAP 2.0 citizens’ advisory committee, and engaged a consultant team for technical analysis.

Our most recent emissions numbers are from the 2016 season, adjusted to reflect the impact of carbon-free electricity. **With our current line of scrimmage at 28% below 1990 levels, we are well-positioned to meet the state’s 2030 target. However, the path to 2050 calls for steeper reductions in emissions**, even as Sunnyvale’s emissions are forecasted to increase with anticipated growth. State policies on energy, transportation, and GHG mitigation, many of which continue through 2030, will offset these emissions significantly. However, state policies alone are not enough.

Effective local policies and programs are needed to complement state regulations and dramatically shift the trajectory to start decreasing carbon emissions. **To reach 80x50, the City must achieve an interim target of a 55% reduction below 1990 levels by 2030, exceeding the state’s 40x30 target.** This calls for a continued focus on addressing the two largest emissions sources – transportation (54%) and energy (37%) – and for putting in place today the policies that will affect our infrastructure in the coming decades. Local policies are also needed to improve our preparedness for and response to climate impacts and to recover from extreme climate events quickly.

The Playbook lays out six **Strategies** that outline the overarching approach for bold climate action to achieve

the end game of 80x50. Within each Strategy, there are several **Plays** that identify areas for action and measurable targets to define progress (see At-A-Glance on next page). These Strategies and Plays foster innovation to transform the way we power our buildings, travel around the Bay Area, consume goods and services, and empower our community to take individual actions. The Strategies and Plays also identify how we can better adapt to increasing local climate change impacts.

The Playbook also includes **Game Plan 2022, which contains “Next Moves,”** or specific actions, that the City and community can collectively take in the short-term to reduce carbon emissions and improve resilience to climate impacts. Game Plan 2022 is intended to be dynamic and will map out the next moves for three years initially. It will be revised every five years thereafter to account for the changing regulatory context, evolving technologies, behavior trends, and community needs.

Our initial next moves (Game Plan 2022) are planned for implementation over three years between 2019-2022 (see page 34). Some of the next moves will be absorbed and integrated into existing departmental operating or projects budgets. Additional resources needed over the next three years total \$1.39 million in one-time costs, which includes consultant services, temporary staffing, and infrastructure needs, and \$1.47 million in ongoing costs (approximately \$500,000 each year), which includes three additional staff positions and augmenting the City’s ongoing budget for CAP implementation. Resources allocated to implementing the Climate Action Playbook will be refined and finalized as part of the annual process for budget development and approval by the City Council.

Moving forward, the City will evaluate a variety of strategies to fund the implementation of the Playbook (e.g., differential utility use taxes, carbon impact fees) and will establish funding mechanisms customized to our community’s needs.

The issue of global climate change has become increasingly urgent, and **we need action today to create the highest GHG reductions by 2030 so that we can achieve 80x50.** This Playbook provides a path for transforming our community into a resilient and sustainable Sunnyvale through our collective commitment to individual and community-wide action.

At-a-Glance: Pathway to 2050



Strategy 1: Promoting Clean Electricity

Play 1.1	Promote 100% clean electricity	2030 Target: 100% participation in clean electricity 2050 Target: 100% participation in clean electricity
Play 1.2	Increase local solar photovoltaics	2030 Target: 3% of load from local solar 2050 Target: 5% of load from local solar
Play 1.3	Increase distributed electricity storage	2030 Target: 1% of electricity demand stored in batteries locally 2050 Target: 5% of electricity demand stored in batteries locally



Strategy 2: Decarbonizing Buildings

Play 2.1	Reduce energy consumption in existing buildings	2030 Target: 5% of existing homes and businesses receive deep energy retrofit 2050 Target: 30% of existing homes and businesses receive deep energy retrofit
Play 2.2	Support electrification of existing buildings	2030 Target: 20% of homes and businesses completely electrified 2050 Target: 50% of homes and businesses completely electrified
Play 2.3	Achieve all-electric new construction	2030 Target: 100% all-electric new buildings 2050 Target: 100% all-electric new buildings



Strategy 3: Decarbonizing Transportation & Sustainable Land Use

Play 3.1	Balance land use supply and enhance urban form	2030 Target: 13% reduction in vehicle miles per person 2050 Target: 25% reduction in vehicle miles per person
Play 3.2	Increase transportation options and support shared mobility	
Play 3.3	Increase zero-emission vehicles	2030 Target: 20% of all vehicles on road are zero-emission vehicles 2050 Target: 75% of all vehicles on road are zero-emission vehicles



Strategy 4: Managing Resources Sustainably

Play 4.1	Achieve Zero Waste goals for solid waste	2030 Target: Reduce landfilled garbage to 1 lb per person per day 2050 Target: Reduce landfilled garbage to 1 lb per person per day
Play 4.2	Ensure resilience of water supply	Targets will be defined as per state requirement
Play 4.3	Enhance natural carbon sequestration capacity	Supports broader net carbon reductions
Play 4.4	Promote sustainable food choices	Supports broader emissions reductions



Strategy 5: Empowering Our Community

Play 5.1	Enhance community awareness and engagement	Supports all other Plays
Play 5.2	Track and share data and tools	Supports all other Plays



Strategy 6: Adapting to a Changing Climate

Play 6.1	Assess climate vulnerabilities for Sunnyvale	
Play 6.2	Protect shoreline area from sea level rise and coastal flooding	
Play 6.3	Strengthen community resiliency	

Top Climate Actions You Can Take Today



Drive less – walk and ride more. It's good for the air and your health! Use the new Sunnyvale Bike Map¹ to find your best route. And if you need a car, take advantage of State incentives for electric vehicles!



Opt-up to 100% renewable electricity. Take advantage of Silicon Valley Clean Energy's GreenPrime² program.



Separate your food scraps. Collect your food scraps for curbside collection or drop-off at the SMaRT station (residents only) and help meet our community's Zero Waste goal by 2020.



Shop local, eat healthier, waste less. Support local farmers so that food travels shorter distances. Buy food in bulk to reduce packaging trash.



Understand your carbon impact. Download the free IGreenSunnyvale app on your smart phone and track the environmental impact of your sustainable actions.



Get the latest sustainability news and event information. Follow Sunnyvale Environmental Services on Facebook or subscribe to the Sustainable Sunnyvale e-newsletter (email green@sunnyvale.ca.gov).



The Playing Field

A Vision for a Sustainable Sunnyvale

Climate change is a global phenomenon that is affecting the social, environmental, and economic health of communities worldwide. The latest scientific reports demonstrate conclusively that greenhouse gas (GHG) emissions from human activities contribute to a progressively warming climate. The most recent Intergovernmental Panel on Climate Change (IPCC) report (2018) shows that if the current trajectory of GHG emissions continues, even a 1.5-degree Celsius (2.7 degrees Fahrenheit) increase in global temperatures above pre-industrial levels by 2040 could lead to significant threats, including sea level rise, increased wildfires, intensifying droughts, food shortages, and ecosystem damage.

In 2015, the Paris Climate Agreement became the world's first comprehensive climate agreement with the goal of holding the increase in global average temperature to well below 2 degrees Celsius (3.6 degrees Fahrenheit). California's emissions reduction goals for 2030 and 2050 are aligned with the scale of emissions reductions necessary to achieve this goal of the Paris Agreement.

The time to act is now. And local governments, like Sunnyvale, can make bold policy decisions, leverage emerging technologies, and actively engage their communities to mitigate climate impacts. Located in the heart of Silicon Valley, the City of Sunnyvale embodies the spirit of being a socially aware, technologically savvy, ethnically diverse, and actively engaged community. As we witness climate impacts in our community, our City recognizes the need for leadership and action to address the stressors that threaten quality of life across Sunnyvale.

Sunnyvale's planning effort to accelerate climate action is designed to reimagine our community and create opportunities for sustainable growth while moving aggressively toward a fossil-free future.

A Vision for 80x50

- **Sustainable and healthy community that preserves natural resources and runs on clean energy**
- **Mobile and well-connected city, supported by "smart" infrastructure and services**
- **Robust economy that prioritizes community equity and wellbeing**
- **Resilient and prepared community that can adapt to a changing climate**

In setting the course to achieve the state's emissions targets, Sunnyvale will need to balance economic and population growth and an increased demand for City services, all while still meeting our climate goals. This means making a fundamental shift in current patterns of urban development, mobility, building construction, and consumption towards more sustainable, holistic systems. It means initiating high-impact sustainability practices and scaling them across both private and public sectors. It means engaging government leadership, local businesses, schools, community groups, and neighborhoods in coordinated action. Most importantly, it means creating a safe, healthy, and liveable Sunnyvale for all in our community.

We know that evolving conditions mean that we will need to identify new moves in the coming years to continue to reduce emissions. This Playbook provides a framework for us to do so. It clearly defines the end game of reducing emissions by 80% by 2050, identifies key strategies and plays, and sets the ball rolling towards the goal posts.

Together, we can create a sustainable, equitable, and prosperous community by enabling next-generation mobility solutions, enhancing our built environments, investing in cleaner technologies, and minimizing our impact on the natural environment.

Background

Climate Action at the State Level

As a climate action leader, California has continued to demonstrate its commitment to early and aggressive action on climate change. The State Legislature and Governor have adopted ambitious targets to encourage bolder climate action, including statewide GHG emissions reduction targets of reaching:

- 1990 levels by 2020 (Assembly Bill 32, 2006)
- 40% below 1990 levels by 2030 (Senate Bill 32, 2016)
- 80% below 1990 levels by 2050 (Executive Order S-3-05, 2005)

Additionally, in September 2018, Governor Brown signed Senate Bill 100 into law, setting a state target of 100% carbon-free electricity by 2045. SB 100 also sets interim requirements for 50% renewable electricity by 2026 and 60% by 2030, superseding the less ambitious renewable portfolio standards (RPS) previously established.

Building Upon Sunnyvale's CAP 1.0

When the City of Sunnyvale's first Climate Action Plan (CAP 1.0) was adopted in 2014, it set the City on a path toward creating a more sustainable, healthy, and livable community. Since then, the City achieved the state's target GHG reductions by reaching 1990 levels ahead of the 2020 schedule, through both local actions and state policies. Notably, Sunnyvale has been a driving force for the launch of Silicon Valley Clean Energy (SVCE), a community choice aggregator that provides carbon-free electricity to most of our community.

Although CAP 1.0 helped the City exceed the state's 2020 GHG emissions reduction target, it was not designed to identify how more ambitious, long-term targets for 2030 and 2050 could be achieved.

To drive progress towards the aggressive emissions reduction targets by 2030 and 2050, City Council adopted Accelerating Climate Action as a Council Policy Priority in January 2017 and directed the development of an updated plan to reflect this Policy Priority.

Staff worked with consultants to build upon the foundation laid by CAP 1.0 and developed this



Playbook to guide the City and community in achieving or exceeding the state's 2030 and 2050 GHG emissions reduction targets.

Setting a New Bar for Leadership

Climate change is a global threat with local impacts. While communities around the world will be affected differently, we all share a collective responsibility to act.

As the heart of the Silicon Valley, what is created in Sunnyvale has influence far beyond its borders. Along with hundreds of cities worldwide, Sunnyvale has signed and endorsed national commitments and charters, such as:

- **U.S. Climate Mayors**, to uphold the commitments enshrined in the Paris Climate Agreement to meet the 1.5 degrees Celsius target; and
- **#WeAreStillIn**, to set a goal for emissions reductions equal to or greater than the U.S. goal under the Paris Climate Agreement.

While one city alone cannot solve the problem of climate change, we can demonstrate that reaching 80x50 is possible. This Playbook reveals how we plan to do our part to sustain future generations. In this way we join leading cities across the globe to realize the ambition of the Paris Climate Agreement.

Our Accomplishments

City Reaches 2020 Target Ahead of Schedule

Since 2008 – when Sunnyvale’s first GHG inventory was developed – the City has experienced significant growth in population, jobs and construction of new buildings. Despite these trends, which historically resulted in emissions growth, the City of Sunnyvale’s overall emissions decreased 12% below 1990 levels in 2016, surpassing the CAP 1.0 goal of reaching 1990 levels of emissions by 2020.

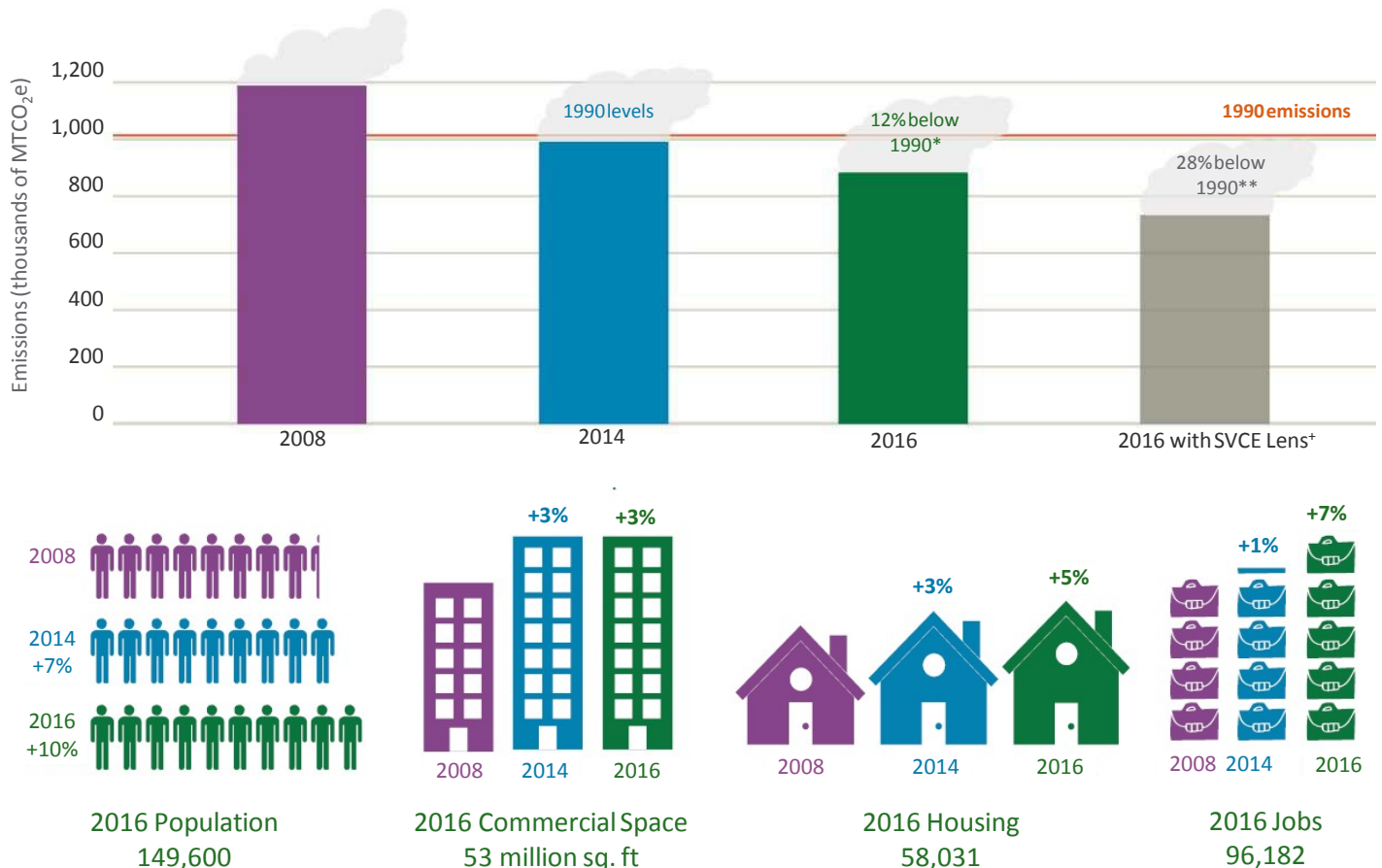
Additionally, SVCE was launched in 2017 and has had an immediate impact. SVCE is the community choice aggregator for Sunnyvale and 12 neighboring communities; they purchase clean electricity on our behalf. Creating such an agency was the action from

CAP 1.0 with the greatest GHG reduction potential. Since SVCE launched, it has provided clean electricity to 97% of Sunnyvale residents and businesses.

If SVCE had been supplying its 100% GHG-free electricity to Sunnyvale in 2016, we estimate that 2016 emissions would have been 28% below 1990 levels – putting our City on its way to achieving the State’s climate target of 40% below 1990 levels by 2030.

The clean energy provided by SVCE is the foundation for the city-wide energy transition Sunnyvale will need across all sectors. The use of carbon free electricity is essential as we shift away from the use of fossil fuels in buildings and transportation through electrification strategies. This is why SVCE is not only an accomplishment to be celebrated from our CAP 1.0, but also one that will continue to be the foundation for actions in this Playbook.

Sunnyvale’s 2016 Accomplishments



*25% below 2008.

**39% below 2008.

[†] Estimated impact of SVCE by applying 2017 SVCE enrollment data to the City’s 2016 emissions.

Current Emissions

In 2016, Sunnyvale emitted 880,000 metric tons of carbon dioxide equivalent (MTCO₂e), representing a 12% decrease in emissions below 1990 levels. Prior to the implementation of SVCE, electricity and natural gas consumption in buildings were the largest source of emissions (48%), followed by on-road transportation (44%) and other sources.

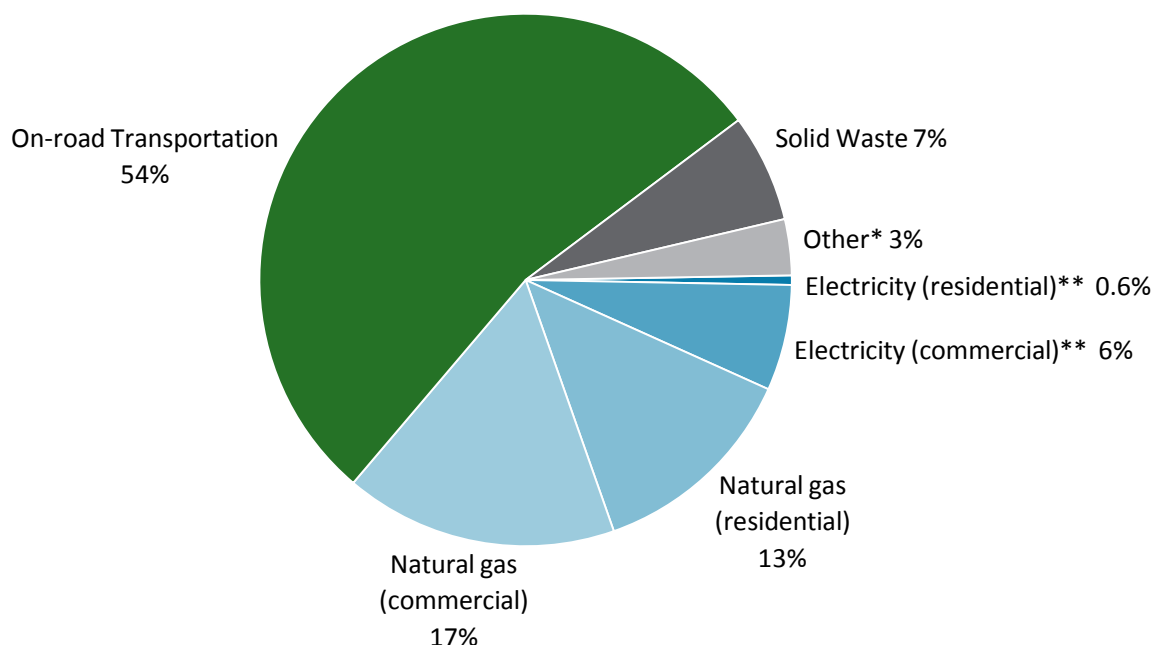
By the end of 2017, however, 98% of Sunnyvale’s residents and businesses were purchasing carbon-free electricity from SVCE. Applying these 2017 SVCE participation levels to the 2016 GHG Inventory decreases total emissions to 721,000 MTCO₂e – an additional 16% drop (total 28% below to 1990 emissions) resulting from switching to clean electricity.

The Impact of Clean Electricity

With SVCE, electricity use in residential and commercial buildings now makes up a much smaller portion of total emissions, with transportation now the largest emissions source (54%), followed by natural gas in buildings (30%) and other sources.

As electricity continues to be supplied by clean, renewable sources, the importance of addressing natural gas and transportation emissions increases. The pathway to zero-emission buildings and transportation, therefore, will largely depend on electrification strategies and growing clean electricity supplies, to move the City away from petroleum and other fossil fuel emissions.

City of Sunnyvale Greenhouse Gas Emissions Sources
Estimated 2016 Emissions (with SVCE)



*"Other" represents emissions associated with water, wastewater, off-road motorized equipment and Caltrain.

**In 2016, prior to the launch of SVCE, residential electricity made up 4% of total emissions and commercial electricity made up 20% of total emissions.

Future Scenarios: 2030 and 2050

Projecting Future Emissions

To understand the level of action the City must undertake to achieve 2030 and 2050 emissions reduction targets, it is necessary to consider how projected growth, state policies and existing efforts will impact future emissions.

As shown below, City of Sunnyvale's GHG emissions are forecasted to increase over time by 2050. This is despite key initiatives at the state and local levels to make electricity, buildings and cars less carbon intensive.

Key state policies and programs include:

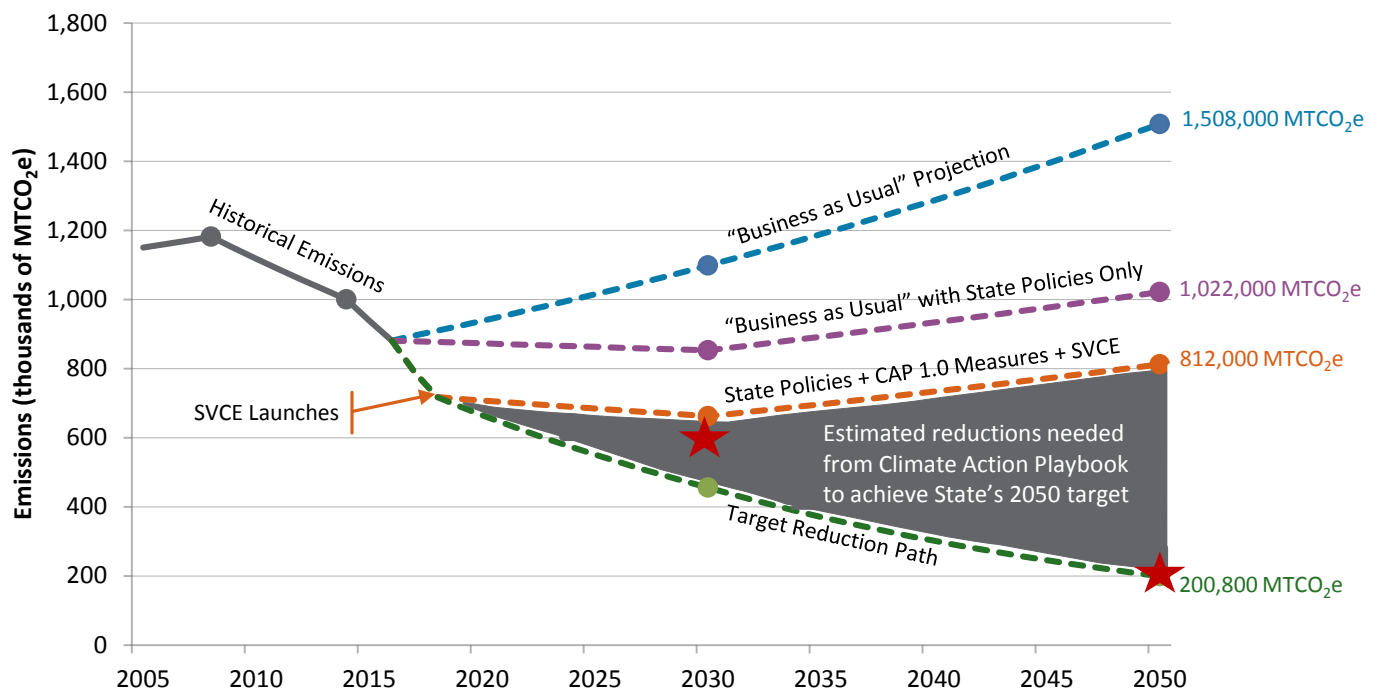
- Renewable Portfolio Standard (Senate Bill 350, 2015)
- Title 24 of California Building Standards Code
- Advanced Clean Cars Program (offered by California Air Resources Board, 2012)

These state policies generally address emissions through 2030, after which without further state and local action, emissions are forecast to increase through 2050 due to anticipated growth.

CAP 1.0 measures currently being implemented by Sunnyvale are also included in the analysis, including the full implementation of SVCE. The grey shaded area indicates additional emissions reductions needed from City action to achieve its end game of 80x50.

Early action is critical to setting Sunnyvale on a path to achieving 80x50, especially considering the projected growth in population and jobs. **For this reason, it is important that Sunnyvale achieve a reduction of 55% below 1990 level emissions by 2030 – surpassing the State's goal of 40% reduction by 2030.** The programs and infrastructure critical to achieving the 2050 goal must be in place and well underway by 2030 to put the City on the 80x50 trajectory.

Historical & Forecasted GHG Emissions: 2005-2050



The business-as-usual (BAU) forecast utilizes Sunnyvale-specific growth projections from the City's Land Use and Transportation Element (LUTE), adopted in 2017. These growth projections are available through 2035 when the City is projected to achieve complete buildout. This BAU forecast, however, assumes continued growth in the absence of future projections between 2035-2050.

★ = State Targets: 40% by 2030; 80% by 2050

Future Scenarios: 2030 and 2050

A Path to 80x50

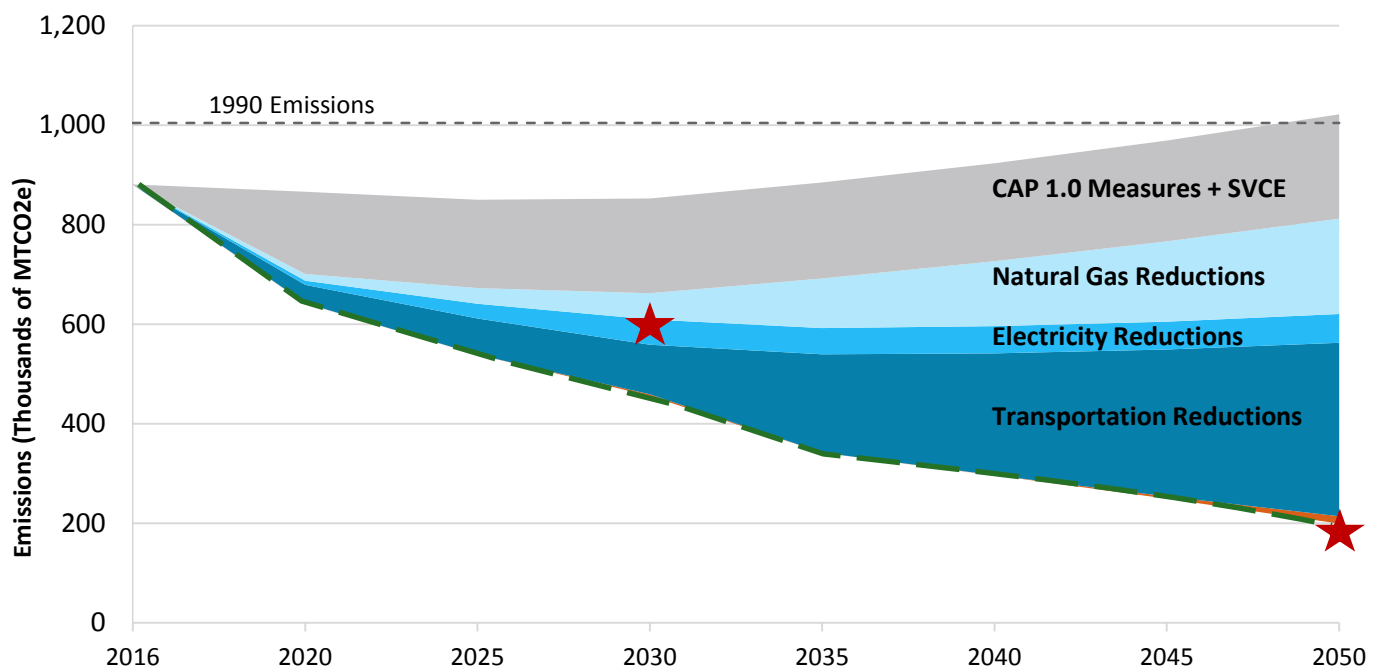
The City must take action to reduce emissions from four key sources – natural gas, electricity, transportation fuels and waste – in order to achieve its goal of carbon neutrality by 2050. While action is needed across sectors, some sectors may need more than others. Evaluating different scenarios for reducing emissions is valuable for understanding how actions result in GHG reductions and for guiding the selection of strategies to focus on in the coming decades.

To develop Sunnyvale’s Playbook, we explored the emissions reduction potential for each sector (shown below; see *Appendix B: Technical Background*). This scenario analysis incorporates the many existing City initiatives, including CAP 1.0 implementation of SVCE and the new FoodCycle (food scraps collection) program. The upper bound represents the adjusted business-as-usual scenario, where anticipated emissions are offset until 2030 by state policies and programs. Each “wedge” in

the chart, identified by a different color, represents the reductions needed from different sectors. The largest emissions reductions needed are in the transportation sector, followed by natural gas use in buildings.

The Playbook identifies strategies, plays, and measurable targets to achieve the emissions reductions related to each emissions source.

The scenario presented below shows the City exceeding the State’s 2030 target of 40% below 1990 levels on the path to achieving the State’s 2050 target. Aiming for emissions well beyond the 2030 State target is essential to being able to achieve the 2050 State target. Early actions help avoid higher cost approaches to retrofit and rebuild, and can have lasting impacts. Early action also has the greatest potential to inspire actions in other communities, amplifying the positive impact of Sunnyvale’s commitment to accelerating climate action.



GHG reductions in the waste sector (orange sliver below Transportation) constitute <3% of total emissions reductions needed to achieve 80x50.



Photo credit: Manish Mohapatra

Six Climate Strategies for the Win

Introduction to the Playbook

Sunnyvale's Playbook engages the enthusiasm of Sunnyvale's community, innovation of local technology companies, and creative can-do Silicon Valley spirit to create an aspirational, achievable and adaptable plan. It lays out a framework of overarching key strategies designed to be used by the City and the community to plan and implement long-term climate actions. This framework readies the field for Sunnyvale's long-term GHG emissions reduction targets to meet or exceed the state goals of 40% by 2030 and 80% by 2050 ("80x50").

Reaching 80x50 – or carbon neutrality – is our “end game.” In the context of reducing emissions, the target of 80x50 is generally considered to be aligned with carbon neutrality, with the potential for remaining emissions to be addressed through sequestration.

The Playbook lays out the pathway that can be followed to achieve our *end game*, hereafter referred to as “80x50”:

- **Six key Strategies** for Sunnyvale to reduce fossil fuel consumption and greenhouse-gas emissions, as well as enhance resilience and adapt to climate change.
- **Eighteen Plays** associated with key strategies, that specify a plan of action. Where possible, Plays are associated with *measurable targets*, which will be tracked and reported in progress reports.

Following the Plays is our “*Game Plan 2022*,” a compilation of the **Next Moves** to be taken by the City in the next three years. The Game Plan of Next Moves will be revised every five years thereafter to be sure we stay on track with the Plays and reach the end game.

Our Team

- **Sunnyvale's local government**, including all City departments.
- **Community members** who live or work in Sunnyvale.
- **Regional Agencies and Organizations**, such as Silicon Valley Clean Energy (SVCE), Valley Transportation Authority (VTA), County of Santa Clara, and Valley Water, among others.
- **Private Sector**, including large corporations, small businesses, technical consultants, contractors, manufacturers of clean technologies, start-ups, funders, and technology incubators.
- **Non-Profit Organizations** that provide support for grassroots community engagement initiatives.

End Game in 2050

- **80x50:** We are seeking to reduce emissions 80% by 2050. Remaining emissions could be sequestered within the city or nearby through projects such as urban forestry, marsh management, or applying compost to our soils.

Strategy 1: Promoting Clean Electricity



Path to 2050

Community-wide electricity can be supplied by different providers, including investor-owned utilities (like PG&E), wholesale electricity markets (used by some businesses), and by local building-scale projects, such as rooftop solar photovoltaic (PV). Sunnyvale has made tremendous progress in reducing emissions in this key sector by launching a community choice energy program, which combines the collective buying power of a community to procure power directly from electricity suppliers. With the launch of SVCE in 2017, 98% of Sunnyvale’s residential and commercial accounts receive carbon-free electricity.

Our success with SVCE will help us move the ball down the field faster than state requirements, as outlined in:

- Senate Bill 350, requiring all utilities in the state to source 50% of their electricity from renewable energy by 2030, and
- Senate Bill 100, committing California to 100% carbon-free electricity by 2045.

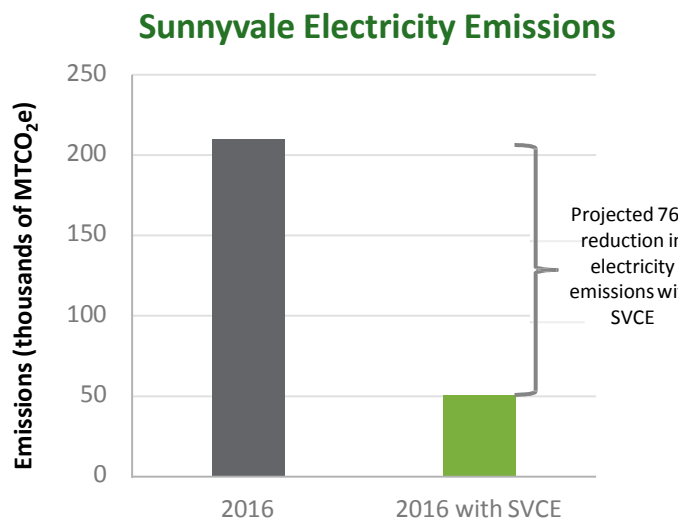
Moving forward, the City will seek to encourage and promote the use of carbon-free electricity sources from all energy providers. Electricity-related emissions have already reduced approximately 76% by moving from conventional PG&E electricity (left bar) to SVCE’s carbon-free electricity. The remaining emissions are associated with electricity procured from other electricity providers and from conventional (not carbon-free) sources. The City will continue to work on shifting these remaining emissions to carbon-free sources by working with large purchasers of electricity that buy electricity from wholesale markets (i.e., direct access customers).

In addition to grid-supplied electricity, the City of Sunnyvale has the opportunity to leverage the falling cost of GHG-free distributed energy resources, such as solar photovoltaic (PV). Currently, approximately 1% of Sunnyvale’s electricity comes from locally generated solar PV. Increasing local investments in distributed energy resources, such as solar PV, particularly when combined with on-site energy storage, may enable buildings to be self-sufficient during power outages, thereby enhancing resilience to climate-induced extreme

	Targets	
	2030:	100% participation in clean electricity
	2050:	100% participation in clean electricity
Play 1.2: Increase local solar photovoltaics	2030:	3% of load from local solar
	2050:	5% of load from local solar
Play 1.3: Increase distributed electricity storage	2030:	1% of electricity demand stored in batteries locally
	2050:	5% of electricity demand stored in batteries locally

weather events. In addition, increased solar installations May also support the local solar industry and, therefore, jobs growth.

Supply of clean electricity is a critical foundation for Strategies 2 (Decarbonizing Buildings) and 3 (Decarbonizing Transportation & Sustainable Land Use). As such, the City plans to continue supporting and expanding Sunnyvale’s participation to transition all electricity accounts to SVCE’s clean electricity by 2030. Further, the City will encourage expansion of local solar to provide 5% of total electricity by 2050, as storage options increase. Further, the City will continue to explore opportunities to increase distributed battery electricity storage at homes and businesses.



Strategy 1: Promoting Clean Electricity



Plays for the Win

Play 1.1: Promote 100% clean electricity. The City is committed to working with SVCE to expand 100% clean energy services to 100% of our community. Supporting and protecting this clean electricity supply is critical to other Strategies from this Playbook that rely on decarbonization (namely, Strategies 2 and 3).

Play 1.2: Increase local solar photovoltaics (PV).

Targeted incentives, regulations and educational resources will be essential to increasing adoption of distributed solar resources in Sunnyvale. These will help ensure local supply but also help to offset demands on the electricity grid during peak demand periods.

Play 1.3: Increase distributed electricity storage.

The City will work with Silicon Valley Clean Energy to pursue opportunities for electricity storage at the building scale, separate from the utility-scale storage that SVCE plans to invest in as a part of its Decarbonization Roadmap. Estimated local storage in Sunnyvale as of 2019 is less than 0.5 MW (Source: California Solar Initiative). Battery technologies are typically rated by the maximum amount of power (kilowatts) they can continuously provide over a 4-hour period. Accordingly, battery installations may be sized to meet specific power and duration requirements. As battery technologies improve, the City will promote and encourage the use of distributed (or behind-the-meter) electricity storage at commercial and residential buildings in Sunnyvale. Local electricity storage provides opportunities to lower peak electricity demand periods and improve grid resilience; improve cost-effectiveness of electricity for the consumer as time-of-use rates go into effect (anticipated in 2020); and supply emergency backup power for limited periods during power outages.

Strategy 2: Decarbonizing Buildings



Path to 2050

While Sunnyvale has experienced significant growth in recent years, emissions from the building sector have decreased by 40% compared to 2008 levels. These reductions can be attributed to many efforts, including the City's incentive-based Green Building Program; a cleaner electricity grid; and financial incentives offered to businesses and residents for efficiency upgrades.

As the electricity supply has become GHG-free, key challenges and opportunities remain for further reductions in emissions associated with the buildings sector. We must continue to pursue all energy efficiency opportunities to reduce overall energy demand and help our citizens and businesses save money. Secondly, we must identify technical and financial innovations to move buildings away from natural gas, which is used to heat our homes, offices and other buildings, as well as to heat water.

The State of California is moving towards Zero Net Energy (ZNE) new buildings. The upcoming Uniform Building Code cycle (in effect January 2020) is expected to include a requirement for all new residential buildings to be ZNE by 2020 and all new commercial buildings to be ZNE by 2030. However, these requirements do not fully address natural gas consumption as the ZNE approach offsets electricity consumption with onsite generation. For this reason, the City has chosen to focus on all-electric buildings that contain no natural gas infrastructure.

To transition away from fossil fuel usage in buildings, partnerships with SVCE, other cities, utilities and the private sector will be essential to effectively target electrification strategies for implementation and to also advocate for building electrification at the State level. These partnerships can also lend themselves to scaling-up the deployment of clean electric appliances to heat our homes, buildings and water.

The City of Sunnyvale will focus on improving building energy efficiency, reducing natural gas use through building electrification, and continuing to source electricity from renewable sources in order to pave the way to a decarbonized building sector by 2050.

	Targets	
Play 2.1: Reduce energy consumption in existing buildings	2030:	5% of existing homes and businesses receive deep energy retrofit
	2050:	30% of existing homes and businesses receive deep energy retrofit
Play 2.2: Support electrification of existing buildings	2030:	20% of homes and businesses completely electrified
	2050:	50% of homes and businesses completely electrified
Play 2.3: Achieve all-electric new construction	2030:	100% all-electric new buildings
	2050:	100% all-electric new buildings

Decarbonizing buildings requires that we address new construction and also seek to retrofit buildings, since not all buildings will be rebuilt before 2050. Play 2.3 seeks to maximize electrification implementation on new buildings, and the target is to get to 100% quickly. Plays 2.1 and 2.2 seek to improve efficiency and then switch fuel uses to electricity. The modest target for efficiency in the early years reflects the relatively low participation seen in efficiency programs. While efficiency is still essential, the Playbook aims for steeper progress on encouraging electrification through appliance retrofits with clean technologies like heat pump technology. The Playbook envisions that by 2050, at least half of the buildings are fully electrified.

Plays for the Win

Play 2.1: Reduce energy consumption in existing buildings. Increasing efficiency will mean continued program outreach and incentives to residents and businesses to encourage efficient designs for new construction and retrofits in existing buildings. System efficiencies such as insulation and upgrades to electric heat pump technologies are top priorities.

Strategy 2: Decarbonizing Buildings



Play 2.2: Support electrification of existing buildings. Building energy optimization includes an innovative focus on installing efficient, electric systems to heat water and heat/cool interiors. Space and heat pump water heaters are high-efficiency alternatives to natural gas systems and have the added benefit of being powered by clean electricity.

Play 2.3: Achieve all-electric new construction. While the state requires moving toward Zero Net Energy (ZNE) for new construction, the City will work towards incentivizing and promoting all-electric new construction options for deep decarbonization.

Strategy 3: Decarbonizing Transportation & Sustainable Land Use



Path to 2050

The transportation sector is the largest source of GHG emissions in Sunnyvale, mostly attributed to personal driving. Congestion from daily traffic creates pressure on the city's transportation infrastructure, reduces mobility and safety and increases emissions.

The City of Sunnyvale is committed to a vision of a complete community, which represents a place to live that is less dependent on automobiles. This includes:

- Comfortable, safe, convenient, and complete pedestrian and bicycle networks
- Transit access on arterial streets within a 10-minute walk from home or work
- Diverse housing choices with a range of affordability
- Village Centers with enhanced neighborhood services

As Sunnyvale's population and jobs continue to increase, providing realistic options for reducing single-occupancy vehicles is key. With this in mind, Sunnyvale is focusing job growth and housing in specific plan areas including Downtown, along El Camino Real, and in the Transit and Village Center areas. The vision is to allow for economic growth and revenue that supports local businesses, while providing housing that ensures that residents have places to live, work and play without having to travel long distances.

The City's plans and policies call for an integrated transportation approach that supports pedestrian-, bike- and transit-friendly neighborhoods. Vehicle electrification augments these mobility strategies to support further emissions reductions and achieve the state's climate goals.

Furthermore, Sunnyvale will continue to explore innovative first- and last-mile solutions to encourage greater use of public transit, including accommodating on-demand ridesharing, piloting shared bicycle and scooter programs and assessing the potential for shuttle service in targeted areas.

	Targets	
	2030:	2050:
Play 3.1: Balance land use supply and enhance urban form	13% reduction in vehicle miles per person	
Play 3.2: Increase transportation options and support shared mobility	25% reduction in vehicle miles per person	
Play 3.3: Increase zero-emission vehicles	20% of all vehicles on road are zero-emission vehicles	
	75% of all vehicles on road are zero-emission vehicles	

Plays for the Win

Play 3.1: Balance land use supply and enhance urban form. The City is committed to creating places to live that are less dependent on automobiles, through ensuring access to nearby services and activity centers. Furthermore, Sunnyvale seeks to provide housing options for all incomes and lifestyles, particularly near transit corridors and Caltrain stations, to support alternative modes of transportation.

Strategy 3: Decarbonizing Transportation & Sustainable Land Use



Play 3.2: Increase transportation options and support shared mobility. Multimodal transportation choices need to be enhanced to offer a variety of travel options in and around the city that are connected to regional transportation systems and destinations. Advocating for and increasing transportation options and shared mobility will create safer, healthier and more convenient movement throughout Sunnyvale.

Play 3.3: Increase zero-emission vehicles. Shifting to electric or alternatively fueled (e.g., hydrogen) vehicles has significant potential to reduce GHG emissions related to transportation. Since SVCE provides 100% carbon-free electricity, promoting a shift to electric vehicles away from fossil fuels would significantly reduce emissions. Other priorities include electrification of public transportation, car sharing, and electric bikes and scooters, and also improving availability of alternative fueling stations (e.g., EV charging facilities, hydrogen fueling stations). Currently (as of Oct. 1, 2018) 2.4% of vehicles registered in Sunnyvale are battery-electric vehicles and 1.3% are plug-in hybrid electric vehicles.³

Strategy 4: Managing Resources Sustainably



Path to 2050

Emissions from waste sent to landfills, transporting water and treating wastewater make up about 7% of total community-wide GHG emissions in Sunnyvale. The City will continue to find alternative methods to divert 90% of its waste away from landfills by 2030, in alignment with the Zero Waste Strategic Plan.

Although emissions from solid waste make up a small portion of Sunnyvale's GHG footprint, the conventional methodology only accounts for emissions released from organic material decomposing in landfills. Substantially more emissions are generated during the production and shipping of goods (furniture, food, cars, etc.) that are eventually used in Sunnyvale. Therefore, emissions associated with goods purchased and food consumed, called embedded emissions, are often dramatically underestimated. As a result, conserving these valuable resources still remains a top priority for the City. Additionally, finding innovative ways to decrease the embedded emissions in food that Sunnyvale residents consume and to capture carbon in our trees and soil can help make our community more sustainable.

Plays for the Win

Play 4.1: Achieve Zero Waste goals for solid waste.

Diverting waste away from landfills, either to recycling, energy recovery or composting facilities, is critical for the City to realize its Zero Waste goals as outlined in its Zero Waste Strategic Plan. This can be accomplished by waste prevention – consuming and throwing away less – and being smarter about the items that must be thrown away. Expanding Sunnyvale's food scraps collection program (FoodCycle) will help to increase the amount of organic material diverted away from the landfill.

However, state laws and policies limit access to diversion technologies so that 75% diversion is the current limit. Increasing diversion to 90% will require changes at the state level to allow use of technologies that recover energy from unrecyclable resident waste, primarily plastic and paper.

	Targets	
Play 4.1: Achieve Zero Waste goals for solid waste	2030:	Reduce landfilled garbage to 1 lb per person per day
	2050:	Reduce landfilled garbage to 1 lb per person per day
Play 4.2: Ensure resilience of water supply		Targets will be determined as per state requirement
Play 4.3: Enhance natural carbon sequestration capacity		Supports broader net carbon reductions
Play 4.4: Promote sustainable food choices		Supports broader emissions reduction

Play 4.2: Ensure resilience of water supply. As the region faces water supply challenges driven by recurring droughts and population growth, it will be critical to find ways to reduce the amount of water consumed and increase the sustainability of water supplies. Water conservation and water reuse, in the form of recycled and purified water, will help Sunnyvale reduce the stress placed on Northern California's water resources.

Play 4.3: Enhance natural carbon sequestration capacity. The natural environment, including plants and soil, have an immense capacity to store carbon dioxide that would otherwise be released into the atmosphere. Through implementation of the City's Urban Forest Management Plan⁴ and Green Stormwater Infrastructure Plan, Sunnyvale can continue to capture carbon by expanding its urban tree canopy and designing landscape features to address stormwater pollution and flood risk.

Play 4.4: Promote sustainable food choices. The process of raising livestock, particularly methane emissions from cattle, are a major source of GHG emissions. Reducing consumption of carbon-intensive foods, such as meat or dairy, is a way for community members to directly lower their personal carbon footprints. Additionally, encouraging the production of food in local gardens can help reduce the emissions associated with transporting foods over long distances.

Strategy 5: Empowering Our Community



Path to 2050

Addressing climate change requires action by all members of our community. The City of Sunnyvale recognizes its role in supporting and empowering individuals throughout Sunnyvale to realize a common vision of achieving our 80x50 target. Together with the diverse sectors of our community, the City will continue to build inclusive and innovative solutions to one of the most difficult challenges of our time.

Through the Playbook planning process, we sourced bold, breakthrough and practical ideas that would pave the way toward more engaged climate action across the community. The engagement process featured a large community workshop, where more than 160 people came together with enthusiastic contributions for the Playbook, and an online portal to collect ideas and encourage stakeholder feedback to hone the ideas. These ideas form the basis of this Playbook (see *Appendix A: Ideas Roster*) and we will continue to draw upon them in the years to come.

The Sunnyvale community has shown a strong commitment to climate action, and much remains to be done to accomplish our 80x50 end game. More ongoing marketing, outreach and behavior change campaigns will be necessary to inspire an 80x50 lifestyle, leverage the benefits of new technologies and empower the people that want to help. Our Plays in this area are focused on sharing necessary information, resources and tools to enable residents and businesses to take continued climate action and build our community. These Plays support other Plays within the Playbook.

Plays for the Win

Play 5.1: Enhance community awareness and engagement. The City is committed to collaborating with the community for immediate and effective climate action through outreach and engagement programs. The City will provide tools, education, and resources (e.g., programs) to enable residents, businesses, corporations, and other stakeholders to work towards mitigating emissions across the Strategies in this Playbook.

Targets	
Play 5.1: Enhance community awareness and engagement	Supports all Plays
Play 5.2: Track and share data and tools	Supports all Plays

Play 5.2: Track and share data and tools. The City will develop regular and effective data collection and communication tools to report progress on climate action. We will continue to partner with innovators in the community to maintain and enhance information and tools to keep our community informed.



Strategy 6: Adapting to a Changing Climate

Path to 2050

Adaptation strategies enable local communities to limit damage and improve recovery from the effects of climate change. This is often referred to as “community resiliency.” In our area, anticipated effects from climate change include rising sea levels, more extreme rain events, and more extreme heat events. Other effects may not occur locally but still affect our community, such as increased susceptibility to drought and increased occurrence and severity of wildfires.

Unlike Strategies 1 through 5 of the Playbook, adaptation strategies do not typically reduce greenhouse gas emissions. Rather, they are an essential complement to emissions reductions to provide a holistic response to climate change.

Adapting to a changing climate may be done effectively by:

- Reducing our exposure to climate stressors, such as sea-level rise, through effective management and improved infrastructure;
- Reducing sensitivity, or the reaction to climate stressors, which is greatest in sensitive populations, including minority or low-income groups, seniors, and children. This can be managed through improved local services to such populations; and
- Enhancing adaptive capacity or resilience, through better emergency preparedness, stronger social systems, and effective communication tools.

The City recognizes that adaptation requires a regional approach to ensure that proactive actions are implemented efficiently and do not have adverse impacts in other communities. For instance, sea-level rise may be addressed through a levee system in one city, which could have the unintended effect of diverting water to a neighboring, lower lying city. We need extensive collaboration and partnerships with neighboring cities, counties, regional agencies, corporations and businesses, and community groups to design, promote, and implement effective strategies that can benefit the Bay Area as a whole.

Play 6.1: Assess climate vulnerabilities for Sunnyvale

Play 6.2: Protect shoreline area from sea level rise and coastal flooding

Play 6.3: Strengthen community resiliency

Plays for the Win

Play 6.1: Assess climate vulnerabilities for Sunnyvale. The first step in addressing climate impacts is to assess our community’s vulnerability to climate change. The City will continue to work with partners to develop tools and resources that enable a better understanding of the vulnerability of our social, environmental, economic, and physical resources to varied climate stressors.

Play 6.2: Protect shoreline area from sea level rise and coastal flooding. The City will continue to plan for and protect the shoreline area under its control against sea-level rise, working with Valley Water (formerly Santa Clara Valley Water District) and other regional partners to do so. Sunnyvale will explore the possible use of traditional levees as well as natural mitigation efforts to protect both its coastal infrastructure, including the City’s Water Pollution Control Plant and closed landfill, as well as the natural and built land area along the Bay.

Play 6.3: Strengthen community resiliency. City departments will continue to collaborate with local volunteer and community groups to develop stronger social support systems to improve communication during emergencies and peer-to-peer education of preparedness and response. Pre-emptive rather than reactive strategies are needed to minimize exposure and improve resilience, particularly among the most vulnerable populations in Sunnyvale.



Photo credit: Alfred Leung

Game Plan 2022: Our Next Moves

Game Plan 2022: Our Next Moves

Focusing Our Efforts

Strategies and Plays are critical to guiding Sunnyvale towards our 80x50 end game. But what actions do we need to take today to ensure success tomorrow?

This chapter identifies “Next Moves,” which are specific, tactical actions to execute in the next three years to ensure the right incentives, technologies and infrastructure are in place to set us up for success in the long-term. Each Move corresponds to a specific Play and Strategy.

The Moves in Game Plan 2022 are not intended to achieve the 2030 targets, but rather to help catapult action and progress towards those targets. The Moves will be updated in alignment with department work plans every five years thereafter, to ensure that climate action priorities are consistently and continually woven throughout City operations.

Moves consist of one or more of the following types of actions:

- Researching the viability of new ideas;
- Implementing and expanding existing plans or programs; and
- Building partnerships with external entities to achieve common goals.

A detailed description of the Next Moves in Game Plan 2022 are provided in the pages that follow. A summary view of the Next Moves is provided on page 34.



Determining Carbon Savings Potential


The Next Moves were prioritized from our list of community ideas (see *Appendix A: Ideas Roster*) based on carbon savings potential and co-benefits to the community. Implementation will be led by specific City departments, in collaboration with other City departments or appropriate external partners.

Each Next Move includes an assessment of its carbon savings potential, which is determined by the following two principles:

- Maximum Carbon Savings Potential.** Each Next Move is evaluated by its maximum potential impact to reduce carbon emissions, regardless of specific levels of implementation in the current 3-year planning horizon. This approach is used to ensure that the implementation can be measured relative to the target for the associated Play. Therefore, the carbon reduction potential for Moves related to initial feasibility studies or planning activities is assessed assuming implementation of the activity.
- City-scale Carbon Savings Impact.** Each Next Move is assessed by its potential to reduce emissions at the local-scale. Such emissions are accounted for within the City's GHG inventory, in accordance with community-wide GHG inventory protocol boundaries. These emissions are currently tracked and will continue to be tracked on a regular cycle to assess CAP implementation progress and ensure Sunnyvale is on track to 80x50. Lifecycle- or consumption-based emissions are not accounted for.


For example, for Move 4.G: Promote consumer awareness of low carbon foods, the carbon savings potential is low because emissions reductions from its implementation occur upstream and are not included in the City's GHG inventory. Only a consumption-based inventory, which evaluates the upstream impacts of all goods and services consumed by a community, would reflect the true carbon savings potential of such a move.

The carbon savings potential for the Next Moves is qualitatively described as follows:




Minimal potential

Uncertain impact. Move is primarily informational or educational (e.g., to develop support for other moves).




Some potential

Move affects a small subset of GHG emissions within a sector (e.g., municipal operations).



Significant potential

Move affects a large portion of GHG emissions within a sector (e.g., incentives, programs and services).



Maximum potential

Move affects GHG emissions in an entire sector (e.g., all buildings, VMTs, etc.).



Local Environmental Quality

Move improves air quality, water quality, and/or open space amenities.



Health & Livability

Move improves physical, mental and emotional health or wellbeing and quality of life for residents, employees, and visitors.



Community Savings

Move provides long-term savings for residents, businesses, or the City.



Partnerships

Move entails assistance from and coordination with partner organizations or agencies, such as SVCE and Valley Water.

City Departments

CDD	Community Development Department
DPW	Department of Public Works
ESD	Environmental Services Department
DPS	Department of Public Safety
FIN	Finance Department
OCM	Office of City Manager

Game Plan 2022 At-a-Glance



Strategy 1: Promoting Clean Electricity

- 1.A Continue to support and steer Silicon Valley Clean Energy (SVCE) in providing clean power and decarbonization programs.
- 1.B Collaborate with SVCE to target direct access customers to shift to 100% clean electricity.
- 1.C Research a mandatory solar roof ordinance for new commercial developments.
- 1.D Collaborate with SVCE to evaluate opportunities for energy storage to maximize utilization of local solar supply and to enhance resiliency.



Strategy 2: Decarbonizing Buildings

- 2.A Research energy disclosure and energy benchmarking requirements for commercial and multi-family residential buildings to encourage property owners and managers to invest in energy efficiency upgrades and building information systems.
- 2.B Advocate to regional providers of energy efficiency programs (such as Bay Area Regional Energy Network or BayREN, Silicon Valley Energy Watch or SVEW) that their offerings are more aggressively promoted to Sunnyvale residents and businesses.
- 2.C Develop a program to accelerate the adoption of heat pump water heaters and space heaters.
- 2.D Electrify municipal buildings upon rebuild or significant remodel, including the Civic Center.
- 2.E Evaluate code and permitting processes to streamline building electrification.
- 2.F Investigate the potential for implementing a differential Utility Use Tax that is at least revenue neutral, such that local taxes on electricity are lower than on natural gas, to incentivize electrification.
- 2.G Continue to incentivize energy efficient and high performance buildings through the Green Building Program updates.



Strategy 3: Decarbonizing Transportation & Sustainable Land Use

- 3.A Plan for additional housing, with the goal of diverse housing, to reduce long-distance commutes.
- 3.B Identify areas that are most appropriate for parking strategies that discourage vehicle use, such as pricing, time limits and supply reductions.
- 3.C Enhance City Transportation Demand Management (TDM) program implementation and monitoring to facilitate further reductions in single-occupant automobile trips, citywide.
- 3.D Advocate that regional service providers implement high quality transit service and a robust set of first- and last-mile strategies in over two-thirds of the cross-city corridors.
- 3.E Update and implement the Integrated Bicycle, Pedestrian and Safe Routes to School Plan to achieve a connected, safe and active network.
- 3.F Pilot and evaluate shared bicycle and scooter programs.
- 3.G Pilot shuttle service in Peery Park and consider options for expansion of a similar service in other areas undergoing redevelopment.
- 3.H Develop design standards for streets and parking lots to accommodate increased pick-up and drop-off for rideshare passengers and apply as appropriate.
- 3.I Monitor autonomous vehicle testing and deployment to inform proactive policy.
- 3.J Develop a Community Electric Vehicle Readiness and Infrastructure Plan.
- 3.K Promote and seek incentives for community adoption of electric vehicles.
- 3.L Electrify Municipal Fleet as vehicles are replaced and continue to seek incentives for electric vehicles and charging infrastructure.

Game Plan 2022 At-a-Glance



Strategy 4: Managing Resources Sustainably

- 4.A Implement and expand food scraps diversion programs to include additional businesses and multi-family residences.
- 4.B Consider solid waste collection and processing improvements to increase waste diversion away from landfills as a part of service provider and facility transition planning.
- 4.C Implement campaign for waste prevention.
- 4.D Promote and seek incentives for making water conservation a way of life and set a water reduction target consistent with new statewide requirements.
- 4.E Partner with Valley Water to evaluate opportunities to expand water reuse.
- 4.F Implement the City's Urban Forest Management Plan and continue to protect and expand tree canopy.
- 4.G Implement the City's Green Stormwater Infrastructure Plan.
- 4.H Promote consumer awareness of sustainable food choices.
- 4.I Work with large businesses to identify best practices for implementing local food gardens.



Strategy 5: Empowering Our Community

- 5.A Pilot a targeted grassroots community engagement strategy (e.g., Cool Blocks Program) to create stronger connections between neighbors to advance climate action and emergency preparedness.
- 5.B Evaluate opportunities for the City to provide online resources and tools for community and small business climate action (e.g., resource center for retrofit electrification, online tool or app to track individual carbon emissions).
- 5.C Create a stronger social media and web presence for Sunnyvale climate action.
- 5.D Implement the Sustainability Speaker Series.
- 5.E Pilot and evaluate a program for youth engagement on climate, building on current engagement with school classrooms and green teams.
- 5.F Build relationships with largest employers to collaborate on climate action, such as: (a) engaging employees to participate in sustainability initiatives; (b) encouraging and facilitating investment in climate action programs or projects.
- 5.G Implement improvements for climate action data performance tracking and reporting progress to the public (e.g., community dashboard).
- 5.H Publish annual greenhouse gas (GHG) inventory.



Strategy 6: Adapting to a Changing Climate

- 6.A Review and summarize assessment products developed by the County's Silicon Valley 2.0 project and by the State.
- 6.B Participate in regional forums on climate vulnerabilities.
- 6.C Collaborate with Valley Water to advance a shoreline protection project with the US Army Corps of Engineers or other partners.
- 6.D Identify shoreline protection solutions as part of Moffett Park Specific Plan update.
- 6.E Updating existing emergency preparedness and response plans to address climate-related impacts such as heat events, air quality issues and flooding.
- 6.F Develop a community resiliency plan.

Next Moves for Strategy 1: Promoting Clean Electricity



The City's Next Moves will focus on promoting programs to increase the adoption rate of 100% carbon-free and renewable electricity. In the Game Plan 2022, this Strategy will focus on collaboration with SVCE on expanding participation, continuing the shift towards 100% renewable electricity, and launching programs that support Sunnyvale's customers in decarbonizing their homes and businesses. Further, we will also work with our larger local companies to develop encourage commitments that direct access procurements focus on carbon free electricity.

Finally, as electric loads increase due to the electrification of transportation and buildings, the City will support distributed energy resources, such as rooftop solar (PV) combined with energy storage. Integrating electrified aspects of buildings, such as electric vehicle chargers, heat pump technologies, and PV will provide opportunities for faster, easier, and more cost-effective conversion away from fossil fuels. A cleaner, smarter electric grid will therefore enable implementation of Strategies 2 and 3, and will more rapidly catalyze movement towards our 80x50 end game.

Strategy 1: Promoting Clean Electricity



Play 1.1: Promote 100% Clean Electricity

Move 1.A: Continue to support and steer Silicon Valley Clean Energy (SVCE) in providing clean power and decarbonization programs. With the launch of SVCE, Sunnyvale residents and businesses have access to clean electricity, sourced primarily from renewable sources. Further, as a part of its mission, SVCE is committed to supporting further actions and investments in its member communities to further reduce carbon emissions, particularly from energy use in buildings and from fuel consumption in vehicles. As a part of its adoption of a Decarbonization Strategy and Programs Roadmap⁵ (December 2018), SVCE has pledged nearly \$6.02 million to offering customer programs to promote decarbonization and energy efficiency improvements to the 13 cities in its service territory. As the municipality with the largest SVCE customer base, the City of Sunnyvale will advocate for programs that incentivize high-impact behaviors (such as installing electric heat pump water heaters) and are responsive to the needs of Sunnyvale residents and businesses.

Move 1.B: Collaborate with SVCE to target direct access customers to shift to 100% clean electricity. While most Sunnyvale residents and businesses have traditionally purchased electricity from an investor-owned utility, some large businesses have contracts to purchase electricity directly from Electric Service Providers. This allows these large businesses, that typically have high energy needs, to purchase electricity at lower prices. While some of these large companies have expressed a strong commitment to ensure significant portions of their electricity is generated from renewable sources, others purchase electricity generated from conventional sources, like coal, which generates GHG emissions. The City has limited opportunities to identify and encourage these companies, called “Direct Access” (DA) customers, to switch to cleaner sources of electricity.

With nearly 97% of residential customers opting in to clean electricity provided by Silicon Valley Clean Energy (SVCE), the electricity sourced to DA customers is now the largest source of electricity-related GHG emissions. With its status as Sunnyvale’s clean electricity provider, SVCE and City staff can encourage DA customers to switch to SVCE’s 100-percent carbon-free offering, or even opt up to 100-percent renewable electricity, which would substantially lower GHG emissions from electricity use in Sunnyvale.

Play 1.2: Increase Local Solar Photovoltaics

Move 1.C: Research a mandatory solar roof ordinance for new commercial developments. A local ordinance requiring solar installations on new commercial buildings leverages and complements the anticipated 2019 California Building Standards Code requirement of mandatory solar installations for all new residential buildings starting in 2020. Local solar installations would also help to comply with the anticipated requirement for all new non-residential buildings to be Zero Net Energy (ZNE) by 2030. By evaluating the feasibility of a local ordinance, the implementation rate of localized solar may be accelerated on all building types.

Play 1.3: Increase Distributed Electricity Storage

Move 1.D: Collaborate with SVCE to evaluate opportunities for energy storage to maximize utilization of local solar supply and to enhance resiliency. Energy storage plays a growing role in ensuring a resilient power grid, especially as dependence on renewable energy increases. Community-scale energy storage could maximize utilization of local solar supply, smooth out electricity supply and demand discrepancies and provide other benefits.



















Strategy 1: Promoting Clean Electricity

Play 1.1: Promote 100% clean electricity

TARGET:









- 2030: 100% participation in clean electricity
- 2050: 100% participation in clean electricity

Next Moves		Lead	Impacts	FY20	FY21	FY22
1.A	Continue to support and steer Silicon Valley Clean Energy (SVCE) in providing clean power and decarbonization programs.	ESD	       	•	•	•
1.B	Collaborate with SVCE to target direct access customers to shift to 100% clean electricity.	ESD	       	•	•	

Play 1.2: Increase local solar photovoltaics

TARGET:









- 2030: 3% of load from local solar
- 2050: 5% of load from local solar

Next Moves		Lead	Impacts	FY20	FY21	FY22
1.C	Research a mandatory solar roof ordinance for new commercial developments.	CDD	       	•		

Play 1.3: Increase distributed electricity storage.

TARGET:

- 2030: 1% of electricity demand stored in batteries locally
- 2050: 5% of electricity demand stored in batteries locally

Next Moves		Lead	Impacts	FY20	FY21	FY22
1.D	Collaborate with SVCE to evaluate opportunities for energy storage and to maximize utilization of local solar supply and to enhance resiliency.	ESD	       	•	•	•



GHG Avoided



Local Environmental Quality



Health & Livability



Community Savings



Partnerships

Next Moves for Strategy 2: Decarbonizing Buildings



Buildings are long lasting infrastructure, and development occurring in Sunnyvale today will likely still be in use in 2050. As the City anticipates most of its land area will be developed by 2035, infrastructure put in place today will be critical in addressing both our 2030 and 2050 targets.

As such, the City's Next Moves focus on both new construction and existing buildings with programs and policies designed for the future climate and energy realities. This includes increasing building efficiency for extreme temperatures and scaling up adoption of technologies in buildings powered by clean electricity.

The City will focus on moves that emphasize and enhance energy conservation, establish policies or programs to support electrification, and facilitate adoption of new building decarbonization technologies for the largest uses, such as electric heat pumps for water and space heating.

Strategy 2: Decarbonizing Buildings



Play 2.1: Reduce energy consumption in existing buildings

Move 2.A: Research energy disclosure and energy benchmarking requirements for commercial and multi-family residential buildings to encourage property owners and managers to invest in energy efficiency upgrades and building information systems. Energy benchmarking collects data about a building's energy usage during a specific time period. With AB 802 (2015)⁶, energy benchmarking is already required for large commercial and residential buildings above a certain square footage, but a local ordinance (e.g., City of San Jose's Energy and Water Building Performance Ordinance⁷; City of Berkeley's Building Energy Saving Ordinance⁸) would extend the requirement to smaller buildings. Energy benchmarking empowers commercial and multi-family residential building managers and property owners with meaningful data depicting energy consumption, allows comparison of energy usage among similar buildings, and helps the City potentially incentivize energy conservation by customizing programs that target areas of greatest need. Energy benchmarking also informs and motivates consumer demand for efficient buildings.

Move 2.B: Advocate to regional providers of energy efficiency programs (such as Bay Area Regional Energy Network or BayREN, Silicon Valley Energy Watch or SVEW) that their offerings are more aggressively promoted to Sunnyvale residents and businesses. Many existing regional energy efficiency programs are available to Sunnyvale residents and businesses through entities such as Bay Area Regional Energy Network (BayREN) and Silicon Valley Energy Watch (SVEW). Greater promotion of existing programs ensures that Sunnyvale residents and businesses are aware of and encouraged to take advantage of these opportunities for assistance to further decarbonize their buildings.

Play 2.2: Support electrification of existing buildings

Move 2.C: Develop a program to accelerate the adoption of heat pump water heaters and space heaters. Heating space and water in buildings is the single largest use of natural gas. Installing electric heat pump water heaters and space heaters is one of the most effective ways to transition away from natural gas towards clean electricity, as provided by SVCE. The technology has progressed for electric equivalents to be as economically competitive and capable of maintaining the same level of comfort as their conventional natural gas counterparts. Partnering with SVCE to teach the public about the benefits of heat pump water heaters and space heaters, while simultaneously offering incentives to conduct these upgrades, will accelerate adoption of heat pump technology.

Move 2.D: Electrify municipal buildings upon rebuild or significant remodel, including the Civic Center. Natural gas use is the largest source of GHG emissions in the building sector, now that SVCE provides clean electricity. Transitioning towards all-electric buildings far outweighs GHG reductions achieved through simply improving building efficiency. Thus, when feasible, existing buildings must transition to all-electric while simultaneously ensuring that newly-constructed buildings are all-electric to begin with. The City of Sunnyvale has an opportunity to lead the local all-electric movement when updating municipal buildings and facilities.

Play 2.3: Achieve all-electric new construction

Move 2.E: Evaluate code and permitting processes to streamline building electrification. All-electric building is increasing in popularity and feasibility and innovative building codes are important to facilitate this transition in building design. Sunnyvale will explore opportunities to accelerate and specifically incentivize all-electric new construction. The City will investigate the possibility of a reach code to encourage all-electric new construction in collaboration with SVCE and its other member agencies. Such collaboration can amplify the impact and simplify

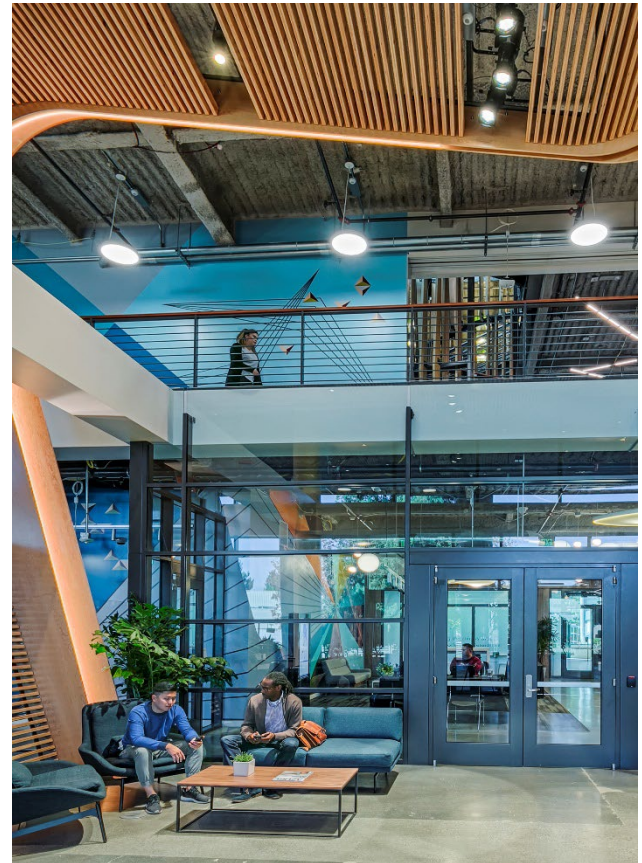
Strategy 2: Decarbonizing Buildings



implementation for project applicants with similar programs across jurisdictions.

Move 2.F: Investigate the potential for implementing a differential Utility Use Tax that is at least revenue neutral, such that local taxes on electricity are lower than on natural gas, to incentivize electrification. Utility User Taxes (UUTs) are fees leveraged by local jurisdictions to consumers of certain utility services. In Sunnyvale, the existing UUT charges a 2% rate on telephone, electricity, and natural gas use. A differential Utility User Tax where the rates on electricity are lower than on natural gas is a possible approach to incentivize all-electric buildings.

Move 2.G: Continue to incentivize energy efficient and high performance buildings through the Green Building Program updates. Sunnyvale's award-winning Green Building Program has successfully facilitated sustainable building design by offering compelling voluntary incentives for developers, allowing more units or increased square footage if the building sufficiently exceeds the California Building Code's minimum environmental requirements. Continuing to update the Green Building Program with more rigorous pathways to qualify for incentives will drive building developers to even further decarbonize to all-electric designs. This will increase the number of new buildings in Sunnyvale that eliminate GHG emissions, particularly since the buildings built today will continue to be in operation well beyond 2030.





















Strategy 2: Decarbonizing Buildings

Play 2.1: Reduce energy consumption in existing buildings

TARGET:

















- 2030: 5% of existing homes and businesses receive deep energy retrofit
- 2050: 30% of existing homes and businesses receive deep energy retrofit

Next Moves		Lead	Impacts	FY20	FY21	FY22
2.A	Research energy disclosure and energy benchmarking requirements for commercial and multi-family residential buildings to encourage property owners and managers to invest in energy efficiency upgrades and building information systems.	CDD	       			●
2.B	Advocate to regional providers of energy efficiency programs (such as Bay Area Regional Energy Network or BayREN, Silicon Valley Energy Watch or SVEW) that their offerings are more aggressively promoted to Sunnyvale residents and businesses.	ESD	       	●	●	●

Play 2.2: Support electrification of existing buildings

TARGET:

- 2030: 20% of homes and businesses completely electrified
- 2050: 50% of homes and businesses completely electrified

Next Moves		Lead	Impacts	FY20	FY21	FY22
2.C	Develop a program to accelerate the adoption of heat pump water heaters and space heaters.	ESD	       	●	●	●
2.D	Electrify municipal buildings upon rebuild or significant remodel, including the Civic Center.	DPW	       	●	●	●



GHG Avoided



Local Environmental Quality



Health & Livability



Community Savings



Partnerships

























Strategy 2: Decarbonizing Buildings



Play 2.3: Achieve all-electric new construction

TARGET:

- 2030: 100% all-electric new buildings
- 2050: 100% all-electric new buildings

Next Moves		Lead	Impacts	FY20	FY21	FY22
2.E	Evaluate code and permitting processes to streamline building electrification.	CDD	       			•
2.F	Investigate the potential for implementing a differential Utility Use Tax that is at least revenue neutral, such that local taxes on electricity are lower than on natural gas, to incentivize electrification.	FIN	       		•	
2.G	Continue to incentivize energy efficient and high performance buildings through the Green Building Program updates.	CDD	       			•



GHG Avoided



Local Environmental Quality



Health & Livability



Community Savings



Partnerships

Next Moves for Strategy 3: Decarbonizing Transportation & Sustainable Land Use



Our Next Moves are focused on setting Sunnyvale on the path to becoming a community that is less dependent on vehicles. This includes encouraging new development, including housing, in areas near transit and managing parking supply to support multi-modal transportation options that connect to regional systems and destinations.

To achieve a meaningful shift away from single-occupancy fossil-fueled vehicles, we need stronger partnerships with regional agencies and must continue to support increased funding for regional transit service providers to expand mobility options. Action in these areas can help simultaneously plan for transit-oriented land use while reducing vehicle miles traveled, and can thereby reduce carbon emissions. Locally, more first- and last-mile options (like bikeshare programs) are needed to encourage transit ridership. Additionally, the City will continue to improve and expand access to live and work spaces, retail, and services by focusing on balanced mixed uses in new or redevelopment areas.

Sunnyvale's current development, while serviced by existing public transit, still largely reflects a car-dependent lifestyle. Dramatic changes to driving habits and accelerated adoption of alternative fuel vehicles will need to work in tandem to achieve steep reductions in transportation emissions.

Strategy 3: Decarbonizing Transportation & Sustainable Land Use



Play 3.1: Balance Land Use Supply and Enhance Urban Form

Move 3.A: Plan for additional housing, with the goal of diverse housing, to reduce long-distance commutes.

The high cost and shortage of housing across the Bay Area has led a rising number of commuters to live in more affordable areas in distant suburbs. The resulting hefty car commute to Silicon Valley employment centers contributes to worsening congestion. By increasing the availability of affordable housing in Sunnyvale, more workers may be able to live closer to their jobs, commute shorter distances or via alternative modes, and thereby lower GHG emissions.

Move 3.B: Identify areas that are most appropriate for parking strategies that discourage vehicle use, such as pricing, time limits and supply reductions. (E.g., goBerkeley⁹, Downtown Redwood City¹⁰) In a car-dependent community, it is critical to promote alternative transportation while simultaneously disincentivizing single occupant car trips. Limiting parking is a common disincentive to decrease car trips and increase alternative trips, thereby lowering GHG emissions. This Move will inform appropriate types and locations of parking options to limit and optimize parking opportunities while ensuring that, when implemented, they do not create unintended disruptions.

Play 3.2: Increase Transportation Options and Support Shared Mobility

Move 3.C: Enhance City Transportation Demand Management (TDM) program implementation and monitoring to facilitate further reductions in single-occupant automobile trips, citywide. A significant part of Sunnyvale traffic comes from long-distance commuters. Transportation Demand Management (TDM) describes the holistic approach by which workplaces encourage their employees to commute via alternative means, counterbalancing the default inclination to drive. Existing TDM programs in Sunnyvale have mixed results. Better monitoring is needed to understand the effectiveness of current TDM programs, to monitor compliance and enforce TDM requirements, to implement regular data collection procedures, and to

use data in developing new TDM programs for residential and business developments.

Move 3.D: Advocate that regional service providers implement high quality transit service and a robust set of first- and last-mile strategies in over two-thirds of the cross-city corridors. Improved frequency, route offerings and quality of local public transportation is expected to increase ridership and reduce the number of cars on the road. Public transit will seem more attractive and viable in conjunction with first- and last-mile options that help residents and employees travel to and from transit stops. Though the City does not directly control public transportation offerings within City limits, the City can advocate to agencies like VTA and Caltrans for improved service. Further, the City can augment alternatives for first- and last-mile mobility.

Move 3.E: Update and implement the Integrated Bicycle, Pedestrian and Safe Routes to School Plan to achieve a connected, safe and active network.

Transitioning away from car dependency requires easy and safe travel via other modes such as walking and biking. Thus, improving the existing bicycle and pedestrian network will make walking and biking to work, school, and other local destinations more palatable and lower VMT and GHG emissions. A complete bicycle and pedestrian network will also assist with first/last mile and TDM efforts.

Move 3.F: Pilot and evaluate shared bicycle and scooter programs. Increased access to bicycles and scooters without having to purchase, maintain or store them may increase the likelihood of residents not using a car for short trips. Bicycle and scooter shares additionally help remedy first- and last-mile challenges. This pilot will inform the feasibility of a bike or scooter share program in select areas of Sunnyvale.

Move 3.G: Pilot shuttle service in Peery Park and consider options for expansion of a similar service in other areas undergoing redevelopment. Shuttle service in frequently visited and/or major employment areas will supplement and extend the reach of existing public transportation offerings. The shuttle(s) would allow more commuters and travelers to get around Sunnyvale without a car, thereby reducing VMT and GHG emissions.

Strategy 3: Decarbonizing Transportation & Sustainable Land Use



Move 3.H: Develop design standards for streets and parking lots to accommodate increased pick-up and drop-off for rideshare passengers and apply as appropriate. As transportation network companies (TNCs), like Uber and Lyft, continue to become more prevalent, they will continue to impact traffic and safety at pick-up and drop-off points. Accommodating the needs of TNCs in the streetscape will minimize disruptions and increase the ease of using these services. Although increased use of TNCs does not directly lower GHG emissions or vehicle miles traveled (VMT), TNCs may provide services that make car-free or car-light lifestyles more viable. Further, as TNCs electrify their fleets, GHG emissions would continue to decrease.

Move 3.I: Monitor autonomous vehicle testing and deployment to inform proactive policy. When autonomous vehicles enter the mainstream market, they could dramatically alter the existing transportation landscape. Keeping track of new developments and proactively formulating policy will ensure that such a transportation transition will happen smoothly.

Play 3.3: Increase Zero-Emission Vehicles

Move 3.J – Develop a Community Electric Vehicle Readiness and Infrastructure Plan. (E.g., City of Santa Monica’s Electric Vehicle Action Plan, 2017¹¹) As electric vehicles (EVs) make up a greater proportion of cars on Sunnyvale streets, so too will demand rise for charging stations and electricity from the grid. To support the transition to EVs, the City of Sunnyvale must prepare and plan for infrastructure accordingly. Developing this Plan will help define the specific changes that are most needed from an infrastructure readiness and from permitting processes and incentives perspectives. In partnership with SVCE, the City will develop a Plan to accelerate our transition to an EV-ready community.

Move 3.K: Promote and seek incentives for community adoption of electric vehicles. Electric vehicles (EVs) charged at residential, office or public locations in Sunnyvale run on carbon-free electricity, which drastically lowers transportation-related emissions. The City will work with community groups to create an EV awareness and education program, such as Acterra’s proposed “Sunnyvale Goes EV! Program” to accelerate EV adoption. Such a program would include activities such as EV ride-and-drive events and workshops to educate prospective buyers on benefits, convenience, and incentives.

Move 3.L: Electrify Municipal Fleet as vehicles are replaced and continue to seek incentives for electric vehicles and charging infrastructure. The City of Sunnyvale has an opportunity to be a local leader in transportation decarbonization by updating its municipal fleet to electric vehicles (EVs). The City is committed to electrifying its vehicle fleet as old fleet vehicles are phased out, where a suitable EV replacement is available. Based on the current replacement schedule, the target is to add 16 EVs by 2022. The City will partner with SVCE to obtain funding and technical support for enhancing public EV chargers throughout the city. In addition, the City will leverage resources and information from sustainability networks, such as Climate Mayors EV Purchasing Collaborative¹², to continue fleet electrification. The City will also monitor future potential for EVs to replace more specialized fleet vehicles, such as trash trucks or police cars.

Strategy 3: Decarbonizing Transportation & Sustainable Land Use



Play 3.1: Balance land use supply and enhance urban form

TARGET:

- 2030: 13% reduction in vehicle miles per person
- 2050: 25% reduction in vehicle miles per person

Next Moves		Lead	Benefits	FY20	FY21	FY22
3.A	Plan for additional housing, with the goal of diverse housing, to reduce long-distance commutes.	CDD		•	•	•
3.B	Identify areas that are most appropriate for parking strategies that discourage vehicle use, such as pricing, time limits and supply reductions.	CDD DPW				•

Play 3.2: Increase transportation options and support shared mobility

TARGET:

- 2030: 13% reduction in vehicle miles per person
- 2050: 25% reduction in vehicle miles per person

Next Moves		Lead	Benefits	FY20	FY21	FY22
3.C	Enhance City Transportation Demand Management (TDM) program implementation and monitoring to facilitate further reductions in single-occupant automobile trips, citywide.	DPW		•	•	•
3.D	Advocate that regional service providers implement high quality transit service and a robust set of first- and last-mile strategies in over two-thirds of the cross-city corridors.	DPW		•		
3.E	Update and implement the Integrated Bicycle, Pedestrian and Safe Routes to School Plan to achieve a connected, safe and active network.	DPW		•	•	•
3.F	Pilot and evaluate shared bicycle and scooter programs.	DPW		•		
3.G	Pilot shuttle service in Peery Park and consider options for expansion of a similar service in other areas undergoing redevelopment.	CDD		•	•	•
3.H	Develop design standards for streets and parking lots to accommodate increased pick-up and drop-off for rideshare passengers and apply as appropriate.	DPW, CDD				•



GHG Avoided



Local Environmental Quality



Health & Livability



Community Savings



Partnerships









Strategy 3: Decarbonizing Transportation & Sustainable Land Use



Play 3.2: Increase transportation options and support shared mobility

TARGET:

























- 2030: 13% reduction in vehicle miles per person
- 2050: 25% reduction in vehicle miles per person

Next Moves		Lead	Benefits	FY20	FY21	FY22
3.I	Monitor autonomous vehicle testing and deployment to inform proactive policy	DPW	       	•		

Play 3.3: Increase zero-emission vehicles

TARGET:

- 2030: 20% of all vehicles on road are zero-emission vehicles
- 2050: 75% of all vehicles on road are zero-emission vehicles

Next Moves		Lead	Benefits	FY20	FY21	FY22
3.J	Develop a Community Electric Vehicle Readiness and Infrastructure Plan.	DPW	       	•	•	
3.K	Promote and seek incentives for community adoption of electric vehicles.	ESD	       	•	•	•
3.L	Electrify Municipal Fleet as vehicles are replaced and continue to seek incentives for electric vehicles and charging infrastructure.	DPW	       	•	•	•



GHG Avoided



Local Environmental Quality



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Next Moves for Strategy 4: Managing Resources Sustainably



Photo credit: Emmanuel Piuze

Reducing landfilled waste, using water efficiently, capturing carbon in the natural environment and lowering the emissions intensity of food consumed are all essential to Sunnyvale becoming a sustainability leader. The City's Next Moves will focus on expanding and improving waste diversion services, adopting water conservation as a way of life, expanding natural landscape areas in the community, and promoting the importance of sustainable food choices.

Implementation of the City's Urban Forest Management Plan will not only help to sequester carbon, but will also result in a more robust urban tree canopy that can alleviate the urban heat island effect.

Strategy 4: Managing Resources Sustainably



Play 4.1: Achieve Zero Waste Goals for Solid Waste

Move 4.A: Implement and expand food scraps diversion programs to include additional businesses and multi-family residences. Currently, food scraps are only collected from single-family residences, schools, and larger businesses in Sunnyvale. With food scraps as the largest component of Sunnyvale garbage, expanding food scraps collection to additional businesses and multi-family residents will further reduce food waste going to the landfill and associated GHG emissions.

Move 4.B: Consider solid waste collection and processing improvements to increase waste diversion away from landfills as a part of service provider and facility transition planning. In addition to Sunnyvale residents and businesses reducing their waste, there may be opportunities to increase waste diversion away from landfills by modifying waste collection and processing practices. Additionally, as processing facilities (e.g., SMaRT Station®) are slated for renovation or replacement, more efficient technology or practices may be employed to improve waste diversion.

Move 4.C: Implement campaigns for waste prevention. Consumer goods require energy to be manufactured, packaged, and transported from where they are produced to where they are consumed. These upstream consumption-based emissions are typically not represented in the standard communitywide GHG inventory. When less waste is generated and sent to the landfill, fewer GHG emissions are released. This campaign to reduce the production of waste may include efforts to encourage the public to reduce waste generation, reuse or upcycle everyday items, spur producer responsibility for less packaging, advocate for legislative and regulatory actions at the local and regional level, and develop incentives and/or disincentives to guide particularly impactful consumer actions.

Play 4.2: Ensure Resilience of Water Supply

Move 4.D: Promote and seek incentives for making water conservation a way of life and set a water reduction target consistent with new statewide requirements. Given Sunnyvale's location in a drought-prone area with heavy reliance on drinking water sources outside the City's boundaries, water conservation needs to be a way of life. Reduced water use and wastewater production may reduce GHGs emitted during the extraction, purification, and distribution of water, in addition to ensuring the sustainability of our water supply for the future.

Move 4.E: Partner with Valley Water to evaluate opportunities to expand water reuse. Expanding the existing use of recycled water (e.g., to Apple Campus in Cupertino) and exploring opportunities for indirect and direct potable reuse of treated wastewater at a regional level are critical to long term water sustainability. Water reuse options provide a sustainable supply source and also have a lower carbon footprint than other alternative water supply options like desalination.

Play 4.3: Enhance Natural Carbon Sequestration Capacity

Move 4.F: Implement the City's Urban Forest Management Plan and continue to protect and expand tree canopy. Urban trees sequester carbon, provide shade that can lower heating- and cooling-related energy consumption in buildings, serve as green features that can reduce flooding, and provide an outlet to connect to nature in a city environment. Continuing to protect and expand the tree canopy by implementing the Urban Forest Management Plan³ will improve both environmental quality and quality of life.

Move 4.G: Implement the City's Green Stormwater Infrastructure Plan. Stormwater runoff from an urban area like Sunnyvale contains trash, debris and pollutants that are carried into the Bay. Green infrastructure involves natural and physical treatments, such as permeable pavement, rain gardens and bioswales, that reduce and treat stormwater at its source. The City's Municipal Regional Stormwater Permit requires the City to develop and implement a

Strategy 4: Managing Resources Sustainably



long-term Green Stormwater Infrastructure Plan to reduce watershed pollution. Beyond reducing water pollution and flood risk, many of the vegetative features also increase carbon sequestration, thereby reducing net carbon emissions.

Play 4.4: Promote Sustainable Food Choices

Move 4.H: Promote consumer awareness of low carbon foods. Our food habits have significant GHG emission consequences as food eaten in Sunnyvale may be produced through energy-intensive processing and may travel long distances to reach our tables. Educating the public and the local food industry about the benefits, environmental and otherwise, of eating food that is locally grown, organic and more plant-based may shift our collective food ethic. The City can lead by example by considering the carbon footprint of food served at City-sponsored events.

Move 4.I: Work with large businesses to identify best practices for implementing local food gardens. Large businesses with corporate cafeterias that serve food to thousands of employees everyday have an opportunity to make a big impact in their carbon footprint. The distance traveled by food served in our local communities has associated energy and transportation emissions. By cultivating a portion of the food served locally onsite at large businesses, such businesses can lower their corporate carbon emissions while also inspiring their workforce to consider low carbon foods. Though currently uncommon, a few businesses in Sunnyvale that are committed to innovative environmental stewardship are piloting local food gardens. The City will work with these businesses to identify, hone and share best practices to empower other businesses to follow suit.



























Strategy 4: Managing Resources Sustainably



Play 4.1: Achieve Zero Waste goals for solid waste

TARGET:

















- 2030: Reduce landfilled garbage to 1 lb per person per day
- 2050: Reduce landfilled garbage to 1 lb per person per day

Next Moves		Lead	Impacts	FY20	FY21	FY22
4.A	Implement and expand food scraps diversion programs to include additional businesses and multi-family residences.	ESD	       	●	●	●
4.B	Consider solid waste collection and processing improvements to increase waste diversion away from landfills as a part of service provider and facility transition planning.	ESD	       	●	●	●
4.C	Implement campaigns for waste prevention.	ESD	       	●	●	●

Play 4.2: Ensure resilience of water supply

TARGET:

- Targets will be determined as per state requirement

Next Moves		Lead	Impacts	FY20	FY21	FY22
4.D	Promote and seek incentives for making water conservation a way of life and set a water reduction target consistent with new statewide requirements.	ESD	       	●	●	●
4.E	Partner with Valley Water to evaluate opportunities to expand water reuse.	ESD	       	●	●	●



GHG Avoided



Local Environmental Quality



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Strategy 4: Managing Resources Sustainably



Play 4.3: Enhance natural carbon sequestration capacity

TARGET:

- Supports broader net carbon reductions

Next Moves		Lead	Impacts				FY20	FY21	FY22
4.F	Implement the City's Urban Forest Management Plan and continue to protect and expand tree canopy.	DPW					•	•	•
4.G	Implement the City's Green Stormwater Infrastructure Plan.	ESD					•	•	•

Play 4.4: Promote sustainable food choices

TARGET:

- Supports broader emissions reductions

Next Moves		Lead	Impacts				FY20	FY21	FY22
4.H	Promote consumer awareness of low carbon foods.	ESD							•
4.I	Work with large businesses to identify best practices for implementing local food gardens.	ESD OCM						•	•



GHG Avoided



Local Environmental Quality



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Next Moves for Strategy 5: Empowering Our Community



Achieving Sunnyvale's climate objectives will require active participation from the whole community including businesses, residents, community-based organizations and all city departments. The City will continue to empower the community with the necessary information, incentives and tools to advance climate action. Through partnership with our community organizations and diverse leaders, we can transform the buildings we live and work in, the way we get around and the way we consume goods and services. Effective engagement and outreach go hand-in-hand with progressive policies and programs that facilitate the decarbonization of our City. Our Next Moves focus on working with neighborhoods, home owners, corporations and their employees. The City will also harness the aspirational power of our youth to expand awareness to our next generation.

Strategy 5: Empowering Our Community



Play 5.1: Enhance Community Awareness and Engagement

Move 5.A: Pilot a targeted grassroots community engagement strategy (e.g., Cool Blocks Program¹³) to create stronger connections between neighbors to advance climate action and emergency preparedness. This initiative aims to bring neighbors together at a very localized level to strengthen community, advance climate action and prepare for natural disasters. Participants in other Bay Area communities with this type of program cut their household carbon emissions by 30% on average. Neighbors learn about climate action behaviors together and collectively shape a local ethic of environmental conscientiousness and preparedness.

Move 5.B: Evaluate opportunities for the City to provide online resources and tools for community and small business climate action (e.g., resource center for retrofit electrification, online tool or app to track individual carbon emissions). There are online resources available to help residents and businesses reduce their carbon footprints, but finding the right information can be overwhelming. Curating an online resource center, tool, or app with user-friendly climate action resources will make it easier for community members to access and understand their carbon impact and to take actions to reduce it.

Move 5.C: Create a stronger social media and web presence for Sunnyvale climate action. Sunnyvale's website and social media channels are effective avenues to reach and communicate with many Sunnyvale residents. Discussing climate action on social media can educate and frequently remind followers in an approachable way about pro-environmental behavior. By expanding existing efforts, Sunnyvale's social media audience will grow, information will be updated more often and posts can be better catered to our audience with more interactive media like videos, polls and livestreams.

Move 5.D: Implement the Sustainability Speaker Series¹⁴. This event series brings renowned experts in sustainability research and policy development to share their ideas and innovations with our community. Implemented in partnership with the Sustainability Commission, each event fosters discussion, brings the community together and inspires individuals to take

climate action into their own hands.

Move 5.E: Pilot and evaluate a program for youth engagement on climate, building on current engagement with school classrooms and green teams. Youth are among the most receptive populations to respond positively to calls for climate action and influence their households' environmental behaviors. Educating the next generation of our community to be sustainability advocates is important to continue climate action going forward. To build on current engagement with school classroom and green teams on environmental topics, this program will expand the conversation to climate action.

Move 5.F: Build relationships with largest employers to collaborate on climate action, such as: (a) engaging employees to participate in sustainability initiatives; (b) encouraging and facilitating investment in climate action programs or projects. Carbon emissions in the business sector can be reduced by changing employee behaviors, from turning off lights and computers at night to commuting to work via alternative modes. The City of Sunnyvale will partner with large employers to encourage employee participation in sustainability initiatives and to seek investment in climate action programs or projects with local benefits.

Play 5.2: Track and Share Data and Tools

Move 5.G: Implement improvements for climate action data performance tracking and reporting progress to the public (e.g., community dashboard). It is important to identify and share our climate action victories and accomplishments with the community. The City will develop a resource such as a community dashboard (e.g., City of Encinitas Climate Action Dashboard¹⁵, City of Richmond Climate Action Open Data¹⁶) to track project progress, improve transparency, and make climate data available and digestible to the public. A list of metrics that will be tracked to monitor Playbook progress is available on page 102 of the Technical Appendix.

Move 5.H: Publish annual greenhouse gas (GHG) inventory. Updating our community about our local GHG emissions on an annual basis keeps the public informed, builds motivation to expand on current progress and conveys the City's commitment to climate action. Regular updates that parse out the GHG emissions associated with each sector also helps inform policy and programming decisions.

















































Strategy 5: Empowering Our Community



Play 5.1: Enhance community awareness and engagement

TARGET:

















- Supports all other Plays

Next Moves		Lead	Impacts	FY20	FY21	FY22
5.A	Pilot a targeted grassroots community engagement strategy (e.g., Cool Blocks Program) to create stronger connections between neighbors to advance climate action and emergency preparedness.	ESD	       	•	•	•
5.B	Evaluate opportunities for the City to provide online resources and tools for community and small business climate action (e.g., resource center for retrofit electrification, online tool or app to track individual carbon emissions).	ESD	       	•	•	
5.C	Create a stronger social media and web presence for Sunnyvale climate action.	ESD OCM	       	•	•	•
5.D	Implement the Sustainability Speaker Series.	ESD	       	•	•	•
5.E	Pilot and evaluate a program for youth engagement on climate, building on current engagement with school classrooms and green teams.	ESD	       		•	
5.F	Build relationships with largest employers to collaborate on climate action, such as: (a) engaging employees to participate in sustainability initiatives; (b) encouraging and facilitating investment in climate action programs or projects.	ESD OCM	       	•	•	•

Play 5.2: Track and share data and tools

TARGET:

- Supports all other Plays

Next Moves		Lead	Impacts	FY20	FY21	FY22
5.G	Implement improvements for climate action data performance tracking and reporting progress to the public (e.g., community dashboard).	ESD	       	•	•	•
5.H	Publish annual greenhouse gas (GHG) inventory.	ESD	       	•	•	•



Local Environmental Quality



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Next Moves for Strategy 6: Adapting to a Changing Climate



Photo credit: Ryan Ferrin

As we continue to experience climate change impacts in the Bay Area and worldwide, Sunnyvale will take steps to better ensure our local community is both prepared for climate disasters and, more importantly, resilient to them.

Recognizing that climate adaptation cannot be addressed single-handedly by one local government, the City will focus on cultivating partnerships with regional entities that are addressing adaptation and on enhancing its participation in regional actions.

In addition, the City will focus on short-term preparedness measures our community can take to resist climate impacts, while simultaneously identifying key future vulnerabilities and strategies to address them in the coming years.

Strategy 6: Adapting to a Changing Climate



Play 6.1: Assess Climate Vulnerabilities for Sunnyvale

Move 6.A: Review and summarize assessment products developed by the County's Silicon Valley 2.0 project and by the State. In 2015, Santa Clara County brought Sunnyvale and other cities together to develop a Countywide vulnerability assessment tool to assess the potential impact of sea level rise on infrastructure and assets in the County, known as Silicon Valley 2.0. The City will continue to participate in this effort and other emerging efforts like it.

Move 6.B: Participate in regional forums on climate vulnerability and adaptation. Climate adaptation efforts necessitate regional discussion to ensure actions effectively and efficiently address risks and don't place adjacent communities in greater harm. Organized regional conversations on climate adaptation are emerging, such as Bay Area Climate Adaptation Network (BayCAN), and various projects facilitated by the Association of Bay Area Governments (ABAG), such as Silicon Valley 2.0. This Move positions the City to participate in these discussions, maintain partnerships with key entities leading adaptation efforts, and stay informed about latest climate adaptation innovations.

Play 6.2: Protect Shoreline Area from Sea Level Rise and Coastal Flooding

Move 6.C: Collaborate with Valley Water to advance a shoreline protection project with the US Army Corps of Engineers or other partners.

Valley Water (formerly Santa Clara Valley Water District) began the Shoreline Project in 2005, to provide sea level rise protection in Santa Clara County in partnership with the United States Army Corps of Engineers (USACE) and the State Coastal Conservancy (Conservancy). The first phase of the Shoreline Protection Project¹⁷, located in north San Jose, has been progressing and recently received federal funding for design and construction. In parallel, Valley Water prepared a Preliminary Feasibility Study for the remaining shoreline areas, including those adjacent to Sunnyvale. This study was completed in March 2017, and USACE has received \$500,000 in their FY 2019 work plan to continue the work to determine

the next phase for project implementation. Sunnyvale staff has remained engaged as a stakeholder in the project and will continue to participate to advocate for a project to protect Sunnyvale's shoreline.

Move 6.D – Identify shoreline protection solutions as part of Moffett Park Specific Plan¹⁸ update. The Moffett Park Specific Plan was adopted in 2004 to provide direction on land use, infrastructure, and design in the northernmost portion of the City, which is mainly commercial and industrial. This part of the City is located right along the Bay and is vulnerable to sea level rise. The Moffett Park Specific Plan is currently being updated to include, among other things, considerations to address future sea level rise.

Play 6.3: Strengthen Community Resiliency

Move 6.E: Update existing emergency preparedness and response plans to address climate-related impacts such as heat events, air quality issues and flooding. While the City has emergency response plans for some events like fire or earthquake, there are no community-specific plans to address response to extreme weather events, which may increase in frequency and severity due to climate change. These include heat waves, intense rain storms, and flooding from sea level rise. This Move calls for cross-departmental collaboration to expand current community-oriented emergency preparedness plans to respond to such events, with particular attention to vulnerable populations during natural disasters.

Move 6.F: Develop a community resilience plan. Climate resiliency means that residents and businesses have proactively prepared for extreme weather events such that they can withstand the duration and after-effects of the event. For the community to be more resilient to extreme heat, rain, and flooding events, the City will develop a community resilience plan to help even the most vulnerable populations be prepared to weather the storms of climate change.



















Strategy 6: Adapting to a Changing Climate

Play 6.1: Assess climate vulnerabilities for Sunnyvale

TARGET:

















- No quantifiable targets

Next Moves		Lead	Impacts	FY20	FY21	FY22
6.A	Review and summarize assessment products developed by the County's Silicon Valley 2.0 project and by the State.	ESD	       	•		
6.B	Participate in regional forums on climate vulnerability and adaptation.	ESD	       	•	•	•

Play 6.2: Protect shoreline area from sea level rise and coastal flooding

TARGET

















- No quantifiable targets

Next Moves		Lead	Impacts	FY20	FY21	FY22
6.C	Collaborate with Valley Water to advance a shoreline protection project with the US Army Corps of Engineers or other partners.	ESD	       	•	•	•
6.D	Identify shoreline protection solutions as part of Moffett Park Specific Plan update.	CDD	       	•	•	

Play 6.3: Strengthen community resiliency

TARGET

- No quantifiable targets

Next Moves		Lead	Impacts	FY20	FY21	FY22
6.E	Update existing emergency preparedness and response plans to address climate-related impacts such as heat events, air quality issues and flooding.	DPS	       		•	
6.F	Develop a community resiliency plan.	DPS	       		•	•



GHG Avoided



Local Environmental Quality



Health & Livability



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Partnerships



Future Work Planning & Resources

Future Work Planning & Resources

This Playbook provides an overarching, strategic framework for the City of Sunnyvale to achieve its end game of 80x50. The City envisions that the core elements of the Playbook – the Strategies and Plays – will not change as we progress towards our end game. The Strategies and Plays will continue to be the foundation for Sunnyvale’s ambitious march down the field towards our long-term targets.

As we live in an age and place of abundant technological innovation, we acknowledge that there will be future technologies and creative innovations that we don’t see today but that will drive drive our society in the decades to come. With uncertainty in our political climate, inevitable changes in the City as an organization, our evolving culture, and future policy changes from the state and federal governments, it is impractical to forecast the specific Moves to achieve all the strategies over a very long time-frame. Our detailed Next Moves, therefore, are deliberately intended to focus on a shorter time horizon so they can be meaningfully integrated into the business of the City and updated dynamically.

The implementation of this Playbook will occur in 5-year cycles. The first cycle is aimed for just three years to take advantage of the dynamic landscape for climate actions among local communities and to give greatest consideration to funding opportunities and partnerships. Subsequent cycles will be every five years. At the close of each cycle, the City will review progress on implementation of the Moves and on the future projections for community emissions in order to determine the best Next Moves for the subsequent cycle. New Moves will represent local conditions of the time, build on progress to date, and continue to advance assertively toward climate neutrality. An update on current emissions and on implementation progress of the current Moves will also be reported to the City Council, Sustainability Commission, and the community each year as part of a Playbook Scorecard.

The Next Moves chapter presented in this Playbook is our first short-term game plan that we’re calling “Game Plan 2022.” In order to align to the City’s annual budget cycle, Game Plan 2022 addresses implementation through fiscal year 2021-22. An update to the emissions inventory, based on community performance through 2020, and a proposal for the next Game Plan will be

presented to the City Council in early 2022 to inform the budget cycle for the next implementation timeframe, commencing with fiscal year 2022-23.

For Game Plan 2022, staff has evaluated the resource impacts across City departments and identified resources needed for implementation. Some of the next moves will be absorbed and integrated into existing departmental operating or projects budgets. Additional resources needed over the next three years total \$1.39 million in one-time costs, which includes consultant services, temporary staffing, and infrastructure needs, and \$1.47 million in ongoing costs (approximately \$500,000 each year), which includes three additional staff positions and augmenting the City’s ongoing budget for CAP implementation. Resources allocated to implementing the Climate Action Playbook will be refined and finalized as part of the annual process for budget development and approval by the City Council.

The City’s strategy to finance the implementation of the current and future game plans will evolve over time. Strategies that the City may consider could include:

- Leveraging partnerships and collaborative projects, particularly through Silicon Valley Clean Energy
- Developing a differential utility use tax (UUT) to incentivize electrification
- Charging carbon impact fees for development projects
- User fees for selected activities and services
- Paid parking in selected locations
- Transportation impact fees

Game Plan 2022

- Game Plan 2022 implemented through fiscal year 2021-2022
- Annual Playbook Scorecard to report progress
- Game Plan 2027 proposed in early 2022

Terms and Acronyms

40x30	40% greenhouse gas reductions by 2030
80x50	80% greenhouse gas reductions by 2050; equivalent to “carbon neutral”
BAU	Business-as-usual
CAC	Community Advisory Committee
CAP	Climate action plan
CAP 1.0	Sunnyvale’s Climate Action Plan (2014)
CAP 2.0	Initiative to Update Climate Action Plan 1.0; Playbook is the product of the CAP 2.0 Initiative
Carbon neutral	GHG emissions reduced by 80% from 1990 levels by 2050, with potential for remaining emissions to be addressed by carbon sequestration
DA	Direct Access
EV	Electric vehicle
EVCI	Electric vehicle charging infrastructure
GHG	Greenhouse gas
MTCO ₂ e	Metric tons of carbon dioxide equivalent
PV	Photovoltaic (solar energy)
SVCE	Silicon Valley Clean Energy
TNC	Transportation Network Company (e.g., Uber, Lyft)
VMT	Vehicle miles traveled

References

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Community Members

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Appendix A: Ideas Roster

Ideas Roster

The CAP 2.0 Framework draws on more than 240 ideas, the majority of which were sourced from our community through the OpenIDEO on-line challenge and the large in-person community workshop. Ideas also originated from City staff, leading City best practices, as well as CAP 1.0 actions that were identified for ongoing implementation. This appendix contains the complete list of ideas evaluated for the Climate Action Playbook. Each idea is identified by a randomly assigned, unique Idea ID#. The Next Moves (presented in Game Plan 2022: Our Next Moves) were developed by staff drawing inspiration from chosen elements of these ideas, and based on their feasibility, cost, and alignment with the City's overall goals and departmental programmatic priorities. The Next Move ID# is indicated where selected ideas from this list contributed to the development of the Next Moves for implementation by year 2020.

Strategy 1: Promoting Clean Energy		
Idea ID #	Idea Description	Next Move(s) ID#
1	Continue to support and steer Silicon Valley Clean Energy (Sunnyvale's community choice energy provider) in providing clean power for Sunnyvale's residents and businesses.	1.A
2	Target direct access shift to 100% RE	1.B
3	Solar roofs: We need to require developers to install solar panels on all new office buildings, just like San Francisco, Santa Monica and Lancaster.	1.C
4	Require solar for new construction	1.C
5	Incentivize local solar, efficiency, and storage	1.C, 1.D
6	Partner with SVCE to boost 100% RE participation	
7	Pilot new technologies (e.g., microgrids)	
8	Improve the Electric Power Mix	

Strategy 2: Decarbonizing Buildings		
Idea ID #	Idea Description	Next Move(s) ID#
9	Benchmarking Requirement: Require commercial properties to benchmark their energy consumption annually and require energy audits every five year with implementation.	2.A
10	Energy Benchmarking and Retrofit Policy/Programs for Energy Benchmarking: Characterize building stock and analyze feasibility for various energy efficiency programs per building type. Draft Energy Benchmarking Ordinance to improve overall system performance in the existing building stock and contribute to city-wide energy use reductions. Include stakeholder outreach, trades training and education, and prepare financing and incentive options. Establish energy score program and performance standards. Public awareness campaign and incentives for building performance.	2.A
11	Establish a residential energy conservation program that encourages or incentivizes homeowners to perform energy and water audits, with an emphasis on leveraging homeowner decision-making during home sale, purchase, and remodel.	2.B

Strategy 2: Decarbonizing Buildings		
Idea ID #	Idea Description	Next Move(s) ID#
12	Outreach and Incentives for Electrification program (Heat pump water and space heaters): Build atop city's free energy audit program: launch a Score card program for single-family residents to track and reduce energy use; and include electrification incentives and options at time of audit. STAFF NOTE: City does not currently offer a free energy audit program. An online energy audit program (Green@Home) was offered for 12 months between 2017-2018.	2.C
13	Pay for the Panel Program: Remove financial obstacles for the adoption of clean energy technologies.	2.C
14	Kick Out Carbon: Develop and Publicize electrification Incentives.	2.C
15	ZNE + All-Electric Incentives and Recognition program: While ZNE is mandatory for new construction in 2020, existing building stock will also need to be addressed to achieve GHG goals. incentivize and tell the success stories.	2.C
16	Municipal facility leadership by example: Upgrade muni. facilities as ZNE demonstration projects using win-win financing strategy.	2.D
17	Improve permit process and ordinance requirements: Maximize GHG reductions and coordinate improvement of permit process in accordance with new ordinance requirements such as Green Building Program Update or others. For example, expand the streamlined solar permitting process to include all rooftop solar project in the city (residential multi-family, commercial and industrial).	2.E, 2.G
18	No New Fossil Infrastructure: City would not purchase new capital eqpt., permit new comm. or res. development, or implement infrastructure that directly uses fossil fuels.	2.E
19	Differential Utility Tax Rate: Work with other cities and PG&E to enable Sunnyvale to implement a lower Utility User Tax on electricity and to raise the tax on natural gas.	2.F
20	Evaluate and update the 2009 Zoning Code for Green Buildings for single-family, multi-family, and non-residential building construction and major remodels every three to five years.	2.G
21	Connect businesses and residents with rebate programs that give priority to appliances with smart grid technology.	
22	Sunnyvale residents can get paid to save energy: OhmConnect is a free service in Sunnyvale that rewards you for saving energy when it matters most to the grid and the environment.	
23	Identify businesses that are likely to be the largest consumers of energy within the city and target City outreach to these businesses.	
24	Home Smart Track: A piece of hardware that monitors a user's energy usage for smarter consumption through visualization of aggregated user data.	
25	Home Energy Clock: A display, like a clock on the kitchen wall, that shows real time use of electricity, gas and water in kw, therms and cft plus dollars.	
26	Free energy audit for home and building owners: Building and home owners will be offered free-of-charge energy audit to identify best efficiency opportunities.	
27	Incentive-based policy for carbon capture and sequestration in building materials: Sunnyvale should create an incentive-based approach to encouraging construction using building materials that sequester carbon.	

Strategy 2: Decarbonizing Buildings		
Idea ID #	Idea Description	Next Move(s) ID#
28	Eco Housing: Convert the Sunken Garden golf course into a farm and eco housing condos.	
29	GHG>15%! Replace risky, toxic, inefficient (10%Eff!) Fireplaces and BBQ with 80%Eff. NG sealed-safe FP-Inserts & 90%Eff. hot water heaters.: GHG>15% Replace smoggy 10%Efficient Fireplaces & BBQs with 80%E NG(Without Solar-PVC) fireplace Inserts and >90%E hot water heaters.	
30	Reducing Air Conditioner Use in Sunnyvale.: This proposal will consider strategies to reduce air conditioner use in existing buildings and new construction in Sunnyvale, including tree planting and shading of buildings.	
31	One Stop Trusted Energy Shop: City energy consultants for residents and businesses for one on one help on implementation of solutions	
32	Turn Lights Off: I turn my lights off as I use them, maybe the many office buildings who leave their lights on 24/7 could do the same.	
33	Green Certification for businesses in Sunnyvale: Businesses can receive certifications that they are conserving energy to provide them incentives to do so.	
34	Green lease program: City provides recognition program for commercial developers or building managers who offer green leases. Green leases allow developers/property managers to invest in energy efficiency features and pass on a portion of the cost to the tenants. Tenants, in turn, pay for the energy use and are motivated to save energy.	
35	Revenue Neutral Carbon Tax on Natural Gas: Add carbon tax per therm to every SV user of Natural Gas which is used to provide rebates for switching to electric for space heating, etc.	
36	Streamline Permitting for Carbon Neutral Building: Accelerate the update of carbon-neutral building.	
37	Solar Hot Water: Make free non Co2 energy from the Sun.	
38	Fast install solar: Modular, possibly prefabricated, standardized approach to solar installation.	
39	Tours and Demos of Decarbonized homes/businesses: Once a year set a day where folks can tour homes + businesses that have innovated in reducing energy use & promoted low or no carbon tech.	
40	ZNE New Construction Policy: Enforce compliance with ZNE New Residential Construction goals of 15% above Title 24 standards for single-family residences and 10% above for high-rise properties with accompanying solar mandates. Incentivize and recognize commercial ZNE.	
41	Updated Green Building Code and Developer's Carbon Impact Fee: Utilize city's Green Building Code & impose Carbon Impact fee to encourage green building feat. that go beyond state's standards.	
42	Require all new and resurfaced parking lots, sidewalks, and crosswalks to be made of materials with high reflectivity, such as concrete or reflective aggregate in paving materials.	
43	Commit to using a warm aggregate mix for all asphalt patching, overlay, and reconstruction.	
44	Adoption of CALGreen Tier 1 or Tier 2 reach codes	

Strategy 3: Decarbonizing Transportation & Sustainable Land Use

Idea ID #	Idea Description	Next Move(s) ID#
45	Promote Medium Density Housing Options in Existing Neighborhoods to Help Reduce Vehicle Miles Traveled: Enact policies to promote infill development @ modestly higher dens. than existing neighborhoods, house more people in SV to reduce VMT.	3.A
46	Facilitate the development of affordable housing near transit.	3.A
47	Sunnyvale Employees live here: Sunnyvale Employees become residents to reduce mobile traffic. This will also maximize their community involvement and cohesion.	3.A
48	Reform Residential Minimum Parking Requirements to Reduce VMT by Allowing More People to Live in Sunnyvale Near Jobs: Update Municipal Code to relax reqs. for dwellings to provide min. number of parking spaces, to support car-light lifestyles & reduce VMT.	3.B
49	Create maximum parking requirements and reduce minimum parking requirements for mixed-use development. Require parking lot sharing for mixed-use or commercial development with complementary hours of operation	3.B
50	Support car light lifestyles with limited parking supply lower vehicle ownership. Actively manage parking supply with parking pricing and unbundled parking	3.B
51	Let's get serious about Transportation Demand Management & Fair Value Commuting: Reduce SOV trips in commuting by strengthening TDM policies, "carrot/stick" commute clubs & community shuttles.	3.C
52	Transportation Demand Management strategies are implemented, mandated, enforced, and promoted actively, and used widely by everyone in Sunnyvale	3.C
53	Promote telecommuting to decrease solo drivers during commute time periods. Leverage technology to decrease need for driving and increase public/ride-sharing travel options	3.C
54	Require trip reduction programs in new residential, commercial, and mixed use development.	3.C
55	Require existing and future major employers to utilize a variety of transportation demand management (TDM) measures such as flexible work schedules, telecommuting, guaranteed rides home, low- or no-cost transit passes, parking "cash-out" incentives, and other programs that provide employees with alternatives to single-occupant commutes	3.C
56	Implement high quality transit service and a robust set of first/last mile strategies for at least two-thirds of the cross-city corridors	3.D
57	Advocate for transit service improvements by area transit providers consistent with established performance standards, with an emphasis on coordinating public transit schedules and connections and for subsidies for a higher level of transit service and/or more transit passes for residents and/or employees	3.D
58	Coordinate Connections to Mass Transit: Create a simple way for employers to coordinate getting employees to and from mass transit, to reduce car commutes to and from Sunnyvale.	3.D
59	Fully fund the City's bicycle and pedestrian improvement plans for completion by 2035.	3.E
60	Improve bicycle facilities and perceptions of comfort through pavement marking/coloring, physical separation specialized signs and markings, and other design elements	3.E

Strategy 3: Decarbonizing Transportation & Sustainable Land Use

Idea ID #	Idea Description	Next Move(s) ID#
61	Implement projects and programs to improve the safety of cyclists and pedestrians through increased enforcement of pedestrian right-of-way laws, removing crossing impediments, improving crossing time at signalized intersections for pedestrians and cyclists, requiring drive-through food establishments to serve bicyclists, and providing center refuge areas for pedestrians and bicyclists to pause when crossing arterials	3.E
62	Support the creation of walking school bus programs in coordination with schools and parent organizations.	3.E
63	Continue to implement a Safe Routes to School program for increased bicycle and pedestrian safety to and from schools	3.E
64	Improve pedestrian safety and comfort through design elements such as landscaped medians, pedestrian level amenities, sidewalk improvements, and compliance with Americans with Disabilities Act (ADA) design standards, particularly for areas serving high volumes of traffic	3.E
65	Complete and connect low stress bicycle network in Sunnyvale: Best way to get people out of cars is to create easily accessed bike lanes and separate routes in a comprehensive cross-city network.	3.E
66	Fully implement bicycle and pedestrian projects throughout Sunnyvale to achieve a connected safe active network	3.E
67	Dockless Bicycle System For Better Transit Access: Provide means for citizens to travel to transit stops using city sponsored dockless bicycle system, for boarding transit instead of driving.	3.F
68	Support business efforts to plan and implement a bike-sharing program for major commercial and industrial areas	3.F
69	E-shuttle (electric) bus to move staff and employees around City: A free shuttle bus that moved people to major work hubs like Moffet Park would cut down on vehicles moving in directions where public transportation modes currently don't exist. Providing free or cheap transportation, WIFI, bike racks and regularly scheduled buses could reduce some of the traffic impacts. A mobile app showing the bus schedule could be created as well.	3.G
70	Free or Reduced Cost Green Shuttle: A shuttle (electric) bus from specific locations (City Hall, downtown) to Moffett Park or other business heavy areas!	3.G
71	Design streets and parking lots to accommodate increased pick-up and drop-off passenger and commercial demand	3.H
72	Create separate facilities and/or road pricing or priority schemes for autonomous vehicles and/or HOV, or Paid Express Lane	3.I
73	Determine if a cap on number of lanes or areas available to autonomous vehicles is appropriate	3.I
74	Sunnyvale Spice and Slice: Food festival and expo featuring locally grown food where Sunnyvale cooks and gardeners show off their skills and compete for fun.	3.I
75	Local food promotion	3.I
76	Rooftop gardens in Sunnyvale: We can plant rooftop gardens on some public or private buildings in Sunnyvale.	3.I

Strategy 3: Decarbonizing Transportation & Sustainable Land Use

Idea ID #	Idea Description	Next Move(s) ID#
77	Support the conversion to a clean vehicle fleet with supporting infrastructure and incentives for individuals	3.J
78	Implement Policies to Accelerate EV Charging Infrastructure Installation Throughout Sunnyvale: Implement required strategies for accelerating EV Charging Infrastructure (EVCI) install. based on Palo Alto & related recommendations from PAEC.	3.J, 3.K
79	Secure funding to install electric vehicle recharging stations or other alternative fuel vehicle support infrastructure in existing public and private parking lots.	3.J
80	Sunnyvale Goes EV!: Educate and support Sunnyvale residents in the biggest action they can take to reduce their carbon emissions: driving electric!.	3.K
81	Sunnyvale EV mobility or Zero-Emission Fleet: Convert city vehicles to EV and install proper infrastructure.	3.L
82	Increase the number of efficient or alternatively fueled vehicles in the City fleet as vehicles are turned over	3.L
83	Solar on DPS covered parking and EVs/plug-in hybrid vehicles for DPS	3.L
84	Integrated housing at job centers: Require job centers (business parks, corporate campuses) to provide on-site housing for employees.	
85	Create walkable and bikeable neighborhoods with a diversity of services and entertainment options, and a diverse mix of residential and office development types.	
86	Require new development to reduce the need for external trips by providing useful services/facilities on-site such as an ATM, vehicle refueling, shopping	
87	Continue to plan for most new residential, commercial and industrial developments to be developed in specific plan areas, near transit, and close to employment and activity centers.	
88	Encourage the establishment and even distribution of neighborhood-serving facilities such as day care providers, banking/ATM locations, markets and drug stores in existing residential, commercial, and industrial areas in order to reduce the need for vehicle trips	
89	The Urban Village: Live without driving (except maybe work).	
90	Support on-demand ridesharing services that provide point-to-point access for all community members, especially the elderly, children, and the disabled	
91	Prepare for what is now parking to become available and design any future urban parking facility for eventual conversion	
92	High Density Housing near transit corridors to achieve housing and job parity by 2050: Sunnyvale adopts a high density housing near transit ordinance with a goal of achieving a one to one job / housing balance by 2050.	
93	Anti-Idling: My objective is to reduce the amount of GHG's and air pollution in Sunnyvale through reducing unnecessary vehicle idling.	
94	Achieve a jobs to housing ratio consistent with the regional average of less than 0.5 jobs per resident	
95	Continue to provide density and other zoning incentives or procedural or financial incentives to developments for establishment of alternative transportation infrastructure within the private as well as adjacent public right-of-way, such as increased bicycle parking, separated sidewalks, bike lanes and signage, and change and shower facilities	

Strategy 3: Decarbonizing Transportation & Sustainable Land Use

Idea ID #	Idea Description	Next Move(s) ID#
96	Ensure that every village core has opportunities for growing produce locally	
97	Retain a residential parking permit program for residential areas adjacent to commercial areas of the City where parking is in higher demand	
98	Designate street parking stalls in the vicinity of key commercial and multi-family residential locations for efficient or alternatively fueled vehicles.	
99	Increase signal coordination as warranted to facilitate traffic flow along arterials and major collectors	
100	Deploy intelligent transportation systems measures for managing traffic of large-scale construction projects and at major City and private events	
101	Support, streamline, and incentivize the retention and expansion of local anchor and growth industries.	
102	Long-term rental homes: Convert short-term (<6months) rentals and empty investment homes into affordable long-term housing without costly construction and GHG.	
103	Address numbers: Require address numbers be clearly visible and legible from the street.	
104	Sunnyvale Bicycle Highway: As part of the Western Channel redevelopment, build a continuous bicycle highway from the bay, through downtown, past El Camino.	
105	Flexible work schedules: More flexibility in work schedules to allow employees to lessen the burden and stress of commuting and reduce emissions from congestion.	
106	Lunch Delivery Service: City can have contract with restaurants and fast food places to deliver work day lunches based on preorders (made by individual staff on a daily basis) to different locations of the City offices. This will reduce the number of vehicles on road during lunch time. City can also solicit restaurants incentives for bulk order.	
107	48/96 DPS Fire Schedule: Implement a 48-96 work schedule consists of a 6-day rotation period where each platoon works two consecutive 24-hour shifts, followed by four days off. For any given day of the week, an employee would work that day two weeks in a row, then have the next 4 off. Creates 50% reduction in commuting for all Sunnyvale Fire Service personnel and the resulting economic and environmental benefits this would create.	
108	Implement Congestion Management pricing in business parks: Convince fewer people to drive solo by charging a fee for each personal automobile entering business parks.	
109	Encourage More Ridership by Helping Change Public Perception of Public Bus System by Merging VTA Bus System with Corporate Bus System: Bring together Santa Clara VTA, large businesses & institutions to create efficient, clean electrical bus transportation system.	
110	City Mobility Strategy: A mobility strategy for the city would identify in clear and easy to understand language, the variety and volume of major commute routes to and from the city. As one example if a sizeable portion of the city's work force commutes from the East Bay, what are the current and future alternatives for commuters to get to and from Sunnyvale. Does the city have a workable strategy to help relieve highway congestion to and from that area? If not, what alternatives can the city contemplate in cooperation with other cities in the region, as well as regional transportation agencies to identify and address current gaps.	

Strategy 3: Decarbonizing Transportation & Sustainable Land Use

Idea ID #	Idea Description	Next Move(s) ID#
111	Encourage and subsidize shared mobility autonomous vehicles	
112	Car-free lifestyle & Mobility as a Service: Promote the benefits of a car-free lifestyle and support 'mobility as a service' for city residents and businesses.	
113	Create a TDM program for City staff to promote alternative transportation modes and carpooling to the greatest extent possible	
114	Continue sponsoring projects to provide transit rider amenities at bus stops and rail stations.	
115	Work with the Valley Transportation Authority and neighboring jurisdictions to provide transit priority signal timing in order to decrease travel time	
116	Encourage schools to link employees and guardians of students with an online system such as 511.org that provides carpool matching	
117	Require sidewalks to be a minimum of six feet wide in order to allow side by side walking at identified locations that currently serve high pedestrian traffic volumes, or locations planned to serve high pedestrian traffic.	
118	Require secure bicycle parking at public and large private events	
119	Increase awareness of the city's bicycle facilities by updating the city bicycle map to show locations of public and private bicycle parking, creating a web-based application for members of the public to identify locations of private parking, and establishing information kiosks at key city locations to provide maps and highlight alternative modes of transportation	
120	Improve bike lanes, bike racks, and bike security: Making bike lanes safer and providing better resources to people who bike will incentivize bike transportation.	
121	Modernize Residential streets' speed limits and parking to increase capacity, improve mobile safety and reduce GHG: Prohibit speeding and parking on bike path streets. Prohibit visually impairing vehicles' parking risks to cars, cyclists & pedestrians.	
122	Green light for bikes/Idaho stop: Create more bike corridors where cyclists (almost) never have to stop at intersections.	
123	Increase Green Mobile and shrink carbon footprint: New home/buildings donate permanent green space property to connect safe bike/pedestrian paths, remove GHG inefficient, same-size structures.	
124	Metrics for Non-car travel within Sunnyvale: Create data for non-car travel comparable to that currently maintained by the City for car-based travel.	
125	WayWatchers: Mobile application that tracks how people move around the city and gives points towards tokens for rewards.	
126	Creative Parking Permits for all Street Parking and Per Use Fees for Public Parking Facilities: Require parking permits for all parking on streets and public parking facilities on; use modern technology for easy fee collection.	
127	Vehicle Tax on mileage, weight, and wheels: Tax vehicles based on mileage, weight, and number of wheels (while driven with audible/visible reminders).	

Strategy 3: Decarbonizing Transportation & Sustainable Land Use

Idea ID #	Idea Description	Next Move(s) ID#
128	Replace 4-way stops with mini-roundabouts when possible: Mini-roundabouts reduce emissions when compared to stop-and-go traffic pattern of 4-way stops, and are more friendly on bike traffic.	
129	Flashing Yellow Left Turn Arrows: Replace red left turn arrows with flashing yellow left turn arrows to allow drivers to turn when their direction of traffic has the green.	
130	Sustainable Commuter Punchcard: This idea uses incentives to motivate commuters to carpool, use public transit, bike, or walk to work or school.	
131	New Civic Center: Re-design the future civic center to reduce planned parking in Option 1 (which is designed for today's transportation).	
132	Making Biking (More) Attractive/Fun: Community activities that encourage biking.	
133	Financing Better Mobility: A universal pass (daily, monthly, and/or yearly) paid for by all residents, for local, multi-modal, carbon-free public transportation.	
134	Improve walkability to Fair Oaks park: Make it easy to walk to Fair Oaks park for people living between Fair Oaks, Arques and Taylor.	
135	Affordable 100% solar power for EV mobility solutions (cars, shuttles, buses): Fuel all future electric vehicles (cars, shuttles, buses) with 100% clean, local, and affordable renewable energy.	
136	48/96 DPS Fire Schedule: City should consider discounting the electricity charging rates or providing free electric vehicle charging for a certain number of hours per employee per year. Incentivizing cleaner vehicles will help reduce the impact of the carbon emissions produced from employee commutes.	
137	Establish Electric Car Sharing Programs as Supplement to City Fleet: Partner with private car-sharing networks, like Envoy, to bring more EVs and EV infrastructure to City properties. Envoy provides a private, car-sharing network dedicated to a location where people live (e.g., apartment building) or work. Envoy will install chargers, supply and maintain EVs, and provide insurance for monthly subscription fees.	
138	Designate preferred parking stalls for electric, hybrid, and other alternative fuel vehicles in all public and private parking lots consistent with the California Green Building Code	
139	Facilitate new fueling stations that offer alternative fuels	
140	Incentivize gas stations to offer E85: Offer incentives for gas stations to offer more alternative fuels like ethanol (E85), hydrogen, or charging stations for electric vehicles.	
141	[Regulate] Gas powered garden equipment: Regulate and enforce rules that reduce the amount of particles that pollute our air from gas powered garden equipment.	
142	Car pool lanes for all-electric vehicles: A 24-hour express lane for all-electric vehicles on all major roads.	
143	Sustainable electric school buses for Sunnyvale's children and environment: We will help Sunnyvale's schools and community to adopt electric buses and innovative, affordable charging solutions.	

Strategy 4: Managing Resources Sustainably		
Idea ID #	Idea Description	Next Move(s) ID#
144	Suggestions on how to implement the FoodCycle program into schools: The Sunnyvale FoodCycle program is moving into public schools and businesses, here are some thoughts on how we can better incorporate it.	4.A
145	Select materials to be targeted for diversion and diversion methods, services, or technologies based on the results of the Zero Waste Strategic Plan.	4.B
146	Waste Audits, education and outreach	4.C
147	Stop Wasting Water & Reduce GHG!: Enact new water efficiency methodologies and policies that combine to greatly reduce Sunnyvale's consumption and lead California by example.	4.D
148	Water conservation: Get the best use out of every drop of water.	4.D
149	Promote existing SCVWD efficiency/conservation rebates	4.D
150	Promote "purple pipe" (reclaimed water) infrastructure in new construction or major renovation in preparation for a growing, usable network.	4.E
151	Create a purple pipe network for citywide use of recycled water for irrigation and other outdoor purposes.	4.E
152	Continue to implement the City's Tree Preservation requirements.	4.F
153	Clarify codes and policies to maximize the preservation of the largest longest-living trees, and ensure the expansion of the urban forest over time as appropriate for the site.	4.F
154	Increase Tree Coverage: Increase tree coverage in Sunnyvale to sequester carbon, regulate temperature, manage water runoff.	4.F
155	Implement City's Green Infrastructure Plan	4.G
156	Carbon Cost Food Labeling: Encourage consumers to make choices that min. environ. impact, req. restaurants & grocers to label food & menu items w/ assoc. carbon emissions.	4.H
157	Business: In the mood for food: Encourage businesses to grow food at their corporate sites.	4.I
158	Tower Garden- a vertical, aeroponic growing system- 90% less water and space, 30% greater yield and 3x faster: I am a mom on a mission to promote education regarding healthy living and how to use urban farming that is productive and sustainable.	
159	Urban Agricultural Internships & Design Program: A system of academic credit for students to design and run urban farms/food stands with paid internships.	
160	Develop and implement a purchasing policy that requires food and other appropriate materials purchased by the City to be purchased from as local a supply as possible.	
161	CityTree Moss Wall: CityTree is a company that installs self-sustaining moss units that can have the equivalent of up to 275 trees per year for air cleaning.	
162	Tree Lined Street: Trees are efficient and aesthetic sequesters of CO2; trees add beauty while removing CO2 and replenishing O2.	
163	GHG>15%! Reduce Factory-Farm-Animals!: Discourage Farm-Animals' products to reduce global GHG>15% Redirect wasted resources to increase credible organic plant food supply.	

Strategy 4: Managing Resources Sustainably

Idea ID #	Idea Description	Next Move(s) ID#
164	Expand existing park, open space, and boulevard tree inventory through the replacement of trees with a greater number of trees when trees are removed due to disease, park development, or other reasons.	
165	Develop and implement canopy coverage requirements for City-owned parking lots, with exceptions for solar installations.	
166	Construction & demolition debris diversion	
167	Pricing increases/penalties for not recycling/composting	
168	Single-use plastics ban	
169	Straws Suck!: Ban plastic straws in eating and drinking establishments in Sunnyvale.	
170	Environmentally Preferable Purchasing Policy ('Default to Green'): Create a comprehensive Environmentally Preferable Purchasing policy for the city.	
171	3D printed homes: Bring affordable 3D printed homes to Sunnyvale.	
172	Ban the sale or dispersal of disposable, single use plastic water bottles at public events permitted by the City.	
173	Green city procurement: Use modern data science tools (ProductBIO.com or other) to evaluate and strategically reduce the impacts of the city's procurement spending.	
174	Reduce take-out plastics: Sunnyvale restaurants only give straws, plastic cup lids, and plastic utensils upon request from patrons for in-store or to go orders.	
175	CJF [Disposables Fee on Plastic Cups and Straws]: Would like to have local business be taxed on single use plastic cups and straws like shopping bag tax to incentivize individuals BYO cup.	
176	Sunnyvale The Green Shopping capital of the world!: List and patronize stores and businesses that decrease packaging and enable Bring Your Own Packaging when shopping.	
177	Require bottle water fillers at all drinking fountains.: Place water fillers at all drinking fountains and stand alone to encourage people to not use plastic bottles and to drink right amount.	
178	Bring your own produce bags: Reduce grocery store plastic bag use for fruits and vegetables by consumers bringing in their own containers.	
179	Trash to Cash: Composting for cash.	
180	Stop the wasted paper mailings: I would like help from the Sunnyvale community to get "Retail me not everyday" to d/c the paper mailings they send out that get trashed.	
181	Fewer Trash Cans, Less Litter?: Make trash cans as we know them non-existent.	
182	Multi-family program for composting, gardens	
183	Promote Reuse/repair and circular economy	
184	Water neutrality ordinance for new construction	
185	repurposing golf courses: convert City golf courses into agrihoods.	

Strategy 4: Managing Resources Sustainably

Idea ID #	Idea Description	Next Move(s) ID#
186	Provide supplemental funding to existing rebates	
187	Require new development to reduce potable indoor water consumption by 30% (Tier 1 CALGreen) and outdoor landscaping water use by 40%.	
188	Realtime Home Water Metering: A prototype water meter with iOS app showing instant usage.	
189	Discourage Use of Bottled Water: Plastic bottle disposal is a huge problem in the ocean and bottled water an economic problem. See Maude Barlow's book "Blue Future."	
190	Dollars for Natives: incentivize homeowners to plant California native landscapes.	
191	Control Water Usage: A Timer operated shower will reduce water usage.	
192	Implement the City's Urban Water Management Plan to facilitate a 20% reduction in per capita water use by 2020.	
193	Create flexible provisions and encourage residents and businesses to collect rainwater to use for irrigation purposes.	
194	Revise development standards to ensure the use of greywater, recycled water, and rainwater catchment systems is allowed in all zones.	
195	Sustainable Landscaping Program: Encourage sustainable landscaping through integrated program including electric landscape equipment & lead by example with city operations.	
196	The Sunnyvale Urban Forest: Host community tree planting events around Sunnyvale until trees outnumber residents.	

Strategy 5: Empowering Our Community

Idea ID #	Idea Description	Next Move(s) ID#
197	The Cool Block: Reinvent the world. The journey begins on the block where you live.	5.A
198	Develop and encourage a mechanism for neighborhoods to share equipment and resources to improve sustainability.	5.A
199	Create a structure or partner with other groups for volunteers, residents, and other organizations to help achieve Sunnyvale's sustainability goals.	5.A
200	Sunnyvale Strong Blocks: Create a program similar to the City of Palo Alto's Cool Blocks to engage neighbors in taking action together on climate and disaster preparedness.	5.A
201	Use the City's Sustainability Commission and outreach staff as a structure to coordinate with other groups for volunteers, residents, and other organizations to help achieve Sunnyvale's sustainability goals.	5.A, 5.D
202	Accelerating Clean Electrification for Sunnyvale Residents: YellowTin educates & empowers homeowners to make informed decisions on clean energy choices such as Solar, Battery, EV, Space & Water Heater.	5.B
203	BE Ready to Electrify (Residential SF & MF): Increase readiness for planned, economic migration from fossil-fuel use to efficient, clean electricity use in residential homes.	5.B
204	Provide a toolkit of resources, including web based efficiency calculators, for residents and businesses to analyze their greenhouse gas emissions in comparison to their neighborhood, the city, and the region.	5.B
205	[Online Neighbor Forum for] Energy Outreach and Education: Ways to involve more people in adopting clean energy technologies.	5.B

Strategy 5: Empowering Our Community		
Idea ID #	Idea Description	Next Move(s) ID#
206	Raising Awareness for CAP and Environmentalism: Create data-driven, specialized campaigns and programs that generate awareness and support for fighting climate change and being environment.	5.B
207	Inform the community of metering options, such as online applications and in-home monitors.	5.B
208	Sunnyvale Green@Home: Free SmartMeter analysis and personalized recommendations for how to reduce home energy waste and lower energy bills.	5.B
209	Dedicate a page of the City's website to climate change and climate change adaptation.	5.C
210	Green Warriors in Training: Teach them while they're young, so they can become eco leaders.	5.E
211	Recommend and advocate for schools to use the Air District curriculum or other programs for local school teachers to teach children about climate change, greenhouse gas emissions, and local actions.	5.E
212	Actively engage with Sunnyvale businesses to identify areas for GHG reduction and financial savings.	5.F
213	Visualizing Community Progress: Visual graphics that show progress towards sustainability goals.	5.G, 5.H
214	Climate Action - Project Tracking: Treat city greenhouse gas emissions & projects designed to reduce them w/ same rigor (planning, improv., controls, metrics) as city finances.	5.G, 5.H
215	Use sustainability initiatives within City operations to educate the community of ways to achieve sustainability by example.	
216	Next Door App for Community Utility Data: Share data and conservation success through an online forum.	
217	Dry your clothes for Free - Use a Clothesline!: All you need is enough space in your backyard to string a clothesline. You'd be amazed how much energy is saved.	
218	GHG Reduction Planning: Develop action road maps for individual households.	
219	Provide regular communication with schools, business, faith groups, community members and neighborhood groups to increase participation in the City's progress toward sustainability.	
220	Develop and implement a competitive greenhouse gas reduction program between groups of citizens in the City with an award component.	
221	Actively promote use of alternative modes of transportation as safe modes of travel. When applicable, promote on the City's web site and publications about viable programs sponsored by 511, the Air District and other recognized agencies.	
222	Through selected projects and efforts to improve City operations, demonstrate how sustainability efforts are possible and successful.	
223	Make comparison an intrinsic part of consumption. Bring awareness of how our consumption compares to other communities, regions, and others in our neighborhood.	
224	Manage Your Metrics, Manage Your Money: This concept would help Sunnyvale residents understand and use their data to manage their energy.	
225	SustainTimes.net - Sustainable Actions Made Easy!: Educate and Implement Sustainability Actions for the Mainstream Community.	
226	Environmental Fair: Provide idea for City of Sunnyvale CAP 2.0 plan. Volunteer during the fair with own booth.	

Strategy 5: Empowering Our Community

Idea ID #	Idea Description	Next Move(s) ID#
227	Kid's Workshop: Treasuring Our Resources: Events that includes livecam to a farm and workshops for kids to encourage behavior change in sustainability.	
228	Art for the Climate: Emphasize Climate and the natural world in the City's "1% for Art" program and build on the successful Earth Day Poster and Film contest.	
229	Consolidate single function devices into multifunction: Evaluate usage and spending on single function devices and determine if consolidation into multifunction devices is cost efficient. Determine if follow me printing, authenticated printing, print management, and/or scan to email/folder are beneficial and cost effective.	
230	Planning and Building staff will work with project applicants to limit GHG emissions from construction equipment by selecting one of the following measures, at a minimum, as appropriate to the construction project: a. Substitute electrified or hybrid equipment for diesel- and gasoline-powered equipment where practical. b. Use alternatively fueled construction equipment on-site, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane, or biodiesel. c. Avoid the use on on-site generators by connecting to grid electricity or utilizing solar-powered equipment. d. Limit heavy-duty equipment idling time to a period of 3 minutes or less, exceeding CARB regulation minimum requirements of 5 minutes.	
231	Deep Time Walk: The Deep Time Walk is a walking audio book where one meter walked represents one million years of Earth history.	

Strategy 6: Adapting to a Changing Climate

Idea ID #	Idea Description	Next Move(s) ID#
232	Regularly train and inform the Department of Public Safety Office of Emergency Services (OES) on potential climate change risks and hazards.	6.A
233	On a regular basis, assess adaptation efforts of the City, region, and state and identify goals or gaps to be addressed.	6.A, 6.B
234	Appoint a staff liaison to attend and participate in regional meetings focusing on adaptation and resilience and to report back to staff on a regular basis	6.B
235	Analyze and disclose possible impacts of climate change on the project or plan area with an emphasis on sea level rise.	6.C, 6.D
236	Integrate climate change adaptation into future updates of the Zoning Code, Building Code, General Plan, and other related documents.	6.D, 6.E
237	Update the City Emergency Plan and Emergency Preparedness Workbook to address climate change impacts.	6.E
238	Require buildings, homes and properties achieve the best Fire prevention methods to reduce fire accident caused GHG	
239	Underground residential power, cable and gray water ecology to reduce GHG	
240	Regenerate the tidal marshlands	



Appendix B: Technical Background

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Overview

The Climate Action Playbook (Playbook) identifies how the City will meet or exceed the State of California's climate goals. The State has adopted ambitious targets to encourage greater climate action, including statewide GHG emissions reductions of:

- 1990 levels by 2020 (Assembly Bill 32, 2006)
- 40% below 1990 levels by 2030 (Senate Bill 32, 2016)
- 80% below 1990 levels by 2050 (Executive Order S-3-05, 2005)

To develop appropriate GHG emissions reduction strategies and actions, the City analyzed its baseline GHG emissions, forecasted future emissions while accounting for moderating impacts of existing policies and programs and determined future scenarios for emissions to estimate how emissions can be reduced through climate action. This analysis was used to guide the development of the Strategies, Plays and Next Moves documented in the Climate Action Playbook.

This appendix provides technical supporting information related to the abovementioned analyses, including a description of the overall methodology, key assumptions, calculations and supporting materials used for the analyses performed.

The work described herein was performed by consultants DNV GL and Fehr & Peers and utilized DNV GL's Climate Scenario Analysis Tool in combination with Fehr & Peers' TrendLab+ Tool for transportation emissions. These tools enabled City staff and community stakeholders to explore the trade-offs between different GHG reduction strategies and emissions reductions between sectors.

GHG Emissions Inventory and Forecast

Greenhouse gas (GHG) emissions inventories estimate the GHG emissions produced within a city's jurisdictional boundaries. They provide a quantifiable means for measuring progress toward reducing GHG emissions over time. The GHG inventory used to guide the development of the Playbook represents community-wide emissions from all entities (residential, commercial, industrial and municipal) within the City of Sunnyvale's jurisdictional boundaries.

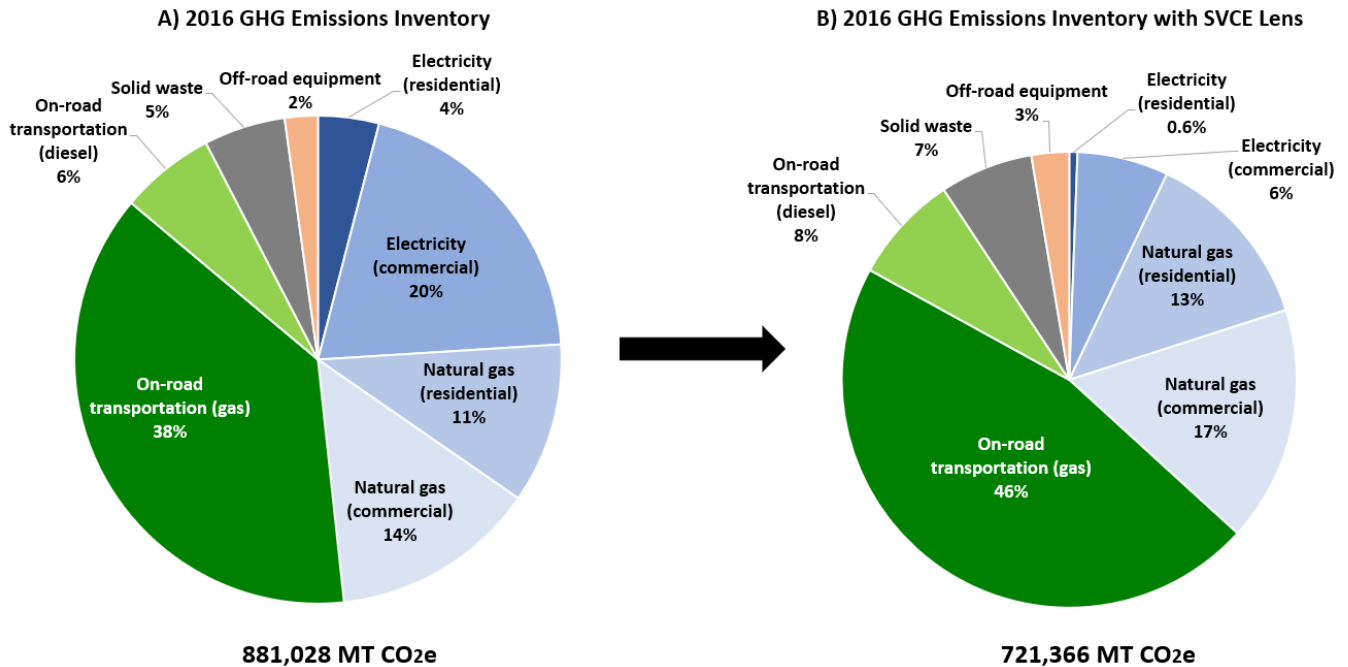
A. GHG Emissions Inventory

As a part of its original Climate Action Plan (CAP 1.0, adopted in May 2014), a baseline GHG emissions inventory was completed for calendar year 2008 to identify the major sources of GHG emissions within Sunnyvale. This inventory provides a baseline against which future progress can be measured. The City's GHG inventory was guided by the U.S. Community Protocol for Accounting and Reporting Greenhouse Gas Emissions (U.S. Community Protocol), developed by International Council for Local Environmental Initiatives (now called ICLEI-Local Governments for Sustainability, hereafter ICLEI) and industry stakeholders.

Following the 2008 baseline inventory, the City completed subsequent GHG emissions inventories for calendar years 2014 and 2016, in accordance with the two-year reporting cycle committed to in the CAP 1.0 Implementation Work Plan (adopted November 2014). These inventories followed the same methodology as the 2008 baseline inventory to provide an "apples-to-apples" comparison across years. The 2016 GHG inventory by sector is shown in Figure 1 (a).

With the launch of Silicon Valley Clean Energy (SVCE) in 2017, which provides carbon-free electricity throughout the community, the City anticipated a drastic drop in electricity sector emissions. To reflect the impact of SVCE's clean electricity, a modified 2016 GHG emissions inventory was created (Table 1) to estimate the GHG emissions impact as if the complete launch of SVCE had occurred in 2016. This serves as a proxy for understanding the magnitude of SVCE's impact and is called the "2016 GHG Emissions Inventory with SVCE Lens," shown in Figure 1(B). With the SVCE Lens, Sunnyvale's community-wide emissions are anticipated to decrease by 18% (from the original 2016 community-wide emissions), as demonstrated by the shrinking pie chart.

Figure 1: Sunnyvale’s 2016 GHG Emissions Inventory by Sector



*Emissions from Caltrain, water and wastewater account for less than 1% of total emissions and are not shown in the above charts.

An updated 2018 GHG inventory will be utilized to track progress against City’s climate targets adopted as a part of the Playbook.

Table 1: 2016 GHG Emissions Inventory with SVCE Lens

Emissions Sector	2016 Emissions (MTCO ₂ e)	Percent of 2016 Emissions
Electricity (residential)	4,165	0.6%
Electricity (commercial)	46,385	6%
Natural gas (residential)	92,999	13%
Natural gas (commercial)	119,659	17%
On-road transportation (gasoline)	331,074	46%
On-road transportation (diesel)	55,154	8%
Water & wastewater	3,202	0.5%
Solid waste	47,409	7%
Off-road equipment	19,173	3%
Caltrain	1,197	0.2%
Total (all sectors)	720,418	100%

Note: Data shown may not add up to the total due to rounding.

B. Forecast Methodology and Assumptions

A GHG emissions forecast estimates how emissions will grow or decrease in the future based on anticipated growth projections, impact of local and state policies and programs, anticipated changes in technologies and community

behavior trends. To estimate the GHG reductions needed to reach the state’s targets, Sunnyvale’s GHG emissions were forecasted based on anticipated growth in population, housing units, jobs, commercial and industrial space, and vehicle miles traveled or VMT (Table 2).

All data on growth variables was pulled from the City’s Land Use and Transportation Element (LUTE), adopted in 2017. The LUTE provides values of growth variables for the year 2014 and projects them for year 2035. For the Playbook, 2016, 2030 and 2050 values were calculated by either interpolating or extrapolating using the growth rate projected between the 2014 and 2035 values. The estimated 2016 values presented in Table 2 differ by less than 2% from the actual 2016 values published in the City’s Climate Action Plan Biennial Progress Report 2018 and cited in *The Playing Field* chapter of the Playbook (page 14). This difference does not have a significant impact on the scenario analysis described in the subsequent section of this appendix.

Table 2: Business-as-usual Growth Variable Forecast Assumptions based on 2035 LUTE Projections

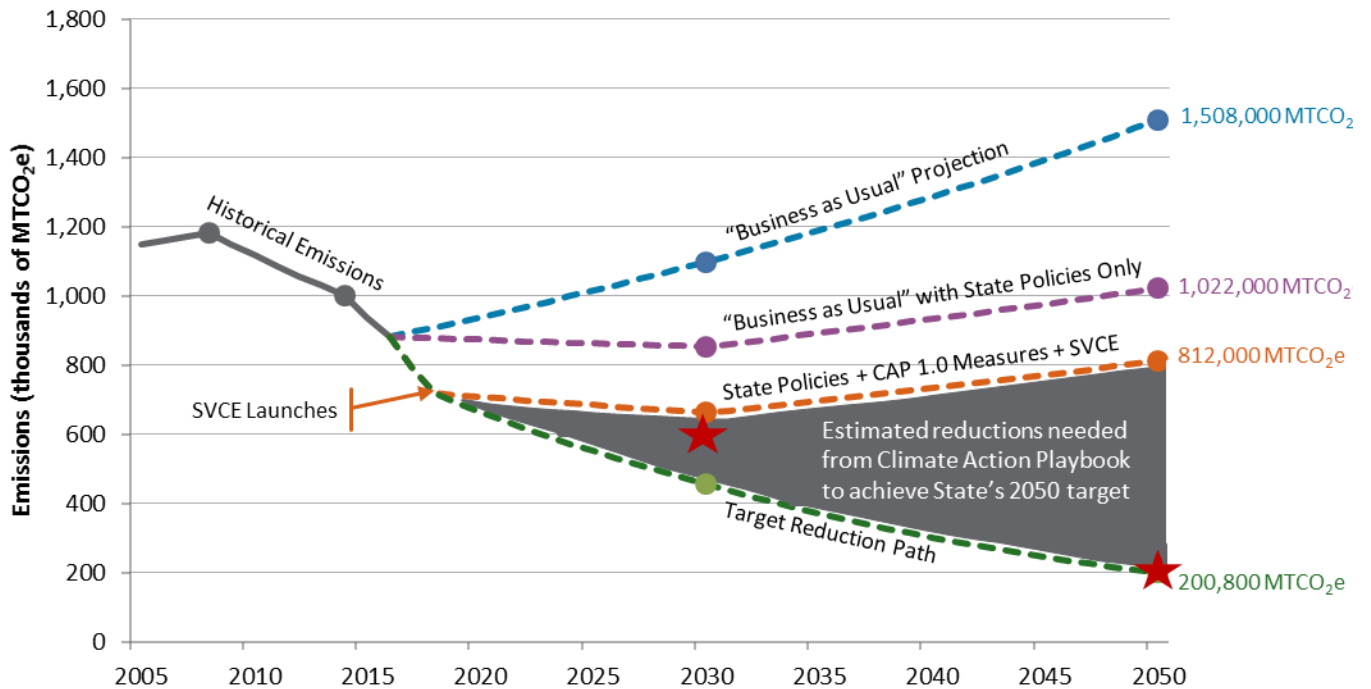
Growth Variable	2016 Estimated (LUTE*)	2030 (CAP)	2035 (LUTE)	2050 (CAP)
Population	149,471	167,533	174,500	197,187
Housing Units	58,318	68,436	72,460	86,009
Jobs	85,321	112,655	124,410	167,560
Non-residential million square feet	48.3	56.1	59.2	69.5
Vehicle miles travelled	869,828,540	1,126,403,395	1,235,341,167	1,629,542,923

*2016 values for growth variables were estimated based on 2014 values from the LUTE.

The growth variables in Table 2 were utilized to project business-as-usual growth on a sector-by-sector basis as described below.

- **Residential energy consumption:** Projected based on an average of the compound annual growth rate of population and compound annual growth rate of housing units.
- **Commercial energy consumption:** Projected based on an average of the compound annual growth rate of jobs and compound annual growth rate of non-residential built environment square footage.
- **On-road transportation:** Projected based on the compound annual growth rate of vehicle miles traveled (VMT) growth.
- **Solid waste, water and wastewater, off-road equipment, and Caltrain:** Projected based on an average of the compound annual growth rate of population, housing units, jobs, and non-residential built environment square footage.

Figure 2: Historical & Forecasted GHG Emissions: 2005 - 2050



★ = State Targets: 40% by 2030; 80% by 2050

The business-as-usual (BAU) forecast utilizes Sunnyvale-specific growth projections from the City's Land Use and Transportation Element (LUTE), adopted in 2017. These growth projections are available through 2035 when the City is projected to achieve complete buildout. This BAU forecast, however, assumes continued growth in the absence of future projections between 2035-2050.

The following four forecasts were developed to support the Playbook:

- (1) **Business-as-usual (BAU) forecast** analyzes how emissions will grow if per capita consumption trends and efficiencies remain at their 2016 level, while the number of people, jobs, and housing units, VMT, and square footage of commercial/industrial space in Sunnyvale continues to grow. In other words, the BAU is the status quo scenario before State, regional and local GHG emissions reduction efforts are taken into consideration.

The BAU projection utilizes the demographic projections for population, households, jobs and traffic (measured by vehicle miles travelled or VMT) as specified in the Land Use and Transportation Element (LUTE, adopted in 2017) of the City's General Plan. The LUTE includes projections out to year 2035, when the City is assumed to have reached complete buildout. As such, the 2017 LUTE does not contain projections for these growth variables for years 2030 and 2050, which define the interim and final planning horizons for climate action planning in the Playbook.

To estimate population, households, jobs and VMT for 2030 and 2050, a compound annual growth rate was calculated for each variable based on the baseline year of data available (2014) and the farthest future year of data available (2035). This compound annual growth rate was applied to the base year (2014) data to interpolate values of these variables annually through 2030 and to extrapolate these variables annually through year 2050.

The above methodology is based on two key assumptions that:

- growth will continue between 2035 and 2050, even though the LUTE assumes complete buildout by 2035; and

- the compound annual growth rate remains constant over the period between 2014 and 2050.

Based on these assumptions, the BAU forecast predicts a continued increase in emissions through 2050, driven by local growth. In reality, growth after 2035 may be higher or lower than assumed. However, in the absence of growth projections beyond 2035, this forecast is conservative as it estimates higher GHG emissions in the future than may actually occur if growth slows down based on the premise of complete buildout by 2035. See Table 4 for the projected 2030 and 2050 emissions under this forecast scenario.

(2) **Business-as-usual with State policies forecast** analyzes how emissions will change under the moderating impact of state and federal policies currently in place that are expected to significantly reduce GHG emissions in Sunnyvale. Specifically, the impact of the following policies was accounted for:

- California Renewable Portfolio Standard (RPS) to achieve 50% renewable energy by 2030¹
- California Energy Code, Title 24, Part 6² which contains energy conservation standards applicable to most residential and non-residential buildings throughout California, including goals related to zero net energy for residential new construction by 2020 and non-residential construction by 2030³
- Caltrain electrification, which will fully convert Caltrain to an electric fleet from the current diesel engines⁴
- Advanced Clean Cars Program⁵ adopted by California Air Resources Board in 2012 to enact low emission vehicle and zero emission vehicle regulations and more stringent fuel economy standards for model years 2017 – 2025.

See Table 4 for the projected 2030 and 2050 emissions under this forecast scenario.

(3) **Business-as-usual with State policies and CAP 1.0 measures** represents the most likely emissions trajectory for Sunnyvale in the absence of new climate action. This forecast considers ongoing implementation of the City's CAP 1.0, including the launch of SVCE. Only CAP 1.0 measures where the City has made significant progress on implementation were attributed to CAP 1.0 emissions avoided. Table 3 shows emissions avoided from the following CAP 1.0 measures were attributed to the Playbook.

¹ Note: Since the completion of the City of Sunnyvale GHG forecast and technical analysis for the Playbook, the State of California passed SB 100 in September 2018, increasing the overall RPS requirement from 50% to 60% by 2030. The legislation also adopted an additional goal of 100% of all retail sales by 2045 to come from renewable energy resources and zero-carbon resources. These additional emissions reductions are accounted for in the current analysis but attributed to SVCE since the community choice aggregation (CCA) program is already providing zero-carbon electricity.

² California Energy Commission, 2016 Building Energy Efficiency Standards.

<https://www.energy.ca.gov/title24/2016standards/index.html>

³ California Public Utilities Commission, Energy Efficiency Strategic Plan. <http://www.cpuc.ca.gov/general.aspx?id=4125>

⁴ Caltrain, Peninsula Corridor Electrification Project.

<http://www.caltrain.com/projectsplans/CaltrainModernization/Modernization/PeninsulaCorridorElectrificationProject>

⁵ California Air Resources Board, Advanced Clean Cars Program. ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program

Table 3: CAP 1.0 Measures Included in Emissions Forecast

CAP 1.0 Measure	2030 Emissions Avoided (MT CO ₂ e)	2050 Emissions Avoided (MT CO ₂ e)
Community Choice Aggregation	152,267	170,845
Commercial Outdoor Lighting Efficiency	184	200
Recycling and Composting	37,619	37,619
Water Conservation	286	477
Water Sources & Efficiency	140	345

The forecasts attribute emissions reductions in descending order as follows:

- emissions reductions resulting from statewide and federal policies.
- emissions reductions resulting from the implementation of local measures in Sunnyvale’s CAP 1.0.

For example, the BAU forecast assumes that (non-direct access) electricity will be 33% renewable in 2030, because PG&E electricity in 2016 was 33% renewable. The BAU forecast with State measures assumes that electricity will be 50% renewable in 2030, because the State’s RPS commits to 50% renewable electricity by 2030. The BAU forecast with CAP 1.0 measures included assumes that electricity will be 100% carbon free by 2030, because it factors in the impact of SVCE. The avoided emissions impact of moving from 33% to 50% renewable electricity in 2030 is attributed to the State RPS policy. The avoided emissions impact of moving from 50% renewable to 100% carbon free electricity in 2030 is attributed to the CAP 1.0 community choice aggregation measure. See Table 4 for the projected 2030 and 2050 emissions under this forecast scenario.

- (4) **Target Reduction Path** is the path the City must be on to best ensure meeting the state’s 2050 target (green dotted line in Figure 2). This target path is represented by a curved line interpolated between the current emissions and the 2050 target of 80% below 1990 levels. As such, this interpolated target path assumes a GHG reduction greater than 40% must be achieved by 2030. This is reflective of the fact that buildings and other infrastructure that are put into place now will likely still be in place in 2050. Emissions reductions achieved in the short-term (i.e., through 2030) will better position the City to meet its longer term 80x50 target. Therefore, it is very important that the City exceed the state’s interim target by meeting a 55% reduction by 2030 to stay on the pathway to 2050. See Table 4 for the projected 2030 and 2050 emissions under this forecast scenario.

Table 4: Emissions Forecast by Scenario and CAP 2.0 Emissions Reduction Targets

Description	2030 Remaining Emissions (MT CO ₂ e)	2050 Remaining Emissions (MT CO ₂ e)
Business-as-usual emissions	1,097,846	1,507,877
BAU with State policies	852,550	1,021,498
BAU with State policies + CAP 1.0	699,741	849,870
CAP 2.0 target	456,023	199,458

The Playbook contains Strategies and Plays that are designed to address the gap between the target reduction path and the business-as-usual emissions forecast that accounts for State policies and CAP 1.0 measure implementation (grey wedge in Figure 2).

C. Implications for the Future

Emissions forecasts represent a future view based on current technological, market and behavioral trends at the time of the analysis. The forecasts make assumptions about population, jobs and growth patterns as identified in the 2017 LUTE. However, growth may happen at a different pace than planned for, and new State and federal policies will influence expected GHG emissions. Therefore, regular GHG communitywide inventories are necessary to account for unforeseen exogenous factors to better ensure that the City remains on track to meeting State climate goals and the commitments of the Paris Agreement.

Scenario Analysis: Estimating Reductions

When it comes to issues as complex and uncertain as climate change, scenario development is a valuable tool for stimulating debate, and inspiring action and innovation. The Playbook relies on two scenario analyses for the target years 2030 and 2050. DNV GL's Climate Scenario Analysis Tool was customized based on Sunnyvale's 2008 baseline GHG emissions inventory, subsequent inventories for 2014 and 2016, anticipated SVCE impact and future projections. The tool also integrates Fehr & Peers' TrendLab+ tool outputs related to transportation to explore different emissions scenarios for 2030 and 2050. These scenarios were analyzed using stakeholder input to explore different options and pathways for emissions reductions. Stakeholder input included feedback from the community, CAP 2.0 Advisory Committee (CAC), and City staff.

A. Scenario Analysis for 2030 and 2050

The DNV GL Climate Scenario Analysis Tool (Climate Tool) is an Excel-based workbook that integrates Sunnyvale's GHG emissions for 2008, 2014 and 2016. The DNV GL Climate Tool utilizes the BAU forecast with the impact of State policies and CAP 1.0 implementation as the base scenario for attributing further emissions reductions associated with specific strategies and targets.

The Climate Tool lays out a possible scenario to achieve each of the targets on Sunnyvale's aforementioned target reduction path:

- 55% below 1990 levels by 2030 (exceeding the State's 40x30 target), in order to reach
- 80% below 1990 levels by 2050 (equal to the State's target)

In each scenario, the Climate Tool analyzes possible GHG reduction strategies and the targets that need to be achieved in each of the following four sectors:

- Natural gas
- Electricity
- Transportation
- Waste

These four sectors are largely aligned with the City's GHG inventory sectors and contribute most significantly to total community-wide GHG emissions.

B. Setting Targets for Energy and Waste

Within each sector, the Climate Tool identifies a set of strategies related to conservation and efficiency (e.g., source reduction) as well as shifting to cleaner sources (e.g., electrification and renewable resources). Each strategy is associated with an implementation target level that may be adjusted by users – that is, the target may be dialed up or dialed down. Table 5, parts (a) through (c), provide examples of the strategies and targets that may be adjusted for these sectors.

Targets are set separately for 2030 and 2050. The City's focus is to achieve the 2050 emissions reduction target. Simultaneously running the analysis for 2030 helps to develop a better understanding of the emissions reductions that are achievable by 2030 and the trade-off between strategy-level targets that will be necessary to achieve the

2050 target. As targets for each sector are dialed up or down based on user input, the total projected GHG emissions for each scenario will be altered.

Table 5. DNV GL Climate Scenario Analysis Tool – Example Natural Gas Strategies and Target Level Inputs by Sector

(a) Natural Gas Sector Targets

Strategy	Target Level Description	2030 Target Level (User Input)	2050 Target Level (User Input)
Improve efficiency of residential natural gas use	% reduction in natural gas before electrification	5%	30%
Improve efficiency of non-residential natural gas use	% reduction in natural gas before electrification	5%	30%
Electrify residential water heating equipment	% equipment electrified after energy efficiency	20%	50%
Electrify residential space heating equipment	% equipment electrified after energy efficiency	20%	50%
Electrify non-residential water heating equipment	% equipment electrified after energy efficiency	20%	50%
Electrify non-residential space heating equipment	% equipment electrified after energy efficiency	20%	50%
Electrify non-residential cooking equipment	% equipment electrified after energy efficiency	20%	50%

(b) Electricity Sector Targets

Strategy	Target Level Description	2030 Target Level (User Input)	2050 Target Level (User Input)
Improve efficiency of residential electricity use	% reduction in electricity	5%	10%
Improve efficiency of non-residential electricity use	% reduction in electricity	5%	10%
Expand rooftop solar	% remaining electricity emissions eliminated with Photovoltaics (PV)	3%	5%
Increased participation in SVCE's carbon free electricity offering	% of electricity carbon free	100%	100%

(c) Waste Sector Targets

Strategy	Target Level Description	2030 Target Level (User Input)	2050 Target Level (User Input)
Decrease amount of waste sent to landfill	% waste diverted from landfills	90%	90%

C. Setting Targets for Transportation

Transportation emissions are typically estimated based on vehicle miles traveled (VMT), which is the total miles driven by private or public vehicles. VMT is calculated using the origin-destination (OD) VMT method. An OD VMT estimate tracks all the vehicle trips generated within a geographic area across the entire network to their ultimate destinations and isolates the VMT as follows:

- Internal-internal (II): All trips made entirely within the study jurisdiction.
- One-half of internal-external (IX): One-half of trips with an origin within the study jurisdiction and a destination outside of this jurisdiction. This assumes that the study jurisdiction shares half the responsibility for trips traveling from other jurisdictions.
- One-half of external-internal (XI): One-half of trips with an origin outside the study jurisdiction and a destination within this jurisdiction. Similar to the IX trips, this assumes that the study jurisdiction shares the responsibility of trips traveling to other jurisdictions.
- External-external (XX): Trips through the study jurisdiction are not included because the study jurisdiction cannot implement policies that influence the trip-making behavior. Rather, through trips are assigned to other jurisdictions that can influence either the origin or destination side of the trip-making behavior.

As population and jobs in Sunnyvale grow, total annual VMT will naturally increase. Therefore, a more reliable assessment of changes in VMT is the VMT per service population⁶. VMT per service population is defined as the annual VMT divided by the service population.

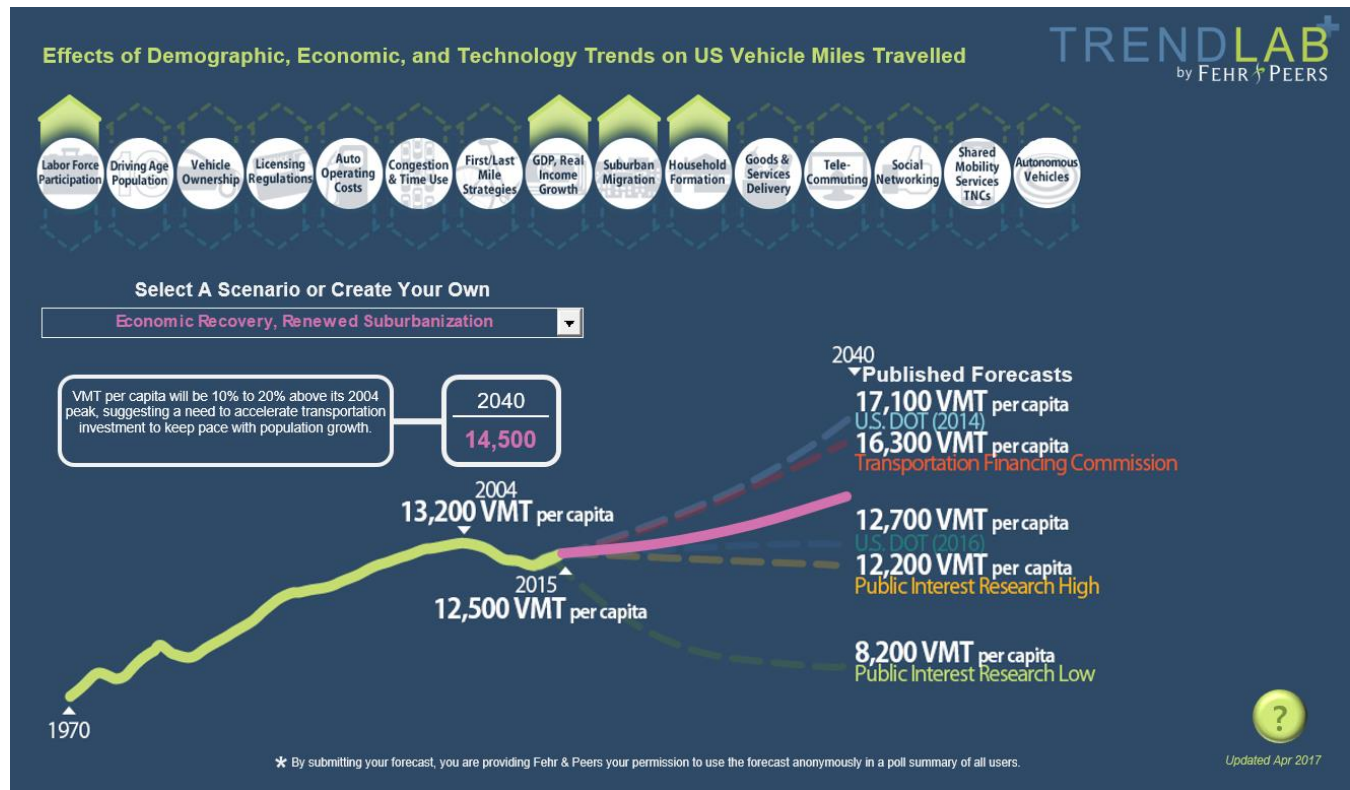
To determine VMT per service population targets for the Playbook, the City used Fehr & Peers' TrendLab+ tool. The Fehr & Peers TrendLab+ tool is a scenario tool that tests how changes from the business-as-usual trends could influence VMT per service population. Fehr & Peers first developed TrendLab+ in 2016 to evaluate the effects of evolving trends on 2040 national average VMT per service population under different future scenarios, such as economic recovery and millennial preferences. The tool (Figure 3) documents the historical annual VMT per service population from 1970 to 2015 in the United States and estimates future year VMT per service population based on the user's input on how they believe the trends might change in the future. Each trend has three possible changes that users can select from: up, level and down. Each scenario estimates future VMT per service population based on the combined effect of each trend. Since user preferences on the future trends might differ, the VMT per service population estimate varies within a range. The tool also includes VMT per service population forecasts published by U.S. Department of Transportation and other public interest research groups for comparison.

Fehr & Peers adapted TrendLab+ for Sunnyvale to estimate VMT per service population in the target years of 2030 and 2050. Fifteen trends that have the greatest influence on Sunnyvale's VMT per service population were identified and used for the Sunnyvale TrendLab+ tool. Because some of trends are anticipated to continue to grow (e.g., clean-fuel vehicles) rather than fall, these trends have the possible changes of staying level, going up and or going "double up." The Sunnyvale TrendLab+ tool separates the citywide annual VMT into "clean" (i.e., miles traveled by vehicles that have zero emissions) and "non-clean" VMT (i.e., miles traveled for fossil fuel powered vehicles) to account for the decarbonization benefits of adopting a cleaner community-wide vehicle fleet. DNV GL's Climate Tool integrates a separate module based on TrendLab+ Tool to account for VMT impacts.

The VMT per service population used in Sunnyvale TrendLab+ tool is based on VMT and service population estimates from Sunnyvale's LUTE, adopted in 2017. See Table 2 for details on population, jobs and VMT projections incorporated into TrendLab+.

⁶ The service population is the sum of resident population and employment.

Figure 3: National TrendLab+ Tool



Trends for Sunnyvale

The fifteen trends included in Sunnyvale TrendLab+ fall into five categories (Table 6): demographic trends, economic trends, land use trends, transportation infrastructure trends, and technology trends.

Table 6. Trends in TrendLab+ Tool

Demographic	Infrastructure
Local Labor Force Participation	Low-Stress Bicycle/ Pedestrian Network
Driver Population	Transit Corridors Enhancement
Economic	Technology
Vehicle Ownership	Goods & Service Delivery
Auto Operating Cost	Social Networking
Transportation Demand Management (TDM) Strategies	Clean-Fuel Vehicles
Telecommuting	Ride Hailing/Shared Mobility
Land Use	Autonomous Vehicles
Housing Affordability	
Densification/Mixed Use	

Table 7 lists each trend, its magnitude of impact, and its direction of influence (direct vs. inverse) on VMT per service population. The magnitude of impact is categorized as high, medium or low, which provides insights for prioritizing transportation policies.

Table 7: Magnitude of Impact for Trends on VMT Per Service Population

	Magnitude of Impact	Direction of Influence	Category
Local Labor Force Participation	High	Direct	Demographic
Auto Operating Cost	High	Inverse	Economic
Housing Affordability	High	Inverse	Land Use
Ride Hailing/Shared Mobility	High	Direct	Technology
Driver Population	Medium	Direct	Demographic
Low Stress Bicycle/Pedestrian Network	Medium	Inverse	Infrastructure
TDM Strategies	Medium	Inverse	Economic
Transit Corridors Enhancement	Medium	Inverse	Infrastructure
Densification/Mixed-Use	Medium	Inverse	Land Use
Goods & Services Delivery	Medium	Direct	Technology
Autonomous Vehicles	Medium	Direct	Technology
Vehicle Ownership	Low	Direct	Economic
Telecommuting	Low	Inverse	Economic
Social Networking	Low	Inverse	Technology
Clean-Fuel Vehicles	Low	Direct	Technology

Sunnyvale TrendLab+ Scenario Summary

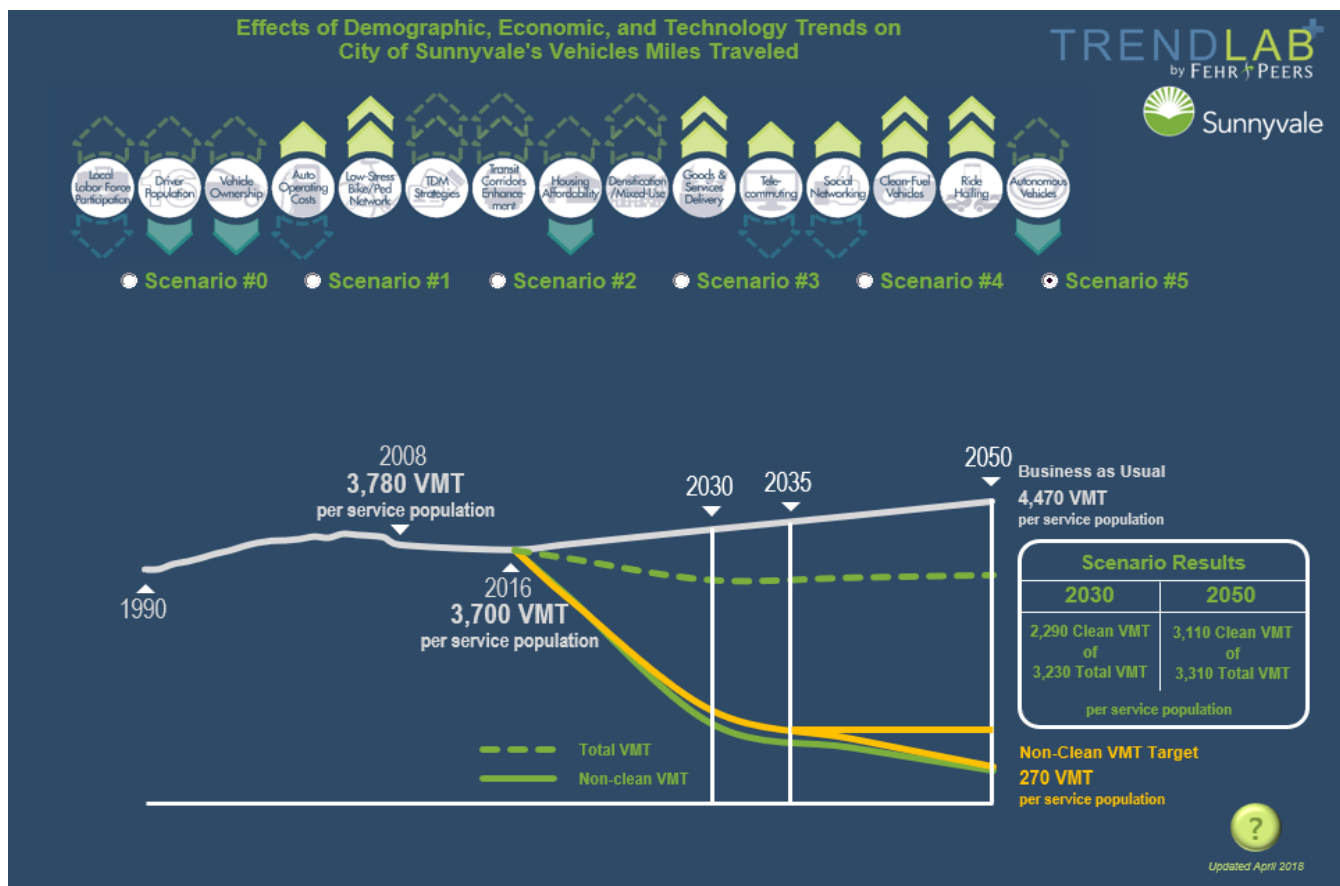
As a part of the community and staff outreach, community members, the City's staff, and the Climate Action Committee (CAC) members were asked to vote on what trends (shown in Table 7) they wished to see in Sunnyvale in the future for each of the variables. The following six scenarios were generated using the Sunnyvale TrendLab+ tool during the community and staff outreach phase of the project:

- **Scenario #0: Business-as-Usual** – This scenario summarizes the citywide annual VMT per service population for business-as-usual conditions under 2008, 2016, 2030, 2035, and 2050 conditions. This scenario represents a scenario similar to the 2035 Land Use and Transportation Element (LUTE).
- **Scenario #1: Ideas Workshop** – This scenario summarizes the citywide annual VMT per service population based on the most common trends voted on at the March 3, 2018 *Innovate Climate Action in Sunnyvale* Workshop.
- **Scenario #2: Transportation Focus Meeting** – This scenario summarizes the citywide annual VMT per service population for the most common trends voted on at the City staff workshop focused on transportation.
- **Scenario #3: CAP 2.0 Advisory Committee (CAC) Meeting** – This scenario summarizes the citywide annual VMT per service population for the most common trends voted on at the April 5, 2018 CAC meeting.
- **Scenario #4: CAP 2.0 (Composite Results)** – This scenario summarizes the citywide annual VMT per service population from the composite of the trends from Scenarios 1, 2 and 3, as noted above.
- **Scenario #5: CAP 2.0 (Alternate Results)** – This scenario summarizes the citywide annual VMT per service population from moderating the composite results of Scenario #4 for TDM strategies, transit corridor enhancements, housing affordability and densification/mixed-use.

For each scenario, service population forecasts and the citywide annual VMT (including clean and non-clean VMT) were estimated using the TrendLab+ tool. The output VMT per service population from these scenarios were used as input into the DNV GL Climate Tool to estimate citywide GHG emissions.

City staff selected a modified version of Scenario #5 that relies more heavily on a clean vehicle fleet and sets ambitious yet attainable VMT targets. Scenario #5 projects a target of reducing VMT per service population by 13% by 2030 and by 11% by 2050, both measured relative to 2016 levels. For 2030, staff adopted the projected target of reducing VMT per service population by 13% from Scenario #5. For 2050, however, staff accelerated the target beyond that projected by the TrendLab+ model to achieve a 25% reduction in VMT per service population to ensure that the City continues on a path of progressively reducing vehicle miles and encouraging mode shift to alternative transportation.

Figure 4. Sunnyvale TrendLab+ VMT Projections for 2030 and 2050 for Scenario #5 with High Clean Fuel Fleet Adoption



The final selected transportation sector targets (modified Scenario #5) reflect:

- A high rate of clean fuel fleet adoption, reaching 20% by 2030 and 75% by 2050;
- Aggressive growth in investment in active transportation and transit projects, given a progressively shrinking driver population;
- A Transportation Demand Management (TDM) program that is mandatory and enforced actively by the City. This attribute is not reflected in the modeled Scenario #5 (Figure 4), but is reflected in the higher target used for 2050 as TDM forms a core component of the City's transportation strategy moving forward.
- Increased reliance on goods and services delivery, telecommuting, social networking and ride hailing; and

- Increased use of ride sharing options and reduced vehicle ownership.

Table 8 summarizes the citywide annual VMT per service population for modified Scenario #5, which is a composite of the meeting scenario trends..

Table 8: Transportation targets with Modified Scenario #5

Metric	2016	2030	2050
Citywide Annual VMT	869,904,400	650,036,200	718,551,600
Percent Change in Annual VMT	0%	4%	16%
Citywide Annual VMT per Service Population	3,705	3,230*	2,775**
Percent Change in Citywide Annual VMT per Service Population (relative to 2016)	0%	-13%	-25%
Clean Fuel Vehicle Fleet Adoption Portion	0.5%	20%	75%
Clean Citywide Annual VMT per Service Population	17	646	2,081
Non-Clean Citywide Annual VMT per Service Population	3,688	2,584	694

Note: All VMT is citywide annual shared VMT per service population. Citywide annual shared VMT per service population: citywide daily shared VMT (100 % internal + 50% internal-external, and 50% external-internal) x 347 days/year.

*VMT per service population for 2030 is equal to that used in Scenario #5 modeled in the TrendLab+ tool and reflected in Figure 4.

**VMT per service population for 2050 is not equal to that used in Scenario #5 modeled in the TrendLab+ tool, as the modeled value of 11% reduction in VMT per capita relative to 2016 allowed the City to relax VMT reduction targets. Instead, City staff increased the 2050 target to achieve a 25% reduction in VMT per capita relative to 2016 to ensure that this target reflects continued emphasis on reducing VMT and shifting to alternative transportation modes.

DNV GL's Climate Tool used the citywide VMT estimates from the TrendLab+ tool to calculate citywide GHG emissions from the transportation sector. The clean vehicle adoption rate and reduction in total VMT work in tandem to impact overall citywide GHG emissions. If other sectors are more effective at reducing GHG emissions, then the clean vehicle adoption rate can be lower. Table 8 summarizes the clean VMT as 20% of Sunnyvale's total VMT by 2030 and 75% of Sunnyvale's total VMT by 2050. If the targeted percent of total VMT accounted for by clean vehicles is reduced, then a greater reduction in VMT per service population will be required to achieve the 2050 emissions reduction target. The opposite is also true. If the targeted percent of total VMT accounted for by clean vehicles is higher, a lower reduction in VMT will be required to achieve the 2050 emissions reduction target.

As of 2016, Sunnyvale's total VMT is 3,705 per service population. The results of Scenario #5 with modifications is a target VMT per service population of 3,230 in 2030 (i.e., 13% reduction in VMT per service population relative to 2016) and a target VMT per service population of 2,775 VMT per service population (i.e., 25% reduction in VMT per service population relative to 2016).

D. Estimating Emissions Reductions Across Sectors

The Playbook strategies are applied to the current emissions by first prioritizing efficiency and conservation measures (e.g., strategies that reduce energy, transportation and waste) and then strategies that shift to cleaner sources are applied to the remaining emissions (e.g., strategies related to solar PV, electric vehicles, etc.). This general approach to climate action planning is in accordance with the CPUC's Energy Efficiency Strategic Plan, which acknowledges the State's "loading order" and identifies energy efficiency as California's top priority resource.⁷

⁷ California Public Utilities Commission, 2008. "Energy Efficiency Strategic Plan."

The Climate Tool considers interactive factors between sectors e.g., increases in electricity consumption from electrification of buildings and transportation are taken into account. Furthermore, “dialing down” targets in one sector (e.g., transportation targets related to VMT) enables the user to see the overall impact on potential emissions reductions for 2030 and 2050 and allows for “dialing up” targets in other sectors (e.g., buildings) to meet State climate goals.

E. Selecting Final Scenario Targets

The DNV GL Climate Scenario Analysis Tool provides a summary output table for each target year (Table 9) that shows the overall GHG reduction target being achieved across sectors by the suite of emissions reduction strategies and targets selected.

Table 9. DNV GL Climate Scenario Analysis Tool Summary Table for 2030

Metric	2030	2050
Remaining emissions in target year	456,023	199,458
1990 baseline emissions	1,004,194	1,004,194
Sunnyvale projected % emissions reduction below 1990 levels by target year	55%	80%
State target % emissions reduction below 1990 levels by target year	40%	80%

F. Metrics to Measure Progress

To ensure the success of implementing the Plays in the Playbook, the City will integrate the Plays and Next Moves into its other local and regional plans, programs and activities. Playbook implementation requires tracking progress to ensure the City is on track to meeting the State’s climate goals.

The City will continue update its GHG communitywide emissions inventory every year with support from regional agencies including SVCE, Metropolitan Transportation Commission (MTC) and Valley Transportation Authority (VTA). In addition, the City will track key metrics as listed in Table 10; these key metrics directly influence community-wide GHG emissions and are, therefore, indicators of progress made towards implementing the Plays and achieving their associated targets.

Table 10. Key Metrics and Data Sources for Tracking Progress Towards CAP 2.0 Play Targets

Play	Target	Metric	Metric Data Source
Strategy 1: Promoting Clean Electricity			
Play 1.1: Promote 100% clean electricity	2030: 100% participation in clean electricity 2050: 100% participation in clean electricity	Remaining direct access electricity consumption	SVCE, PG&E
Play 1.2: Increase solar photovoltaics (PV)	2030: 3% of load from local solar 2050: 5% of load from local solar	Distributed solar photovoltaics (PV) capacity	California Distributed Generation Statistics

Play	Target	Metric	Metric Data Source
Play 1.3: Increase distributed electricity storage	2030 Target: 1% of electricity demand stored in batteries locally 2050 Target: 5% of electricity demand stored in batteries locally	Cumulative communitywide battery storage capacity	CPUC Self-Generation Incentive Program (SGIP) data on battery storage installed capacity
Strategy 2: Decarbonizing Buildings			
Play 2.1: Reduce energy consumption in existing buildings	2030: 5% of existing homes and businesses receive deep energy retrofit 2050: 30% of existing homes and businesses receive deep energy retrofit	Energy efficiency program participation rates	PG&E, BayREN and SVCE
Play 2.2: Support electrification of existing buildings	2030: 20% of homes and businesses completely electrified 2050: 50% of homes and businesses completely electrified	Number of customers on all-electric rates or without associated gas account.	SVCE
Play 2.3: Achieve all-electric new construction	2030: 100% all-electric new buildings 2050: 100% all-electric new buildings	Number of new buildings that are all-electric Total area (sq. ft.) of buildings that are all-electric	City Community Development Department (CDD)
Strategy 3: Decarbonizing Transportation & Sustainable Land Use			
Play 3.1: Balance land use supply and enhance urban form	2030: 13% reduction in vehicle miles per person 2050: 25% reduction in vehicle miles per person	Modeled per service population VMT	Metropolitan Transportation Commission (MTC) or City DPW's Travel Demand Model
Play 3.2: Increase transportation options and support shared mobility			
Play 3.3: Increase zero-emission vehicles	2030: 20% of all vehicles on road are zero-emissions 2050: 75% of all vehicles on road are zero-emissions	Vehicle registrations by fuel type	Department of Motor Vehicles (DMV)
Strategy 4: Managing Resources Sustainably			
Play 4.1: Achieve Zero Waste goals for solid waste	2030: Reduce landfilled garbage to 1 lb per person per day 2050: Reduce landfilled garbage to 1 lb per person per day	Waste diversion rate	California Department of Resources, Recycling and Recovery (CalRecycle)
Play 4.2: Ensure resilience of water supply	Targets will be defined as per state requirement	Annual water consumption per capita relative to 2016 baseline	City of Sunnyvale Environmental Services Department (ESD)
Play 4.3: Enhance natural carbon sequestration capacity	Supports broader net carbon reductions	Net number of new trees added on public lands Acreage of land area treated by green stormwater infrastructure features	City of Sunnyvale Department of Public Works (DPW), CDD, and ESD

Play	Target	Metric	Metric Data Source
Play 4.4: Promote sustainable food choices	Supports broader emissions reductions	No defined metric	Not applicable
Strategy 5: Empowering Our Community			
Play 5.1: Enhance community awareness and engagement	Supports all other Plays	Social media engagement analytics Number of people participating in community engagement programs each year (e.g., CERT, Cool Blocks, etc.) Number of businesses engaged in CAP programs	City of Sunnyvale various departments and Office of City Manager (OCM)
Play 5.2: Track and share data and tools	Supports all other Plays	Annual GHG Inventory Number of people using online or mobile phone community engagement platforms (e.g., IGreenSunnyvale)	City of Sunnyvale ESD

The City can also track additional secondary metrics as listed in Table 11; while these metrics are not directly used to estimate GHG emissions, they indicate the performance of key programs that would be integral to the CAP.

Table 11. Secondary Metrics to Assess Progress

Metric	Data Source
Distributed local solar (kW) on all building types	Center for Sustainable Energy – California Solar Statistics
Number of residential units approved for voluntary Green Building Program incentives	City of Sunnyvale CDD
Total floor area (sqft) of commercial building space approved for voluntary Green Building Program incentives	City of Sunnyvale CDD
Electric vehicle charging infrastructure	DOE Alternative Fuels Data Center + direct communication with large businesses
Public transportation ridership	Caltrain + VTA ridership data
Bike or scooter share ridership	Lime ridership data
Percent of students using non-motorized transportation to school	City of Sunnyvale Department of Public Safety (DPS) – Safe Routes to School Program
Percent of commuters riding bicycles to work	American Community Survey 5-year estimates
Miles of bicycle lanes by class	City of Sunnyvale DPW
Train ridership	Caltrain annual ridership estimates
Percent of local water needs met by recycled water	City of Sunnyvale ESD
Waste disposed per capita	California Disposal Reporting System

At-a-Glance: Pathway to 2050



Strategy 1: Promoting Clean Electricity

Play 1.1	Promote 100% clean electricity	2030 Target: 100% participation in clean electricity 2050 Target: 100% participation in clean electricity
Play 1.2	Increase local solar photovoltaics	2030 Target: 3% of load from local solar 2050 Target: 5% of load from local solar
Play 1.3	Increase electricity storage	2030 Target: 1% of electricity demand stored in batteries locally 2050 Target: 5% of electricity demand stored in batteries locally



Strategy 2: Decarbonizing Buildings

Play 2.1	Reduce energy consumption in existing buildings	2030 Target: 5% of existing homes and businesses receive deep energy retrofit 2050 Target: 30% of existing homes and businesses receive deep energy retrofit
Play 2.2	Support electrification of existing buildings	2030 Target: 20% of homes and businesses completely electrified 2050 Target: 50% of homes and businesses completely electrified
Play 2.3	Achieve all-electric new construction	2030 Target: 100% all-electric new buildings 2050 Target: 100% all-electric new buildings



Strategy 3: Decarbonizing Transportation & Sustainable Land Use

Play 3.1	Balance land use supply and enhance urban form	2030 Target: 13% reduction in vehicle miles per person 2050 Target: 25% reduction in vehicle miles per person
Play 3.2	Increase transportation options and support shared mobility	
Play 3.3	Increase zero-emission vehicles	2030 Target: 20% of all vehicles on road are zero-emission vehicles 2050 Target: 75% of all vehicles on road are zero-emission vehicles



Strategy 4: Managing Resources Sustainably

Play 4.1	Achieve Zero Waste goals for solid waste	2030 Target: Reduce landfilled garbage to 1 lb per person per day 2050 Target: Reduce landfilled garbage to 1 lb per person per day
Play 4.2	Ensure resilience of water supply	Targets will be defined as per state requirement
Play 4.3	Enhance natural carbon sequestration capacity	Supports broader net carbon reductions
Play 4.4	Promote sustainable food choices	Supports broader emissions reductions



Strategy 5: Empowering Our Community

Play 5.1	Enhance community awareness and engagement	Supports all other Plays
Play 5.2	Track and share data and tools	Supports all other Plays



Strategy 6: Adapting to a Changing Climate

Play 6.1	Assess climate vulnerabilities for Sunnyvale	
Play 6.2	Protect shoreline area from sea level rise and coastal flooding	
Play 6.3	Strengthen community resiliency	

Game Plan 2022 At-a-Glance



Strategy 1: Promoting Clean Electricity

- 1.A Continue to support and steer Silicon Valley Clean Energy (SVCE) in providing clean power and decarbonization programs.
- 1.B Collaborate with SVCE to target direct access customers to shift to 100% clean electricity.
- 1.C Research a mandatory solar roof ordinance for new commercial developments.
- 1.D Collaborate with SVCE to evaluate opportunities for energy storage to maximize utilization of local solar supply **and to enhance resiliency**.



Strategy 2: Decarbonizing Buildings

- 2.A Research energy disclosure and energy benchmarking requirements for commercial and multi-family residential buildings to encourage property owners and managers to invest in energy efficiency upgrades and building information systems.
- 2.B Advocate to regional providers of energy efficiency programs (such as Bay Area Regional Energy Network or BayREN, Silicon Valley Energy Watch or SVEW) that their offerings are more aggressively promoted to Sunnyvale residents and businesses.
- 2.C Develop a program to accelerate the adoption of heat pump water heaters and space heaters.
- 2.D Electrify municipal buildings upon rebuild or significant remodel, including the Civic Center.
- 2.E Evaluate code and permitting processes to streamline building electrification.
- 2.F Investigate the potential for implementing a differential Utility Use Tax that is at least revenue neutral, such that local taxes on electricity are lower than on natural gas, to incentivize electrification.
- 2.G Continue to incentivize energy efficient and high performance buildings through the Green Building Program updates.



Strategy 3: Decarbonizing Transportation & Sustainable Land Use

- 3.A Plan for additional housing, with the goal of diverse housing, to reduce long-distance commutes.
- 3.B Identify areas that are most appropriate for parking strategies that discourage vehicle use, such as pricing, time limits and supply reductions.
- 3.C Enhance City Transportation Demand Management (TDM) program implementation and monitoring to facilitate further reductions in single-occupant automobile trips, citywide.
- 3.D Advocate that regional service providers implement high quality transit service and a robust set of first- and last-mile strategies in over two-thirds of the cross-city corridors.
- 3.E Update and implement the Integrated Bicycle, Pedestrian and Safe Routes to School Plan to achieve a connected, safe and active network.
- 3.F Pilot and evaluate shared bicycle and scooter programs.
- 3.G Pilot shuttle service in Peery Park and consider options for expansion of a similar service in other areas undergoing redevelopment.
- 3.H Develop design standards for streets and parking lots to accommodate increased pick-up and drop-off for rideshare passengers and apply as appropriate.
- 3.I Monitor autonomous vehicle testing and deployment to inform proactive policy.
- 3.J Develop a Community Electric Vehicle Readiness and Infrastructure Plan.
- 3.K Promote and seek incentives for community adoption of electric vehicles.
- 3.L Electrify Municipal Fleet as vehicles are replaced and continue to seek incentives for electric vehicles and charging infrastructure.

Game Plan 2022 At-a-Glance



Strategy 4: Managing Resources Sustainably

- 4.A Implement and expand food scraps diversion programs to include additional businesses and multi-family residences.
- 4.B Consider solid waste collection and processing improvements to increase waste diversion away from landfills as a part of service provider and facility transition planning.
- 4.C Implement campaign for waste prevention.
- 4.D Promote and seek incentives for making water conservation a way of life and set a water reduction target consistent with new statewide requirements.
- 4.E Partner with Valley Water to evaluate opportunities to expand water reuse.
- 4.F Implement the City's Urban Forest Management Plan and continue to protect and expand tree canopy.
- 4.G Implement the City's Green Stormwater Infrastructure Plan.
- 4.H Promote consumer awareness of sustainable food choices.
- 4.I Work with large businesses to identify best practices for implementing local food gardens.



Strategy 5: Empowering Our Community

- 5.A Pilot a targeted grassroots community engagement strategy (e.g., Cool Blocks Program) to create stronger connections between neighbors to advance climate action and emergency preparedness.
- 5.B Evaluate opportunities for the City to provide online resources and tools for community and small business climate action (e.g., resource center for retrofit electrification, online tool or app to track individual carbon emissions).
- 5.C Create a stronger social media and web presence for Sunnyvale climate action.
- 5.D Implement the Sustainability Speaker Series.
- 5.E **Pilot and evaluate** a program for youth engagement on climate, building on current engagement with school classrooms and green teams.
- 5.F Build relationships with largest employers to collaborate on climate action, such as: (a) engaging employees to participate in sustainability initiatives; (b) encouraging and facilitating investment in climate action programs or projects.
- 5.G Implement improvements for climate action data performance tracking and reporting progress to the public (e.g., community dashboard).
- 5.H Publish annual greenhouse gas (GHG) inventory.



Strategy 6: Adapting to a Changing Climate

- 6.A Review and summarize assessment products developed by the County's Silicon Valley 2.0 project and by the State.
- 6.B Participate in regional forums on climate vulnerabilities.
- 6.C Collaborate with Valley Water to advance a shoreline protection project with the US Army Corps of Engineers or other partners.
- 6.D Identify shoreline protection solutions as part of Moffett Park Specific Plan update.
- 6.E Updating existing emergency preparedness and response plans to address climate-related impacts such as heat events, air quality issues and flooding.
- 6.F Develop a community resiliency plan.

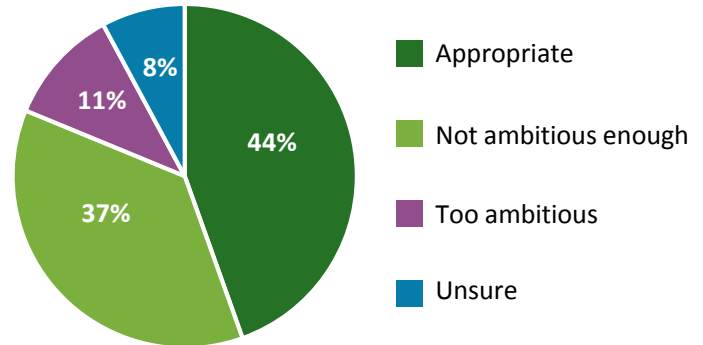
CLIMATE ACTION PLAYBOOK

Summary of Feedback from Public Review

Overview

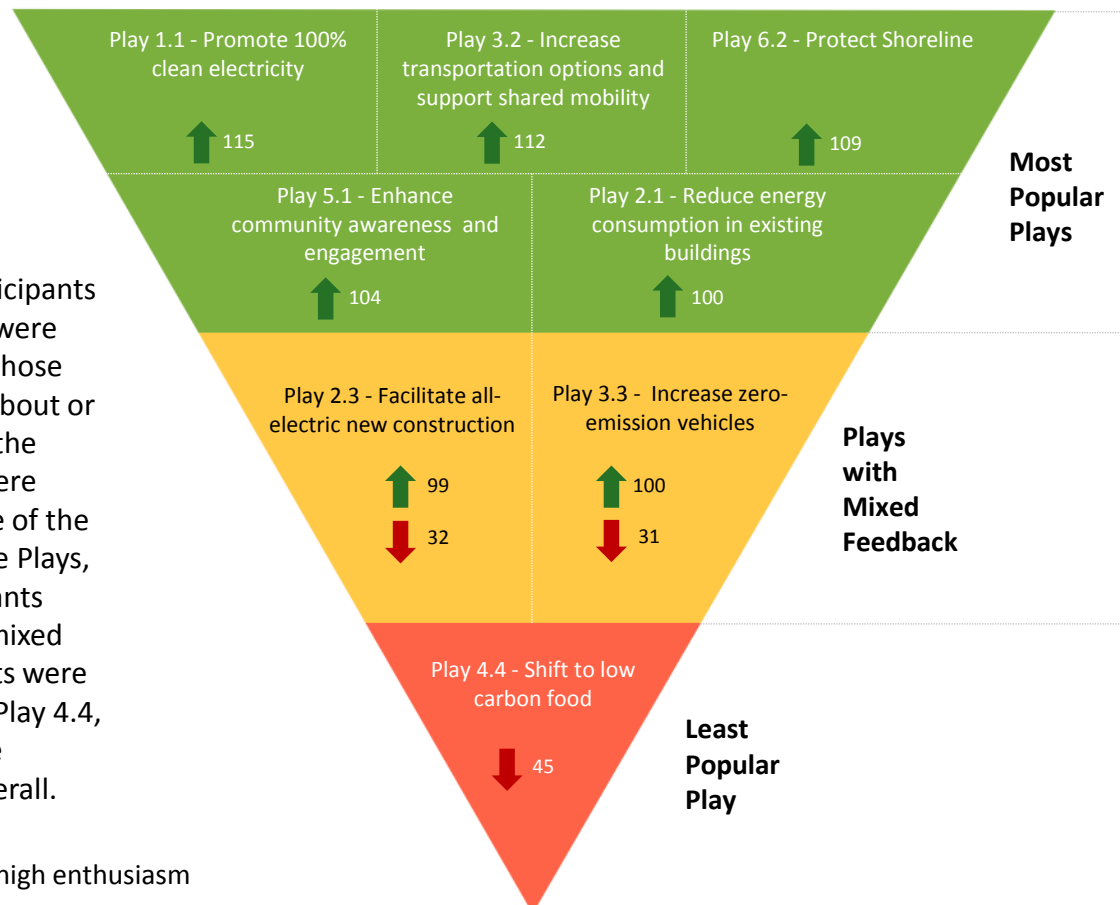
The Draft Climate Action Playbook was released on March 11, 2019, and public feedback was gathered through April 2019. Feedback was gathered online through Open City Hall, paper surveys, and at public meetings. 152 individuals completed surveys and 119 individuals attended seven public meetings, providing feedback on the general framework of the Playbook, the proposed targets, and the "Next Moves" (specific actions) in Game Plan 2022. All feedback was reviewed and changes were made to the Climate Action Playbook to reflect community sentiment.

Opinion of Long-Term Climate Targets



Feedback on Plays Summary

Survey and meeting participants indicated the Plays they were most excited about and those they were least excited about or wanted to remove from the Playbook. Participants were generally very supportive of the proposed Plays. For some Plays, like 2.3 and 3.3, participants showed strong support mixed with concern. Participants were least enthusiastic about Play 4.4, although it still had more supportive responses overall.



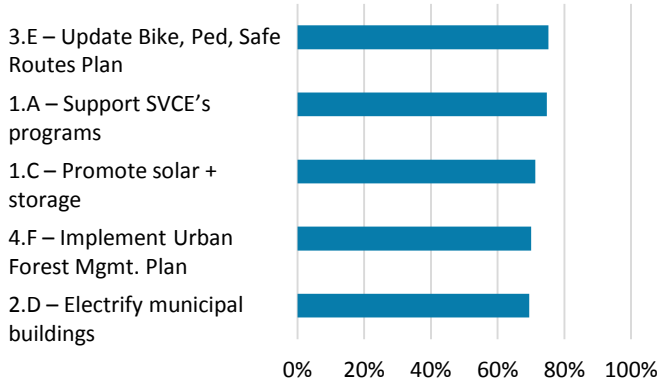
Number of votes with high enthusiasm
 Number of votes with low enthusiasm

Feedback on Moves

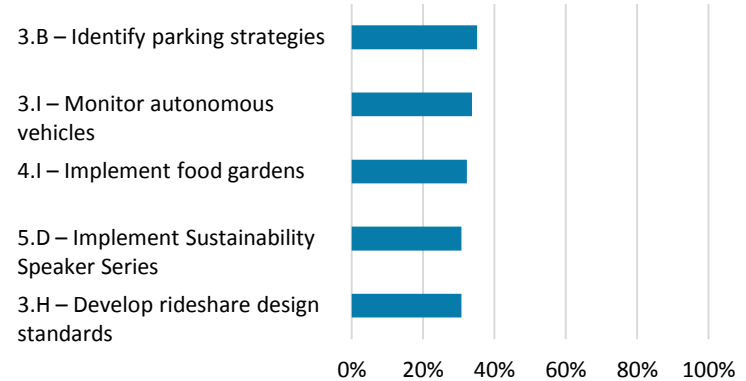
From Surveys

Survey participants ranked their enthusiasm on a High-Medium-Low scale for each Move in Game Plan 2022. Below are the five Moves that participants were most enthusiastic about and least enthusiastic about. Participants also expressed other ideas and concerns via written comments.

Most Enthusiasm



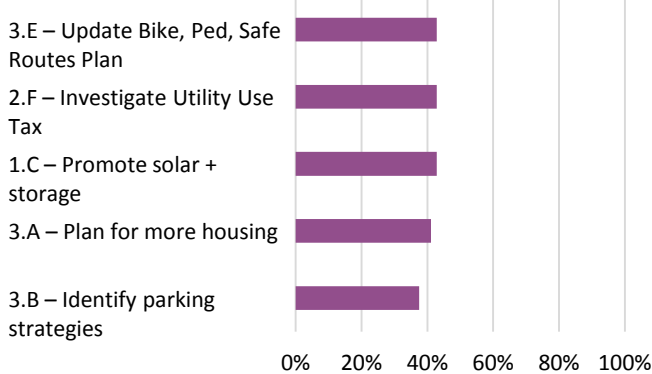
Least Enthusiasm



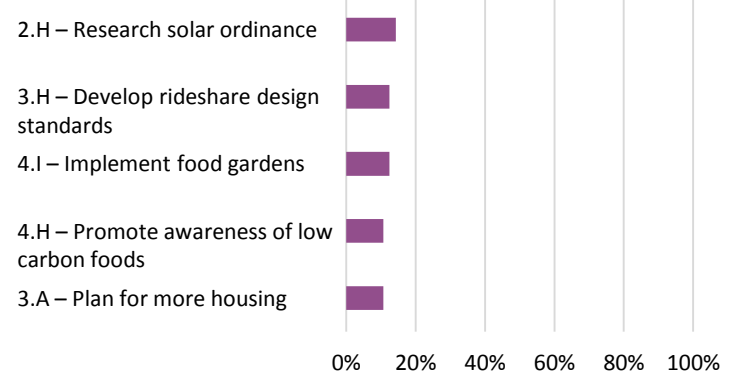
From Meeting Polls

Meeting attendees indicated which Moves in Game Plan 2022 they were most or least excited about by participating in a dot voting exercise. Below are the five Moves that participants were most excited about or least excited about and recommended removing. Note that Move 3.A appears in both lists. Participants also expressed other ideas and concerns via verbal and written comments.

Most Excitement



Most Concern/Remove



Summary of Feedback

Based on the feedback, the following changes were made to the Playbook:



Accelerated the target for Play 2.3 to achieve all-electric buildings sooner.



Simplified language for Zero Waste targets for Play 4.1 to be more meaningful to the community.



Adjusted transportation vehicle miles traveled (VMT) targets downward for Plays 3.1 and 3.2 to reflect a target that is challenging and attainable.



Adjusted language for action on sustainable food in Play 4.4 to emphasize consumer choice.



Created a new Play 1.3 to emphasize importance of expanding distributed electricity storage.

CLIMATE ACTION PLAYBOOK

COMPILATION OF FEEDBACK FROM PUBLIC REVIEW

March-April 2019

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SUMMARY OF FEEDBACK FROM PUBLIC REVIEW

The Draft Climate Action Playbook was made available for public review on March 11, 2019 and feedback was collected through April 28, 2019. The document was posted online on the City's website at bit.ly/sunnyvaleplaybook, and hard copies were made available at City locations, including the Library and City Hall. Feedback was collected through these main methods:

1. Survey (administered online, via fillable PDFs, and hard copy)
2. Public Meetings
3. Informal meetings (i.e., presentations at meetings not organized by the City)

Online Survey

The online survey administered was a two part survey, where Part 1 included questions to gather feedback on the pathway to the 2050 target and Part 2 included questions to gather feedback for respondents who wished to delve deeper into the Game Plan 2022 (Next Moves for implementation in the next three years). The paper survey only included questions from Part 1, as it was designed to be shorter and gather feedback from audiences at events where respondents likely did not have the time to respond to both parts.

Public Meetings

During March and April, the following public meetings were held:

- CAP 2.0 Advisory Committee (CAC) Meeting
- General community meeting (open to all members of the public)
- Focus groups:
 - Businesses
 - Developers
- Joint Info Study Session for 3 Commissions (Sustainability, Planning, and Bicycle and Pedestrian)

Informal Meetings

Staff also presented the Playbook in informal meetings (i.e., not organized by the City), namely a service at the Universalist Unitarian Fellowship of Sunnyvale and a meeting of the Rotary Club.

These meetings were designed with the following interactive elements to gather feedback:

- **Live polling** using software that allowed meeting attendees to participate in a real-time poll using their mobile device; live polling was used to gather information on opinions of the overall Playbook, targets, and the Plays. This approach was used at the community meetings except the CAC meeting.
- **Dot voting exercise**, in which meeting participants were provided with two colors of dots that they could place next to "Next Moves" on poster displays to indicate those that they were most excited about or most concerned about (i.e., those Moves they recommend removing from the Playbook). This approach was used at all community meetings.
- **Show of hands poll**, in which meeting participants were asked to raise their hand to vote on multiple choice questions, similar to those asked in the Live Polling. This approach was used at the Informal Meetings where time was limited.

The following pages summarize the findings in charts and graphs. A full compilation of all raw data from the public review process is begins on page 13.

Community Engagement Summary

Table 1. Meeting Participation

Public Meetings	Attendees±	Participants by Poll Type		
		Live Poll	Dots	Informal
CAP 2.0 Advisory Committee (CAC)	18	-	9	-
Community	17	12	17*	-
Joint Info Study Session for 3 Commissions	24	20	24*	-
Focus Group: Developer	3	3	3	-
Focus Group: Business	4	4	3	-
Informal Meeting: Unitarian Universalist Fellowship	27	-	-	27
Informal Meeting: Rotary Club	26	-	-	26
TOTAL	119	39	56	53

**Indicates estimated number of participants, as attendees may have left early or arrived late*

± The total number of attendees represents the number of individuals that attended across all meetings, without distinguishing community members that may have attended more than one meeting.

Table 2. Survey Responses

Surveys	Responses
Online	125
PDF	6
Hard Copy	21
TOTAL	152

Table 3. Outreach Summary

Events	Number of People Reached
Google	205
Juniper	70
Farmer's Market	91
Mobile Farmer's Market	20
Home Buyers	12
Fit N Fun	211
Senior Center	1
TOTAL	610

Public Review Feedback Overview

The following figures and tables summarize the data gathered during the public review process from 152 survey respondents and 119 meeting attendees. For each figure and table, a sample size or n number is provided. Note that this n number reflects the number of individuals responding to that specific question. As not all survey respondents or meeting attendees responded to every question, the n number varies across the figures and tables provided below.

Figure 1. Survey Respondents

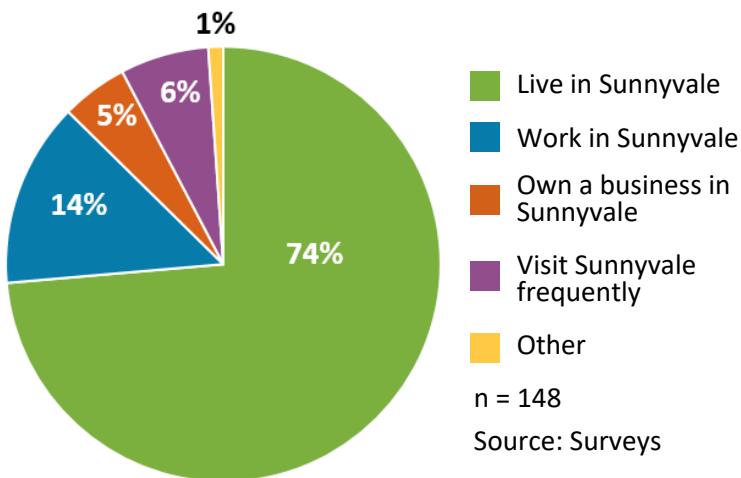


Figure 2. Opinion of Local Climate Action

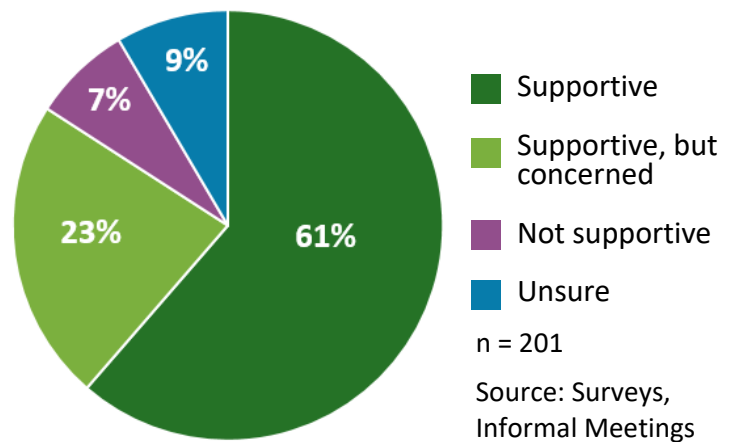


Figure 3. Survey Completion

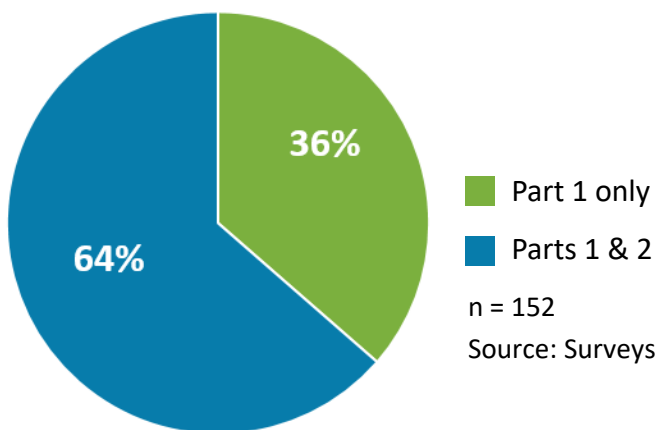
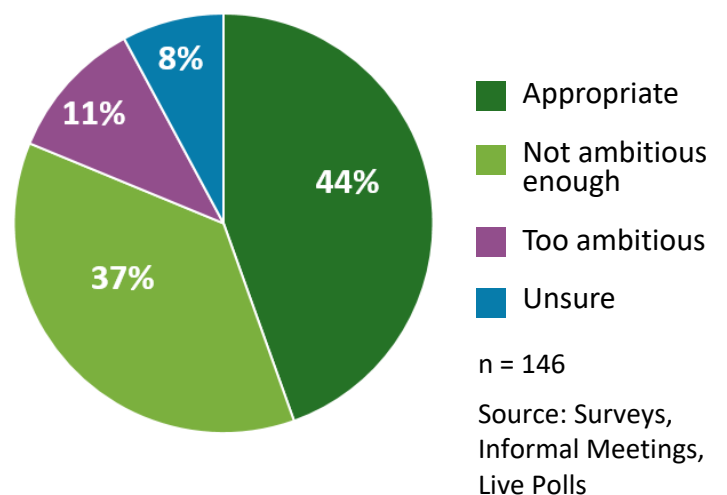


Figure 4. Opinion on Sunnyvale's Proposed 2050 Target



Feedback on Plays

Table 4. Play Ratings Overview

Plays		No. of Votes from Surveys			No. of Votes from Live Polls	
		n = 152			n = 39	
		High	Medium	Low	Excited	Remove
	Play 1.1 - Promote 100% clean electricity	102	17	26	13	0
	Play 1.2 - Increase distributed solar photovoltaics and storage	76	43	25	14	0
	Play 2.1 - Reduce energy consumption in existing buildings	81	39	26	19	0
	Play 2.2 - Support electrification of existing buildings	72	44	29	21	0
↔	Play 2.3 - Zero Net Energy and all-electric new construction	80	33	31	19	1
	Play 3.1 - Balance land use supply and enhance urban form	69	41	36	11	1
	Play 3.2 - Increase transportation options and support shared mobility	82	35	29	30	0
↔	Play 3.3 - Increase zero-emission vehicles	88	29	29	12	2
	Play 4.1 - Achieve zero waste goals	86	34	27	9	0
	Play 4.2 - Ensure resilience of water supply	87	39	20	10	0
	Play 4.3 - Enhance natural carbon sequestration capacity	70	45	30	10	1
↓	Play 4.4 - Shift to low carbon food	58	48	38	9	7
	Play 5.1 - Enhance community awareness and engagement	84	35	21	20	0
	Play 5.2 - Track and share data and tools	83	35	20	13	1
	Play 6.1 - Assess climate vulnerabilities for Sunnyvale	81	46	20	9	0
	Play 6.2 - Protect shoreline area from sea level rise and coastal flooding	98	28	21	11	1
	Play 6.3 - Strengthen community resiliency	81	40	23	7	1

Top 5 Highest Enthusiasm

Top 4 Lowest Enthusiasm

Top 5 Most Excited About

Top 2 Least Excited About/ Remove

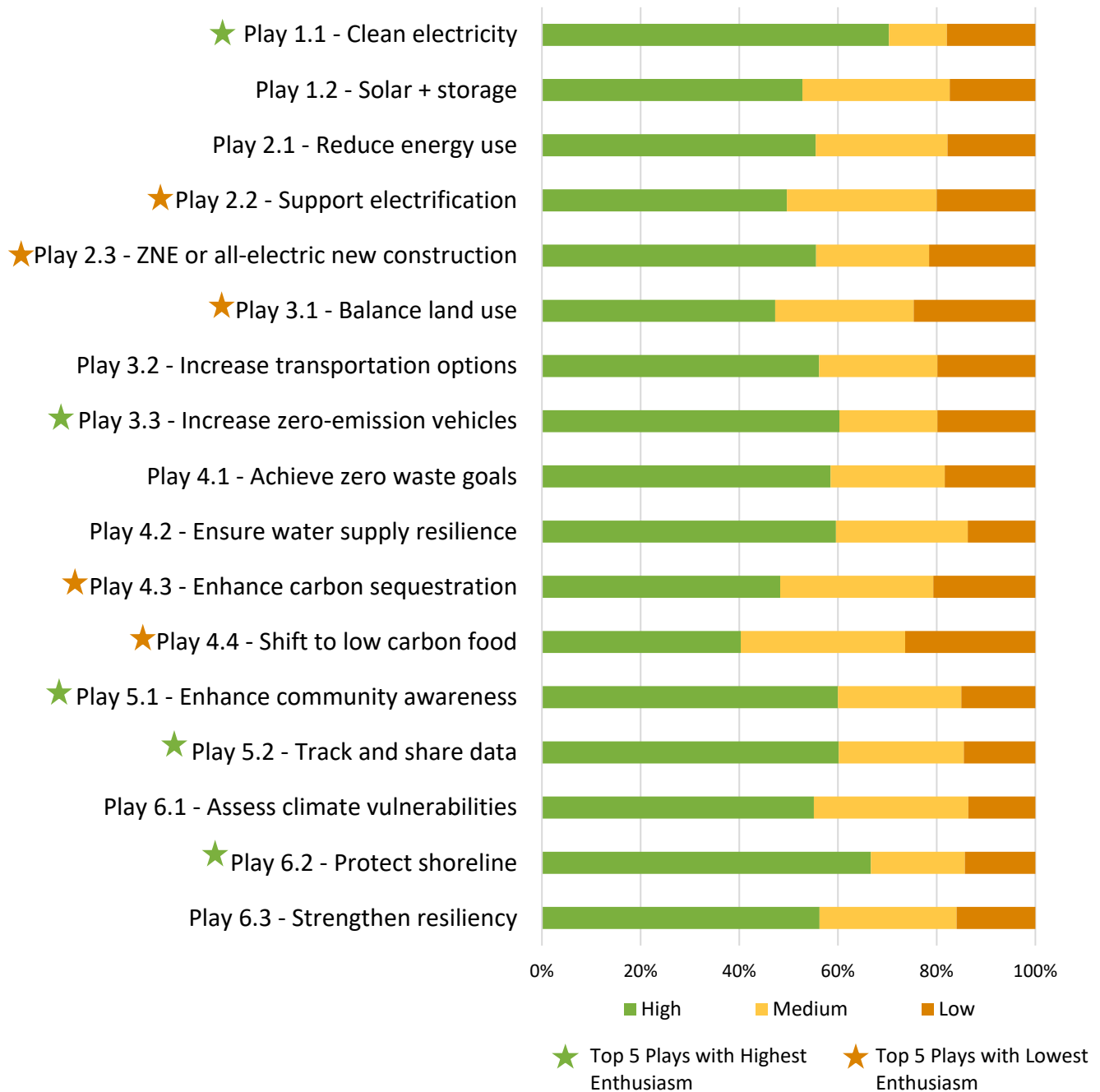
↔

Top Plays with Mixed Feedback

↓

Top Plays with Lowest Enthusiasm/Remove

Figure 5. Enthusiasm Ratings of Plays

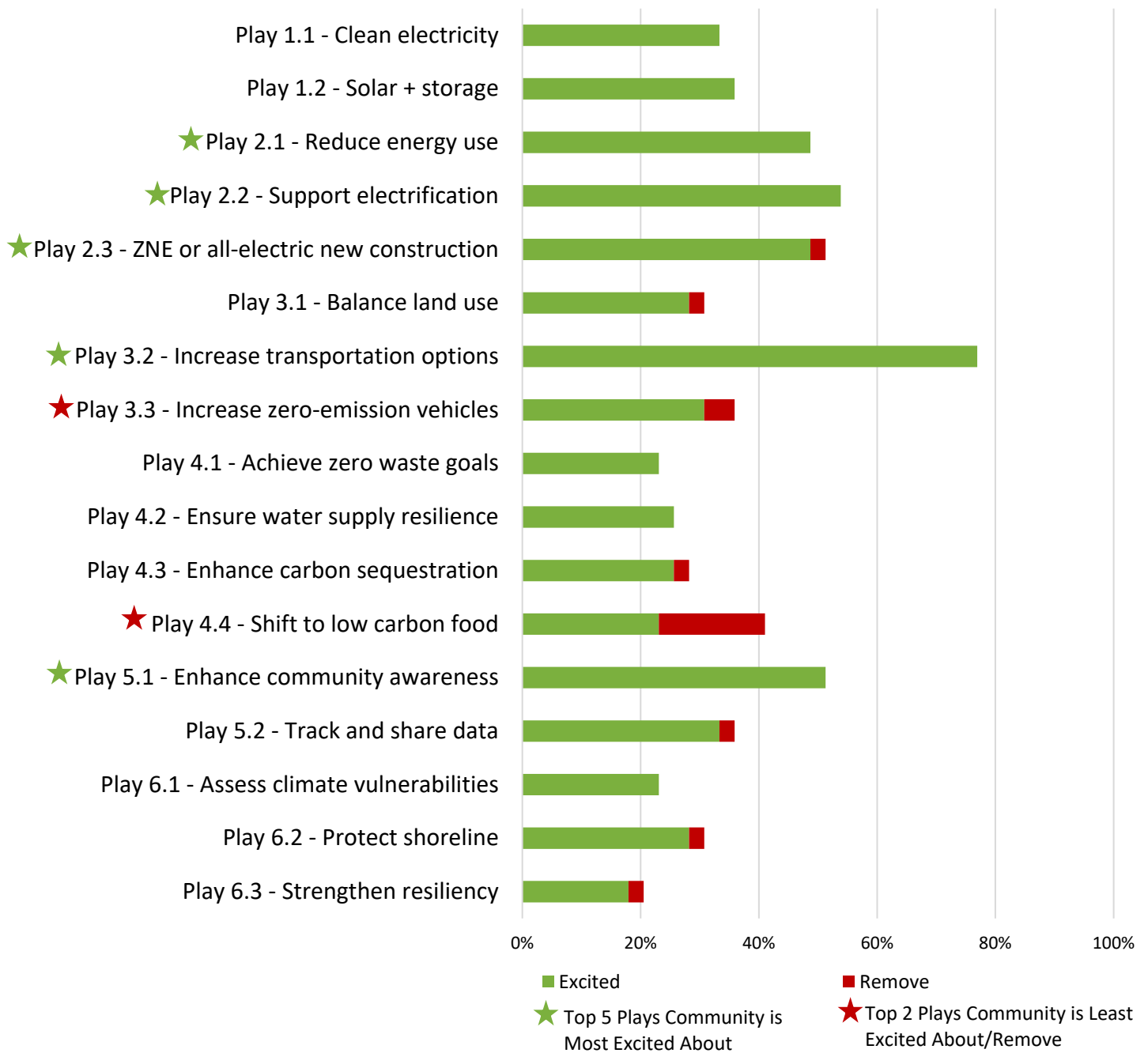


n = 152

Source: Surveys

Note: The above chart use percentages to rank the Plays. In contrast, Table 4 uses absolute values to rank the Plays. For this reason, the Play rankings in the above chart may not exactly match those presented in Table 4.

Figure 6. Excited vs. Remove Ratings of Plays



n = 39

Source: Live Polls

Feedback on Moves

Table 5. Move Ratings Overview

Moves		No. of Votes from Surveys n = 96			No. of Votes from Dot Voting n = 56	
		High	Medium	Low	Excited	Remove
↑	Move 1.A - Support SVCE's programs	69	12	12	16	1
↔	Move 1.B - Target direct access customers	64	15	14	14	4
↑	Move 1.C - Promote solar + storage	67	13	14	23	1
	Move 2.A - Research energy benchmarking	52	24	13	18	0
	Move 2.B - Advocate energy efficiency <u>pgms</u>	37	30	22	1	3
	Move 2.C - Accelerate adoption of heat pumps	50	26	16	21	0
	Move 2.D - Electrify municipal buildings	65	14	15	11	0
↑	Move 2.E - Streamline building electrification	57	20	14	16	1
	Move 2.F - Investigate Utility Use Tax	48	23	22	24	0
	Move 2.G - Implement Green Building Pgm	62	20	9	14	1
	Move 2.H - Research solar ordinance	51	24	18	13	8
↔	Move 3.A - Plan for more housing	47	26	19	23	6
↔	Move 3.B - Identify parking strategies	38	20	32	21	4
	Move 3.C - Enhance TDM Pgm	41	26	23	11	0
↑	Move 3.D - Improve transit service	61	16	14	16	0
↑	Move 3.E - Update Bike, Ped, Safe Routes Plan	69	10	13	24	0
	Move 3.F - Pilot bike/scooter <u>pgms</u>	36	28	26	4	1
	Move 3.G - Pilot Peery Park shuttle	34	31	24	7	2
↓	Move 3.H - Develop rideshare design standards	34	28	28	5	7
	Move 3.I - Monitor autonomous vehicles	27	33	31	7	3
	Move 3.J - Develop community EV plan	55	14	20	15	0
	Move 3.K - Incentivize EV adoption	52	18	21	12	0
	Move 3.L - Electrify municipal fleet	56	18	16	11	0

- Top 10 Highest Enthusiasm
 Top 10 Lowest Enthusiasm
- Top 11 Most Excited
 Top 8 Least Excited About/Remove
- Top Moves with Highest Enthusiasm/Excitement
 Top Moves with Lowest Enthusiasm/Remove
- Top Moves with Mixed Feedback

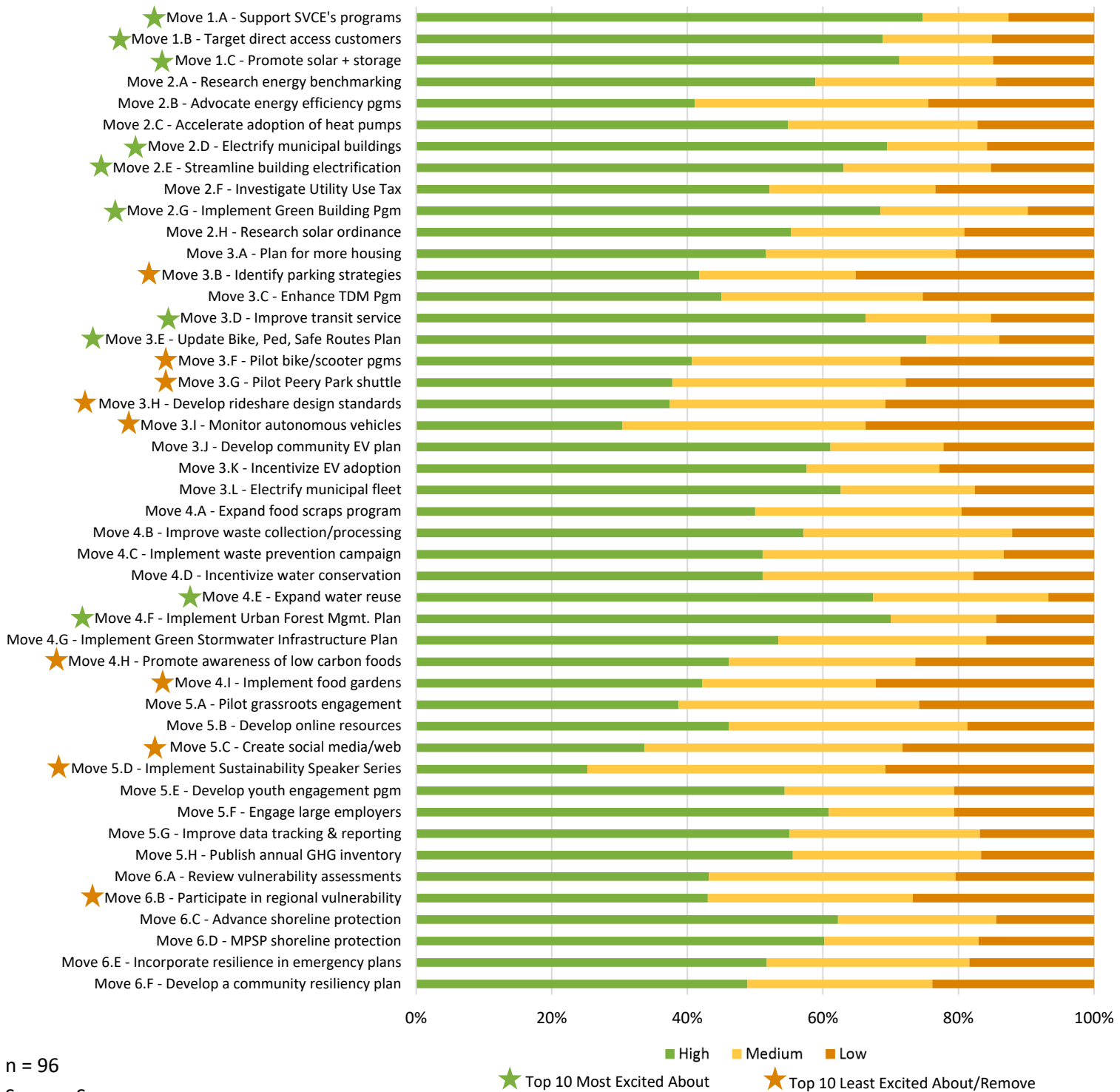
Table 5 is continued on next page...

Table 5. Move Ratings Overview (continued)

Moves		No. of Votes from Surveys			No. of Votes from Dot Voting	
		n = 96			n = 56	
		High	Medium	Low	Excited	Remove
	Move 4.A - Expand food scraps program	45	28	18	10	5
	Move 4.B - Improve waste collection/processing	50	29	11	9	0
	Move 4.C - Implement waste prevention campaign	45	32	12	7	2
	Move 4.D - Incentivize water conservation	45	28	16	11	0
	Move 4.E - Expand water reuse	59	23	6	12	1
	Move 4.F - Implement Urban Forest Mgmt. Plan	63	13	13	14	1
	Move 4.G - Implement Green Stormwater Infrastructure Plan	46	27	14	4	2
↓	Move 4.H - Promote awareness of low carbon foods	42	24	24	10	6
↓	Move 4.I - Implement food gardens	38	23	28	5	7
	Move 5.A - Pilot grassroots engagement	35	33	24	11	1
	Move 5.B - Develop online resources	42	31	17	7	1
	Move 5.C - Create social media/web	31	34	26	6	2
	Move 5.D - Implement Sustainability Speaker Series	22	40	28	6	1
	Move 5.E - Develop youth engagement pgm	50	22	19	8	0
	Move 5.F - Engage large employers	55	17	19	16	2
	Move 5.G - Improve data tracking & reporting	48	25	15	6	1
	Move 5.H - Publish annual GHG inventory	49	25	15	5	0
	Move 6.A - Review vulnerability assessments	38	31	18	1	0
	Move 6.B - Participate in regional vulnerability	36	26	23	4	0
	Move 6.C - Advance shoreline protection	55	21	13	8	0
	Move 6.D - MPSP shoreline protection	52	20	15	8	0
	Move 6.E - Incorporate resilience in emergency plans	45	25	16	7	0
	Move 6.F - Develop a community resiliency plan	43	24	20	8	3

■ Top 10 Highest Enthusiasm ■ Top 10 Lowest Enthusiasm
■ Top 11 Most Excited ■ Top 8 Least Excited About/Remove
↑ Top Moves with Highest Enthusiasm/Excitement ↓ Top Moves with Lowest Enthusiasm/Remove
↔ Top Moves with Mixed Feedback

Figure 7. Enthusiasm Ratings of Moves



n = 96

Source: Surveys

Note: The above chart use percentages to rank the Moves. In contrast, Table 5 uses absolute values to rank the Moves. For this reason, the Move rankings in the above chart may not exactly match those presented in Table 5.

Figure 8. Excited vs. Remove Move Ratings



n = 56

Source: Dot Voting

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Open City Hall Summary of Responses

As of May 22, 2019, 2:06 PM, this forum had:

Attendees: 262
 Responses: 152
 Hours of Public Comment: 7.6

Topic Start

March 11, 2019, 4:30 PM

Topic End

April 28, 2019, 11:59 AM

QUESTION 1

1. Tell us about yourself. (Please check all that apply.)

		%	Count
I live in Sunnyvale.		90.5%	134
I work in Sunnyvale.		16.9%	25
I own a business in Sunnyvale.		6.1%	9
I frequently visit Sunnyvale.		8.1%	12
Other		3.4%	5

QUESTION 2

2. What do you think about the City's current efforts to address climate change locally?

		%	Count
I am supportive		52.7%	78
I am supportive, but have concerns		27.7%	41
I am not supportive		9.5%	14
Unsure		10.1%	15

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QUESTION 3

Any additional comments about the City's efforts to address climate change?

Answered	52
Skipped	100

QUESTION 4

3. What do you think of Sunnyvale's proposal to meet the State's long-term target of reducing emissions 80% below 1990 levels by 2050 (carbon neutrality)?

		%	Count
Target is not ambitious enough		36.3%	53
Target is appropriate		41.8%	61
Target is too ambitious		16.4%	24
Unsure		5.5%	8

QUESTION 5

Any additional comments on the City's proposed long term target?

Answered	42
Skipped	110

QUESTION 6

4a. How would you rate your enthusiasm for the Plays in Strategy 1?

Play 1.1

		%	Count
High		69.7%	101
Medium		12.4%	18

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		%	Count
Low		17.9%	26

Play 1.2

		%	Count
High		52.4%	76
Medium		29.7%	43
Low		17.2%	25

QUESTION 7

4b. How would you rate your enthusiasm for the Plays in Strategy 2?

Play 2.1

		%	Count
High		55.5%	81
Medium		26.7%	39
Low		17.8%	26

Play 2.2

		%	Count
High		49.3%	72
Medium		30.1%	44
Low		19.9%	29

Play 2.3

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		%	Count
High	<div></div>	55.5%	81
Medium	<div></div>	21.9%	32
Low	<div></div>	21.2%	31

QUESTION 8

4c. How would you rate your enthusiasm for the Plays in Strategy 3?

Play 3.1

		%	Count
High	<div></div>	47.3%	69
Medium	<div></div>	28.1%	41
Low	<div></div>	24.7%	36

Play 3.2

		%	Count
High	<div></div>	55.5%	81
Medium	<div></div>	24.7%	36
Low	<div></div>	19.9%	29

Play 3.3

		%	Count
High	<div></div>	60.3%	88
Medium	<div></div>	19.9%	29
Low	<div></div>	19.9%	29

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QUESTION 9

4d. How would you rate your enthusiasm on the Plays for Strategy 4?

Play 4.1

		%	Count
High		57.8%	85
Medium		23.8%	35
Low		18.4%	27

Play 4.2

		%	Count
High		59.2%	87
Medium		26.5%	39
Low		13.6%	20

Play 4.3

		%	Count
High		47.6%	70
Medium		30.6%	45
Low		20.4%	30

Play 4.4

		%	Count
High		39.5%	58
Medium		32.7%	48
Low		25.9%	38

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QUESTION 10

4e. How would you rate your enthusiasm for the Plays in Strategy 5?

Play 5.1

		%	Count
High		60.0%	84
Medium		25.0%	35
Low		15.0%	21

Play 5.2

		%	Count
High		59.3%	83
Medium		25.0%	35
Low		14.3%	20

QUESTION 11

4f. How would you rate your enthusiasm for the Plays in Strategy 6?

Play 6.1

		%	Count
High		55.8%	82
Medium		30.6%	45
Low		13.6%	20

Play 6.2

		%	Count
High		66.0%	97

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		%	Count
Medium	<div></div>	19.7%	29
Low	<div></div>	14.3%	21

Play 6.3

		%	Count
High	<div></div>	55.1%	81
Medium	<div></div>	27.2%	40
Low	<div></div>	15.6%	23

QUESTION 12

5. Are there any other Plays that you think are missing from the Draft Playbook?

Answered	45
Skipped	107

QUESTION 13

Any additional comments on the Plays?

Answered	49
Skipped	103

QUESTION 14

6. This concludes Part 1 of the survey. Thank you for your input. Would you like to go to Part 2 to provide more feedback on the Playbook?

		%	Count
Yes. Please take me to Part 2 to provide more feedback.	<div></div>	63.4%	90

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		%	Count
No thanks. I don't want to provide more feedback.	<div></div>	36.6%	52

QUESTION 15

If you are not continuing the survey, is there anything else you want to add about the Draft Playbook?

Answered	20
Skipped	132

QUESTION 16

7. How would you rate your enthusiasm for the Moves in Strategy 1?

Move 1.A – Continue to support and steer Silicon Valley Clean Energy (SVCE) in providing clean power and decarbonization programs.

		%	Count
High	<div></div>	74.7%	71
Medium	<div></div>	12.6%	12
Low	<div></div>	12.6%	12

Move 1.B – Collaborate with SVCE to target direct access customers to shift to 100% clean electricity.

		%	Count
High	<div></div>	67.4%	64
Medium	<div></div>	15.8%	15
Low	<div></div>	14.7%	14

Move 1.C – Collaborate with SVCE to evaluate opportunities for energy storage to maximize utilization of local solar supply.

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		%	Count
High	<div></div>	70.5%	67
Medium	<div></div>	13.7%	13
Low	<div></div>	14.7%	14

QUESTION 17

Any additional comments on the Moves in Strategy 1?

Answered	20
Skipped	132

QUESTION 18

8. How would you rate your enthusiasm for the Moves in Strategy 2?

Move 2.A – Research energy disclosure and energy benchmarking requirements for commercial and multi-family residential buildings to encourage property owners and managers to invest in energy efficiency upgrades and building information systems.

		%	Count
High	<div></div>	55.8%	53
Medium	<div></div>	25.3%	24
Low	<div></div>	13.7%	13

Move 2.B – Advocate to regional providers of energy efficiency programs (such as Bay Area Regional Energy Network or BayREN, Silicon Valley Energy Watch or SVEW) that their offerings are more aggressively promoted to Sunnyvale residents and businesses.

		%	Count
High	<div></div>	37.9%	36
Medium	<div></div>	33.7%	32

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		%	Count
Low		23.2%	22

Move 2.C – Develop a program to accelerate the adoption of heat pump water heaters and space heaters.

		%	Count
High		53.7%	51
Medium		27.4%	26
Low		16.8%	16

Move 2.D – Electrify municipal buildings upon rebuild or significant remodel, including the Civic Center.

		%	Count
High		69.5%	66
Medium		14.7%	14
Low		15.8%	15

Move 2.E – Evaluate code and permitting processes to streamline building electrification.

		%	Count
High		61.1%	58
Medium		21.1%	20
Low		14.7%	14

Move 2.F – Investigate the potential for implementing a differential Utility Use Tax that is at least revenue neutral, such that local taxes on electricity are lower than on natural gas, to incentivize electrification.

		%	Count
High		52.6%	50
Medium		23.2%	22

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		%	Count
Low		23.2%	22

Move 2.G – Continue to incentivize energy efficient and high performance buildings through the Green Building Program updates.

		%	Count
High		66.3%	63
Medium		21.1%	20
Low		9.5%	9

Move 2.H – Research a mandatory solar roof ordinance for new commercial developments.

		%	Count
High		54.7%	52
Medium		25.3%	24
Low		18.9%	18

QUESTION 19

Any additional comments on the Moves in Strategy 2?

Answered	28
Skipped	124

QUESTION 20

9. How would you rate your enthusiasm for the Moves in Strategy 3?

Move 3.A – Plan for additional housing, with the goal of diverse housing, to reduce long-distance commutes.

		%	Count
High		51.6%	48

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		%	Count
Medium		28.0%	26
Low		20.4%	19

Move 3.B – Identify areas that are most appropriate for parking strategies that discourage vehicle use, such as pricing, time limits and supply reductions.

		%	Count
High		40.9%	38
Medium		22.6%	21
Low		34.4%	32

Move 3.C – Enhance City Transportation Demand Management (TDM) program implementation and monitoring to facilitate further reductions in single-occupant automobile trips, citywide.

		%	Count
High		44.1%	41
Medium		29.0%	27
Low		24.7%	23

Move 3.D – Advocate that regional service providers implement high quality transit service and a robust set of first- and last-mile strategies in over two-thirds of the cross-city corridors.

		%	Count
High		64.5%	60
Medium		19.4%	18
Low		15.1%	14

Move 3.E – Update and implement the Integrated Bicycle, Pedestrian and Safe Routes to School Plan to achieve a connected, safe and active network.

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**Move 3.F – Pilot and evaluate shared bicycle and scooter programs.****Move 3.G – Pilot shuttle service in Peery Park and consider options for expansion of a similar service in other areas undergoing redevelopment.****Move 3.H – Develop design standards for streets and parking lots to accommodate increased pick-up and drop-off for rideshare passengers and apply as appropriate.****Move 3.I – Monitor autonomous vehicle testing and deployment to inform proactive policy.**

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Move 3.J – Develop a Community Electric Vehicle Readiness and Infrastructure Plan.



Move 3.K – Promote and seek incentives for community adoption of electric vehicles.



Move 3.L – Electrify Municipal Fleet as vehicles are replaced and continue to seek incentives for electric vehicles and charging infrastructure.



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Any additional comments on the Moves in Strategy 3?

Answered	41
Skipped	111

QUESTION 22

10. How would you rate your enthusiasm for the Moves in Strategy 4?

Move 4.A – Implement and expand food scraps diversion programs to include additional businesses and multi-family residents.

		%	Count
High		49.5%	46
Medium		30.1%	28
Low		19.4%	18

Move 4.B – Consider solid waste collection and processing improvements to increase waste diversion away from landfills as a part of service provider and facility transition planning.

		%	Count
High		55.9%	52
Medium		30.1%	28
Low		11.8%	11

Move 4.C – Implement campaign for waste prevention.

		%	Count
High		49.5%	46
Medium		34.4%	32
Low		12.9%	12

Move 4.D – Promote and seek incentives for making water conservation a way of life and set a water reduction target consistent with new statewide requirements.

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Move 4.E – Partner with Valley Water to evaluate opportunities to expand water reuse.



Move 4.F – Implement the City's Urban Forest Management Plan and continue to protect and expand tree canopy.



Move 4.G – Implement the City's Green Stormwater Infrastructure Plan.



Move 4.H – Promote consumer awareness of low carbon foods.

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Move 4.I – Work with large businesses to identify best practices for implementing local food gardens.



QUESTION 23

Any additional comments on the Moves in Strategy 4?

Answered	36
Skipped	116

QUESTION 24

11. How would you rate your enthusiasm for the Moves in Strategy 5?

Move 5.A - Pilot a targeted grassroots community engagement strategy (e.g., Cool Blocks Program) to create stronger connections between neighbors to advance climate action and emergency preparedness.



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Move 5.B - Evaluate opportunities for the City to provide online resources and tools for community and small business climate action (e.g., resource center for retrofit electrification, online tool or app to track individual carbon emissions).

		%	Count
High		45.2%	42
Medium		34.4%	32
Low		18.3%	17

Move 5.C - Create a stronger social media and web presence for Sunnyvale climate action.

		%	Count
High		34.4%	32
Medium		36.6%	34
Low		28.0%	26

Move 5.D - Implement the Sustainability Speaker Series.

		%	Count
High		24.7%	23
Medium		43.0%	40
Low		30.1%	28

Move 5.E - Evaluate and pilot a program for youth engagement on climate, building on current engagement with school classrooms and green teams.

		%	Count
High		53.8%	50
Medium		24.7%	23
Low		20.4%	19

Move 5.F - Build relationships with largest employers to collaborate on climate action, such as: (a) engaging

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employees to participate in sustainability initiatives; (b) encouraging and facilitating investment in climate action programs or projects.

		%	Count
High		60.2%	56
Medium		18.3%	17
Low		20.4%	19

Move 5.G - Implement improvements for climate action data performance tracking and reporting progress to the public (e.g., community dashboard).

		%	Count
High		52.7%	49
Medium		26.9%	25
Low		16.1%	15

Move 5.H - Publish annual greenhouse gas (GHG) inventory.

		%	Count
High		53.8%	50
Medium		26.9%	25
Low		16.1%	15

QUESTION 25

Any additional comments on the Moves in Strategy 5?

Answered	20
Skipped	132

QUESTION 26

Climate Action Playbook

Gear up for game day with Sunnyvale's Climate Action Playbook!

12. How would you rate your enthusiasm for the Moves in Strategy 6?**Move 6.A - Review and summarize assessment products developed by the County's Silicon Valley 2.0 project and by the State.****Move 6.B - Participate in regional forums on climate vulnerability and adaptation.****Move 6.C - Collaborate with Valley Water to advance a shoreline protection project with the US Army Corps of Engineers or other partners.****Move 6.D - Identify shoreline protection solutions as part of Moffett Park Specific Plan update.**

Climate Action Playbook

Gear up for game day with Sunnyvale's Climate Action Playbook!

Move 6.E - Update existing emergency preparedness and response plans to address climate-related impacts such as heat events, air quality issues and flooding.

		%	Count
High		50.6%	45
Medium		28.1%	25
Low		18.0%	16

Move 6.F - Develop a community resiliency plan.

		%	Count
High		47.2%	42
Medium		27.0%	24
Low		23.6%	21

QUESTION 27

Any additional comments on the Moves in Strategy 6?

Answered	14
Skipped	138

QUESTION 28

13. Would you like to share any final thoughts about the Draft Playbook?

Answered	31
Skipped	121

WRITTEN COMMENTS FROM OPEN CITY HALL SURVEYS

The following written comments were provided by survey respondents via the Open City Hall survey. Only questions that allowed an opportunity for survey respondents to type in their comments are included below.

2. What do you think about the City's current efforts to address climate change locally?

Any additional comments about the City's efforts to address climate change?

- I'm not convinced you are concerned about issues I have raised for years like more pedestrian zones, shuttle service for us, a gazillion Apple and Google shuttles and buses running amock.
- The metaphorical use of "Playbook" may suggest that climate change isn't a serious problem. I'd like to see the City's publications state the seriousness of the challenges face by city government, residents and the Earth.
- There is NOTHING the City can do against the..... Sun
- I'm concerned that perhaps not all easy ways to address climate change have been thought about. For example reducing the use of paper: We get pounds and pounds of unsolicited mail that go directly without reading to recycling.
- To imagine that we will have 25% gas driven cars in 2050 seems quite bizarre.
- charge pollution tax on users of deviced that burn fossil fuel and contributes to pollution. Place air pollutoin tax on Caltrain (diesel engines)
- Gone too far and doing things couner to like increased housing that causes incerased traffic, noise, polition, waste.
- I do not want to ballon the climate change action to be another bureaucratic forum that spends precious tax dollars in the wring priority
- I really appreciate your focus on this critical issue
- limit population
- Security as a means to address climate change. Example: I bought my first new commuter bike to drive less, and on my first experience riding/parking it at a local business (ironically right in front where many people can see it) someone tried to steal it. Thieves got some components, went through bags. Looked like they did not have enough time for more. Had the bike been in a less visible place while I was inside studying, it most likely would have been gone when I returned. My roommate a couple years ago had the same thing happen when parking her brand new bike at Sunnyvale Caltrain. It was stolen on the first day. People will be less apt to bike if they think their bike will be stolen shortly after they buy it. I reported to police and that business. Now I in some cases I drive when I should bike because I don't feel my bike will be safe. Else I park my bike where I can see it at all times or only for a short duration. I suggest more bike racks where cyclists can see their bikes, especially in dark (such as in front of local coffee shops in morning), more security cameras, patrols.
- I think the goal is to avoid inconvenience to and sacrifice by people. We'll never get there that way, in my opinion.

- Given the magnitude of the climate problem, it will be important to focus additional resources in this area.
- I am pleased that Sunnyvale is taking an active role in addressing climate change
- I believe we should be more aggressive about the goals.
- BOTH Climate Action 1.0 AND 2.0 have essentially ignored the huge role that the City's urban forest can play here by just saying "increase the urban forest" without establishing any quantitative goals like "plant 1000 trees" yearly for ten years starting October 1, 2019. Without specific goals, the City's Urban Forest has LOST hundreds of street trees and commercial zoned trees such that the City now has LESS coverage than noted in the last survey in 2008.
- I don't want to live in a city that is going to take these draconian measures. This whole thing is a poor idea and a waste of time.
- I applaud efforts to move aggressively! Leadership on climate action must come from cities and states, given the political realities of our country.
- The city does not address much easier issues such as traffic safety, speeding, etc, which makes me question the feasibility of harder goals.
- Science has shown that climate change is not a real issue. Pollution causes problems, but to claim globally warming, cooling or climate change, there is no scientific proof that stands up. The things we are seeing are things that we have seen over time before.
- I am not aware of the city's initiatives to address climate change.
- Not doing enough in these area: 1 Recycling of all types of recyclable plastic. 2 To encourage products come in low cost recyclable containers by making producers bear the cost not Sunnyvale residents. 3 To make the roads more bicycle/pedestrian friendly.
- I applaud efforts to move aggressively! Leadership on climate action must come from cities and states, given the political realities of our country.
- Seems like the City undershot with the original plan since it was achieved so quickly. Glad to see this was revisited and and updated very quickly.
- This is a great update to the original CAP 1.0. I hope to see all departments participating in the "Next Moves" and strong accountability to ensure the Next Moves are completed within the next three years.
- Transportation is too weak.

3. What do you think of Sunnyvale's proposal to meet the State's long-term target of reducing emissions 80% below 1990 levels by 2050 (carbon neutrality)?

Any additional comments on the City's proposed long term target?

- If we're ahead of schedule it shows the people want to achieve faster/steeper reductions than currently planned.
- California's Climate Change plans are ridiculous. Moving away from carbon based fuels towards electricity without developing electrical supply safely and adequately, is ridiculous and dangerous. Just heating houses with electricity will put an incredible load on our power supplies.

Electrical vehicles will do likewise. WHERE IS ALL THIS ELECTRICITY GOING TO COME FROM? We can SUPPLEMENT our energy supplies with renewable energy but it is not adequate to power the state. California's plan to combat climate change will destroy the state and do nothing to affect climate change.

- Nobody's target is ambitious enough! North Bayshore will be underwater by 2150, 2200 at the latest.
- My fears are that the devastating effects of climate change are accelerating, can we be nimble enough to update the CAP if we only approach the evaluation every 5 years? Will we be able to incorporate any breakthrough tech quickly? In addition, this edition of the CAP does not meet the Governor's directive (?) to achieve the outcome in 2045 that we have for 2050. Most of the scientific reporting I see says we have 11 years to reduce emissions to avoid tipping point, are we being aggressive enough??
- Reach 80% by 2045 to be in line with newest State standards
- Totally unscientific and based on economically unsound principles. This may make the environmental zealots feel good, but will cost residents and businesses dearly with limited global impact.
- Only chose 'unsure' because "Some targets, not all, are misguided" was not an option
- Weather related events around the globe keep pointing to climate change effects are happening now, and we are already way behind where we need to be to address the problem. It feels like the City does not want to make the tough decisions now and keeps kicking the can down the road.
- You will no impact on what happens in 2050. Zero.
- I appreciate that staff has looked down the road to our mid-century target and put us on the track to get there by adopting a more ambitious 2030 target than the State. However, we already have too much carbon in the atmosphere and are already suffering the consequences. We need to make up for lost time. What is really needed is to get to carbon neutrality asap, so we can start taking more carbon out of the atmosphere than we emit. These targets could work, if they were regarded by staff and the community as an absolute floor that we need to increasingly exceed. We need to use the targets and trajectory as a challenge to surpass. Also, the Playbook should be updated to include the current State target-carbon neutrality by 2045- for the sake of accuracy. Ideally the curve toward mid-century would also be modified to reflect this recent change in target. If doing so would delay the adoption of the CAP, we could note the change in the Playbook now and change the graph at the next CAP update.
- I am enthusiastic about CAP 2.0, but I feel we can--and must--be even bolder as we move to address climate change.
- Align with Governor Brown's executive order for climate neutrality by 2045:
<https://www.vox.com/energy-and-environment/2018/9/11/17844896/california-jerry-brown-carbon-neutral-2045-climate-change>
- Good goal
- Explore opportunities to engage surrounding communities in common short-range public transportation solutions with high capital requirements (specifically outside of VTA)

- Why bother? AOC says the world will end in 12 years.
- Try harder
- Stupid
- We should aspire to zero net carbon by 2050, if not sooner.
- 3% and 5% from local solar is ridiculously low.
- Why do we have so many buuildings now that come right up to the walk and have no green space? We need plants and trees for our health.
- Do the plan authors have a vision of how folks in Sunnyvale will be living if the target is attained? If it is seriously missed?
- The target should be to INCREASE CO2 in order to Green Up the Planet (via Photo Synthesis)
- I was thinking about "not ambitious enough" option, but let's start with this plan and make it more ambitious based on progress (our own and the rest of the world's).
- This seems very much too little too late. Change can be more radical.
- Lots of rezoning and pedestrian friendly changes needed to discourage use of cars. Not a safe place to walk, bike, et
- Must plan with surrounding cities and the state to make it worthwhile
- Too little too late.
- San Luis Obispo is targeting carbon neutrality by 2035.
- CLIMATE is changing faster than scientists have predicted. Change long term target date to 2035.
- It's a joke. Solar only makes sense when you spend someone else's money.
- I'm no expert. I really need others to sort out the science & info and tell me what goal we must achieve.
- Full electrification of buildings should be a must now, not in 50 years. Fossil fuel vehicles need to be taxed now, not some decades later.
- I think there are other issues the city should focus on. Forcing people to follow these restrictions is starting to look more and more like a socialist state.
- Target for 2030 needs to be much more aggressive to ensure realistic chance to meet 2050 goals. % reduction vs effort required will not be linear. Last 5-10% will be the hardest so needs to make additional reduction by 2030.
- Target for 2030 needs to be much more aggressive to ensure realistic chance to meet 2050 goals. % reduction vs effort required will not be linear. Last 5-10% will be the hardest so needs to make additional reduction by 2030.
- Target for 2030 needs to be much more aggressive to ensure realistic chance to meet 2050 goals
- I'm no expert. I really need others to sort out the science & info and tell me what goal we must achieve.
- Think we should be targeting lower, which might be the only way to get to the actual target. That said, I believe the playbook is flexible enough to adapt and we can course-correct as time goes on.
- Target of Carbon Neutrality (80% reduction compared to 1990 levels) should be pulled in to 2045 in line with Governor Brown's Executive Order from September 2018: B-55-18.

- The city may not achieve its intended targets for all of the individual "plays" so it should aim to overperform where possible so as to make up for areas where we miss the mark.
- I think the target is appropriate but also believe there will be technical advances that may help improve the numbers.
- Again transportation. We need action not just more study.

5. Are there any other Plays that you think are missing from the Draft Playbook?

- Reduced carbon footprint from air travel (lower carbon fuels, or electrification); reduction in disposable plastic (switch to bio/compostable alternatives); more thought on consequences of these plays (e.g. sustainable water from increased housing/local population growth, fire hazards from electricity storage, safer roads for coexistence of increased bicyclers and pedestrians); etc
- Is nuclear power an option? Can it meet green energy prices? It is carbon free.
- Building housing.
- Our food consumption is a critical piece of emissions. We need to look at ways to move to and incentivize shifts in our behaviors in meat and plant-based foods.
- Reducing consumption in general (resisting capitalism) to have less in landfill, disincentivizing air travel and SOV car travel
- Yes, take the money and send to China India or other developing nations to reduce emissions from coal-fired plants. This is far more cost-effective solution.
- Powerful role ruminants play in sequestering carbon in, and growing, the topsoil. Goats on our landfills is a start, but SVL can do much more.
- There is no direct item about increasing bicycle infrastructure. This is a good alternative for many people, but city staff and council do not support truly safe bicycling, as seen in lack of action in new infrastructure. Meanwhile, San Jose has been creating separated bike lanes downtown.
- It may be worth considering initiatives to eventually move away from gas appliances as electricity gets cleaner.
- Burn the Draft Playbook.
- I would add a play under strategy 4 to develop programs to encourage sharing and repair.
- Accelerate planning and approval processes for transportation improvements and new housing.
- Transportation should include a network of protected bicycle lanes on streets with higher speeds (30+mph) higher traffic or both.
- I read the pdf file it is very comprehensive --- I'm impressed.
- Sunnyvale should also examine whether there are local industrial facilities that could decarbonize their industrial processes.
- Electric cars and buses still have a bad carbon footprint when inching through miles of stuck red lights.
- More specific strategies including increasing density, developing a low-stress bicycle network, designing and delivering transit priority corridors (in coordination with transit providers).
- Increase multi family housing

- Need an enhanced focus on electrical storage (i.e., not just for solar); need regional efforts for a stable supply grid; call explicitly for natural gas exclusion/conversion in commercial and industrial; stronger connections between new development requirements and CAP goals, need to make it as measures explicitly called out as conditions of approval; not enough quantifiable measures for success with insufficient granularity;
- Play 1.1: Determine cost. Play 1.2: Determine who pays it (%homeowners, %small businesses, %big tech businesses). Play 1.3: Share 1.1 and 1.2 city-wide at downtown events like Summer Wednesday music nights and get responses.
- Cars are a form of personal freedom, so reducing their carbon footprint without reducing usage is key.
- Accurate, unbiased assessments
- Strategy 3 omits mention of "Active Transportation" which is low Carbon and improves health but would require modest investments in protected bicycle/pedestrian infrastructure, which would require the (controversial) removal of travel lanes or parking.
- I thought the plan was to switch to 'green' pavement already but they are still using blacktop at the schoolyards and other impervious materials for drives and walks.
- Fuel Cell vehicles are much greener than battery. We need a filling station.
- none
- Nature's diversity. Climate change will bring new species and kill/move existing ones, but in all the diversity is decreasing around the world. I know no one wants new scary spiders in their garages, but how do we grow plants in our new yard gardens if we don't have bees or other polluters?
- community zero emission transportation
- Gone too far and doing things counter to like increased housing that causes increased traffic, noise, pollution, waste.
- Locate aquifers before building to avoid flooding of subterranean parking lots.
- As mentioned above, better security plays a part in this.
- Traffic signal update to include AI driven traffic control.
- Improve retail to encourage shopping locally, supporting small businesses. Eliminate pesticides.
- Advocate for better strategies at the state and federal level. Work with other Bay Area governments to coordinate remediation for common issues (sea level rise)
- timed traffic lights to SPEED UP traffic and keep idling cars to a minimum. Sunnyvale needs to move MORE people by cars.
- Play 4.2 specifies "Implementing the Urban Forest Management Plan". The UFMP has been in existence for five years yet the City has seemingly done little to follow through on its guidelines. If the City is serious about natural carbon sequestration then I would suggest it puts more money into its tree division which is currently understaffed and underfunded. I would also like to see strengthening of the current municipal code to protect trees during development and require homeowners to have street trees. In addition to carbon sequestration, more trees mean less heat and less use of air conditioning. More people are likely to walk and bike on tree-shaded streets as well.

- Restore buy back price for solar energy to what it was previously before PG&E wiped out incentive to add rooftop solar.
- Again, no expert. Seems there is lots of room for more definition to various plays, which I will look to others to provide. I'm willing to endeavor to change what I do once others have sorted out what will have impact.
- Quickly phase in carbon neutral fuels for cars, trucks, construction machinery. Carbon neutral example: oil made from atmospheric Co2 + solar or wind, or biofuels. They can use existing infrastructure and equipment.
- Ensure that owners of all existing and new structures built in areas endangered by sea level rise bear the full cost for adaptive measures and not the Sunnyvale residents who were prudent enough to not take advantage of others.
- Again, I'm no expert. Seems there is lots of room for more definition to various plays, which I will look to others to provide. I'm willing to endeavor to change what I do once others have sorted out what will have impact.
- Could have greater emphasis on energy efficiency. Better explanation of 1990 baseline. An explicit target for the remaining 3% of electricity customers NOT on SVCE is a good idea.
- Inclusion of 4.4 is good, but also need to raise awareness of other consumption based emissions (airline travel, goods, and services produced outside the city's boundaries). Provide tools and education to help households reduce their consumption footprints.
- More emphasis on looking for ways to shift consumption in climate-friendly directions including reducing or offsetting air travel
- I rated 3.1 and 3.2 low because there is no clue as to how they will be done. I think aggressive paid parking in all noted areas would be a start to give meat to 3.2. 3.1 is already done with the new LUTE. How do you incentivize developers

Any additional comments on the Plays?

- prioritize traffic lights for bikers; make left turns for bikers/pedestrians more efficient and safer; better policing of drivers encroaching in bike lanes; educating public on driving safely for bicyclists and pedestrians.
- California's Climate Change plans are ridiculous. Moving away from carbon based fuels towards electricity without developing electrical supply safely and adequately, is ridiculous and dangerous. Just heating houses with electricity will put an incredible load on our power supplies. Electrical vehicles will do likewise. WHERE IS ALL THIS ELECTRICITY GOING TO COME FROM? We can SUPPLEMENT our energy supplies with renewable energy but it is not adequate to power the state. California's plan to combat climate change will destroy the state and do nothing to affect climate change.
- I don't think replacing big gas autos with big hybrid/electric autos will improve the quality of life, as long as the primary use is single-occupancy. SOV Automobiles have an inherent 93% inefficiency in energy and space effectiveness.
- 4c is only possible by building housing

- This is a clever way to present and review our CAP, it is easily understood, links outcomes to actions, and leads us to possible behavior change.
- Every Play should have a quantifiable target
- The report contains no cost benefit analysis. For example, Table 7 should include at least relative costs of the various actions. This makes the plan not credible. The stated cost of \$1.39M and \$500K per year is absolute waste of resources.`
- Great to ask for electrical vehicles but few can afford to buy or have access to charging stations. Will SVL subsidize households to buy/charge their EVs?
- For Play 2.3 "Zero Net Energy and all-electric new construction", an incentive for developers such as increased square footage to go all electric "now" could be beneficial, supporting this Play, and could help prepare for the goal to be all electric by 2030.
- I am not sure how you will use this data, because I rate everything "high" but that does not mean I am satisfied with the choices. I rate them "high" because those options are better than nothing. What does "high" mean to the writers and interpreters of this survey??
- Have the author do something more useful.
- There are no goals for the plays for within plan timeframe of three years.
- Play 5.2 target: Put GHG reduction graph, with future targets and link to more info on city home page by end of 2019. Play 5.1: Adopt less time-consuming, more informative online platform.
- 3.1 and 3.2 are in my opinion the most important of the plays. However I am concerned about the time-frame for implementing these changes. The process to change land use and street forms can take years of study, and we don't have that kind of time. We need to be considering how we can accelerate these processes.
- re: food - industrial agriculture practices for dairy/meat are bad for climate, but regenerative agriculture practices may be less harmful or climate-positive. Also, local gardens are delightful, but would it be a better overall climate strategy to decarbonize freight transport of food from rural to urbanized areas?
- In order to increase solar useage we need more flexibe zoning and allow residents to increase the size of their installations. Additiona panels are more cost effective than brand new installations.
- I recently replaced my HVAC system, and found that heat pumps were much more expensive than a gas heater, so I question whether installing heat pumps is an achievable building decarbonization strategy due to financial considerations.
- Looks like a student's research project. Lots of great ideas that won't be implemented properly.
- The categories "enhancing transportation options" and "supporting shared mobility" combine several disparate strategies. For example, if shared mobility refers to TNCs, please be aware that recent research shows that these are associated with more trips and reduced transit viability, which would result in increased GHG emissions.
- Permitting more housing options so that people can live closer to their jobs, and implementing transportation demand management to reduce Vehicle Miles Travelled, are the most impactful things we can do.

- Dense apartment buildings are the most environmentally friendly type of housing, while detached single family houses are the worst for the environment. If we want all new construction to align with our sustainability goals, that means only dense multifamily construction for residential.
- I would like to see Sunnyvale initiate plans for a regional electricity-producing waste incineration plant similar to what is done in Germany: would help achieving waste and methane reduction goals while at the same time allowing for carbon capture of residual waste and energy generation. Could be coupled with regional electrical storage backup for emergencies/catastrophes.
- We need to seriously look at our housing density strategies using actual data from large high-density projects already in place. Most residents are still using cars as the primary mode of transport for commuting and daily errands regardless of "transit oriented" and "mixed use" development, so in the end we just wind up with more congestion and cars operating at their worst efficiency, negatively impacting both carbon emissions and local air quality. Congestion leads to aggressive driving (red light running, driving in bike lanes) and discourages cycling and other non-auto modes of personal transport due to safety concerns. If people are going to drive regardless of their proximity to transit, we are just adding to our landfills and overall energy use by continuing to build at the highest possible densities and only developing housing for the high-income demographic, with all other workers enduring extended commutes from outlying areas.
- Play 4.1 is important, but I don't think we're set to achieving it with the current food scrap recycling program. Given the recent changes in the recycling marketplace, it would be preferable to have a program that accepted compostable containers. Then, if the city mandated that local businesses provided compostable plastics instead of non-recyclable plastics, we'd really be on our way to zero waste.
- Several seem to be on the unambitious side. E.G. we should be at 50% zero-emission vehicles by 2030 and 95% by 2050.
- Environmental damage from non-traditional energy sources not even looked at
- What's the cost?
- The targets are not ambitious.
- Right now Apple and Google bombard us with busses and shuttles everyday which cannot be good for the environment nor traffic. When will we take control and get some power???
- none
- Plays dates are too conservative- "kicking the can down the road" is a copout, adopt more aggressive date goals!
- I would strongly support ideas 134, 65, and 124.
- This is a very complex plan. I would like to see small projects carved out and started now. For instance, why is the city not installing solar on all city owned buildings? Most local schools have done this. What is holding you the city?
- Play 3.2 doesn't should call out bike/clean bus infrastructure focus.
- Create free or low cost chargers for electric cars!
- Don't lose sight on the REALITIES!

- I feel that Strategies 1 through 3 are all too weak and should be strengthened.
- My answers are influenced by the need to change the long term goals to 2035 and the essential need to establish specific quantitative goals wherever possible.
- You need more parking. Especially at apartment complexes so the surrounding streets don't become a blight.
- Is Strat #3 aggressive enough? For ex, seems like higher goals for zero-emission cars would not be so tough around here; not sure about other vehicles.
- What is the plan to encourage people to get rid of their gas/diesel vehicles as quickly as possible?
- Is Strat #3 aggressive enough? For ex, seems like higher goals for zero-emission cars would not be so tough around here; not sure about other vehicles.
- Strategy 3 is entitled "Sustainable Land Use", but all of the plays are focused on transportation. None of them are focused on measurable items that help us get better planning that will result in the "complete communities" discussed. I realize this is more qualitative and hard to specify, but it seems like a major gap in the report right.
- 1.2: I think there should be a 'storage' target added in line with the amount of storage that will be needed to support the grid as additional renewables come online to meet state 100% renewable energy goal by 2045. 3.1: Weak compared to the scale of change needed to impact VMT. Levers: rezoning, procuring open space, reduced parking requirements, march housing affordability with salary distribution of jobs...
- Strategy 2.3: Can you explain zero net energy vs. all electric? Strategy 3: Is it possible to express the VMT goal in a more accessible way? At minimum, the document should explain what VMT means.
- I am concerned that the VMT reduction targets (Plays 3.1/3.2) will be difficult to achieve so we should hedge our bets by being more aggressive on building decarb (Plays 2.2/2.3) and zero-emission vehicles (Play 3.3). Play 2.3 in particular needs to be MUCH more ambitious: new buildings should be all electric ASAP, not in 2050.
- Strategy 6 in general is a regional responsibility. Sunnyvale should participate in regional efforts and do its fair share.
- 3.3 could succeed if a charging station addition plan were being implemented and incentives to buy electric were put in place. But electric cars are coming, so this play should get some success

6. This concludes Part 1 of the survey. Thank you for your input. Would you like to go to Part 2 to provide more feedback on the Playbook?

If you are not continuing the survey, is there anything else you want to add about the Draft Playbook?

- To make a big difference will require lifestyle changes, not just replacing a car or a stove, but rethinking how and where we live, and how we move around, and how residences are connected to businesses, activities, and jobs.

- Prop 13 property tax rules highly discourage moving. so when a job moves, the commute can adjust, but few will move to be a lot closer to a job once they are locked in to a location through home ownership. Removing this barrier could make a big difference in encouraging non-renters to move closer to jobs. Of course this is beyond the scale of this work.
- Fixing the jobs/housing imbalance of Silicon Valley is needed to make the transportation piece work. That is not just Sunnyvale.
- Redo the plan. Include the cost effectiveness of the various actions. Consider global actions that will be far more effective in reducing emissions for the same cost. I am confident that you will find that virtually no government funded action will be justified by carbon reduction alone.
- I can't conceive of a bigger waste of time, resources, and tax dollars.
- Transportation should include support for regional transportation initiatives that help Sunnyvale.
- not at this time
- I don't have confidence in this. Sunnyvale's traffic jams have become extreme due to placing high density housing and high density office space in separate areas. Every attempt to improve traffic flow actually cripples it with increased stops, increased gridlock, and defective traffic lights. Large trees that created barriers between buildings and roads have been replaced with lots of dwarf trees on the sidewalk that block views of the bike lane and look like they'll be dead soon. It's such an epic display of incompetence that I cringe every time I hear about Sunnyvale starting a new project.
- Until we look at balancing ALL kinds of development, we cannot hope to achieve most of these goals. Traffic is a No. 1 concern for reduction of pollution. It is not mentioned per se. We drive an EV, we have solar electric, and we have tons of insulation. Where are they in your survey?
- This is a liberal environmentalist boondoggle.
- none
- Thank you for making this information available!
- There is NO need for any of that!!!
- I would strongly support ideas 134, 65, and 124 from the Ideas Roster.
- For The Climate Action Playbook to promote "100% renewable electricity" is a mistake. Doing so motivates utilities to shut down nuclear plants and replace them with wind and solar farms, which would raise the cost of electricity due to the intermittency and vast land requirements of renewable energy farms. The only reason renewables are cost effective is due to the constellation of tax incentives and other subsidies showered upon them, which greatly exceed the per kW-hr subsidies that nuclear power receives. A better plan is to confine solar panels to rooftops and parking lots, and demand that utilities provide whatever backup power the city needs from nuclear plants, which take up far less land than wind and solar farms.
- References:
- Cost of renewables:
- <https://www.forbes.com/sites/michaelshellenberger/2019/04/22/unreliable-nature-of-solar-and-wind-makes-electricity-much-more-expensive-major-new-study-finds/#681974474f59>
- Threat to biodiversity:

- <http://bravenewclimate.com/2014/12/15/an-open-letter-to-environmentalists-on-nuclear-energy>
- Necessity of nuclear power to stop climate change:
- <http://www.cnn.com/2013/11/03/world/nuclear-energy-climate-change-scientists-letter/>
- Reduce the cost of government fees to residents, trash, water, sewer. The annually increasing fees do not improve the quality of the service. More work is shifted to the consumer by automation.
- How much is this survey costing residents?
- One way to immediately reduce air and noise pollution would be to outlaw gas-powered blowers for outdoor area cleanup. I'd like to see us gradually move away from gas-powered lawn mowers as well.
- The city is hypocritical. This city has eliminated the ability to make right turns at intersections, thus forcing vehicles to sit idling, producing excess pollution. The city has also changed signal light timing to force vehicles to sit idle for as many as three minutes, wasting gasoline, and producing unnecessary carbon pollution.
- We need people to consume less electricity, food, gas, etc.
- There should be additional discussion of the need to sequester or offset the remaining emissions to achieve "carbon neutrality" (by 2045). At least say that we need to figure this out even if we don't know yet how it will be done or how it will be measured. Increased carbon sequestration within our city boundaries (adding tree canopy and green infrastructure) will most likely be highly insufficient to balance 20% of 1990 emissions. As measurement standards and methods emerge, the city will need to select and adopt plans to sequester, offset, and/or reduce "consumption" related emissions.
- I understand that the targets are intended to be long-term, but you should set an expectation that they will be reviewed for appropriateness as part of every 5-year planning exercise for determining the next "moves". Look at how much progress has been made on building electrification in the last 6 months, and the way that has made some targets seem outdated already. Over longer timeframes this also seems likely to affect other targets.

7. How would you rate your enthusiasm for the Moves in Strategy 1?

Any additional comments on the Moves in Strategy 1?

- Incentivize the directions you need to move us all toward decarb. Storage is certainly one, 100% electric in new developments with PVs, wired for EVs, etc.
- Storage seems to be particularly important, regardless of where it comes from. Part of energy/emergency resilience. May warrant its own move/designation.
- My PGE bill has tripled since SVCE service was added. Was this the city's intention to overcharge residents??
- We should also be encouraging microgrids, powered by clean energy.

- I do not know about SVCE, but when I consulted with BayREN I found them very knowledgeable and helpful, but the contractors that they required one to use to qualify for their incentives were greatly more expensive than contractors that did not participate
- storage should not be limited to solar; residential solar storage needs emphasis, subsidies, and technical support
- 1.C Collaborate not just with SVCE but with local companies who are in this exact business.
- Since the long-term goal is directed at 2050, an action to address the challenge of providing electricity at night and during calm weather needs to be specifically addressed.
- I don't know much about SVCE, but... I think people should have some choice over their energy provider, but I agree with the city that 100% clean electricity is a must. If there would be selection of energy providers, they all need to be 100% clean.
- Photovoltaics require rare earth metals that take significant resources to acquire, and burden the environment in terms of used chemicals and energy for example. Hydropower is also clean electricity, and if available should be considered. Also direct solar
- Eliminate electric and gas dryers and garbage disposals. Line dry laundry and compost wasted food.
- We should also collaborate with SVCE on Reach Building Codes.
- If you want clean energy, support nuclear.
- Promote through education and incentives both roof top solar adoption, rooftop solar water heaters
- How is SVCE providing 100% renewables all the time?
- Can excess energy be used to make hydrogen fuel?
- You need to notify participants in writing before doing community outreach.
- Get those remaining 3% of customers into SVCE, since they are still responsible for massive amounts of emissions (about 22% of the original electrical emissions per the graphic on page 21).
- Although only 6.6% of remaining emissions these moves seem relatively easy and we should definitely leverage the expertise and funding of SVCE.
- Move 1.C certainly couldn't hurt in and of itself, but if it distracts from other moves that more directly result in GHG reduction then it should be de-prioritized, especially because this is more SVCE's area of focus than the City's.

8. How would you rate your enthusiasm for the Moves in Strategy 2?

Any additional comments on the Moves in Strategy 2?

- Conservation should be a high priority too. We can run into a scalability problem otherwise, because when people feel energy is free and/or clean, they may be inclined to use much more of it.
- Electrification is key. (Renewable) energy independence is also important for resilience. Data is always important to know and track progress.

- Do NOT market to residents in apartments...only the landlords and homeowners have authority to make building / appliance changes, if cost-effective.
- For solar roof requirements, as part of the evaluation process, keep in mind that properties and buildings are different sizes, so where solar may work well on a large roof of a single story building, it may be much more difficult (if not impossible) to w
- It is important that any requirements regarding solar or natural gas taxes be affordable to those who are unable to fully electrify their property. The term "electrify" needs to be clearly explained that it means "no natural gas" and not simply electrici
- Don't "encourage", instead "require"!! Require solar, don't "research". Require heat pumps. Require all electric. Now. Not in 2030 or 2050.
- Since it is illegal to forbid new natural gas connections, make the fees very high.
- 2.H solar roof ordinance should include storage€solar roof with storage ordinance
- I like solar but the panels are not easily recyclable either. I would like the option of cooling green roofs which are also valuable and lower cost.
- Buiding and zoning codes are not that solar friendly
- I recently installed a new HVAC system in my house, and when I looked at heat pumps I found that they were much more expensive than gas heaters. If Sunnyvale wants to accelerate the adoption of heat pump water heaters and space heaters, it also needs to
- Please accelerate requirements for net-zero buildings! These technologies exist NOW.
- Passive solar for buildings is key. Active solar for generation is nice but not always available to us.
- Many of these proposals would in themselves cause environmental problems -- pollution causes in building these materials? Disposal of solar panels, etc when past their life span?
- Emphasize dynamic windows, such as those made by View Glass in Milpitas, as a key part of reducing both heating and air conditioning needs in buildings. Visit the Delta Americas building in Fremont, a zero energy building. Take the Sustainability Commis
- Solar panel production does not reduce energy consumption
- City must commit to changing building codes and related regulations that will incentivize carbon reduction.
- 2.F We have a lot of renters in the area. The renter pays the utility use tax while the landlord pays the electrification. Therefore the tax does not make any difference in the landlord's mind and they won't be incentivized to electrification.
- Bay Area climate is very good for heat pumps (heating or cooling), and using heat pumps to heat houses should be incentivized for example when old A/C units are replaced. But also bear in mind that building energy usage can be lowered with proper insulati
- Electricity is TOO expensive - our electricity costs are 2x to 3x more than other areas - you want us to heat buildings with expensive electricity? Between that and our high minimum wage will drive people from Sunnyvale. Is that what the city wants? Ma
- Limit population. No new taxes, please.
- The actions in Move 2.A should not be solely the responsibility of the City of Sunnyvale. Are there other governmentagencies who are already doing this,and could share their information?

- The key is to make gas not economical.
- 2.G Add: 'all-electric'. 2.H Seems too prescriptive unless also requiring 'storage' AND local solar + storage is needed to support grid resilience.
- Great. Optimistic about 2.F.
- Move 2.H couldn't hurt but shouldn't distract from moves with more direct GHG reduction impact.
- 2 H could be difficult to implement as roofs are generally used for HVAC equipment. May target parking structures and open parking lots for solar programs.
- A solar roof doesn't always make sense. And when it does, it must include local storage to offset the worsening duck curve problem. An alternative choice would be for the developer to invest the equivalent wattage rating into a commercial solar farm.

9. How would you rate your enthusiasm for the Moves in Strategy 3?

Any additional comments on the Moves in Strategy 3?

- Consider ways to encourage carbon neutrality with air travel. Also consider transportation solutions for traveling to and from SFO/SJC with luggage. Safer/protected bike lanes.
- California's Climate Change plans are ridiculous. Moving away from carbon based fuels towards electricity without developing electrical supply safely and adequately, is ridiculous and dangerous. Just heating houses with electricity will put an incredible load on our power supplies. Electrical vehicles will do likewise. WHERE IS ALL THIS ELECTRICITY GOING TO COME FROM? We can SUPPLEMENT our energy supplies with renewable energy but it is not adequate to power the state. California's plan to combat climate change will destroy the state and do nothing to affect climate change.
- All non-residential parking should be PAID. Driving cars should be a privilege, not a right. While it is good to incentivize zero-emission vehicles, they are still cars and biking, walking, or transit would be better. So they should be incentivized over conventionally-fueled vehicles, but incentivized less than biking, walking, and transit. That also means that public transportation options need to be real and significant, enabling all people to have real options. And this needs to be applied regionally. What is your committed plan to collaboration on a regional scale, and how is this going to be better than what already exists in a dysfunctional way? All major employers (including the City of Sunnyvale staff) need an employee commuter program comparable to Stanford University or Facebook, which have proven impressive and significant results. There is no reason why that could not also happen here in Sunnyvale -- PAID parking at work, locker rooms with showers, bike racks, transit passes, etc. Land use and housing is also a key component of the challenge of transportation. It is good to see something relating to land use on here, but much more is needed in the way of mixed-use, medium- to high-density development to reduce commutes and VMT per resident. In many ways we have built and zoned ourselves into this trap so making sure that it can't continue is vital.

- Some of these strategies can make a difference today, while others need to wait for technology to catch up before incurring additional cost to residents.
- Reducing parking without appropriate transit is not an answer to congestion. Limited parking will probably not reduce the number of cars, people will just spend more time looking for parking. Increased parking fees unfairly hurt those who have no alternatives.
- Perry Park shuttle has been waiting for implementation.... get it going! I do not see actionable support for separated bicycle lanes from city staff nor council. The council appears to support bicycling as a general principle, but the rubber is not hitting the road. There are many moderate level bicyclists who would bicycle a lot more if it was truly safe.
- Reduced parking (ex: limited spaces in multifamily dwellings) and similar options are generally bad ideas that create frustration and strife between neighbors. Don't punish people who have to drive until the options for them are good enough. Make sure there are carrots available before using the stick.
- Set a high tax on internal combustion engine vehicles after 2025.
- Develop robust messaging with the rationale for housing, parking limitations, and rationale for moving away from auto dependence.
- Adding housing (3.A) is the single most important change we can make so far, followed closely by 3.E, which should also include Safe Routes to Work.
- More protected bike Lanes!
- We are already on a path to make Sunnyvale too crowded. Need to stop encouraging companies to increase the number of jobs
- It is important to realize that many residents are not going to bike or use a scooter if it is raining or extremely cold. If there was decent public transportation options (not UBER, etc.) then more would not feel a need to drive.
- "Rideshare" is a misnomer. TNC trips are almost always single occupant trips and should be treated as such. They may be useful for emergency ride home, but should not be considered as a strategy that will result in lower transportation trips or emissions for commute or other trip types. In addition to the above strategies, there is a need for organizational and cultural change and training to support the above moves.
- 3.A is the most important thing we can do. Regarding electric vehicles, let's move away from cars and single occupancy vehicles all together.
- Strongly enhance and accelerate 3G; make such public transit free; not optimistic on 3D: if not successful, achieve it with 3G; accelerate/enhance city-wide EV charging infrastructure
- 3.A) "Diverse" housing should include at least *some* single family homes - lots of transplants from other states want this option locally (and can afford it), but end up buying homes in the south county and tri-valley area because nothing is available locally. Their extended commutes in large, gas-only vehicles has a huge carbon footprint, and their homes are in more energy-intensive areas due to higher summer and lower winter temperatures. By not allowing *any* local single-family home development while continuing to build the offices that employ these people, we are driving this unfortunate trend. 3.B&C) Efforts to simply make parking and driving more expensive is basically a *regressive tax* on those who can least afford it! Local real estate

is extremely expensive - those who live locally already pay the least in transportation costs while having at least **some** viable transit options, while those who **must** drive are often the people who can least afford it. This strategy will not work to reduce driving trips no matter how you look at it: high-income tech workers will have no qualms about paying the fees and just continue to drive, while the low-income, long-commute service workers, will still have no choice but to drive and just endure more economic hardship. PLEASE do not consider these fee options - not a "solution"! 3.F) I haven't seen any real research that shows that these programs actually **reduce vehicle trips** - which should be the goal. They do get some use in areas where they are available, people seem to just use them as a fun novelty, while anyone serious about cycling or other human powered transport just buys their own bike or scooter and is already doing it. 3.H) Please do NOT go to any effort to accommodate more ride "share" activity in the city - no one is "sharing" rides - these are CABS, plain and simple. They do NOT reduce, but rather INCREASE traffic, as high-income residents simply employ these services as a private car, rather than use public transit options. They also DO NOT belong in our local commuter lanes - the driver isn't **going** anywhere, and they impact our carbon footprint and local air quality by circling constantly, creating MORE traffic congestion, which causes all other vehicles on the road to operate at lower efficiency. It is also a scam business model that excessively utilizes public resources for private gain while shirking the responsibility to even **pay** for proper use of those public resources. Drivers don't even need a local business license - this actually IMPACTS local government's ability to implement everything else in this plan. Require business parks to have off-street drop-off/pickup facilities for any type of vehicle (carpool, shuttle, ride"share", or otherwise) and implement STEEP FINES for anyone stopping on a thoroughfare! 3.I) Definitely **monitor** autonomous vehicle testing (hint, they are already causing local traffic problems due to their inability to negotiate simple 4-way stops, etc.), but please DO NOT encourage their on-street commute hours testing or adoption. Autonomous vehicles are PERSONAL TRANSPORT with all of the same negatives as single-driver vehicles. Some projections have already shown that they are likely to **INCREASE** traffic (as they drive to and from fares - completely empty!) and exacerbate parking problems. They are not some "magic solution" as local tech companies who are heavily invested in them would have you believe. At some point, perhaps we'll have a nice onboard technology in our vehicles so that we can put them in a sort of "boxcar mode" allowing greater throughput at intersections and traffic segments etc., and perhaps at that point we have designated lanes, but that seems to be a long way off. For now, there is NO BENEFIT to our city in endeavoring to accommodate this private business venture.

- It is hard to get people to give up freedom and convenience for personal vehicles, so making alternatives better is important.
- Electrical vehicles may be charged via fossil fuels? Unrealistic to expand buses, trains, etc when using them is unsafe due to criminal activity on them
- Strategy 3 is the place where the city can make the biggest difference, and there are several areas here that need improvement. 3B needs to be stronger. Read Donald Shoup's "The High Cost of Free Parking," and implement dynamic parking meters in downtown (price changes based on number of open spots). Replace minimum parking requirements citywide with parking

caps. Explain to citizens that in order to have a truly walkable downtown, buildings need to be closer together, which means elimination of big parking lots between them. Carry out the city's policy on streetscape allocation, recently undermined by the staff-driven initiative to replace car lanes on Mary Avenue with bike lanes, while leaving street parking. Staff may not like to listen to citizens gripe about losing their ability to use the public right of way for their own personal vehicle storage, rather than using the two covered and two uncovered spots that their homes are required to provide, but that's too bad. That policy, which prioritizes mobility uses (cars, bikes, sidewalks) over stationary uses (parking, landscaping) is critical for minimizing trip times and reducing carbon footprint. Staff and council need to have the spine to tell some citizens something that they don't want to hear, like the fact that our city policy says park on your own property. 3D also needs to be stronger. Instead of "high quality transit service," which could mean anything, say "carbon-free, dedicated right-of-way, mass transit that is faster than driving." That means either electric BRT or light rail. Buses in regular traffic will not do the trick, because they are slower than driving. VTA's research has shown, unsurprisingly, that a mode shift to mass transit occurs only when mass transit is faster than driving. Sunnyvale should work to help prioritize the Stevens Creek-Alum Rock light rail line, which for 30 years has shown the highest potential ridership in the entire system, but whose funding keeps getting diverted by the many San Jose members on the VTA Board to the BART project. Given the huge number of daily trips to Apple and DeAnza, Sunnyvale would benefit from getting those cars off the road. The city should also push to restore its equal representation on the VTA Board, cut back a few years ago in favor of South County cities. Another Move should be added to this section, consistent with Move 5H, which could be called Move 3M. The city MUST keep track of its number of jobs, houses, slots in schools, office space, etc. After a community visioning event in 2005, the city started tracking these indicators, with the idea that when council made decisions on land use, it would understand the effects of those decisions on the cumulative balance between jobs and housing and intensity of development, so that we would not keep putting straws on the camel's back. After the CDD who devised this retired, staff started to undermine this approach passive-aggressively, to the point where a councilmember had to ask to see those data every time a land use decision was made. As soon as that councilmember was termed out, staff came running to council to ask to scrap the tracking of these indicators, and the newly elected rubber stamps complied. Staff needs to commit sincerely to helping the citizens achieve their goal of sustainable rather than uncontrolled development; backlash against excessive development got two councilmembers defeated for reelection in 2016. Move 3A says "build more housing." That is half of the equation; "build less commercial" is the other half. Sunnyvale is completely built out, so more housing can be added only by changing the nature of the city, which citizens oppose. But saying "no" to an office project is much easier, and matches public desire. Staff really needs to decide to carry out public desire rather than just paying lip service on this issue.

- Does Rideshare actually reduce VMT and CO2 emissions? How about PROTECTED INFRASTRUCTURE so that people can ride bicycles safely, and provide "incentives for adoption of bicycles and e-bikse"?
- A shuttle down Sunnyvale/Saratoga route to the Caltrain station would solve the needs of a significant percent of both workers, restaurant goers and shoppers

- You could also incentivise home owners to be able to reduce/remove the planning requirements for garages and driveways if they meet certain requirements (max number of cars registered per address for eg).
- Adoption of EVs is the single most valuable change individuals and households can make in the near term to reduce carbon. Implementation of a infrastructure plan--not just development of a plan--should be the highest priority action of all. And publish how GHG from transportation is estimated.
- 3.E: It requires a real effort to implement this. I am a bike commuter, but I cannot bike even half of the places I would like to. There are no safe routes through the city (El Camino with a bike, no thanks), and biking around downtown is basically impossible. There is no bicycle infra in Sunnyvale. Also safe routes to school... Look at Peterson Middle, there are no bike lanes, no safe crossings over larger roads, no real routes to anywhere. The kids bike on narrow streets surrounded by cars. I would say that there has been zero effort to create safe routes. 3.G: Pilot a shuttle? How is a shuttle different than public transportation bus? I hope we are not trying to invent a wheel again. Though, I am all for public local transportation. 3.H: You mean like a bus stop? We wouldn't need that much ride shares if we had functional and affordable public transportation.
- New (and retrofitting existing) office building parking lots should have shady parking spaces for majority of vehicles. When the vehicles are cool in the afternoon, when people leave the office, the A/C unit of the car don't need to work so hard, and will use less energy (thus less vehicle emissions). Parking restrictions (time, pricing) will only make people angry; the cars will be still there, because people in general can afford to pay. Better strategy is to make finding (shady) parking very easy and concentrated centrally so that it's easy to reach the destination by foot. Easy parking and joining traffic will reduce vehicle idle times.
- With transportation being our significantly largest emission driver, this seems overly cautious. We need much more aggressive standards. No one able to bike, walk or access transit should need to drive for a trip under 3 miles. Free parking needs to go in most areas, especially on El Camino, which is in desperate need of safe bike access. Bike parking should be a requirement..
- People in the valley switch jobs ever few years - you will make it so people have to move every 2-3 years. Public transportation is too slow and expensive on personal time. Face it, we need to drive or spend 1/2 of our day on busses and at work. I did this for 6 months and it was NOT worth it! 3.5 hours on Train and bus - not worth it. Drive took 90 min each day.
- Stop punishing longterm residents with the destruction of peace and quiet. Our quality of life is destroyed by the unbridled growth in population. Too much traffic, brownouts, not enough water, etc. And we are charged more for using less.
- Ridesharing (Uber...) only increases the number of cars on the streets as people move from busses to Uber. Ridesharing does decrease the number of parking spaces needed. Not EVERY road needs a bicycle lane. El Camino is a major car artery and bicycles should not be encouraged. Bike can use a side street.
- Don't sideline hydrogen fuel cell as a viable alternative

- Rationale for ones I rated medium... 3D: We MUST do ALL we can and not expect regional entities will fix transportation. 3K: Just don't think this will be a hard sell around here, although that may be a reason to be sure to cover it well.
- There will be no development of bikes, scooters, etc without maximum safety on the road, or dedicated roads.
- 3.B Reducing parking spaces / increasing time restrictions penalizes large families where ride-sharing does not make sense. 3.E We need better bike paths across the city. Not just to/from schools. For example, it is impossible to get from West Sunnyvale to the Steven's creek trail using bike paths. Bernardo does not have any bike lanes South of Knickerbocker.
- 3.B Reducing parking spaces / increasing time restrictions penalizes large families where ride-sharing does not make sense. 3.E We need better bike paths across the city. Not just to/from schools. For example, it is impossible to get from West Sunnyvale to the Steven's creek trail using bike paths. Bernardo does not have any bike lanes South of Knickerbocker.
- Rationale for ones I rated medium... 3D: WE MUST DO ALL WE CAN and not expect regional entities will fix transportation. 3K: Just don't think this will be a hard sell around here, although that may be a reason to be sure to cover it well.
- Again, there is nothing in here that measurably speaks to how we are creating complete communities. Transportation is important, but these moves could risk optimizing around a single factor and not resulting in the community we want. I'm very disappointed with this section.
- 3.C Also adopt TDM plan for city employees. 3.E So important. Would probably be done anyway regardless of Playbook, right? 3.H Incentivize 'shared / pooled' Uber & Lyft - not just dropping off one person. Require Uber/Lyft to park and turn off engine when awaiting next riders
- Elevated/protected bike lanes? I'm not convinced that 3H is necessary in a city as suburban as Sunnyvale. 3G: why are redeveloped areas more in need of shuttle service than others?
- Develop a citywide program for free VTA transportation or at least free for students/seniors.
- None of these have any meat. They are mostly study which means in three years we will have hardly any improvement. I suggest the city immediately implement a paid parking tax where the proceeds fund city wide shuttles. All public parking is paid by the hour'. Business could

10. How would you rate your enthusiasm for the Moves in Strategy 4?

Any additional comments on the Moves in Strategy 4?

- We should target reduction of plastic use in products, and especially single-use/disposable plastics, encouraging compostable alternatives instead.
- California's Climate Change plans are ridiculous. Moving away from carbon based fuels towards electricity without developing electrical supply safely and adequately, is ridiculous and dangerous. Just heating houses with electricity will put an incredible load on our power supplies. Electrical vehicles will do likewise. WHERE IS ALL THIS ELECTRICITY GOING TO COME FROM? We

can SUPPLEMENT our energy supplies with renewable energy but it is not adequate to power the state. California's plan to combat climate change will destroy the state and do nothing to affect climate change.

- When I look at my waste--the non-recyclables mostly relate to packaging issues. We need to look at the supply chain packaging and possible regulation of plastics and possible incentives.
- There is no good reason why food scraps aren't available to all residents and businesses. Do that ASAP. The UFMP has little substance and needs to be rewritten. There are many opportunities for afforestation and it doesn't look like Sunnyvale takes that seriously or is concerned about increasing its urban forest. I don't really understand how the City can promote low carbon foods, but I agree it is important. How do you measure this impact?
- 4F Beetle infestations destroying mature trees; plant more native trees. 4H Local ruminants are the lowest carbon healthy food source, restore soil, heal bodies which lowers medical costs. See www.savory.global for more.
- Increasing the tree canopy and reducing water use will make a huge impact. The trees help will all elements of the CAP (carbon sequestration, temperature control, storm water runoff) and provide an environment for walkers and bikers, thus reducing the need for cars. Trees are also a very tangible item that everyone can help with or at least appreciate. It is one of the few items in the CAP that will have a direct, visible impact on every resident. More green space is critical.
- Work with school districts and senior housing to identify best practices for implementing local food gardens.
- I think Move 4.H should actually be the Play. I don't think making the actual switch is something government can do.
- Yes, plant more trees!
- Here is what we can do right now in 2019 -- urge big box stores like Lucky's, Safeway and Smart&Final to transition away from plastic clamshell food containers. City of Sunnyvale needs to partner with TERRACYCLE to divert hard to recycle products from the landfill the cost is \$0 check it out!
- What is the Green Stormwater Infrastructure Plan? We would like to see some workshops to teach us how to install recirculation systems in our homes so that we don't waste so much water waiting for the cold water to arrive in the sink. We have tried to research this ourselves but there is a lot of conflicting info out there and we would hate to install something that didn't work correctly.
- Residential water reduction is barely a drop in the bucket compared to commercial and agricultural water use.
- 4.A) Good to have a food scraps program, particularly for restaurants, but I find myself with an empty bin every week. Also, contributing to HOG FARMING (severely environmentally destructive) is at cross purposes with other goals here! Food itself (other than production energy) is carbon neutral, whether eaten or thrown away - it can only release the carbon it absorbed from the atmosphere in the first place. Basic science.
- Invest in a way to process recycling that China won't take any more

- 4F is by far the most important one here, since trees sequester CO₂. Staff must implement the utility undergrounding policies passed by Council about ten years ago, and use Sunnyvale's Rule 20 funds to the maximum. The city must explore mechanisms to fight PG&E's plans to eradicate street trees in order to make it easier for themselves to monitor their subterranean pipelines. Get those wires and pipes out of the way of our trees, and find places to plant more of them. Incentivize citizens to do so. Make the city's tree removal permit process more fair by subsidizing the maintenance of large trees on private property whose owners have been denied tree removal permits. If the city tells a property owner that his tree is essentially owned by the neighborhood, then the neighborhood should kick in to help maintain it, since the basis for the city policy is the argument that large trees benefit all nearby properties. Have a Come to Jesus meeting with planning commissioners to explain to them that the three criteria for a tree removal permit are the only allowable basis for their votes, not personal opinions about trees (one former Commissioner voted for every single tree removal permit that came before him; another voted against every single tree removal permit that came before her, and a third has always voted against every single tree removal permit unless it is a palm tree, which he unilaterally declares to be a species not allowed in Sunnyvale). Tell these people to follow the code or get off the Commission (or allow appeal up to Council). With regard to the food issue, a lot of vegans have been arguing that everyone should have to be vegan to eliminate livestock, which has a large carbon footprint. But since we all have canine teeth, we evolved to eat meat as well as plants, and it is wrongheaded to order people to deny their own biology for someone else's agenda. If the mass extinction event proceeds, all the animals will die off and people will have to become vegan, but that shift should not be enforced by policy.
- How can I repair appliances instead of trashing them? I hear some places will have a "repair fair" and you can bring something in and handy folk can help you fix them.
- When in Silicon Valley it's hard to get people not to 'need' the latest smartphone or computer. If you can get these providers - both manufacturers and network providers to co-operate on slowing down it would be a miracle.
- 4.C: We need more than that. Maybe some regulation just like the plastic bag ban. It is hard to make a good choice if the store offers 10 different brands of non-ecologically packaged items. This applies to all the items: if stores don't offer sustainable options, it is hard to buy them.
- Effective way to promote low carbon (and healthy) foods is through children. Making high quality food a daily standard (that is, so it's a way of life) with children will have deep reach through them to their parents. Another way to lower resource usage is ban unsolicited mail altogether. We weekly get pounds and pounds of unsolicited credit card offers and other advertising via mail, that goes directly to the recycle bin without reading. A step forward and thought leadership would be to start seeking ways to replace single use cardboard boxes for deliveries with multi-use alternatives. Many small items that are delivered to homes would fit very well in 3-4 different (standard) size containers. People could then return the containers to centralized location, or there could be a scheduled weekly/bi-weekly/monthly collection (like garbage) by the delivery companies since they drive around the neighborhoods anyway.

- Currently recycling program does not take most recyclable items; ex[and recycling to include all items
- When it does not rain, our water rates go up to pay for reduce revenue for water company. It rains and usage goes up -> rates stay high. Drought->rates go up. Rains come-Rates stay high, never go down. Garbage rates go up and up. My rates are ridiculous compared to the service/value I receive. Sunnyvale is getting too expensive. My kids have stated they will not live here when they graduate as it is too expensive and no longer a nice place to live - their friends all say the same thing.
- Has Sunnyvale become Berkley? "Promote consumer awareness of low carbon foods" ?? Really ? We're the FDA or Dept. of Ag. now?
- 4D. I think we should aim to beat not just meet state standards.
- Limit population growth. How much income does the waste diversion program generate for the City? Who receives a benefit? That money should be used to reduce our garbage collection fees.
- While one saves water, bills are still going up as we are told we saved too much!
- It is time to implement the Urban Forest Plan!
- 4.I -in addition to large businesses, add schools as sites for implementing local food gardens.
- Planting more trees is the only plan I can get behind. But also make it easier to chop down (an replace somewhere else) problem trees. The city goes overboard in "protecting" the urban canopy.
- Provide incentives and templates for mid and low income apartment complex owner to build raised beds for residents to develop their own community vegetable gardens.
- 4D: Seems we've done lots here already. 4F: Good we have others who focus on trees. 4I: Maybe I'm wrong, but this seems like something for a bit down the road; maybe we have larger asks of businesses.
- 4.1 General comment - With China no longer importing recyclables from the US, how does this plan address the growing pile of cardboard and plastic accumulating and not getting recycled?
4.A - The current food scrap program is completely untenable for residents. Make it easier to use before expanding the program. 4.H Education at the city-level on low-carbon food does not sound like a good investment of resources. This should be a state-level initiative. If not a state-level initiative, look to an organization like Seafood Watch (<https://www.seafoodwatch.org/about-us>) that operates well beyond the boundaries of Monterey.
- 4.1 General comment - With China no longer importing recyclables from the US, how does this plan address the growing pile of cardboard and plastic accumulating and not getting recycled?
4.A - The current food scrap program is completely untenable for residents. Make it easier to use before expanding the program. 4.H Education at the city-level on low-carbon food does not sound like a good investment of resources. This should be a state-level initiative. If not a state-level initiative, look to an organization like Seafood Watch (<https://www.seafoodwatch.org/about-us>) that operates well beyond the boundaries of Monterey.

- Reduce waste. reduce packaging on new products. Could delivery services be reduced? Our neighbors have packages delivered multiple times a day from different carriers; this is crazy.
- 4D: Seems we've done lots here already. 4F: Good we have others who focus on trees. 4I: Maybe I'm wrong, but this seems like something for a bit down the road; maybe we have larger asks of businesses.
- 4.B, D & G would be done anyway without Playbook.. More focus on waste reduction overall.& reducing per capita waste. Define a 'plastics strategy'. For example, only allow sales of plastics in the city that can be recycled (preferably locally)..
- Work with master gardeners to promote sustainable backyard gardening and environmentally friendly landscaping without the use of leaf blowers and synthetic fertilizer. Most of the other moves are already in progress and well studied. How will these moves make the programs better?

11. How would you rate your enthusiasm for the Moves in Strategy 5?

Any additional comments on the Moves in Strategy 5?

- Brainstorm consequences of above plays and develop new initiatives to mitigate risks.
- California's Climate Change plans are ridiculous. Moving away from carbon based fuels towards electricity without developing electrical supply safely and adequately, is ridiculous and dangerous. Just heating houses with electricity will put an incredible load on our power supplies. Electrical vehicles will do likewise. WHERE IS ALL THIS ELECTRICITY GOING TO COME FROM? We can SUPPLEMENT our energy supplies with renewable energy but it is not adequate to power the state. California's plan to combat climate change will destroy the state and do nothing to affect climate change.
- I'm pretty sure that there are more effective and less costly programs than 'cool blocks,' but the idea is one I like a lot--community action can help a lot!
- I'm not confident social media and SSS are worth their effort to promote proenvironmental behavior. Does this work prevent Staff from reaching beyond the eco-choir? Annual GHG inventory is great if it doesn't prevent other important work from being done. Employer action is important here. Cool Block has potential to drive residents to significant actions, but the people who join the program are probably more environmental than average anyway.
- I understand the need for additional staff, including an expert in sustainable transportation and outreach
- Speaker series is a waste of \$ unless you plan to upload YouTube videos and expand the reach. Currently the City's social media game is weak. Who is doing a good job? Sunnyvale Public Library's social media person gets it.
- I know most schools' curriculums are packed just trying to teach the basic requirements. You would have more success with this if you could get it included in the state standards.

- Social media presence should include notifying people each time an issue related to any of the items on the climate action plan comes to a committee or Council. The Legistar noticing is cumbersome and makes it difficult for residents to follow topics that are of interest.
- 5.A sounds designed to empower self-promoters and possible kickbacks and other corruption
- 5H is critically important and highly appreciated. Make sure that the numbers are correct and then base policies on them (for example, the number of jobs in 2016 is 13% higher on page 14 than it is on page 92. As mentioned above, a key mechanism for accomplishing Move 5H is to create Move 3M and go back to tracking all the metrics on the city's land use, in particular the gap between jobs (demand for housing) and houses (supply), which is the cause of the Silicon Valley housing crisis. It's not the jobs-housing ratio that is meaningful, it's the jobs-housing difference. Sunnyvale should set a target of a number of jobs equal to the number of adult residents, and measure every year where we are with regard to that target. It is no longer acceptable to say, "our population goes up during the day, so that's great for our budget, so everything is OK." When we do that, we are saying "Let some other city house our workers and pay for all those residential city services, and let them all commute to Sunnyvale and burn gas." That's immoral, when you get down to it. And make sure that the amount of CO2 emitted by excess commuters into Sunnyvale (above our nighttime population) counts as part of our GHG inventory, since that amount is directly caused by city actions.
- Our local schools should compete to get the most kids in and out of school with alternate transportation. Every kid who rides to school in a car is a failure of our community to prepare the next generation for the challenges they face.
- "What gets measured, gets done." Metrics and analysis are crucial to CAP success. I would like to see more measurement built into the plan.
- 5.A and 5.D: These are nice to have, but I don't think they are the key steps. Only people who are already interested and active will join. Instead, put more effort to 5.E and 5.F. When people adopt good habits at school or at work those habits become "the way of life".
- Allow residents to maintain their privacy.
- 5F: Maybe this would be big, but would it work to expand communications beyond Sunnyvale residents? (Many workers live elsewhere.) Mus
- 5.D - I don't see a sponsored speaker series as an effective investment by the city unless there is a commitment to stream / record the sessions and then promote access to these speaker sessions through online resources. It is incredibly difficult to get people out of their homes. 5.E - I'm a big fan of this. I don't think our goals are achievable without educating our next generation of citizens.
- 5.D - Sounds great in principle, but I don't see how this helps spread a message to everyone in the city. Speaking sessions are typically only attended by people who already care about the topic. It takes real effort to get people out of their homes to come to a speaking session. 5.E. I'm a big fan of this. I don't think our goals are achievable without educating our next generation of citizens.
- 5F: Maybe this would be big, but would it work to expand communications beyond Sunnyvale residents? (Many workers live elsewhere.)

- 5.A & 5.B together are really important and can also help bring 'consumption' of goods and services into the conversation. Involve Library and Community Services more in Strategy 5 Moves. There is a lot of outreach and programs potential there. Get their buy-in and ownership.
- 5C and 5G: it could be more effective and have broader reach to publish updates in the Norizons newsletter or as part of the utility bill. Another move could be providing resources to assist other cities in achieving their goals.

12. How would you rate your enthusiasm for the Moves in Strategy 6?

Any additional comments on the Moves in Strategy 6?

- Work with the state to identify more water reservoir opportunities, work with the state to identify better wildfire prevention/protection.
- These are all essential to long-term sustainability if not survival...
- Regional collaboration on climate action is crucially important. I am not confident in the quality of work done by the Army Corps of Engineers--they seem to be behind in the best practices and latest science by 20 years minimum.
- If there isn't enough city staff to deal with all the Moves, then this section can wait. We need to address energy use and transportation first.
- This strategy in particular seems to require a level of nimbleness that is currently lacking in the City. Change management and fostering a culture of engagement, innovation and sustainability is a prerequisite to many of the moves in this and previous st
- Seems highly theoretical as opposed to mitigating threats clearly, historically known
- Shoreline protection as in levees or shoreline protection as in wetlands?
- No real actions. Just review, participate, collaborate, identify, ... It is nice to have plans and projects and discuss with others, but we need real actions.
- Don't waste my tax dollars on this.
- Adaptations is a different matter, not unimportant but not my focus here.
- I just want to stress that this section will not be achieved unless moves B, C, and D are prioritized and intentionally pursued.
- In addition for being prepared for disasters, part of the adaptation plan should be to find ways to avoid the expected riverine flooding through more robust green infrastructure and/or to change land use protocols/zoning in areas of highest risk.
- Another move should be in there: Identify areas of the city which all will be most impacted by sea level rise. That can be done by extracting from regional and state data which neighbors are impacted and how severely they are impacted. Make the data easily accessible by citizen

13. Would you like to share any final thoughts about the Draft Playbook?

- Great job so far! Let's make it happen!

- The whole concept of calling the future of Sunnyvale a "Draft Playbook" sounds like an advertising scheme. There is no mention of the economic strain the plans designed above will put on the average Sunnyvale citizen. This plan is too aggressive and tries to move too fast.
- Thank you very much for the CAP citizen's advisory group, the development, the outreach and the actions taken. Sunnyvale is SUCH a well-run City!
- I want to see sustainability in everything the City does. City staff in all departments should have some required sustainability training (environmental purchasing policy, zero waste, transportation, etc.) to be more sustainability-minded in their daily work. Same with students, and businesses, but with multiple firms it is harder to wrangle. The City could be the first place to start!
- I rated all the actions as low based on carbon emission reduction. Some of the actions are viable and cost effective based on energy reduction. But these will occur without any government intervention and do not require public funding.
- Time to step away from old business-driven choices, and focus on resident health / wellbeing sustainability. Businesses need healthy employees to thrive.
- Please be really clear about what "high" means. Again, I don't think the city is doing enough fast enough.
- I appreciate that this plan is easy to understand and well-written, with the appropriate sense of urgency. That it contains an implementation plan as well as cost estimates is also an improvement over the first plan. I worry that strategies and plays are considered rather static when technologies and climate are moving so quickly. I wish for a method to revise at least the moves between updates for this reason. Also, the next GhG inventory needs to include a consumption audit so that we are aware of the magnitude of this source and its sources.
- This is a bold plan, but we may need to be even bolder. We have 11 years left if we're going to hold temperature increases to 1.5C. Let's get to work.
- Impressive Playbook it is something to be proud of. Bottom line is the chain grocery stores are still the exact opposite by still selling food in non-biodegradable plastic clamshell containers. Sunnyvale should elevate restaurants which use biodegradable take-out containers and let the restaurants market themselves as "green certified" at their door.
- Thanks to everyone who helped put this together!
- Glad you're doing this work. Thank you for the opportunity to comment!
- Need granularity and specificity in quantifiable measures of what we have now (baseline) and how we are progressing
- We need to seriously look at our housing density strategies using actual data from large high-density projects already in place. Most residents are still using cars as the primary mode of transport for commuting and daily errands regardless of "transit oriented" and "mixed use" development, so in the end we just wind up with more congestion and cars operating at their worst efficiency, negatively impacting both carbon emissions and local air quality. Congestion leads to aggressive driving (red light running, driving in bike lanes) and discourages cycling and other non-auto modes of personal transport due to safety concerns. If people are going to drive regardless of their proximity to transit, we are just adding to our landfills and overall energy use

by continuing to build at the highest possible densities. Some solutions would be to ensure that any new office development has VERY little parking, ON-SITE shuttle parking with enforced idling restrictions (on-street and illegal bus parking has become a HUGE problem in Sunnyvale and they frequently illegally block bike lanes!), and require all new housing developments (of *any* density) to have off-street shuttle accommodations as well. Small local-loop (electric) shuttles serving last-mile needs between neighborhoods and transit stops are desperately needed. Please utilize ACTUAL DATA in the decision making process! High density development in and of itself is NOT necessarily "green" - we need to take ALL IMPACTS into consideration.

- It's a good document and very necessary.
- I hope it fails
- The IPCC indicates that in order to avoid the worst climate change scenarios, we will need to reduce CO2 emissions to 45% by 2030, and achieve net zero by 2050. Unfortunately, the goals specified in the draft Climate Action Plan fall considerably short of IPCC recommendations. How do we account for the discrepancy? Shouldn't those of us who live in a wealthy community with access to advanced technology be, if anything, ahead of IPCC recommendations? I believe that lagging on these recommendations is morally reprehensible and is an awful way to provide for our children. The lack of ambition on the part of my own community fills me with a deep shame.
- First order on the Agenda should be to insure all members on the Governing Council are willing and able to conduct business without the prospect of personal gain. And to have a plan installed to initiate removal of any Official upon notice of such actions without hesitation.
- End the collection of so-called recyclables. The program is a failure. It is tax, collect, transport and store. What is the carbon footprint of the ship that take it away to China? Unless a US based program is developed, it is an expensive joke.
- I am very thankful that the City HAS a Playbook, but have concerns about lack of urgency and quantitative details. Words alone will not provide meaningful results.
- Don't waste time on money on your utopia. I don't want to live in a city that does this. Reading this playbook made me sick.
- Identify which Sunnyvale Farmers Market vendors practice regenerative agriculture. (Beyond organic, this is fixing the soil and covering it year round, per this clip on NPR this week. https://www.npr.org/2019/04/27/717756929/california-farmers-try-new-strategy-to-cut-carbon?utm_campaign=storyshare&utm_source=facebook.com&utm_medium=social&fbclid=IwAR1gYVP1Po9mvBEeEiYXE5PQ1ZH7jjPVJa9qkEPBNp1-wf4WGcGiShEPZk
- What a tremendous effort. Thanks so much for all the hard work!! It is great to have all this organized into something we can start using now and will be able to build upon over time.
- How are the 1990 baseline and current emissions measured?
- Great job in putting an overall strategy together!
- First order on the Agenda should be to insure all members on the Governing Council are willing and able to conduct business without the prospect of personal gain. And to have a plan installed to initiate removal of any Official upon notice of such actions without hesitation.
- What a tremendous effort. Thanks so much for all the hard work!! It is great to have all this organized into something we can start using now and will be able to build upon over time.

- All in all, I'm very happy with the final product. I do hope some of my stronger critiques above make it in, but I believe this is a thorough, accessible, and adaptable document that will serve Sunnyvale well as it pursues its 80 by 50 goals.
- Yes. The Playbook is a great improvement from CAP 1.0 and I recommend that it get adopted in June and fully funded for the next three years to support the "Next Moves". // See my full detailed annotated comments on the draft with suggestions for improvement, and a summary of main concerns which were sent to Nupur Hiremath on April 8, 2019. // Each 'Next Move' should have a target so it is clear when it is completed and so the moves can be project managed more closely (than for example the CAP 1.0 actions were). // It will be challenging to complete the 43 'Next Moves' in three years. Let's get started!
- This looks excellent. It is comprehensive and has a nice mix of a few out of the box ideas worth trying. In the final document it would be great to provide full context around timeframes for completing each move as well as explaining any non obvious acronyms (such as VMT). Lastly I would like to know more about what Sunnyvale can do to impact climate initiatives outside our borders, whether by reducing consumption or helping other cities with their climate plans.
- I think the plan is well thought out but we need to focus on the moves that will move the ball ASAP.
- A wonderful piece of work. But transportation needs more work. It is the bull in the china closet but is being treated like a puppy. Thanks for providing the opportunity for comment

NOTES FROM MEETINGS

Public Meetings

Climate Action Plan (CAP 2.0) Advisory Committee Meeting Notes, March 20, 2019 [to be published]

City Council Study Session for Climate Action Plan 2.0, March 26, 2019
File ID: 19-0652

Joint Info Study Session for the Sustainability, Planning, and Bicycle and Pedestrian Advisory Commissions
File ID19-0622

Community Meeting, March 23, 2019
See page 53 of this Attachment

Focus Group: Developer Outreach Meeting, April 8, 2019
See page 67 of this Attachment

Focus Group: Business Outreach Meeting, April 11, 2019
See page 78 of this Attachment

Informal Meetings

Rotary Club Meeting, April 2, 2019
See page 89 of this Attachment

Unitarian Universalist Fellowship of Sunnyvale, April 14, 2019
See page 90 of this Attachment

Notes from Community Meeting March 23, 2019

Title

Climate Action Playbook Community Outreach Meeting – March 21, 2019, 10 a.m. to noon

City Staff Present:

Ramana Chinnakotla
Melody Tovar
Nupur Hiremath
Elizabeth Greenfield

Attendees Present:

Seventeen (17) community members were present.

Meeting Summary:

Ramana Chinnakotla, Director of Environmental Services, in collaboration with Melody Tovar, Regulatory Programs Division Manager, and Nupur Hiremath, Environmental Programs Manager, of the City of Sunnyvale Environmental Services Department, delivered a presentation describing the structure and content of the Draft Climate Action Playbook.

The presentation covered an overview of the history of climate action in Sunnyvale and progress to date; the targets of the new Climate Action Playbook; and the proposed Strategies, Plays, targets, and Moves to reduce greenhouse gas emissions by 2050. Attendees participated in live polling and an interactive dot voting activity to indicate the Plays and Moves they were excited and concerned about (see following pages).

Attendees asked questions and made comments on the information presented, which included:

- Questions regarding the meaning and implication of terms, such as Zero Net Energy, Utility Use Tax, and electric vehicles.
- Questions about State targets, proposed Plays, and their targets.
- Requests for improved documentation of the methodology used to assess greenhouse gas emissions.
- Encouragement to engage with community groups and volunteers more effectively to enhance interest and participation in climate action.

Staff provided clarifications that no carbon offsets were included in the plan to achieve the 2050 target. Staff also explained that the Game Plan 2022, included in the Draft Playbook, is the implementation plan for the initial cycle. In addition, staff noted that the Utility Use Tax UUT would need additional study, outreach with affected stakeholders, and City Council approval before implementation.

Dot Voting Exercise Results

Meeting attendees were invited to share feedback on the Next Moves in the Game Plan 2022 of the Playbook. Each attendee was given 10 blue dot stickers to place next to Moves they were excited about and 10 red dots to place next to Moves they wanted to remove. Attendees could also provide more general comments on specific moves via post-its. The results of the Dot Voting Exercise and comments provided by attendees are summarized by Strategy below.

Strategy 1: Promoting Clean Electricity		
Play 1.1: Promote 100% clean electricity		
Next Moves		Count of Blue Dots (Excited)
1.A	Continue to support and steer Silicon Valley Clean Energy (SVCE) in providing clean power and decarbonization programs.	6
1.B	Collaborate with SVCE to target direct access customers to shift to 100% clean electricity.	2
Play 1.2: Increase distributed solar photovoltaics and storage		
Next Moves		
1.C	Collaborate with SVCE to evaluate opportunities for energy storage and to maximize utilization of local solar supply.	11

Comments:

- Use EV Batteries for Storage – is EV friendly
- What are the outreach initiatives planned?
- Again, help renters be able to advocate for increased efficiency in residences we don't own.

Strategy 2: Decarbonizing Buildings		
Play 2.1: Reduce energy consumption in existing buildings		
Next Moves		Count of Blue Dots (Excited)
		Count of Red Dots (Remove)
2.A	Research energy disclosure and energy benchmarking requirements for commercial and multi-family residential buildings to encourage property owners and managers to invest in energy efficiency upgrades and building information systems.	4
2.B	Advocate to regional providers of energy efficiency programs (such as Bay Area Regional Energy Network or BayREN, Silicon Valley Energy Watch or SVEW) that their offerings are more aggressively promoted to Sunnyvale residents and businesses.	
Play 2.2: Support electrification of existing buildings		
Next Moves		
2.C	Develop a program to accelerate the adoption of heat pump water heaters and space heaters.	7
2.D	Electrify municipal buildings upon rebuild or significant remodel, including the Civic Center.	1
Play 2.3: Zero Net Energy and all-electric new construction		
Next Moves		
2.E	Evaluate code and permitting processes to streamline building electrification.	4
2.F	Investigate the potential for implementing a differential Utility Use Tax that is at least revenue neutral, such that local taxes on electricity are lower than on natural gas, to incentivize electrification.	4
2.G	Continue to incentivize energy efficient and high performance buildings through the Green Building Program updates.	5
2.H	Research a mandatory solar roof ordinance for new commercial developments.	5

Comments:

- Benchmark! Yes!
- I just got a heat-pump water heater last October with mixed results. I am not seeing the bill savings I thought I would see, and there were additional costs to implementation than I anticipated. The lack of savings may be because my price-point comparisons are only during the winter months so far.
- Move 2.H: I'm concerned about the "cradle to grave" emissions of solar and electrical vehicles aren't included in the analysis. Can this be added in the next update?
- Move 2.G: All for incentivizing energy efficient upgrades for homeowners. Billion dollar corporations do not need rebates to implement climate action initiatives.

- I don't see this talking about e.g. weatherization upgrades of old buildings—also important for efficiency, need to incentivize

Strategy 3: Decarbonizing Transportation & Sustainable Land Use		
Play 3.1: Balance land use supply and enhance urban form		
Next Moves		Count of Blue Dots (Excited)
		Count of Red Dots (Remove)
3.A	Plan for additional housing, with the goal of diverse housing, to reduce long-distance commutes.	9
3.B	Identify areas that are most appropriate for parking strategies that discourage vehicle use, such as pricing, time limits and supply reductions.	2
Play 3.2: Increase transportation options and support shared mobility		
Next Moves		
3.C	Enhance City Transportation Demand Management (TDM) program implementation and monitoring to facilitate further reductions in single-occupant automobile trips, citywide.	4
3.D	Advocate that regional service providers implement high quality transit service and a robust set of first- and last-mile strategies in over two-thirds of the cross-city corridors.	2
3.E	Update and implement the Integrated Bicycle, Pedestrian and Safe Routes to School Plan to achieve a connected, safe and active network.	10
3.F	Pilot and evaluate shared bicycle and scooter programs.	2
3.G	Pilot shuttle service in Peery Park and consider options for expansion of a similar service in other areas undergoing redevelopment.	4
3.H	Develop design standards for streets and parking lots to accommodate increased pick-up and drop-off for rideshare passengers and apply as appropriate.	1
3.I	Monitor autonomous vehicle testing and deployment to inform proactive policy	1
Play 3.3: Increase zero-emission vehicles		
Next Moves		
3.J	Develop a Community Electric Vehicle Readiness and Infrastructure Plan.	4
3.K	Promote and seek incentives for community adoption of electric vehicles.	2
3.L	Electrify Municipal Fleet as vehicles are replaced and continue to seek incentives for electric vehicles and charging infrastructure.	2

Comments:

- Balance development of new “mixed use buildings.” Do we need more retail facilities when online services are popular? For example 1) the latest redevelopment in Sunnyvale DT. 2) Kyli project in Santa Clara. Do we need these?
- Include helmets in bike/scooter rental. This would remove some hesitation of some people to use them

- Require all new housing developments to provide safe routes for bikes and pedestrians
- How is legislation around scooters going to be managed?
- Move 3.J needs more detail. How it gets us to target.
- Need a citywide shuttle
- MORE BIKE LANES offset from car lanes!!!
- It takes me 15 min to drive to work, but 1.5 hours to go via bus. Can the light rail be made faster?
- Need a people mover from Caltrain to Peery & Moffett Park
- Add bike infrastructure (separated bike lanes & bike parking locations)

Strategy 4: Managing Resources Sustainably		
Play 4.1: Achieve Zero Waste goals		
Next Moves	Count of Blue Dots (Excited)	Count of Red Dots (Remove)
4.A Implement and expand food scraps diversion programs to include additional businesses and multi-family residents.	5	
4.B Consider solid waste collection and processing improvements to increase waste diversion away from landfills as a part of service provider and facility transition planning.	2	
4.C Implement campaigns for waste prevention.	3	
Play 4.2: Ensure resilience of water supply		
Next Moves		
4.D Promote and seek incentives for making water conservation a way of life and set a water reduction target consistent with new statewide requirements.	6	
4.E Partner with Valley Water to evaluate opportunities to expand water reuse.	4	
Play 4.3: Enhance natural carbon sequestration capacity		
Next Moves		
4.F Implement the City's Urban Forest Management Plan and continue to protect and expand tree canopy.	7	
4.G Implement the City's Green Stormwater Infrastructure Plan.	3	1
Play 4.4: Shift to low carbon food		
Next Moves		
4.H Promote consumer awareness of low carbon foods.	2	1
4.I Work with large businesses to identify best practices for implementing local food gardens.	3	1

Comments:

- Can we consider tabulating and informing citizens about airline travel?
- Very important category. Gets at consumption emissions.
- Consider consumption inventory.
- Rainwater harvesting?
- Groundwater recharge initiatives?
- Encourage residents to calculate individual carbon footprint
- 4.I Identifying best practices is good, work with large businesses to subsidize locally grown food for low income families
- Need standard Food Cycle for apartments

- Reduce single-use plastics in businesses (& homes I guess too)
- Carbon capture through composting and sustainable landscaping
- Need action on building a sharing ethic
- Category needs strengthening
- Expand 4.F and 4.I to include effective carbon capture and carbon sequestration in the soil of residences and even businesses

Strategy 5: Empowering Our Community		
Play 5.1: Enhance community awareness and engagement		
Next Moves	Count of Blue Dots (Excited)	Count of Red Dots (Remove)
5.A Pilot a targeted grassroots community engagement strategy (e.g., Cool Blocks Program) to create stronger connections between neighbors to advance climate action and emergency preparedness.	6	
5.B Evaluate opportunities for the City to provide online resources and tools for community and small business climate action (e.g., resource center for retrofit electrification, online tool or app to track individual carbon emissions).	3	1
5.C Create a stronger social media and web presence for Sunnyvale climate action.	2	
5.D Implement the Sustainability Speaker Series.	2	
5.E Evaluate and pilot a program for youth engagement on climate, building on current engagement with school classrooms and green teams.	1	
5.F Build relationships with largest employers to collaborate on climate action, such as: (a) engaging employees to participate in sustainability initiatives; (b) encouraging and facilitating investment in climate action programs or projects.	7	1
Play 5.2: Track and share data and tools		
Next Moves		
5.G Implement improvements for climate action data performance tracking and reporting progress to the public (e.g., community dashboard).	1	1
5.H Publish annual greenhouse gas (GHG) inventory.	1	

Comments:

- How are residents going to access events?
- Key category
- GHG reporting belongs on city homepage
- How about public art that encourages sustainability – Chris Jorden
- Sustainable gardening and landscaping: No leaf blowers; No chemicals
- Probably need new online tool that emphasizes acting and greatest impact
- Empowering renters to get engaged. Not all of us get a say as to how our residences use energy. Help!
- Build on MYN emergency preparedness program with community engagement process
- GHG performance data needs to be prominently displayed at all city facilities
- Want to make sure that online services are accessible to all
- Not all residents have access to stable WiFi

Strategy 6: Adapting to a Changing Climate			
Play 6.1: Assess climate vulnerabilities for Sunnyvale			
Next Moves		Count of Blue Dots (Excited)	Count of Red Dots (Remove)
6.A	Review and summarize assessment products developed by the County's Silicon Valley 2.0 project and by the State.		
6.B	Participate in regional forums on climate vulnerability and adaptation.	2	
Play 6.2: Protect shoreline area from sea level rise and coastal flooding			
Next Moves			
6.C	Collaborate with Valley Water to advance a shoreline protection project with the US Army Corps of Engineers or other partners.	4	
6.D	Identify shoreline protection solutions as part of Moffett Park Specific Plan update.	2	
Play 6.3: Strengthen community resiliency			
Next Moves			
6.E	Update existing emergency preparedness and response plans to address climate-related impacts such as heat events, air quality issues and flooding.	3	
6.F	Develop a community resiliency plan.	5	2

Comments:

- Clearly identify areas at risk from sea level rise
- Basic function of government
- Need to clarify what 6D means
- Will the resiliency plan be separate from CAP
- Valley water should expedite Bike/Ped on East and West Channels
- Great to see regional collaboration listed here

Live Polling Results from Community Meeting

March 23, 2019

Number of Meeting Attendees: 17

Number of Poll Participants: 12

Source: Zeetings Live Polling Software

Number	Question	Answer	Responses	Type	Status
1	1. How did you get to today's meeting?	I drove	6	Multiple Choice	Active
1	1. How did you get to today's meeting?	I rode a bike/scooter	3	Multiple Choice	Active
1	1. How did you get to today's meeting?	I walked	0	Multiple Choice	Active
1	1. How did you get to today's meeting?	I used my ruby slippers	0	Multiple Choice	Active
1	1. How did you get to today's meeting?	I flew on my zero emissions broomstick	1	Multiple Choice	Active
2	2. Sunnyvale's community-wide emissions are currently at 28% below 1990 levels. With the Climate Action Playbook, the City is proposing to achieve an 80% reduction by 2050. What do you think about the City's proposed target?	Target is not ambitious enough.	5	Multiple Choice	Active
2	2. Sunnyvale's community-wide emissions are currently at 28% below 1990 levels. With the Climate Action Playbook, the City is proposing to achieve an 80% reduction by 2050. What do you think about the City's proposed target?	Target is appropriate.	3	Multiple Choice	Active
2	2. Sunnyvale's community-wide emissions are currently at 28% below 1990 levels. With the Climate Action Playbook, the City is proposing to achieve an 80% reduction by 2050. What do you think about the City's proposed target?	Target is too ambitious.	0	Multiple Choice	Active
2	2. Sunnyvale's community-wide emissions are currently at 28% below 1990 levels. With the Climate Action Playbook, the City is proposing to achieve an 80% reduction by 2050. What do you think about the City's proposed target?	Unsure	2	Multiple Choice	Active
3	3. Which Plays are you most excited about?	Play 1.1: Promote 100% clean electricity	5	Multiple Selection	Active
3	3. Which Plays are you most excited about?	Play 1.2: Increase distributed solar photovoltaics and storage	3	Multiple Selection	Active

Number	Question	Answer	Responses	Type	Status
3	3. Which Plays are you most excited about?	Play 2.1: Reduce energy consumption in existing buildings	4	Multiple Selection	Active
3	3. Which Plays are you most excited about?	Play 2.2: Support electrification of existing buildings	5	Multiple Selection	Active
3	3. Which Plays are you most excited about?	Play 2.3: Zero Net Energy and all-electric new construction	4	Multiple Selection	Active
3	3. Which Plays are you most excited about?	Play 3.1: Balance land use supply and enhance urban form	2	Multiple Selection	Active
3	3. Which Plays are you most excited about?	Play 3.2: Increase transportation options and support shared mobility	8	Multiple Selection	Active
3	3. Which Plays are you most excited about?	Play 3.3: Increase zero-emission vehicles	4	Multiple Selection	Active
3	3. Which Plays are you most excited about?	Play 4.1: Achieve zero waste goals	3	Multiple Selection	Active
3	3. Which Plays are you most excited about?	Play 4.2: Ensure resilience of water supply	2	Multiple Selection	Active
3	3. Which Plays are you most excited about?	Play 4.3: Enhance natural carbon sequestration capacity	3	Multiple Selection	Active
3	3. Which Plays are you most excited about?	Play 4.4: Shift to low carbon food	3	Multiple Selection	Active
3	3. Which Plays are you most excited about?	Play 5.1: Enhance community awareness and engagement	6	Multiple Selection	Active
3	3. Which Plays are you most excited about?	Play 5.2: Track and share data and tools	3	Multiple Selection	Active
3	3. Which Plays are you most excited about?	Play 6.1: Assess climate vulnerabilities for Sunnyvale	4	Multiple Selection	Active
3	3. Which Plays are you most excited about?	Play 6.2: Protect shoreline area from sea level rise and coastal flooding	2	Multiple Selection	Active
3	3. Which Plays are you most excited about?	Play 6.3: Strengthen community resiliency	2	Multiple Selection	Active
4	4. Which Plays are you most concerned about?	Play 1.1: Promote 100% clean electricity	0	Multiple Selection	Active
4	4. Which Plays are you most concerned about?	Play 1.2: Increase distributed solar ☐ photovoltaics and storage	0	Multiple Selection	Active

Number	Question	Answer	Responses	Type	Status
4	4. Which Plays are you most concerned about?	Play 2.1: Reduce energy consumption in existing buildings	0	Multiple Selection	Active
4	4. Which Plays are you most concerned about?	Play 2.2: Support electrification of existing buildings	0	Multiple Selection	Active
4	4. Which Plays are you most concerned about?	Play 2.3: Zero Net Energy and all-electric new construction	0	Multiple Selection	Active
4	4. Which Plays are you most concerned about?	Play 3.1: Balance land use supply and enhance urban form	0	Multiple Selection	Active
4	4. Which Plays are you most concerned about?	Play 3.2: Increase transportation options and support shared mobility	0	Multiple Selection	Active
4	4. Which Plays are you most concerned about?	Play 3.3: Increase zero-emission vehicles	1	Multiple Selection	Active
4	4. Which Plays are you most concerned about?	Play 4.1: Achieve zero waste goals	0	Multiple Selection	Active
4	4. Which Plays are you most concerned about?	Play 4.2: Ensure resilience of water supply	0	Multiple Selection	Active
4	4. Which Plays are you most concerned about?	Play 4.3: Enhance natural carbon sequestration capacity	0	Multiple Selection	Active
4	4. Which Plays are you most concerned about?	Play 4.4: Shift to low carbon food	0	Multiple Selection	Active
4	4. Which Plays are you most concerned about?	Play 5.1: Enhance community awareness and engagement	0	Multiple Selection	Active
4	4. Which Plays are you most concerned about?	Play 5.2: Track and share data and tools	1	Multiple Selection	Active
4	4. Which Plays are you most concerned about?	Play 6.1: Assess climate vulnerabilities for Sunnyvale	0	Multiple Selection	Active
4	4. Which Plays are you most concerned about?	Play 6.2: Protect shoreline area from sea level rise and coastal flooding	0	Multiple Selection	Active
4	4. Which Plays are you most concerned about?	Play 6.3: Strengthen community resiliency	0	Multiple Selection	Active
5	5. Given what you have now learned about the Strategies and Plays, what do you think of Sunnyvale's targets of reducing emissions by 80% by 2050 (carbon neutrality)?	Target is not ambitious enough.	6	Multiple Choice	Active

Number	Question	Answer	Responses	Type	Status
5	5. Given what you have now learned about the Strategies and Plays, what do you think of Sunnyvale's targets of reducing emissions by 80% by 2050 (carbon neutrality)?	Target is appropriate.	4	Multiple Choice	Active
5	5. Given what you have now learned about the Strategies and Plays, what do you think of Sunnyvale's targets of reducing emissions by 80% by 2050 (carbon neutrality)?	Target is too ambitious.	0	Multiple Choice	Active
5	5. Given what you have now learned about the Strategies and Plays, what do you think of Sunnyvale's targets of reducing emissions by 80% by 2050 (carbon neutrality)?	Unsure	2	Multiple Choice	Active
5	Sunnyvale's community-wide emissions are currently at 28% below 1990 levels. With the Climate Action Playbook, the City is proposing to achieve an 80% reduction by 2050. What do you think about the City's proposed target?	Target is too ambitious.	0	Multiple Choice	5
5	Sunnyvale's community-wide emissions are currently at 28% below 1990 levels. With the Climate Action Playbook, the City is proposing to achieve an 80% reduction by 2050. What do you think about the City's proposed target?	Unsure.	1	Multiple Choice	5

Notes from Focus Group: Developer Outreach Meeting April 8, 2019

Title

Climate Action Playbook Developer Outreach Meeting – April 8, 2019, 10 a.m. to noon

City Staff Present:

Ramana Chinnakotla
Trudi Ryan
Melody Tovar
Nupur Hiremath
Elizabeth Greenfield

Attendees Present:

Patty Rhodes, Juniper
Peter Larko, JP DiNapoli Companies Inc.
Dan Deibel, Olympic Residential

Meeting Summary:

Ramana Chinnakotla, Director of Environmental Services, in collaboration with Melody Tovar, Regulatory Programs Division Manager, and Nupur Hiremath, Environmental Programs Manager, of the City of Sunnyvale Environmental Services Department, delivered a presentation describing the structure and content of the Draft Climate Action Playbook.

The presentation covered an overview of the history of climate action in Sunnyvale and progress to date; the targets of the new Climate Action Playbook; and the proposed Strategies, Plays, targets, and Moves to reduce greenhouse gas emissions by 2050. Attendees participated in live polling and an interactive dot voting activity to indicate the Plays and Moves they were excited and concerned about (see following pages).

Attendees asked questions and made comments on the information presented, which included:

- Questions about the renewable energy portfolio difference between Silicon Valley Clean Energy (SVCE) and Pacific Gas & Electric (PG&E).
- Clarification of the meaning of Play 3.1 - Balance land use supply and enhance urban form.
- Clarification of the definition of Zero Net Energy and the feasibility of achieving it for high-rise buildings with high load but limited area for installing onsite rooftop solar.
- Clarification on whether onsite electricity generation from natural gas would be exempt from efforts to discourage natural gas use.
- Clarification on the meaning of Play 4.4 - Shift to low carbon food.
- Question about the process for adopting a mandatory solar ordinance.
- Comments about the challenges facing decarbonizing transportation, including shrinking bus service, the regional scope of the issue, and limited public transportation options available in Sunnyvale.
- Clarifications about potential funding sources for the Playbook, including carbon impact fees.
- Question about whether the Climate Action Playbook would apply to projects already approved but not yet built.

Dot Voting Exercise Results

Meeting attendees were invited to share feedback on the Next Moves in the Game Plan 2022 of the Playbook. Each attendee was given 10 blue dot stickers to place next to Moves they were excited about and 10 red dots to place next to Moves they wanted to remove. Attendees could also provide more general comments on specific moves via post-its. The results of the Dot Voting Exercise and comments provided by attendees are summarized by Strategy below.

Strategy 1: Promoting Clean Electricity		
Play 1.1: Promote 100% clean electricity		
Next Moves		Count of Blue Dots (Excited)
		Count of Red Dots (Remove)
1.A	Continue to support and steer Silicon Valley Clean Energy (SVCE) in providing clean power and decarbonization programs.	
1.B	Collaborate with SVCE to target direct access customers to shift to 100% clean electricity.	
Play 1.2: Increase distributed solar photovoltaics and storage		
Next Moves		
1.C	Collaborate with SVCE to evaluate opportunities for energy storage and to maximize utilization of local solar supply.	1

Comments:

None.

Strategy 2: Decarbonizing Buildings		
Play 2.1: Reduce energy consumption in existing buildings		
Next Moves	Count of Blue Dots (Excited)	Count of Red Dots (Remove)
2.A Research energy disclosure and energy benchmarking requirements for commercial and multi-family residential buildings to encourage property owners and managers to invest in energy efficiency upgrades and building information systems.	2	
2.B Advocate to regional providers of energy efficiency programs (such as Bay Area Regional Energy Network or BayREN, Silicon Valley Energy Watch or SVEW) that their offerings are more aggressively promoted to Sunnyvale residents and businesses.		
Play 2.2: Support electrification of existing buildings		
Next Moves		
2.C Develop a program to accelerate the adoption of heat pump water heaters and space heaters.	1	
2.D Electrify municipal buildings upon rebuild or significant remodel, including the Civic Center.	1	
Play 2.3: Zero Net Energy and all-electric new construction		
Next Moves		
2.E Evaluate code and permitting processes to streamline building electrification.		
2.F Investigate the potential for implementing a differential Utility Use Tax that is at least revenue neutral, such that local taxes on electricity are lower than on natural gas, to incentivize electrification.	2	
2.G Continue to incentivize energy efficient and high performance buildings through the Green Building Program updates.	3	
2.H Research a mandatory solar roof ordinance for new commercial developments.		1

Comments:

None.

Strategy 3: Decarbonizing Transportation & Sustainable Land Use		
Play 3.1: Balance land use supply and enhance urban form		
	Next Moves	Count of Blue Dots (Excited) Count of Red Dots (Remove)
3.A	Plan for additional housing, with the goal of diverse housing, to reduce long-distance commutes.	2
3.B	Identify areas that are most appropriate for parking strategies that discourage vehicle use, such as pricing, time limits and supply reductions.	
Play 3.2: Increase transportation options and support shared mobility		
	Next Moves	
3.C	Enhance City Transportation Demand Management (TDM) program implementation and monitoring to facilitate further reductions in single-occupant automobile trips, citywide.	
3.D	Advocate that regional service providers implement high quality transit service and a robust set of first- and last-mile strategies in over two-thirds of the cross-city corridors.	3
3.E	Update and implement the Integrated Bicycle, Pedestrian and Safe Routes to School Plan to achieve a connected, safe and active network.	
3.F	Pilot and evaluate shared bicycle and scooter programs.	
3.G	Pilot shuttle service in Peery Park and consider options for expansion of a similar service in other areas undergoing redevelopment.	1
3.H	Develop design standards for streets and parking lots to accommodate increased pick-up and drop-off for rideshare passengers and apply as appropriate.	2
3.I	Monitor autonomous vehicle testing and deployment to inform proactive policy	
Play 3.3: Increase zero-emission vehicles		
	Next Moves	
3.J	Develop a Community Electric Vehicle Readiness and Infrastructure Plan.	1
3.K	Promote and seek incentives for community adoption of electric vehicles.	
3.L	Electrify Municipal Fleet as vehicles are replaced and continue to seek incentives for electric vehicles and charging infrastructure.	

Comments:

None.

**Strategy 4:
Managing Resources Sustainably**

Play 4.1: Achieve Zero Waste goals

	Next Moves	Count of Blue Dots (Excited)	Count of Red Dots (Remove)
4.A	Implement and expand food scraps diversion programs to include additional businesses and multi-family residents.		
4.B	Consider solid waste collection and processing improvements to increase waste diversion away from landfills as a part of service provider and facility transition planning.		
4.C	Implement campaigns for waste prevention.		

Play 4.2: Ensure resilience of water supply

	Next Moves		
4.D	Promote and seek incentives for making water conservation a way of life and set a water reduction target consistent with new statewide requirements.		
4.E	Partner with Valley Water to evaluate opportunities to expand water reuse.		

Play 4.3: Enhance natural carbon sequestration capacity

	Next Moves		
4.F	Implement the City's Urban Forest Management Plan and continue to protect and expand tree canopy.		
4.G	Implement the City's Green Stormwater Infrastructure Plan.		

Play 4.4: Shift to low carbon food

	Next Moves		
4.H	Promote consumer awareness of low carbon foods.		
4.I	Work with large businesses to identify best practices for implementing local food gardens.		

Comments:

None.

Strategy 5: Empowering Our Community		
Play 5.1: Enhance community awareness and engagement		
Next Moves	Count of Blue Dots (Excited)	Count of Red Dots (Remove)
5.A Pilot a targeted grassroots community engagement strategy (e.g., Cool Blocks Program) to create stronger connections between neighbors to advance climate action and emergency preparedness.		
5.B Evaluate opportunities for the City to provide online resources and tools for community and small business climate action (e.g., resource center for retrofit electrification, online tool or app to track individual carbon emissions).		
5.C Create a stronger social media and web presence for Sunnyvale climate action.		
5.D Implement the Sustainability Speaker Series.	1	
5.E Evaluate and pilot a program for youth engagement on climate, building on current engagement with school classrooms and green teams.	2	
5.F Build relationships with largest employers to collaborate on climate action, such as: (a) engaging employees to participate in sustainability initiatives; (b) encouraging and facilitating investment in climate action programs or projects.		
Play 5.2: Track and share data and tools		
Next Moves		
5.G Implement improvements for climate action data performance tracking and reporting progress to the public (e.g., community dashboard).		
5.H Publish annual greenhouse gas (GHG) inventory.		

Comments:

None.

Strategy 6: Adapting to a Changing Climate			
Play 6.1: Assess climate vulnerabilities for Sunnyvale			
Next Moves		Count of Blue Dots (Excited)	Count of Red Dots (Remove)
6.A	Review and summarize assessment products developed by the County's Silicon Valley 2.0 project and by the State.		
6.B	Participate in regional forums on climate vulnerability and adaptation.		
Play 6.2: Protect shoreline area from sea level rise and coastal flooding			
Next Moves			
6.C	Collaborate with Valley Water to advance a shoreline protection project with the US Army Corps of Engineers or other partners.		
6.D	Identify shoreline protection solutions as part of Moffett Park Specific Plan update.		
Play 6.3: Strengthen community resiliency			
Next Moves			
6.E	Update existing emergency preparedness and response plans to address climate-related impacts such as heat events, air quality issues and flooding.		
6.F	Develop a community resiliency plan.		

Comments:

None.

Live Polling Results from Developer Meeting

April 15, 2019

Number of Meeting Attendees: 3

Number of Poll Participants: 3

Source: Zeetings Live Polling Software

Number	Question	Answer	Responses	Type	Status
1	Test question: How did you get here today?	I drove my car	1	Multiple Choice	Active
1	Test question: How did you get here today?	I drove in my electric/zero emissions car	1	Multiple Choice	Active
1	Test question: How did you get here today?	I biked	0	Multiple Choice	Active
1	Test question: How did you get here today?	I walked	0	Multiple Choice	Active
1	Test question: How did you get here today?	I used my ruby slippers	0	Multiple Choice	Active
1	Test question: How did you get here today?	I flew on my zero emissions broomstick	0	Multiple Choice	Active
2	Sunnyvale's community-wide emissions are currently at 28% below 1990 levels. With the Climate Action Playbook, the City is proposing to achieve an 80% reduction by 2050. What do you think about the City's proposed target?	Target is not ambitious enough.	0	Multiple Choice	Active
2	Sunnyvale's community-wide emissions are currently at 28% below 1990 levels. With the Climate Action Playbook, the City is proposing to achieve an 80% reduction by 2050. What do you think about the City's proposed target?	Target is appropriate.	0	Multiple Choice	Active
2	Sunnyvale's community-wide emissions are currently at 28% below 1990 levels. With the Climate Action Playbook, the City is proposing to achieve an 80% reduction by 2050. What do you think about the City's proposed target?	Target is too ambitious.	0	Multiple Choice	Active
2	Sunnyvale's community-wide emissions are currently at 28% below 1990 levels. With the Climate Action Playbook, the City is proposing to achieve an 80% reduction by 2050. What do you think about the City's proposed target?	Unsure.	2	Multiple Choice	Active
3	Which Plays are you excited about?	Play 1.1: Promote 100% clean electricity	1	Multiple Selection	Active

Number	Question	Answer	Responses	Type	Status
3	Which Plays are you excited about?	Play 1.2: Increase distributed solar ☑ photovoltaics and storage	1	Multiple Selection	Active
3	Which Plays are you excited about?	Play 2.1: Reduce energy consumption in existing buildings	3	Multiple Selection	Active
3	Which Plays are you excited about?	Play 2.2: Support electrification of existing buildings	2	Multiple Selection	Active
3	Which Plays are you excited about?	Play 2.3: Zero Net Energy and all-electric new construction	1	Multiple Selection	Active
3	Which Plays are you excited about?	Play 3.1: Balance land use supply and enhance urban form	2	Multiple Selection	Active
3	Which Plays are you excited about?	Play 3.2: Increase transportation options and support shared mobility	3	Multiple Selection	Active
3	Which Plays are you excited about?	Play 3.3: Increase zero-emission vehicles	2	Multiple Selection	Active
3	Which Plays are you excited about?	Play 4.1: Achieve zero waste goals	0	Multiple Selection	Active
3	Which Plays are you excited about?	Play 4.2: Ensure resilience of water supply	0	Multiple Selection	Active
3	Which Plays are you excited about?	Play 4.3: Enhance natural carbon sequestration capacity	0	Multiple Selection	Active
3	Which Plays are you excited about?	Play 4.4: Shift to low carbon food	0	Multiple Selection	Active
3	Which Plays are you excited about?	Play 5.1: Enhance community awareness and engagement	2	Multiple Selection	Active
3	Which Plays are you excited about?	Play 5.2: Track and share data and tools	2	Multiple Selection	Active
3	Which Plays are you excited about?	Play 6.1: Assess climate vulnerabilities for Sunnyvale	0	Multiple Selection	Active
3	Which Plays are you excited about?	Play 6.2: Protect shoreline area from sea level rise and coastal flooding	1	Multiple Selection	Active
3	Which Plays are you excited about?	Play 6.3: Strengthen community resiliency	0	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 1.1: Promote 100% clean electricity	0	Multiple Selection	Active

Number	Question	Answer	Responses	Type	Status
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 1.2: Increase distributed solar ☒ photovoltaics and storage	0	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 2.1: Reduce energy consumption in existing buildings	0	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 2.2: Support electrification of existing buildings	0	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 2.3: Zero Net Energy and all-electric new construction	1	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 3.1: Balance land use supply and enhance urban form	0	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 3.2: Increase transportation options and support shared mobility	0	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 3.3: Increase zero-emission vehicles	0	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 4.1: Achieve zero waste goals	0	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 4.2: Ensure resilience of water supply	0	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 4.3: Enhance natural carbon sequestration capacity	0	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 4.4: Shift to low carbon food	3	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 5.1: Enhance community awareness and engagement	0	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 5.2: Track and share data and tools	0	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 6.1: Assess climate vulnerabilities for Sunnyvale	0	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 6.2: Protect shoreline area from sea level rise and coastal flooding	0	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 6.3: Strengthen community resiliency	0	Multiple Selection	Active

Number	Question	Answer	Responses	Type	Status
5	Sunnyvale's community-wide emissions are currently at 28% below 1990 levels. With the Climate Action Playbook, the City is proposing to achieve an 80% reduction by 2050. What do you think about the City's proposed target?	Target is not ambitious enough.	0	Multiple Choice	Active
5	Sunnyvale's community-wide emissions are currently at 28% below 1990 levels. With the Climate Action Playbook, the City is proposing to achieve an 80% reduction by 2050. What do you think about the City's proposed target?	Target is appropriate.	3	Multiple Choice	Active
5	Sunnyvale's community-wide emissions are currently at 28% below 1990 levels. With the Climate Action Playbook, the City is proposing to achieve an 80% reduction by 2050. What do you think about the City's proposed target?	Target is too ambitious.	0	Multiple Choice	Active
5	Sunnyvale's community-wide emissions are currently at 28% below 1990 levels. With the Climate Action Playbook, the City is proposing to achieve an 80% reduction by 2050. What do you think about the City's proposed target?	Unsure.	0	Multiple Choice	Active
5	Sunnyvale's community-wide emissions are currently at 28% below 1990 levels. With the Climate Action Playbook, the City is proposing to achieve an 80% reduction by 2050. What do you think about the City's proposed target?	Unsure.	1	Multiple Choice	Active

Notes from Focus Group: Business Outreach Meeting April 11, 2019

Title

Climate Action Playbook Business Outreach Meeting – April 11, 2019, 8:30 a.m. to 10:30 a.m.

Staff Present:

Nupur Hiremath
Elizabeth Greenfield
Olivia Thomas
Maria Rodriguez
Connie Verceles

Attendees Present:

Cindy O'Leary, XP Power
Lauren Sparandara, Google
Layla Monajemi, Juniper Networks
Angela Rausch, resident

Meeting Summary:

Nupur Hiremath, Environmental Programs Manager at the City of Sunnyvale Environmental Services Department, delivered a presentation describing the structure and content of the Draft Climate Action Playbook.

The presentation covered an overview of the history of climate action in Sunnyvale and progress to date; the targets of the new Climate Action Playbook; and the proposed Strategies, Plays, targets, and Moves to reduce greenhouse gas emissions by 2050. Attendees participated in live polling and an interactive dot voting activity to indicate the Plays and Moves they were excited and concerned about (see following pages).

- Attendees asked questions and made comments on the information presented, which included: Concern about discouraging all natural gas use, specifically on-site natural gas used for electricity generation.
- Questions about the timeline of implementation of the Utility Use Tax (UUT).
- Questions about how the ambitious vehicle miles traveled (VMT) reduction goals will be met, and how emissions reductions are measured.
- Comment about California Public Utility Commission (CPUC)-mandated exit fees that make participation in Silicon Valley Clean Energy (SVCE) less attractive for businesses.
- Question about whether carbon impact fees would include embodied carbon.
- Question about where to access information about the FoodCycle program.

Dot Voting Exercise Results

Meeting attendees were invited to share feedback on the Next Moves in the Game Plan 2022 of the Playbook. Each attendee was given 10 blue dot stickers to place next to Moves they were excited about and 10 red dots to place next to Moves they wanted to remove. Attendees could also provide more general comments on specific moves via post-its. The results of the Dot Voting Exercise and comments provided by attendees are summarized by Strategy below.

Strategy 1: Promoting Clean Electricity		
Play 1.1: Promote 100% clean electricity		
Next Moves		Count of Blue Dots (Excited)
		Count of Red Dots (Remove)
1.A	Continue to support and steer Silicon Valley Clean Energy (SVCE) in providing clean power and decarbonization programs.	1
1.B	Collaborate with SVCE to target direct access customers to shift to 100% clean electricity.	1
Play 1.2: Increase distributed solar photovoltaics and storage		
Next Moves		
1.C	Collaborate with SVCE to evaluate opportunities for energy storage and to maximize utilization of local solar supply.	1

Comments:

- Collaboration with SVCE without CPUC's engagement might result in significant business impact. The exist [sic] fee that SVCE's customers are charged is mandated by CPUC.

Strategy 2: Decarbonizing Buildings		
Play 2.1: Reduce energy consumption in existing buildings		
Next Moves		Count of Blue Dots (Excited)
		Count of Red Dots (Remove)
2.A	Research energy disclosure and energy benchmarking requirements for commercial and multi-family residential buildings to encourage property owners and managers to invest in energy efficiency upgrades and building information systems.	1
2.B	Advocate to regional providers of energy efficiency programs (such as Bay Area Regional Energy Network or BayREN, Silicon Valley Energy Watch or SVEW) that their offerings are more aggressively promoted to Sunnyvale residents and businesses.	1
Play 2.2: Support electrification of existing buildings		
Next Moves		
2.C	Develop a program to accelerate the adoption of heat pump water heaters and space heaters.	
2.D	Electrify municipal buildings upon rebuild or significant remodel, including the Civic Center.	
Play 2.3: Zero Net Energy and all-electric new construction		
Next Moves		
2.E	Evaluate code and permitting processes to streamline building electrification.	2
2.F	Investigate the potential for implementing a differential Utility Use Tax that is at least revenue neutral, such that local taxes on electricity are lower than on natural gas, to incentivize electrification.	2
2.G	Continue to incentivize energy efficient and high performance buildings through the Green Building Program updates.	3
2.H	Research a mandatory solar roof ordinance for new commercial developments.	1

Comments:

- Local tax on natural gas used for onsite power generation technologies should be treated differently than NG used for core purposes.

Strategy 3: Decarbonizing Transportation & Sustainable Land Use		
Play 3.1: Balance land use supply and enhance urban form		
Next Moves	Count of Blue Dots (Excited)	Count of Red Dots (Remove)
3.A Plan for additional housing, with the goal of diverse housing, to reduce long-distance commutes.		
3.B Identify areas that are most appropriate for parking strategies that discourage vehicle use, such as pricing, time limits and supply reductions.	1	1
Play 3.2: Increase transportation options and support shared mobility		
Next Moves		
3.C Enhance City Transportation Demand Management (TDM) program implementation and monitoring to facilitate further reductions in single-occupant automobile trips, citywide.		
3.D Advocate that regional service providers implement high quality transit service and a robust set of first- and last-mile strategies in over two-thirds of the cross-city corridors.		
3.E Update and implement the Integrated Bicycle, Pedestrian and Safe Routes to School Plan to achieve a connected, safe and active network.		
3.F Pilot and evaluate shared bicycle and scooter programs.		
3.G Pilot shuttle service in Peery Park and consider options for expansion of a similar service in other areas undergoing redevelopment.		
3.H Develop design standards for streets and parking lots to accommodate increased pick-up and drop-off for rideshare passengers and apply as appropriate.		
3.I Monitor autonomous vehicle testing and deployment to inform proactive policy		
Play 3.3: Increase zero-emission vehicles		
Next Moves		
3.J Develop a Community Electric Vehicle Readiness and Infrastructure Plan.		
3.K Promote and seek incentives for community adoption of electric vehicles.		
3.L Electrify Municipal Fleet as vehicles are replaced and continue to seek incentives for electric vehicles and charging infrastructure.		

Comments:

None.

Strategy 4: Managing Resources Sustainably		
Play 4.1: Achieve Zero Waste goals		
Next Moves	Count of Blue Dots (Excited)	Count of Red Dots (Remove)
4.A Implement and expand food scraps diversion programs to include additional businesses and multi-family residents.	2	
4.B Consider solid waste collection and processing improvements to increase waste diversion away from landfills as a part of service provider and facility transition planning.	1	
4.C Implement campaigns for waste prevention.	1	
Play 4.2: Ensure resilience of water supply		
Next Moves		
4.D Promote and seek incentives for making water conservation a way of life and set a water reduction target consistent with new statewide requirements.		
4.E Partner with Valley Water to evaluate opportunities to expand water reuse.	1	
Play 4.3: Enhance natural carbon sequestration capacity		
Next Moves		
4.F Implement the City's Urban Forest Management Plan and continue to protect and expand tree canopy.	2	
4.G Implement the City's Green Stormwater Infrastructure Plan.		
Play 4.4: Shift to low carbon food		
Next Moves		
4.H Promote consumer awareness of low carbon foods.	1	
4.I Work with large businesses to identify best practices for implementing local food gardens.		

Comments:

- Consider deconstruction requirement

Strategy 5: Empowering Our Community		
Play 5.1: Enhance community awareness and engagement		
Next Moves	Count of Blue Dots (Excited)	Count of Red Dots (Remove)
5.A Pilot a targeted grassroots community engagement strategy (e.g., Cool Blocks Program) to create stronger connections between neighbors to advance climate action and emergency preparedness.		
5.B Evaluate opportunities for the City to provide online resources and tools for community and small business climate action (e.g., resource center for retrofit electrification, online tool or app to track individual carbon emissions).	1	
5.C Create a stronger social media and web presence for Sunnyvale climate action.		
5.D Implement the Sustainability Speaker Series.	2	
5.E Evaluate and pilot a program for youth engagement on climate, building on current engagement with school classrooms and green teams.	1	
5.F Build relationships with largest employers to collaborate on climate action, such as: (a) engaging employees to participate in sustainability initiatives; (b) encouraging and facilitating investment in climate action programs or projects.	1	
Play 5.2: Track and share data and tools		
Next Moves		
5.G Implement improvements for climate action data performance tracking and reporting progress to the public (e.g., community dashboard).		
5.H Publish annual greenhouse gas (GHG) inventory.		

Comments:

None.

Strategy 6: Adapting to a Changing Climate			
Play 6.1: Assess climate vulnerabilities for Sunnyvale			
Next Moves		Count of Blue Dots (Excited)	Count of Red Dots (Remove)
6.A	Review and summarize assessment products developed by the County's Silicon Valley 2.0 project and by the State.		
6.B	Participate in regional forums on climate vulnerability and adaptation.		
Play 6.2: Protect shoreline area from sea level rise and coastal flooding			
Next Moves			
6.C	Collaborate with Valley Water to advance a shoreline protection project with the US Army Corps of Engineers or other partners.		
6.D	Identify shoreline protection solutions as part of Moffett Park Specific Plan update.		
Play 6.3: Strengthen community resiliency			
Next Moves			
6.E	Update existing emergency preparedness and response plans to address climate-related impacts such as heat events, air quality issues and flooding.		
6.F	Develop a community resiliency plan.		

Comments:

None.

Live Polling Results from Business Meeting

April 11, 2019

Number of Meeting Attendees: 4

Number of Poll Participants:

Source: Zeetings Live Polling Software

Number	Question	Answer	Responses	Type	Status
1	Test: How did you get here today?	I drove	6	Multiple Choice	Active
1	Test: How did you get here today?	I drove in my zero emissions car	6	Multiple Choice	Active
1	Test: How did you get here today?	I biked	2	Multiple Choice	Active
1	Test: How did you get here today?	I used my ruby slippers	1	Multiple Choice	Active
1	Test: How did you get here today?	I flew on my zero emissions broomstick	1	Multiple Choice	Active
2	Sunnyvale's community-wide emissions are currently at 28% below 1990 levels. With the Climate Action Playbook, the City is proposing to achieve an 80% reduction by 2050. What do you think about the City's proposed target?	Target is not ambitious enough.	10	Multiple Choice	Active
2	Sunnyvale's community-wide emissions are currently at 28% below 1990 levels. With the Climate Action Playbook, the City is proposing to achieve an 80% reduction by 2050. What do you think about the City's proposed target?	Target is appropriate.	4	Multiple Choice	Active
2	Sunnyvale's community-wide emissions are currently at 28% below 1990 levels. With the Climate Action Playbook, the City is proposing to achieve an 80% reduction by 2050. What do you think about the City's proposed target?	Target is too ambitious.	0	Multiple Choice	Active
2	Sunnyvale's community-wide emissions are currently at 28% below 1990 levels. With the Climate Action Playbook, the City is proposing to achieve an 80% reduction by 2050. What do you think about the City's proposed target?	Unsure.	0	Multiple Choice	Active
3	Which Plays are you excited about?	Play 1.1: Promote 100% clean electricity	7	Multiple Selection	Active
3	Which Plays are you excited about?	Play 1.2: Increase distributed solar photovoltaics and storage	9	Multiple Selection	Active

Number	Question	Answer	Responses	Type	Status
3	Which Plays are you excited about?	Play 2.1: Reduce energy consumption in existing buildings	11	Multiple Selection	Active
3	Which Plays are you excited about?	Play 2.2: Support electrification of existing buildings	12	Multiple Selection	Active
3	Which Plays are you excited about?	Play 2.3: Zero Net Energy and all-electric new construction	13	Multiple Selection	Active
3	Which Plays are you excited about?	Play 3.1: Balance land use supply and enhance urban form	7	Multiple Selection	Active
3	Which Plays are you excited about?	Play 3.2: Increase transportation options and support shared mobility	17	Multiple Selection	Active
3	Which Plays are you excited about?	Play 3.3: Increase zero-emission vehicles	6	Multiple Selection	Active
3	Which Plays are you excited about?	Play 4.1: Achieve zero waste goals	5	Multiple Selection	Active
3	Which Plays are you excited about?	Play 4.2: Ensure resilience of water supply	7	Multiple Selection	Active
3	Which Plays are you excited about?	Play 4.3: Enhance natural carbon sequestration capacity	7	Multiple Selection	Active
3	Which Plays are you excited about?	Play 4.4: Shift to low carbon food	6	Multiple Selection	Active
3	Which Plays are you excited about?	Play 5.1: Enhance community awareness and engagement	11	Multiple Selection	Active
3	Which Plays are you excited about?	Play 5.2: Track and share data and tools	8	Multiple Selection	Active
3	Which Plays are you excited about?	Play 6.1: Assess climate vulnerabilities for Sunnyvale	4	Multiple Selection	Active
3	Which Plays are you excited about?	Play 6.2: Protect shoreline area from sea level rise and coastal flooding	8	Multiple Selection	Active
3	Which Plays are you excited about?	Play 6.3: Strengthen community resiliency	5	Multiple Selection	Active
3	Which Plays are you excited about?	None of the above	0	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 1.1: Promote 100% clean electricity	0	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 1.2: Increase distributed solar photovoltaics and storage	0	Multiple Selection	Active

Number	Question	Answer	Responses	Type	Status
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 2.1: Reduce energy consumption in existing buildings	0	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 2.2: Support electrification of existing buildings	0	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 2.3: Zero Net Energy and all-electric new construction	0	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 3.1: Balance land use supply and enhance urban form	1	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 3.2: Increase transportation options and support shared mobility	0	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 3.3: Increase zero-emission vehicles	1	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 4.1: Achieve zero waste goals	0	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 4.2: Ensure resilience of water supply	0	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 4.3: Enhance natural carbon sequestration capacity	1	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 4.4: Shift to low carbon food	3	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 5.1: Enhance community awareness and engagement	0	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 5.2: Track and share data and tools	0	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 6.1: Assess climate vulnerabilities for Sunnyvale	0	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 6.2: Protect shoreline area from sea level rise and coastal flooding	1	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	Play 6.3: Strengthen community resiliency	1	Multiple Selection	Active
4	Which Plays do you think the City should not pursue (i.e., remove from the Playbook)?	None of the above	13	Multiple Selection	Active

Number	Question	Answer	Responses	Type	Status
5	Sunnyvale's community-wide emissions are currently at 28% below 1990 levels. With the Climate Action Playbook, the City is proposing to achieve an 80% reduction by 2050. What do you think about the City's proposed target?	Target is not ambitious enough.	12	Multiple Choice	Active
5	Sunnyvale's community-wide emissions are currently at 28% below 1990 levels. With the Climate Action Playbook, the City is proposing to achieve an 80% reduction by 2050. What do you think about the City's proposed target?	Target is appropriate.	7	Multiple Choice	Active
5	Sunnyvale's community-wide emissions are currently at 28% below 1990 levels. With the Climate Action Playbook, the City is proposing to achieve an 80% reduction by 2050. What do you think about the City's proposed target?	Target is too ambitious.	0	Multiple Choice	Active
5	Sunnyvale's community-wide emissions are currently at 28% below 1990 levels. With the Climate Action Playbook, the City is proposing to achieve an 80% reduction by 2050. What do you think about the City's proposed target?	Unsure.	1	Multiple Choice	Active

Notes from Informal Meeting at the Rotary Club April 2, 2019

Title

Climate Action Playbook Informal Outreach Meeting with Rotary Club – April 8, 2019, 12:30 p.m. to 1 p.m.

City Staff Present:

Melody Tovar
Nupur Hiremath

Attendees Present:

Twenty-six (26) Rotary members were present.

Meeting Summary:

Melody Tovar, Regulatory Programs Division Manager, and Nupur Hiremath, Environmental Programs Manager, delivered a presentation to the Sunnyvale Rotary Club at the Elks Lodge on April 2, 2019 from 12:30 p.m. to 1 p.m. describing the structure and content of the Draft Climate Action Playbook.

The presentation covered an overview of the history of climate action in Sunnyvale and progress to date; the targets of the new Climate Action Playbook; and the proposed Strategies, Plays, targets, and Moves to reduce greenhouse gas emissions by 2050. Attendees participated in live polling with a show of hands to indicate their position on climate action in Sunnyvale.

Show of Hands Poll Results

Meeting attendees were asked to participate in live polling with a show of hands for the following questions:

1. What do you think about the City's current efforts to address climate change locally?

Responses (multiple choice)	Count of Hands
I am supportive	19
I am supportive, but have concerns	0
I am not supportive	0
Unsure	0

2. What do you think of Sunnyvale's proposal to meet the State's long-term target of reducing emissions 80% below 1990 levels by 2050 (carbon neutrality)?

Responses (multiple choice)	Count of Hands
Target is appropriate	17
Target is too ambitious	0
Target is not ambitious enough	1
Unsure	3

Notes from Informal Meeting at the Unitarian Universalist Fellowship of Sunnyvale April 14, 2019

Title

Climate Action Playbook Informal Outreach Meeting with Unitarian Universalist Fellowship of Sunnyvale
– April 14, 2019, 10:45 a.m. to noon.

City Staff Present:

Nupur Hiremath
Elizabeth Greenfield

Attendees Present:

Twenty-seven (27) individuals were present.

Meeting Summary:

Nupur Hiremath, Environmental Programs Manager, and Elizabeth Greenfield, Sustainability Fellow, delivered a presentation to the Unitarian Universalist Fellowship of Sunnyvale congregation at their church on April 14, 2019 from 10:45 a.m. to noon describing the structure and content of the Draft Climate Action Playbook.

The presentation covered an overview of the history of climate action in Sunnyvale and progress to date; the targets of the new Climate Action Playbook; and the proposed Strategies, Plays, targets, and Moves to reduce greenhouse gas emissions by 2050. Attendees participated in live polling with a show of hands to indicate their position on climate action in Sunnyvale.

Show of Hands Poll Results

Meeting attendees were asked to participate in live polling with a show of hands for the following questions:

1. What do you think about the City's current efforts to address climate change locally?

Responses (multiple choice)	Count of Hands
I am supportive	19
I am supportive, but have concerns	2
I am not supportive	0
Unsure	1

2. What do you think of Sunnyvale's proposal to meet the State's long-term target of reducing emissions 80% below 1990 levels by 2050 (carbon neutrality)?

Responses (multiple choice)	Count of Hands
Target is appropriate	7
Target is too ambitious	0
Target is not ambitious enough	12
Unsure	4

DRAFT 7/11/19 *em*

RESOLUTION NO. ____

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY
OF SUNNYVALE ADOPTING THE CLIMATE ACTION
PLAYBOOK AND MAKING FINDINGS REQUIRED BY
THE CALIFORNIA ENVIRONMENTAL QUALITY ACT**

WHEREAS, the State of California has adopted ambitious targets to encourage statewide reductions in greenhouse gases (GHG) to 1990 levels by 2020 (Assembly Bill 32, 2006), 40% below 1990 levels by 2030 (Senate Bill 32, 2016) and 80% below 1990 levels by 2050 (Executive Order S-3-05, 2005); and

WHEREAS, in September 2018, Governor Brown signed Senate Bill 100 into law, setting a target of 100% carbon-free electricity by 2045, with interim targets of 50% renewable energy by 2026 and 60% renewable energy by 2030; and

WHEREAS, since the adoption of the City of Sunnyvale's Climate Action Plan ("CAP 1.0") in May 2014, the City has achieved the state's target GHG reductions by reaching 1990 levels ahead of the 2020 schedule through both local actions and state policies; and

WHEREAS, CAP 1.0 was not designed to identify how more ambitious, long-term targets for 2030 and 2050 could be achieved; and

WHEREAS, in addition, the CAP 1.0 growth predictions were based on land use designations in the City's 1997 Land Use and Transportation Element; and

WHEREAS, in January 2017, in order to drive progress towards the aggressive emissions reduction targets by 2030 and 2050, the City Council adopted Accelerating Climate Action as a Council Policy Priority and directed staff to develop an updated Climate Action Plan to reflect this policy priority; and

WHEREAS, on April 11, 2017, the City Council adopted an updated Land Use and Transportation Element (LUTE) of the General Plan, which establishes the fundamental framework of how streets and buildings in the City of Sunnyvale will be laid out and how various land use, development, and transportation facilities will function together; and

WHEREAS, the updated LUTE and accompanying policies were developed to help guide decision-making regarding land use and transportation for an approximately 20-year time frame referred to as Horizon 2035; and

WHEREAS, the LUTE's policy framework encourages the City to promote sustainable growth and maintain a CAP that support the LUTE by establishing specific measures to put the City in a regional leadership role with regard to reducing GHG emissions; and

WHEREAS, the City prepared an Environmental Impact Report (EIR) (State Clearinghouse #2012032003) for the LUTE that evaluated the environmental impacts associated with development of land uses and implementation of transportation planning efforts in Sunnyvale as regulated and guided by the LUTE; and

WHEREAS, as discussed in Section 3.13, “Greenhouse Gases and Climate Change,” of the LUTE EIR, the LUTE used different growth projections and GHG modeling than CAP 1.0, so the results of the analysis cannot be used to demonstrate compliance with 2035 GHG reduction targets outlined in CAP 1.0; and

WHEREAS, Mitigation Measure 3.13.1 of the LUTE EIR required the City to update the CAP 1.0 to include the new LUTE growth projections; and

WHEREAS, on April 11, 2017, the City Council made Findings, adopted a Statement of Overriding Considerations and a Mitigation Monitoring and Reporting Program, certified the LUTE EIR and adopted the LUTE; and

WHEREAS, pursuant to the direction of the City Council and to implement Mitigation 3.13.1 of the LUTE EIR, the City prepared the Climate Action Playbook (“the Playbook”), also known as “CAP 2.0”, which outlines a pathway to achieve GHG emission reductions of 55% below 1990 levels by 2030 and 80% below 1990 levels by 2050; and

WHEREAS, the adoption of a Climate Action Plan is a “project” within the meaning of the California Environmental Quality Act (CEQA) that requires environmental review; and

WHEREAS, in addition to serving as the environmental document for the adoption of the LUTE, the LUTE EIR was intended by the City to serve as the basis for compliance with CEQA for projects that are consistent with the LUTE in accordance with Public Resources Code Section 21083.3 and Section 15183 of the CEQA Guidelines. These sections provide that if an environmental effect of a project is not peculiar to the parcel or the project, has been addressed as a significant impact in the EIR, or can be substantially mitigated by the imposition of uniformly applied development standards or policies, then an additional EIR need not be prepared on the basis of that effect; and

WHEREAS, the City has analyzed the Playbook to determine if it meets the criteria for streamlined environmental review under Public Resources Code Section 21083.3 and Section 15183 of the CEQA Guidelines; and

WHEREAS, the Environmental Checklist prepared for the Playbook concludes that the Playbook will not have any new or more severe impacts than were analyzed in the LUTE EIR; and

WHEREAS, CEQA authorizes an agency to adopt an addendum to a previously certified EIR where some changes or revisions to the project are proposed, or the circumstances surrounding the project have changed, but none of the changes or revisions would result in significant new or substantially more severe environmental impacts, consistent with CEQA Section 21166 and State CEQA Guidelines Sections 15162, 15163, 15164, 15168, and 15183; and

WHEREAS, accordingly, the City has prepared an Addendum that incorporates the Playbook into the environmental analysis of the LUTE EIR.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Sunnyvale as follows:

1. The City Council has independently reviewed the programmatic Draft and Final Environmental Impact Reports for the Land Use and Transportation Element (LUTE) of the Sunnyvale General Plan, State Clearinghouse #2012032003 (the “LUTE EIR”).
2. Based on the Environmental Checklist and Addendum to the LUTE EIR prepared for the Playbook and other information in the record, and after a duly noticed public hearing, the City Council finds that:
 - a) The Playbook is consistent with the Land Use and Transportation Element (LUTE) of the City’s General Plan.
 - b) Projects implementing the Playbook will be required to undertake all feasible mitigation measures required by the LUTE EIR.
 - c) The Playbook will have no environmental effects that are peculiar to the project; were not analyzed as significant effects in the LUTE EIR; are potentially significant off-site impacts or cumulative impacts which were not discussed in the LUTE EIR; or are previously identified significant effects which, as a result of substantially new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the LUTE EIR.
 - d) Accordingly, the City finds that no additional EIR needs to be prepared for the Playbook.
3. The City Council hereby adopts the Climate Action Playbook.

Adopted by the City Council at a regular meeting held on _____, 2019, by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:
RECUSAL:

ATTEST:

APPROVED:

City Clerk
(SEAL)

Mayor

APPROVED AS TO FORM:

City Attorney



City of Sunnyvale

Agenda Item 5

19-0790

Agenda Date: 7/22/2019

Selection of Chair



City of Sunnyvale

Agenda Item 6

19-0791

Agenda Date: 7/22/2019

Selection of Vice Chair



City of Sunnyvale

Agenda Item 7

19-0792

Agenda Date: 7/22/2019

Selection of Seats