

# Appendices





Mountain View  
Whisman  
School District

CAMPUS MAPS

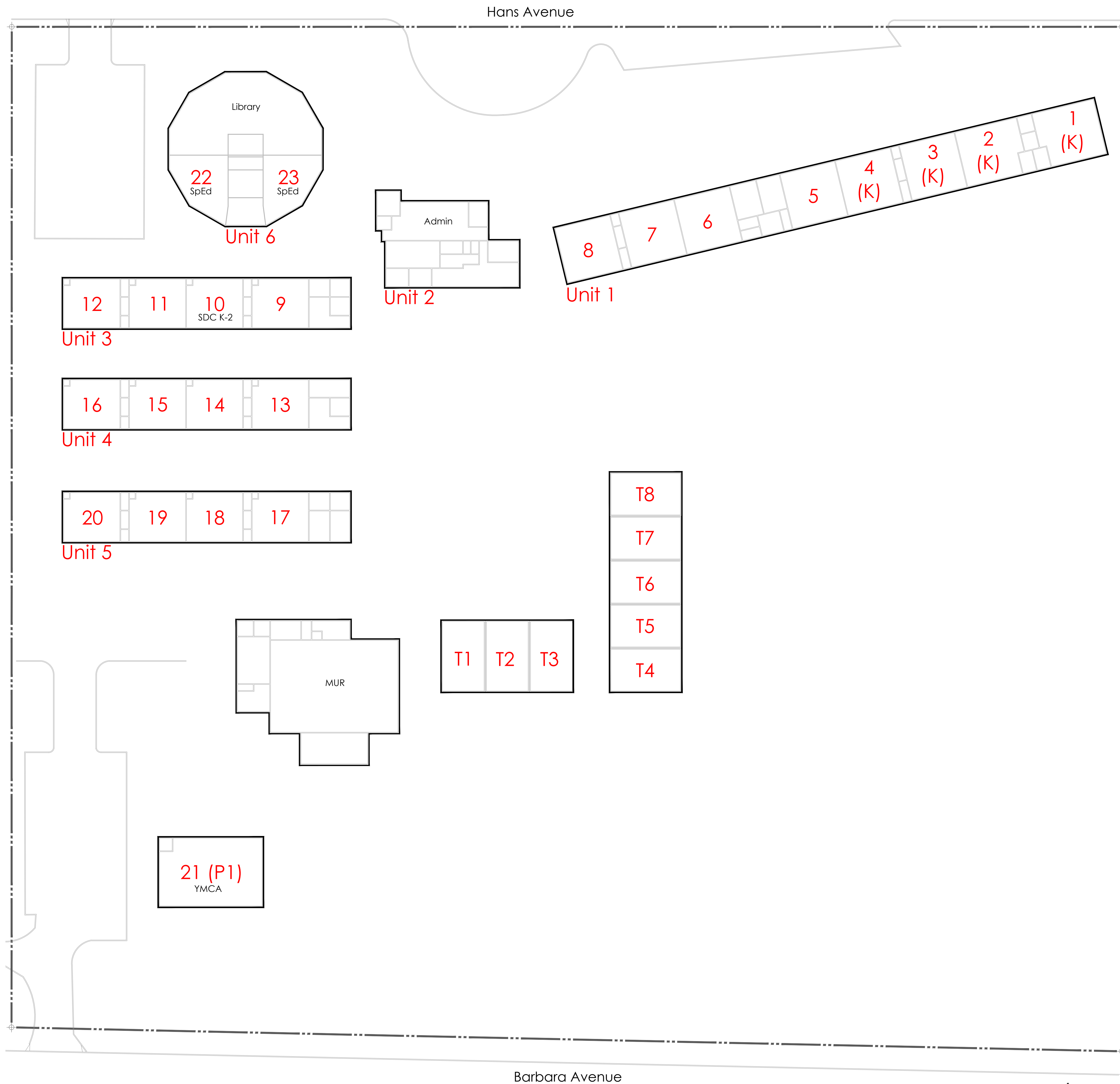
# APPENDIX A



MVWSD MASTER FACILITIES PLAN

November 2019



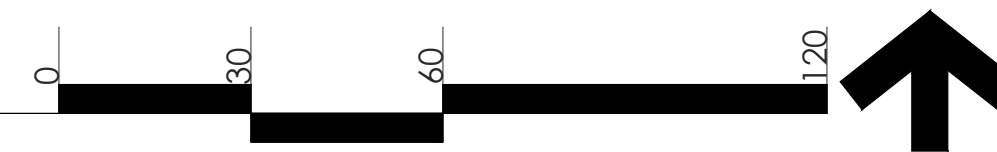


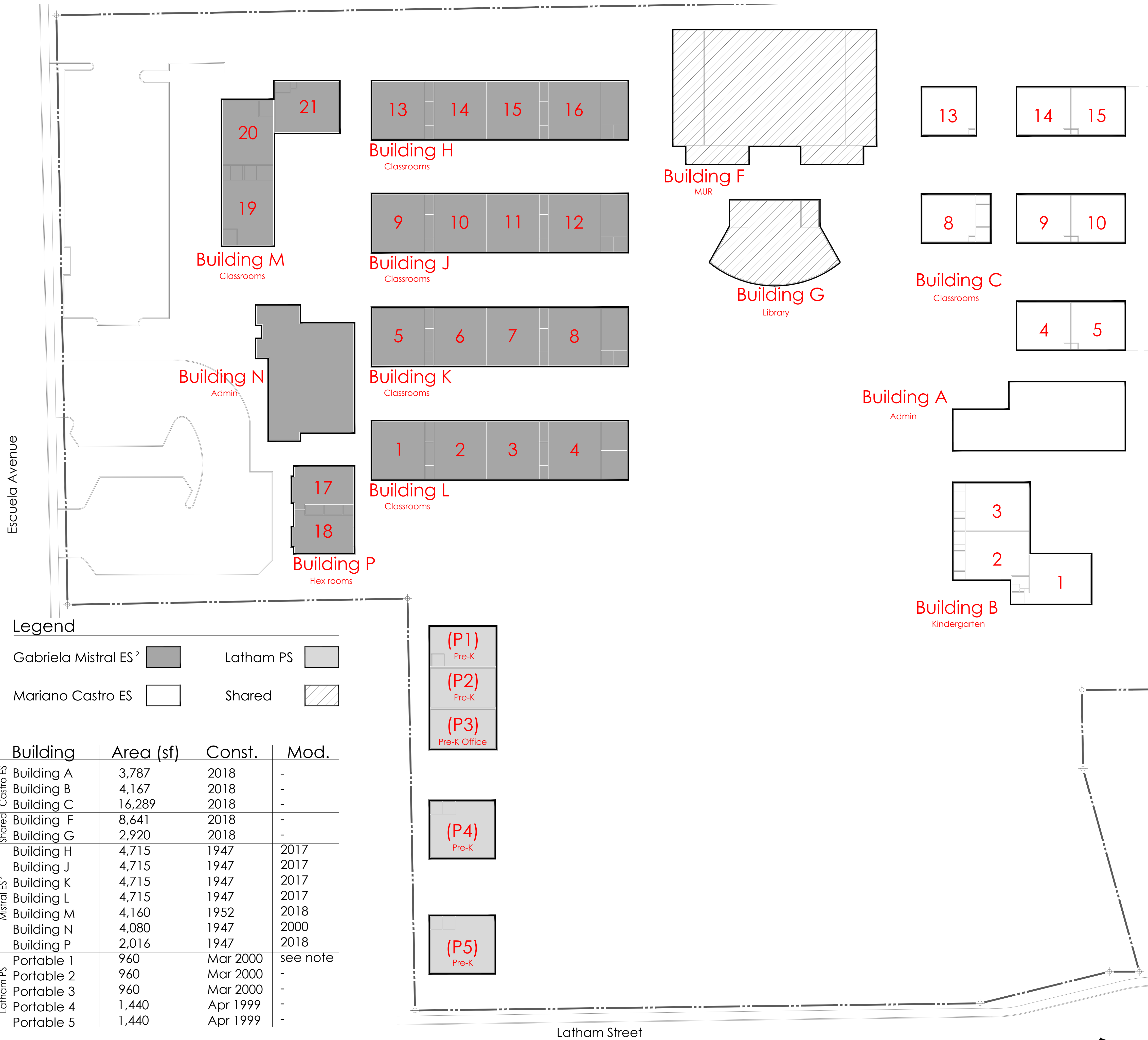
Benjamin Bubb	Current Space Utilization				Total
	Permanent Classrooms (1 - 20)	Portables (Owned) (P1)	Portables leased more than 5 yrs	Temp. Portables leased less than 5 yrs (not counted)	
Gross	22	1	0	(8)	23
Less than 700 sf.	0	0	0	0	0
Net	22	1	0	(0)	23

Notes:  
 1. Room 21 has been leased to YMCA Kids' Place since 2004.

Unit	Area	Construction	Modernization
Unit 1	8,335 sf	1953	2018
Unit 2	2,965	1953	2018
Unit 3	4,715	1954	2018
Unit 4	4,715	1954	2018
Unit 5	4,715	1958	2018
Unit 6	5,222	1965	2018
MUR	6,288	2018	n/a

Classroom Inventory - Benjamin Bubb Elementary School



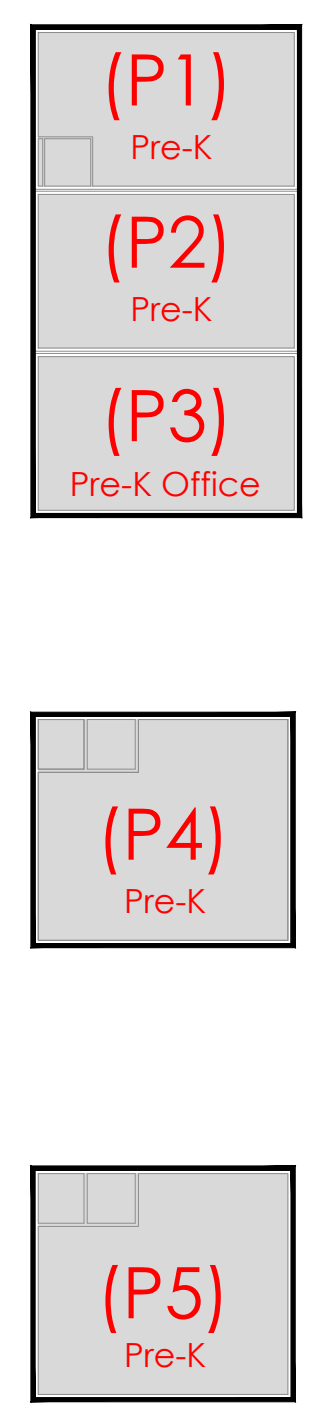


**Legend**

Gabriela Mistral ES<sup>2</sup>  Latham PS

Mariano Castro ES  Shared

Building	Area (sf)	Const.	Mod.
Castro ES			
Building A	3,787	2018	-
Building B	4,167	2018	-
Building C	16,289	2018	-
Shared			
Building F	8,641	2018	-
Building G	2,920	2018	-
Mistral ES <sup>2</sup>			
Building H	4,715	1947	2017
Building J	4,715	1947	2017
Building K	4,715	1947	2017
Building L	4,715	1947	2017
Building M	4,160	1952	2018
Building N	4,080	1947	2000
Building P	2,016	1947	2018
Latham PS			
Portable 1	960	Mar 2000	see note
Portable 2	960	Mar 2000	-
Portable 3	960	Mar 2000	-
Portable 4	1,440	Apr 1999	-
Portable 5	1,440	Apr 1999	-



Second Floor Plan: Bldg C

Current Space Utilization

	Permanent Classrooms	Portables (Owned)	Portables leased more than 5 yrs	Temp. Portables leased less than 5 yrs (not counted)	Total
Mistral ES <sup>1</sup>					
Gross	21	0	0	0	21
Less than 700 sf.	0	0	0	0	0
Net	21	0	0	0	21

Current Space Utilization

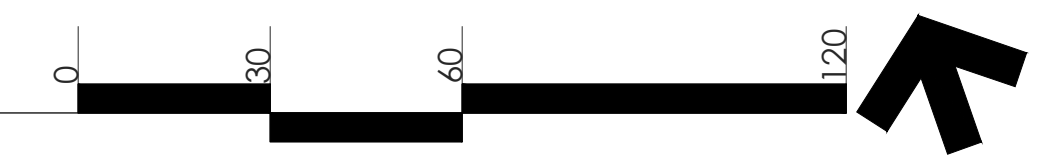
	Permanent Classrooms	Portables (Owned) (P1-P5)	Portables leased more than 5 yrs	Temp. Portables leased less than 5 yrs (not counted)	Total
Castro ES					
Gross	18	0	0	0	18
Less than 700 sf.	0	0	0	0	0
Net	18	0	0	0	18

Current Space Utilization

	Permanent Classrooms	Portables (Owned) (P1-P5)	Portables leased more than 5 yrs	Temp. Portables leased less than 5 yrs (not counted)	Total
Latham PS					
Gross	0	5	0	0	5
Less than 700 sf.	0	0	0	0	0
Net	0	5	0	0	5

**Notes:**  
 1. Mistral has a Spanish-English Dual Immersion Program.  
 2. Toilet room added to Portable 1, Summer 2018.

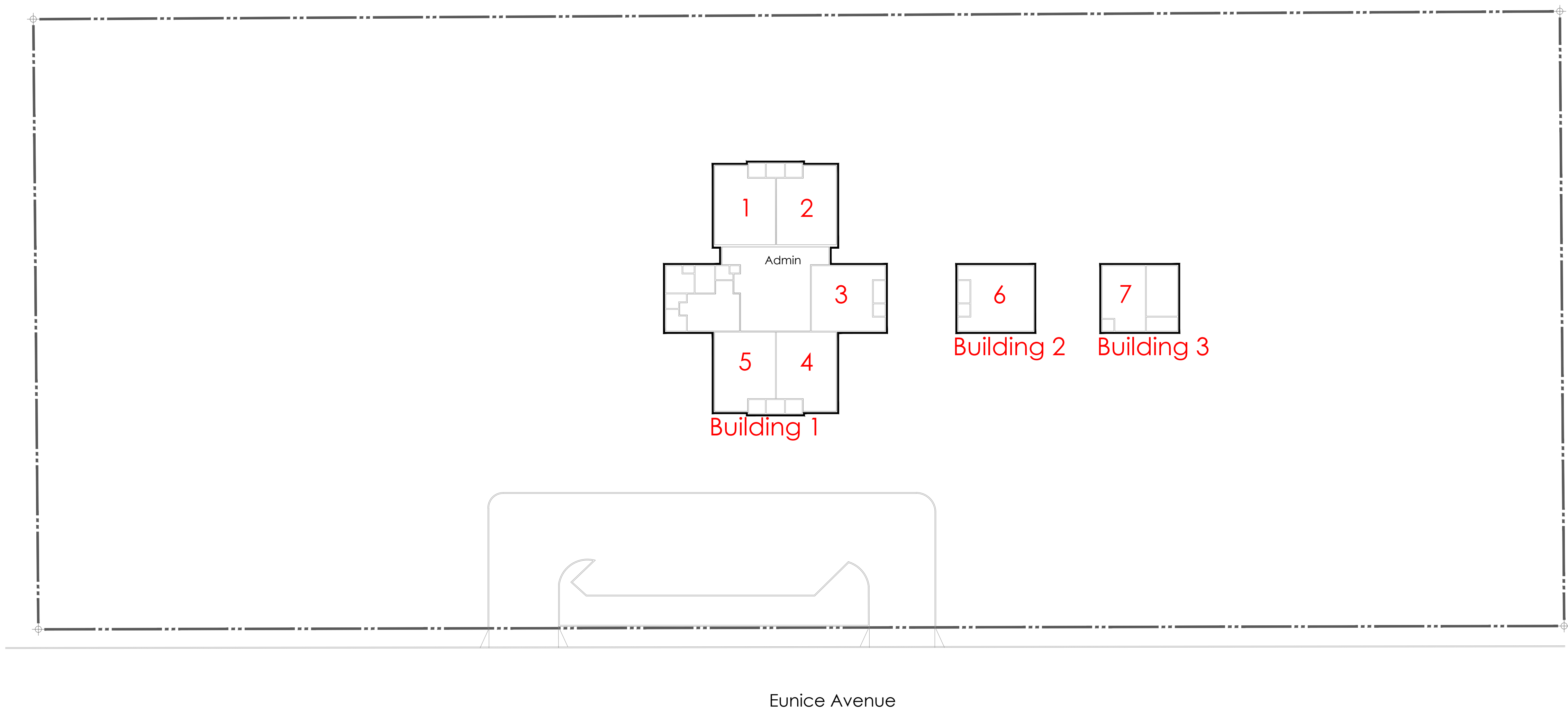
Classroom Inventory - Mistral ES, Castro ES, and Latham PS



OJ Cooper	Current Space Utilization				Total
	Permanent Classrooms (1 - 6)	Portables (Owned)	Portables leased more than 5 yrs	Temp. Portables leased less than 5 yrs (not counted)	
Gross	6	0	0	0	6
Less than 700 sf.	-1	0	0	0	0
Net	5	0	0	0	6

Notes:  
 1. OJ Cooper Campus has been leased to Primary Plus for day care for more than 25 years.  
 2. Building 3 has been divided into rooms smaller than 700 square feet. Room 7 is used as a nursery and has been included in the count.

Building	Area	Construction	Modernization
Building 1	7,171 sf	1962	
Building 2	986	1962	
Building 3	885	1962	



Classroom Inventory - **O.J. Cooper Elementary School**  
 LEASED Action Day Primary Plus



Second Floor Plan: Bldg 200

Second Floor Plan: Bldg 400

**Current Space Utilization**

	Permanent Classrooms (1-41)	Portables (Owned) (P1-P3)	Portables leased more than 5 yrs	Temp. Portables leased less than 5 yrs (not counted)	Total
<b>Crittenden</b>					
Gross	41	1	0	0	42
Less than 700 sf.	0	0	0	0	0
<b>Net</b>	<b>41</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>42</b>

Notes:  
1. P1 has been leased to MVEF since 2016.

Building	Area	Construction	Mod.
Building 100	11,490 sf	1948	2014
Building 200	17,705	1997	2014
Building 300	4,650	___ (10623)	2014
Building 400	16,170	2017	n/a
Building 500	4,195	___ (24373)	2014
Building 600	±10,127	2017	n/a
Building 700	2,708	___ (15937)	2014
Building 800	9,440	___	2004
Building 900	4,006	___ (12395)	2014
Building 1000	4,691	___ (19537)	1997
Building 1100	21,149	1993	n/a



**Classroom Inventory - Crittenden Middle School**

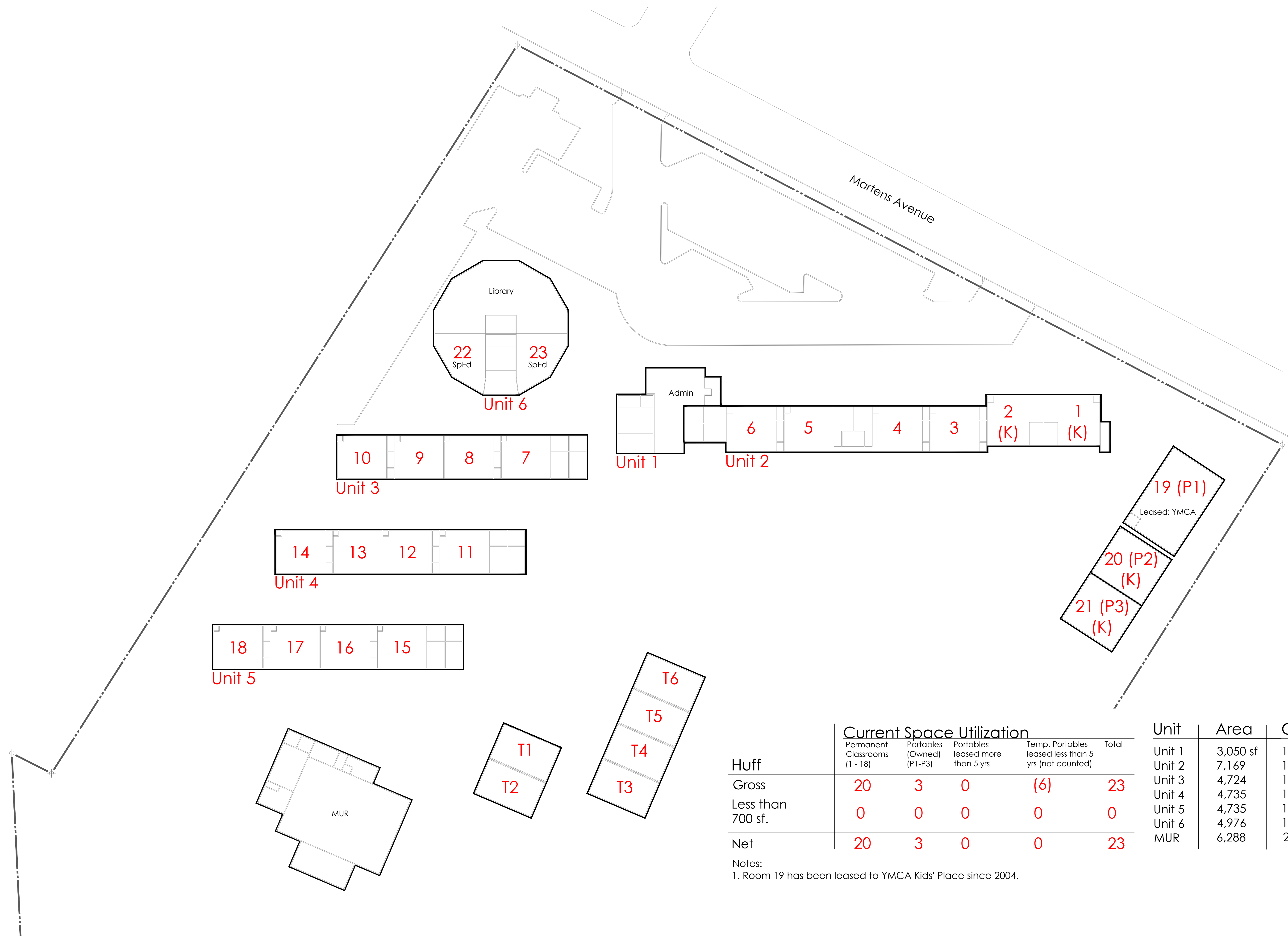




Graham	Current Space Utilization				Total
	Permanent Classrooms (1-46)	Portables (Owned) (P1-P5)	Portables leased more than 5 yrs	Temp. Portables leased less than 5 yrs (not counted)	
Gross	46	5	0	0	51
Less than 700 sf.	-1	0	0	0	-1
Net	45	5	0	0	50

Notes:  
 1. Room 10 is less than 700 sf. Added to gross count.  
 2. Room 49 (P3) leased to City for BEAT, Before and After School Daycare.

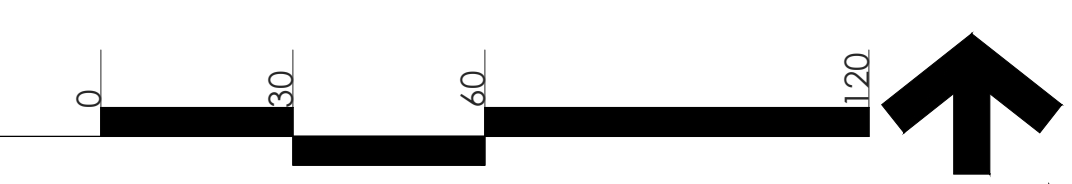
Unit	Area	Construction	Modernization
Unit 1	1,813 sf	—	2014
Unit 2	5,146	1957	2014
Unit 3	5,092	1957	2014
Unit 4	5,175	1957	2014
Unit 5	3,202	—	2014
Unit 6	3,194	—	2015
Unit 7	8,103	—	2017
Unit 8	5,135	—	2014
Unit 9	3,829	—	2014
Unit 11	6,120	—	2014
Unit 12	6,774	1993	2014
Unit 13	9,516	—	2014
Unit 14	9,232	2016	n/a
Unit 15	±2,880	2000	2014
Unit 16	±2,880	2000	2014
Unit 17	4,784	1993	2014
Snack Shack	±1,298	2005	n/a

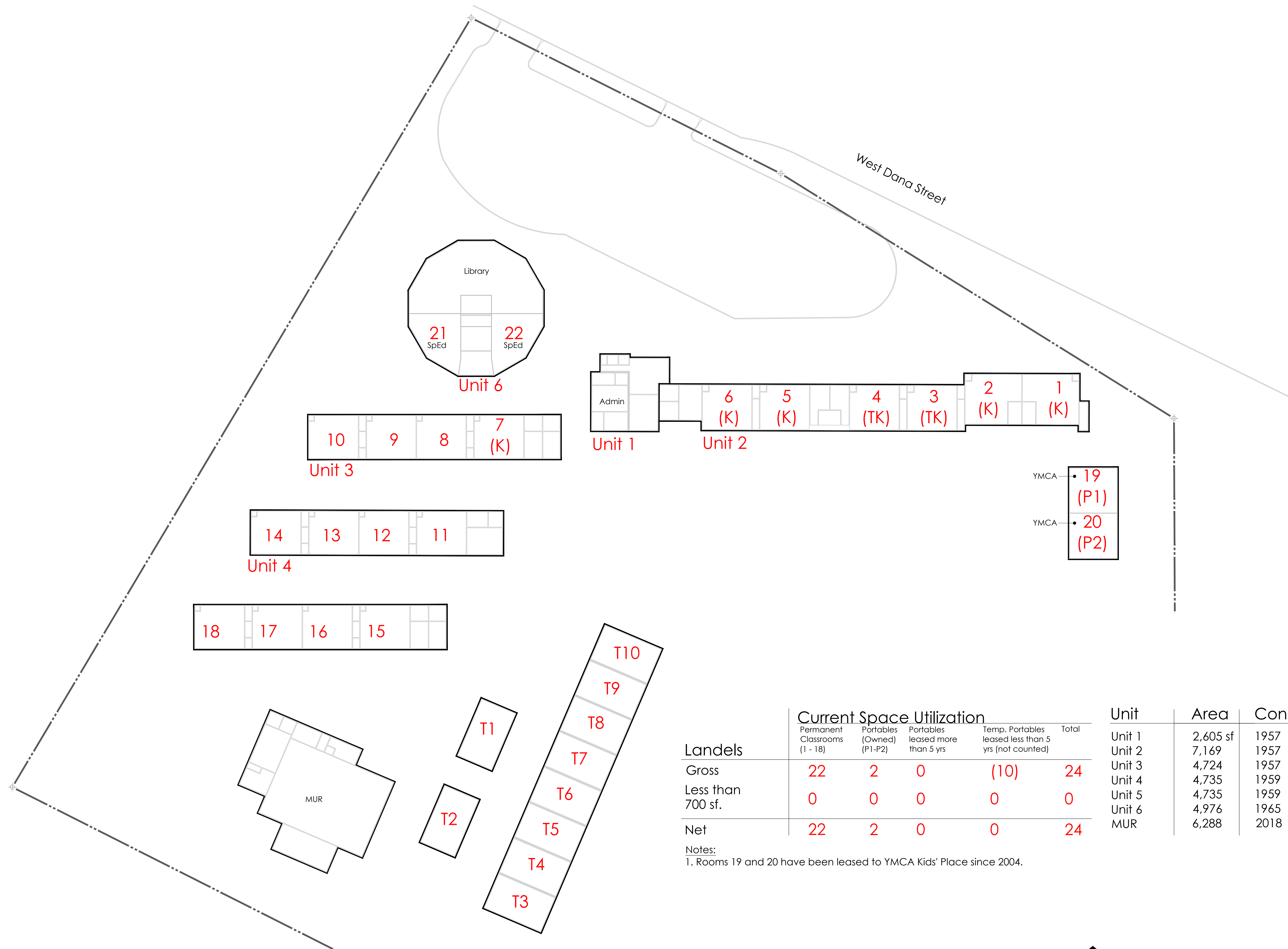


	Current Space Utilization				Total	Unit	Area	Const.	Mod.
	Permanent Classrooms (1 - 18)	Portables (Owned) (P1-P3)	Portables leased more than 5 yrs	Temp. Portables leased less than 5 yrs (not counted)					
Huff									
Gross	20	3	0	(6)	23	Unit 1	3,050 sf	1957	2018
Less than 700 sf.	0	0	0	0	0	Unit 2	7,169	1957	2018
Net	20	3	0	0	23	Unit 3	4,724	1957	2018
						Unit 4	4,735	1959	2018
						Unit 5	4,735	1959	2018
						Unit 6	4,976	1965	2018
						MUR	6,288	2018	n/a

Notes:  
 1. Room 19 has been leased to YMCA Kids' Place since 2004.

Classroom Inventory - Franklin L. Huff Elementary School

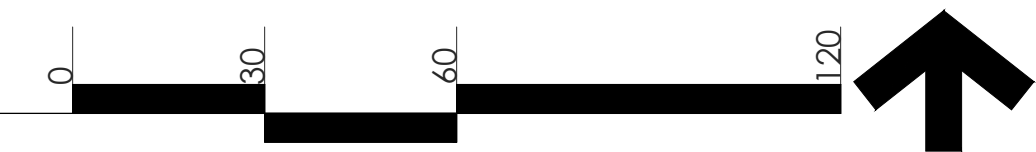


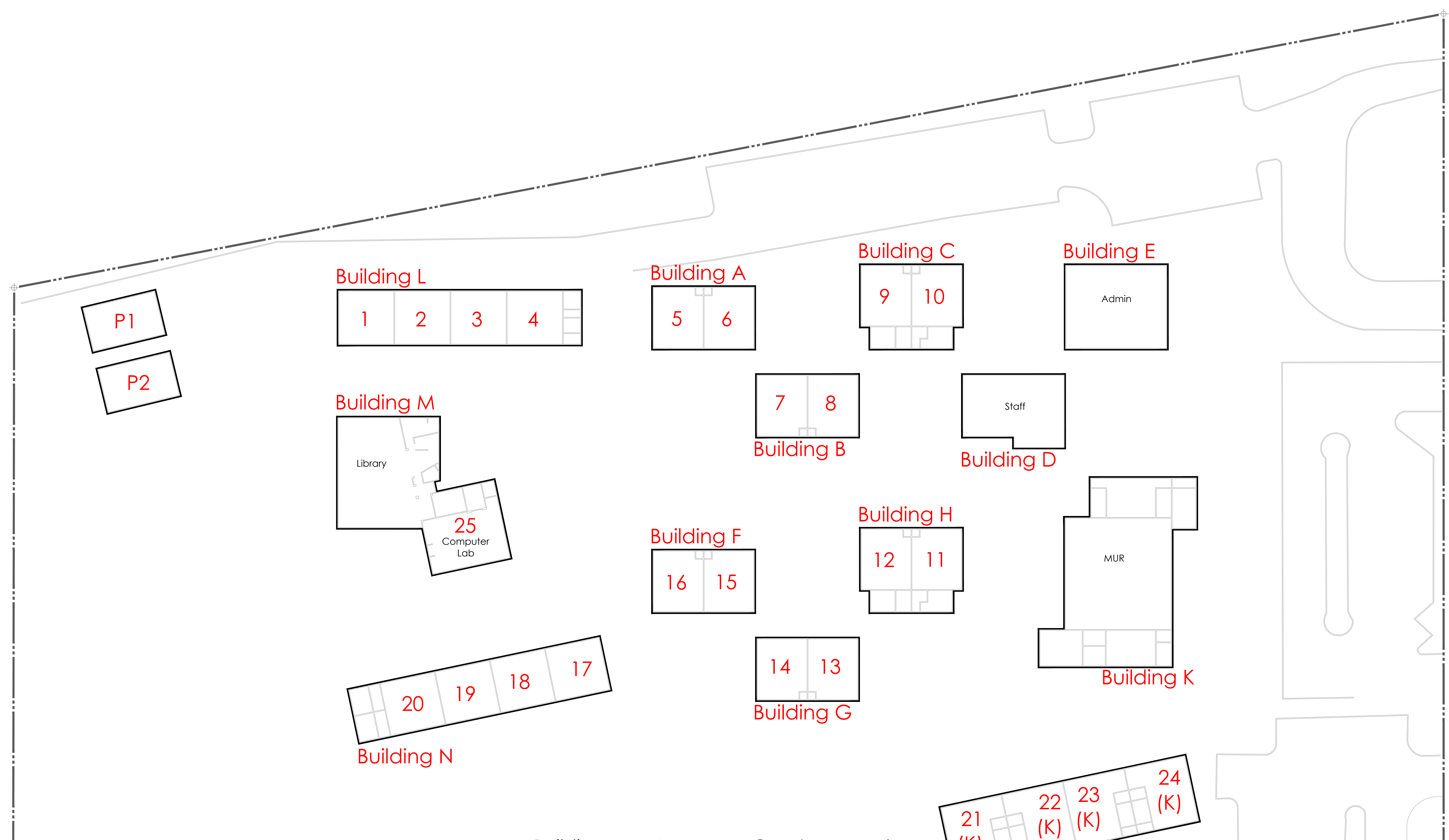


Landels	Current Space Utilization				Total	Unit	Area	Const.	Mod.
	Permanent Classrooms (1 - 18)	Portables (Owned) (P1-P2)	Portables leased more than 5 yrs	Temp. Portables leased less than 5 yrs (not counted)					
Gross	22	2	0	(10)	24	Unit 1	2,605 sf	1957	2018
Less than 700 sf.	0	0	0	0	0	Unit 2	7,169	1957	2018
Net	22	2	0	0	24	Unit 3	4,724	1957	2018
						Unit 4	4,735	1959	2018
						Unit 5	4,735	1959	2018
						Unit 6	4,976	1965	2018
						MUR	6,288	2018	n/a

Notes:  
 1. Rooms 19 and 20 have been leased to YMCA Kids' Place since 2004.

Classroom Inventory - Edith Landels Elementary School

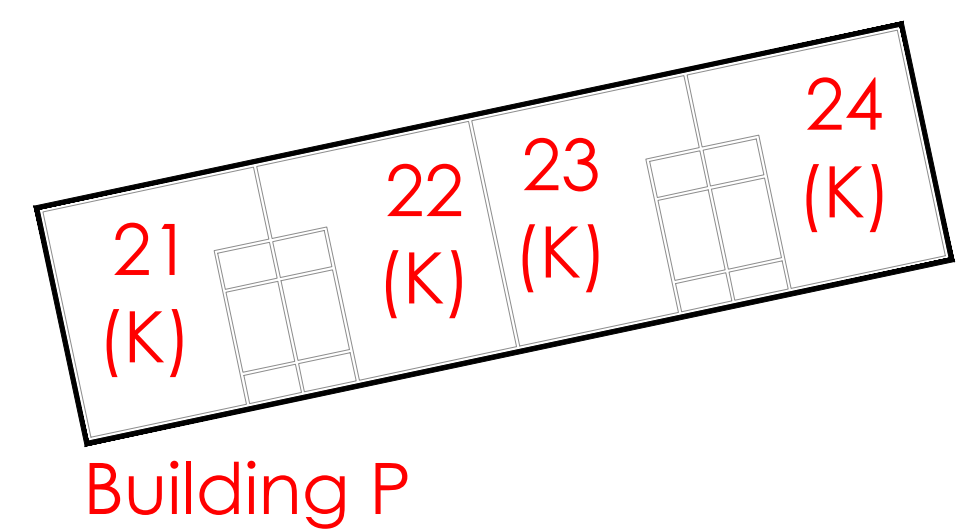




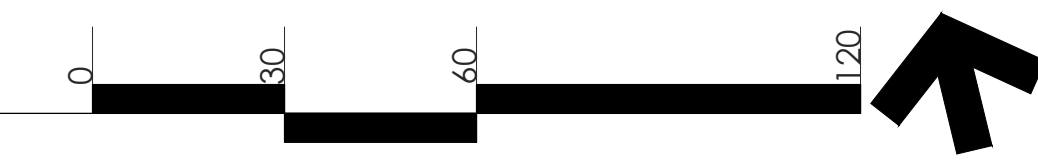
	Current Space Utilization				Total
	Permanent Classrooms (1 - 25)	Portables (Owned)	Portables leased more than 5 yrs	Temp. Portables leased less than 5 yrs (not counted)	
Gross	25	2	0	0	27
Less than 700 sf.	0	0	0	0	0
Net	25	2	0	0	27

Notes:  
1. Computer lab added to gross count.

Building	Area	Const.	Mod.
Building A	1,802 sf	1955	2017
Building B	1,802	1955	2017
Building C	2,294	1955	2017
Building D	2,489	1955	2017
Building E	±2,022	1955	2017
Building F	1,802	1955	2017
Building G	1,802	1955	2017
Building H	2,294	1955	2017
Building K	4,778	1958	2017
Building L	±3,779	—	2017
Building M	±4,821	—	2017
Building N	±3,998	—	2017
Building P	±4,776	—	2017
Portable 1	960	1996	2017
Portable 2	960	1996	2017



Classroom Inventory - Monta Loma Elementary School




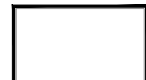
Thompson Avenue



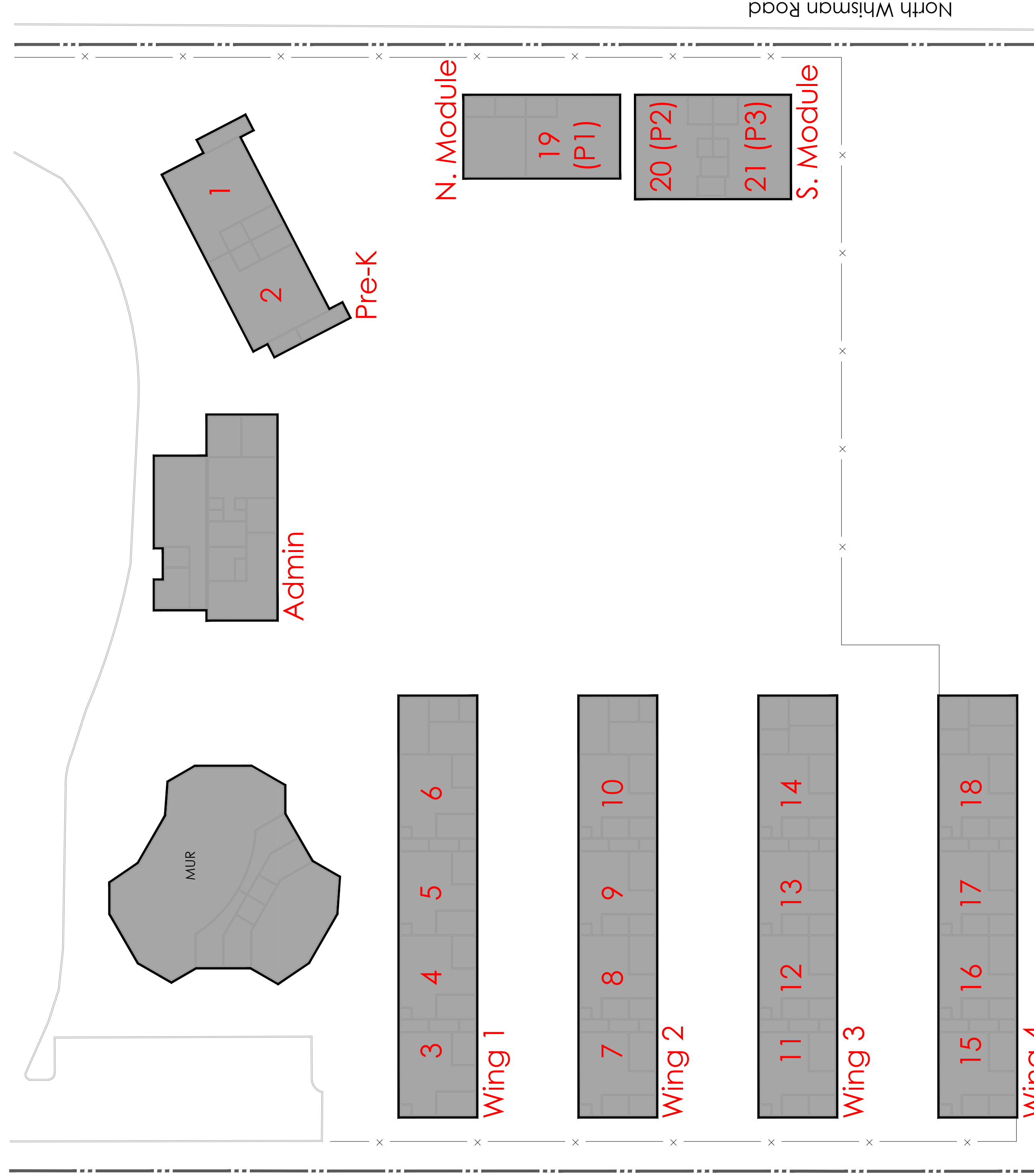
Stevenson	Current Space Utilization				Total
	Permanent Classrooms	Portables (Owned) (P1 - P14)	Portables leased more than 5 yrs	Temp. Portables leased less than 5 yrs (not counted)	
Gross	18	3	0	0	21
Less than 700 sf.	0	0	0	0	0
Net	18	3	0	0	21

Building	Area	Construction	Modernization
Building A	3,840 sf	2018	—
Building B	6,078	2018	—
Building C	3,840	2018	—
Building D	6,720	2018	—
Building E	2,841	1964	2018
Building F	5,400	2019	—
Building G	3,360	2018	—

**Legend**

Stevenson ES	
Temp. District Office	

Classroom Inventory - Stevenson (PACT) Elementary School



**Legend**

- Kenneth Slater ES
- Jose Vargas ES

Building	Area (sf)	Const.	Mod.
MUR	4,976 sf	1956	2002
Admin	3,011	1952	2007
Pre-K	2,656	1956	2007
Wing 1	4,469	1952	2007
Wing 2	4,437	1952	2007
Wing 3	4,437	1952 <sup>2</sup>	2007
Wing 4	4,437	1956	2007
Building A	3,360	2019	-
Building B	2,880	2019	-
Building C	6,288	2019	-
Building D	3,840	2019	-
Building E	9,120	2019	-

Notes:  
1. 2007 Modernization at Slater is not DSA compliant.

**Current Space Utilization**

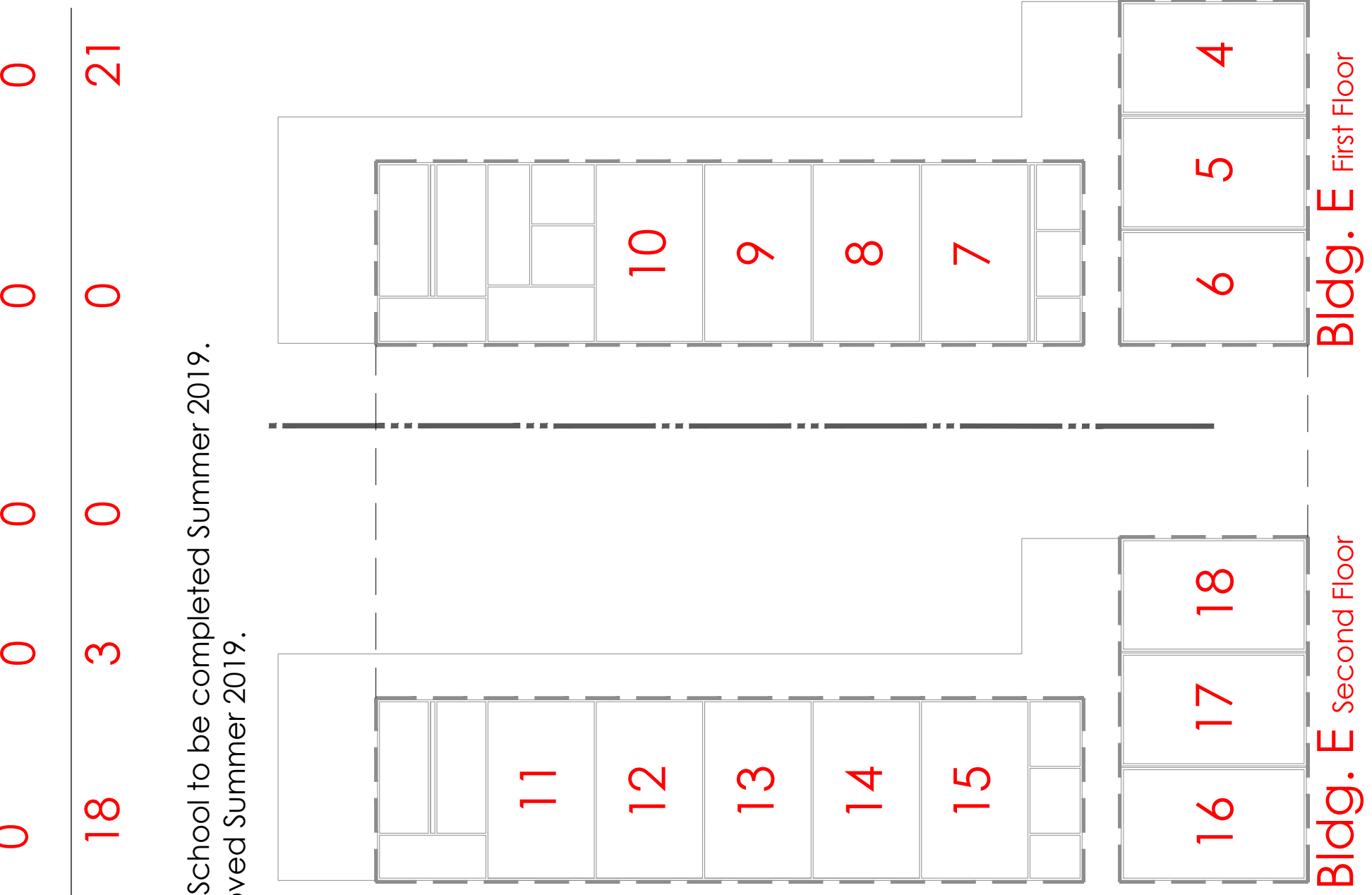
Slater	Permanent Classrooms (1 - 18)	Portables		Total
		(Owned) (P1-P12)	leased more than 5 yrs (not counted)	
Gross	18	3	0	21
Less than 700 sf.	-16	0	0	-16
Net	2	3	0	5

Notes:  
1. Google Children's Center at The Woods has been within the Slater site since 2004.

**Current Space Utilization**

Vargas	Permanent Classrooms (1 - 18)	Portables		Total
		(Owned) (P1-P12)	leased more than 5 yrs (not counted)	
Gross	18	3	0	21
Less than 700 sf.	0	0	0	0
Net	18	3	0	21

Notes:  
1. Vargas Elementary School to be completed Summer 2019.  
2. P3 - P11 to be removed Summer 2019.



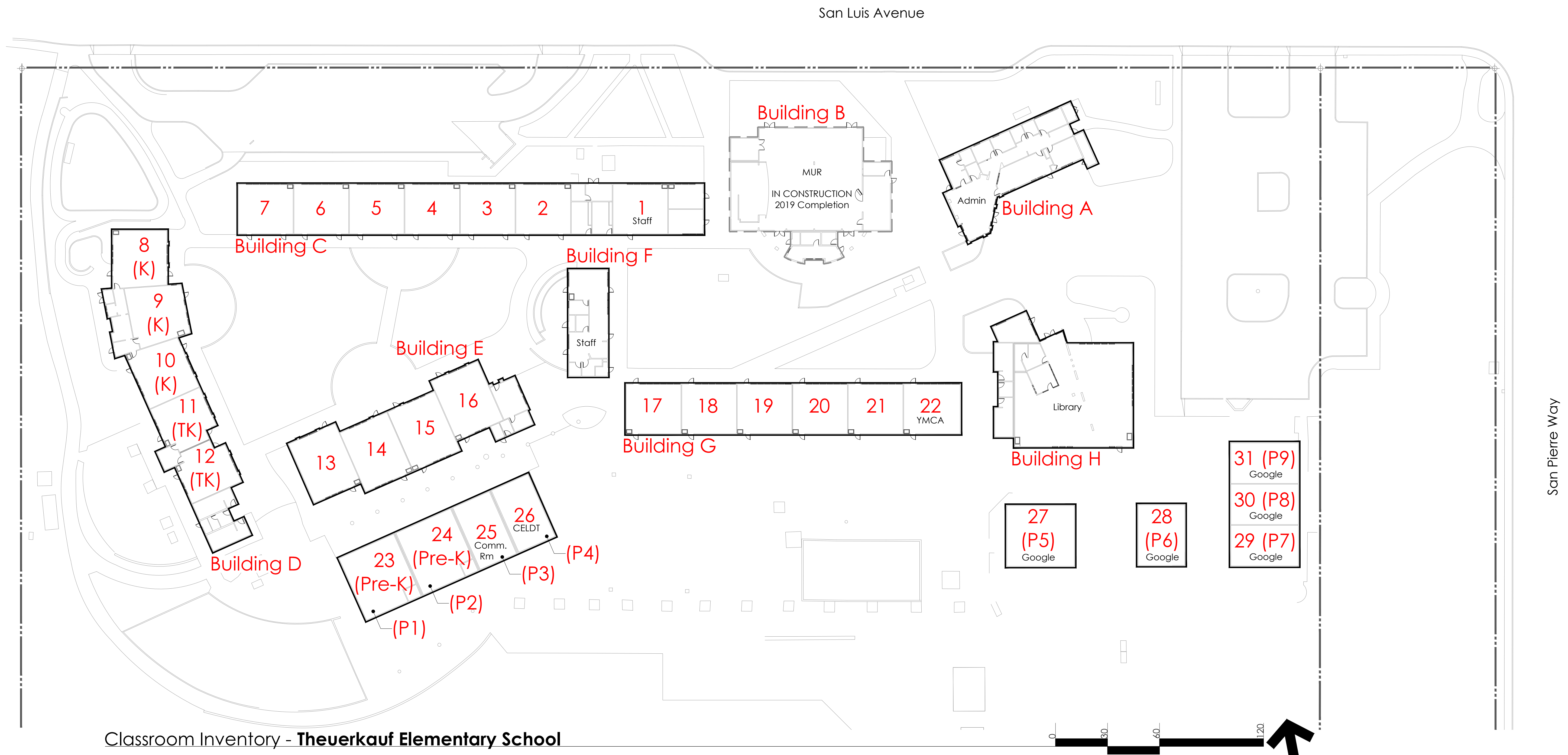
**Classroom Inventory - Slater ES, Vargas ES**



Theuerkauf	Current Space Utilization				Total
	Permanent Classrooms (1 - 22)	Portables (Owned) (P1-P9)	Portables leased more than 5 yrs	Temp. Portables leased less than 5 yrs (not counted)	
Gross	22	9	0	0	31
Less than 700 sf.	0	0	0	0	0
Net	22	9	0	0	31

Notes:  
 1. Room 22 has been leased to YMCA Kids' Place since 2004.  
 2. Rooms 27-31 have been leased to Google since 2004.

Building	Area	Construction	Modernization
Building A	3,150 sf	1956	2018
Building B	4,211	1952	2019
Building C	8,060	1952	2018
Building D	6,276	1998	2018
Building E	4,4827	1998	2018
Building F	1,300	1956	2018
Building G	5,352	1956	2018
Building H	4,793	1985	2018

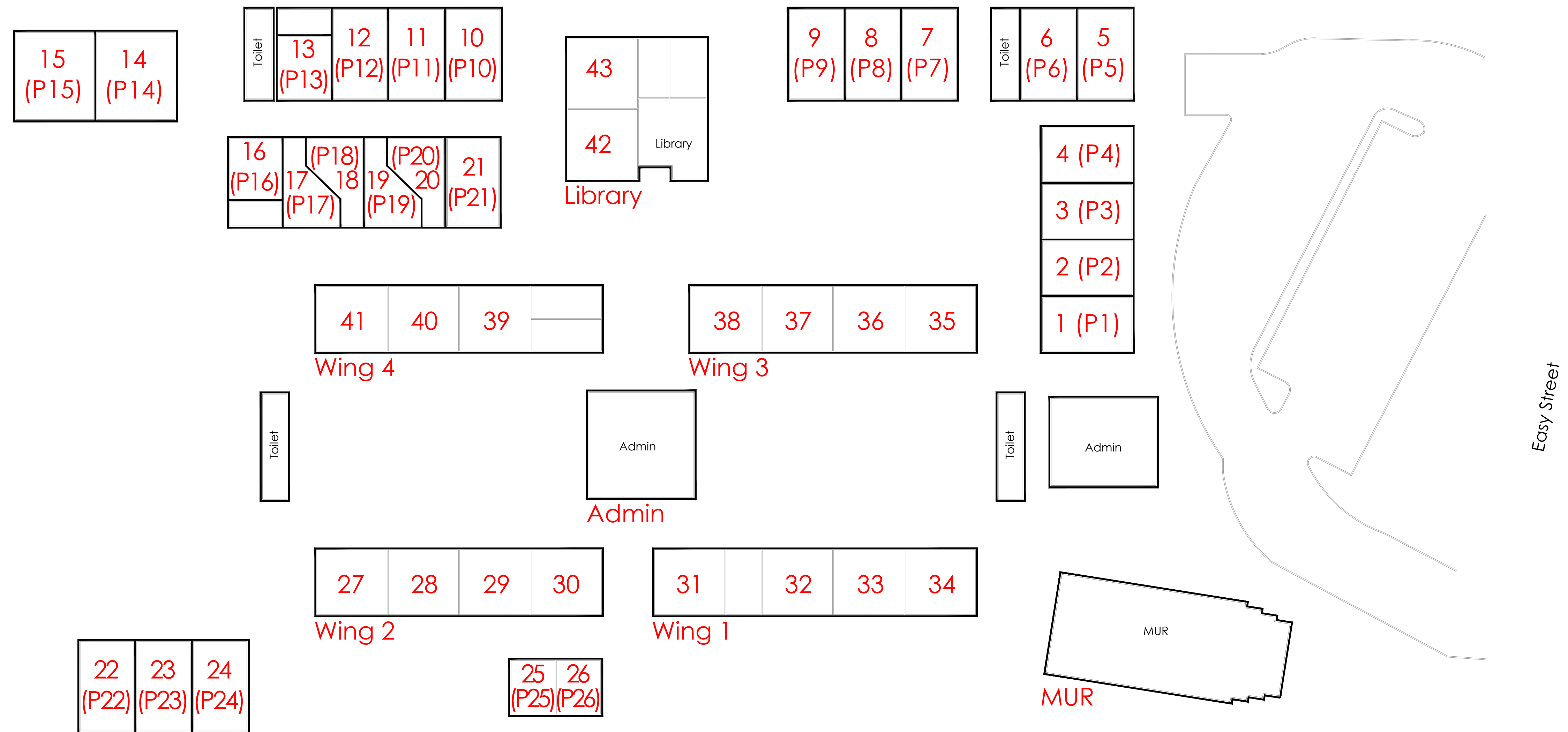


Classroom Inventory - Theuerkauf Elementary School

Slater	Current Space Utilization				Total
	Permanent Classrooms (27 - 43)	Portables (Owned) (P1 - P26)	Portables leased more than 5 yrs	Temp. Portables leased less than 5 yrs (not counted)	
Gross	17	26	0	0	43
Less than 700 sf.	0	-4	0	0	-4
Net	17	22	0	0	39

Notes:  
1. Rooms 13, 16, 25, and 26 are less than 700 sf. Added to gross count.

Building	Area	Construction	Modernization
Admin	1,800 sf	— (19773)	—
MUR	±4,400	—	—
Library	3,715	—	—
Wing 1	4,118	—	—
Wing 2	3,660	— (19773)	—
Wing 3	3,660	—	1994
Wing 4	3,660	— (22295)	1994



### Classroom Inventory - Whisman Elementary School

LEASED German International School of Silicon Valley, Yew Chung International School







Mountain View  
Whisman  
School District

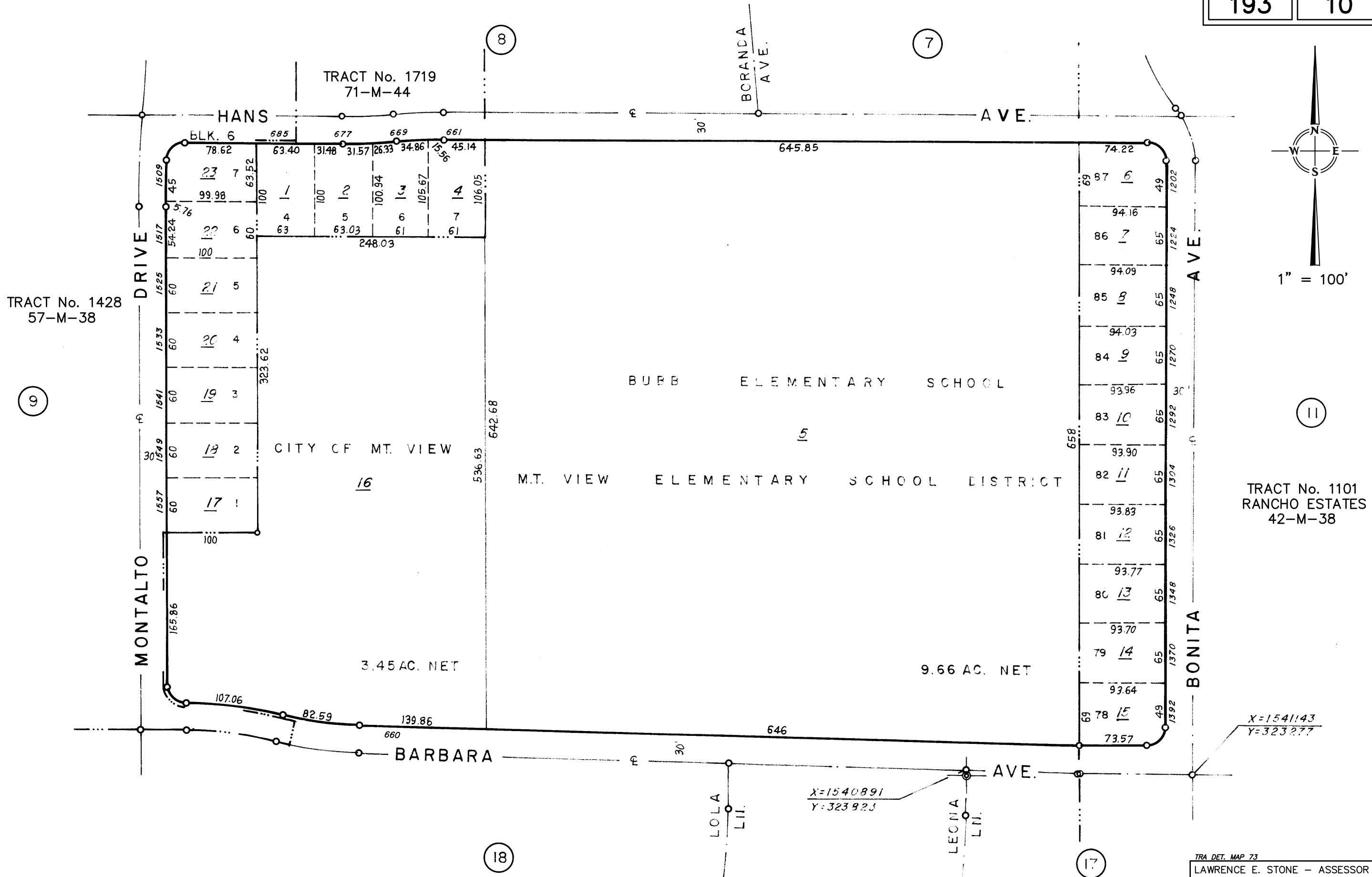
ASSESSOR PARCEL MAPS  
MVWSD PROPERTIES

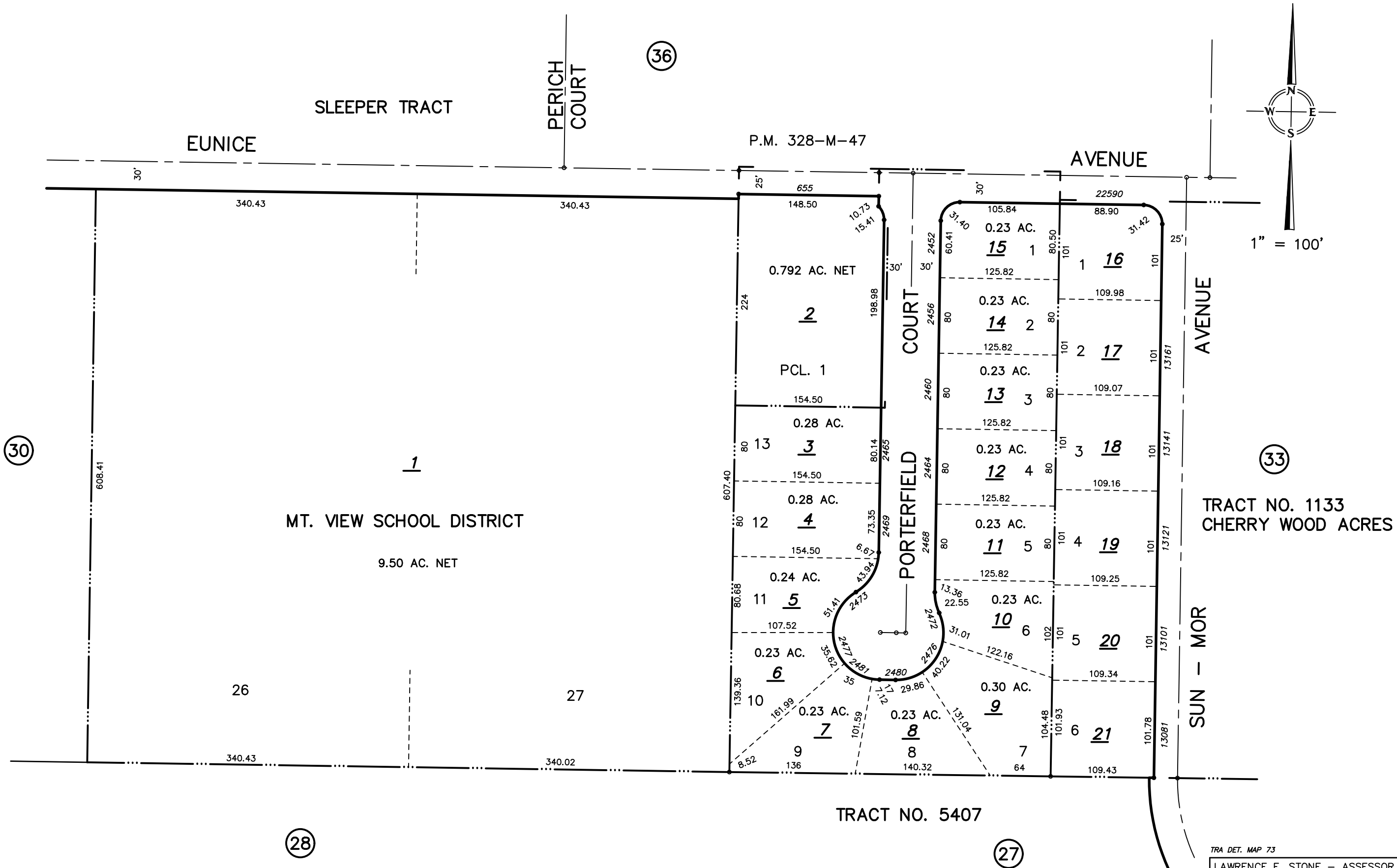
# APPENDIX B

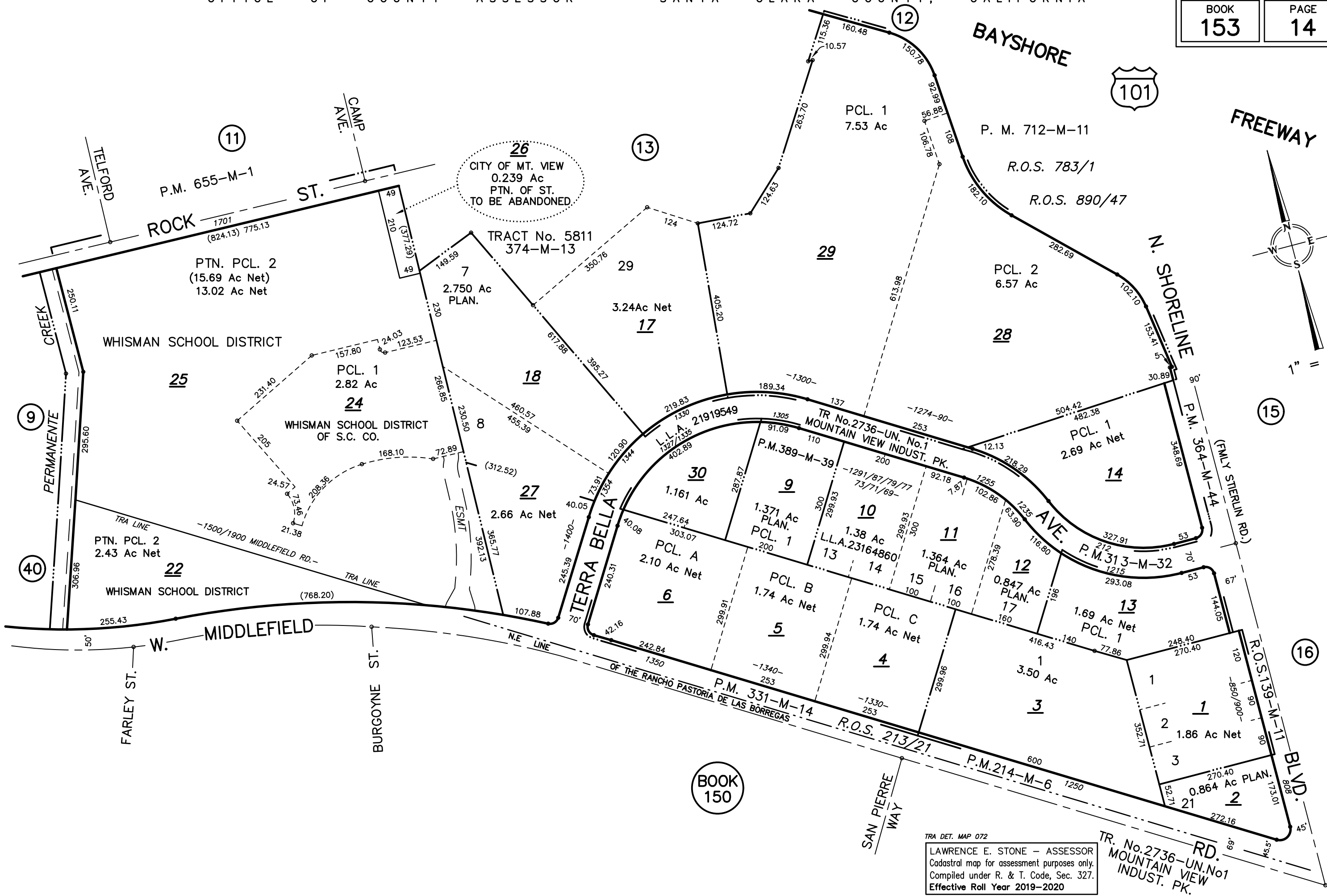
MVWSD MASTER FACILITIES PLAN

November 2019









26 CITY OF MT. VIEW 0.239 Ac PTN. OF ST. TO BE ABANDONED.

TRACT No. 5811 374-M-13

P.M. 655-M-1

PTN. PCL. 2 (15.69 Ac Net) 13.02 Ac Net

WHISMAN SCHOOL DISTRICT

PCL. 1 2.82 Ac

WHISMAN SCHOOL DISTRICT OF S.C. CO.

PTN. PCL. 2 2.43 Ac Net

WHISMAN SCHOOL DISTRICT

2.750 Ac PLAN.

3.24Ac Net

PCL. 1 7.53 Ac

P. M. 712-M-11

R.O.S. 783/1

R.O.S. 890/47

PCL. 2 6.57 Ac

TR No.2736-UN. No.1 MOUNTAIN VIEW INDUST. PK.

1.161 Ac

1.371 Ac PLAN.

PCL. A 2.10 Ac Net

PCL. B 1.74 Ac Net

1.364 Ac PLAN.

PCL. C 1.74 Ac Net

0.847 Ac PLAN.

1.69 Ac Net PCL. 1

P.M. 331-M-14

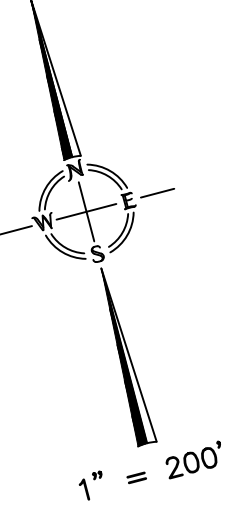
R.O.S. 213/21

P.M.214-M-6

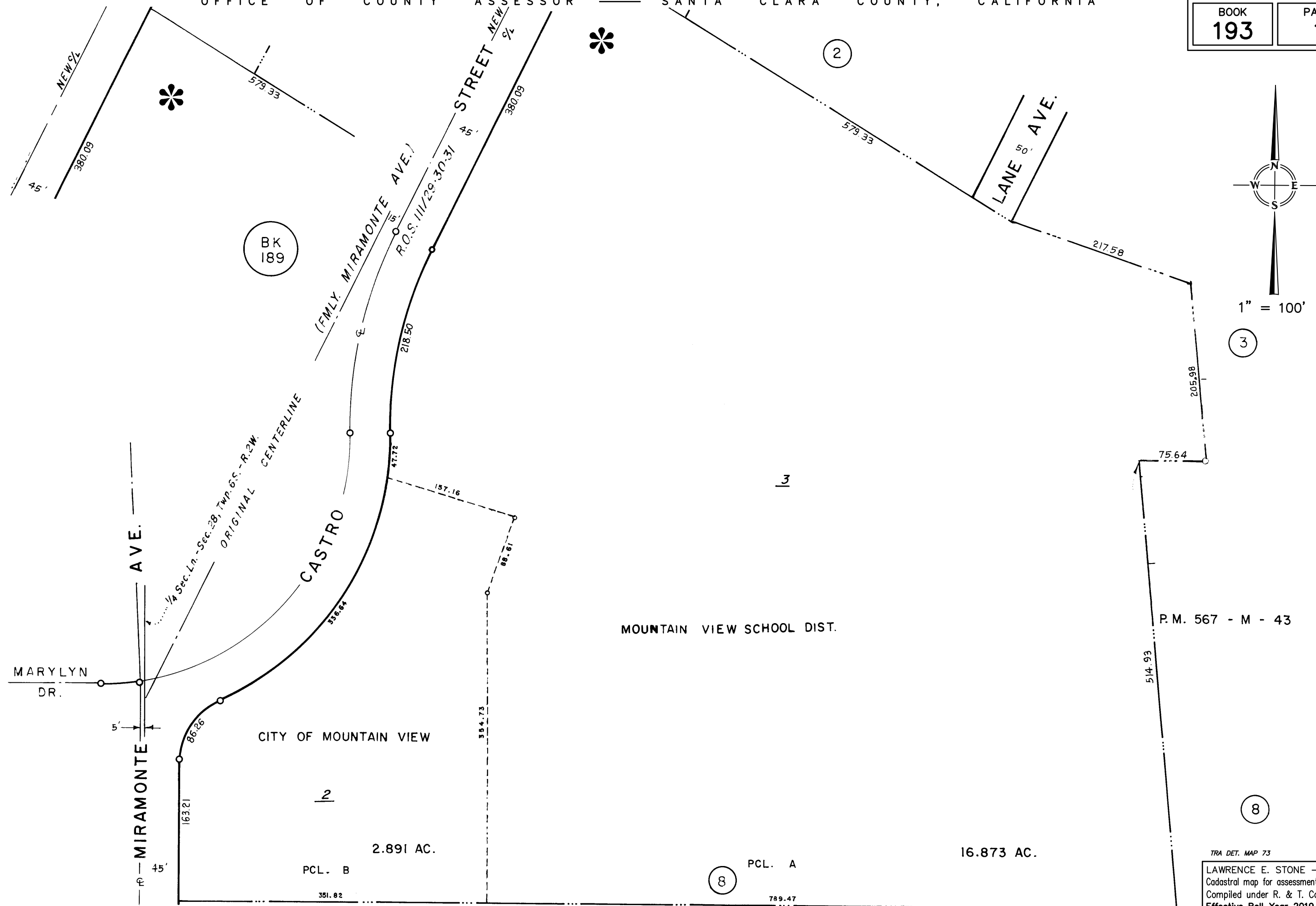
0.864 Ac PLAN.

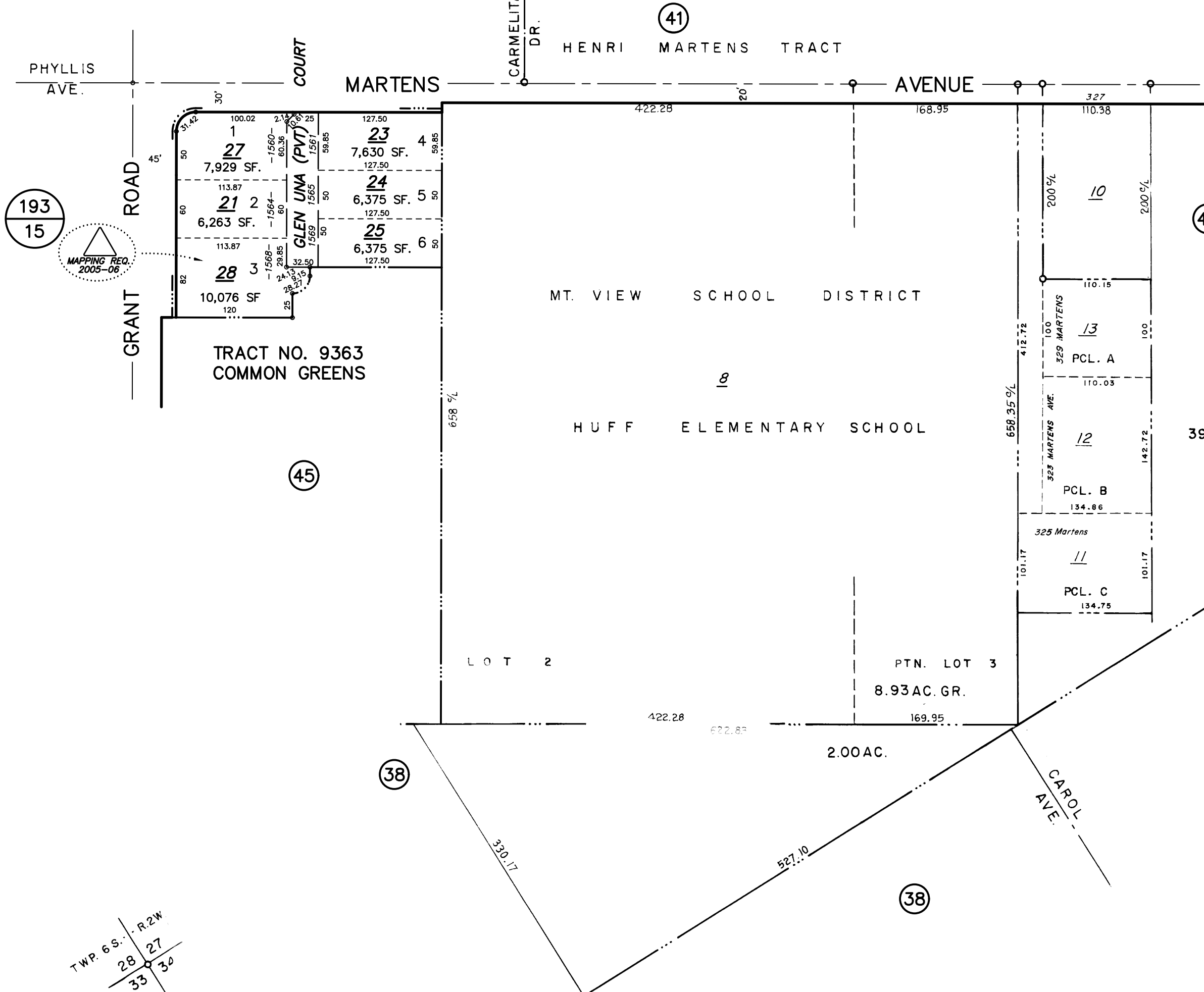
LAWRENCE E. STONE - ASSESSOR Cadastral map for assessment purposes only. Compiled under R. & T. Code, Sec. 327. Effective Roll Year 2019-2020

TR. No.2736-UN.No1 MOUNTAIN VIEW INDUST. PK.



BOOK 150





193  
15

MAPPING REQ.  
2005-06

40

45

37

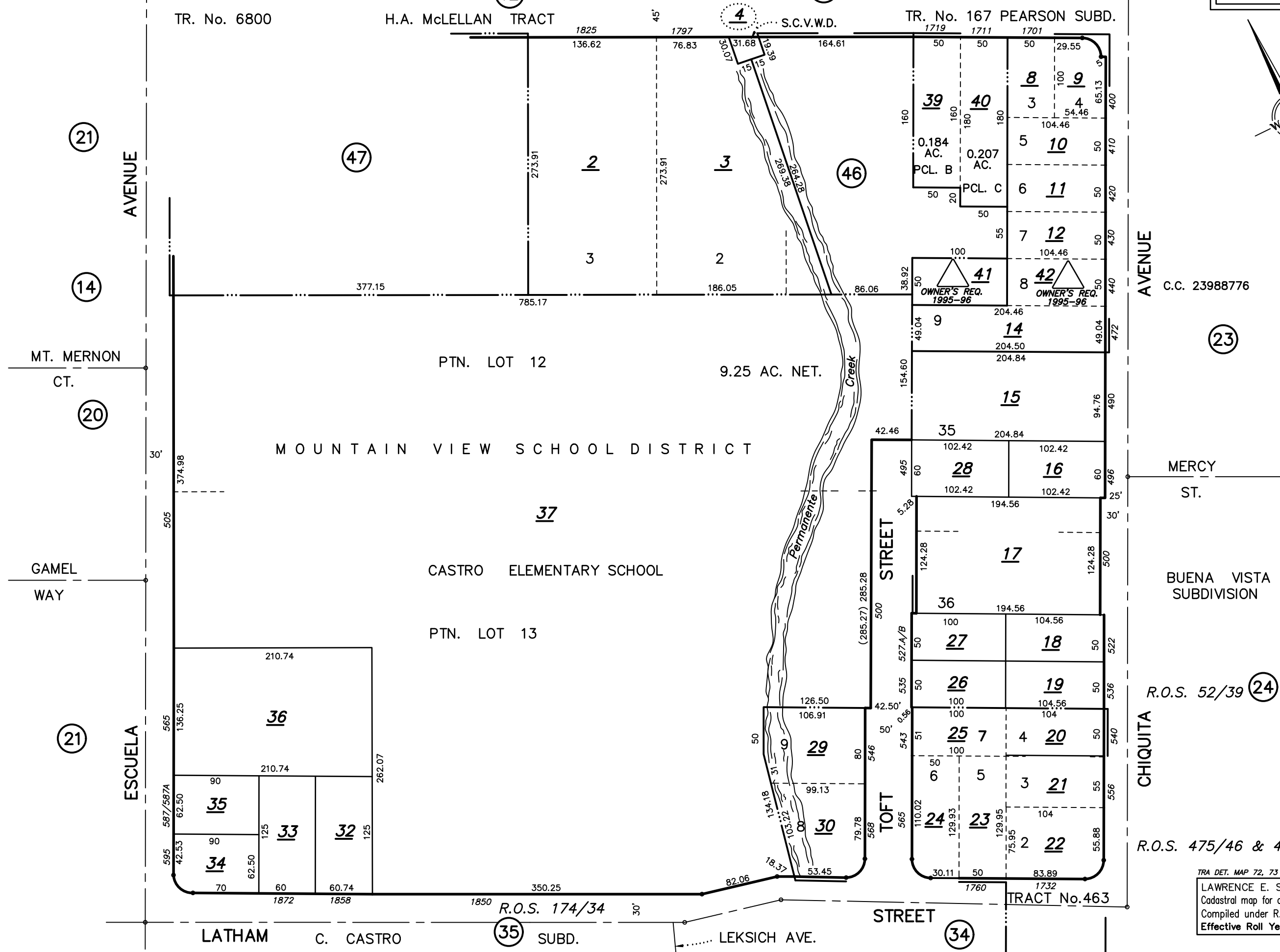
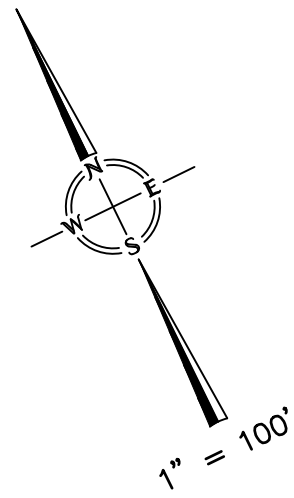
38

38

TWP. 6 S. R. 2 W.  
28 27  
33 30







C.C. 23988776

R.O.S. 52/39

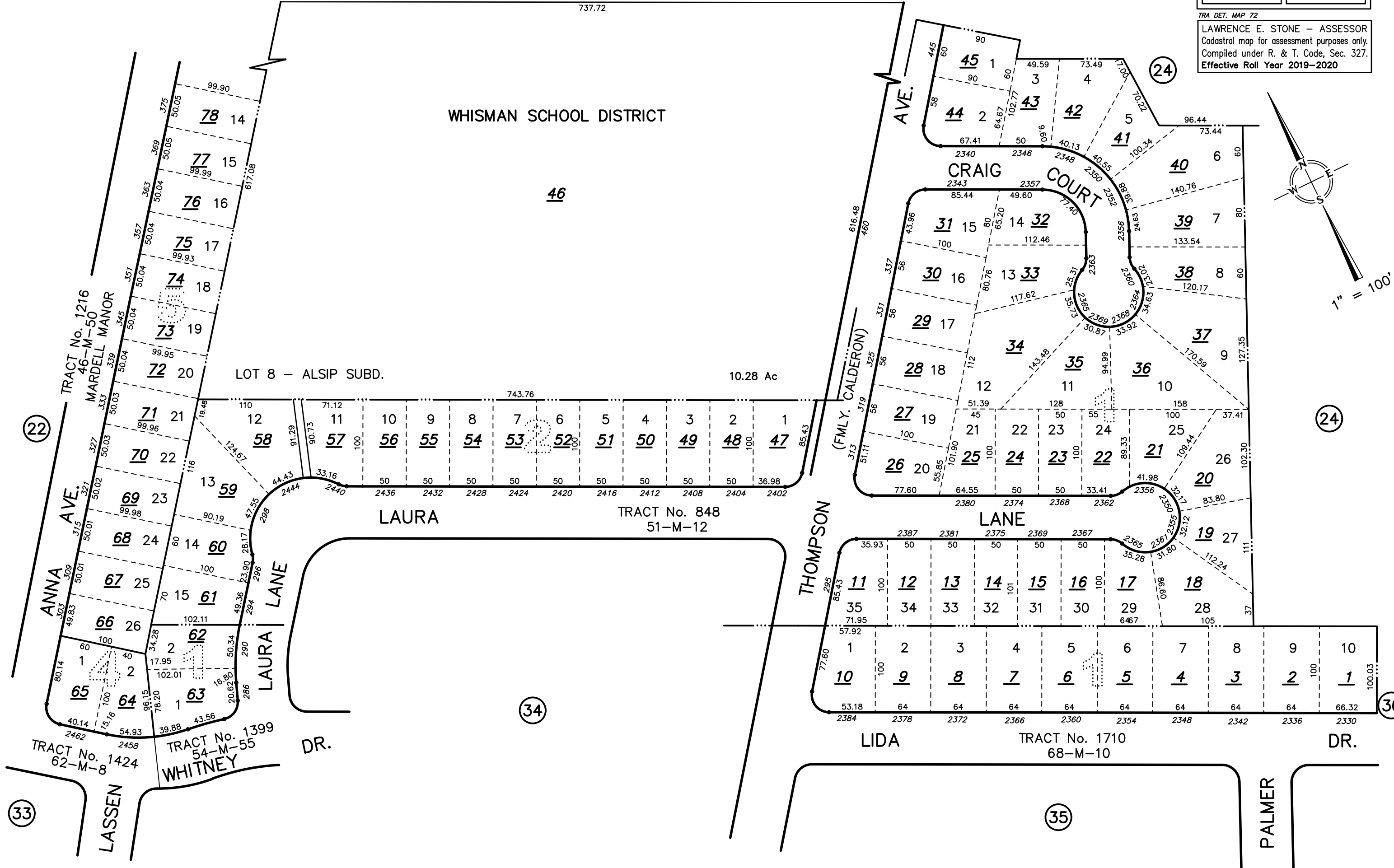
R.O.S. 475/46 & 47

TRA DET. MAP 72, 73  
LAWRENCE E. STONE — ASSESSOR  
Cadastral map for assessment purposes only.  
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Effective Roll Year 2019-2020

23

BOOK 147 PAGE 29

TRA DET. MAP 72  
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Effective Roll Year 2019-2020



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27

BOOK 150

PAGE 17

MOUNTAIN SHADOWS — UN. No.2  
TRACT No. 3669, 173-M-28

MOUNTAIN SHADOWS — UN. No.2  
TRACT No. 3757, 184-M-46

SAN PIERRE

WY.

AVENUE

AVENUE

16

LUIS

1605/1625

750

ADLAI STEVENSON ELEMENTARY SCHOOL

WHISMAN SCHOOL DISTRICT

2

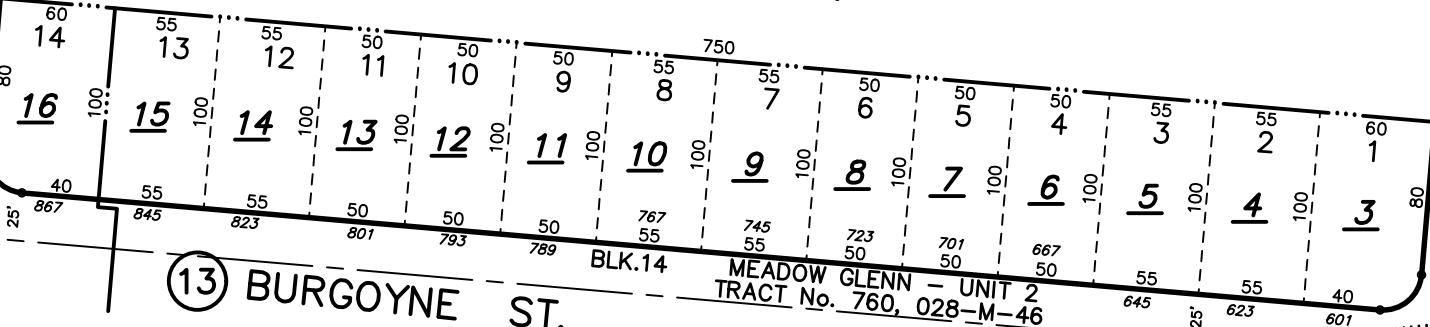
EURKAUF ELEMENTARY SCHOOL

MONTECITO

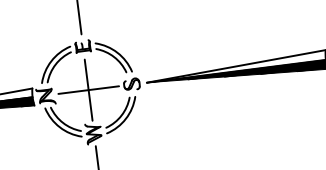
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16.96 Ac. Net

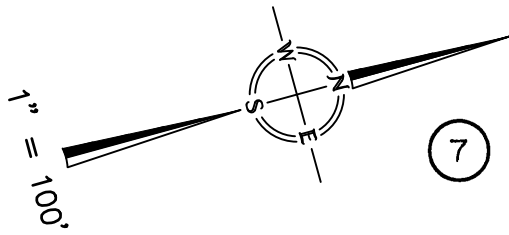
MEADOW GLENN — UNIT 3  
TRACT No. 775, 030-M-42



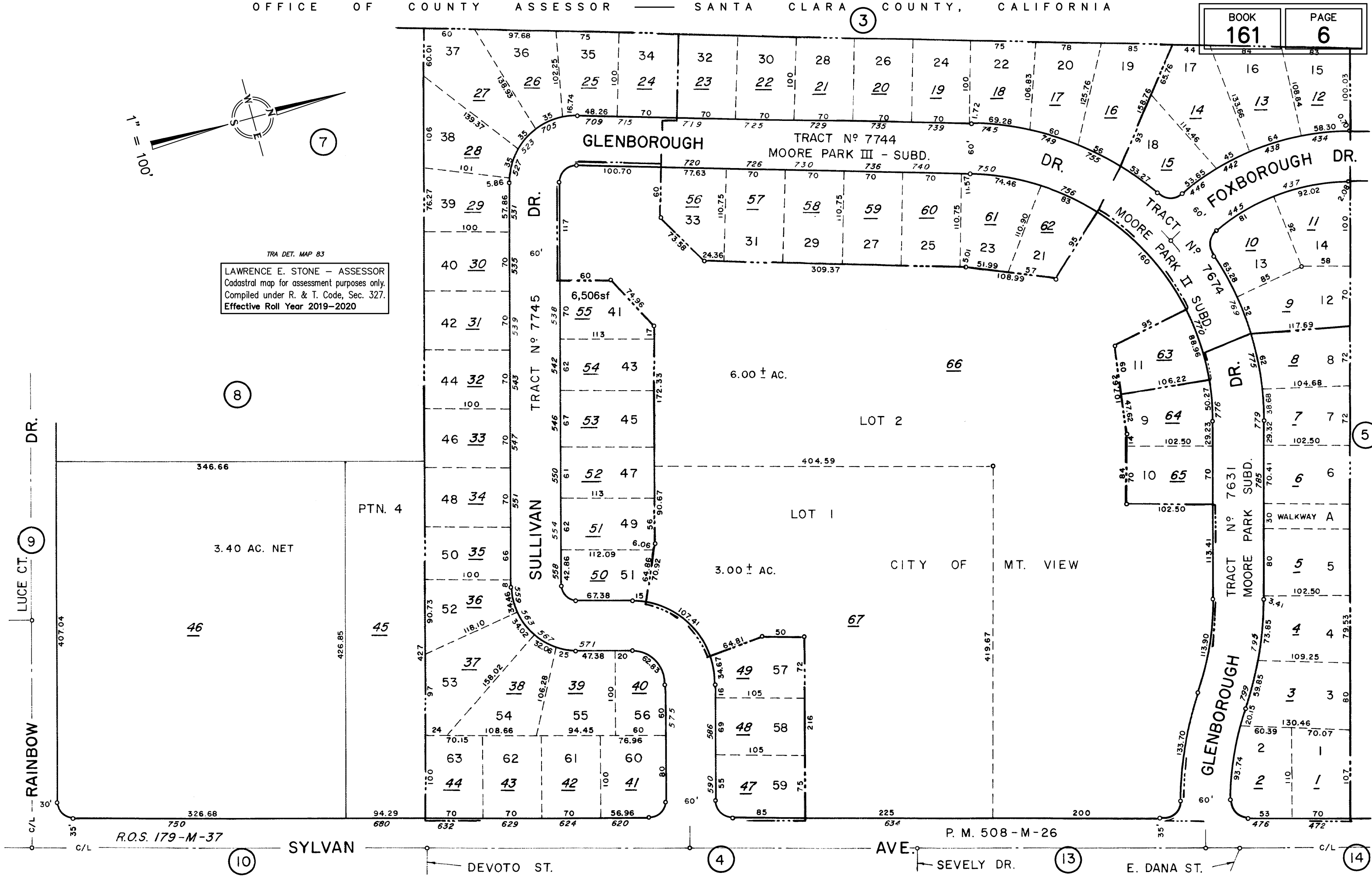
TRA DET. MAP 072  
LAWRENCE E. STONE — ASSESSOR  
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Effective Roll Year 2019-2020

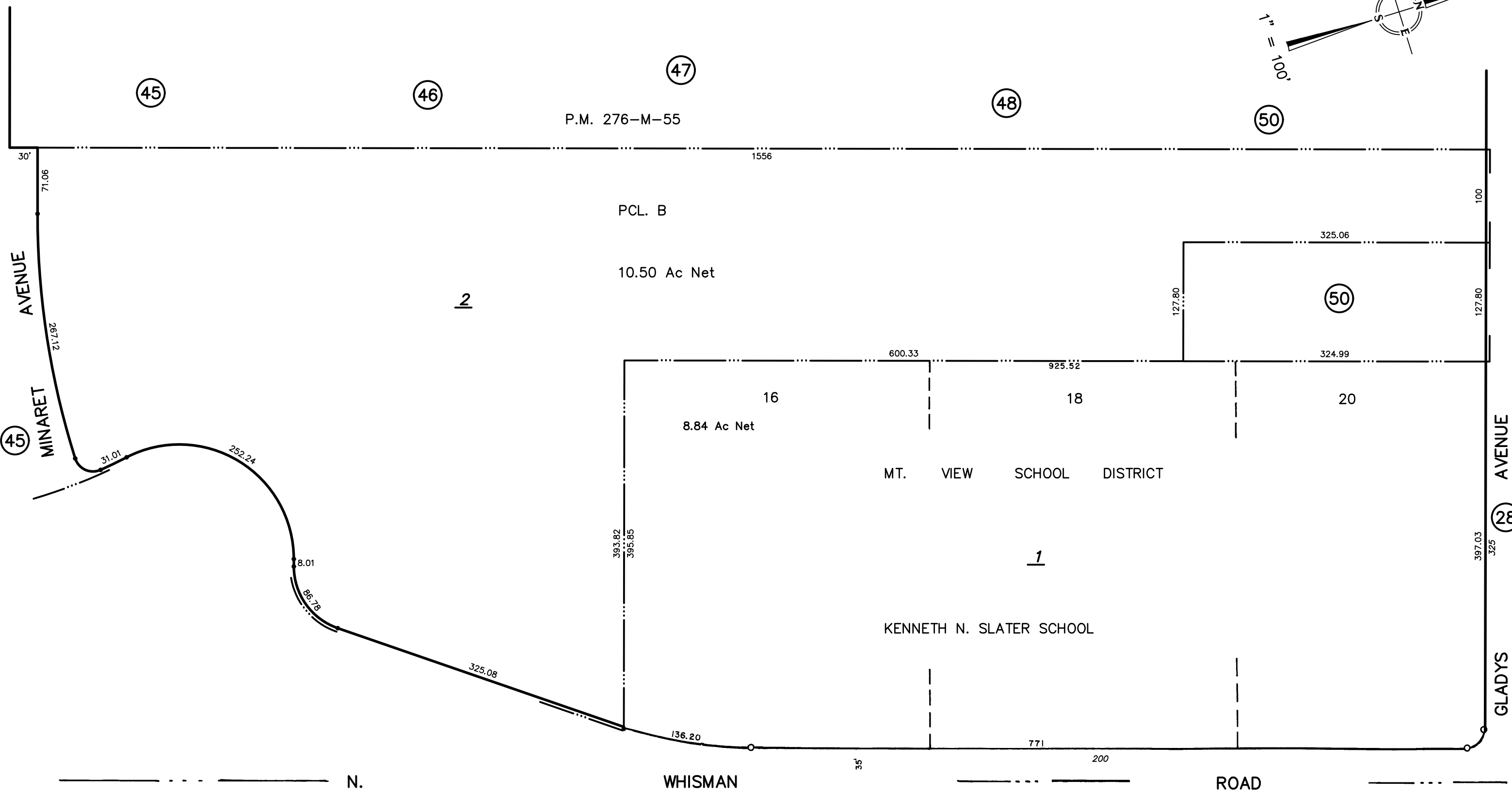
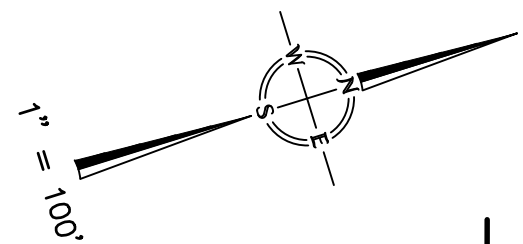


1" = 100'



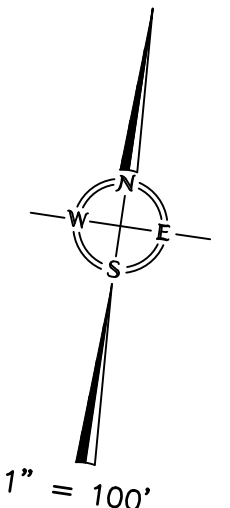
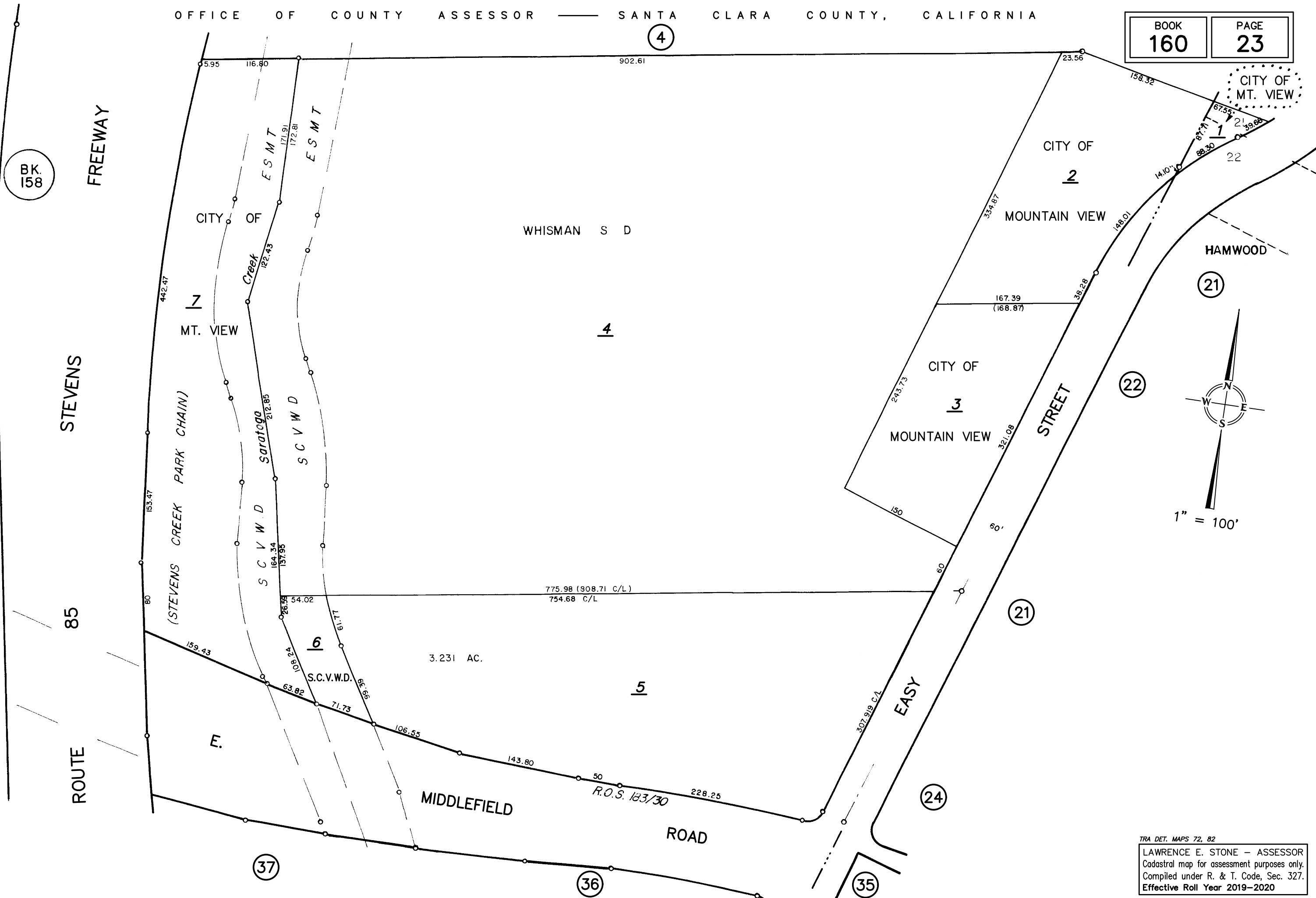
TRA DET. MAP 83  
 LAWRENCE E. STONE — ASSESSOR  
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 Effective Roll Year 2019-2020





TRA DET. MAP 83  
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Effective Roll Year 2019-2020

CITY OF MT. VIEW



**ELEMENTARY SCHOOLS (K-5)**

Bubb

Castro

Huff

Landels

Mistral

Monta Loma

Stevenson

Theuerkauf

**MIDDLE SCHOOLS (6-8)**

Crittenden

Graham

**DISTRICT SERVICES/PROGRAMS**

Maintenance, Operations, Transportation (MOT)

Preschools

Special Education

Technology



**Mountain View  
Whisman  
School District**

INTERVIEW NOTES

**APPENDIX C**







MEMORANDUM



TO: File FROM: Maria Madrigal/Gene Yong

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COMPANY: Student Facilities Improvement Plan (SFIP)/ Ten-Year Master Plan Update DATE: 31 Jul 19  
Mountain View Whisman School District

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SUBJECT: Interview Notes JOB NUMBER/REFERENCE NUMBER: 02449  
Principal-Bubb Elementary School  
10:00am, Tuesday, 30 Jul 19

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ATTENDEES

BUBB ELEMENTARY SCHOOL		
Bubb ES	Cyndee Nguyen	Principal
ARTIK (A3)		
A3	Gene Yong	Senior Project Manager
A3	Maria Madrigal	Project Architect

DISCUSSION NOTES

1. The school's educational programs are based on differentiated and diverse learning.
  - a. Each grade level has 75-100 students, equivalent to 3-4 classrooms per grade.
  - b. Students only sit in a fixed classroom during the first "home room" period.
  - c. Each subsequent period of instruction involves a fluid grouping of students by competency levels in a given subject. These grouping fluctuate from period to period and are changed approximately every two weeks.
    - i. The 3-4 teachers in each grade level will meet regularly/bi-weekly to identify students groupings.
    - ii. The size of groups can vary widely from a small group (<10 students) to a very large group (>40 students).
    - iii. Teachers collaborate with each other, both within each grade and within each subject matter. Teachers in each grade meet at the end of each week to plan for the following week (e.g., Thursday).
  - d. The school often hires an extra teacher for breakout groups in a given subject or grade level.

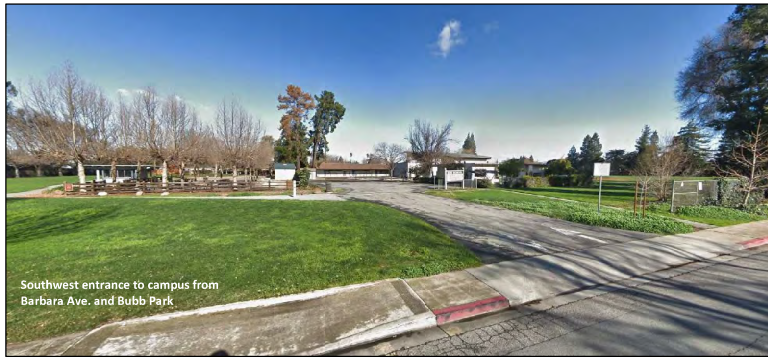
MEMORANDUM



2. Classrooms
  - a. Existing classrooms are standardized across the entire school and lack flexibility to handle small groups or very large groups.
  - b. Classrooms are often either too big for small groups or too small for very large groups.
  - c. Flexible, adaptable classrooms are needed to accommodate breakout groups and large groups.
    - i. Break out spaces attached to classrooms.
    - ii. Operable interior and exterior partitions to enable spaces to be combined and for classroom spaces to be extended to adjoining exterior spaces.
3. STEM-based education is a priority and there is no dedicated purposefully configured space for it.
  - a. The only difference between the school's existing STEM classroom and a regular classroom is the flooring (i.e., VCT vs. carpet) and sink.
  - b. A STEM classroom should be configured more like a workshop or lab (i.e., flexible, adaptable, messy, fabrication, utility support, etc.).
4. Competing Demands for Space-Extended Care
  - a. After school, several different vendors provide extended care services on campus (e.g., YMCA). They use the portables, MUR and library. They do not use any classrooms.
  - b. The school loses access to facilities used by Extended Care providers after hours.
  - c. The school needs access to these spaces for meetings, workshops and its own after school programs.
5. Circulation
  - a. 50% of students arrive through the front of the school along Hans Ave. and 50% arrive through the back of the school from Barbara Ave.
  - b. Students arriving by vehicles arrive primarily on Hans Ave. The existing pickup/dropoff area on Hans Ave. is too small and awkwardly configured.
  - c. There is no designated pickup/dropoff facilities on Barbara Ave. Students are dropped off curbside and walk through the back gates.
6. Safety and Security
  - a. There is minimal perimeter security along the back of the school campus along Barbara Ave. and Bubb Park. There is no gate to control entry at the SE corner of the campus and no fence or gate at the SW corner to control entry to/from the rear parking lot and along the shared boundary with Bubb Park.
  - b. Existing gates in the fence along the park edge are locked. Custodial staff open and lock the gates every day. Students and staff need to be able to exit the site even when the gates are locked (e.g. during an emergency event).



- c. There is minimal site lighting around the playground, parking lot and portables. It is very dark on campus after hours. Only the immediate areas around classrooms are lit. The lack of site lighting can make it very uncomfortable for staff walking from their classrooms to their cars in the dark (i.e., late afternoons in winter).



7. Play Equipment

- a. Has not been updated in 10 years and will need to be replaced.

8. Special Ed

- a. The SPED program is based in recently modernized spaces in Bldg. 6. Its existing facilities are less than ideal due to the following:
  - i. Location, gates and lack of windows isolates SPED students from the rest of campus.
  - ii. Classrooms are awkwardly configured (i.e., triangle-shaped space).
  - iii. Lack of windows gives space.
- b. Bubba ES has larger than average SPED population, many of whom are severely disabled.
- c. Need smaller spaces for service providers/specialists/counselors to support program.

9. Outdoor Spaces

- a. Campus lacks outdoor spaces for non-athletic, more passive activities (e.g., board games, drawing, reading). These spaces should be visibly connected to existing play areas.
- b. Outdoor Classrooms: Create outdoor, sheltered spaces for up to 30 student, including storage, utilities, and furnishings to support gatherings/instruction.



- c. Shade Structure: existing shade structure is very popular, but cannot be used during inclement weather since it is a fabric roof. Would be ideal to have an all-weather shade structure.

**PROJECTS WORKSHEET**  
Update to the 2010 Student Facilities Improvement Plan  
Mountain View Whisman School District

2010 Student Facilities Improvement Plan (SIP) Projects							
PRIORITY CATEGORY	PROJECT DESCRIPTIONS		SITE REFERENCE	PROJECT STATUS	CURRENT PRIORITY/NEED		
	PROJECT TYPE/CATEGORIES	PROJECT NOTES			PRIORITY	NOTES	NOTES (STATUS)
<small>Safety &amp; Enrollm Growth School Infrastructure Educational Enhancements</small>							
<b>BUBB ELEMENTARY SCHOOL:</b>							
<small>2 if not note: 1=High to 4=Low, NA=Not Needed</small>							
<b>PROJECTS FROM 2010 SIP - NOT COMPLETED / PARTIALLY COMPLETED</b>							
1	Safety&Growth	Campus Lighting	Add/replace parking and site lighting	Partial	2	Improve site lighting around campus, including parking areas.	Site & parking lighting not done.
1	Safety&Growth	Separate Parking, Pickup and Bus Loading Areas	Replace paving, curbs, fixtures; new driveways, ramps, landscaping	Partial	1	Expand capacity for pickups/dropoff. Discard parking from pickup/dropoff areas.	Still needed, not done, limited scope based on available land.
1	Safety&Growth	Restroom Modernization	Replace flooring, wall tiles, fixtures, lighting, cubicles	Partial	-	CN to defer to others	Restrooms are functional and up to current code. Wall tile is dated. Limited scope.
1	Safety&Growth	Gas Upgrade (code compliance, underground lines)	Gas shutoff valves/vacuum breakers, at bldgs to be modernized.	Not Completed	-	CN to defer to others	Not sure of current condition
1	Safety&Growth	Play Cluster (asphalt, turf, play structures)- Foster garden	New play box w/ rubber flooring, play structure, fencing, turf	Not Completed	3	See discussion in interview notes.	Replace aging play structures
1	Safety&Growth	Play Structures-Grades 1-3/4-5	New play structure, play box and surfaces (2)	Not Completed	3	See discussion in interview notes.	Replace aging facilities
1	Safety&Growth	Classroom Replacement-1 Story	New extended care bldg.	Not Completed	-	See discussion in interview notes.	Extended Care is in portable which was just modernized. Confirm if still needed.
1	Safety&Growth	Fencing	New 8' chainlink/gates at school perimeter, garden fencing.	Not Completed	1	Provide fencing and control gates along Barbara Ave. and Double Pass (SW corner of campus).	Side of school (west), abutting park
2	Infrastructure	Plumbing Upgrade (fixtures, eqpt., domestic lines, end-use fl)	Replace all plumbing fixtures, eqpt., and bldg. domestic water lines.	Partial	-	CN to defer to others	Fixtures replaced under phases 1 & 2. Replacement of concealed plumbing lines not completed, would be quite costly and require ripping open new finishes.
2	Infrastructure	Mechanical Upgrade (end of service life)	Replace all existing HVAC systems	Not Completed	-	CN to defer to others	HVAC systems replaced in 2003 (beyond exp. 15 year service life). Systems do not meet Title 24 standards.
2	Infrastructure	Underground utility survey/upgrade	Survey existing underground utilities, upgrade utilities if needed	Not Completed	-	CN to defer to others	Limited value. Site deficiencies recognized and addressed during completed projects. Consider on case-by-case basis with specific modernization projects.
2	Infrastructure	Hard-Court Play Area (new AC, AC overlay)	New asphalt-concrete	Not Completed	-	CN to defer to others	Include in scope of modular removal and site projects.
2	Infrastructure	Covered Walkway Repair (remove utilities, re-roof)	Replace concrete paving, repair/replace covered walkway, underground existing roof-mounted conduits	Not Completed	-	CN to defer to others	Covered walkways repaired and refurbished (5-10 yrs service life left). Roof mounted conduits not relocated. Limited benefit to undergrounding conduits. Consider when time to replace roof.
3	Enhancement	Alternative Energy-Solar Panels	New solar panel installation	Partial	-	CN to defer to others	Subject to District (electrical, cost) & School (shade structural) priorities
3	Enhancement	Energy Efficiency (mechanical, electrical, plumbing)	Upgrade MEP systems to energy efficient systems-existing bldg.	Partial	-	CN to defer to others	Controls/BMS done under phase 1 & 2. See HVAC replacement project.
3	Enhancement	Landscape (Frontage, programmatic spaces)	New hardscape/softscape at new frontage, outdoor spaces, garden area	Not Completed	2	Create outdoor learning spaces	Landscape is functional. Confirm with school & district if upgrade is a priority.
3	Enhancement	Existing Administration Expansion	3k sq expansion of existing Admin Bldg (R2). Bldg #2 modernized by SEP #27	Not Completed	-		Existing admin building modernized summer 2018. Defer to school & district if still needed.
3	Enhancement	Athletic Fields (track, walking trail)	New decomposed granite trail around playground	Not Completed	-	See Landels interview notes	Condition of field is good. Confirm if trail is still needed or field surface to be changed.

**PROJECTS WORKSHEET**  
Update to the 2010 Student Facilities Improvement Plan  
Mountain View Whisman School District

2010 Student Facilities Improvement Plan (SIP) Projects							
PRIORITY CATEGORY	PROJECT DESCRIPTIONS		SITE REFERENCE	PROJECT STATUS	CURRENT PRIORITY/NEED		
	PROJECT TYPE/CATEGORIES	PROJECT NOTES			PRIORITY	NOTES	NOTES (STATUS)
<small>Safety &amp; Enrollm Growth School Infrastructure Educational Enhancements</small>							
<b>BUBB ELEMENTARY SCHOOL:</b>							
<small>2 if not note: 1=High to 4=Low, NA=Not Needed</small>							
<b>OTHER PROJECTS STILL NEEDED TO ADDRESS ANY PRIORITY AREA-1) STUDENT SAFETY &amp; ENROLLMENT GROWTH, 2) SCHOOL INFRASTRUCTURE, 3) EDUCATIONAL PROGRAM ENHANCEMENTS</b>							
2	Infrastructure	Existing Classrooms-Modernization		#1, #3-5	1	Create flexible, collaborative spaces with breakout rooms and operable partitions.	
2	Infrastructure	Existing Classrooms-Modernization (EPED)		TBD	2	Create more centrally located EPED classroom spaces with better configuration and lighting.	
2	Infrastructure	Technology Upgrade	Replace all fiber optic cables with OM3 cables Replace all copper cables with Cat6a cables Repair network cabling	A8	2	OM3 upgrades available bandwidth to approx. 4,700 megabits (approx. double existing) Upgrade from Cat5e copper, support higher bandwidth/data rates over longer distances. Portions of network cabling hasn't worked since being installed in 2018.	



MEMORANDUM

TO# File	FROM# Maria Madrigal/Gene Yong
COMPANY# Student Facilities Improvement Plan (SFIP)/ Ten-Year Master Plan Update Mountain View Whisman School District	DATE# 29 Jul 19
SUBJECT# Interview Notes Principal-Castro Elementary School 9:00am, Monday, 29 Jul 19	JOB NUMBER/REFERENCE NUMBER# 02449

ATTENDEES

CASTRO ELEMENTARY SCHOOL		
Castro ES	Theresa Lambert	Principal
ARTIK (A3)		
A3	Gene Yong	Senior Project Manager
A3	Maria Madrigal	Project Architect

DISCUSSION NOTES

1. Castro ES is a Title 1 School
  - a. Castro ES and Theuerkauf ES are MVWSD's two Title 1 elementary schools.
  - b. Title 1 Schools are part of a federal program which provides additional resources and services for public schools which serve students from predominantly lower-income communities (min. of 40% to students).
  - c. Approximately 82% of Castro ES students come from low-income families, while 68% of Theuerkauf ES' students do (source: Great Schools.org).
  - d. Castro ES is required to provide additional support services that other MVWSD schools are not required to.



MEMORANDUM

2. Location
  - a. Castro ES is situated on the eastern half of the combined Mistral/Castro ES campus. The majority of its students come from areas to the west of the campus.
  - b. This create some circulation issues since many students/parents travel through the Mistral portion of the campus to get to Castro ES.
3. Three most significant facilities-related needs include:
  - a. Storage
  - b. Administrative support space
  - c. Parking
4. Storage
  - a. Need/Workarounds
    - i. There are only three storage closets/rooms on campus.
      1. A storage closet in the Admin Office for general school materials (Bldg. A)
      2. An upstairs custodial closet in Classroom wing (Bldg. C)
      3. An L-shaped closet in the MUR (Bldg. F)
    - ii. Classrooms have no storage closets. Built-in storage facilities in classrooms are limited to a half-bank of shelves/cabinets and a sink.
      1. School bought storage cabinets and shelves for classrooms. This results in net loss of usable classroom space.
    - iii. Classrooms do not have storage hooks for students backpacks outside of classrooms. Storage hooks are on a wall inside classrooms, resulting in loss of wall space and increasing clutter in classroom spaces.
    - iv. P.E. does not have any storage.
      1. Castro ES shares use of Mistral's P.E. storage for outdoor P.E. equipment.
      2. K Playground equipment/material storage uses the nurse's office in the Admin. Bldg.
    - v. MUR storage closet is used to store school materials, and not MUR-related equipment/furnishings as intended.
      1. Tables and chairs are stored in the open MUR space. These have to be moved outside during large events in the MUR.
    - vi. The custodial closet is on the second floor.
      1. This can create challenges when servicing ground level facilities, especially if the elevator is unavailable.
      2. School also stores school supplies in the custodial closet.
    - vii. School relies on MVWSD's MOT to store large items.



5. Parking

- a. Insufficient parking for staff.
  - i. Existing Toft St. parking lot has 18 stalls.
  - ii. School needs parking for its staff (35 pns).
  - iii. Parking also needed for part-time or rotating staff (e.g., occupational therapist, psychologist, vision, adaptive movement, nurse, etc.), visitors, and volunteers.
- b. Staff park in open paved area behind the Classroom Bldg. (Bldg. C).
  - i. This area is designated as the site for future or interim classrooms.
  - ii. If the school loses area for staff parking, it currently does not have an alternative location for staff to park.
- c. The Mistral ES parking lot is not available to Castro ES staff.

6. Administrative Support and Meeting Spaces

- a. School has only three offices and one small meeting room (6-8 pns).
  - i. One office is for the principal and two are for other senior administrative staff.
    - 1. Principal only occupies her office three days of the week and works from the reception area the other two days.
    - 2. The principal's office is used by support services on the other two days since they require privacy.
  - ii. There are no offices for other support staff that provide services at the school. These services are critical to fulfill its Title 1 requirements. They often require spaces which are private.
    - 1. These services currently use the principal's office, the meeting room or an empty classroom.
  - iii. Need at least two additional offices
    - 1. School psychologist requires a dedicated office for 2-3 days a week.
    - 2. Counselors for occupational therapy, vision and adaptive movement each work 1 to 2 days a week at the school. The three can share one office.
  - iv. Staff meetings are held either in the staff room or a vacant classroom, since the existing meeting room is too small.
    - 1. Need space for up to 40 pns. This can include space for community meetings.



7. Other facility needs/issues include:

- a. Library teaching/meeting space.
  - 1. The library does not have a space to teach a group of students or to meet.
  - 2. Need at least one space suitable for teaching/sharing and/or meetings. This space can supplement the administrative office and meeting space needs noted above.
- b. Covered Walkways
  - i. Covered walkways were in the original plan for the school but were not constructed, notably on the upper level of the classroom bldg.
    - 1. Students exposed to inclement weather when traveling to/from classrooms.
    - 2. Unable to store student backpacks outside classrooms.
    - 3. Classrooms affected as students track in mud/wet shoes on rainy days.
- c. Secure Perimeter
  - i. There are fences along the public frontages of both Mistral and Castro along Escuela Ave. and Toft St.
  - ii. Campus is open to Castro Park and Latham Street.
  - iii. Parents have expressed concerns about having a secure perimeter around campus.
  - iv. Need to secure campus during school hours and secure buildings after hours.
    - 1. Scenario during school hours
      - a. Secure Mistral/Castro campus at perimeter along Escuela Ave., Latham St. and Toft St.
    - 2. Scenario after hours
      - a. Enable public access to playfield, playcourts, play structure and one set of restrooms (in Admin Bldg.) from Latham St. and path from Toft St.
      - b. Secure perimeter between playcourts and buildings and along Escuela Ave. and Toft St.



TO# FROM#  
File Maria Madrigal/Gene Yong

COMPANY# DATE#  
Student Facilities Improvement Plan (SFIP)/ Ten-Year Master Plan Update 14 Aug 19

SUBJECT# JOB NUMBER/REFERENCE NUMBER #  
Interview Notes 02449  
Principal-Huff Elementary School  
11:00am, Monday, 5 Aug 19

PROJECTS WORKSHEET  
Update to the 2010 Student Facilities Improvement Plan  
Mountain View Whisman School District

2010 Student Facilities Improvement Plan (SFIP) Projects				CURRENT PRIORITY/NEED			
PRIORITY CATEGORY	PROJECT TYPE/CATEGORIES	PROJECT DESCRIPTIONS	SITE REFERENCE	PROJECT STATUS	PRIORITY	NOTES	NOTES (STATUS)
<small>1 School &amp; Student Growth 2 School Infrastructure 3 Educational Enhancements</small>							
<b>MISTRAL-CASTRO ELEMENTARY SCHOOL</b>							
<b>PROJECTS FROM 2010 SFIP - NOT COMPLETED / PARTIALLY COMPLETED</b>							
1	Safety&Growth	Play Cluster-Preschool		Partial		Preschool needs its own age-appropriate play areas.	at Latham, open space between modulars Regulators replaced to existing classroom wings in 2017.
1	Safety&Growth	Gas Upgrade (code compliance, underground lines)		Partial			All Latham Preschool
1	Safety&Growth	Fencing		Partial	3	Need secure perimeter during school hours, secure property after hours. Active mitigation now required.	Confirm with schools/district regarding public access from park side.
1	Safety&Growth	Restroom Modernization		Partial	2	Dated, need modernization	Features, partitions and flooring done in 2017. Tile is dated but functional.
1	Safety&Growth	Signage, Drinking Fountains		Partial	2	Need replace drinking stations.	2 new drinking fountains installed in 2017 along with signage. 3 older one needs replacing.
2	Infrastructure	Mechanical Upgrade (end of service life)		Not Completed	3		Control/BWS upgraded in 2017. Units are existing, not turn on age.
2	Infrastructure	Covered Walkway Repair (remove utilities, re-roof)		Not Completed	3	Not critical.	Re-roofing may be needed.
2	Infrastructure	Existing Administration Modernization		Partial	3	Reconfigure parent/ community room, separate from faculty spaces.	Scheduled for summer of 2020
2	Infrastructure	Plumbing Upgrade (fixtures, eqpt., domestic lines, end-use I)		Not Completed	1	K Classroom (brown water)	Fixtures replaced in classrooms in 2017. No infrastructure replacement done.
2	Infrastructure	Underground utility survey/upgrade		Not Completed			Limited value. Site deficiencies recognized and addressed during completed projects. Consider on
3	Enhancement	Shade Structures (assembly)		Partial	1	None on campus. Can share with Castro/prefer own.	Still needed
3	Enhancement	Alternative Energy-Solar Panels		Partial			Subject to district (electrical, cost) & School (shade structure) priorities.
<b>OTHER PROJECTS STILL NEEDED TO ADDRESS ANY PRIORITY AREA - 1) STUDENT SAFETY &amp; ENVIRONMENT GROWTH, 2) SCHOOL INFRASTRUCTURE, 3) EDUCATIONAL PROGRAM ENHANCEMENTS</b>							
		CASTRO-Admin Support Services Expansion			3	No spaces currently available. Use open classrooms, workrooms and staff offices as workroom.	Having adaptable, transparent and flexible spaces can encourage greater collaboration and buy-in to educational philosophy.
		CASTRO-Library Modernization/Expansion			2	No instructional/break out spaces in library. Can locate student-oriented Title I spaces in library.	Existing MLR only allows for one activity at a time to occur in space. Need flexibility for concurrent activities, particularly for after hours use.
		CASTRO-Storage Expansion			3	Storage lacking for school.	Having adaptable, transparent and flexible spaces (classrooms, and P.E. AdG) storage will encourage greater collaboration and buy-in to educational philosophy.
		CASTRO-Staff Parking			3	Existing space may be lost if add'l classrooms added.	Existing MLR only allows for one activity at a time to occur in space. Need flexibility for concurrent activities, particularly for after hours use.
2	Infrastructure	MISTRAL-Technology Upgrade		All	2	DIM upgrades available bandwidth to approx. 4,700 megabits (optical, double existing) Upgrade from Cat5e copper, support higher bandwidth/data rates over longer distances. MDF Main Distribution Frame: signal distribution frame connecting campus IT equipment to cables and external carrier equipment (transition from outside to internal systems).	

Prepared by Artik for MVWSD  
1 of 1

ATTENDEES

HUFF ELEMENTARY SCHOOL		
Huff ES	Miguel Espinosa	Principal
ARTIK (A3)		
A3	Gene Yong	Senior Project Manager
A3	Maria Madrigal	Project Architect

DISCUSSION NOTES

- New principal, started two months ago and came from Modesto
- First campus impressions
  - Exteriors look dated. Interiors have been modernized and are in good condition.
  - Campus is not secure. Lack of fences and gates to control access to campus.
    - Open and accessible to community.
    - Accustomed to having a controlled perimeter and a single controlled point of entry during school hours.
  - School recently recognized by the State as a Blue Ribbon school, which is a prestigious award. School should reflect this recognition. Campus should be revitalized and made more aesthetically appealing/more inviting.
  - Campus lacks a clear center.



MEMORANDUM

MEMORANDUM



- e. PA system should be centralized and separated from the fire alarm system.
  - f. Drinking stations need to be modernized.
3. Does not necessarily see need for differentiated spaces to address RTI. Good teachers adapt to space given. Not a space issue.
  4. Classrooms should be teacher friendly and have ample natural light, especially in this climate.
  5. Project Based Learning is large part of educational program
    - a. Inquiry based education
    - b. Manipulatives are used more frequently (need storage space)
    - c. Smaller “pod” spaces could be used for a student breakout groups
    - d. Would like more open classroom with natural daylight
  6. Staff Needs
    - a. Access to technology more important than the space
  7. Outdoor
    - a. Qualitative outdoor play
      - i. Differentiated play
    - b. Sensory spaces
    - c. Program of differentiated play
      - i. Encouragement of different levels of skill
      - ii. Safe place for students to sit down
    - d. Likes idea of gardens and courtyards, similar to previous school (Palisades Charter Elementary) where they had gathering spaces for the school and the community.

TO: File	FROM: Gene Yong
COMPANY: Student Facilities Improvement Plan (SFIP)/ Ten-Year Master Plan Update Mountain View Whisman School District	DATE: 31 Jul 19
SUBJECT: Interview Notes Principal-Landels Elementary School 10:00am, Tuesday, 30 Jul 19	JOB NUMBER/REFERENCE NUMBER: 02449

ATTENDEES

LANDELS ELEMENTARY SCHOOL		
Landels ES	Heidi Galassi	Principal
ARTIK (A3)		
A3	Gene Yong	Senior Project Manager

DISCUSSION NOTES

1. Pickup/Dropoff & Parking
  - a. Existing pickup/dropoff and parking area is awkwardly laid out and results in a lot of confusing/conflicting vehicle movements.
2. Safety & Security (Lighting & Perimeter Fence)
  - a. There is no fence along the shared boundary between the playground and Stevens Creek Trail.
    - i. Staff have to continually monitor and has had to address people coming into the school from the trail during school hours.
  - b. There are four play structures. Three belong the school, but the fourth belongs to the City.
    - i. The fourth play structure is closest to the trail. School has no control over the fourth play structure.
  - c. Site lighting beyond the immediate area of the classrooms is poor, especially in the parking lot and the play areas around the classrooms. In the winter, it can be dark by late afternoon when teachers travel between classrooms to their cars.



Playfield at Landels Elementary School  
with Stevens Creek Trail to the right

3. Extended Care Programs
  - a. Programs are provided by outside vendors (e.g., YMCA, Beyond the Bell, Right at School, etc.).
  - b. Non-classroom meeting facilities are used by these programs (portables, MUR, library).
    - i. Classrooms are controlled by the teachers and made available only with consent of teachers.
  - c. Vendors compete for space with the school's after-hour activities (staff meetings, etc) and programs (art, LEAP, tutoring, clubs). There are not enough non-classroom facilities to meet the needs of all after-school programs.
4. MUR
  - a. Space was designed as a single-use space without the flexibility to partition the space.
  - b. MUR would be more valuable if it could be partitioned to support multiple, concurrent activities. This is particularly relevant for after-school facilities to support multiple programs/activities.
5. Additional Administrative Offices
  - a. Additional offices are needed. Many of the school's support services require privacy. Need at least four (4) additional offices for the following:
    - i. 1-School Psychologist (2-3 days/week)
    - ii. 1-shared among tutoring, testers, and LPAC-Language Proficiency Assessment Committee (2-3 days/week each)
    - iii. 1-School Community Facilitator (5 days/week)
    - iv. 1-Instructional Coach (5 days/week)

6. Parent/Community Workroom
  - a. Need a workroom that parent and community organizations (PTA, ELAC-English Learner Advisory Committee) can use throughout the day and after hours.
7. Educational Vision
  - a. Differentiated learning for different children.
    - i. Emphasis is on push-in instruction for different types of learners. Minimize pull-out. Push-in results in better integration of instruction with a student's primary educational experience.
  - b. RTI (Response to Instruction) and ELD (English Language Development) are core educational platforms for Landels ES and schools in MVWSD.
    - i. RTI is a tiered framework for differentiated learning across a grade level. Instruction provided at an individual, small group and whole class level. RTI enables children to learn differently and at their own pace (i.e., students with challenges in learning, students who have demonstrated mastery of content, etc.).
    - ii. ELD means focused instruction during the regular school day on English language standards to assist English learners to develop language skills necessary for learning academic content in English.
8. Differentiated Learning/Instruction
  - a. Students are grouped by competency levels for each period (organized along grade levels).
  - b. Groupings are fluid and vary from period to period based on different levels of competency in different subjects. Teachers assign students to groups. Group sizes vary widely.
  - c. Collaboration among teachers is a critical part of the process. High buy-in from teachers. Team teaching/co-teaching is central to this approach.
9. Differentiated Learning Environments
  - a. Need flexible classrooms that can create differentiated learning environments. More open, more flexible spaces.
  - b. Need a more collaborative learning environments that can foster collaboration among teachers/staff. Continue to break down silos.
  - c. Example of the Innovation Center at Graham MS.
10. Classrooms of the future
  - a. Purposefully configured science classrooms which are more like labs and workshops. Allow/encourage more hands-on, project-based learning (e.g., maker spaces).
  - b. More open, flexible, workshop-type spaces.
  - c. Enable flexible groupings, small groups, team teaching.



**PROJECTS WORKSHEET**  
Update to the 2010 Student Facilities Improvement Plan  
Mountain View Whisman School District

2010 Student Facilities Improvement Plan (SFIP) Projects						
PRIORITY CATEGORY	PROJECT DESCRIPTIONS			CURRENT PRIORITY/NEED		
<small>Safety &amp; Crime/Event Goals School Infrastructure Educational Enhancements</small>	PROJECT TYPE/CATEGORIES	PROJECT NOTES	SITE REFERENCE	PROJECT STATUS	PRIORITY	NOTES (STATUS)
<b>LANDELS ELEMENTARY SCHOOL</b>						
<b>PROJECTS STILL NOT COMPLETED / PARTIALLY COMPLETED</b>						
1	Safety-Growth	Fencing	New 8' perimeter fence, gates, plan garden fence	Not Completed	1	Provide perimeter fence along boundary with creek trail
1	Safety-Growth	Campus Lighting	Add/replace existing site and parking lighting	Partial	1	Improve site lighting in parking lot, playground areas adjacent to school
1	Safety-Growth	Gas Upgrade (code compliance, underground lines)	Gas shut-off valves/vacuum breakers for bridge, being modernized.	Not Completed	-	HS defers to others
1	Safety-Growth	Play Cluster (softball, turf, city street) @ Kindergarten	New play/booster surface, play structure, fencing, AC/turf	Not Completed	1	Repair ground surface around playstructures (cracking, unsafe)
1	Safety-Growth	Separate Parking, Pickup and Bus Loading Areas	Reduce curbs, sidewalks, AC, steps, ramps, landscaping. New trash enclosure. New bus/truck area.	Partial	1	Reconfigure to address awkward vehicular flows through pickup/dropoff/parking areas.
1	Safety-Growth	Storage, Drinking Fountains	New exterior drinking fountains (6), interior/outdoor signage	Partial	2	2 drinking fountains realized summer of 2018
1	Safety-Growth	Classroom Replacement 1 Story	New 1 story classroom bldg for Extended Care (site of Unit #3)	#3 site Not Completed	2	Need facilities for Extended Care to second site/enable school use of its facilities after hours.
1	Safety-Growth	Restroom Modernization	Reduce floor/wall tiles, new fixtures/lighting/cabinets.	Partial	4	Restrooms are functional and up to current code. Wall tile is dated. Limited scope.
2	Infrastructure	Mechanical Upgrade (rest of service life)	Reduce existing mechanical (HVAC) systems at bldgs being modernized	Not Completed	-	HS defers to others
2	Infrastructure	Hard Court Play Area (new AC, AC overlay)	New AC at play area	Not Completed	1	Include in scope of modular removal and site projects.
2	Infrastructure	Underground Utility survey/upgrade	Survey existing underground utilities, upgrade existing utilities if needed.	Not Completed	-	HS defers to others
2	Infrastructure	Plumbing Upgrade (fixtures, eqpt., domestic lines, ext. svc. if)	Reduce existing plumbing eqpt. & domestic lines/bldgs being modernized. New fixtures include car 3 (RR, upgr. old)	Not Completed	4	No concerns on campus
2	Infrastructure	Covered Walkway Repair (remove utilities, re-configure)	Reduce concrete paving, rewire/reroof covered walkway, underground existing roof required on-site	Not Completed	-	HS defers to others
3	Enhancement	Shade Structures (assembly)	New 4000 sq ft shade structure in assembly area	Partial	3	Vision is for students to not outside
3	Enhancement	Existing Parking Modification (ADA, wheelchair access)	Reduce curbs, sidewalks, AC, steps, ramps	Not Completed	3	Reconfigure to address awkward vehicular flows through pickup/dropoff/work area.
3	Enhancement	Landscape (heritage, programmatic spaces)	New herbaceous/landscape at heritage, outdoor spaces (sidewalks/fencing, new garden area)	Not Completed	4	HS not aware of any concerns
3	Enhancement	Alternative Energy Solar Panels	New solar panel installation	Partial	-	HS defers to others
3	Enhancement	Energy Efficiency (mechanical, electrical, plumbing)	Upgrade mechanical/plumbing/electrical systems for energy efficiency for bldgs being modernized (those replacement under CP 3)	Partial	-	HS defers to others
3	Enhancement	Existing Administration Expansion	1500 sq expansion of Admin Bldg, #1 (examines adjoining Bldg, #2 is decommission)	#1 Not Completed	1	Need additional 3-4 offices for future, connecting services, CLAC services. Priority required.
3	Enhancement	Athletic Fields (track, walking trail)	New decomposed granite or AC walking trail around playfield	Not Completed	2	Pathways is a good project to support P.E. and annual walkathon.

**PROJECTS WORKSHEET**  
Update to the 2010 Student Facilities Improvement Plan  
Mountain View Whisman School District

2010 Student Facilities Improvement Plan (SFIP) Projects						
PRIORITY CATEGORY	PROJECT DESCRIPTIONS			CURRENT PRIORITY/NEED		
<small>Safety &amp; Crime/Event Goals School Infrastructure Educational Enhancements</small>	PROJECT TYPE/CATEGORIES	PROJECT NOTES	SITE REFERENCE	PROJECT STATUS	PRIORITY	NOTES (STATUS)
<b>LANDELS ELEMENTARY SCHOOL</b>						
<b>OTHER PROJECTS STILL NEED TO ADDRESS ANY PRIORITY AREA: 1) STUDENT SAFETY &amp; ENROLLMENT GROWTH, 2) SCHOOL INFRASTRUCTURE, 3) EDUCATIONAL PROGRAMS/ENHANCEMENTS</b>						
2	Infrastructure	Existing Classroom Modernization		#1, 3, 5	1	Need flexible, interactive classroom spaces that can support differentiated learning
2	Infrastructure	Existing MUR Modernization		WS	2	Create adaptable, flexible system to partition different areas of MUR for simultaneous use by different activities
2	Infrastructure	Technology Upgrade	Replace all fiber optic cables with <u>OM3</u> cables Replace all copper cables with <u>Cat6</u> cables Repair network cabling	All	2	OM3 upgrades available bandwidth to approx. 4200 megabits/second, double existing Upgrade from Cat5e copper, support higher bandwidth/data rates over longer distances. Portions of network cabling from "workset" since being installed in 2018.



MEMORANDUM

TO# File	FROM# Maria Madrigal/Gene Yong
COMPANY# Student Facilities Improvement Plan (SFIP)/ Ten-Year Master Plan Update Mountain View Whisman School District	DATE-#/# 14 Aug 19
SUBJECT# Interview Notes Principal-Mistral Elementary School 10:30am, Tuesday, 6 Aug 19	JOB NUMBER/REFERENCE NUMBER# 02449

ATTENDEES

MISTRAL ELEMENTARY SCHOOL		
Mistral ES	Tabitha Miller	Principal
ARTIK (A3)		
A3	Gene Yong	Senior Project Manager
A3	Maria Madrigal	Project Architect

DISCUSSION NOTES

1. Administrative Bldg. Modernization
  - a. Need to address condition deficiencies in bldg.
  - b. Need a conference room.
  - c. School has sufficient space for specialist and counseling staff.
2. As one of the District's two "Choice" schools (Dual Immersion), Mistral enjoys a very high level of parent engagement (similar to Stevenson ES). Landscape features around campus were contributed by the parent group.
  - a. Parents are willing to stretch boundaries, support rigorous instruction.
  - b. Foster innovation with students
  - c. Technological innovation enable greater global collaboration (i.e., AR, VR, videosharing, etc.)
  - d. Need flexible, modular facilities
  - e. Need for continuous training with staff
  - f. Foster inquiry-based, independent learning (i.e., open-ended questions/no right answers, freedom to learn/explore, school provides guided learning, teach content/enable exploration).



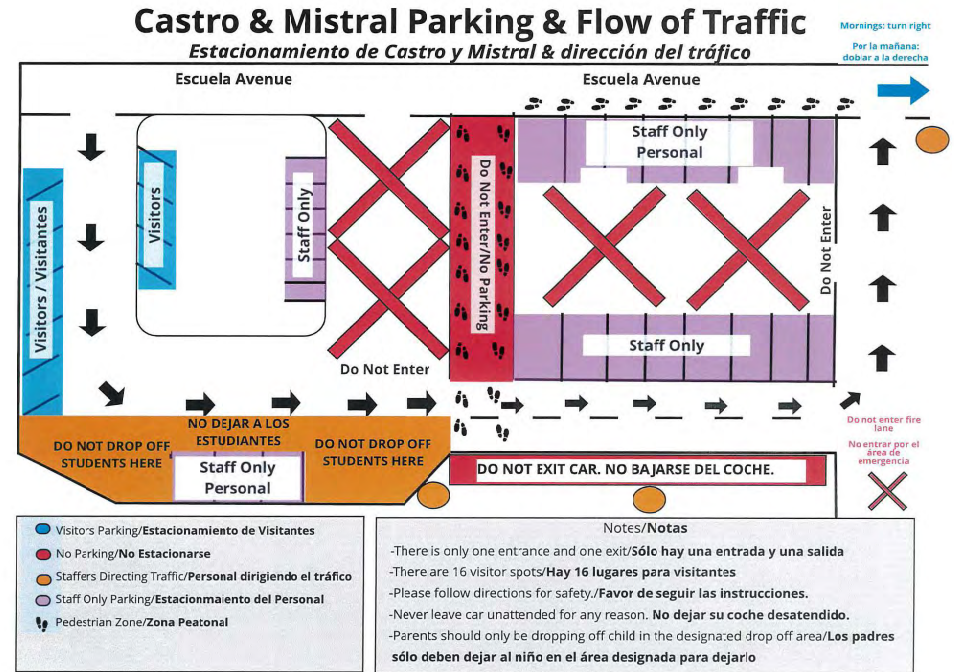
MEMORANDUM

3. Need to provide work space and storage space for parent/community volunteers
  - a. Easily accessible from the front of the school
  - b. Segregated from staff areas, to minimize cross traffic between staff and parent/volunteers.
4. To address RTI, need more flexible classrooms that can foster greater collaboration among students and staff.
  - a. Need breakout spaces
  - b. Need larger spaces for PBL, STEAM and maker space activities
  - c. Better furnished and equipped (e.g., sinks, lab/workroom-type configuration)
  - d. Connected classrooms to enable easier movement between classroom spaces
  - e. Connect to the exterior environment
    - i. Lots of natural light
    - ii. Operable windows/openings
    - iii. Ability to be outside
  - f. Existing storage is adequate. Need to maintain storage in any future modernization.
5. Outdoor Learning/Living Classrooms
  - a. Ideal to have outdoor spaces configured and furnished for outdoor learning.
  - b. Living classroom program is popular with parents/students. Opportunities to expand.
  - c. Opportunity to integrate STEAM, farm-to-table type curriculum in outdoor settings.
  - d. Reconnect students to the natural environment (i.e. counter technology inundation of students).
6. Perimeter Controls
  - a. Campus is not secure.
  - b. Open to Latham Ave and Escuela Ave.
  - c. Staff has to regularly redirect/confront people coming onto campus.
  - d. If campus can be secured during school hours, it would free staff from having to monitor perimeter. Configure to single entry point at school office.
  - e. Need controlled perimeter along public frontages of campus (i.e., Escuela Ave., Latham Ave., Toft St.).
7. Safety Measures
  - a. PA system (existing system not fully functioning)
  - b. CCTV/monitor different points of campus from a single location
  - c. Motion sensors



MEMORANDUM

8. After school programs
  - a. Vendors and school competes for space after school.
  - b. Classrooms in Bldg. P, Library and MUR used by vendors.
  - c. Shared use is very difficult since it requires continuous setup/breaking down to work.
  
9. Pickup/Dropoff
  - a. Traffic flow (pickup/dropoff) is a major concern and requires active management by school staff during peak period. See school parking and traffic flow diagram.
  - b. Parents naturally want to drop kids off in front of the school office and then return immediately to Escuela Ave.
    - i. Parents are prohibited from dropping students at the school office and from using the first return driveway to Escuela Ave. This area is coned off and staff have to keep parents moving to designated pickup/dropoff areas in front of the K Classroom bldg. (#M).
    - ii. Parents are directed to curbside areas in front of the K Classroom and to egress through the driveway at the northern edge of the parking area.
  
10. Shared facilities
  - a. Difficult to share facilities like the MUR, library and after-school facilities among two schools (i.e., availability/programming, set up, break down, storage, clean up, etc.).
  
11. Shade Structure
  - a. Ideal for Mistral and Castro to each have their own, but can share one if necessary.





TO# FROM#  
 File Maria Madrigal/Gene Yong

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COMPANY# DATE#  
 Student Facilities Improvement Plan (SFIP)/ Ten-Year Master Plan Update 14 Aug 19  
 Mountain View Whisman School District

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SUBJECT# JOB NUMBER/REFERENCE NUMBER #  
 Interview Notes 02449  
 Principal-Monta Loma Elementary School  
 9:00am, Tuesday, 6 Aug 19

PROJECTS WORKSHEET  
 Update to the 2010 Student Facilities Improvement Plan  
 Mountain View Whisman School District

2010 Student Facilities Improvement Plan (SFIP) Projects				CURRENT PRIORITY/NEED			
PRIORITY CATEGORY	PROJECT TYPE/CATEGORIES	PROJECT DESCRIPTIONS	SITE REFERENCE	PROJECT STATUS	PRIORITY	NOTES	NOTES (STATUS)
<small>1 School &amp; Student Growth                      2 School Infrastructure                      3 Educational Enhancements</small>							
<b>MISTRAL-CASTRO ELEMENTARY SCHOOL</b>							
<b>PROJECTS FROM 2010 SFIP - NOT COMPLETED / PARTIALLY COMPLETED</b>							
1	Safety&Growth	Play Cluster-Preschool		Partial		Preschool needs its own age-appropriate play areas.	at Latham, open space between modulars
1	Safety&Growth	Gas Upgrade (code compliance, underground lines)		Partial			Regulators replaced to existing classroom wings in 2017.
1	Safety&Growth	Fencing		Partial	3	Need secure perimeter during school hours, secure property after hours. Active mitigation now required.	All Latham Preschool Confirm with schools/district regarding public access from park side.
1	Safety&Growth	Restroom Modernization		Partial	2	Dated, need modernization	Features, partitions and flooring done in 2017. Tile is dated but functional.
1	Safety&Growth	Signage, Drinking Fountains		Partial	2	Need replace drinking stations.	2 new drinking fountains installed in 2017 along with signage. 3 older one needs replacing.
2	Infrastructure	Mechanical Upgrade (end of service life)		Not Completed	3		Control/BWS upgraded in 2017. Units are existing, not turn on age.
2	Infrastructure	Covered Walkway Repair (remove utilities, re-roof)		Not Completed	3	Not critical.	Re-roofing may be needed.
2	Infrastructure	Existing Administration Modernization		Partial	3	Reconfigure parent/ community rooms separate from faculty spaces.	Scheduled for summer of 2020
2	Infrastructure	Plumbing Upgrade (fixtures, eqpt., domestic lines, end use I)		Not Completed	1	K Classroom (brown water)	Fixtures replaced in classrooms in 2017. No infrastructure replacement done.
2	Infrastructure	Underground utility survey/upgrade		Not Completed			Limited value. Site deficiencies recognized and addressed during completed projects. Consider on
3	Enhancement	Shade Structures (assembly)		Partial	1	None on campus. Can share with Castro/prefer own.	JOB needed
3	Enhancement	Alternative Energy-Solar Panels		Partial			Subject to district (electrical, cost) & School (shade structure) priorities.
<b>OTHER PROJECTS STILL NEEDED TO ADDRESS ANY PRIORITY AREA - 1) STUDENT SAFETY &amp; ENVIRONMENT GROWTH, 2) SCHOOL INFRASTRUCTURE, 3) EDUCATIONAL PROGRAM ENHANCEMENTS</b>							
		CASTRO-Admin Support Services Expansion	Create at least 4 additional offices for Title I specialists (psychological, education specialist, vision/PT/OT, etc.)		1	No spaces currently available. Use open classrooms, workrooms and staff offices as workroom.	Having adaptable, transparent and flexible spaces can encourage greater collaboration and buy-in to educational philosophy.
		CASTRO-Library Modernization/Expansion	Create instructional and break out spaces for small groups.		2	No instructional/break out spaces in library. Can locate student-oriented Title I spaces in library.	Existing MRB only allows for one activity at a time to occur in space. Need flexibility for concurrent activities, particularly for after hours use.
		CASTRO-Storage Expansion	Create additional general, classroom, and PE storage facilities.		1	Storage lacking for school. Classrooms, and P.E. ADFI storage will free up MRB storage for MRB.	Having adaptable, transparent and flexible spaces can encourage greater collaboration and buy-in to educational philosophy.
		CASTRO-Staff Parking	Create staff parking area for up to 35 cars.		1	Existing space may be lost if add'l classrooms added.	Existing MRB only allows for one activity at a time to occur in space. Need flexibility for concurrent activities, particularly for after hours use.
2	Infrastructure	MISTRAL-Technology Upgrade	Replace all fiber optic cables with OM3 OM4s Replace all copper cables with Cat6e cables Create de-centralized MDF from campus.	All	2	DMA upgrades available bandwidth to approx. 4,700 megabits (optical, double existing) Upgrade from Cat5e copper, support higher bandwidth/data rates over longer distances MDF Main Distribution Frame: signal distribution frame connecting campus IT equipment to cables and external carrier equipment (transition from outside to internal systems)	

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 1 of 1

ATTENDEES

MONTA LOMA ELEMENTARY SCHOOL		
Monta Loma ES	Gloria Higgins	Principal
ARTIK (A3)		
A3	Gene Yong	Senior Project Manager
A3	Maria Madrigal	Project Architect

DISCUSSION NOTES

- Monta Loma and Theuerkauf are formerly part of the Whisman School District. Both have a different architectural and landscaped character from other schools which were formerly part of the Mountain View School District.
  - More extensive landscaping, especially in courtyards.
  - Less standardized building types.
- Perimeter Controls
  - Campus is located alongside and shares use of Monta Loma Park.
  - Campus has a perimeter fence around its buildings, but not around its parking lots, driveways or outdoor play areas.
  - While the school and park abut residential properties on three sides, there are two pedestrian access points at the rear of the campus including a pedestrian path to Anna Ave/Elka Ave. and second path to Laura Lane.
    - These paths are open at all hours.
    - School needs to have ability to close these off during school hours.



- d. During school hours, the school buildings and outdoor play areas (e.g., playfield, playcourts, play structures) need to be secured.
    - i. Only exception may be the tot lot/play structure at the southern boundary of Monta Loma Park.
  - e. After school hours, the school buildings need to be secured, but the parking, driveway and park areas can be accessible to the public.
    - i. There is an existing fence between school buildings which secures the buildings and the interior campus areas.
  - f. Need to configure a perimeter fence and gate system to enable to the school to control the perimeter around both the school and the adjacent outdoor play areas.
    - i. Consider a more attractive fencing system (i.e., not chain link).
3. School's RTI program will be emphasizing STEM. School wants to continue fostering collaboration and teaming among teachers.
- a. Need higher functioning classrooms that can support STEM-based PBL (e.g., lab/workroom-type settings)
  - b. Need different-sized spaces to support teaching/collaboration in different sized groupings (i.e., small, large, etc.).
  - c. Provide flexible, operable partitions to enable classroom spaces to connect to each other.
    - i. Instructional time is diminished as students are reassigned/regrouped between periods.
4. Maker Space
- a. Currently using art room as maker space, but not enough storage or space
  - b. Computer lab in Bldg. M is underutilized. Consider adapting to a lab/workroom-type maker space. Space is open and enjoys a high ceiling with good light.
  - c. Space needs to be configured to serve young students (K) as well as older students
  - d. High priority based on instructional program
  - e. Currently using classrooms in Bldg. L for art and STEM. Classrooms are too small and not configured/furnished to support these types of activities.
5. Library
- a. Main library space is very appealing (i.e., high bay, free span, large window walls, etc.)
    - i. Consider flexible furnishings so space can be easily adapted/converted for variety of uses (e.g., informal browsing, gatherings, meetings).
    - ii. Convert rear storage area as possible meeting/breakout space
6. Additional meeting/break out rooms
- a. Currently have community room
  - b. Need 3-4 additional small meeting rooms (2-4 pns) for tutoring, counseling, psychologists.



7. MUR
- a. Projection systems in the rooms lacking
  - b. When MUR was expanded, MUR lost storage. MUR storage is now in a corner room at the SW corner of the MUR. If storage space was found elsewhere, the current storage room would be better used for other purposes (e.g., staff room, breakout room, community room).
  - c. Provide external speakers into courtyard
8. SPED
- a. Two former K classrooms in Bldg. P are being converted for SPED-Autism classrooms (Special Day program)
  - b. Sensory room desired for both general population and special education
  - c. Plan is to create two sensory rooms by converting kitchen spaces between K classrooms.
  - d. Additional restroom needs for special education in Bldg. P.
  - e. Barriers are needed at rear doors to SPED classrooms
    - i. Keep children from running out of classrooms and onto adjacent playfields.
    - ii. Ensure easy passage/unobstructed path for emergency egress (i.e. panic hardware).
    - iii. Provide perimeter fence to separate park from classroom bldg.
    - iv. Add Front Row audio system for large meetings. Existing system is in school's conference room where it is not needed.
  - f. Staff meetings (35-40 pns) are currently held in the library.
9. Outdoor Spaces
- a. School enjoys extensive landscaping in interior campus areas/courtyards.
  - b. Opportunities to create better outdoor instructional/learning spaces (e.g., furnishings, shade/shelter, utilities, etc.) as part of the school's environmental education program.
  - c. Campus has nice series of outdoor spaces from the MUR to the playfields, with the MUR courtyard transitioning to shade structures to the K-playground and the playcourts. Continuous line-of-sight throughout this area.
10. Play Areas
- a. Exterior play areas not addressed in previous bond measure (G)
  - b. K play area is a high priority. Replace play equipment and ground surface, ensure accessibility and inclusion.
  - c. Replace all playground equipment and improve ground surface.
  - d. The playcourt areas have uneven and degrading ground surfaces.
  - e. Additional shade structure is desired near MUR.



MEMORANDUM

11. Parking and Pickup/Dropoff
  - a. Parking and pickup/dropoff are adequate
  - b. If enrollment grows significantly, additional parking may be needed.
  - c. The bus pickup/dropoff may not be needed in the future (i.e., opportunity to reconfigure for more parking).
  
12. Storage
  - a. Lack classroom storage, loss of built-in storage systems (i.e., shelving, cabinets, casework) when classrooms were modernization
  - b. Extensive use of temporary storage sheds around campus, including parent storage for special programs
  - c. Two portables (P1-P2) in the back are currently used by the District for storage
  
13. Trash enclosure is situated in an awkward, but very visible location at the front of campus in front of the MUR and K Classroom Bldgs (#K, #P).
  - a. Difficult for service vehicles to access (i.e., pull onto walkway in front of MUR).
  - b. Obstructs line of sight and pedestrian circulation along the front of school between the parent pickup/dropoff and the bus pickup/dropoff areas.
  
14. FF&E
  - a. Classroom and office furnishings are dated and need replacing.
  
15. Safety
  - a. Fire Alarm: Fire drills are a workaround since it's a separate system
  - b. Emergency preparedness
    - i. A Community Emergency Response Team (CERT) uses a storage shed at the back of the campus. It would be ideal if it was situated at a more central location so it could be more accessible to school staff.
  
16. Restrooms
  - a. Gender neutral restrooms needed throughout campus.
  - b. Convert single occupancy staff restrooms to gender neutral.
  
17. Miscellaneous Concerns
  - a. Majority of drinking fountains are outdated and should be replaced
  - b. Standardize outdoor backpack hooks.
  - c. Create bike storage enclosure. Currently using bike racks in school area.
  - d. HVAC needs to be upgraded.

PROJECTS WORKSHEET  
Update to the 2010 Student Facilities Improvement Plan  
Mountain View Whisman School District

2010 Student Facilities Improvement Plan (SFIP) Projects								
PRIORITY CATEGORY	PROJECT DESCRIPTIONS			CURRENT PRIORITY/NEED				
<small>Safety &amp; Remediation Items School Infrastructure Educational Enhancements</small>	PROJECT TYPE/CATEGORIES	PROJECT NOTES	SITE REFERENCE	PROJECT STATUS	PRIORITY	NOTES (STATUS)		
<b>MONTE LOMA ELEMENTARY SCHOOL</b>								
<small>PROJECTS FROM 2010 SFIP - NOT COMPLETED / PARTIALLY COMPLETED</small>								
1	Safety-Growth	Play Chaise (asphalt, turf, play structures)-Kindergarten	New play box/rubber surface, play structure, fencing, AC/turf		Not Completed	1	Repair/replace ground surface	Still needed
1	Safety-Growth	Play Structures-Grades 1-3/4-5	New play structures (2), play box rubber surface (2)		Not Completed	2	Replace aging play equipment. Replace wood chips with accessible, durable, safe surface.	Still needed
1	Safety-Growth	Fencing	New 8' perimeter fence, gates, plus garden fence		Not Completed	1	Secure rear access into playground area (2 community entrances)	Rear fence needs replacing. Confirm with school/district on perimeter controls needed.
1	Safety-Growth	Gas Upgrade (code compliance, underground lines)	Allow for gas shutoff valve/vacuum breaker		Not Completed			Still needed
2	Infrastructure	Mechanical Upgrade (end of service life)	Replace existing mechanical (HVAC) systems in bldgs being modernized		Not Completed			Controls/RMS upgraded in 2017/2018. Units at end of useful life.
2	Infrastructure	Plumbing Upgrade (Fixtures, eqpt., domestic lines, end use II)	Replace existing plumbing eqpt. & domestic lines at bldgs being modernized. New fixtures include cat 1 (RR upgrade)		Not Completed			Fixtures replaced with modernization projects. Replacement of concealed plumbing lines would be quite costly and require ripping open new fixtures.
2	Infrastructure	Underground utility survey/upgrade	Survey existing underground utilities, upgrade existing utilities if needed.		Not Completed			Need survey, stormwater concerns apply.
2	Infrastructure	Hard-Court Play Area (new AC, AC overlay)	New AC at play area		Not Completed	1	Repair/replace ground surface (cracking, uneven)	Still needed
2	Infrastructure	Existing Library-Modernization	Modernize Library and Computer Lab Bldg.	#M	Partial	1	Reconfigure existing computer lab into active lab/workroom for science and other PBL collaborative activities (maker).	New flooring and paint in 2017.
2	Infrastructure	Covered Walkway Repair (remove utilities, re-roof)	Replace concrete paving, repair/renov covered walkway, underground existing roof-mounted conduits	A&C/D L/J,H	Partial			Struct repair and reconfiguration completed in 2018. Conduits not re-routed underground.
3	Enhancement	Shade Structures (assembly)	New 4500 of shade structure in assembly area		Not Completed	1	Add in courtyard next to MUR.	Still needed.
3	Enhancement	Athletic Fields (track, walking trail)	New decomposed granite or AC walking trail (5' wide) around playfield		Not Completed			Confirm if still priority by school/district.
3	Enhancement	Alternative Energy-Solar Panels	New solar panel installation		Partial			Subject to District (electrical, cost) & School (shade structure) priorities.
3	Enhancement	Energy Efficiency (mechanical, electrical, plumbing)	Upgrade mechanical/plumbing/electrical systems for energy efficiency for bldgs being modernized (basic replacement under Cat 2).		Partial			Controls/RMS completed with modernization projects. See HVAC replacement project.
3	Enhancement	Existing Parking Modify (stalls, asphalt overlay/new)	Replace curbs, sidewalks, AC, stops, ramps, landscaping		Not Completed			Rear parking lot only/ AC overlay. Parking and pick up/drop off reconfigured in 2017.

Prepared by Artik for MVWSD  
1 of 2



TO# FROM#  
 File Maria Madrigal/Gene Yong

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COMPANY# DATE#  
 Student Facilities Improvement Plan (SFIP)/ 31 Jul 19  
 Ten-Year Master Plan Update  
 Mountain View Whisman School District

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SUBJECT# JOB NUMBER/REFERENCE NUMBER #  
 Interview Notes 02449  
 Principal-Stevenson Elementary School  
 9:00am, Tuesday, 30 Jul 19

**PROJECTS WORKSHEET**  
 Update to the 2010 Student Facilities Improvement Plan  
 Mountain View Whisman School District

2010 Student Facilities Improvement Plan (SFIP) Projects				CURRENT PRIORITY/NEED			
PRIORITY CATEGORY	PROJECT DESCRIPTIONS		SITE REFERENCE	PROJECT STATUS	PRIORITY	NOTES	NOTES (STATUS)
<small>1) Safety &amp; Environment (Health)                      2) School Infrastructure                      3) Educational Enhancements</small>	PROJECT TYPE/CATEGORIES	PROJECT NOTES					
<b>MONTA LOMA ELEMENTARY SCHOOL</b>							
<small>1) Student Safety &amp; Enrollment Growth, 2) School Infrastructure, 3) Educational Program Enhancements</small>							
2	Infrastructure	Technology Upgrade	Run network cabling behind TV in each classroom Run network cabling to mount APs in center of each classroom Replace all copper cables with Cat6a cables	All	2	<small>1) Upgrade Wireless Access Point (WAP) (District Standard (DW))                      2) Upgrade from Cat5e copper, support higher bandwidth (data runs over longer distances).</small>	

Prepared by Artik for MWUSD  
 2 of 2

**ATTENDEES**

STEVENSON ELEMENTARY SCHOOL		
Stevenson ES	Ryan Santiago	Principal
ARTIK (A3)		
A3	Gene Yong	Senior Project Manager
A3	Maria Madrigal	Project Architect

**DISCUSSION NOTES**

1. RS was previously an assistant principal at Graham MS and a principal at Thuerkauf ES.
2. Stevenson ES is one of two Choice Schools in MVWSD. Mistral ES is the other.
  - a. Mistral ES is a Dual Immersion program (English/Spanish)
  - b. Stevenson ES is a Parent, Child, Teacher or PACT program
    - i. The program features extensive collaboration between teachers and parents and inquiry-based, hands-on project-based learning. Parent participation in the school, including classrooms, is welcomed and expected.
    - ii. Emphasis is on more holistic, non-traditional learning (i.e., indoors, outdoors, field trips/off-site, gardens, kitchens, etc.).
  - c. As a Choice School, parents elect to be a part of the PACT program. More than half of Stevenson's students come from outside its immediate neighborhood.
  - d. Stevenson enjoys significant parent/family participation (80%) in school-wide activities (e.g., PBL/exhibition night, silent auction, socials). Parent engagement is very high and beneficial to the school.



3. Stevenson ES is supported by a foundation (PACT Foundation) that is registered as a 501(c)3 non-profit. The foundation oversees volunteerism, volunteer committees and collaborates with the school on supporting activities. All parents, teachers and staff are eligible members of the foundation. The foundation functions in lieu of a Parent-Teacher Association (PTA), unlike other MVWSD schools.
4. RS provided the following observations of the campus.
  - a. Campus facilities are new and functional, but the overall character is lacking, particularly with regards to landscaping. RS referenced the outdoor courtyard area by the auditorium at Graham MS and the courtyard at Theuerkauf as the kind of spaces lacking from the school.
  - b. Facilities which appear to work well include:
    - i. Administrative Bldg: centrally located, staff lounge, consolidated staff facilities, adequate offices, meeting rooms
    - ii. Library: furnishings, functionality, center of school community, interactive, flexible space where parents can teach, conducive to small groups; more dynamic than typical libraries
    - iii. Parking: layout seems ok. Congestion may be an issue since parking and pickup/dropoff activity is in the same area. RS referenced Monta Loma ES as a good example where staff parking and parent pickup/dropoff are in separate areas.
  - c. Areas of need include the following (extensive workarounds apply):
    - i. Material storage (educational/classroom/PACT): A classroom (room no. 21) is used for material storage. Only other available space are the IDF rooms (utility rooms, intermediate distribution frame), which are not appropriate for storage.
      1. School is expected to grow and will need all available classroom space for instruction (i.e., cannot use for storage).
    - ii. Large staff meetings: No place for entire staff to meet (40 pns). Spaces are either too small (admin meeting room), too large (MUR), not configured (library), or not readily available (classrooms).
    - iii. Garden: PACT and staff have created the raised planting boxes because ground was not suitable for gardening plots. School is looking to expand gardening.
    - iv. STEAM Education: Classroom nos. 18 and 19 are used for STEAM. Staff have reconfigured furnishings to support more workshop, creative, hands-on instruction, but space was not configured to do so.
      1. Need purpose-built space that is flexible and collaborative.
    - v. Instructional Kitchen: Existing space in Admin. Bldg: works well functionally but is too small.
    - vi. MUR: facility is affected by direct sunlight in afternoon and morning (SW and SE full height/clerestory windows) and lacks fixed production/A-V systems to support performances.
    - vii. Outdoor shaded and landscaped spaces: tents are used in center of campus courtyard. There is no landscaping on campus.



5. The following spaces/facilities are needs the following:
  - a. Community/PACT Work Space
    - i. Parent involvement is a very large part of school culture. Parents are welcomed and involved in education and teaching. As members of PACT, parents are expected to volunteer on campus.
    - ii. Need a "community room" that can be both a collaborative work space for parents/teachers and a place to store materials for both.
    - iii. Need storage for parent work space, room 21 is about ¾ material room owned by parents to support cooking, garden, arts focus program (hands on experiences led by parents). Need that classroom for instructional space
  - b. Storage Facilities
    - i. With the school's emphasis on project-based, hands-on, creative learning, there is a significant need for storage for related materials.
    - ii. Creating storage facilities will free up other spaces for their intended purposes (e.g., classrooms).
  - c. Expanded/Flexible Learning Environments
    - i. Need classrooms which are more collaborative and flexible (e.g., maker space, workshop, labs, etc.), especially for STEAM.
    - ii. Extend classroom space into adjoining exterior spaces.
    - iii. Enable greater collaboration between classrooms
  - d. Landscaped Outdoor Spaces
    - i. Expanded garden areas. Gardening is engrained in the curriculum.
    - ii. Courtyard Area: create shaded, more relaxed and softer exterior environment. RS referenced Theuerkauf ES' courtyard areas (e.g., differentiated landscaped areas). Create outdoor landscaped learning spaces (e.g., living classrooms).
    - iii. Landscape exterior spaces between classrooms (e.g., trees, shade, furnishings) to extend and integrate classroom learning into the surrounding environment.
    - iv. Add shade and landscaping around the play structures.
  - e. Large Shade Structure: centrally situated within courtyard.
6. Others who have been involved with the school for a longer period of time may be able to offer good insights into the questions being asked by A3 (e.g., foundation, past principals, etc.). RS will reach out to the CBO (formerly the principal at Stevenson ES) for guidance on any further communications.





TO: File FROM: Maria Madrigal/Gene Yong

COMPANY: Student Facilities Improvement Plan (SFIP)/ Ten-Year Master Plan Update DATE: 29 Jul 19

SUBJECT: Interview Notes JOB NUMBER/REFERENCE NUMBER: 02449  
Principal-Theuerkauf Elementary School  
10:00am, Monday, 29 Jul 19

PROJECTS WORKSHEET  
Update to the 2010 Student Facilities Improvement Plan  
Mountain View Whisman School District

2010 SFIP Projects				CURRENT PRIORITY/NEED			
PRIORITY CATEGORY	PROJECT DESCRIPTIONS		SITE REFERENCE	CURRENT STATUS	PRIORITY	NOTES	NOTES (STATUS)
1 Safety & Enclosure Growth 2 School Infrastructure 3 Educational Enhancement	Type	PROJECT NOTES					
<b>STEVENS ON ELEMENTARY SCHOOL</b>				4 (Priority: 1 High to 4 Low, N/A Not Needed)			
<b>PROJECTS IN PROGRESS/NOT STARTED/NOT COMPLETED/PARTIALLY COMPLETED</b>							
1	Safety-Growth	Fencing	Add perimeter fence/gate to control access from park.	Partial	1		Campus is open to park at back of school.
2	Infrastructure	Technology Upgrades	Replace IDF cabinet in library with larger cabinet to fit equipment. Run copper cabling to FrontFlow devices in each classroom. Install FrontFlow conductor for the PA system.	Partial	2	IDF: Intermediate Distribution Frame, distribution point from MDF to cables connecting to on-site equipment. Copper cabling assumed to be Cat5e.	
3	Enhancement	Shade Structures (assembly)	New 4500 sf Shade Structure	Partial	1		Still needed
3	Enhancement	Landscape (on-site)	Create differentiated exterior landscaped environments/outdoor learning/living classrooms	Partial	1		Introduce landscape, shade, furnishings to create formal and informal gathering, play and instructional spaces.
3	Enhancement	MUR Modernization	Add shade devices to SW/SE windows. Upgrade A-V	Partial	3		Mitigate glare from afternoon and morning sun in MUR. Enable A-V set up close-in to screen.

Prepared by Artik for MWUSD  
1 of 1

ATTENDEES

THEUEKAUF ELEMENTARY SCHOOL		
Theuerkauf ES	Swati Dagar	Principal
ARTIK (A3)		
A3	Gene Yong	Senior Project Manager
A3	Maria Madrigal	Project Architect

DISCUSSION NOTES

1. Classrooms
  - a. Existing Conditions
    - i. Even with recent upgrades, classrooms are still dated, undersized and inflexible.
  - b. Future Vision
    - i. Expand classrooms to enable flexible configuration of furnishings and spaces.
    - ii. Improve connectivity between classrooms and with the adjacent outdoor spaces.
      1. Consider flexible partitions between classroom spaces which are also soundproof.
      2. Outdoor spaces can be extensions of the classrooms but need to be all-weather (i.e., cool, shaded, sheltered).
    - iii. Create larger, more open spaces to foster collaboration and project-based learning.
    - iv. Foster collaborative/team teaching. Create teaching/learning environments which encourage collaboration.
    - v. Develop outdoor learning environments.



MEMORANDUM

2. Industrial Arts/Career Skills
  - a. Need to provide instruction in real-world, hands-on skills, especially for students who may not go on to typical Silicon Valley type professional careers (e.g., high-tech, law, etc.)
  - b. The school's workshop-type space is limited to a classroom with a big screen.
  - c. School needs a purposefully configured workshop/lab-type space where students can learn real-world skills (e.g., woodworking, fabrication, production, etc.).
3. Faculty & Staff Spaces
  - a. Office and staff facilities are OK.
  - b. Create an outdoor dining area for faculty that is isolated from students and inviting.
    - i. Potential for the courtyard area next to Bldg. F. Space is now used for storage. Need to landscape and furnish to make more inviting.
    - ii. Space for informal interaction and collaboration.
4. Admin Support, Office and Storage
  - a. Spaces are adequate on campus.
5. Drinking Stations
  - a. Need more drinking fountains with filling stations throughout campus, and especially in the back of campus by Buildings C, D and E. Add drinking stations outside restrooms at Bldgs. D and F.
  - b. The school has only one drinking station with a filling station outside the MUR bldg.
6. Parking, Pickup/Dropoff
  - a. School shares pickup/drop-off with the Google Preschool
    - i. Preschool drops off at 8:00am. Parents park and walk preschoolers into school.
    - ii. This is the same period as the drop-off activity for Theuerkauf students.
  - b. Congestion and conflicting use of staff parking stalls by preschool parents is an issue that needs to be addressed.
  - c. Need to find a permanent solution which deconflicts movements between the schools and the different types of activity (e.g., staff parking, parent pickup/dropoff).
7. Perimeter Fencing
  - a. The school's play areas are exposed to, and accessible from the park and public paths from San Pierre Way and San Luis Ave. during school hours.
    - i. The school has exclusive use of its play areas during school hours, but it is difficult to enforce and members of the community access or cross these areas regularly during school hours.
  - b. The School only has a perimeter fence around its buildings (A, B, C, D, E, G, H).
  - c. Need a fence around play areas so school can control access during school hours (playcourts, play structure, etc.).



MEMORANDUM

8. Play structures
  - a. Dated and need replacing, especially the K play equipment.
9. Campus Lighting
  - a. Campus has minimal lighting. Need campus lighting project for site and parking areas.
10. Shade Structure
  - a. There is no shade structure on campus, parents waiting outside have no shelter, some trees were recently cut down, no lunch shade structure
11. Plumbing
  - a. Blockages are regular occurrences. Need to upgrade.
12. Library
  - a. Opportunity to create a more collaborative space.
13. Landscaping
  - a. Need more green in the front of the campus, make more inviting, planters for classroom adoption, furnishings don't support student activity in outdoor settings.
14. Create an Outdoor Living Classroom
  - a. Landscaping, collaborative furnishings, teaching board (white board/screen), covered/all-weather, benches, utilities (e.g., water, sink, electrical, data).

**PROJECTS WORKSHEET**  
Update to the 2010 Student Facilities Improvement Plan (SFIP)  
Mountain View Whisman School District (MVWSD)

2010 SFIP Projects					CURRENT PRIORITY/NEED (6/25/19)			
PRIORITY CATEGORY	PROJECT DESCRIPTIONS	PROJECT NOTES	SITE REFERENCE	PROJECT STATUS	PRIORITY	NOTES	NOTES (STATUS)	
<b>THEUERKAUF ELEMENTARY SCHOOL</b>								
<i>4-pt scale: 1-High to 4-Low, NA-Not Needed</i>								
1	Smart&Growth	Separate Parking, Pickup and Bus Loading Areas	Replace curbs, sidewalks, AC, stopramps, landscaping		Not Completed	1	Deconflict Google Preschool and Elementary School dropoff and parking.	Improve circulation with joint use of site with Google preschool.
1	Smart&Growth	Play Cluster (asphalt, turf, play structures) Kindergarten	New play box/surface, play structure, fencing, turf		Not Completed	1	Replace and include turf	Replace aging play structures
1	Smart&Growth	Play Structures-Grades 1-3/4-5	New play box/surface, play structure (2)		Not Completed	3		Replace aging facilities
1	Smart&Growth	Campus Lighting	Exterior light fixtures controlled by photocell/time clock via low voltage control panel. Parking lot has adequate lighting for pedestrian safety.		NA	1	Minimal site lighting on campus.	Site and parking lighting deficiencies/concerns apply.
1	Safety& Growth	Building Structural Upgrade	Structural upgrades to Bldg #F (shair upgrade) and G (shair upgrade/longitudinal wall)	#, #G	Partial			No upgrades were completed for Bldgs. F and G. Confirm if still needed.
1	Safety& Growth	Restroom Modernization	Replace flooring, wall tiles, fixtures, lighting, cubicles	BA, H	Partial	4	Not a priority	Less work completed on restrooms than at H/R/L schools.
1	Smart&Growth	Electrical Upgrade	Electrical repairs, replace panel (no electrical system upgrade required).		Not Completed			
1	Smart&Growth	Fencing			Completed	2	Secure perimeter outdoor play areas (playcourts, play structure)	
1	Smart&Growth	Site Accessibility Upgrade (Ramps)	Path of travel, drinking fountains, signage are code compliant		NA			New ramp to parking, path of travel at Bldg. G, add non-compliant thresholds.
2	Infrastructure	Mechanical Upgrade (end of service life)	Replace existing mechanical systems (end of service life)		Not Completed	1		Classroom units reaching end of useful life
2	Infrastructure	Hard-Court Play Area (new AC, AC overlay)	New AC at play area		Not Completed	4		Still needed.
2	Infrastructure	Plumbing Upgrade (Fixtures, eqpt, domestic lines, and vent)	New fixtures (cat. 1/1n upgrade), replace plumbing lines & equipment		Not Completed	1	Frequent blockages on campus. Assume upgrades need to extend beyond building to include site plumbing, sanitary drain lines.	Replacement of concealed plumbing lines not completed, would be quite costly, require ripping open new finishes.
2	Infrastructure	Underground utility survey/upgrade	Survey existing underground utilities, upgrade utilities if needed		Not Completed			Limited value. Site deficiencies recognized and addressed during completed projects. Consider on case-by-case basis with specific modernization projects.
2	Infrastructure	Existing Library Modernization	Modernize existing library		Partial	2	Make more collaborative spaces	Flooring and paint done in 2018. Casework functional/dated.
2	Infrastructure	Covered Walkway Repair (remove utilities, re-roof)	Roof system in good condition, no roof-mounted eqpt./conduits		NA			See Roof Survey and service life of existing roof/repair for replacement
3	Enhancement	Existing Classrooms-Modernization		AC,D,E,F, G,H	Completed	2		
3	Enhancement	Existing Parking (mostly stalls, asphalt overlay/new)	Repair or replace curbs/sidewalks/surface, stops, ramps, landscaping as needed		Not Completed	1	Dedicated pickup/dropoff areas for elementary school and preschool	Improve circulation with joint use of site with Google preschool.
3	Enhancement	Shade Structures (assembly)	New 4500 sf shade structure		Partial	1	None on campus.	Still needed.

Prepared by Antik for MVWSD  
1 of 2

**PROJECTS WORKSHEET**  
Update to the 2010 Student Facilities Improvement Plan (SFIP)  
Mountain View Whisman School District (MVWSD)

2010 SFIP Projects					CURRENT PRIORITY/NEED (6/25/19)			
PRIORITY CATEGORY	PROJECT DESCRIPTIONS	PROJECT NOTES	SITE REFERENCE	PROJECT STATUS	PRIORITY	NOTES	NOTES (STATUS)	
<b>THEUERKAUF ELEMENTARY SCHOOL</b>								
<i>4-pt scale: 1-High to 4-Low, NA-Not Needed</i>								
3	Enhancement	Landscape (frontage, programmatic spaces)	New hardscape/softscape at frontage, outdoor spaces, garden areas		Not Completed	2		
3	Enhancement	Alternative Energy-Solar Panels	New solar panel installation		Partial			Subject to District electrical, cost & School (shade structure) priorities.
3	Enhancement	Energy Efficiency (mechanical, electrical, plumbing)	Upgrade mechanical, plumbing, electrical systems for energy efficiency		Partial			Controls/BMS upgraded in 2018. See HVAC replacement project
<b>OTHER PROJECTS STILL NEEDED TO ADDRESS ANY PRIORITY AREA- 1) STUDENT SAFETY &amp; ENDDUMLNT GROWTH, 2) SCHOOL INFRASTRUCTURE, 3) EDUCATIONAL PROGRAM ENHANCEMENTS</b>								
2	Infrastructure	Technology Upgrade	Replace all fiber optic cables with Cat5e cables. Replace all copper cables with Cat5e cables. Replace IDF in Bldg. E	AI		2		104K upgrades available bandwidth to approx. 4,700 megabits (approx. double existing). Upgrade from Cat5e copper, support higher bandwidth/data rates over longer distances. Need larger Intermediate Distribution Frame to can accommodate network equipment.
3	Enhancement	Existing Classrooms-Modernization		AC,D,E,F, G,H		2	Provide connectivity between classrooms and with outdoors.	Provide operable interior and exterior walls. Expand classroom spaces to enable more flexible configurations within space.
3	Enhancement	Outdoor Living Classroom				1	Create outdoor living classroom, all-weather, utilities, landscaped.	

Prepared by Antik for MVWSD  
2 of 2



MEMORANDUM

TO# File	FROM# Maria Madrigal/Gene Yong
COMPANY# Student Facilities Improvement Plan (SFIP)/ Ten-Year Master Plan Update Mountain View Whisman School District	DATE-#/# 14 Aug 19
SUBJECT# Interview Notes Principal-Crittenden Middle School 9:00am, Wednesday, 7 Aug 19	JOB NUMBER/REFERENCE NUMBER# 02449

ATTENDEES

CRITTENDEN MIDDLE SCHOOL		
Crittenden MS	Sonia Gomez Morales	Principal
ARTIK (A3)		
A3	Gene Yong	Senior Project Manager

DISCUSSION NOTES

1. Campus security is a big concern.
  - a. Campus is not secure.
  - b. While there is fence around the school, there are multiple gaps in the following areas:
    - i. Rock Street (no gates or fences at locations below)
      1. Between Bldg. 100 and driveway/bike enclosure
      2. Between Bldg. 700 & 100
      3. Between Bldg. 700 & 800
    - ii. Permanente Creek Trail
      1. Service gate between the portable (P1) and track/field. Closed during school hours.
    - iii. Middlefield Road.
      1. Multiple pedestrian gates along Middlefield Road providing access to the track and baseball/softball field. These gates are signed but not closed during school hours.
      2. Pickup/dropoff and parking area by the gym has open access to areas south of the gym (leading to the track) and north of the gym (leading to the



MEMORANDUM

- school's courtyard). No fence or gates controlling access from these areas onto campus.
      - c. Community treats track, gym and baseball field along Middlefield as park facilities, though the school has exclusive use during school hours. Difficult to enforce or prevent access during school hours since there are only signs and no control gates.
      - d. While the Admin office has frontage onto Rock Street, the main campus entrance for most families is from Middlefield Road. The parking and pickup/dropoff areas from Middlefield Road are not visible from the Admin offices.
2. Enrollment at the school is 655 for grades 6-8.
  - a. Capacity for the school is 730.
3. Classroom availability is adequate, but will be challenged if enrollment goes back to, or exceeds capacity. School is running out of classrooms.
4. While the number of classrooms is adequate, the school needs more project-based learning (PBL) type classrooms to support STEAM and science-based curriculum.
  - a. Bldg. 100 is the arts classroom bldg. but is poorly configured for art (i.e., too small, lack of storage/drying racks, etc.).
  - b. Bldg. 200 is a two-story classroom building that anchors the west end of the school's main courtyard. While this is a relatively recently built building (early 2000s), it is awkwardly configured and poorly designed and is underutilized.
    - i. There are only two classrooms on the second floor. Neither are being used as classrooms. One is too large and the other is too small. School is reluctant to schedule only 1 class on the floor since it is so isolated (i.e., safety)..
    - ii. There is excessive noise transmission from activity on the end floor to the ground floor spaces due to excessive spans in the upper level's floor.
    - iii. The ground level classrooms were designed as a hub with a center classroom and six surrounding classrooms. The center classroom, as well as one other classroom are not directly accessible from the exterior and require passage through one of three classrooms. The center classroom is accessible to only three of the surrounding six classrooms.
  - c. Bldg. 400 is a new two-story Innovation Center/Library/Classroom building which works well as a flexible, adaptable instructional facility that encourages inquiry- and project-based collaboration and teaming. Math is primary area of instruction in bldg. The large common space is heavily used.



MEMORANDUM

5. P.E. needs a classroom.
  - a. It should be located near the gym and/or locker/changing rooms.
  - b. P.E. currently has to find empty classroom anywhere on campus to teach classes.
  
6. Auditorium
  - a. Eventhough new, lighting and sound system needs to be upgraded to match school's production expectations.
  
7. Drinking fountains
  - a. All drinking fountains except at the new buildings (#400, #600) need replacing.
  
8. The eastern portion of the campus extending from Bldg. 700 to Bldg. 1000, encompassing the MUR, Kitchen, Snack Shop, Lockers, and MOT Transportation Yard has a lot of conflicting movements which are occurring on an unplanned, ad hoc basis including:
  - a. Service access to the Kitchen alongside the auditorium's main entrance and parking area.
  - b. A major parent/visitor pickup/dropoff and parking area alongside the locker rooms and the MOT transportation yard.
  - c. The Snack Shop's service area oriented to a small courtyard next to the service yard for the kitchen, with constrained access through a narrow passage between Bldgs. 800 and 900.
  - d. Unintended school entry corridors between Bldgs. 700/100/800 and 1000/1100.
  - e. The lack of major public functions (e.g., Admin, MUR) oriented to major public spaces (e.g., courtyard, pickup/dropoff, parking).
  
9. Traffic flow is a major issue on campus.
  - a. While Rock Street is the designated front of the campus, there is very limited parking and pickup/dropoff capacity in front of the Admin. Offices.
  - b. The parking area off Rock Street in front of the Auditorium is also used as a pickup/dropoff area. This area is not visible to Admin.
  - c. The main parent pickup/dropoff area is off Middlefield Road at the gym and lockers (Bldgs. 1000/1100). This area is not visible to Admin.
  - d. Parents used to cut from the Middlefield Road through the parking lot to Rock Street as a shortcut to the freeway and Rengstorff. School now uses a gate to block this through-traffic to improve pedestrian safety (i.e., speeding).
  
10. Though off-site, a major safety concern is the pedestrian crossing at Terra Bella Ave. along Middlefield Road. This is a wide, unsignalized intersection with heavy vehicle traffic in the mornings (i.e., shortcut from Shoreline Blvd. to Middlefield Rd./campus). Need to address (*note: assume this will be addressed during Terra Bella detailed planning, design and redevelopment*).

PROJECTS WORKSHEET  
Update to the 2010 Student Facilities Improvement Plan  
Mountain View Whisman School District

PRIORITY CATEGORY		PROJECT DESCRIPTIONS			CURRENT PRIORITY/NEED		
Type	PROJECT NOTES	SITE REFERENCE	CURRENT STATUS	PRIORITY	NOTES	NOTES (STATUS)	
<b>CRITTENDEN MIDDLE SCHOOL</b>							
2010 SFIP Projects							
1 Safety/Growth	Electrical Upgrade	Replace existing panel w/ add'l breaker capacity, allow for electrical repairs to new wiring.		Not Completed		3-way switching part of modernization projects. Panels not completed.	
1 Safety/Growth	Signage, Drinking Fountains	Add signage at Middlefield Rd pickup/dropoff. Replace all drinking fountains at older Bldgs.		Partial	1 Lack of info for parents at Middlefield Rd pickup/dropoff (main pickup/dropoff). Aging drinking fountains at older Bldgs.	Completed with campus modernization projects (PH. 1)	
1 Safety/Growth	Finishing	Add flooring and gates to gym to perimeter Bldgs. 100, 700, 1000, correct trail. (Middlefield Rd.)		Partial	1 Multiple uncontrolled entry points from parking areas, trails, trails.	Completed with campus modernization & new projects (PH. 1-3)	
1 Safety/Growth	Restroom Modernization	Replace flooring, wall tiles, fixtures, lighting, cubicles		Partial	3	School tile and lighting done in 2014. No work to fixtures, partitions or floor/wall finishes.	
2 Infrastructure	Mechanical Upgrade (end of service life)	Replace existing mechanical systems in Bldgs being modernized		Not Completed		HVAC systems at end of service life. No work done. Still needed.	
2 Infrastructure	Plumbing Upgrade (fixtures, egs, domestic lines)	Replace existing plumbing egs & domestic lines being modernized. New fixtures include cat 1 (DR upgrade).		Not Completed		No work done. Still needed.	
2 Enhancement	Locker Room Replacement	New 3 story Locker Room		Not Completed	1	Need new locker rooms.	
1 Enhancement	Shade Structure (covered)	New 6000' of shade structure		Not Completed	2	Add additional shade structure in main courtyard area.	
1 Safety/Growth	Gas Upgrade (code compliance, underground lines)	Allow for gas shutoff valve/pressure breaker		Not Completed		Still needed	
1 Safety/Growth	Building Structural Upgrade	Structural Upgrade to Bldg. nos. 3 & 7	#100, 700	Not Completed		Phase 2 modernized Bldgs. 300 and 700 in 2014. Confirm if still needed.	
2 Infrastructure	Underground utility survey/upgrade	Survey existing underground utilities, upgrade existing utilities if needed.		Not Completed		No work done. Limited value. Consider need on case by case basis for specific projects.	
2 Infrastructure	Existing MUR Modernization	Modernize existing MUR (1000-1100)	#100	Partial	1	Obtain permits main courtyard. Reconfigure work shop for easier access from main courtyard.	
2 Infrastructure	Existing Administration Modernization	Modernize existing Admin space in Classroom Bldg (#100)	#100	Partial		New flooring, pocket tables and paint installed in 2010. Upgrade A/C lighting, hardware to match district standards.	
3 Enhancement	Alternative Energy-Solar Panels	New Solar Panel Installation		Partial		Priority for school. Admin modernized in previous bond (early 2000s).	
1 Safety/Growth	Separate Parking, Pickup and Drop-off Areas	Replace curbs, sidewalks, AC, power, steps, ramps, signage landscaping. New trash enclosure.		Not Completed	1	Reconfigure vehicle driveway/ pickup/dropoff. Improve flow/vehicle congestion. Improve pedestrian safety, disabled, vehicle/pedestrian movements. Terra Bella Ave. intersection with Middlefield Road is an unsignalized intersection that is also major pedestrian route for students. Safety concern.	
1 Safety/Growth	Site Accessibility Upgrade (Ramp)	Path of travel deficiencies (thresholds, steep slopes, 2nd curb), Drinking fountains/signage more compliant. See SFIP Project no. 3 (Bldg accessibility)		NA	3	Address open rail at ramp to track/TEAM from playgrounds.	

Prepared by ARTiK for M/VWSD  
1 of 2



TO# FROM#  
File Maria Madrigal/Gene Yong

COMPANY# DATE#  
Student Facilities Improvement Plan (SFIP)/ 14 Aug 19  
Ten-Year Master Plan Update

Mountain View Whisman School District

SUBJECT# JOB NUMBER/REFERENCE NUMBER #  
Interview Notes 02449  
Graham Middle School

8:00am, Tuesday, 6 Aug 19

PROJECT WORKSHEET  
Update to the 2010 Student Facilities Improvement Plan  
Mountain View Whisman School District

2010 SFIP Projects							
PRIORITY CATEGORY	PROJECT DESCRIPTIONS			CURRENT PRIORITY/NEED			
2-Safety & Enrollment Growth 3-School Infrastructure 4-Student Enhancement	Type	PROJECT NOTES	SITE REFERENCE	CURRENT STATUS	PRIORITY	NOTES	NOTES (STATUS)
	<b>CRITTENDEN MIDDLE SCHOOL</b>						
2	Infrastructure	Existing Walkers Modification	Modernize existing Walkers (CMB #)	8800	Partial		New walk in fridge and freezer installed in 2016. Confirm with District any upgrades necessary (Food service director).
2	Infrastructure	Security System Upgrade	Add system which allows principal/eval_principal to access the PA system from anywhere on campus.	8100-1300	Partial	1	Existing PA system accessible from only 3 location (Admin). Need mobile system on Principal/eval_principal or access system from anywhere on campus. Concern about accessing system if not at or near each Admin Bldg. Completed with campus modernization & new projects (PP, 1-3)
3	Enhancement	Auditorium New		8600	Completed	3	Upgrade A/V/sound system to auditorium. New auditorium completed in Ph. 3
3	Enhancement	Existing Parking Modify (Add, asphalt, work/flow)	Replace curbs, sidewalks, AC, poles, stops, ramps, signage/landscaping		Not Completed	1	Reconfigure vehicle drop/pickup/dropoff, improve flows/vehicle congestion, improve pedestrian safety, de-conflict vehicle/pedestrian flow. Parking area around Auditorium completed. Trash enclosure required/rebuilt. Pickup/dropoff not completed. Confirm if still needed.
3	Enhancement	Energy Efficiency (mechanical, electrical, plumbing)	Upgrade Mech/Elec/Plumbing systems for energy efficiency		Partial		HVAC controls and lighting upgraded from 2014 to 2018.
3	Enhancement	Landscape (Frontage, programmatic spaces)	New landscape/softscape at frontage, outdoor spaces (seating/fining), new garden area.		Partial	2	Improve landscaping/finishing in main courtyard and outdoor Bldg. Landscape is functional. Conf with School/District if priority.
<b>OTHER PROJECTS STILL NEEDED TO ADDRESS ANY PRIORITY AREA (1) STUDENT SAFETY &amp; ENROLLMENT GROWTH, (2) SCHOOL INFRASTRUCTURE, (3) EDUCATIONAL PROGRAM ENHANCEMENTS</b>							
1	Enrollment Growth	Classroom-PE	Add space for PE classroom instruction. Locate near locker room/recreation facilities			1	No existing PE classroom. Locate near lockers/gym/playfields/playcourts.
2	Infrastructure	Middlefield Road-Campus Entrance	Reconfigure landscape, frontage and security features at Middlefield Rd. pickup/dropoff area.			1	Redesign as main campus pickup/dropoff arrival area with adequate controls and supervision features. Consider reusing or reconfiguring portion of MOT transportation yard, reusing portion of grass area next to baseball field, and redeveloping locker room Bldg.
2	Infrastructure	Technology Upgrade	Run copper cabling (Cat6) to frontrow devices in each classroom. Install frontrow conductor for PA system. Run network cabling behind 7% in each classroom in Bldg. 400/Im. 213. Run fiber (SMD) and support cabling to Bldg. 3000/3300.	All		2	

ATTENDEES

GRAHAM MIDDLE SCHOOL		
Graham MS	Michael Hermosillo	Principal
Graham MS	Mariko Kobata	Assistant Principal
ARTIK (A3)		
A3	Gene Yong	Senior Project Manager
A3	Maria Madrigal	Project Architect

DISCUSSION NOTES

- School needs to expand curriculum to address students who are more kinesthetic learners (i.e., learn by doing physical activities vs. sitting/listening, etc.).
  - There are students that are not on a college/professional career track (e.g., software, computer, science) that would benefit from a curriculum which teaches and provides for hands-on life skills.
- SPED classrooms need to be full-sized. Half-sized classrooms are not working.
- Areas of Need/Opportunity
  - School lacks facilities to support electives that support life skills and kinesthetic learning. These spaces need to be purposefully configured and furnished
    - Home Economics (e.g., crafts, sewing/knitting, cooking, washer/dryer, etc.)
    - Industrial Arts/Workshop (e.g., wood shop, ceramics/kiln/pottery, autoshop, etc.).
    - Cosmetology (e.g., self expression, stage/drama, etc.)



- b. Staff Lounge
  - i. Underutilized
  - ii. More varied spaces for private and down time
  - iii. Improve courtyard as landscaped space for staff
  - iv. Can also be space for use by service providers/counselors
    - 1. Can work from shared spaces. On campus part-time basis. Work in other instructional and collaborative spaces (e.g., classrooms, library, admin office, etc.).
- c. Mountain View Sports Pavilion
  - i. Joint use facility shared between school and community (*Note: clarify with District how future planning and design and use is coordinated between the school district and the City*).
  - ii. Pavilion includes a gym and locker facilities used by the school during school hours.
  - iii. Locker rooms are outdated and need to be modernized.
    - 1. Need more lockers, more single stalls for changing, non-gender specific changing rooms. Showers not needed.
  - iv. Gym needs to be modernized
    - 1. Improve sound system, acoustics, air conditioning
  - v. Ideal to have its own facility to control programming and use (i.e., school must end games/activities because of commitments for community use of facility).
- d. Landscaping/Outdoor Spaces
  - i. Need to connect current and future generations of kids (i.e., digital natives) back to the natural environment
  - ii. Existing outdoor spaces are unshaded, lack landscaping and furnishings
  - iii. Improve landscaping between buildings
  - iv. Create outdoor gathering spaces which are landscaped, shaded and furnished.
  - v. Create outdoor learning spaces/living classrooms (i.e., furnishings, shelter, utilities), particularly for science-based and environmental studies classes (e.g., tie into community garden by MUR).
  - vi. Add Shade Structure and locate centrally as a gathering facility.
  - vii. More informal, passive, differentiated spaces that not athletically oriented (e.g., play courts, playfields, etc.).
- e. Need more large spaces to balance demand for after school programs by vendors and by school



- 4. Other Improvements to consider
  - a. Replace existing marquis/signage at the front of the school (marquis is dated).
  - b. Flagpole seems short
  - c. Solar panels
  - d. Relocate bike cage to more suitable location
    - i. Existing location in the middle of the playground encourages students to ride bikes across campus, which is not allowed. Safety issue. Requires active supervision.
    - ii. Better if located at a more accessible location which does not require crossing the interior of the campus.

**PROJECTS WORKSHEET**  
Update to the 2020 Student Facilities Improvement Plan  
Mountain View Whisman School District

2010 SFIP Projects						
PRIORITY CATEGORY	PROJECT DESCRIPTIONS	SITE REFERENCE	CURRENT STATUS	PRIORITY	NOTES	NOTES (STATUS)
1 Safety & Wellness Growth 2 School Infrastructure 3 Educational Enhancement	Type	PROJECT NOTES				
<b>GRAHAM MIDDLE SCHOOL</b>						
4 (2) code: 1-High to 4-Low, Not-Not Needed						
<b>PROJECTS FROM 2010 SITE: NOT COMPLETED/PARTIALLY COMPLETED</b>						
1	Safety+Growth	Electrical Upgrade	Replace existing panel w/ additional breaker capacity	Not Completed		Not done. Confirm if still needed.
1	Safety+Growth	Gas Upgrade (code compliance, underground lines)	Allow for gas shutoff valve/vacuum breaker	Not Completed		Confirm if safety or regulatory issue. Otherwise, system is functioning.
1	Safety+Growth	Fencing	New perimeter chainlink fence, garden fence	Not Completed	1	CANON NOT SECURE "CRASH TOUGH" (around perimeter incl. parking & road)
1	Safety+Growth	Restroom Modernization	Replace floor/wall tiles, new fixtures/lighting/cabinets.	Partial		North side fencing not replaced. All other fencing replaced.
1	Safety+Growth	Signage, Drinking Fountains		Completed	3	Need new signage/markings
1	Safety+Growth	Building Accessibility	Replace counters, sink cabinets, thresholds	Partial		No significant DSA deficiencies noted/were addressed with modernization. Counters not done, thresholds made compliant (min. 1 per room).
1	Safety+Growth	Separate Parking, Pickup and Bus Loading Areas	Modify car parking (Cat 3), New trash enclosure.	Not Completed	2	Backlot area only (spring). Upgrades completed w/ Phase 3 (87-Au6), including new parking, bus pickup/dropoff, trash enclosure.
2	Infrastructure	Mechanical Upgrade (end of service life)	Replace existing mechanical (HVAC) systems for Bldgs being modernized	Not Completed		Controls done in 2014, but classroom units are dated. New HVAC units in 896g, 1, 7 (Au6), 9, 13, 14 (New), 17 (MUR). Still
2	Infrastructure	Plumbing Upgrade (fixtures, eqpt., domestic lines, end of service life)	Replace existing plumbing eqpt./domestic lines for bldgs being modernized. New fixtures in Cat 1 (RR upgrade)	Not Completed		No work done. Still needed.
2	Infrastructure	Covered Walkway Repair (remove utilities, re-roof)	Replace concrete paving, repair/replace covered walkway, underground existing roof-mounted conduits	Not Completed		Only lighting completed.
2	Infrastructure	Underground Utility Survey/Upgrade	Survey existing underground utilities, upgrade existing utilities if needed.	Not Completed		No work done. Limited value. Consider need on case-by-case basis for specific projects.
2	Infrastructure	Existing Kitchens-Modernization	Modernize existing kitchen & Dining Service	#12	Partial	Still needed. Consult with district food service staff.
3	Enhancement	Alternative Energy Solar Panels	New Solar Panel Installation	Partial		Subject to District (electrical, cost) & School (shade structure) priorities.
3	Enhancement	Shade Structures (assembly)	DSA shows project None in SFIP	Partial	1	None on campus. Confirm with School if needed. Former Shade Structure converted to structure replaced.
3	Enhancement	Energy Efficiency (mechanical, electrical, plumbing)	Upgrade Mech/Elec/Plumbing systems for energy efficiency	Partial		HVAC controls/lighting completed (2014-2017). See HVAC projects.
3	Enhancement	Existing Parking-Modify (stairs, asphalt overlay/new)	Replace curbs, sidewalks, AC pavers, stoop, ramps, signage landscaping.	Partial	2	Backlot area only (spring). Upgrades completed w/ Phase 3 (87-Au6), including new parking, bus pickup/dropoff, trash enclosure.
3	Enhancement	Landscape (Frontage, programmatic spaces)	New hardscape/softscape at frontage, outdoor spaces (courts/club/tennis). New garden area.	Partial	1	Improve outdoor campus spaces for student gatherings & learning. District worked with non-profit org on frontage improvements. Confirm if add'l upgrades needed.

**PROJECTS WORKSHEET**  
Update to the 2020 Student Facilities Improvement Plan  
Mountain View Whisman School District

2010 SFIP Projects						
PRIORITY CATEGORY	PROJECT DESCRIPTIONS	SITE REFERENCE	CURRENT STATUS	PRIORITY	NOTES	NOTES (STATUS)
1 Safety & Wellness Growth 2 School Infrastructure 3 Educational Enhancement	Type	PROJECT NOTES				
<b>GRAHAM MIDDLE SCHOOL</b>						
4 (2) code: 1-High to 4-Low, Not-Not Needed						
<b>OTHER PROJECTS STILL NEEDED TO ADDRESS ANY PRIORITY AREA: 1) STUDENT SAFETY &amp; ENROLLMENT GROWTH; 2) SCHOOL INFRASTRUCTURE; 3) EDUCATIONAL PROGRAM ENHANCEMENTS</b>						
	Locker Room modernization	Dated, need individual changing stations, non-gender changing rooms.		2		Clarify implementation path between City and MVWSD.
	Gym modernization	Modernize gym, Add AC.		2		Clarify implementation path between City and MVWSD.
	Classroom modernization/conversion for Industrial Arts and Home Economics	Modernize classroom(s) for industrial arts/home economics		1		Lack facilities to teach home economics, woodshop, auto shop (non-professional life skills)
2	Infrastructure	Technology Upgrade	Run support cabling (Cat6) to Frontflow devices in each classroom Install Frontflow conductor for PA system Replace all copper cables with Cat6 cables.	All	2	Upgrade from Cat5e copper, support higher bandwidth/data rates over longer distances. DF-Intermediate Distribution Frame





MEMORANDUM

TO# File	FROM# Gene Yong
COMPANY# Student Facilities Improvement Plan (SFIP)/ Ten-Year Master Plan Update Mountain View Whisman School District	DATE# 28 Aug 19
SUBJECT# Interview Notes MVWSD Maintenance, Operations, Transportation (MOT) 8:00am, Tuesday, 27 Aug 19	JOB NUMBER/REFERENCE NUMBER# 02449

ATTENDEES

MVWSD MAINTENANCE, OPERATIONS, TRANSPORTATION		
MVWSD MOT	Brian Perron	Director
ARTIK (A3)		
A3	Gene Yong	Senior Project Manager

DISCUSSION NOTES

1. MOT should be consolidated into a single site. MOT needs a long-term facilities solution (e.g., location, size, configuration).
  - a. It is presently split in two sites, with offices and storage warehouses at Graham MS and transportation at Crittenden MS.
2. MOT would benefit from being centrally located and easy to access, especially since MOT utilizes oversized vehicles (e.g. trucks, buses).
  - a. The corporation yard at Graham MS is accessible only through the school's rear gate at Lane Ave., a small two-lane residential street.
3. The two middle school gyms (Mountain View Sports Pavilion @ Graham MS, Whisman Sports Center @ Crittenden MS) are on MVWSD land and leased to the City of Mountain View on 100-year leases.
  - a. The City manages each of the gyms, including funding and coordinating any repairs, maintenance or recapitalization of facilities.
  - b. Graham MS and Crittenden MS function as tenants of these facilities.
  - c. School-related modernization requests have to go through the City. District does not have a formal say in future renovations/modernization of either gym.



MEMORANDUM

4. The District does not have a good understanding of the status of underground utility lines. It would be beneficial to undertake surveys of all underground utilities.
5. Sanitary Sewer Lines are a district-wide concern. MOT has been in a reactionary mode (i.e., respond to complaints), and hasn't been able to adequately identify how extensive these issues on a campus-wide basis (i.e., instead of simply at an individual bldg. site). When investigating complaints, they are finding block lines from tree roots and other concerns.
  - a. Monta Loma ES and Theuerkauf ES have significant plumbing/drain lines issues (e.g. frequent blockages, tree roots in pipes, etc.).
  - b. Need to survey lines at all sites (e.g., camera).
  - c. Make repairs as needed based on survey.
6. Roof gutters and stormwater drain lines at buildings are a district-wide concern, especially at older campuses. Many roof gutters and related drain lines are poorly or non-functioning (i.e., reverse slope, blockages, leaking, rusted through metal, taped joints, etc.).
  - a. Consider redoing all gutters and drain lines at same time as roofing projects.
7. Most significant district-wide facilities-related concerns are: roofs, HVAC systems, asphalt, play yards.
  - a. Priority 1: Asphalt, HVAC
  - b. Priority 2: Roofing, Bldg. Gutters/Drains, Underground Utility Surveys

**MOT BASE YARD & HQ  
GRAHAM SCHOOL SITE**

**STORAGE WAREHOUSE (Rack Storage)**  
Need 2x same size (75% of Bldg. Footprint)  
3 rack shelves/pallets (3x4' high/height), forklift accessible  
10'-12' wide roll-up doors  
Rack storage, oversized material storage, tool crib  
Existing 25' roof

**STAFF SPACE**  
4 Offices (Dir. Sec, Locksmith, Dispatch)  
Lockers, Showers, Restrooms, Kitchen  
20 Staff (future). Existing staff is 6 drivers/9 maintenance  
Conference Room-20 pns  
Break Room-20 pns

**SHACK (Existing Garden Dept.)**  
Need 3x same size  
1 each for: a) Garden, b) Paint, c) Plumbing/HVAC/Electrical

**SHOP (Existing Wood/Metal/Weld Shop)**  
Need 2x same size  
Specialized ventilation  
Gas, Electrical, Compressed Air, Telecom/Data  
Longest material is 20' (pipes)  
Does not need to be high-bay (no tall items being worked on)

**MANEUVERING AREA (Vehicles)**  
Need maneuvering area for 54' tractor-trailer (flatbed, container) and 40' buses.

**COVERED VEHICLE PORT**  
10-15 Operational Vehicles  
Large pickup trucks  
1 box truck (30'), 3 trucks w/ two trailers

**STORAGE WAREHOUSE (Floor Storage)**  
Need 1.5x same size  
Reuse furnishings/equipment (cannot go on racks/shelves)  
Hand-carry items  
Does not need to be high-bay (existing 12' roof)

**COVERED LEAN-TO (None)**  
Need covered lean-to for equipment/material laydown  
Same size (1:1) as Floor Storage Warehouse

**WASTE AREA (None)**  
Equal to two-40' Containers  
1-Green Waste  
1-Regular Waste

**MOT TRANSPORTATION YARD  
CRITTENDEN SCHOOL SITE**

**STAFF FACILITIES**  
1 Office (Dispatch), Break Room (5 Drivers)  
Need restrooms, lockers, kitchen, break room  
(no need for showers)

**BUS PARKING**  
11 Buses (6-40' buses, 5-25' van buses)  
Buses currently park in stacked/landem arrangement  
Prefer regular parking configuration w/o stacking

**BUS REPAIRS/MAINTENANCE**  
Off-site by vendor/contractor (mechanic) at their shop

**BUS FUELING**  
Off-site at commercial gas station



MEMORANDUM

TO# File	FROM# Gene Yong
COMPANY# Student Facilities Improvement Plan (SFIP)/ Ten-Year Master Plan Update Mountain View Whisman School District	DATE# 12 Aug 19
SUBJECT# Interview Notes Preschool Programs 10:00am, Monday, 5 Aug 19	JOB NUMBER/REFERENCE NUMBER# 02449

ATTENDEES

MVWSD PRESCHOOLS		
MVWSD Preschool Programs	Terri Kemper	Director
ARTIK (A3)		
A3	Gene Yong	Senior Project Manager
A3	Maria Madrigal	Project Architect

DISCUSSION NOTES

1. MVWSD Preschool Programs funded primarily by the State (California)
  - a. Program to provide early education/pre-elementary school programs for at-risk/low income/disadvantaged families/students across the entire District
    - i. State covers cost of preschool programs/free to families that qualify.
    - ii. Students/families must meet specific income-based eligibility requirements.
    - iii. Selective entry based on criteria set by the State's grant program.
    - iv. District has been able to meet the need for preschool programs based on the number of eligible students.
    - v. Majority of students/families who qualify come from the areas around Mistral/Castro and Theuerkauf.



MEMORANDUM

2. Additional funding is provided by the District.
  - a. District prioritized expanding early education opportunities to the community, including those that don't qualify under the State's grant program.
  - b. Additional funding also from grants and fees.
3. District funding created capacity for preschools to accept other students.
  - a. Based on available spaces.
  - b. No prequalification necessary to meet State criteria.
  - c. Fees charged to augment district and grant funding of additional spaces.
4. Increasing demand for full-day programs
  - a. District's preschool programs have been oriented to half-day programs.
  - b. Full-day programs require larger spaces than half day programs.
    - i. More space needed.
      1. Minimum regulatory space requirements for naps (e.g., size of mats, distance between mats, etc.).
      2. Dining/snacks.
      3. Variety of play spaces (indoors, outdoors).
    - ii. Existing preschool facilities constrained by:
      1. Undersized classrooms (i.e., reuse of standard 960 sf classroom modules OK for half-day, too small for full-day).
      2. Inadequate playgrounds.
      3. Location and lack of security.
5. Facility shortcomings
  - a. Whereas Latham's preschool classroom are all general ed, only one classroom at Graham is general ed. Graham's general ed preschool is isolated/siloed. Better to consolidate and collocate.
  - b. No dedicated preschool play area at Theuerkauf. Share use of K-classroom play structures.
  - c. Restroom fixtures are for older children, including WCs and sinks (i.e., too large, too high).
  - d. Lack of half-height doors to enable easy control and supervision of adjoining spaces.



MEMORANDUM

- e. Separate areas for eating/drinking. Ideal not to come in instructional/learning spaces.
  - f. Lack of storage for outdoor play equipment. Presently stored outdoors (i.e., theft, exposure, weathering) or in classrooms (i.e., cleanliness, logistics).
6. Preschool facilities are informed by ECERS (Early Childhood Environment Rating Scale) facility standards/criteria. Facilities are assessed and given a "Site Rating", which is important for grants.
- a. District preschools typically fall short on its playgrounds
    - i. ECERS identifies the need to support student development in 7 different gross motor activities goal:
    - ii. During regulatory inspections, District preschools typical create workarounds to address the ECERS criteria.
7. District goal is to have a program for 225 students. Staffing is currently based on the following:
- a. Required staff/student ratio is 1:8
  - b. Classroom 1: 15 students with 1 teacher and 1 aide.
  - c. Classroom 2: 24 students with 1 teacher and 2 aides.
8. The District preschool program would ideally be situated at a single, centrally-located and purposefully configured preschool facility.
- a. Collocate general and SPED preschool students
  - b. Consolidates teachers, support and administrative staff at single site.
  - c. Classroom spaces which flow into adjoining outdoor spaces.
  - d. Create varied outdoor play environments that enables children to connect to the natural environment. Many students come from backgrounds where access to outdoor natural and play settings is limited.
  - e. Create shared spaces where school can gather (e.g., MUR, outdoor gathering spaces) and where the preschool can hold workshops and training sessions with parents.
  - f. Place for art and play-based/project-based activities.
  - g. Secure
  - h. Age-appropriate/child-centered spaces, furnishings and equipment.
    - i. Preschools are currently using spaces and furnishings designed for older students.

**PROJECTS WORKSHEET**  
Update to the 2010 Student Facilities Improvement Plan  
Mountain View Whisman School District

2010 SFIP Projects					CURRENT PRIORITY/NEED		
PRIORITY CATEGORY	PROJECT DESCRIPTIONS			SITE REFERENCE	PROJECT STATUS	PRIORITY	NOTES
<small>           1 Safety &amp; Treatment Concern            2 Space Infrastructure            3 Educational Enhancement         </small>	PROJECT TYPE/CATEGORIES	PROJECT NOTES	SITE REFERENCE	PROJECT STATUS	PRIORITY	NOTES	
<b>PRESCHOOL @ LATHAM STREET</b>					<small># per scale: 1=High to 4=Low, NA Not Needed</small>		
1	Safety+Growth	Site Accessibility Upgrade (Ramps)	Create separate paths from Latham Ave. to preschool and Mistral			1	Mistral pedestrian traffic travels across preschool paths.
1	Safety+Growth	Play Cluster-Preschool	Provide holistic play environment for preschool			1	Minimal play environment. Provide natural/landscaped play features.
1	Safety+Growth	Technology (communications, data, phone)	Replace ethernet cable with OM3 fiber cables to connect to MDF			2	Assume MDF is at Mistral or Castro.
1	Safety+Growth	Fencing	Replace all copper cables with Cat6a cables Fencing to create a secure perimeter during and after school hours			1	No perimeter fence around preschool campus.
2	Infrastructure	Existing Classrooms-Modernization	Modernization ongoing-Summer 2019	P1,P5	Ongoing		Classroom/Presroom furnishings not age-appropriate to preschool children.
2	Infrastructure	Security System Upgrade	Establish perimeter controls for preschool campus			1	No perimeter around preschool campus.
3	Enhancement	Shade Structures (assembly)	Shade outdoor play and learning areas (landscape, structure)			1	Can be landscaped or structure.
3	Enhancement	Landscape (frontage, programmatic spaces)	Fencing to establish perimeter along park edge. Landscape improvements in play areas.			1	

Prepared by Artik for MVWSD  
1 of 1



MEMORANDUM

TO# File	FROM# Gene Yong
COMPANY# Student Facilities Improvement Plan (SFIP)/ Ten-Year Master Plan Update Mountain View Whisman School District	DATE# 9 Aug 19
SUBJECT# Interview Notes Special Education Programs 7:30am, Monday, 5 Aug 19	JOB NUMBER/REFERENCE NUMBER# 02449

ATTENDEES

MVWSD SPECIAL EDUCATION		
MVWSD SPED	Arianna Mayes	Director
ARTIK (A3)		
A3	Gene Yong	Senior Project Manager
A3	Maria Madrigal	Project Architect

DISCUSSION NOTES

1. Increasing demand for SPED services throughout the District.
2. MVWSD's Special Education (SPED) program has several major components:
  - a. General SPED services for SPED students with less significant disabilities.
    - i. Services located on all elementary and middle school campuses.
    - ii. Within the next 5 years, goal is to "push-in"<sup>1</sup> high functioning SPED students who are able to be integrated with the general student population with limited support in specific areas of need.
    - iii. District services in schools includes:
      1. Psychologist (assessments)
      2. Speech Therapist
      3. Vision Specialist
      4. Physical Therapist (PT)

<sup>1</sup> With this approach, the general education teacher and the special education teacher work together in close collaboration. The focus is to ensure students are receiving full access to the general education curriculum while limiting any disruption to their daily schedule (such as pulling students out of a classroom)



MEMORANDUM

5. Occupational Therapist (OT)
6. Education/Resource Specialist.
- iv. Typical classroom settings involve 20-25 students and 4 teachers/specialist/support staff at any given time.
- b. Three Special Day Class programs for SPED students with more significant disabilities.
  - i. Individual sites for three district-wide "pull-out"<sup>2</sup> SPED services include:
    1. Autism @ Monta Loma Elementary School (ES) and Crittenden Middle School (MS)
      - a. Program being relocated from Huff ES because Huff ES needs space for enrollment growth. Monta Loma ES space needs to be upgraded (e.g., install barriers at rear door to classrooms)
    2. Medically-Fragile<sup>3</sup> @ Landels ES.
      - a. Need to provide facilities to support Medically Fragile students in middle school. MS students currently based in Landels or HS.
    3. Functional Life Skills<sup>4</sup> @ Bubb ES and Graham MS
  - ii. Need purposefully configured and equipped spaces.
- c. SPED Preschools
  - i. Based at Graham Middle School.
    1. Three SPED classrooms
      - a. 2 classrooms are for SPED students with IEPs<sup>5</sup>.
      - b. 1 classroom is co-taught with a general ed teacher and SPED teacher<sup>6</sup>.

<sup>2</sup> Depending on the student's education needs, he or she may require to also receive small group or individual instruction with the special education teacher in another setting outside of the general education classroom.

<sup>3</sup> Medically fragile refers to a student receiving special education and related services who has a serious, ongoing illness or a chronic condition that requires daily, ongoing medical treatments and monitoring by appropriately trained personnel, and requires the routine use of medical device or of assistive technology to compensate for the loss of usefulness of a body function needed to participate in activities of daily living, and lives with ongoing threat to his or her continued well-being. Students with medically fragile disabilities require an intensive individual education program of special education services that includes specially designed instruction, related services, assistive technology, school health services, and/or other services required for the provision of a free appropriate public education. Services are frequently provided in a self-contained instructional setting.

<sup>4</sup> Functional skills are those skills a student needs to live independently. An important goal of special education is for our students to gain as much independence and autonomy as possible, whether their disability is emotional, intellectual, physical, or a combination of two or more (multiple) disabilities.

<sup>5</sup> Assumed to include SPED preschool students requiring "pull-out" support. Individual Education Plans (IEP) defines the individualized objectives of a child who has been determined to have a disability or requires specialized accommodation, as defined by federal regulations. The IEP is intended to help children reach educational goals more easily than they otherwise would, four component goals are: conditions, learner, behavior, and criteria. In all cases the IEP must be tailored to the individual student's needs as identified by the IEP evaluation process, and must especially help teachers and related service providers understand the student's disability and how the disability affects the learning process.

<sup>6</sup> Assumed to include SPED preschool students who are "pushed-in" with general preschool students.



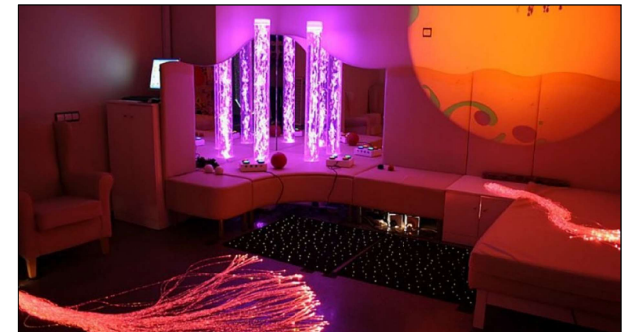
- ii. Medically fragile SPED preschool being relocated from Slater to Graham.
- iii. AM would prefer to combine the two preschools (Latham, Graham) into a single site.
  - 1. Montecito site would be ideal because of its central location.
  - 2. Integrate SPED students with general preschool students.
  - 3. Shared support among teachers and staff if located at a single site.
- d. Specialist SPED programs/outsourced to higher-level non-district SPED programs.
  - i. For students with disabilities beyond the capabilities of Districts programs.
  - ii. Too few students in the District to dedicate staff and space for specialized programs. 6 students including one in 3<sup>rd</sup> grade and five in 7<sup>th</sup> and 8<sup>th</sup> grade.
- e. Extended School Year (ESY) Summer Program
  - i. District is required to provide 19 days of Summer School for SPED students. Currently held at Stevenson ES.

3. SPED Facilities

- a. SPED facilities have moved to different school sites depending on availability of space and as enrollment fluctuates.
- b. SPED spaces are adapted from existing classroom spaces and are not purposefully-built. Some spaces are poorly configured for SPED (e.g., Bubb ES, Landels ES). SPED staff often not involved in design of its spaces.
  - i. Triangular spaces
  - ii. Furnishings and fixtures not ideally selected/configured (e.g., TV screens in instructional spaces, fixed wall storage systems, etc.).
  - iii. Located at the outer edges of a school campus behind gates/fences. Feeling of isolation and being marginalized.
  - iv. Lack of break out space attached to classrooms for individual/small group instruction.
  - v. Lack of separate space attached to classrooms for staff.
  - vi. Lack of showers
  - vii. Lack of kitchens and washer/dryer for functional life skills program.
- c. SPED requires specialized spaces which need to be purposefully design, configured and equipped) for SPED functions, especially spaces for more specialized services (e.g., autism, medically fragile, functional life skills, etc.).



- d. SPED Special Day Program Facilities
  - i. Locate centrally
  - ii. Locate near SPED program director (i.e., director's proximity near ESY program at Stevenson was very beneficial).
  - iii. Equip/furnish facilities to support programs
    - 1. Showers in classrooms
    - 2. Kitchen and washer/dryer in Functional Life Skills classrooms/labs.
- e. SPED instructional spaces
  - i. 10-15 adults may be working with 20+/- SPED students at any given time.
  - ii. Need to have space for staff to work from.
  - iii. Need to have space to break into small groups (4).
  - iv. Consider very large classroom with operable partitions (e.g., 1500+/- sf) or regular sized classrooms with attached break out rooms.
- f. Ideal for Program Director to be located with, or near SPED Special Day Programs
  - i. When ESY was at Stevenson ES over summer, program director could visit program/be more accessible to the students/families.
- g. Sensory Space (aka Multi-Sensory Environments).
  - i. Safe, calm space
  - ii. Ideal to have at least one indoor and outdoor space for SPED students on each campus.
    - 1. Indoor space requires supervision.
    - 2. Stevenson ES has an outdoor sensory space.
  - iii. Sensory space at EBC Palo Alto campus is a good example (see photo).



Sensory Space at EBC Palo Alto Campus



MEMORANDUM

- h. SPED Program Support Staff/Specialists.
  - i. Psychologist
    - 1. Supports both general ed and SPED students.
    - 2. Locate near front of school (e.g., Admin Bldg.).
      - a. Frequent interaction between psychologist, student, parents, and principal.
    - 3. Need private office and a small meeting room for 4-5 pns.
      - a. Privacy is requirement.
      - b. Space to conduct assessments
  - ii. Speech Therapist
    - 1. Locate centrally near students
    - 2. Need office and small group space for 4-5 pns.
  - iii. Education/Resource Specialist
    - 1. All schools have a full-time education/resource specialist.
    - 2. Goal is to have two at each school site, one to support general ed and one to support SPED.
    - 3. Education Specialist sometimes co-teach other general ed classes (e.g., english/math @ Graham MS, science/social studies @ Graham MS).
    - 4. Need office.
  - iv. Vision Specialist/PT/OT
    - 1. Locate centrally near students
    - 2. Each spend 2-3 days on any one campus in a week.
    - 3. One office can be shared.
    - 4. Need meeting room for 10-15 pns.

**Gene Yong**

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**From:** Jon Aker <jaker@mwbsd.org>  
**Sent:** Thursday, July 25, 2019 12:57 PM  
**To:** Gene Yong  
**Subject:** Re: MWSD Interviews for SFIP Update (TECHNOLOGY)

Sure. See responses below.

Also, overall I don't like the projector setup we have at the elementary MURs. I would prefer a projector mounted at the back of the stage and projects on to the screen from behind. When they built them they designed a projector on a cart setup. Some cabling would need to be run in order to make this change.

We support MOT with the EMS systems. A single EMS system that is used for all sites. From what I understand, the middle schools have an older system from another vendor and the elementary sites have various versions of the same vendor but they can't manage them from what system. It seems like it was only half done.

On Thu, Jul 25, 2019 at 9:04 AM Gene Yong <[gyong@artika3.com](mailto:gyong@artika3.com)> wrote:

Jon,

Can you quickly list what you think would be the top 2-3 technology-related priorities for the following campuses (can be simple one sentence scoping type descriptions for now). If specific to a building, please reference the building references in the attached set of maps (e.g., #B, #200, etc.).

**BUBB ES**

- 1. Replace all fiber with OM4 fiber
- 2. Replace all cat5e copper with Cat6a
- 3. Repair network cabling that hasn't worked since it was installed in 2018

**MISTRAL ES**

- 1. Replace all fiber with OM4 fiber
- 2. Create an adequately sized MDF for the campus
- 3. Replace all cat5e copper with Cat6a

**CASTRO ES (NEW)**

- 1. Can't think of anything. Some of the issues at that campus are in the Mistral buildings.
- 2.

**CRITTENDEN MS**

- 1. Run copper cabling to FrontRow devices in each classroom and install FrontRow conductor for the PA
- 2. Run network cabling behind the TV in each classroom in building 400 and room 213
- 3. Run fiber and copper to building 1100 and 1000

**GRAHAM MS**

- 1. Run copper cabling to FrontRow devices in each classroom and install FrontRow conductor for the PA
- 2. Replace old cat5e copper with cat6a
- 3. Eliminate redundant IDF in building 11

HUFF ES

1. Replace all fiber with OM4 fiber
2. Replace old cat5e copper with cat6a
3. Repair network cabling that hasn't worked since it was installed in 2018

LANDELS ES

1. Replace all fiber with OM4 fiber
2. Replace old cat5e copper with cat6a
3. Repair network cabling that hasn't worked since it was installed in 2018

MONTA LOMA ES

1. Run network cabling behind the TV in each classroom
2. Run network cabling to mount the APs in the center of each classroom
3. Replace old cat5e copper with cat6a

STEVENSON ES (NEW)

1. Replace IDF cabinet in library with one deep enough for the equipment
2. Run copper cabling to FrontRow devices in each classroom and install FrontRow conductor for the PA

THEUERKAUF

1. Replace all fiber with OM4 fiber
2. Replace IDF for building E with one that can accommodate our network equipment
3. Replace old cat5e copper with cat6a

VARGAS ES (NEW)

1. Don't know what the issues might be yet.
- 2.

PRESCHOOL AT LATHAM ST.

1. Replace ethernet cable that is connecting preschool to the MDF with OM4 fiber
2. Replace old cat5e copper with cat6a

PRESCHOOL AT GRAHAM MS

1. Run new OM4 fiber from IDF to MDF
2. Replace old cat5e copper with cat6a

Gene

**From:** Jon Aker <[jaker@mvwsd.org](mailto:jaker@mvwsd.org)>

**Sent:** Thursday, July 25, 2019 8:24 AM

**To:** Gene Yong <[gyong@artika3.com](mailto:gyong@artika3.com)>

**Cc:** Rebecca Westover <[rwestover@mvwsd.org](mailto:rwestover@mvwsd.org)>; Ron Wheelehan <[rwheelehan@mvwsd.org](mailto:rwheelehan@mvwsd.org)>; Maria Madrigal <[mmadrigal@artika3.com](mailto:mmadrigal@artika3.com)>; Pauline Torrez <[ptorrez@artika3.com](mailto:ptorrez@artika3.com)>; Bill Gould <[bgould@artika3.com](mailto:bgould@artika3.com)>

**Subject:** Re: MVWSD Interviews for SFIP Update (TECHNOLOGY)

We have lots of physical plant upgrades needed at the sites. Most of the sites they just added additional network cabling during the modernization and didn't address any of the deficiencies with the existing cabling. At some sites we've had to reduce the speed of the network or use older equipment due to the old physical plant.





**Mountain View  
Whisman  
School District**

## **SCHOOL SITES**

**Bubb**

**Cooper**

**Crittenden**

**Graham**

**Huff**

**Landels**

**Mistral**

**Monta Loma**

**Slater**

*Google Childrens Center*

**Theuerkauf**

**Whisman**

*German International School of Silicon Valley/YCIS*

## **ROOF ASSESSMENTS**

Western Roofing Service

# **APPENDIX D**



# Mountain View Whisman School District Roof Assessment



**Benjamin Bubb ES**  
525 Hans Ave.  
Mountain View, CA 94040

**Prepared By:**  
Western Roofing Service  
15002 Wicks Blvd.  
San Leandro, CA 94577

## Roof Area: Buildings 1, 2, 3, 4, 5, 6 Dimensional Asphalt Shingle Roofing

### Roof System Overview

Substrate	Wood
Insulation	N/A
Cover board	N/A
Field Assembly	Dimensional Asphalt Shingles
Base Flashing Assembly	N/A
Surfacing	N/A
Condition	Good
Approximate Age	10 - 15yrs.
Estimated Useable Life Remaining	15 - 20yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 25 - 30 years.

## Roof Area: Buildings 1, 2, 3, 4, 5, 6 Built-up Roofing

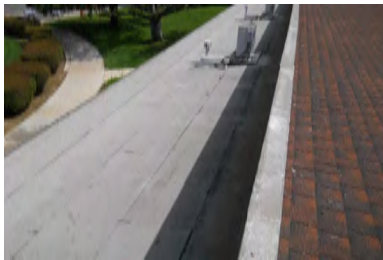
### Roof System Overview

Substrate	Wood
Insulation	Unknown
Cover board	Unknown
Field Assembly	Hot Asphalt Applied Built-up Roofing
Base Flashing Assembly	Hot Asphalt Applied Built-up Roofing
Surfacing	Mineral Surfaced Cap Sheet
Condition	Fair - Good
Approximate Age	10 - 15yrs.
Estimated Useable Life Remaining	5 - 10yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 15 - 20 years.

Existing roof system condition assessment and observations are based on the opinion and professional expertise of Western Roofing Service. Roof manufacturer of record and age is unknown.



Roof Overview - Building 1



Roof Overview - Building 1



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Roof Overview - Building 2



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Through roof penetrations do not appear to have proper low slope roof jack. Recommend installing proper roof jack and storm collar.



Typical Deficiency - Pipe jacks are missing band clamps and sealant. Recommend installing stainless steel band clamps, sealant, and install storm collar.



Typical Deficiency - BUR at gravel stop edge metal has split at joints. Recommend removing loose material to expose adequate tie-in of existing striping plies, prime and re-flash per industry standards.



Roof Overview - Building 3 (Building 4&5 Similar)



Roof Overview - Building 3 (Building 4&5 Similar)



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



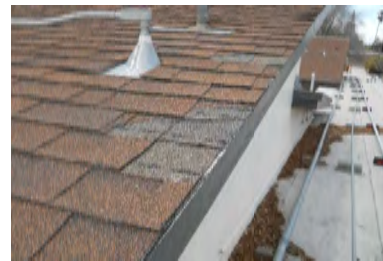
Typical Deficiency - Pipe jacks are missing sealant and or flexible self-adhered flashing tape. Recommend sealing, and install storm collar.



Typical Deficiency - Pipe jacks are damaged. Recommend installing new GSM roof jack and storm collar.



Typical Deficiency - Detailing at through roof penetrations show signs of cracking and delamination. Recommend touch up of mastic at penetrations and application of acrylic or silicone coating to preserve and maintain repair.



Typical Deficiency - Shingles are missing. Recommend replacing as needed.



Typical Deficiency - Pipe jacks are missing band clamps and sealant. Recommend installing stainless steel band clamps, apply sealant, and install storm collar.



Typical Deficiency - Pipe jack is in need of replacement. Recommend installing new roof jack and storm collar. Recommend LB to be removed if abandoned.



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Roof Overview - Building 6



Typical Deficiency - Pipe jacks are missing band clamps and sealant. Recommend installing stainless steel band clamps, apply sealant, and install storm collar.



Typical Deficiency - Conduit penetrations do not appear to have proper roof jack. Recommend installing proper roof jack and storm collar.



Typical Deficiency - Hip and ridge shingles are missing. Recommend replacing as needed.

**Condition Overview Roof Area: Buildings 1, 2, 3, 4, 5, 6 Dimensional Asphalt Shingle Roofing**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing. Several through roof pipe penetrations have been improperly flashed. Missing hip, ridge, and field shingles throughout. Missing pipe clamps and storm collars.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.

Replace missing shingles as needed.

Install new pipe flashings with storm collars as needed.

Install stainless steel band clamps and storm collars as needed.

**Long Term Recommendations**

None at this time.

**Condition Overview Roof Area: Buildings 1, 2, 3, 4, 5, 6 Built-up Roofing**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing. Improperly flashed through roof pipe penetrations. Cracking and delamination of mineral surfaced cap sheet at gravel stop joints. Cracking and delamination of mastics at base flashing curb penetrations, and through roof pipe penetrations.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.

Install new pipe flashings with storm collars as needed.

Repair splits in mineral surfaced cap sheet at gravel stop.

Touch up of mastic at penetrations and apply acrylic or silicone coating to preserve repair.

**Long Term Recommendations**

None at this time.

**Budget Estimates**

<b>Annual Roof/Gutter Cleaning and Inspection</b>	\$13,500 - \$14,850
<b>Deficiency Repairs</b>	\$13,500 - \$14,850

# Mountain View Whisman School District Roof Assessment



**Cooper School**  
33 Eunice Ave.  
Mountain View, CA 94040

**Prepared By:**  
Western Roofing Service  
15002 Wicks Blvd.  
San Leandro, CA 94577

## Roof Area: Building 1 - Poly Urethane Foam Roofing

### Roof System Overview

Substrate	Wood
Insulation	Unknown
Cover board	Unknown
Field Assembly	Poly Urethane Foam Roofing
Base Flashing Assembly	Poly Urethane Foam Roofing
Surfacing	Coating
Condition	Poor
Approximate Age	15 - 20yrs.
Estimated Useable Life Remaining	0 - 5yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 15 - 20 years.

## Roof Area: Buildings 2, 3 - Built-up Roofing

### Roof System Overview

Substrate	Wood
Insulation	Unknown
Cover board	Unknown
Field Assembly	Hot Asphalt Applied Built-up Roofing
Base Flashing Assembly	Hot Asphalt Applied Built-up Roofing
Surfacing	Gravel
Condition	Fair - Good
Approximate Age	10 - 15yrs.
Estimated Useable Life Remaining	5 - 10yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 15 - 20 years.

Existing roof system condition assessment and observations are based on the opinion and professional expertise of Western Roofing Service. Roof manufacturer of record and age unknown.





Roof Overview - Building 1



Roof Overview - Building 1



Typical Deficiency - Debris have accumulated at field of roof. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Pipe jack at through roof penetration is damaged. Recommend repairing as needed.



Typical Deficiency - Coating has begun to delaminate from perimeter coping cap. Recommend touch up as needed.



Typical Deficiency - Coating has begun to delaminate from foam roofing. Recommend touch up as needed.



Roof Overview - Building 2 (Building 3 Similar)



Typical Deficiency - Debris have accumulated at field of roof. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Sealant at coping seams has begun to fail. Recommend removal and replacement of sealant as needed.

**Condition Overview Roof Area: Building 1 - Poly Urethane Foam Roofing**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing. Open pipe penetration. Blistered coating at coping and field of roofing.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.

Repair pipe penetration.

Repair damaged coating.

**Long Term Recommendations**

Tear off foam roofing to wood substrate and install new BUR roof system.

**Condition Overview Roof Area: Buildings 2, 3 - Built-up Roofing**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing. Open seams at coping metal.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.

Seal open coping seams.

**Long Term Recommendations**

None at this time.

**Budget Estimates**

<b>Annual Roof/Gutter Cleaning and Inspection</b>	\$9,500 - \$10,450
<b>Deficiency Repairs</b>	\$12,000 - \$13,200
<b>BUR Re-roof</b>	\$288,000 - \$316,800

# Mountain View Whisman School District Roof Assessment



**Crittenden MS**  
1701 Rock Street  
Mountain View, CA 94043

**Prepared By:**  
Western Roofing Service  
15002 Wicks Blvd.  
San Leandro, CA 94577

**Roof Area: Building 100, 200, 300, 500, 700, 800, 900, 1000 - Dimensional Asphalt Shingles**

### Roof System Overview

Substrate	Wood
Insulation	N/A
Cover board	N/A
Field Assembly	Dimensional Asphalt Shingles
Base Flashing Assembly	N/A
Surfacing	N/A
Condition	Good
Approximate Age	10 - 15yrs.
Estimated Useable Life Remaining	15 - 20yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 25 - 30 years.

**Roof Area: Building Canopies 300, 500, 700, 800, 900, 1000 - Built-up Roofing**

### Roof System Overview

Substrate	Wood
Insulation	Unknown
Cover board	Unknown
Field Assembly	Hot Asphalt Applied Built-up Roofing
Base Flashing Assembly	Hot Asphalt Applied Built-up Roofing
Surfacing	Mineral Surfaced Cap Sheet
Condition	Poor
Approximate Age	15 - 20yrs.
Estimated Useable Life Remaining	0 - 5yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 15 - 20 years.

**Roof Area: Building 100, 800, 900 - Built-up Roofing**

### Roof System Overview

Substrate	Wood
Insulation	Unknown
Cover board	Unknown
Field Assembly	Hot Asphalt Applied Built-up Roofing
Base Flashing Assembly	Hot Asphalt Applied Built-up Roofing
Surfacing	Mineral Surfaced Cap Sheet
Condition	Fair - Good
Approximate Age	10 - 15yrs.
Estimated Useable Life Remaining	5 - 10yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 15 - 20 years.

**Roof Area: Building 400, 600 - Single-ply Roofing**

**Roof System Overview**

Substrate	Wood
Insulation	Unknown
Cover board	Unknown
Field Assembly	Single-Ply Roofing
Base Flashing Assembly	Single-Ply Roofing
Surfacing	N/A
Condition	Good
Approximate Age	0 - 5yrs.
Estimated Useable Life Remaining	15 - 20yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 15 - 20 years.

**Roof Area: Building 1100 - Built-up Roofing**

**Roof System Overview**

Substrate	Wood
Insulation	Unknown
Cover board	Unknown
Field Assembly	Hot Asphalt Applied Built-up Roofing
Base Flashing Assembly	Hot Asphalt Applied Built-up Roofing
Surfacing	Gravel
Condition	Poor
Approximate Age	15 - 20yrs.
Estimated Useable Life Remaining	0 - 5yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 15 - 20 years.

**Roof Area: Building 1100 - Concrete S Tile**

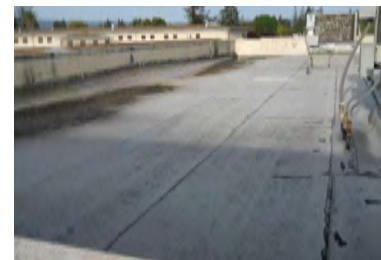
**Roof System Overview**

Substrate	Wood
Insulation	N/A
Cover board	N/A
Field Assembly	Concrete S Tile
Base Flashing Assembly	N/A
Surfacing	N/A
Condition	Fair - Good
Approximate Age	15 - 20yrs.
Estimated Useable Life Remaining	10 - 15yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 25 - 30 years.

Existing roof system condition assessment and observations are based on the opinion and professional expertise of Western Roofing Service. Roof manufacturer of record and age unknown.



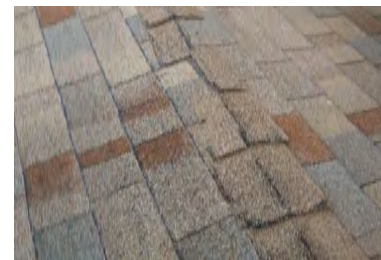
Roof Overview - Building 100



Roof Overview - Building 100



Typical Deficiency - Gutter brackets have been face fastened through asphalt shingle. Recommend removal and repositioning bracket. Repair asphalt shingles as needed.



Typical Deficiency - Hip and ridge shingles are damaged and missing. Recommend replacing as needed.



Typical Deficiency - Asphalt shingles are damaged and missing. Recommend replacing as needed.



Typical Deficiency - Pipe jacks are missing sealant. Recommend application of flexible flashing self-adhered tape and or sealant, and install storm collar.



Typical Deficiency - Sealant at coping seams has begun to fail. Recommend removal and replacement of sealant as needed.



Typical Deficiency - Observed fastener penetrating through finished built-up roofing. Recommend removal and patch.



Typical Deficiency - Base flashing at mechanical curb has not been properly skirt flashed. Recommend installation of GSM skirt flashing.



Typical Deficiency - Sealant at lead pipe jacks has begun to pull away from through roof penetration. Recommend replacing sealant as needed, installing stainless steel band clamps, and storm collar.



Typical Deficiency - Observed exposed lath and underlayment at roof to wall transition. Recommend stucco patch and as needed sealing to protect underlayment and minimize water intrusion behind stucco.



Typical Deficiency - Through wall scuppers should have debris screens. Recommend installation of gutter screens to promote positive drainage.



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Gutter brackets have been face fastened through asphalt shingle. Recommend removal and repositioning bracket. Repair asphalt shingles as needed.



Typical Deficiency - Pipe jacks are missing sealant. Recommend application of flexible flashing self-adhered tape and or sealant, and install storm collar.



Typical Deficiency - Through roof penetration does not appear to have proper roof jack. Recommend installing proper roof jack and storm collar.



Typical Deficiency - Hip and ridge shingles are damaged and missing. Recommend replacing as needed.



Typical Deficiency - Gutter brackets have been face fastened through asphalt shingle. Recommend removal and repositioning bracket. Repair asphalt shingles as needed.



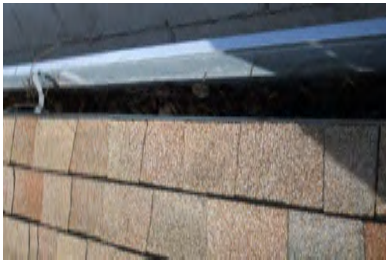
Typical Deficiency - Missing leader pipe. Recommend installation of leader pipe to divert water to lower roof.



Typical Deficiency - Asphalt shingles are damaged and missing. Recommend replacing as needed.



Typical Deficiency - Pipe jacks are missing sealant. Recommend application of flexible flashing self-adhered tape and or sealant, and install storm collar.



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Gutter straps need to be re-fastened.



Typical Deficiency - Pipe jacks are missing sealant. Recommend application of flexible flashing self-adhered tape and or sealant, and install storm collar.



Roof Overview - Building 600



Roof Overview - Building 600



Roof Overview - Building 700



Roof Overview - Building 700



Typical Deficiency - Asphalt shingles are damaged and missing. Recommend replacing as needed.



Typical Deficiency - Gutter brackets have been face fastened through asphalt shingle. Recommend removal and repositioning bracket. Repair asphalt shingles as needed.  
Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Pipe jack sealant has begun to pull away from through roof pipe penetration. Recommend application of flexible flashing self-adhered tape and sealant, and install storm collar.



Roof Overview - Building 800



Roof Overview - Building 800



Roof Overview - Building 800



Typical Deficiency - Gutter brackets have been face fastened through asphalt shingle. Recommend removal and repositioning bracket. Repair asphalt shingles as needed.



Typical Deficiency - Pipe jack is open. Recommend removal and replacement and installation of storm collar.





Typical Deficiency - Hip and ridge shingles are damaged and missing. Recommend replacing as needed.



Typical Deficiency - Missing leader pipe. Recommend installation of leader pipe to divert water to lower roof.



Typical Deficiency - Roof to wall counter flashing is open. Recommend removal and replacement as necessary to achieve water tight application.



Typical Deficiency - Observed fastener penetrating through finished asphalt shingle roofing. Recommend removal and repair as needed.



Typical Deficiency - Mechanical duct work seams damaged and deteriorated. Recommend replacement of damaged duct by licensed mechanical contractor and coating with acceptable silicone or acrylic coating.



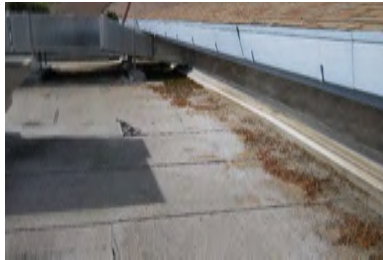
Typical Deficiency - Through wall scuppers should have debris screens. Recommend installation of gutter screens to promote positive drainage.



Typical Deficiency - Sealant at low slope roof jack needs to be replaced. Recommend re-seal and install storm collar.



Typical Deficiency - Sealant at coping seams has begun to fail. Recommend removal and replacement of sealant as needed.



Typical Deficiency - Observed accumulation of debris at field of roof. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Roof Overview - Building 900



Typical Deficiency - Gutter brackets have been face fastened through asphalt shingle. Recommend removal and repositioning bracket. Repair asphalt shingles as needed.



Typical Deficiency - Sealant at steep slope roof jack needs to be replaced. Recommend re-seal and install storm collar.



Roof Overview - Building 1000



Typical Deficiency - Pipe jacks are missing sealant. Recommend application of flexible flashing self-adhered tape and or sealant, and install storm collar.



Typical Deficiency - Hip and ridge shingles are damaged and missing. Recommend replacing as needed.



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



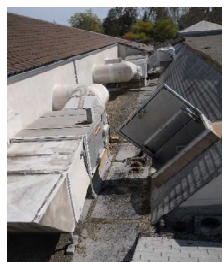
Typical Deficiency - Damaged gutter seam.  
Recommend repair as needed.



Typical Deficiency - Missing leader pipe.  
Recommend installation of leader pipe to divert water to lower roof.



Roof Overview - Building 1100



Roof Overview - Building 1100



Roof Overview - Building 1100



Typical Deficiency - Missing concrete S tile.  
Recommend replacement of all missing and or damaged tiles.



Typical Deficiency - Base flashings show signs of deterioration and cracking. Recommend application of silicone or acrylic coating to maximize usable life of existing built-up roof system.



Typical Deficiency - Mechanical duct work damaged and deteriorated. Recommend replacement of damaged duct by licensed mechanical contractor and coating with acceptable silicone or acrylic coating.

**Condition Overview Roof Area: Building 100, 200, 300, 500, 700, 800, 900, 1000 - Dimensional Asphalt Shingles**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing. Several through roof pipe penetrations have been improperly flashed. Missing hip, ridge, and field shingles throughout. Missing pipe clamps and storm collars. Improperly fastened gutter straps through existing roofing. Incomplete stucco wall finishes.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.  
Replace missing shingles as needed.  
Repair improperly fastened gutter straps.  
Complete roof to wall stucco work.  
Install new pipe flashings with storm collars as needed.  
Install stainless steel band clamps and storm collars as needed.

**Long Term Recommendations**

None at this time.

**Condition Overview Roof Area: Building Canopies 300, 500, 700, 800, 900, 1000 - Built-up Roofing**

Existing roof system is performing as designed, but nearing end of usable life. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.

**Long Term Recommendations**

Recommend tear off of existing roofing and installation of new BUR roof system.

**Condition Overview Roof Area: Building 100, 800, 900 - Built-up Roofing**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing. Sealant at coping seams has begun to fail. Observed fasteners penetrating through finished roof system. Missing skirt flashings around mechanical unit penetrations. Missing scupper screens. delamination of sealants around through roof penetrations.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.  
Replace sealants at pipe flashings and install storm collars as needed.  
Replace sealants at coping cap seams.  
Install missing skirt flashings.  
Install scupper screens.

**Long Term Recommendations**

None at this time.

**Condition Overview Roof Area: Building 200, 600 - Single Ply Roofing**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.

**Long Term Recommendations**

None at this time.

**Condition Overview Roof Area: Building 1100 - Built-up Roofing**

Existing roof system is performing as designed, but nearing end of usable life. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing. Delamination of sealants around through roof penetrations. Mechanical duct needs to be repaired and or replaced by licensed contractor.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.

**Long Term Recommendations**

Recommend tear off of existing roofing and installation of new BUR roof system. Recommend additional evaluation of mechanical duct for repair and or replacement.

**Condition Overview Roof Area: Building 1100 - Concrete S Tile**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing. Missing tiles.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.

Replace missing tiles as needed.

**Long Term Recommendations**

None at this time.

**Budget Estimates:**

<b>Annual Roof/Gutter Cleaning and Inspection</b>	\$23,000 - \$25,300
<b>Deficiency Repairs</b>	\$75,000 - \$82,500
<b>Re-Roof</b>	\$437,000 - \$480,700

# Mountain View Whisman School District Roof Assessment



**Graham MS**  
1175 Castro Street  
Mountain View, CA 94040

**Prepared By:**  
Western Roofing Service  
15002 Wicks Blvd.  
San Leandro, CA 94577

**Roof Area: Building 2, 3, 4, 5, 6, 8, 11 - Dimensional Asphalt Shingles**

### Roof System Overview

Substrate	Wood
Insulation	N/A
Cover board	N/A
Field Assembly	Dimensional Asphalt Shingles
Base Flashing Assembly	N/A
Surfacing	N/A
Condition	Good
Approximate Age	10 - 15yrs.
Estimated Useable Life Remaining	15 - 20yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 25 - 30 years.

**Roof Area: Building 12, 13 - 3 Tab Asphalt Shingles**

### Roof System Overview

Substrate	Wood
Insulation	N/A
Cover board	N/A
Field Assembly	3 Tab Asphalt Shingles
Base Flashing Assembly	N/A
Surfacing	N/A
Condition	Poor - Fair
Approximate Age	10 - 15yrs.
Estimated Useable Life Remaining	5 - 10yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 15 - 20 years.

**Roof Area: Building 1, 2, 3, 4, 5, 6, 7A, 8, 9 - Built-up Roofing**

### Roof System Overview

Substrate	Wood
Insulation	Unknown
Cover board	Unknown
Field Assembly	Hot Asphalt Applied Built-up Roofing
Base Flashing Assembly	Hot Asphalt Applied Built-up Roofing
Surfacing	Mineral Surfaced Cap Sheet
Condition	Fair - Good
Approximate Age	10 - 15yrs.
Estimated Useable Life Remaining	5 - 10yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 15 - 20 years.

**Roof Area: Building 12 - Built-up Roofing**

**Roof System Overview**

Substrate	Wood
Insulation	Unknown
Cover board	Unknown
Field Assembly	Hot Asphalt Applied Built-up Roofing
Base Flashing Assembly	Hot Asphalt Applied Built-up Roofing
Surfacing	Gravel
Condition	Fair - Good
Approximate Age	10 - 15yrs.
Estimated Useable Life Remaining	5 - 10yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 15 - 20 years.

**Roof Area: Building 7B, 14, 17 - Standing Seam Metal Roofing**

**Roof System Overview**

Substrate	Wood
Insulation	Unknown
Cover board	Unknown
Field Assembly	Standing Seam Metal Roofing
Base Flashing Assembly	N/A
Surfacing	N/A
Condition	Good
Approximate Age	0 - 5yrs.
Estimated Useable Life Remaining	25 - 30yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 25 - 30 years.

**Roof Area: Building 7B, 14 - Single-ply Roofing**

**Roof System Overview**

Substrate	Wood
Insulation	Unknown
Cover board	Unknown
Field Assembly	Single-Ply Roofing
Base Flashing Assembly	Single-Ply Roofing
Surfacing	N/A
Condition	Good
Approximate Age	0 - 5yrs.
Estimated Useable Life Remaining	15 - 20yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 15 - 20 years.

**Roof Area: Building 13 - Single-ply Roofing**

**Roof System Overview**

Substrate	Wood
Insulation	Unknown
Cover board	Unknown
Field Assembly	Single-Ply Roofing
Base Flashing Assembly	Single-Ply Roofing
Surfacing	N/A
Condition	Fair - Good
Approximate Age	10 - 15yrs.
Estimated Useable Life Remaining	5 - 10yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 15 - 20 years.

**Roof Area: Building 1, 9 - Clay S Tile**

**Roof System Overview**

Substrate	Wood
Insulation	N/A
Cover board	N/A
Field Assembly	Clay S Tile
Base Flashing Assembly	N/A
Surfacing	N/A
Condition	Good
Approximate Age	10 - 15yrs.
Estimated Useable Life Remaining	15 - 20yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 25 - 30 years.

**Roof Area: Building 10 - Clay Barrel Tile**

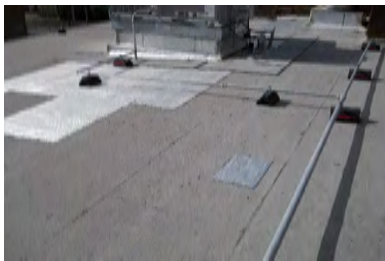
**Roof System Overview**

Substrate	Wood
Insulation	N/A
Cover board	N/A
Field Assembly	Clay Barrel Tile
Base Flashing Assembly	N/A
Surfacing	N/A
Condition	Good
Approximate Age	10 - 15yrs.
Estimated Useable Life Remaining	15 - 20yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 25 - 30 years.

Existing roof system condition assessment and observations are based on the opinion and professional expertise of Western Roofing Service. Roof manufacturer of record and age unknown.



Roof Overview - Building 1



Roof Overview - Building 1



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



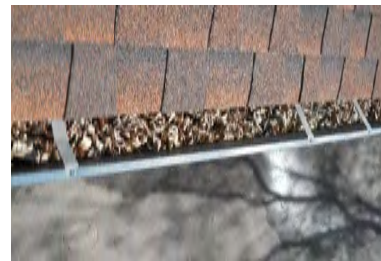
Roof Overview - Building 2 (Buildings 3, 4, and 8 Similar)



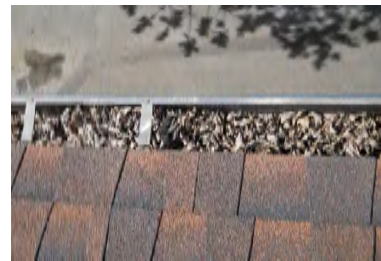
Roof Overview - Building 2 (Buildings 3, 4, and 8 Similar)



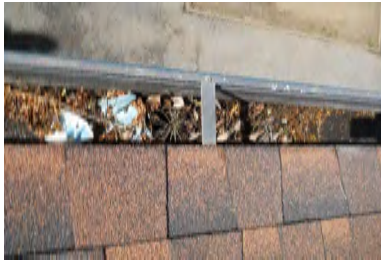
Typical Deficiency - Pipe jacks are missing sealant. Recommend application of flexible flashing self-adhered tape and or sealant, and install storm collar.



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Pipe jacks are missing sealant. Recommend application of flexible flashing self-adhered tape and or sealant, and install storm collar.



Typical Deficiency - Asphalt shingles are damaged and missing. Recommend replacing as needed.



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



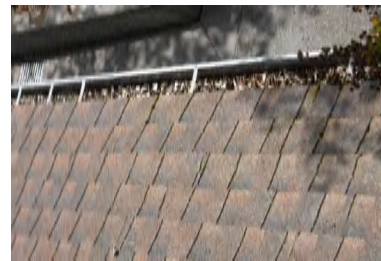
Typical Deficiency - Pipe jacks are missing sealant. Recommend application of flexible flashing self-adhered tape and or sealant, and install storm collar.



Roof Overview - Building 5 (Buildings 6 Similar)



Roof Overview - Building 5 (Buildings 6 Similar)



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.





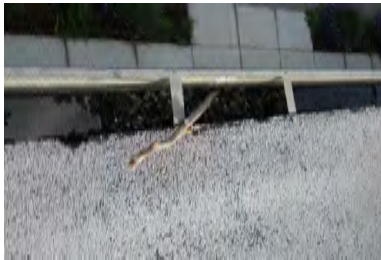
Roof Overview - Building 7A



Roof Overview - Building 7A



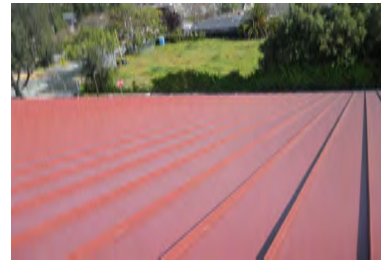
Typical Deficiency - Observed accumulation of debris at field of roof. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Roof Overview - Building 7B



Roof Overview - Building 7B



Roof Overview - Building 9



Typical Deficiency - Roof to wall transition has been improperly detailed. Recommend removing shingles and installing proper counterflashing assembly, roofing and wall finishes by others.



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Roof Overview - Building 10



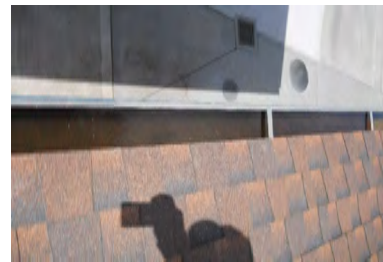
Roof Overview - Building 11



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Asphalt shingles are damaged and missing. Recommend replacing as needed.



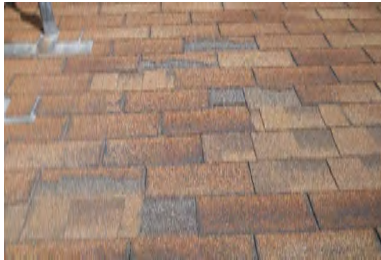
Typical Deficiency - Missing drop outlet and leader pipe. Recommend installation of drop outlet and leader pipe for drainage.



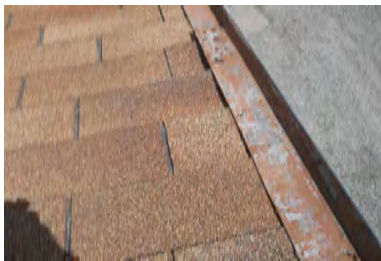
Roof Overview - Building 12



Roof Overview - Building 12



Typical Deficiency - Asphalt shingles are damaged and missing. Recommend replacing as needed.



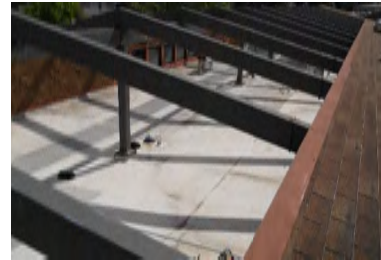
Typical Deficiency - Edge metal has been fastened directly through existing shingle roofing. Recommend metal removal, replacement, and roof repairs as needed.



Typical Deficiency - Pipe jacks are missing sealant. Recommend application of flexible flashing self-adhered tape and or sealant, and install storm collar.



Roof Overview - Building 13



Roof Overview - Building 13



Typical Deficiency - Asphalt shingles are damaged and missing. Recommend replacing as needed.



Typical Deficiency - Observed accumulation of debris at field of roof. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Observed fastener penetrating through finished asphalt shingle roofing. Recommend removal and repair as needed.



Typical Deficiency - Observed fastener penetrating through finished asphalt shingle roofing. Recommend removal and repair as needed.



Roof Overview - Building 14



Roof Overview - Building 17

**Condition Overview Roof Area: Building 2, 3, 4, 5, 6, 8, 11 - Dimensional Asphalt Shingles**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing. Missing hip, ridge, and field shingles throughout. Missing pipe clamps and storm collars.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.  
Replace missing shingles as needed.

Install stainless steel band clamps and storm collars as needed.

**Long Term Recommendations**

None at this time.

**Condition Overview Roof Area: Building 12, 13 - 3 Tab Asphalt Shingles**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing. Missing hip, ridge, and field shingles throughout. Missing pipe clamps and storm collars. Fasteners backing out, through finished roof system.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.  
Replace missing shingles as needed.

Install stainless steel band clamps and storm collars as needed.

Repair and patch shingles at exposed fasteners.

**Long Term Recommendations**

Remove existing 3 tab shingles and re-roof with standard asphalt dimensional shingle.

**Condition Overview Roof Area: Building 1, 2, 3, 4, 5, 6, 7A, 8, 9 - Built-up Roofing**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing. Missing pipe clamps and storm collars.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.  
Install stainless steel band clamps and storm collars as needed.

**Long Term Recommendations**

None at this time.

**Condition Overview Roof Area: Building 12 - Built-up Roofing**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.

**Long Term Recommendations**

None at this time.

**Budget Estimates:**

Annual Roof/Gutter Cleaning and Inspection	\$23,000 - \$25,300
Deficiency Repairs	\$15,500 - \$17,050
Re-Roof	\$203,000 - \$223,300

**Condition Overview Roof Area: Building 7B, 14, 17 - Standing Seam Metal Roofing**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.

**Long Term Recommendations**

None at this time.

**Condition Overview Roof Area: Building 7B, 14 - Single-Ply Roofing**

Existing roof system is performing as designed, but nearing end of usable life. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.

**Long Term Recommendations**

None at this time.

**Condition Overview Roof Area: Building 13 - Single-Ply Roofing**

Existing roof system is performing as designed, but nearing end of usable life. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.

**Long Term Recommendations**

None at this time.

**Condition Overview Roof Area: Building 1, 9 - Clay S Tile**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.

**Long Term Recommendations**

None at this time.

**Condition Overview Roof Area: Building 10 - Clay Barrel Tile**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.

**Long Term Recommendations**

None at this time.

# Mountain View Whisman School District Roof Assessment



**Frank L. Huff ES**  
253 Martens Ave.  
Mountain View, CA 94040

**Prepared By:**  
Western Roofing Service  
15002 Wicks Blvd.  
San Leandro, CA 94577

## Roof Area: Buildings 1, 2, 3, 4, 5, 6 Dimensional Asphalt Shingle Roofing

### Roof System Overview

Substrate	Wood
Insulation	N/A
Cover board	N/A
Field Assembly	Dimensional Asphalt Shingles
Base Flashing Assembly	N/A
Surfacing	N/A
Condition	Good
Approximate Age	10 - 15yrs.
Estimated Useable Life Remaining	15 - 20yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 25 - 30 years.

## Roof Area: Buildings 1, 2, 3, 4, 5, 6 Built-up Roofing

### Roof System Overview

Substrate	Wood
Insulation	Unknown
Cover board	Unknown
Field Assembly	Hot Asphalt Applied Built-up Roofing
Base Flashing Assembly	Hot Asphalt Applied Built-up Roofing
Surfacing	Mineral Surfaced Cap Sheet
Condition	Fair - Good
Approximate Age	10 - 15yrs.
Estimated Useable Life Remaining	5 - 10yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 15 - 20 years.

Existing roof system condition assessment and observations are based on the opinion and professional expertise of Western Roofing Service. Roof manufacturer of record and age is unknown.



Roof Overview - Building 2 (Building 1, 3, 4, 5, 6 Similar)



Roof Overview - Building 2 (Building 1, 3, 4, 5, 6 Similar)



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Observed accumulation of debris at field of roof. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Shingles are missing. Recommend replacing as needed.



Typical Deficiency - Shingles are missing. Recommend replacing as needed.



Typical Deficiency - Sealants at pipe jacks have dried up and pulled away. Recommend removal/ replacement of sealant, and install storm collar.



Typical Deficiency - Pitch pockets have dried up and sealant has pulled away from galvanized sheet metal flashing. Recommend removal and replacement of sealants.



Typical Deficiency - Pitch pockets have dried up and sealant has pulled away from galvanized sheet metal flashing. Recommend removal and replacement of sealants.



Typical Deficiency - Vent pipe is missing diffuser/ rain cap. Recommend installing rain cap and or replacement of vent.



Typical Deficiency - Pipe jacks are missing band clamps and sealant. Recommend installing stainless steel band clamps, apply sealant, and install storm collar.



Typical Deficiency - Shingles are damaged. Recommend replacing as needed.



Typical Deficiency - Mechanical curbs have been improperly flashed. Recommend removal of shingles, install new sheet metal flashings properly tied into existing steep slope asphalt shingles.



**Condition Overview Roof Area: Buildings 1, 2, 3, 4, 5, 6 Dimensional Asphalt Shingle Roofing**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing. Missing hip, ridge, and field shingles throughout. Improperly flashed mechanical curbs.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.

Replace missing shingles as needed.

Re-work improperly flashed mechanical curbs.

**Long Term Recommendations**

None at this time.

**Condition Overview Roof Area: Buildings 1, 2, 3, 4, 5, 6 Built-up Roofing**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing. Sealants at pipe jacks have dried up and pulled away conduit/ pipe. Pitch pockets have dried up and sealant has pulled away from galvanized sheet metal flashing. Vent pipe is missing diffuser/ rain cap. Pipe jacks are missing band clamps and sealant.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.

Removal/ replacement of sealant, and install storm collar as needed.

Top off pitch pockets with modified mastic or compatible sealants as needed, coat with acrylic or silicone coating to preserve repair.

Installing missing rain cap at vent pipes as needed.

**Long Term Recommendations**

None at this time.

Budget Estimates

Annual Roof/Gutter Cleaning and Inspection	\$13,500 - \$14,850
Deficiency Repairs	\$6,500 - \$7,150

# Mountain View Whisman School District Roof Assessment



**Edith Landels ES**  
115 West Dana St.  
Mountain View, CA 94041

**Prepared By:**  
Western Roofing Service  
15002 Wicks Blvd.  
San Leandro, CA 94577

## Roof Area: Buildings 1, 2, 3, 4, 5, 6 Dimensional Asphalt Shingle Roofing

### Roof System Overview

Substrate	Wood
Insulation	N/A
Cover board	N/A
Field Assembly	Dimensional Asphalt Shingles
Base Flashing Assembly	N/A
Surfacing	N/A
Condition	Good
Approximate Age	10 - 15yrs.
Estimated Useable Life Remaining	15 - 20yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 25 - 30 years.

## Roof Area: Buildings 1, 2, 3, 4, 5, 6 Built-up Roofing

### Roof System Overview

Substrate	Wood
Insulation	Unknown
Cover board	Unknown
Field Assembly	Hot Asphalt Applied Built-up Roofing
Base Flashing Assembly	Hot Asphalt Applied Built-up Roofing
Surfacing	Mineral Surfaced Cap Sheet
Condition	Fair - Good
Approximate Age	10 - 15yrs.
Estimated Useable Life Remaining	5 - 10yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 15 - 20 years.

Existing roof system condition assessment and observations are based on the opinion and professional expertise of Western Roofing Service. Roof manufacturer of record and age is unknown.



Roof Overview - Building 1&2



Roof Overview - Building 1&2



Typical Deficiency - Through roof penetrations do not appear to have proper roof jack. Recommend installing proper roof jack and storm collar.



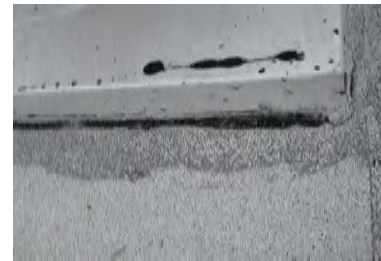
Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Condenser line sets and electrical have not been flashed properly. Recommend installing galvanized pitch pocket with cover.



Typical Deficiency - Debris have accumulated on roofs. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Corner detailing at mechanical curb penetrations show signs of cracking and delamination. Recommend touch up of mastic and application of acrylic or silicone coating to preserve and maintain repair.



Typical Deficiency - LB electrical penetrations have not been flashed properly. Recommend installing galvanized pitch pocket with cover.



Roof Overview - Building 3



Roof Overview - Building 3



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Through roof penetrations do not appear to have proper roof jack. Recommend installing proper roof jack and storm collar.



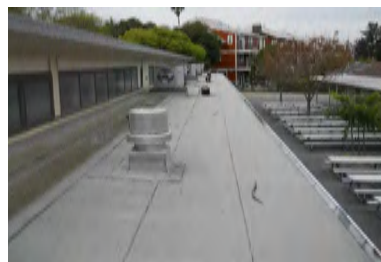
Typical Deficiency - Mineral surfaced cap sheet has blistered. Recommend relief cutting blister, imbed in layer of modified mastic, and apply target sheet of mineral surfaced cap sheet in cold applied adhesive.



Typical Deficiency - Pitch pocket sealants have dried out and pulled away from flashing. Recommend topping off pitch pocket with compatible sealer or modified mastic and application of acrylic or silicone coating to preserve and maintain repair.



Roof Overview - Building 4



Roof Overview - Building 4



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



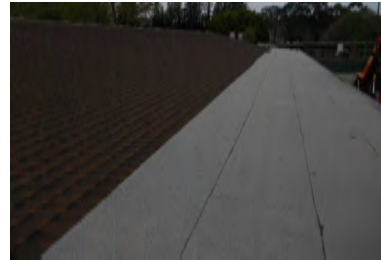
Typical Deficiency - Through roof penetrations do not appear to have proper roof jack. Recommend installing proper roof jack and storm collar.



Roof Overview - Building 5



Roof Overview - Building 5



Roof Overview - Building 5



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Roof Overview - Building 6



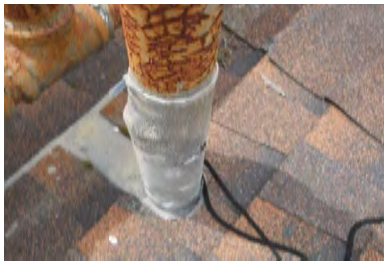
Typical Deficiency - Hip and ridge shingles are missing. Recommend replacing as needed.



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Debris have accumulated on roofs. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Pipe jacks are missing band clamps and sealant. Recommend installing stainless steel band clamps, apply sealant, and install storm collar.

**Condition Overview Roof Area: Buildings 1, 2, 3, 4, 5, 6 Dimensional Asphalt Shingle Roofing**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing. Several through roof pipe penetrations have been improperly flashed. Missing hip and ridge shingles throughout. Missing pipe clamps and storm collars.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.

Replace missing shingles as needed.

Install new pipe flashings with storm collars as needed.

Install stainless steel band clamps and storm collars as needed.

**Long Term Recommendations**

None at this time.

**Condition Overview Roof Area: Buildings 1, 2, 3, 4, 5, 6 Built-up Roofing**

Existing roof system is performing as designed. Observed improperly flashed roof penetrations.

Blistering of mineral surfaced cap sheet. Cracking and delamination of mastics at base flashing curb penetrations.

Cracking and shrinking of pitch pocket sealants at roof penetrations.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.

Install new flashings and roof safes at improperly flashed pipe penetrations.

Repair blisters at mineral surfaced cap sheet as needed.

Top off pitch pockets with modified mastic or compatible sealants as needed, coat with acrylic or silicone coating to preserve repair.

Install stainless steel band clamps and storm collars as needed.

**Long Term Recommendations**

None at this time.

**Budget Estimates**

<b>Annual Roof/Gutter Cleaning and Inspection</b>	\$13,500 - \$14,850
<b>Deficiency Repairs</b>	\$12,000 - \$13,200

# Mountain View Whisman School District Roof Assessment



Gabriela Mistral ES  
505 Escuela Ave.  
Mountain View, CA 94040

**Prepared By:**  
Western Roofing Service  
15002 Wicks Blvd.  
San Leandro, CA 94577

## Roof Area: Building H, J, K, L - Dimensional Asphalt Shingles

### Roof System Overview

Substrate	Wood
Insulation	N/A
Cover board	N/A
Field Assembly	Dimensional Asphalt Shingles
Base Flashing Assembly	N/A
Surfacing	N/A
Condition	Good
Approximate Age	10 - 15yrs.
Estimated Useable Life Remaining	15 - 20yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 25 - 30 years.

## Roof Area: Building H, J, K, L, M, N, P - Built-up Roofing

### Roof System Overview

Substrate	Wood
Insulation	Unknown
Cover board	Unknown
Field Assembly	Hot Asphalt Applied Built-up Roofing
Base Flashing Assembly	Hot Asphalt Applied Built-up Roofing
Surfacing	Mineral Surfaced Cap Sheet
Condition	Fair - Good
Approximate Age	10 - 15yrs.
Estimated Useable Life Remaining	5 - 10yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 15 - 20 years.

## Roof Area: Building N, P - Clay S Tile

### Roof System Overview

Substrate	Wood
Insulation	N/A
Cover board	N/A
Field Assembly	Clay S Tile
Base Flashing Assembly	N/A
Surfacing	N/A
Condition	Good
Approximate Age	10 - 15yrs.
Estimated Useable Life Remaining	15 - 20yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 25 - 30 years.

Existing roof system condition assessment and observations are based on the opinion and professional expertise of Western Roofing Service. Roof manufacturer of record and age unknown.



Roof Overview - Building H



Roof Overview - Building H



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Roof Overview - Building J



Roof Overview - Building J



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Roof Overview - Building K



Roof Overview - Building K





Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Observed debris at field of roofing. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



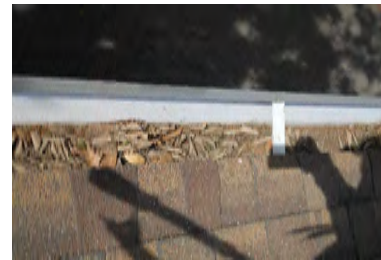
Roof Overview - Building L



Roof Overview - Building L



Typical Deficiency - Through roof penetrations has not been properly flashed. Recommend installing new roof jack and storm collar.



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Roof Overview - Building M



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Observed debris at field of roofing. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Roof Overview - Building N



Roof Overview - Building N



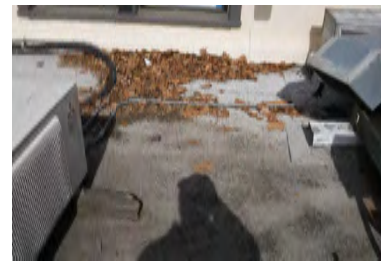
Typical Deficiency - Mineral surfaced cap sheet is damaged from previous sleeper block that has been removed. Recommend repairing as needed.



Typical Deficiency - Through roof penetrations has not been properly flashed. Recommend installing new roof jack and storm collar.



Typical Deficiency - Through roof penetration is open. Recommend resealing and installing storm collar.



Typical Deficiency - Observed debris at field of roofing. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Leader pipe seam is broken. Recommend repairing and or replacement.



Roof Overview - Building P



Roof Overview - Building P



Typical Deficiency - Asphalt shingles are damaged and missing. Recommend replacing.



Typical Deficiency - Through roof penetration has not been properly sealed. Recommend re-sealing and installing storm collar.



Typical Deficiency - Observed debris at field of roofing. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.

**Condition Overview Roof Area: Building H, J, K, L - Dimensional Asphalt Shingles**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing. Several through roof pipe penetrations have been improperly flashed. Missing and damaged mansard shingles. Missing pipe clamps and storm collars.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.

Repair shingles as needed.

Install new pipe flashings with storm collars as needed.

Install stainless steel band clamps and storm collars as needed.

**Long Term Recommendations**

None at this time.

**Condition Overview Roof Area: Building H, J, K, L, M, N, P - Built-up Roofing**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing. Damaged membrane. Open through roof pipe penetrations. Missing pipe clamps and storm collars.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.

Repair damaged membrane as needed.

Install new pipe flashings with storm collars as needed.

Install stainless steel band clamps and storm collars as needed.

**Long Term Recommendations**

Recommend tear off of existing canopy roofing and installation of new BUR roof system.

**Condition Overview Roof Area: Building N, P Clay S Tile**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.

**Long Term Recommendations**

None at this time.

**Budget Estimates:**

<b>Annual Roof/Gutter Cleaning and Inspection</b>	\$15,500 - \$17,050
<b>Deficiency Repairs</b>	\$14,500 - \$15,950

# Mountain View Whisman School District Roof Assessment



**Monta Loma ES**  
460 Thompson Ave.  
Mountain View, CA 94043

**Prepared By:**  
Western Roofing Service  
15002 Wicks Blvd.  
San Leandro, CA 94577

## Roof Area: Buildings A, B, C, D, E, F, G, H, L, M, N, P Standing Seam Metal Roofing

### Roof System Overview

Substrate	Wood
Insulation	N/A
Cover board	N/A
Field Assembly	Standing Seam Metal Roofing
Base Flashing Assembly	N/A
Surfacing	N/A
Condition	Good
Approximate Age	5 - 10yrs.
Estimated Useable Life Remaining	20 - 25yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 25 - 30 years.

## Roof Area: Buildings K Standing Seam Metal Roofing

### Roof System Overview

Substrate	Wood
Insulation	N/A
Cover board	N/A
Field Assembly	Standing Seam Metal Roofing
Base Flashing Assembly	N/A
Surfacing	N/A
Condition	Good
Approximate Age	0 - 5yrs.
Estimated Useable Life Remaining	25 - 30yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 25 - 30 years.

## Roof Area: Buildings A, C, E, F, H Built-up Roofing

### Roof System Overview

Substrate	Wood
Insulation	Unknown
Cover board	Unknown
Field Assembly	Hot Asphalt Applied Built-up Roofing
Base Flashing Assembly	Hot Asphalt Applied Built-up Roofing
Surfacing	Gravel
Condition	Fair - Good
Approximate Age	10 - 15yrs.
Estimated Useable Life Remaining	5 - 10yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 15 - 20 years.

Existing roof system condition assessment and observations are based on the opinion and professional expertise of Western Roofing Service. Roof manufacturer of record and age unknown.



Roof Overview - Building A



Roof Overview - Building C



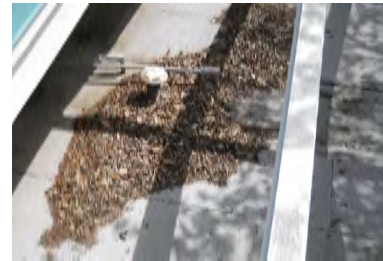
Roof Overview - Building A



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Roof transition is open. Recommend removal of all temporary repairs and installation of as needed permanent repairs.



Typical Deficiency - Debris have accumulated at field of roof. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Lead pipe jacks are missing band clamps and sealant. Recommend installing stainless steel band clamps, apply sealant, and install storm collar.



Roof Overview - Building D



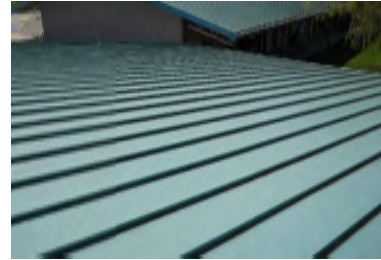
Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



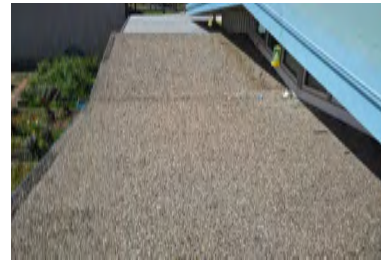
Roof Overview - Building E



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Roof Overview - Building F



Roof Overview - Building F



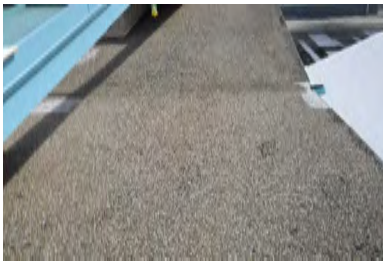
Typical Deficiency - Debris have accumulated at field of roof. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



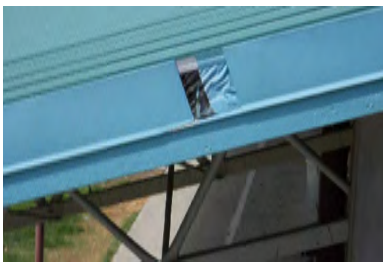
Roof Overview - Building G



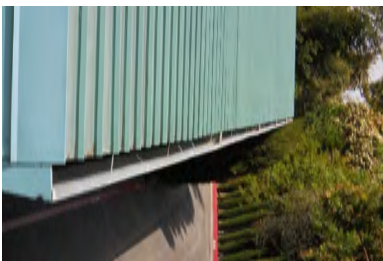
Roof Overview - Building H



Roof Overview - Building H



Typical Deficiency - Metal fascia detail is incomplete. Recommend repairing as necessary to provide a water tight application.



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Roof Overview - Building M



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Roof transition/ cricket has been temporarily sealed. Recommend removal of all temporary repairs and installation of as needed permanent repairs.



Roof Overview - Building N





Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Roof Overview - Building P



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.

**Condition Overview Roof Area: Buildings A, B, C, D, E, F, G, H, L, M, N, P Standing Seam Metal Roofing**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing. Open roof transitions, and incomplete details. Missing pipe clamps and storm collars.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.  
 Repair incomplete details and open roof transitions.  
 Install stainless steel band clamps and storm collars as needed.

**Long Term Recommendations**

None at this time.

**Condition Overview Roof Area: Buildings K Standing Seam Metal Roofing**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.

**Long Term Recommendations**

None at this time.

**Condition Overview Roof Area: Buildings A, C, E, F, H Built-up Roofing**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing. Displaced gravel exposing membrane to UV.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.  
 Re- distribute and adhere gravel with cold adhesive to cover exposed membrane.

**Long Term Recommendations**

None at this time

**Budget Estimates**

Annual Roof/Gutter Cleaning and Inspection	\$15,500 - \$17,050
Deficiency Repairs	\$21,000 - \$23,100

# Mountain View Whisman School District Roof Assessment



Slater/ Google ES  
325 Gladys Ave.  
Mountain View, CA 94043

**Prepared By:**  
Western Roofing Service  
15002 Wicks Blvd.  
San Leandro, CA 94577

## Roof Area: Buildings 1, 2, 3, 4, 5, 6 Dimensional Asphalt Shingle Roofing

### Roof System Overview

Substrate	Wood
Insulation	N/A
Cover board	N/A
Field Assembly	Dimensional Asphalt Shingles
Base Flashing Assembly	N/A
Surfacing	N/A
Condition	Good
Approximate Age	5 - 10yrs.
Estimated Useable Life Remaining	20 - 25yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 25 - 30 years.

## Roof Area: Buildings 1, 2, 3, 4, 5, 6, 7 Built-up Roofing

### Roof System Overview

Substrate	Wood
Insulation	Unknown
Cover board	Unknown
Field Assembly	Hot Asphalt Applied Built-up Roofing
Base Flashing Assembly	Hot Asphalt Applied Built-up Roofing
Surfacing	Mineral Surfaced Cap Sheet
Condition	Fair - Good
Approximate Age	10 - 15yrs.
Estimated Useable Life Remaining	5 - 10yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 15 - 20 years.

Existing roof system condition assessment and observations are based on the opinion and professional expertise of Western Roofing Service. Roof manufacture of record and age is unknown.



Roof Overview - Building 1



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



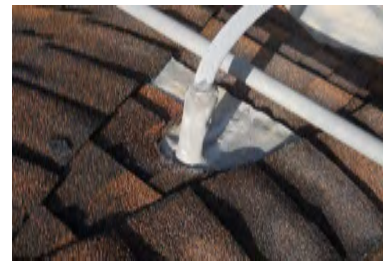
Roof Overview - Building 1



Typical Deficiency - Hip and ridge shingles are missing. Recommend replacing as needed.



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Pipe jacks are missing band clamps and sealant. Recommend installing stainless steel band clamps, apply sealant, and install storm collar.



Roof Overview - Building 2



Roof Overview - Building 3



Roof Overview - Building 3 and 4 Similar



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Pipe jacks are missing band clamps and sealant. Recommend installing stainless steel band clamps, apply sealant, and install storm collar.



Roof Overview - Building 5 and 6 Similar



Roof Overview - Building 5 and 6 Similar



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Roof Overview - Building 7



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Blister between BUR plies. Recommend relieving blister, dry moisture, imbed ply in modified mastic, and apply sacrificial protection membrane in cold adhesive.

**Condition Overview Roof Area: Buildings 1, 2, 3, 4, 5, 6 Dimensional Asphalt Shingle Roofing**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing. Missing hip, ridge, and field shingles throughout. Missing pipe clamps and storm collars.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.

Replace missing shingles as needed.

Install stainless steel band clamps and storm collars as needed.

**Long Term Recommendations**

None at this time.

**Condition Overview Roof Area: Buildings 1, 2, 3, 4, 5, 6, 7 Built-up Roofing**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing. Blistered cap sheet in 1 area. Substantial granule loss at mineral surfaced cap sheet.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.

Repair blistered membrane.

**Long Term Recommendations**

Install coating restoration to BUR mineral surfaced cap sheet.

**Budget Estimates**

Annual Roof/Gutter Cleaning and Inspection	\$13,500 - \$14,850
Deficiency Repairs	\$5,000 - \$5,500
Coating Restoration	\$390,000 - \$429,000

# Mountain View Whisman School District Roof Assessment



**Theuerkauf ES**  
1625 San Luis Ave.  
Mountain View, CA 94043

**Prepared By:**  
Western Roofing Service  
15002 Wicks Blvd.  
San Leandro, CA 94577

## Roof Area: Buildings A, B, C, D, E, G, H Standing Seam Metal Roofing

### Roof System Overview

Substrate	Wood
Insulation	N/A
Cover board	N/A
Field Assembly	Standing Seam Metal Roofing
Base Flashing Assembly	N/A
Surfacing	N/A
Condition	Good
Approximate Age	5 - 10yrs.
Estimated Useable Life Remaining	20 - 25yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 25 - 30 years.

## Roof Area: Buildings A, C, E, F, H Built-up Roofing

### Roof System Overview

Substrate	Wood
Insulation	Unknown
Cover board	Unknown
Field Assembly	Hot Asphalt Applied Built-up Roofing
Base Flashing Assembly	Hot Asphalt Applied Built-up Roofing
Surfacing	Mineral Surfaced Cap Sheet
Condition	Fair - Good
Approximate Age	10 - 15yrs.
Estimated Useable Life Remaining	5 - 10yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 15 - 20 years.

Existing roof system condition assessment and observations are based on the opinion and professional expertise of Western Roofing Service. Roof manufacturer of record and age unknown.



Roof Overview - Building A



Roof Overview - Building A



Typical Deficiency - Pipe jacks are missing sealant. Recommend application of flexible flashing self-adhered tape and or sealant, and install storm collar.



Typical Deficiency - Debris have accumulated at field of roof. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



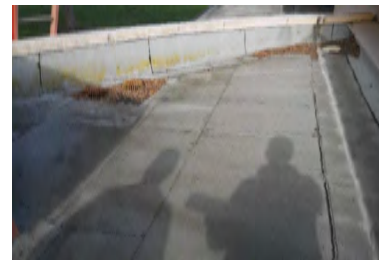
Typical Deficiency - Sealant at coping seams has begun to fail. Recommend removal and replacement of sealant as needed.



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



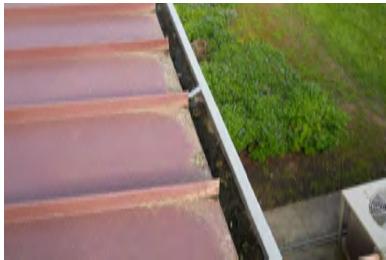
Roof Overview - Building B



Roof Overview - Building B



Typical Deficiency - Pipe jacks are missing sealant. Recommend application of flexible flashing self-adhered tape and or sealant, and install storm collar.



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Debris have accumulated at field of roof. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Detailing at through roof penetrations show signs of cracking and delamination. Recommend touch up of mastic at penetrations and application of acrylic or silicone coating to preserve and maintain repair.



Roof Overview - Building C



Roof Overview - Building C



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Pipe jacks are missing sealant. Recommend application of flexible flashing self-adhered tape and or sealant, and install storm collar.





Roof Overview - Building D



Roof Overview - Building D



Typical Deficiency - Ridge cap has buckled. Recommend removal and reinstallation incorporating an expansion plate for movement.



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



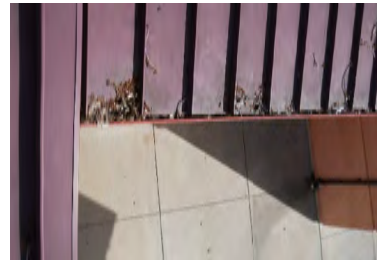
Typical Deficiency - Pipe jacks are missing sealant. Recommend application of flexible flashing self-adhered tape and or sealant, and install storm collar.



Typical Deficiency - Roof transition/ cricket has been temporarily sealed. Recommend removal of all temporary repairs and installation of as needed permanent repairs.



Roof Overview - Building E



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Debris have accumulated at field of roof. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Ridge closure pieces have buckled. Recommend removal and reinstallation as needed.



Typical Deficiency - Debris have accumulated at field of roof. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage. Through wall scuppers should have debris screens. Recommend installation of gutter screens to promote positive drainage.



Typical Deficiency - Mineral surfaced cap sheet has blistered. Recommend relief cutting blister, imbed in layer of modified mastic, and apply target sheet of mineral surfaced cap sheet in cold applied adhesive.



Typical Deficiency - Damaged gutter. Recommend repair as needed.



Roof Overview - Building F



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



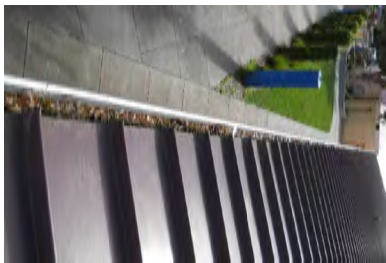
Typical Deficiency - Pipe jacks are missing sealant. Recommend application of flexible flashing self-adhered tape and or sealant, and install storm collar.



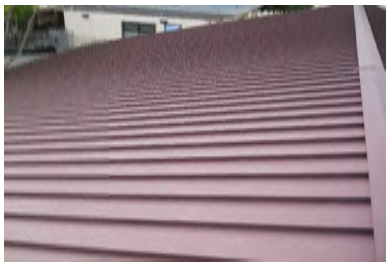
Roof Overview - Building G



Typical Deficiency - Pipe jacks are missing sealant. Recommend application of flexible flashing self-adhered tape and or sealant, and install storm collar.



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



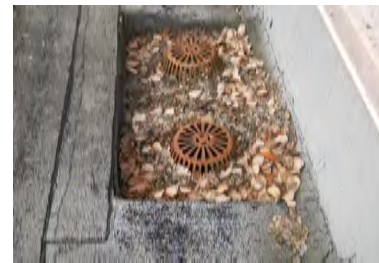
Roof Overview - Building H



Roof Overview - Building H



Typical Deficiency - Pipe jacks are missing sealant. Recommend application of flexible flashing self-adhered tape and or sealant, and install storm collar.



Typical Deficiency - Debris have accumulated at field of roof. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Sealant at coping seams has begun to fail. Recommend removal and replacement of sealant as needed.

**Condition Overview Roof Area: Buildings A, B, C, D, E, G, H Standing Seam Metal Roofing**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing. Missing pipe clamps and storm collars. Open ridge enclosures, damaged gutter, and buckled ridge cap details.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.

Install stainless steel band clamps and storm collars as needed.

Repair metal transitions, ridge cap, and gutter as needed.

**Long Term Recommendations**

None at this time.

**Condition Overview Roof Area: Buildings A, C, E, F, H Built-up Roofing**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing. Missing pipe clamps and storm collars. Blistered membrane. Sealant at coping seams has begun to fail.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.

Install stainless steel band clamps and storm collars as needed.

Repair blistered membrane.

Remove and replace sealants at coping seams.

**Long Term Recommendations**

None at this time

**Budget Estimates**

<b>Annual Roof/Gutter Cleaning and Inspection</b>	\$15,500 - \$17,050
<b>Deficiency Repairs</b>	\$14,000 - \$15,400

# Mountain View Whisman School District Roof Assessment



**Whisman/ International School**  
310 Easy Street  
Mountain View, CA 94043

**Prepared By:**  
Western Roofing Service  
15002 Wicks Blvd.  
San Leandro, CA 94577

## Roof Area: Buildings Administration Office, 9 - Standing Seam Metal Roofing

### Roof System Overview

Substrate	Wood
Insulation	N/A
Cover board	N/A
Field Assembly	Standing Seam Metal Roofing
Base Flashing Assembly	N/A
Surfacing	N/A
Condition	Good
Approximate Age	5 - 10yrs.
Estimated Useable Life Remaining	20 - 25yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 25 - 30 years.

## Roof Area: Buildings 1, 2, 3, 5, 7, 8, Restroom - Built-up Roofing

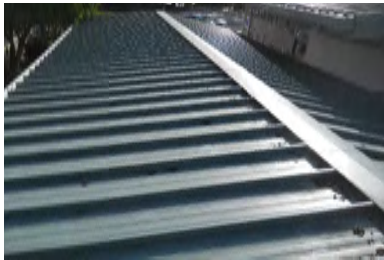
### Roof System Overview

Substrate	Wood
Insulation	Unknown
Cover board	Unknown
Field Assembly	Hot Asphalt Applied Built-up Roofing
Base Flashing Assembly	Hot Asphalt Applied Built-up Roofing
Surfacing	Gravel
Condition	Poor
Approximate Age	15 - 20yrs.
Estimated Useable Life Remaining	0 - 5yrs. +/- (With Annual Maintenance) **Projections are based on industry standard lifespan of 15 - 20 years.

Existing roof system condition assessment and observations are based on the opinion and professional expertise of Western Roofing Service. Roof manufacturer of record and age unknown.



Roof Overview - Building Admin. Office



Roof Overview - Building Admin. Office



Typical Deficiency - Debris have accumulated at field of roof. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Roof Overview - Building 1



Typical Deficiency - Debris have accumulated at field of roof. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Areas of displaced gravel. Recommend re-distributing and adhering gravel over bare areas to protect underlying membrane from exposure to UV .



Roof Overview - Building 2



Typical Deficiency - Areas of displaced gravel. Recommend re-distributing and adhering gravel over bare areas to protect underlying membrane from exposure to UV .



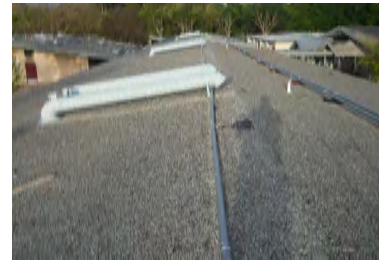
Typical Deficiency - Damaged solar panels. Recommend further investigation and repair by licensed solar contractor.



Typical Deficiency - Detailing at through roof penetrations show signs of cracking and delamination. Recommend touch up of mastic at penetrations and application of acrylic or silicone coating to preserve and maintain repair.



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Roof Overview - Building 3



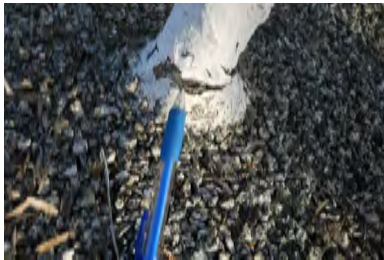
Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Areas of displaced gravel. Recommend re-distributing and adhering gravel over bare areas to protect underlying membrane from exposure to UV .



Typical Deficiency - Unistrut supports have been fastened directly through existing roof system. Recommend removal, repair of roof and refastening support to sleeper, floating block, etc..



Typical Deficiency - Detailing at through roof penetrations show signs of cracking and delamination. Recommend touch up of mastic at penetrations and application of acrylic or silicone coating to preserve and maintain repair.



Roof Overview - Building 5



Roof Overview - Building 5



Typical Deficiency - Debris have accumulated at field of roof. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Pitch pocket sealants have dried out and pulled away from flashing. Recommend topping off pitch pocket with compatible sealer or modified mastic and application of acrylic or silicone coating to preserve and maintain repair.



Typical Deficiency - Detailing at through roof penetrations show signs of cracking and delamination. Recommend touch up of mastic at penetrations and application of acrylic or silicone coating to preserve and maintain repair.



Typical Deficiency - Areas of displaced gravel. Recommend re-distributing and adhering gravel over bare areas to protect underlying membrane from exposure to UV .





Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Leak Reported Below. Recommend further review and assessment.



Roof Overview - Building 7



Typical Deficiency - Detailing at through roof penetrations show signs of cracking and delamination. Recommend touch up of mastic at penetrations and application of acrylic or silicone coating to preserve and maintain repair.



Typical Deficiency - Debris have accumulated at field of roof. Recommend trimming trees back from roof eaves, clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Roof Overview - Building 8



Typical Deficiency - Through roof penetrations do not appear to have proper roof jack. Recommend installing proper roof jack and storm collar.



Typical Deficiency - Detailing at through roof penetrations show signs of cracking and delamination. Recommend touch up of mastic at penetrations and application of acrylic or silicone coating to preserve and maintain repair.



Typical Deficiency - Detailing at through roof penetrations show signs of cracking and delamination. Recommend touch up of sealants..



Typical Deficiency - Areas of displaced gravel. Recommend re-distributing and adhering gravel over bare areas to protect underlying membrane from exposure to UV .



Typical Deficiency - Corner of gutter is damaged. Recommend repair and seal as needed.



Roof Overview - Building 9



Roof Overview - Building Restrooms



Typical Deficiency - Gutters are full of debris. Recommend clearing debris from all gutters, drains, waterways, and field of roof to promote positive drainage.



Typical Deficiency - Areas of displaced gravel. Recommend re-distributing and adhering gravel over bare areas to protect underlying membrane from exposure to UV .



Typical Deficiency - Detailing at through roof penetrations show signs of cracking and delamination. Recommend touch up of mastic at penetrations and application of acrylic or silicone coating to preserve and maintain repair.

**Condition Overview Roof Area: Buildings Administration Office, 9 - Standing Seam Metal Roofing**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing. Open roof transitions, and incomplete details. Sealants have begun to dry out. Gutter damage.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.

Remove and replace damaged sealants.

Repair gutter as needed.

**Long Term Recommendations**

None at this time.

**Condition Overview Roof Area: Buildings 1, 2, 3, 5, 7, 8, Restroom - Built-up Roofing**

Existing roof system is performing as designed. Observed accumulation of debris at waterways, gutters, drain assemblies, and field of roofing. Displaced gravel exposing membrane to UV. Damaged solar panels. Mastics around pipes and pitch pockets have begun to dry up. Incorrectly mounted roof top conduits. Incorrect roof jacks.

**Immediate Recommendations:**

Remove all debris from field of roof, drain assemblies, gutters, and waterways.

Re- distribute and adhere gravel with cold adhesive to cover exposed membrane.

Touch up mastics at penetrations and pitch pockets.

Remove and replace incorrect roof jacks.

Remove incorrectly roof mounted conduits and remount correctly, repair roofing as needed.

**Long Term Recommendations**

Tear-off and install new BUR roofing at all gravel roof areas.

**Budget Estimates**

Annual Roof/Gutter Cleaning and Inspection	\$13,500 - \$14,850
Deficiency Repairs	\$20,500 - \$22,550
BUR Re-roof	\$1,180,000 - \$1,298,000





Mountain View  
Whisman  
School District

FUNDING OVERVIEW  
**APPENDIX E**



MVWSD MASTER FACILITIES PLAN

November 2019



October 22, 2019

# Mountain View Whisman School District

Overview of Funding Options & Potential 2020 Bond Measure



Mountain View  
Whisman  
School District

# Table of Contents

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## **Section**

- I. General Obligation Bonds
- II. School Facilities Improvement District Bonds
- III. Mello-Roos Bonds
- IV. Certificates of Participation





# Section I

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General Obligation Bonds

# General Obligation Bonds Overview

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A general obligation bond is a common method of debt financing used by California school districts to generate capital project funds

- ◆ Lowest borrowing cost of any debt financing technique available to school districts
- ◆ Repayment (principal and interest) is made from taxes levied on assessed value of properties within school district boundaries
- ◆ Repayment of bonds does not encroach on district general fund
- ◆ Requires approval of district's registered voters
  - Bond authorization amount
  - Project list
  - Estimated tax rate



# Types of General Obligation Bond Elections

## Proposition 46

## Proposition 39

	Proposition 46	Proposition 39
Voter Approval Threshold	◆ Two-thirds	◆ 55%
Annual Tax Rate Limits per \$100,000 of AV	◆ None	<ul style="list-style-type: none"> <li>◆ \$60 for unified school districts</li> <li>◆ <b>\$30 for elementary and high school districts</b></li> <li>◆ \$25 for community college districts</li> </ul>
Board Approval Threshold	◆ Simple majority of members present	◆ Two-thirds of total members
Election Dates	◆ Any Tuesday	<ul style="list-style-type: none"> <li>◆ Statewide primary, general, special, or regularly scheduled local elections</li> <li>◆ In 2020: March 3 &amp; November 3</li> </ul>
Use of Bond Proceeds	<ul style="list-style-type: none"> <li>◆ Acquisition or improvement of real property only</li> <li>◆ No furnishings or equipment</li> </ul>	<ul style="list-style-type: none"> <li>◆ Construction, reconstruction, rehabilitation or replacement of school facilities</li> <li>◆ Furnishings and equipment</li> <li>◆ Acquisition or lease of real property</li> </ul>
Accountability Measures	◆ None	<ul style="list-style-type: none"> <li>◆ Citizens' Oversight Committee</li> <li>◆ Annual audits</li> </ul>



# Comparison of Parcel Tax & Bond Measures

	Parcel Tax	Proposition 39 Bond
Voter Approval Threshold	◆ Two-thirds	◆ 55%
Primary Use of Proceeds	◆ <b>Operational:</b> any use, including programs, personnel and operations	◆ <b>Capital:</b> facilities and equipment (including technology)
Receipt of Proceeds	◆ Funding received each year as taxpayers pay property taxes	◆ Funding received upfront via debt issuance and taxpayers repay principal and interest via property taxes
Tax Parameters	<ul style="list-style-type: none"> <li>◆ Cannot be based on the value of property (typically a flat rate per parcel)</li> <li>◆ No cap on tax other than political limitations</li> </ul>	<ul style="list-style-type: none"> <li>◆ Based on AV of property</li> <li>◆ \$30 per \$100,000 of AV for elementary and high school districts school districts</li> </ul>
Election Dates	◆ May be on a special election ballot	◆ Regularly scheduled ballot
Accountability Measures	◆ Optional Citizens' Oversight Committee	◆ Mandatory Citizens' Oversight Committee
Senior Exemptions	◆ Allowed	◆ Not allowed



# Bond Program Considerations

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General obligation bond programs are generally structured based on:

- ◆ **Funding needs**
  - District projects
    - Scope
    - Cost
    - Timing
- ◆ **Financing constraints**
  - District assessed value
  - Interest rates
  - Tax rates
  - Legal parameters
    - State law
    - Federal law

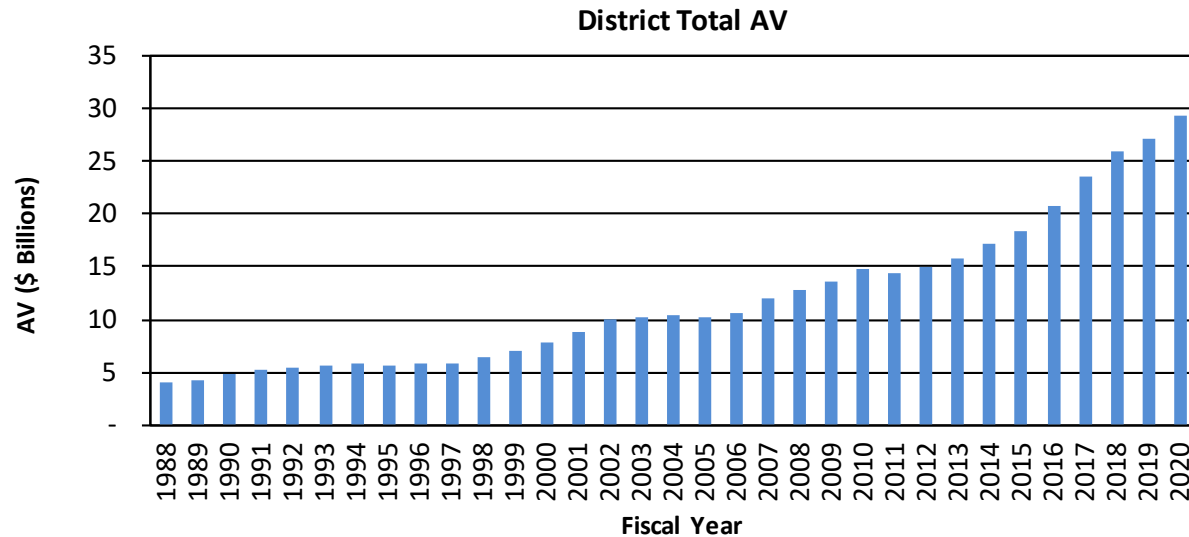
School districts commonly seek multiple GO bond authorizations to meet their ongoing project needs



# Assessed Value (“AV”) History

Mountain View Whisman SD grew 8.36% in 2019-20

- ◆ The former Mountain View SD represents 62.4% of the total AV
- ◆ The former Whisman SD represents 37.6% of the total AV



FY	Total AV <sup>(1)</sup>	Annual % Change
1988	\$ 4,016,359,523	
1989	4,254,855,681	5.94 %
1990	4,800,206,033	12.82
1991	5,223,278,540	8.81
1992	5,344,021,546	2.31
1993	5,606,013,593	4.90
1994	5,728,071,074	2.18
1995	5,653,430,504	-1.30
1996	5,778,951,712	2.22
1997	5,900,637,935	2.11
1998	6,416,959,960	8.75
1999	7,088,425,781	10.46
2000	7,834,967,334	10.53
2001	8,746,920,698	11.64
2002	9,970,705,164	13.99
2003	10,280,852,219	3.11
2004	10,414,457,142	1.30
2005	10,132,992,586	-2.70
2006	10,654,863,150	5.15
2007	11,900,729,296	11.69
2008	12,767,567,548	7.28
2009	13,650,618,335	6.92
2010	14,785,613,473	8.31
2011	14,397,541,410	-2.62
2012	14,881,752,063	3.36
2013	15,855,098,426	6.54
2014	17,155,503,989	8.20
2015	18,351,287,766	6.97
2016	20,657,107,181	12.56
2017	23,516,716,879	13.84
2018	25,996,182,874	10.54
2019	27,104,016,031	4.26
2020	29,368,739,836	8.36

Growth Statistics			
Annualized Growth Rates:		Lowest Rolling Averages:	
1-year:	8.36 %	3-year:	0.54 %
5-year:	9.86	5-year:	2.00
10-year:	7.10	10-year:	4.09
15-year:	7.35	15-year:	4.87
20-year:	6.83	20-year:	5.20
25-year:	6.81	25-year:	5.51
30-year:	6.22	30-year:	6.37

(1) Source: California Municipal Statistics, Inc. and Santa Clara County.



# IRS Spend-Down Requirements

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## 3-year expenditure rule:

- ◆ 5% of bond proceeds and earnings **committed** within 6 months
- ◆ 85% of bond proceeds and earnings **spent** within 3 years

## 5-year expenditure rule:

- ◆ 10% of bond proceeds and earnings **spent** within 1 year
- ◆ 30% of bond proceeds and earnings **spent** within 2 years
- ◆ 60% of bond proceeds and earnings **spent** within 3 years
- ◆ 85% of bond proceeds and earnings **spent** within 5 years
- ◆ *Note: requires that an architect or engineer show that the actual construction/acquisition of the project takes up to 5 years*



# March 2020 Election Scenario

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**Summary:** A new tax for \$30 per \$100,000 of AV (Proposition 39 maximum tax rate) would generate \$259 million in proceeds

◆ **Assumptions:**

- Interest rates: 5.00% - 6.00%
- AV growth rates:
  - 2020-21 3.00%
  - 2021-22: 4.00%
  - Annually thereafter: 4.85%
- Current interest bonds only; no capital appreciation bonds

◆ **Note: Changing any of the assumptions will impact the total proceeds**

- Higher AV growth, lower interest rates, or more issuances will increase the proceeds
- Lower AV growth, higher interest rates, fewer issuances, or a lower tax rate will decrease the proceeds

**Illustrative Issuance Schedule <sup>(1)</sup>**

<b>Issue</b>	<b>Issue Date</b>	<b>Proceeds</b>	<b>Net Repayment Ratio</b>
Series A	August 2020	\$ 64,750,000	1.92 to 1
Series B	August 2022	64,750,000	1.99 to 1
Series C	August 2024	64,750,000	2.12 to 1
Series D	August 2026	64,750,000	2.29 to 1
Total		\$ 259,000,000	2.08 to 1

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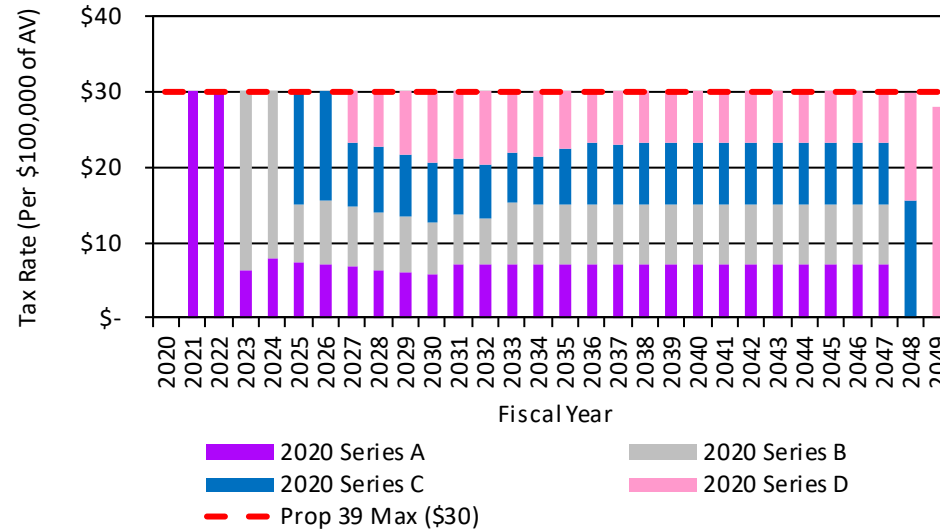
(1) Issuance schedule for illustrative purposes only. Actual amounts and dates will be tailored to the District's project needs.



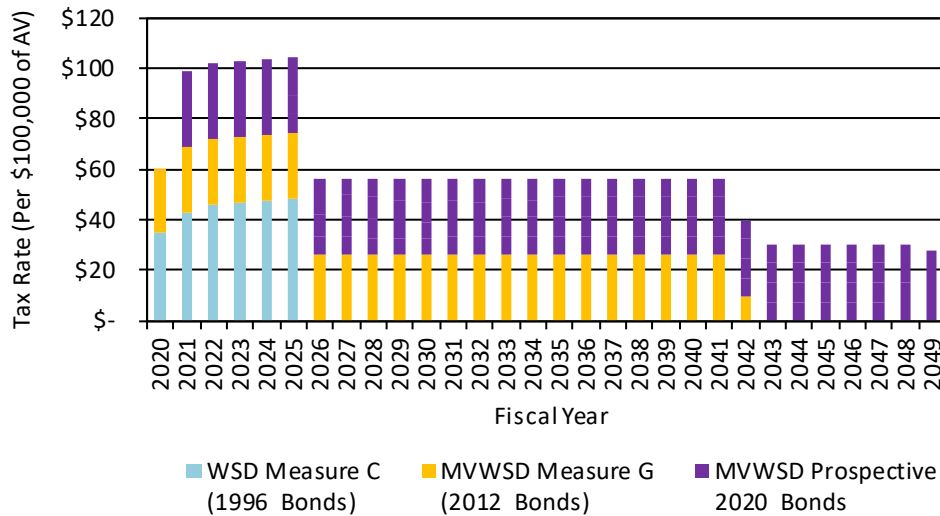


# Projected Tax Rates (1)

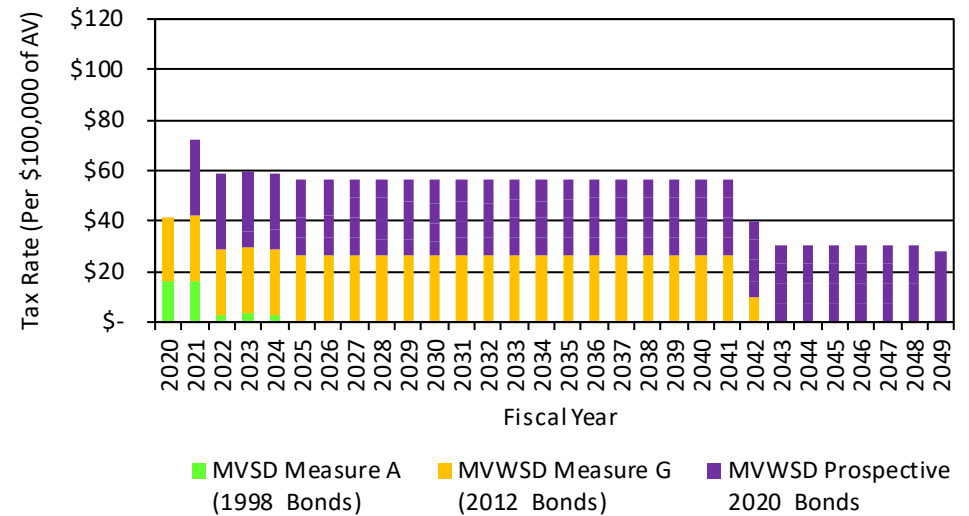
**Projected Tax Rates - Prospective 2020 Election Bonds**



**Projected Tax Rates - Whisman SD Portion**



**Projected Tax Rates - Mountain View SD Portion**



(1) Assumes assumptions shown on previous page.



# Assembly Bill 195 (2018)

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AB 195 requires any tax measure (e.g. bonds) to disclose the following information in the 75-word ballot statement:

- ◆ Tax rate
- ◆ Amount of money to be raised annually
- ◆ Duration of the tax

Following is a sample of an AB 195-compliant 75-word ballot statement:

- ◆ “To replace leaking roofs, plumbing/electrical systems, repair/replace classrooms for math, science, reading, writing/technology instruction, upgrade outdated safety systems to meet current safety codes, qualify for State matching funds, and acquire equipment/construct facilities, shall this Portola Valley School District measure authorizing \$49,500,000 in bonds at legal rates, **levying \$3.4 million annually at \$30/\$100,000 assessed value while bonds are outstanding**, be adopted with oversight, all funds benefiting Portola Valley schools, and not taken by the State?”

## Considerations

- ◆ ~15 of the 75 words are used to disclose tax information instead of additional projects
- ◆ This may negatively impact support for a new measure



# Illustrative March 3, 2020 Election Timeline

Activity	Minimum Timing
Develop or update District facility master plan to identify and prioritize potential bond projects	Currently – Aug 2019
Bond team meeting with District personnel, financial advisor, bond counsel, pollster, and strategist	Currently – Aug 2019
Determine all available sources of capital improvement funds, including State funds, capital fund reserves, donations, developer fees, and bond proceeds	Currently – Aug 2019
Begin community outreach to educate voters on District’s facility needs	Currently & Ongoing
Identify issues within the community that could impact the bond election	Aug 2019
Conduct voter opinion survey (if required)	Aug 2019
Adjust community messages based on voter opinion survey	Sep 2019 – Nov 2019
Identify community leaders to serve on campaign committee	Nov 2019
Finalize bond projects list, election amount, estimated tax rates, and draft ballot language	Nov 2019
Adopt resolution, including tax rate statement, calling for bond election ( <b><i>must be received by County Registrar of Voters by December 6, 2019</i></b> )	Nov 2019
Prepare impartial analysis (bond counsel, county counsel) and pro-ballot argument (committee, campaign consultant) for voter pamphlet	Dec 2019
Fund raising by bond committee	Dec 2019 – Feb 2020
Conduct active “Yes on” campaign	Dec 2019 – Feb 2020
Election	Mar 3, 2020
Certify election results	April 2020
Issuance of bonds	May 2020



## Section II

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School Facilities Improvement District Bonds

# School Facilities Improvement District Bonds Overview

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Bonds for School Facilities Improvement Districts (“SFIDs”) are general obligation bonds for only a portion of a school district’s boundaries

- ◆ The size of the bond would depend upon the AV of the SFID compared to the AV of the district as a whole
  - For example, if a school district’s AV supported a \$100 million bond, an SFID that represented 50% of the territory of the school district would therefore support a ~\$50 million bond
- ◆ The County Board of Supervisors and Board of Trustees must approve resolutions to form the SFID(s)

SFIDs are a good option for districts that wish to only tax a portion of the district

- ◆ For example, if a district needed to renovate schools that only benefited one portion of the district, an SFID might be considered
- ◆ The following districts have put bond measures on the ballot for SFIDs since 2014:
  - Saugus Union SD
  - Upper Lake USD
  - Centinela Valley UHSD
  - Santa Barbara USD
  - Hughson USD
  - Western Placer USD
  - Mountain View SD
  - Mojave USD
  - Tracy USD

After the formation of the SFID, the general timeline for voter approval and issuance of SFID bonds is the same as the timeline for general obligation bonds



## Section III

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Mello-Roos Bonds

# Mello-Roos Bonds Overview

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Mello-Roos bonds are a type of land secured financing that leverages the value of land in a portion of the school district

- ◆ Most commonly-used method of financing infrastructure for new development on the local government level in California
- ◆ Special taxes are collected using a special tax formula
  - Bonds may or may not be issued against the special tax revenue stream
    - If Bonds are issued, special tax revenues will be used to pay debt service on bonds annually
    - Bonds are generally issued on a tax-exempt basis
- ◆ To form, the school district sponsors the creation of a Community Facilities District (“CFD”)
  - CFD legal authority is the Mello-Roos Community Facilities Act of 1982 (hence “Mello-Roos” bonds)
  - Requires approval of 2/3rds of CFD’s registered voters
    - Property owners agree/vote to put lien on property
    - If less than 12 registered voters in CFD, vote is by landowner, weighted by acreage, otherwise vote is by registered voters in CFD
  - The timeline from start to finish for bond issuance is dependent on the developer and development status
- ◆ Repayment of bonds does not impact public agency general fund



# Benefits of Mello-Roos Special Taxes

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## Developer perspective:

- ◆ Access lower cost of financing with tax-exempt interest rates
  - Without a CFD, developer must pay fees at the time a building permit is obtained and carry financing cost of fees until home is sold
  - With a CFD, fees reimbursed through the issuance of bonds
- ◆ Non-recourse, off-balance sheet financing
  - Cost of developer fees passed to homeowner over time through the special tax levy rather than in the selling price of the home
- ◆ Provide funds/projects to public agency sooner so schools open when new homes are completed

## Public agency perspective:

- ◆ Assist in financing public facilities
  - Allows for earlier construction of school facilities compared to funding from developer fees
    - Developer fees typically paid at building permit
    - Approximately 6 months from building permit to completed home
- ◆ Repayment burden is on property owners, not public agency
- ◆ Generate new revenue source for projects





# What Can Land Secured Bonds Finance?

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- ◆ The revenue stream from the Mello-Roos special taxes may fund facilities or services
  - If bonds are issued against the revenue stream, then the bonds can be issued to fund capital projects only
- ◆ Facilities financed must be owned and operated by a public agency
  - Owned/controlled by public agency and/or
  - Owned, operated and maintained by other public entities
    - Joint Community Facilities Agreements with other public entities
- ◆ Public improvements must have a useful life longer than five years
- ◆ May or may not be physically located in CFD



# Special Tax Formula

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The special tax formula governs the special taxes levied in a CFD

- ◆ Special taxes may be levied for both infrastructure and services
- ◆ Special taxes may be levied on developed and undeveloped property
- ◆ Special taxes can not be based on the value of a home
- ◆ Rate and Method of Apportionment (“RMA”) is flexible
  - Rates may be based on size of residential property (lot or home) and acreage if commercial/industrial;
  - Priority of levy may be given to developed property over undeveloped property
- ◆ Special tax rate is set at a manageable level for future homeowners (typically below 2% effective tax rate)

A special tax consultant is typically hired to do the special tax calculations based on the proposed development



# CFD Formation Overview

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In general, CFD formation and bond issuance process are as follows:

- ◆ Public agency/property owner initiates petition
- ◆ Public agency goals & policies are adopted
- ◆ Public agency board commences CFD proceedings
- ◆ Public hearing
- ◆ Election
- ◆ Final actions taken by board
- ◆ Bonds issued
- ◆ Project costs funded/reimbursed
- ◆ Annual special taxes levied



## Section IV

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Certificates of Participation

# Certificates of Participation Overview

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Certificates of participation (“COPs”) are a common method of financing used by California school districts to construct/acquire real or personal property

- ◆ Repaid from any legally available source of funds (typically General Fund for most districts)
- ◆ Funds can be used for capital projects of the District; cannot be used for operations
- ◆ Borrowing costs are tax-exempt (assuming qualified tax-exempt use of proceeds)
- ◆ Can be structured with early prepayment options (any legally available source of funds)
- ◆ Financing term must be commensurate with the useful life of the project

No voter approval required

- ◆ District must provide written notification of financing to the County Office of Education and Auditor-Controller’s Office
  - Estimated financing repayment schedule
  - Projected sources of funds for COP repayment
- ◆ The timeline for issuance is 3-4 months from start to finish

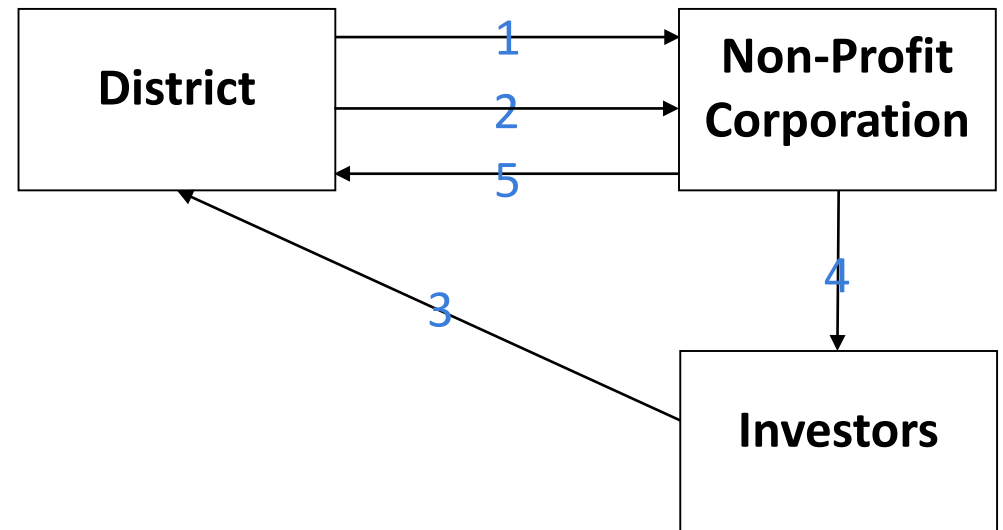
***District must carefully assess their ability to repay COPs to avoid overburdening the sources of funding***



# COP Diagram

Under California law, school districts cannot enter into non-voter approved debt for longer than one year. COPs are structured as a lease/leaseback (not the same as the lease/leaseback project delivery method), allowing districts to incur debt for a longer period of time. This is a common practice that California school districts have employed for decades.

1. District assigns rights of an essential District site (e.g. school site) to a non-profit organization (e.g. CSBA, District-formed, or other organization)
2. District maintains useful possession of site and as such, makes lease payments to the non-profit for useful possession
3. Investors provide capital improvement funds to District by purchasing COPs from the District
4. Non-profit organization assigns lease payments to Investors (repayment of COPs)
5. Rights of the essential site return to the District once COPs are completely repaid





Mountain View  
Whisman  
School District

PROJECT COST ESTIMATES  
TBD Consultants

# APPENDIX F

MVWSD MASTER FACILITIES PLAN  
November 2019





# Mountain View Whisham School District

## Student Facilities Improvement Plan Update

Mountain View, California

### Masterplan Budget Plan

#### Report Prepared for:

Artik Art & Architecture

September 30, 2019

more value, less risk

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Mountain View Whisham School District  
Student Facilities Improvement Plan Update  
Mountain View, California



Masterplan Budget Plan  
September 30, 2019

#### BASIS OF ESTIMATE

##### REFERENCE DOCUMENTATION

This Construction Cost Estimate was produced from the following documentation. Design and engineering changes occurring subsequent to the issue of these documents have not been incorporated in this estimate.

##### Document

- SFIP Update-2019\_PROJECTS\_16 Sep 19\_v2

##### BASIS FOR PRICING

This estimate reflects the fair construction value for this project and should not be construed as a prediction of low bid. Prices are based on local prevailing wage construction costs at the time the estimate was prepared. Pricing assumes a procurement process with competitive bidding for all sub-trades of the construction work, which is to mean a minimum of 3 bids for all subcontractors and materials/equipment suppliers. If fewer bids are solicited or received, prices can be expected to be higher.

Subcontractor's markups have been included in each line item unit price. Markups cover the cost of field overhead, home office overhead and subcontractor's profit. Subcontractor's markups typically range from 15% to 25% of the unit price depending on market conditions.

General Contractor's/Construction Manager's Site Requirement costs are calculated on a percentage basis. General Contractor's/Construction Manager's Jobsite Management costs are also calculated on a percentage basis.

Site Requirements	5.0%
Jobsite Management	10.0%
Phasing	0.0%

General Contractor's/Construction Manager's overhead and fees are based on a percentage of the total direct costs plus general conditions, and covers the contractor's bond, insurance, site office overheads and profit.

Insurance & Bonding	2.5%
General Contractor Bonding	
Sub-Contractor Bonding	
OSIP	

Fee (G.C. Profit)	5.0%
-------------------	------

Unless identified otherwise, the cost of such items as overtime, shift premiums and construction phasing are not included in the line item unit price.

This cost estimate is based on standard industry practice, professional experience and knowledge of the local construction market costs. TBD Consultants have no control over the material and labor costs, contractors methods of establishing prices or the market and bidding conditions at the time of bid. Therefore TBD Consultants do not guarantee that the bids received will not vary from this cost estimate.

##### CONTINGENCY

Design Contingency	15.0%
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The Design Contingency is carried to cover scope that lacks definition and scope that is *anticipated* to be added to the Design. As the Design becomes more complete the Design Contingency will reduce.

Construction Contingency	10.0%
--------------------------	-------

The Construction Contingency is carried to cover the unforeseen during construction execution and Risks that do not currently have mitigation plans. As Risks are mitigated, Construction Contingency can be reduce, but should not be eliminated.

Soft Costs	30.0%
------------	-------

An owners contingency has not been included in this construction cost estimate, but it is advised that the owner carry additional contingency to cover scope change, bidding conditions, claims and delays.



**BASIS OF ESTIMATE**

**ESCALATION**

Escalation is included to October 2024 at the following per annum escalation rates:

<b>Escalation:</b>	33.82%
Year 0 - 1	6.00%
Year 1 - 2	6.00%
Year 2 - 3	6.00%
Year 3 - 4	6.00%
Year 4 - 5	6.00%
Beyond 5 Years	6.00%

This calculation does not account for adverse bidding conditions and a separate Bid Contingency should be carried if there are limited qualified bidders or if a market research study indicates.

**EXCLUSIONS**

- Land acquisition, feasibility studies, financing costs and all other owner costs
- All professional fees and insurance
- Site surveys, existing condition reports and soils investigation costs
- Items identified in the design as Not In Contract (NIC)
- Hazardous materials investigations and abatement
- Utility company back charges, including work required off-site and utilities rates
- Work to City streets and sidewalks
- Items defined as Vendor / Owner supplied and Vendor / Owner installed
- Permits
- Owners contingency
- Overtime, 2nd shift and lost productivity premiums
- Design Fees
- PG & E Fees
- Sustainability Fees (LEED)
- Furniture, fixtures and equipment (FF&E)



**KEY CRITERIA**

**AREA TABULATION**

AREAS	
Bubb Elementary School	36,955 SF
Huff Elementary School	35,677 SF
Landels Elementary School	35,232 SF
Mistral Elementary School	29,116 SF
Castro Elementary School	35,804 SF
Monta Loma Elementary School	40,379 SF
Stevenson Elementary School	32,079 SF
Theuerkauf Elementary School	37,969 SF
Vargas Elementary School	25,488 SF
Crittenden Elementary School	106,781 SF
Graham Elementary School	84,173 SF
Latham Elementary School	5,760 SF
<b>TOTAL AREA</b>	<b>505,413 SF</b>



EXECUTIVE SUMMARY

	GSF	\$/SF	TOTAL	COMMENTS
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PROJECT COSTS INCLUDING MARKUPS & SOFT COSTS

BUBB ELEMENTARY SCHOOL	36,955 GSF	\$767.41	28,359,647	
HUFF ELEMENTARY SCHOOL	35,677 GSF	\$630.50	22,494,254	
LANDELS ELEMENTARY SCHOOL	35,232 GSF	\$822.42	28,975,420	
MISTRAL ELEMENTARY SCHOOL	29,116 GSF	\$788.20	22,949,282	
CASTRO ELEMENTARY SCHOOL	35,804 GSF	\$260.92	9,341,841	
MONTA LOMA ELEMENTARY SCHOOL	40,379 GSF	\$744.70	30,070,362	
STEVENSON ELEMENTARY SCHOOL	32,079 GSF	\$271.80	8,719,231	
THEUERKAUF ELEMENTARY SCHOOL	37,969 GSF	\$1,026.75	38,984,532	
VARGAS ELEMENTARY SCHOOL	25,488 GSF	\$141.25	3,600,265	
CRITTENDEN ELEMENTARY SCHOOL	106,781 GSF	\$616.45	65,824,902	
GRAHAM ELEMENTARY SCHOOL	84,173 GSF	\$607.23	51,112,751	
LATHAM ELEMENTARY SCHOOL	5,760 GSF	\$293.93	1,693,022	

<b>TOTAL CONSTRUCTION COST</b>	<b>505,413 GSF</b>	<b>\$617.57</b>	<b>312,125,509</b>	
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Mountain View Whisham School District  
 Student Facilities Improvement Plan Update  
 Mountain View, California

ibd consultants

Masterplan Budget Plan  
 September 30, 2019

MAJOR CONSTRUCTION COST SUMMARY

PROJECT	TOTAL	BUBB	HUFF	LANDELS	MISTRAL	CASTRO	MONTA LOMA	STEVENSON	THEUERKAUF	VARGAS	CRITTENDEN	GRAHAM	LATHAM
1 REPLACE HVAC	8,078,904	719,300	683,616	692,616	789,592		980,256	\$1,600	973,450		2,090,192	1,274,616	93,000
1 FENCES AND GATES - ORNAMENTAL	698,426	98,000		76,000	100,000				138,000		142,500	340,800	
1 FENCES AND GATES - CHAIN LINK	346,000	108,250		90,750			57,000						
1 FENCING/ROOF/PAVING	3,003,800			1,200,400					1,803,400				
1 COLLABORATIVE INSTRUCTIONAL SPACES	4,488,222	2,348,520		2,118,912									
1 SHADE STRUCTURE	4,029,500		562,500		562,500		562,500		562,500				102,000
1 USHTING	236,250												
1 PLAYGROUND K	413,750				133,700								
1 NEW ASPHALT OVERLAY	229,600				229,600								
1 ADMIN/EXTENDED CARE EXPANSION	4,081,000					1,485,000		827,000				484,000	
1 WOODRIZE LOW RISE BLDG	1,022,000				1,122,000								
1 STORAGE	715,000					357,500					1,518,615		
1 COLLABORATIVE SPACES AT LIBRARY	1,518,615										2,818,000		
1 UTILITY SURVEY	2,818,000												
1 PLUMBING REPAIRS	1,075,000							1,075,000					
1 OUTDOOR LANDSCAPED AREAS	2,511,490									2,197,750			313,740
1 LANDSCAPE - COURTYARDS	2,526,213											1,803,076	723,137
1 UTILITY SURVEY	48,000												48,000
1 PLUMBING REPAIRS	1,200,000												1,200,000
1 LOCKER ROOM MODERNIZATION/REPLACEMENT	2,346,500												2,346,500
1 NEW P.E. CLASSROOM	600,000												600,000
1 FRONTAGE IMPROVEMENT	2,691,800												2,691,800
1 TERRACE RENOVATE	85,000												85,000
1 MULTIMEDIA CENTER/REPLACEMENT	3,304,000												3,304,000
1 SECURITY SYSTEM UPGRADE - PA	18,000												18,000
1 DRINKING FOUNTAINS	30,000												30,000
1 CLASSROOM MODERNIZATION	1,798,000												1,798,000
1 BETA ACCESSIBILITY	51,000												51,000
1 PLAY CLUSTER	77,000												77,000
<b>SUBTOTAL PROJECT 1</b>	<b>58,271,849</b>	<b>4,088,620</b>	<b>1,346,116</b>	<b>6,882,778</b>	<b>2,672,093</b>	<b>1,869,500</b>	<b>3,773,871</b>	<b>2,801,750</b>	<b>4,009,674</b>	<b>841,500</b>	<b>11,298,117</b>	<b>5,716,091</b>	<b>647,200</b>
2 USHTING	542,600		271,000	269,600									
2 NEW ASPHALT OVERLAY	848,250	348,250	397,000										
2 UTILITY SURVEY	348,700	48,000	96,400	56,000	42,400							64,000	79,000
2 TECHNOLOGY UPGRADE	478,295	85,000	42,375	42,375	36,250		30,500	25,000	73,540			84,000	13,000
2 OUTDOOR LEARNING CLASSROOM	3,891,900	1,561,350			1,288,400								
2 FENCES & GATES - ORNAMENTAL	381,200		76,200						88,000				217,000
2 MULTIMEDIA CENTER	389,072				389,072								
2 OUTDOOR LANDSCAPED SPACES	2,421,225		1,331,860		1,189,278								
2 FREESTANDING TRAIL	81,700				81,700								
2 DRINKING FOUNTAINS	20,000												20,000
2 STAFF PARKING	272,850												
2 LIBRARY MODERNIZATION/EXPANSION	1,888,725					74,100		198,000					1,616,725
2 COLLABORATIVE INSTRUCTIONAL SPACES	313,588												313,588
2 STORAGE EXPANSION	488,000												488,000
2 CLASSROOM MODERNIZATION	879,275												879,275
2 BUILDING STRUCTURAL UPGRADE	2,148,000												2,148,000
2 ELECTRICAL UPGRADE	340,000												340,000
2 PLUMBING REPAIRS	2,148,000												2,148,000
2 SHADE STRUCTURE	1,126,000									562,500			563,500
2 LANDSCAPE - COURTYARDS	2,731,790												2,731,790
2 ROOF REPAIR	2,228,997												2,228,997
2 RESTROOM MODERNIZATION	478,750				873,460								537,810
2 GYM MODERNIZATION	7,300,000												7,300,000
2 LOCKER ROOM MODERNIZATION													see gym modernization
<b>SUBTOTAL PROJECT 2</b>	<b>37,428,497</b>	<b>2,228,000</b>	<b>2,072,425</b>	<b>1,718,477</b>	<b>2,261,710</b>	<b>592,100</b>	<b>1,712,528</b>	<b>598,000</b>	<b>5,684,970</b>	<b>562,500</b>	<b>10,897,249</b>	<b>8,184,578</b>	<b>13,000</b>
3 ROOF REPAIR	1,341,242		214,000	295,250	295,250				295,250				295,250
3 WINDOW REPLACEMENT	13,045,000	1,375,000	1,350,000	1,300,000	1,100,000		1,500,000		1,616,000				2,465,000
3 UTILITY NETWORK REPAIRS	4,003,000	330,000	571,000	660,000	430,000				480,000				320,000
3 RESTROOM MODERNIZATION/EXPANSION	794,170	103,100	103,400	107,725	103,300								252,425
3 PLAYGROUND K	313,425	187,880	147,540										
3 PLAYGROUND I-S	602,800	211,200	280,800										
3 ADMIN/EXTENDED CARE EXPANSION	2,975,000	1,485,000	1,485,000										130,600
3 DRINKING FOUNTAINS	20,000			20,000									
3 FENCES AND GATES ORNAMENTAL	320,400				183,000								137,400
3 COLLABORATIVE INSTRUCTIONAL SPACES	1,881,660												1,881,660
3 COVERED WALKWAY	628,000								628,000				
3 SHADE STRUCTURE	662,500									562,500			100,000
3 CLASSROOM STORAGE EXPANSION	21,800												21,800
3 SPEED RECOVERY SPACE	300,000												300,000
3 MULTIMEDIA CENTER/UPGRADE	78,500												78,500



**MAJORED CONSTRUCTION COST SUMMARY**

PROJECT/PROJECT	TOTAL	BUBB	KUFF	LANDHELS	MIRAL	CASTRO	MONTALOMA	STEVENSON	TIEDERKRAUF	VARGAS	CHERTHOLDEN	GRAHAM	LATHAM	
1 LANDSCAPE - CAMPUS FRONTAGE	999,000								999,000					
3 SIGNAGE - CAMPUS FRONTAGE	86,000											86,000		
3 PICKUP/DROPOFF PARKING	886,000												886,000	
5 CLASSROOM MODERNIZATION													161,000	
<b>SUBTOTAL PRIORITY 3</b>	<b>28,866,122</b>	<b>4,200,269</b>	<b>4,353,373</b>	<b>2,199,333</b>	<b>3,682,200</b>	<b>1,246,600</b>	<b>2,157,878</b>	<b>78,500</b>	<b>3,361,566</b>	<b>2,674,365</b>	<b>4,567,846</b>			
4 PEDESTRIAN TRAIL	52,200	62,500												
4 COVERED WALKWAY	2,642,000	400,000			483,000	332,500		133,000						
4 PICKUP/DROPOFF PARKING	470,000			470,000										
4 NEW ASPHALT DRIVEWAY	216,700													
4 RESTROOM MODERNIZATION	237,000								214,700					
4 PLAYFIELD LANDSCAPE	25,000								237,000					
4 AUDITORIUM SYSTEMS UPGRADE	200,000									25,000				
4 PLAYSPACES- RELOCATE W/EE ENCLOSURE	30,000									200,000				
<b>SUBTOTAL PRIORITY 4</b>	<b>3,971,450</b>	<b>472,250</b>	<b>1,100,800</b>	<b>483,000</b>	<b>332,500</b>	<b>133,000</b>	<b></b>	<b>451,700</b>	<b>225,000</b>	<b>474,000</b>	<b></b>	<b></b>	<b></b>	
TBD SOLAR PANELS	TBD													
TBD ELECTRICAL UPGRADE	624,000								624,000					
TBD STRUCTURAL UPGRADE	348,750									348,750				
<b>SUBTOTAL PRIORITY TBD</b>	<b>624,000</b>	<b></b>	<b></b>	<b></b>	<b></b>	<b></b>	<b></b>	<b></b>	<b>624,000</b>	<b>348,750</b>	<b></b>	<b></b>	<b></b>	
<b>PROJECT TOTALS</b>	<b>121,719,968</b>	<b>11,996,649</b>	<b>6,772,114</b>	<b>11,269,342</b>	<b>6,946,592</b>	<b>3,663,658</b>	<b>11,728,579</b>	<b>3,489,290</b>	<b>15,292,658</b>	<b>1,686,000</b>	<b>25,969,824</b>	<b>19,922,397</b>	<b>690,220</b>	
SEE REQUIREMENTS	5.0%	6,000,000	392,872	408,606	566,976	447,276	182,163	566,120	170,013	780,142	70,200	1,282,491	966,625	33,012
JOBSITE MANAGEMENT	10.0%	12,172,000	1,109,548	877,211	1,123,668	864,954	364,305	1,172,668	340,028	1,920,285	148,400	2,566,982	1,693,251	66,023
<b>ESTIMATE SUB-TOTAL</b>	<b>139,877,667</b>	<b>12,718,266</b>	<b>18,667,931</b>	<b>12,864,520</b>	<b>10,291,386</b>	<b>4,189,508</b>	<b>13,463,566</b>	<b>3,919,288</b>	<b>17,483,277</b>	<b>1,874,800</b>	<b>29,539,298</b>	<b>22,622,393</b>	<b>759,245</b>	
INSURANCE - BONDING	2.0%	3,496,400	317,659	252,188	324,863	207,300	104,738	337,138	87,707	437,082	40,365	738,007	673,000	18,982
FEES	5.0%	6,993,000	630,918	506,397	649,728	414,600	209,470	674,276	180,516	874,164	80,750	1,479,010	1,146,119	37,943
<b>ESTIMATE SUB-TOTAL</b>	<b>156,870,467</b>	<b>13,672,244</b>	<b>19,464,284</b>	<b>13,866,109</b>	<b>11,952,686</b>	<b>4,592,721</b>	<b>14,948,882</b>	<b>4,292,559</b>	<b>19,746,523</b>	<b>1,794,855</b>	<b>31,746,329</b>	<b>24,641,512</b>	<b>819,209</b>	
DESIGN CONTINGENCY	15.0%	23,571,452	2,059,837	1,626,679	2,066,366	1,499,664	875,658	3,174,647	630,634	2,816,178	263,364	4,760,148	3,664,254	122,431
CONSTRUCTION CONTINGENCY	10.0%	15,547,858	1,387,224	1,084,463	1,390,911	1,108,160	450,372	1,448,699	420,109	1,976,462	175,570	3,173,432	2,464,159	81,621
SOFT COSTS	30.0%	40,119,310	4,101,673	3,203,308	4,100,720	3,316,199	1,951,116	4,349,955	1,291,987	6,208,217	630,209	8,956,499	7,064,469	246,903
<b>ESTIMATE SUB-TOTAL</b>	<b>212,228,228</b>	<b>21,191,878</b>	<b>18,888,818</b>	<b>21,452,120</b>	<b>17,149,829</b>	<b>6,989,787</b>	<b>22,679,228</b>	<b>6,515,517</b>	<b>29,131,519</b>	<b>2,896,237</b>	<b>48,188,198</b>	<b>38,194,421</b>	<b>1,285,134</b>	
ESCALATION	33.0%	78,887,171	7,167,669	5,695,238	7,323,301	5,800,244	3,361,074	7,659,038	2,203,714	9,853,022	906,937	16,638,768	12,916,930	427,697
<b>ESTIMATE TOTAL</b>	<b>312,102,598</b>	<b>28,259,687</b>	<b>23,494,254</b>	<b>28,375,420</b>	<b>22,498,283</b>	<b>9,291,241</b>	<b>36,619,260</b>	<b>8,719,231</b>	<b>38,984,532</b>	<b>3,699,265</b>	<b>65,926,929</b>	<b>51,112,521</b>	<b>1,893,023</b>	



**BUBB ELEMENTARY SCHOOL - ESTIMATE DETAIL**

GSF : 36,955

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
1							
2		<b>Replace HVAC</b>					
3							
4		New HVAC allowance serving Bldg 1, 3, 4 and 5, assume new rooftop units, replace ductwork and diffusers as necessary, disconnect and reconnect services and electrical	22,480	SF	32.00	719,360	
5							
6							
7	<b>1</b>	<b>REPLACE HVAC</b>				<b>719,360</b>	<b>32 \$/SF</b>
8							
9		<b>Fences And Gates - Ornamental</b>					
10							
11		Demo existing	1	LS	3,000.00	3,000	
12		Ornamental fence	425	LF	200.00	85,000	8ft
13		Gates	2	EA	5,000.00	10,000	pedestrian
14							
15							
16	<b>1</b>	<b>FENCES AND GATES - ORNAMENTAL</b>				<b>98,000</b>	
17							
18		<b>Fences And Gates - Chain Link</b>					
19							
20		Demo existing	1	LS	6,000.00	6,000	
21		Chain link fence	1,150	LF	75.00	86,250	
22		Gates	2	EA	3,500.00	7,000	pedestrian
23		Gates	1	EA	10,000.00	10,000	vehicular
24							
25							
26	<b>1</b>	<b>FENCES AND GATES - CHAIN LINK</b>				<b>109,250</b>	
27							
28		<b>Pickup/Dropoff, Parking</b>					
29							
30		Demolition of existing	35,000	SF	1.00	35,000	
31		Rough and fine grading, allow	35,000	SF	0.50	17,500	
32		New hardscape - concrete/asphalt	24,500	SF	12.00	294,000	70%
33		Allow for curbs, striping, signage, wheel stops etc	1	LS	65,000.00	65,000	
34		Softscape - allow for minimal trees/shrubs	10,500	SF	15.00	157,500	30%
35		Drainage	35,000	SF	2.50	87,500	
36		Irrigation	10,500	SF	3.00	31,500	
37		Lighting	35,000	SF	3.00	105,000	
38							
39							
40	<b>1</b>	<b>PICKUP/DROPOFF, PARKING</b>				<b>793,000</b>	<b>23 \$/SF</b>
41							
42		<b>Collaborative Instructional Spaces</b>					
43							
44		Remove partitions to accommodate for operable walls, including hazmat allowance	120	LF	75.00	9,000	
45		Structural work allowance	1	LS	20,000.00	20,000	at dividing walls only
46		New operable walls	120	LF	1,800.00	216,000	
47		Cut & patch interiors at renovated walls	120	LF	120.00	14,400	as required at disturbed areas along wall, excludes new classroom finishes
48		MEP reconfiguration allowance	22,480	SF	4.00	89,920	
49		New construction/expansion for breakout spaces	4,000	SF	500.00	2,000,000	
50							
51							
52	<b>1</b>	<b>COLLABORATIVE INSTRUCTIONAL SPACES</b>				<b>2,349,320</b>	<b>89 \$/SF</b>
53							
54		<b>Lighting</b>					
55							
56		Install site lighting in parking and playground areas	156,000	SF	1.50	234,000	for safety/security
57		Remove existing	156,000	SF	0.25	39,000	
58							



**BUBB ELEMENTARY SCHOOL - ESTIMATE DETAIL**

GSF : 36,955

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
59							
60	2	LIGHTING				273,000	2 \$/SF
61							
62		<u>New Asphalt Overlay</u>					
63							
64		Demolish existing	63,500	SF	1.00	63,500	
65		Asphalt overlay of existing playground (pedestrian use)	63,500	SF	4.50	285,750	
66							
67							
68	2	NEW ASPHALT OVERLAY				349,250	6 \$/SF
69							
70		<u>Utility Survey</u>					
71							
72		Condition Survey of underground utility lines (gas, domestic water, sanitary sewer, bldg/stormwater drain, electrical, data)	244,500	SF	0.20	48,900	
73							
74							
75	2	UTILITY SURVEY				48,900	0 \$/SF
76							
77		<u>Technology Upgrade</u>					
78							
79		Replace fiber optic and copper cable networks from MDF bldg 2 to Bldgs. 1,3, 4,5,6, MUR, P1, reuse existing raceways as necessary, replace if needed	2,220	LF	25.00	55,500	
80							
81							
82	2	TECHNOLOGY UPGRADE				55,500	
83							
84		<u>Outdoor Learning Classroom</u>					
85							
86		Demolition	35,100	SF	1.00	35,100	
87		Rough and fine grading, allow	35,100	SF	0.50	17,550	
88		New hardscape	17,550	SF	35.00	614,250	50%
89		New softscape	17,550	SF	15.00	263,250	50%
90		Drainage	35,100	SF	2.50	87,750	
91		Irrigation	17,550	SF	3.00	52,650	
92		Allow for site furnishings - benches, seatwalls, tables etc)	35,100	SF	5.00	175,500	
93		Shade feature, allow	1	LS	150,000.00	150,000	allowance
94		Electric/data connections	35,100	SF	1.00	35,100	
95		Lighting	35,100	SF	2.00	70,200	
96							
97							
98	2	OUTDOOR LEARNING CLASSROOM				1,501,350	43 \$/SF
99							
100		<u>Roof Repair</u>					
101							
102		Repair damaged membrane, pipe flashings/storm collars, gutters/drain assemblies - allow	30,667	SF	7.00	214,669	Not a roof replacement
103							
104							
105	3	ROOF REPAIR				214,669	7 \$/SF
106							
107		<u>WINDOW REPLACEMENT</u>					
108							
109		Replace existing glass windows with thermal insulating glass	1	LS	1,375,000.00	1,375,000	remove and replace - allowance
110							
111							
112	3	WINDOW REPLACEMENT				1,375,000	



**BUBB ELEMENTARY SCHOOL - ESTIMATE DETAIL**

GSF : 36,955

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
113							
114		<u>Utility Network Repairs</u>					
115							
116		Assume repair/replacement of 75% sanitary sewer lines, 50% of stormwater drain lines, 25% of domestic water lines, 25% gas lines.	244,500	SF	3.00	733,500	
117							
118							
119	3	UTILITY NETWORK REPAIRS				733,500	3 \$/SF
120							
121		<u>Restroom Modernization</u>					
122							
123		Remove and replace wall finishes	2,300	SF	25.00	57,500	
124		Remove and replace ceiling finishes	1,520	SF	30.00	45,600	
125		Fixtures, walls tiles and partitions					No work required
126		Misc. MEP rework/reconfiguration					No work required
127							
128							
129	3	RESTROOM MODERNIZATION				103,100	68 \$/SF
130							
131		<u>Playground K</u>					
132							
133		Demolish existing	3,800	SF	1.00	3,800	
134		Rough and fine grading, allow	3,800	SF	0.50	1,900	
135		Tot turf	3,800	SF	18.00	68,400	
136		Drainage	3,800	SF	2.50	9,500	
137		Irrigation	3,800	SF	3.00	11,400	
138		Lighting	3,800	SF	3.00	11,400	
139		Play equipment allowance	1	LS	50,000.00	50,000	
140		Miscellaneous site benches, furnishings etc	3,800	SF	3.00	11,400	
141							
142							
143	3	PLAYGROUND K				167,800	44 \$/SF
144							
145		<u>Playground 1-5</u>					
146							
147		Demolish existing	5,200	SF	1.00	5,200	
148		Rough and fine grading, allow	5,200	SF	0.50	2,600	
149		Tot turf	5,200	SF	18.00	93,600	
150		Drainage	5,200	SF	2.50	13,000	
151		Irrigation	5,200	SF	3.00	15,600	
152		Lighting	5,200	SF	3.00	15,600	
153		Play equipment allowance	1	LS	50,000.00	50,000	
154		Miscellaneous site benches, furnishings etc	5,200	SF	3.00	15,600	
155							
156							
157	3	PLAYGROUND 1-5				211,200	41 \$/SF
158							
159		<u>Admin/Extended Care Expansion</u>					
160							
161		New building allowance	2,700	SF	550.00	1,485,000	
162							
163							
164	3	ADMIN/EXTENDED CARE EXPANSION				1,485,000	550 \$/SF
165							
166		<u>Pedestrian Trail</u>					
167							
168		Demolish existing	5,500	SF	1.00	5,500	
169		Rough and fine grading, allow	5,500	SF	0.50	2,750	
170		Decomposed granite trail	5,500	SF	8.00	44,000	
171							
172							
173	4	PEDESTRIAN TRAIL				52,250	10 \$/SF



BUBB ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 36,955

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
174							
175		<u>Covered Walkway</u>					
176							
177		Repair/reroof 50% of covered area as needed	12,000	SF	35.00	420,000	no work to walkway required
178							
179							
180	4	COVERED WALKWAY				420,000	35 \$/SF
181							
182		<u>Solar Panels</u>					Under District Study - excluded
183							
184							
185	TBD	SOLAR PANELS					



HUFF ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 35,677

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
1							
2		<u>Replace HVAC</u>					
3							
4		New HVAC allowance serving Bldg 2, 3, 4 and 5, assume new rooftop units, replace ductwork and diffusers as necessary, disconnect and reconnect services and electrical	21,363	SF	32.00	683,616	
5							
6							
7	1	REPLACE HVAC				683,616	32 \$/SF
8							
9		<u>Shade Structure</u>					
10							
11		New steel frame, open-sided shade structure with a solid roof	4,500	SF	125.00	562,500	no new paving assumed
12							
13							
14	1	SHADE STRUCTURE				562,500	125 \$/SF
15							
16		<u>Fences &amp; Gates - Ornamental</u>					
17							
18		Demo existing	1	LS	200.00	200	
19		Ornamental fence	330	LF	200.00	66,000	8'ht
20		Gates	2	EA	5,000.00	10,000	pedestrian
21							
22							
23	2	FENCES & GATES - ORNAMENTAL				76,200	
24							
25		<u>Lighting</u>					
26							
27		Low level perimeter area (safety) lighting around parking, walkways, playground, driveways	154,000	SF	1.50	231,000	for safety/security
28		Remove existing	154,000	SF	0.25	38,500	
29							
30							
31	2	LIGHTING				269,500	2 \$/SF
32							
33		<u>New Asphalt Overlay</u>					
34							
35		Asphalt overlay of existing playground (pedestrian use)	54,000	SF	4.50	243,000	
36		Demolish existing	54,000	SF	1.00	54,000	
37							
38	2	NEW ASPHALT OVERLAY				297,000	6 \$/SF
39							
40		<u>Utility Survey</u>					
41							
42		Condition Survey of underground utility lines (gas, domestic water, sanitary sewer, bldg/stormwater drain, electrical, data)	277,000	SF	0.20	55,400	
43							
44							
45	2	UTILITY SURVEY				55,400	
46							
47		<u>Technology Upgrade</u>					
48							
49		Replace fiber optic and copper cable networks from MDF bldg 1 to Bldgs 2,3, 4,5,6, reuse existing raceways as necessary, replace if needed	1,695	LF	25.00	42,375	
50							
51							
52	2	TECHNOLOGY UPGRADE				42,375	
53							
54		<u>Outdoor Landscaped Spaces</u>					



HUFF ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 35,677

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
55							
56		Demolition	30,700	SF	1.00	30,700	
57		Rough and fine grading, allow	30,700	SF	0.50	15,350	
58		New hardscape	15,350	SF	35.00	537,250	50%
59		New softscape	15,350	SF	15.00	230,250	50%
60		Drainage	30,700	SF	2.50	76,750	
61		Irrigation	15,350	SF	3.00	46,050	
62		Allow for site furnishings - benches, seatwalls, tables etc)	30,700	SF	5.00	153,500	
63		Shade feature, allow	1	LS	150,000.00	150,000	allowance
64		Electric/data connections	30,700	SF	1.00	30,700	
65		Lighting	30,700	SF	2.00	61,400	
66							
67							
68	2	<b>OUTDOOR LANDSCAPED SPACES</b>				<b>1,331,950</b>	<b>43 \$/SF</b>
69							
70		<u>Roof Repair</u>					
71							
72		Repair damaged membrane, pipe flashings/storm collars, gutters/drain assemblies	29,389	SF	7.00	205,723	Not a roof replacement
73							
74							
75	3	<b>ROOF REPAIR</b>				<b>205,723</b>	<b>7 \$/SF</b>
76							
77		<u>WINDOW REPLACEMENT</u>					
78							
79		Replace existing glass windows with thermal insulating glass	1	LS	1,320,000.00	1,320,000	remove and replace - allowance
80							
81							
82	3	<b>WINDOW REPLACEMENT</b>				<b>1,320,000</b>	
83							
84		<u>Utility Network Repairs</u>					
85							
86		Assume repair/replacement of 75% sanitary sewer lines, 50% of stormwater drain lines, 25% of domestic water lines, 25% gas lines	277,000	SF	3.00	831,000	
87							
88							
89	3	<b>UTILITY NETWORK REPAIRS</b>				<b>831,000</b>	<b>3 \$/SF</b>
90							
91		<u>Restroom Modernization</u>					
92							
93		Remove and replace wall finishes	2,300	SF	25.00	57,500	
94		Remove and replace ceiling finishes	1,530	SF	30.00	45,900	
95		Fixtures, walls tiles and partitions					No work required
96		Misc. MEP rework/reconfiguration					No work required
97							
98							
99	3	<b>RESTROOM MODERNIZATION</b>				<b>103,400</b>	<b>68 \$/SF</b>
100							
101		<u>Playground K</u>					
102							
103		Demolish existing	3,150	SF	1.00	3,150	
104		Rough and fine grading, allow	3,150	SF	0.50	1,575	
105		Tot turf	3,150	SF	18.00	56,700	
106		Drainage	3,150	SF	2.50	7,875	
107		Irrigation	3,150	SF	3.00	9,450	
108		Lighting	3,150	SF	3.00	9,450	
109		Play equipment allowance	1	LS	50,000.00	50,000	
109		Miscellaneous site benches, furnishings etc	3,150	SF	3.00	9,450	
110							
111							
112							
113	3	<b>PLAYGROUND K</b>				<b>147,650</b>	<b>47 \$/SF</b>
114							
115		<u>Playground 1-5</u>					



HUFF ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 35,677

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
116							
117		Demolish existing	6,800	SF	1.00	6,800	
118		Rough and fine grading, allow	6,800	SF	0.50	3,400	
119		Tot turf	6,800	SF	18.00	122,400	
120		Drainage	6,800	SF	2.50	17,000	
121		Irrigation	6,800	SF	3.00	20,400	
122		Lighting	6,800	SF	3.00	20,400	
123		Play equipment allowance	1	LS	50,000.00	50,000	
123		Miscellaneous site benches, furnishings etc	6,800	SF	3.00	20,400	
124							
126							
127	3	<b>PLAYGROUND 1-5</b>				<b>260,800</b>	<b>38 \$/SF</b>
128							
129		<u>Admin/Extended Care Expansion</u>					
130							
131		New building allowance	2,700	SF	550.00	1,485,000	
132							
133							
134	3	<b>ADMIN/EXTENDED CARE EXPANSION</b>				<b>1,485,000</b>	<b>550 \$/SF</b>
135							
136		<u>Pickup/Dropoff, Parking</u>					
137							
138		Demolition of existing	18,800	SF	1.00	18,800	
139		Rough and fine grading, allow	18,800	SF	0.50	9,400	
140		Reconfigure, restripe and improve landscaping and pathways	18,800	SF	15.00	282,000	
141		Drainage	18,800	SF	2.50	47,000	
142		Irrigation	18,800	SF	3.00	56,400	
143		Lighting	18,800	SF	3.00	56,400	
144							
145							
146	4	<b>PICKUP/DROPOFF, PARKING</b>				<b>470,000</b>	<b>25 \$/SF</b>
147							
148		<u>Covered Walkway</u>					
149							
150		Repair/reroof 50% of covered area as needed	18,000	SF	35.00	630,000	no work to walkway required
151							
152							
153	4	<b>COVERED WALKWAY</b>				<b>630,000</b>	<b>35 \$/SF</b>
154							
155		<u>Solar Panels</u>					Under District Study - excluded
156							
157							
158	TBD	<b>SOLAR PANELS</b>					



LANDELS ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 35,232

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
1							
2		<b>Replace HVAC</b>					
3							
4		New HVAC allowance serving Bldg 2, 3, 4 and 5, assume new rooftop units, replace ductwork and diffusers as necessary, disconnect and reconnect services and electrical	21,363	SF	32.00	683,616	
5							
6							
7	1	<b>REPLACE HVAC</b>				<b>683,616</b>	<b>32 \$/SF</b>
8							
9		<b>Fences And Gates - Ornamental</b>					
10							
11		Demo existing	1	LS	2,000.00	2,000	
12		Ornamental fence	220	LF	200.00	44,000	8'ht
13		Gates	2	EA	5,000.00	10,000	pedestrian
14		Gates	1	EA	20,000.00	20,000	vehicular
15							
16							
17	1	<b>FENCES AND GATES - ORNAMENTAL</b>				<b>76,000</b>	
18							
19		<b>Fences And Gates - Chain Link</b>					
20							
21		Demo existing	1	LS	5,000.00	5,000	
22		Chain link fence	870	LF	75.00	65,250	8'ht
23		Gates	3	EA	3,500.00	10,500	pedestrian
24		Gates	1	EA	10,000.00	10,000	vehicular
25							
26							
27	1	<b>FENCES AND GATES - CHAIN LINK</b>				<b>90,750</b>	
28							
29		<b>Pickup/Dropoff, Parking</b>					
30							
31		Demolition of existing	47,000	SF	1.00	47,000	
32		Rough and fine grading, allow	47,000	SF	0.50	23,500	
33		New hardscape - assume concrete	42,300	SF	16.00	676,800	90%
34		Allow for curbs, striping, signage	1	LS	110,000.00	110,000	
35		Softscape - allow for minimal trees/shrubs	4,700	SF	15.00	70,500	10%
36		Drainage	47,000	SF	2.50	117,500	
37		Irrigation	4,700	SF	3.00	14,100	
38		Lighting	47,000	SF	3.00	141,000	
39							
40							
41	1	<b>PICKUP/DROPOFF, PARKING</b>				<b>1,200,400</b>	<b>26 \$/SF</b>
42							
43		<b>Collaborative Instructional Spaces</b>					
44							
45		Remove partitions to accommodate for operable walls	108	LF	75.00	8,100	
46		Structural work allowance	1	LS	18,000.00	18,000	at dividing walls only
47		New operable walls	108	LF	1,800.00	194,400	
48		Cut & patch interiors at renovated walls	108	LF	120.00	12,960	as required at disturbed areas along wall, excludes new classroom finishes
49		MEP reconfiguration allowance	21,363	SF	4.00	85,452	
50		New expansion for breakout spaces	3,600	SF	500.00	1,800,000	
51							
52							
53	1	<b>COLLABORATIVE INSTRUCTIONAL SPACES</b>				<b>2,118,912</b>	<b>85 \$/SF</b>
54							
55		<b>Lighting</b>					
56							
57		Install site lighting in parking and playground areas, front pickup/drop-off/parking, side parking, playground	135,000	SF	1.50	202,500	for safety/security
58		Remove existing	135,000	SF	0.25	33,750	
59							



LANDELS ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 35,232

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
60							
61	1	<b>LIGHTING</b>				<b>236,250</b>	<b>2 \$/SF</b>
62							
63		<b>Playground K</b>					
64							
65		Demolish existing	2,700	SF	1.00	2,700	
66		Rough and fine grading, allow	2,700	SF	0.50	1,350	
67		Tot turf	2,700	SF	18.00	48,600	
68		Drainage	2,700	SF	2.50	6,750	
69		Irrigation	2,700	SF	3.00	8,100	
70		Lighting	2,700	SF	3.00	8,100	
71		Play equipment allowance	1	LS	50,000.00	50,000	
72		Miscellaneous benches, furnishings etc	2,700	SF	3.00	8,100	
73							
74							
75	1	<b>PLAYGROUND K</b>				<b>133,700</b>	<b>50 \$/SF</b>
76							
77		<b>New Asphalt Overlay</b>					
78							
79		Demolish existing	58,300	SF	1.00	58,300	
80		Asphalt overlay of existing playground (pedestrian use)	58,300	SF	4.50	262,350	
81							
82							
83	1	<b>NEW ASPHALT OVERLAY</b>				<b>320,650</b>	<b>6 \$/SF</b>
84							
85		<b>Admin/Extended Care Expansion</b>					
86							
87		New building allowance	2,700	SF	550.00	1,485,000	
88							
89							
90	1	<b>ADMIN/EXTENDED CARE EXPANSION</b>				<b>1,485,000</b>	<b>550 \$/SF</b>
91							
92		<b>Shade Structure</b>					
93							
94		New steel frame, open-sided shade structure with a solid roof	4,500	SF	125.00	562,500	no new paving assumed
95							
96							
97	1	<b>SHADE STRUCTURE</b>				<b>562,500</b>	<b>125 \$/SF</b>
98							
99		<b>Utility Survey</b>					
100							
101		Condition Survey of underground utility lines (gas, domestic water, sanitary sewer, bldg/stormwater drain, electrical, data)	280,000	SF	0.20	56,000	
102							
103							
104	2	<b>UTILITY SURVEY</b>				<b>56,000</b>	
105							
106		<b>Technology Upgrade</b>					
107							
108		Replace fiber optic and copper cable networks from MDF bldg 1 to Bldgs 1, 3, 4, 5, 6 and MUR, reuse existing raceways as necessary, replace if needed	1,695	LF	25.00	42,375	
109							
110							
111	2	<b>TECHNOLOGY UPGRADE</b>				<b>42,375</b>	
112							
113		<b>MUR Modernization</b>					
114							
115		Allow for miscellaneous demolitions, including hazmat allowance	6,288	SF	9.00	56,592	assume minimal required
116		Structural work allowance	6,288	SF	5.00	31,440	assume minimal required
117		New operable walls	130	LF	1,800.00	234,000	





LANDELS ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 35,232

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
118		Cut & patch interiors at renovated walls	130	LF	120.00	15,600	as required at disturbed areas along wall, excludes new classroom finishes
119		MEP allowance	6,288	SF	5.00	31,440	
120							
121							
122	2	<b>MUR MODERNIZATION</b>				<b>369,072</b>	<b>69 \$/SF</b>
123							
124		<u>Outdoor Landscaped Spaces</u>					
125							
126		Demolition	27,900	SF	1.00	27,900	
127		Rough and fine grading, allow	27,900	SF	0.50	13,950	
128		New hardscape	13,950	SF	35.00	488,250	50%
129		New softscape	13,950	SF	15.00	209,250	50%
130		Drainage	13,950	SF	2.50	34,875	
131		Irrigation	13,950	SF	3.00	41,850	
132		Allow for site furnishings - benches, seatwalls, tables etc)	27,900	SF	5.00	139,500	
133		Shade feature, allow	1	LS	150,000.00	150,000	allowance
134		Electric/data connections	27,900	SF	1.00	27,900	
135		Lighting	27,900	SF	2.00	55,800	
136							
137							
138	2	<b>OUTDOOR LANDSCAPED SPACES</b>				<b>1,189,275</b>	<b>43 \$/SF</b>
139							
140		<u>Pedestrian Trail</u>					
141							
142		Demolish existing	6,500	SF	1.00	6,500	
143		Rough and fine grading, allow	6,500	SF	0.50	3,250	
144		Decomposed granite trail	6,500	SF	8.00	52,000	
145							
146							
147	2	<b>PEDESTRIAN TRAIL</b>				<b>61,750</b>	<b>10 \$/SF</b>
148							
149		<u>Drinking Fountain</u>					
150							
151		Replace older drinking fountains with drinking stations	4	EA	5,000.00	20,000	
152							
153							
154	3	<b>DRINKING FOUNTAIN</b>				<b>20,000</b>	
155							
156		<u>Roof Repair</u>					
157							
158		Repair damaged membrane, pipe flashings/storm collars, gutters/drain assemblies - allow	28,944	SF	7.00	202,608	Not a roof replacement
159							
160							
161	3	<b>ROOF REPAIR</b>				<b>202,608</b>	<b>7 \$/SF</b>
162							
163		<u>WINDOW REPLACEMENT</u>					
164							
165		Replace existing glass windows with thermal insulating glass	1	LS	1,300,000.00	1,300,000	remove and replace - allowance
166							
167							
168	3	<b>WINDOW REPLACEMENT</b>				<b>1,300,000</b>	
169							
170		<u>Utility Network Repairs</u>					
171							
172		Assume repair/replacement of 75% sanitary sewer lines, 50% of stormwater drain lines, 25% of domestic water lines, 25% gas lines.	280,000	SF	2.00	560,000	
173							
174							



LANDELS ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 35,232

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
175	3	<b>UTILITY NETWORK REPAIRS</b>				<b>560,000</b>	<b>2 \$/SF</b>



LANDELS ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 35,232

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
176							
177		<b>Restroom Modernization</b>					
178							
179		Remove and replace wall finishes	2,365	SF	25.00	59,125	
180		Remove and replace ceiling finishes	1,620	SF	30.00	48,600	
181		Fixtures, walls tiles and partitions					No work required
182		Misc. MEP rework/reconfiguration					No work required
183							
184							
185	3	<b>RESTROOM MODERNIZATION</b>				<b>107,725</b>	<b>66 \$/SF</b>
186							
187		<b>Covered Walkway</b>					
188							
189		Repair/reroof 50% of covered area as needed	13,800	SF	35.00	483,000	no work to walkway required
190							
191							
192	4	<b>COVERED WALKWAY</b>				<b>483,000</b>	
193							
194		<b>Solar Panels</b>					Under District Study - excluded
195							
196							
197	TBD	<b>SOLAR PANELS</b>					



MISTRAL ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 29,116

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
1							
2		<b>Replace HVAC</b>					
3							
4		New HVAC allowance serving Bldg H, J, K, L, N, P, assume new rooftop units, replace ductwork and diffusers as necessary, disconnect reconnect services and electrical	24,956	SF	32.00	798,592	
5							
6							
7	1	<b>REPLACE HVAC</b>				<b>798,592</b>	<b>32 \$/SF</b>
8							
9		<b>Fences And Gates - Ornamental</b>					
10							
11		Demo existing	1	LS	4,000.00	4,000	
12		Ornamental fence	630	LF	200.00	126,000	\$/ft
13		Gates	4	EA	5,000.00	20,000	pedestrian
14		Gates	2	EA	20,000.00	40,000	vehicular
15							
16							
17	1	<b>FENCES AND GATES - ORNAMENTAL</b>				<b>190,000</b>	
18							
19		<b>Modernize Admin Building</b>					
20							
21		Renovate within existing footprint, reconfigure walls/rooms, new FF&E, redo all bldg systems (HVAC, electrical/lighting, plumbing, security)	4,080	SF	275.00	1,122,000	
22							
23							
24	1	<b>MODERNIZE ADMIN BUILDING</b>				<b>1,122,000</b>	<b>275 \$/SF</b>
25							
26		<b>Shade Structure</b>					
27							
28		New steel frame, open-sided shade structure with a solid roof	4,500	SF	125.00	562,500	no new paving assumed
29							
30							
31	1	<b>SHADE STRUCTURE</b>				<b>562,500</b>	<b>125 \$/SF</b>
32							
33		<b>Roof Repair</b>					
34							
35		Replace built-up roofing, repair/replace roof membranes, flashings/collars, gutters/drains	24,956	SF	35.00	873,460	
36							
37							
38	2	<b>ROOF REPAIR</b>				<b>873,460</b>	<b>35 \$/SF</b>
39							
40		<b>Utility Survey</b>					
41							
42		Condition Survey of underground utility lines (gas, domestic water, sanitary sewer, bldg/stormwater drain, electrical, data)	212,000	SF	0.20	42,400	
43							
44							
45	2	<b>UTILITY SURVEY</b>				<b>42,400</b>	
46							
47		<b>Technology Upgrade</b>					
48							
49		Replace fiber optic and copper cable networks from MDF bldg N to Bldgs H, J, K, L, M, P, reuse existing raceways as necessary, replace if needed	1,450	LF	25.00	36,250	
50							
51							
52	2	<b>TECHNOLOGY UPGRADE</b>				<b>36,250</b>	



MISTRAL ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 29,116

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
53							
54		<b>Outdoor Learning Classroom</b>					
55							
56		Demolition	29,600	SF	1.00	29,600	
57		Rough and fine grading, allow	29,600	SF	0.50	14,800	
58		New hardscape	14,800	SF	35.00	518,000	50%
59		New softscape	14,800	SF	15.00	222,000	50%
60		Drainage	29,600	SF	2.50	74,000	
61		Irrigation	14,800	SF	3.00	44,400	
62		Allow for site furnishings - benches, seatwalls, tables etc)	29,600	SF	5.00	148,000	
63		Shade feature, allow	1	LS	150,000.00	150,000	allowance
64		Electric/data connections	29,600	SF	1.00	29,600	
65		Lighting	29,600	SF	2.00	59,200	
66							
67							
68	2	<b>OUTDOOR LEARNING CLASSROOM</b>				<b>1,289,600</b>	<b>44 \$/SF</b>
69							
70		<b>Drinking Fountains</b>					
71							
72		Replace older drinking fountains with drinking stations	4	EA	5,000.00	20,000	
73							
74							
75	2	<b>DRINKING FOUNTAINS</b>				<b>20,000</b>	
76							
77		<b>WINDOW REPLACEMENT</b>					
78							
79		Replace existing glass windows with thermal insulating glass	1	LS	1,120,000.00	1,120,000	
80							
81							
82	3	<b>WINDOW REPLACEMENT</b>				<b>1,120,000</b>	
83							
84		<b>FENCES AND GATES ORNAMENTAL</b>					
85							
86		Demo existing	1	LS	3,000.00	3,000	
87		Ornamental fence	600	LF	200.00	120,000	8'ht
88		Gates	6	EA	5,000.00	30,000	pedestrian
89							
90							
91	3	<b>FENCES AND GATES ORNAMENTAL</b>				<b>153,000</b>	
92							
93		<b>Collaborative Instructional Spaces</b>					
94							
95		Remove partitions to accommodate for operable walls, including hazmat allowance	96	LF	75.00	7,200	
96		Structural work allowance	1	LS	15,000.00	15,000	at dividing walls only
97		New operable walls	96	LF	1,800.00	172,800	
98		Cut & patch interiors at renovated walls	96	LF	120.00	11,520	as required at disturbed areas along wall, excludes new classroom finishes
99		MEP reconfiguration allowance	18,860	SF	4.00	75,440	
100		New expansion for breakout spaces	3,200	SF	500.00	1,600,000	
101							
102							
103	3	<b>COLLABORATIVE INSTRUCTIONAL SPACES</b>				<b>1,881,960</b>	<b>85 \$/SF</b>
104							
105		<b>Utility Network Repairs</b>					
106							
107		Assume repair/replacement of 75% sanitary sewer lines, 50% of stormwater drain lines, 25% of domestic water lines, 25% gas lines	212,000	SF	2.00	424,000	
108							
109							
110	3	<b>UTILITY NETWORK REPAIRS</b>				<b>424,000</b>	<b>2 \$/SF</b>



MISTRAL ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 29,116

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
111							
112		<b>Restroom Modernization</b>					
113							
114		Remove and replace wall finishes	2,500	SF	25.00	62,500	
115		Remove and replace ceiling finishes	1,360	SF	30.00	40,800	
116		Fixtures, walls tiles and partitions					No work required
117		Misc. MEP rework/reconfiguration					No work required
118							
119							
120	3	<b>RESTROOM MODERNIZATION</b>				<b>103,300</b>	<b>76 \$/SF</b>
121							
122		<b>Covered Walkway</b>					
123							
124		Repair/reroof 50% of covered area as needed	9,500	SF	35.00	332,500	no work to walkway required
125							
126							
127	4	<b>COVERED WALKWAY</b>				<b>332,500</b>	<b>35 \$/SF</b>
128							
129		<b>Solar Panels</b>					Under District Study - excluded
130							
131							
132	TBD	<b>SOLAR PANELS</b>					



CASTRO ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 35,804

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
1							
2		<u>Admin Support Services</u>					
3							
4		New building allowance	2,700	SF	550.00	1,485,000	
5							
6							
7	1	ADMIN SUPPORT SERVICES				1,485,000	550 \$/SF
8							
9		<u>Storage</u>					
10							
11		New building allowance	1,300	SF	275.00	357,500	
12							
13							
14	1	STORAGE				357,500	275 \$/SF
15							
16		<u>Fences And Gates - Chain Link</u>					
17							
18		Demo existing	1	LS	2,500.00	2,500	
19		Chain link fence	500	LF	75.00	37,500	
20		Gates	2	EA	3,500.00	7,000	pedestrian
21		Gates	1	EA	10,000.00	10,000	vehicular
22							
23							
24	1	FENCES AND GATES - CHAIN LINK				57,000	
25							
26		<u>Staff Parking</u>					
27							
28		Demo existing	6,300	SF	1.00	6,300	
29		Rough and fine grade	6,300	SF	0.50	3,150	
30		New asphalt paving	6,300	SF	5.00	31,500	
31		Striping, curbs, wheel stops, signage	1	LS	8,000.00	8,000	
32		Lighting	6,300	SF	3.00	18,900	
33		Security	6,300	SF	1.00	6,300	
34							
35							
36	2	STAFF PARKING				74,150	12 \$/SF
37							
38		<u>Library Modernization/Expansion</u>					
39							
40		New library expansion	780	SF	550.00	429,000	
41							
42							
43	2	LIBRARY MODERNIZATION/EXPANSION				429,000	550 \$/SF
44							
45		<u>Fences And Gates - Ornamental</u>					
46							
47		Demo existing	1	LS	900.00	900	
48		Ornamental fence	180	LF	200.00	36,000	8'ht
49		Gates	3	EA	5,000.00	15,000	pedestrian
50							
51							
52	3	FENCES AND GATES - ORNAMENTAL				51,900	
53							
54		<u>Shade Structure</u>					
55							
56		New steel frame, open-sided shade structure with a solid roof	4,500	SF	125.00	562,500	no new paving assumed
57							
58							
59	3	SHADE STRUCTURE				562,500	125 \$/SF



CASTRO ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 35,804

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
60							
61		<u>Covered Walkways</u>					
62							
63		New canopy over upper level walkways	5,200	SF	65.00	338,000	at 2nd level walkways
64		Columns to ground, including footings	30	EA	9,600.00	288,000	allowance
65							
66							
67	3	COVERED WALKWAYS				626,000	120 \$/SF



MONTE LOMA ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 40,379

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
1							
2		<b>Replace HVAC</b>					
3							
4		New HVAC allowance serving Bldg A, B, C, D, F, G, H, L, M, N, P, assume new rooftop units, replace ductwork and diffusers as necessary, disconnect reconnect services and electrical	26,883	SF	32.00	860,256	
5							
6							
7	1	<b>REPLACE HVAC</b>				<b>860,256</b>	<b>32 \$/SF</b>
8							
9		<b>Fences And Gates - Chain Link</b>					
10							
11		Demo existing	1	LS	8,000.00	8,000	
12		Chain link fence	1,560	LF	75.00	117,000	
13		Gates	4	EA	3,500.00	14,000	pedestrian
14							
15							
16	1	<b>FENCES AND GATES - CHAIN LINK</b>				<b>139,000</b>	
17							
18		<b>Collaborative Spaces At Library</b>					
19							
20		Building renovation allowance - renovate existing computer lab, install maker lab/workroom utility services (plumbing, electrical, ventilation)	4,821	SF	315.00	1,518,615	
21							
22							
23	1	<b>COLLABORATIVE SPACES AT LIBRARY</b>				<b>1,518,615</b>	<b>315 \$/SF</b>
24							
25		<b>Playground K</b>					
26							
27		Demolish existing	2,600	SF	1.00	2,600	
28		Rough and fine grading, allow	2,600	SF	0.50	1,300	
29		Tot turf	2,600	SF	18.00	46,800	
30		Drainage	2,600	SF	2.50	6,500	
31		Irrigation	2,600	SF	3.00	7,800	
32		Lighting	2,600	SF	3.00	7,800	
33		Play equipment allowance	1	LS	50,000.00	50,000	
34		Miscellaneous benches, furnishings etc	2,600	SF	3.00	7,800	
35							
36							
37	1	<b>PLAYGROUND K</b>				<b>130,600</b>	<b>50 \$/SF</b>
38							
39		<b>Playground Modernization</b>					
40							
41		Demolish existing	92,000	SF	1.00	92,000	
42		Rough and fine grading, allow	92,000	SF	0.50	46,000	
43		Tot turf	92,000	SF	18.00	1,656,000	
44		Reconfigure stormwater drainage	92,000	SF	2.50	230,000	
45		Irrigation	92,000	SF	3.00	276,000	
46		Lighting	92,000	SF	1.00	92,000	
47		Play equipment allowance	3	LOC	50,000.00	150,000	
48		Miscellaneous benches, furnishings etc	92,000	SF	3.00	276,000	
49							
50							
51	1	<b>PLAYGROUND MODERNIZATION</b>				<b>2,818,000</b>	<b>31 \$/SF</b>
52							
53		<b>Shade Structure</b>					
54							
55		New steel frame, open-sided shade structure with a solid roof	4,500	SF	125.00	562,500	no new paving assumed
56							
57							
58	1	<b>SHADE STRUCTURE</b>				<b>562,500</b>	<b>125 \$/SF</b>
59							



MONTE LOMA ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 40,379

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
60		<b>Admin Support Services</b>					
61							
62		New building allowance	1,140	SF	550.00	627,000	
63							
64							
65	1	<b>ADMIN SUPPORT SERVICES</b>				<b>627,000</b>	<b>550 \$/SF</b>
66							
67		<b>Utility Survey</b>					
68							
69		Condition Survey of underground utility lines (gas, domestic water, sanitary sewer, bldg/stormwater drain, electrical, data)	215,000	SF	0.20	43,000	
70							
71							
72	1	<b>UTILITY SURVEY</b>				<b>43,000</b>	
73							
74		<b>Plumbing Repairs</b>					
75							
76		Repair campus sanitary sewer lines & bldg. drain lines. Assume repair/replacement of 100% sanitary sewer lines, 50% of stormwater drain lines, 25% of domestic water lines	215,000	SF	5.00	1,075,000	
77							
78							
79	1	<b>PLUMBING REPAIRS</b>				<b>1,075,000</b>	<b>5 \$/SF</b>
80							
81		<b>Technology Upgrade</b>					
82							
83		Replace fiber optic and copper cable networks from MDF bldg E to Bldgs A-D, F-H, K-N, P, reuse existing raceways as necessary, replace if needed, add interior cabling to WAP's and TV's with classrooms (24)	1,220	LF	25.00	30,500	
84							
85							
86	2	<b>TECHNOLOGY UPGRADE</b>				<b>30,500</b>	
87							
88		<b>Outdoor Learning Classroom</b>					
89							
90		Demolition	24,700	SF	1.00	24,700	
91		Rough and fine grading, allow	24,700	SF	0.50	12,350	
92		New hardscape	12,350	SF	35.00	432,250	50%
93		New softscape	12,350	SF	15.00	185,250	50%
94		Drainage	24,700	SF	2.50	61,750	
95		Irrigation	12,350	SF	3.00	37,050	
96		Allow for site furnishings - benches, seatwalls, tables etc)	24,700	SF	5.00	123,500	
97		Shade feature, allow	1	LS	150,000.00	150,000	allowance
98		Electric/data connections	24,700	SF	1.00	24,700	
99		Lighting	24,700	SF	2.00	49,400	
100							
101							
102	2	<b>OUTDOOR LEARNING CLASSROOM</b>				<b>1,100,950</b>	<b>45 \$/SF</b>
103							
104		<b>Staff Parking</b>					
105							
106		Demo existing	17,000	SF	1.00	17,000	
107		Rough and fine grade	17,000	SF	0.50	8,500	
108		New asphalt paving	17,000	SF	5.00	85,000	
109		Striping, curbs, wheel stops, signage	1	LS	20,000.00	20,000	
110		Lighting	17,000	SF	3.00	51,000	
111		Security	17,000	SF	1.00	17,000	
112							
113							
114	2	<b>STAFF PARKING</b>				<b>198,500</b>	<b>12 \$/SF</b>



MONTE LOMA ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 40,379

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
115		<b>Collaborative Instructional Spaces</b>					
116							
117							
118		Remove partitions to accommodate for operable walls, including hazmat allowance	120	LF	75.00	9,000	
119		Structural work allowance	1	LS	15,000.00	15,000	at dividing walls only
120		New operable walls	120	LF	1,800.00	216,000	
121		Cut & patch interiors at renovated walls	120	LF	120.00	14,400	as required at disturbed areas along wall, excludes new classroom finishes
122		MEP reconfiguration allowance	14,797	SF	4.00	59,188	
123							
124							
125	2	<b>COLLABORATIVE INSTRUCTIONAL SPACES</b>				<b>313,588</b>	<b>21 \$/SF</b>
126							
127		<b>Fences And Gates - Oranmental</b>					
128							
129		Demo existing	1	LS	2,000.00	2,000	
130		Ornamental fence	285	LF	200.00	57,000	8'ht
131		Gates	2	EA	5,000.00	10,000	pedestrian
132							
133							
134	2	<b>FENCES AND GATES - ORANMENTAL</b>				<b>69,000</b>	
135							
136		<b>Restroom Modernization</b>					
137							
138		Demolition	640	SF	10.00	6,400	
139		Floor finishes	640	SF	18.00	11,520	
140		Wall finishes	1,215	SF	20.00	24,300	
141		Ceiling finishes	640	SF	25.00	16,000	
142		Toilet accessories	4	EA	1,500.00	6,000	
143		Restroom modernization/expansion, add gender neutral, single-occupancy restrooms (4), 620SF	4	EA	15,000.00	60,000	
144							
145							
146	3	<b>RESTROOM MODERNIZATION</b>				<b>124,220</b>	<b>194 \$/SF</b>
147							
148		<b>CLASSROOM STORAGE EXPANSION</b>					
149							
150		New storage systems in classrooms	720	SF	25.00	18,000	
151		Reconfigure lighting/power as necessary	720	SF	5.00	3,600	
152							
153							
154	3	<b>CLASSROOM STORAGE EXPANSION</b>				<b>21,600</b>	
155							
156		<b>SPED SENSORY SPACE</b>					
157							
158		Renovate space in Bldg. P for sensory space	1,500	SF	200.00	300,000	
159							
160							
161	3	<b>SPED SENSORY SPACE</b>				<b>300,000</b>	<b>200 \$/SF</b>
162							
163		<b>WINDOW REPLACEMENT</b>					
164							
165		Replace existing glass windows with thermal insulating glass	1	LS	1,500,000.00	1,500,000	remove and replace - allowance
166							
167							
168	3	<b>WINDOW REPLACEMENT</b>				<b>1,500,000</b>	
169							
170		<b>Utility Network Repairs</b>					
171							
172		Assume repair/replacement of 25% of utility systems not covered under plumbing repairs (gas, electrical/data). See utility survey area.	215,000	SF	0.75	161,250	
173							
174							



MONTE LOMA ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 40,379

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
175	3	<b>UTILITY NETWORK REPAIRS</b>				<b>161,250</b>	<b>1 \$/SF</b>
176							
177		<b>Covered Walkway</b>					
178							
179		Repair/reroof 50% of covered area as needed	3,800	SF	35.00	133,000	no work to walkway required
180							
181							
182	4	<b>COVERED WALKWAY</b>				<b>133,000</b>	<b>35 \$/SF</b>
183							
184		<b>Solar Panels</b>					Under District Study - excluded
185							
186							
187	TBD	<b>SOLAR PANELS</b>					



STEVENSON ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 32,079

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
1							
2		<b>Fences And Gates - Ornamental</b>					
3							
4		Demo existing	1	LS	1,500.00	1,500	
5		Ornamental fence	200	LF	200.00	40,000	8ht
6		Gates	2	EA	5,000.00	10,000	pedestrian
7							
8							
9	1	<b>FENCES AND GATES - ORNAMENTAL</b>				<b>51,500</b>	
10							
11		<b>Shade Structure</b>					
12							
13		New steel frame, open-sided shade structure with a solid roof	4,500	SF	125.00	562,500	no new paving assumed
14							
15							
16	1	<b>SHADE STRUCTURE</b>				<b>562,500</b>	<b>125 \$/SF</b>
17							
18		<b>Outdoor Landscaped Areas</b>					
19							
20		Demolition	47,500	SF	1.00	47,500	
21		Rough and fine grading, allow	47,500	SF	0.50	23,750	
22		New hardscape	33,250	SF	35.00	1,163,750	70%
23		New softscape	14,250	SF	15.00	213,750	30%
24		Drainage	47,500	SF	2.50	118,750	
25		Irrigation	14,250	SF	3.00	42,750	
26		Allow for site furnishings - benches, seatwalls, tables etc)	47,500	SF	5.00	237,500	
27		Shade feature, allow	1	LS	150,000.00	150,000	allowance
28		Electric/data connections	47,500	SF	1.00	47,500	
29		Lighting	47,500	SF	2.00	95,000	
30		Potable water/bib	47,500	SF	1.00	47,500	
31							
32							
33	1	<b>OUTDOOR LANDSCAPED AREAS</b>				<b>2,187,750</b>	<b>46 \$/SF</b>
34							
35		<b>Technology Upgrade</b>					
36							
37		Replace IDF cabinet in library with larger cabinet. Install Front Row conductor for PA system.	1	LS	25,000.00	25,000	
38							
39							
40	2	<b>TECHNOLOGY UPGRADE</b>				<b>25,000</b>	
41							
42		<b>Storage Expansion</b>					
43							
44		New storage building	1,800	SF	275.00	495,000	
45							
46							
47	2	<b>STORAGE EXPANSION</b>				<b>495,000</b>	<b>275 \$/SF</b>
48							
49		<b>MUR Modernization/A-V Upgrade</b>					
50							
51		Add shade devices to SW/SE windows	1	LS	3,500.00	3,500	
52		Upgrade A-V systems with fixed production-oriented systems	1	LS	75,000.00	75,000	
53							
54							
55	3	<b>MUR MODERNIZATION/A-V UPGRADE</b>				<b>78,500</b>	
56							
57		<b>Solar Panels</b>					Under District Study - excluded
58							
59							
60	TBD	<b>SOLAR PANELS</b>					<b>\$0 / SF</b>



THEUERKAUF ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 37,969

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
1							
2		<b>Replace HVAC</b>					
3							
4		New HVAC units in 5 single-story classroom buildings and 1 library. Replace Existing HVAC Systems, (6) Bldgs. (Nos. C, D, E, F, G, H)	30,608	SF	32.00	979,456	
5							
6							
7	1	<b>REPLACE HVAC</b>				<b>979,456</b>	<b>32 \$/SF</b>
8							
9		<b>Playground K</b>					
10							
11		Demolish existing	9,300	SF	1.00	9,300	
12		Rough and fine grading, allow	9,300	SF	0.50	4,650	
13		Tot turf	6,510	SF	18.00	117,180	70%
14		Hardscape	2,790	SF	25.00	69,750	30%
15		Drainage	9,300	SF	2.50	23,250	
16		Irrigation	6,510	SF	3.00	19,530	
17		Lighting	9,300	SF	3.00	27,900	
18		Play equipment allowance	1	LS	50,000.00	50,000	
19		Miscellaneous benches, furnishings etc	9,300	LS	3.00	27,900	
20							
21							
22	1	<b>PLAYGROUND K</b>				<b>349,460</b>	<b>38 \$/SF</b>
23							
24		<b>Landscape - Courtyards</b>					
25							
26		Demolition	14,250	SF	1.00	14,250	
27		Rough and fine grading, allow	14,250	SF	0.50	7,125	
28		New hardscape	9,975	SF	35.00	349,125	70%
29		New softscape	4,275	SF	15.00	64,125	30%
30		Drainage	4,275	SF	2.50	10,688	
31		Irrigation	4,275	SF	3.00	12,825	
32		Allow for site furnishings - benches, seatwalls, tables etc)	14,250	SF	5.00	71,250	
33		Shade feature, allow	1	LS	150,000.00	150,000	allowance
34		Electric/data connections	14,250	SF	1.00	14,250	
35		Lighting	14,250	SF	2.00	28,500	
36							
37							
38	1	<b>LANDSCAPE - COURTYARDS</b>				<b>722,138</b>	<b>51 \$/SF</b>
39							
40		<b>Shade Structure</b>					
41							
42		New steel frame, open-sided shade structure with a solid roof	4,500	SF	125.00	562,500	no new paving assumed
43							
44							
45	1	<b>SHADE STRUCTURE</b>				<b>562,500</b>	<b>125 \$/SF</b>
46							
47		<b>Utility Survey</b>					
48							
49		Condition survey for underground utility lines (water, sanitary sewer, stormwater drain, gas, electrical/data conduits)	240,000	SF	0.20	48,000	
50							
51							
52	1	<b>UTILITY SURVEY</b>				<b>48,000</b>	<b>0 \$/SF</b>



THEUERKAUF ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 37,969

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
53							
54		<b>Plumbing Repairs</b>					
55							
56		Repair campus sanitary sewer lines & bldg. drain lines. Assume repair/replacement of 100% sanitary sewer lines, 50% of stormwater drain lines, 25% of domestic water lines. See utility survey area.	240,000	SF	5.00	1,200,000	
57							
58							
59	1	<b>PLUMBING REPAIRS</b>				1,200,000	5 \$/SF
60							
61		<b>Pickup/Dropoff, Parking</b>					
62							
63		Demolition of existing	49,700	SF	1.00	49,700	
64		Rough and fine grading, allow	49,700	SF	0.50	24,850	
65		New hardscape - concrete/asphalt	44,730	SF	12.00	536,760	90%
66		Allow for curbs, striping, signage	1	LS	115,000.00	115,000	
67		Softscape - allow for minimal trees/shrubs	4,970	SF	15.00	74,550	10%
68		Drainage	49,700	SF	2.50	124,250	
69		Irrigation	4,970	SF	3.00	14,910	
70		Lighting	49,700	SF	2.00	99,400	
71							
72							
73	1	<b>PICKUP/DROPOFF, PARKING</b>				1,039,420	21 \$/SF
74							
75		<b>Fences And Gates - Ornamental</b>					
76							
77		Demo existing	1	LS	6,000.00	6,000	
78		Ornamental fence	1,100	LF	200.00	220,000	8'ht
79		Gates	4	EA	5,000.00	20,000	pedestrian
80							
81							
82	2	<b>FENCES AND GATES - ORNAMENTAL</b>				246,000	
83							
84		<b>Library Modernization</b>					
85							
86		Interior renovation allowance - renovate entire library with new FF&E, including HVAC, lighting	4,793	SF	325.00	1,557,725	
87							
88							
89	2	<b>LIBRARY MODERNIZATION</b>				1,557,725	325 \$/SF
90							
91		<b>Technology Upgrade</b>					
92							
93		Create collaborative classroom spaces with lab/workroom type instructional spaces, Bldgs. C, D, E, G. Modernize/refurbish Gr 1-5 classrooms (17) Exclude Prek-K & portable classrooms.	24,515	SF	3.00	73,545	
94							
95							
96	2	<b>TECHNOLOGY UPGRADE</b>				73,545	
97							
98		<b>Classroom Modernization</b>					
99							
100		Modernize classroom spaces - create lab/workroom-type instructional spaces, Introduce transparent, operable partitions between classrooms and with exteriors	24,515	SF	160.00	3,922,400	
101							
102							
103	2	<b>CLASSROOM MODERNIZATION</b>				3,922,400	160 \$/SF



THEUERKAUF ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 37,969

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
104							
105		<b>Building Structural Upgrade</b>					
106							
107		Allowance for shear and structural supports	1,300	SF	50.00	65,000	
108							
109							
110	2	<b>BUILDING STRUCTURAL UPGRADE</b>				65,000	50 \$/SF
111							
112		<b>Playground 1-5</b>					
113							
114		Demolish existing	2,600	SF	1.00	2,600	
115		Rough and fine grading, allow	2,600	SF	0.50	1,300	
116		Tot turf	2,600	SF	18.00	46,800	
117		Drainage	2,600	SF	2.50	6,500	
118		Irrigation	2,600	SF	3.00	7,800	
119		Lighting	2,600	SF	3.00	7,800	
120		Play equipment allowance	1	LS	50,000.00	50,000	
121		Miscellaneous benches, furnishings etc	2,600	LS	3.00	7,800	
122							
123							
124	3	<b>PLAYGROUND 1-5</b>				130,600	50 \$/SF
125							
126		<b>Landscape - Campus Frontage</b>					
127							
128		Demolish existing	28,000	SF	1.00	28,000	
129		Rough and fine grading, allow	11,200	SF	0.50	5,600	
130		Hardscape	16,800	SF	35.00	588,000	60%
131		Landscape	11,200	SF	15.00	168,000	40%
132		Drainage	11,200	SF	2.25	25,200	
133		Irrigation	11,200	SF	1.50	16,800	
134		Lighting	28,000	SF	3.00	84,000	
135		Misc site amenities	28,000	SF	3.00	84,000	
136							
137							
138	3	<b>LANDSCAPE - CAMPUS FRONTAGE</b>				999,600	36 \$/SF
139							
140		<b>WINDOW REPLACEMENT</b>					
141							
142		Replace existing glass windows with thermal insulating glass	1	LS	1,515,000.00	1,515,000	remove and replace - allowance
143							
144							
145	3	<b>WINDOW REPLACEMENT</b>				1,515,000	
146							
147		<b>Roof Repair</b>					
148							
149		Repair damaged membrane, pipe flashings/storm collars, gutters/drain assemblies - allow	33,758	SF	7.00	236,306	Not a roof replacement
150							
151							
152	3	<b>ROOF REPAIR</b>				236,306	7 \$/SF
153							
154		<b>Utility Network Repairs</b>					
155							
156		Assume repair/replacement of 25% of utility systems not covered under plumbing repairs (gas, electrical/data). See utility survey area.	240,000	SF	2.00	480,000	
157							
158							
159	3	<b>UTILITY NETWORK REPAIRS</b>				480,000	2 \$/SF





**THEUERKAUF ELEMENTARY SCHOOL - ESTIMATE DETAIL**

GSF : 37,969

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
160							
161		<b><u>New Asphalt Overlay</u></b>					
162							
163		Demolish existing	38,000	SF	1.00	38,000	
164		Asphalt overlay of existing playground (pedestrian use)	38,000	SF	4.50	171,000	
165		Allow for striping	38,000	SF	0.15	5,700	
166							
167							
168	4	<b>NEW ASPHALT OVERLAY</b>				<b>214,700</b>	<b>6 \$/SF</b>
169							
170		<b><u>Restroom Modernization</u></b>					
171							
172		Demolition	1,900	SF	10.00	19,000	
173		Floor finishes	1,900	SF	18.00	34,200	
174		Wall finishes	2,565	SF	20.00	51,300	
175		Ceiling finishes	1,900	SF	25.00	47,500	
176		Toilet accessories	6	EA	1,500.00	9,000	
177		MEP allowance, includes fixture replacement, in wall piping rework to support relocation of fixtures	1,900	SF	40.00	76,000	
178							
179							
180	4	<b>RESTROOM MODERNIZATION</b>				<b>237,000</b>	<b>125 \$/SF</b>
181							
182		<b><u>Electrical Upgrade</u></b>					
183							
184		Replace switchgear to support 26 classrooms (700 stu), library, admin bldg., and MUR	1	LS	624,000.00	624,000	
185							
186							
187	TBD	<b>ELECTRICAL UPGRADE</b>				<b>624,000</b>	
188							
189		<b><u>Solar Panels</u></b>					Under District Study - excluded
190							
191							
192	TBD	<b>SOLAR PANELS</b>					



**VARGAS ELEMENTARY SCHOOL - ESTIMATE DETAIL**

GSF : 25,488

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
1							
2		<b><u>Admin Support Services</u></b>					
3							
4		New building allowance	880	SF	550.00	484,000	
5							
6							
7	1	<b>ADMIN SUPPORT SERVICES</b>				<b>484,000</b>	<b>550 \$/SF</b>
8							
9		<b><u>Storage</u></b>					
10							
11		New building allowance	1,300	SF	275.00	357,500	
12							
13							
14	1	<b>STORAGE</b>				<b>357,500</b>	<b>275 \$/SF</b>
15							
16		<b><u>Shade Structure</u></b>					
17							
18		New steel frame, open-sided shade structure with a solid roof	4,500	SF	125.00	562,500	no new paving assumed
19							
20							
21	2	<b>SHADE STRUCTURE</b>				<b>562,500</b>	<b>125 \$/SF</b>
22							
23		<b><u>Solar Panels</u></b>					Under District Study - excluded
24							
25							
26	TBD	<b>SOLAR PANELS</b>					



CRITTENDEN ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 106,781

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
1							
2		<b>Replace HVAC</b>					
3							
4		New HVAC units in 10 single-story classroom and admin. Buildings (10) Bldgs. (Nos. 100, 200, 300, 500, 700, 800, 1000)	65,006	SF	32.00	2,080,192	
5							
6							
7	1	<b>REPLACE HVAC</b>				<b>2,080,192</b>	<b>32 \$/SF</b>
8							
9		<b>Locker Room Modernization/Replacement</b>					
10							
11		Construct new locker rooms facility	4,691	SF	500.00	2,345,500	
12							
13							
14	1	<b>LOCKER ROOM MODERNIZATION/REPLACEMENT</b>				<b>2,345,500</b>	<b>500 \$/SF</b>
15							
16		<b>New PE Classroom</b>					
17							
18		Construct new PE Classroom	1,200	SF	500.00	600,000	
19							
20							
21	1	<b>NEW PE CLASSROOM</b>				<b>600,000</b>	<b>500 \$/SF</b>
22							
23		<b>Frontage Improvement</b>					
24							
25		Demolition of existing	113,000	SF	1.00	113,000	
26		Rough and fine grading, allow	113,000	SF	0.50	56,500	
27		New hardscape - assume concrete/asphalt	90,400	SF	15.00	1,356,000	80%
28		Allow for curbs, striping, signage	1	LS	25,000.00	25,000	
29		Softscape - allow for minimal trees/shrubs	22,600	SF	15.00	339,000	20%
30		Drainage	113,000	SF	2.50	282,500	
31		Irrigation	22,600	SF	3.00	67,800	
32		Lighting	113,000	SF	3.00	339,000	
33		Misc amenities - fences, gates	113,000	SF	1.00	113,000	
34							
35							
36	1	<b>FRONTAGE IMPROVEMENT</b>				<b>2,691,800</b>	<b>24 \$/SF</b>
37							
38		<b>Signage Marquis</b>					
39							
40		Digital signage allowance	1	LS	75,000.00	75,000	
41		Electrical/telecom allowance serving new Marquis	1	LS	10,000.00	10,000	
42							
43							
44	1	<b>SIGNAGE MARQUIS</b>				<b>85,000</b>	
45							
46		<b>MUR Modernization/Replacement</b>					
47							
48		Allowance for renovation/modernization - reconfigure for MUR, snack shop and kitchen	9,440	SF	350.00	3,304,000	
49							
50							
51	1	<b>MUR MODERNIZATION/REPLACEMENT</b>				<b>3,304,000</b>	<b>350 \$/SF</b>
52							
53		<b>Security System Upgrade - PA</b>					
54							
55		Upgrade PA system to enable remote access	1	LS	15,000.00	15,000	
56							
57							
58	1	<b>SECURITY SYSTEM UPGRADE - PA</b>				<b>15,000</b>	



CRITTENDEN ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 106,781

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
59							
60		<b>Fences And Gates - Ornamental</b>					
61							
62		Demo existing	1	LS	2,625.00	2,625	
63		Ornamental fence	525	LF	200.00	105,000	8ft
64		Gates	7	EA	5,000.00	35,000	pedestrian
65							
66							
67	1	<b>FENCES AND GATES - ORNAMENTAL</b>				<b>142,625</b>	
68							
69		<b>Drinking Fountains</b>					
70							
71		Replace aging drinking fountains Bldgs 100, 200, 300, 500, 800, 1100, hi/lo type with bottle filler	6	EA	5,000.00	30,000	
72							
73							
74	1	<b>DRINKING FOUNTAINS</b>				<b>30,000</b>	
75							
76		<b>Electrical Upgrade</b>					
77							
78		Site is at capacity (breakers, servicing gear), upsize system to expand capacity New servicing gear and breakers (replacement) to increase system capacity 50% above existing	1	LS	240,000.00	240,000	
79							
80							
81	2	<b>ELECTRICAL UPGRADE</b>				<b>240,000</b>	
82							
83		<b>Utility Survey</b>					
84							
85		Condition Survey of underground utility lines (gas, domestic water, sanitary sewer, bldg/stormwater drain, electrical, data)	320,000	SF	0.20	64,000	
86							
87							
88	2	<b>UTILITY SURVEY</b>				<b>64,000</b>	<b>0 \$/SF</b>
89							
90		<b>PLUMBING REPAIRS</b>					
91							
92		Assume repair/replacement of 75% sanitary sewer lines, 50% of stormwater drain lines, 25% of domestic water lines	320,000	SF	3.00	960,000	
93							
94							
95	3	<b>PLUMBING REPAIRS</b>				<b>960,000</b>	<b>3 \$/SF</b>
96							
97		<b>Shade Structure</b>					
98							
99		New steel frame, open-sided shade structure with a solid roof	4,500	SF	125.00	562,500	
100							
101							
102	2	<b>SHADE STRUCTURE</b>				<b>562,500</b>	<b>125 \$/SF</b>
103							
104		<b>Landscape - Courtyards</b>					
105							
106		Demolition	57,500	SF	1.00	57,500	
107		Rough and fine grading, allow	57,500	SF	0.50	28,750	
108		New hardscape	40,250	SF	35.00	1,408,750	70%
109		New softscape	17,250	SF	15.00	258,750	30%
110		Drainage	57,500	SF	2.50	143,750	
111		Irrigation	17,250	SF	3.00	51,750	
112		Allow for site furnishings - benches, seatwalls, tables etc)	57,500	SF	5.00	287,500	
113		Shade feature, allow	1	LS	150,000.00	150,000	allowance



CRITTENDEN ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 106,781

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
114		Electric/data connections	57,500	SF	1.00	57,500	
115		Potable water/bibbs	57,500	SF	2.00	115,000	
116		Lighting	57,500	SF	3.00	172,500	
117							
118							
119	2	<b>LANDSCAPE - COURTYARDS</b>				<b>2,731,750</b>	<b>48 \$/SF</b>
120							
121		<u>Classroom Modernization</u>					
122							
123		Modernize classroom spaces - structural upgrades/support for 2nd floor, L1-reconfigure interior walls & add openings L2-reconfigure all non-structural walls (increase number of classrooms)	17,705	SF	275.00	4,868,875	
124							
125							
126	2	<b>CLASSROOM MODERNIZATION</b>				<b>4,868,875</b>	<b>275 \$/SF</b>
127							
128		<u>Roof Repair</u>					
129							
130		Remove existing shingles, re-roof w/ asphalt shingles. Repair damaged membrane, pipe flashings/storm collars, gutters/drain assemblies	24,999	SF	33.00	824,967	
131							
132							
133	2	<b>ROOF REPAIR</b>				<b>824,967</b>	<b>33 \$/SF</b>
134							
135		<u>Technology Upgrade</u>					
136							
137		Network cabling in classrooms. Replace copper cable networks Classroom Bldgs. Bldgs. 400, 1000 (Locker), 1100 (Gym) New fiber & copper cabling between MDF (Bldg. 100) to Bldgs. 1000 & 1100, add interior cabling to WAPs and TVs in classrooms (33)					
138		Interior cabling in classrooms	33	EA	2,500.00	82,500	
139		Fiber and copper cabling	650	LF	25.00	16,250	
140							
141							
142	2	<b>TECHNOLOGY UPGRADE</b>				<b>98,750</b>	
143							
144		<u>Restroom Modernization</u>					
145							
146		Remove and replace wall finishes	4,550	SF	25.00	113,750	
147		Remove and replace ceiling finishes	3,000	SF	30.00	90,000	
148		Remove and replace floor tiles	3,000	SF	25.00	75,000	
149		Replace partitions & accessories, allow	12	EA	1,500.00	18,000	
150		Plumbing, fixtures and lighting	3,000	SF	60.00	180,000	
151							
152							
153	2	<b>RESTROOM MODERNIZATION</b>				<b>476,750</b>	<b>159 \$/SF</b>
154							
155		<u>Window Replacement</u>					
156							
157		Replace existing glass windows with thermal insulating glass	1	LS	2,450,000.00	2,450,000	remove and replace - allowance
158							
159							
160	3	<b>WINDOW REPLACEMENT</b>				<b>2,450,000</b>	
161							
162		<u>Roof Repair</u>					
163							
164		Repair damaged membrane, pipe flashings/storm collars, gutters/drain assemblies - allow	29,195	SF	7.00	204,365	Not a roof replacement



CRITTENDEN ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 106,781

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
165							
166							
167	3	<b>ROOF REPAIR</b>				<b>204,365</b>	<b>7 \$/SF</b>
168							
169		<u>Utility Network Repair</u>					
170							
171		Assume repair/replacement of 25% of utility systems not covered under plumbing repairs (gas, electrical/data)	320,000	SF	1.00	320,000	
172							
173							
174	3	<b>UTILITY NETWORK REPAIR</b>				<b>320,000</b>	<b>1 \$/SF</b>
175							
176		<u>Playfield Rail Upgrade</u>					
177							
178		Replace rail, allowance	1	LS	25,000.00	25,000	
179							
180							
181	4	<b>PLAYFIELD RAIL UPGRADE</b>				<b>25,000</b>	
182							
183		<u>Auditorium Systems Upgrade</u>					
184							
185		Replace A-V/Sound System	1	LS	200,000.00	200,000	
186							
187							
188	4	<b>AUDITORIUM SYSTEMS UPGRADE</b>				<b>200,000</b>	
189							
190		<u>Structural Upgrade</u>					
191							
192		Provide structural upgrade to B300 if bldg is modernized	4,650	SF	75.00	348,750	assume architectural cut and patch as needed only
193							
194							
195	TBD	<b>STRUCTURAL UPGRADE</b>				<b>348,750</b>	<b>75 \$/SF</b>
196							
197		<u>Solar Panels</u>					
198							Under District Study - excluded
199							
200	TBD	<b>SOLAR PANELS</b>					



GRAHAM ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 84,173

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
1							
2		<b>Replace HVAC</b>					
3							
4		Replace Existing HVAC Systems 8 Bldgs. (Nos. 2, 3, 4, 5, 6, 8, 11, 12) New HVAC units in 10 single-story classroom and admin. buildings	39,838	SF	32.00	1,274,816	
5							
6							
7	1	<b>REPLACE HVAC</b>				<b>1,274,816</b>	<b>32 \$/SF</b>
8							
9		<b>Classroom Modernization</b>					
10							
11		Modernize classroom spaces - lab-type spaces for woodshop (electrical/ventilation), home economics (i.e., kitchens), and art lab type spaces	6,396	SF	275.00	1,758,900	
12							
13							
14	1	<b>CLASSROOM MODERNIZATION</b>				<b>1,758,900</b>	<b>275 \$/SF</b>
15							
16		<b>Landscape - Courtyards</b>					
17							
18		Demolition	41,850	SF	1.00	41,850	
19		Rough and fine grading, allow	41,850	SF	0.50	20,925	
20		New hardscape	20,925	SF	35.00	732,375	50%
21		New softscape	20,925	SF	15.00	313,875	50%
22		Drainage	41,850	SF	2.50	104,625	
23		Irrigation	20,925	SF	3.00	62,775	
24		Allow for site furnishings - benches, seatwalls, tables etc)	41,850	SF	5.00	209,250	
25		Shade feature, allow	1	LS	150,000.00	150,000	allowance
26		Electric/data connections	41,850	SF	1.00	41,850	
27		Lighting	41,850	SF	3.00	125,550	
28							
29							
30	1	<b>LANDSCAPE - COURTYARDS</b>				<b>1,803,075</b>	<b>43 \$/SF</b>
31							
32		<b>Shade Structure</b>					
33							
34		New steel frame, open-sided shade structure with a solid roof	4,500	SF	125.00	562,500	
35							
36							
37	1	<b>SHADE STRUCTURE</b>				<b>562,500</b>	<b>125 \$/SF</b>
38							
39		<b>Fences And Gates - Ornamental</b>					
40							
41		Demo existing	1	LS	4,800.00	4,800	
42		Ornamental fence	960	LF	200.00	192,000	8ft
43		Gates	6	EA	20,000.00	120,000	vehicular
44							
45							
46	1	<b>FENCES AND GATES - ORNAMENTAL</b>				<b>316,800</b>	
47							
48		<b>Utility Survey</b>					
49							
50		Condition Survey of underground utility lines (gas, domestic water, sanitary sewer, bldg/stormwater drain, electrical, data)	395,000	SF	0.20	79,000	
51							
52							
53	2	<b>UTILITY SURVEY</b>				<b>79,000</b>	<b>0 \$/SF</b>
54							
55		<b>Plumbing Repairs</b>					
56							



GRAHAM ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 84,173

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
57		Repair campus sanitary sewer lines & bldg. drain lines Assume repair/replacement of 75% sanitary sewer lines, 50% of stormwater drain lines, 25% of domestic water lines	395,000	SF	3.00	1,185,000	
58							
59							
60	2	<b>PLUMBING REPAIRS</b>				<b>1,185,000</b>	<b>3 \$/SF</b>
61							
62		<b>Gym Modernization</b>					
63							
64		Replace finishes, HVAC, A-V/Sound system, and lights, add individual changing stations, non-gender changing rooms	29,200	SF	250.00	7,300,000	
65		New FF&E					excluded
66							
67							
68	2	<b>GYM MODERNIZATION</b>				<b>7,300,000</b>	<b>250 \$/SF</b>
69							
70		<b>Locker Room Modernization</b>					Included with Gym Modernization above
71							
72							
73	2	<b>LOCKER ROOM MODERNIZATION</b>					
74							
75		<b>Roof Repair</b>					
76							
77		Remove existing shingles, re-roof w/ asphalt shingles. Repair damaged membrane, pipe flashings/storm collars, gutters/drain assemblies	16,290	SF	33.00	537,570	
78							
79							
80	2	<b>ROOF REPAIR</b>				<b>537,570</b>	<b>33 \$/SF</b>
81							
82		<b>Technology Upgrade</b>					
83							
84		Replace copper cabling between MDF (Bldg. 9) to Bldgs. 1-17 Add interior cabling to Front Row Devices in classrooms (46)	2,120	LF	25.00	53,000	
85							
86							
87	2	<b>TECHNOLOGY UPGRADE</b>				<b>53,000</b>	
88							
89		<b>Signage - Campus Frontage</b>					
90							
91		Allow for new signage	1	LS	75,000.00	75,000	
92		New signage, allow power and data	1	LS	10,000.00	10,000	
93							
94							
95	3	<b>SIGNAGE - CAMPUS FRONTAGE</b>				<b>85,000</b>	
96							
97		<b>WINDOW REPLACEMENT</b>					
98							
99		Replace existing glass windows with thermal insulating glass	1	LS	2,465,000.00	2,465,000	remove and replace - allowance
100							
101							
102	3	<b>WINDOW REPLACEMENT</b>				<b>2,465,000</b>	
103							
104		<b>Fences And Gates - Ornamental</b>					
105							
106		Demo existing	1	LS	2,500.00	2,500	
107		Ornamental fence	415	LF	200.00	83,000	8ft
108		Gates	6	EA	5,000.00	30,000	pedestrian
109							
110							



GRAHAM ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 84,173

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
111	3	FENCES AND GATES - ORNAMENTAL				115,500	



GRAHAM ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 84,173

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
112							
113		<u>Pickup/Dropoff, Parking</u>					
114							
115		Demolition of existing	41,000	SF	1.00	41,000	
116		Rough and fine grading, allow	41,000	SF	0.50	20,500	
117		New hardscape - assume concrete/asphalt	36,900	SF	12.00	442,800	90%
118		Allow for curbs, striping, signage	1	LS	95,000.00	95,000	
119		Softscape - allow for minimal trees/shrubs	4,100	SF	15.00	61,500	10%
120		Drainage	41,000	SF	2.50	102,500	
121		Irrigation	4,100	SF	3.00	12,300	
122		Lighting	41,000	SF	3.00	123,000	
123							
124							
125	3	PICKUP/DROPOFF, PARKING				898,600	22 \$/SF
126							
127		<u>Restroom Modernization</u>					ADA upgrades/lighting completed
128							
129		Remove and replace wall finishes	3,625	SF	25.00	90,625	
130		Remove and replace floor tiles	2,280	SF	25.00	57,000	
131		Replace partitions & accessories, allow	10	EA	2,500.00	25,000	
132		Plumbing fixtures	2,280	SF	35.00	79,800	
133							
134							
135	3	RESTROOM MODERNIZATION				252,425	111 \$/SF
136							
137		<u>Roof Repair</u>					
138							
139		Repair damaged membrane, pipe flashings/storm collars, gutters/drain assemblies - allow	39,653	SF	7.00	277,571	Not a roof replacement
140							
141							
142	3	ROOF REPAIR				277,571	7 \$/SF
143							
144		<u>Utility Network Repairs</u>					
145							
146		Assume repair/replacement of 25% of utility systems not covered under plumbing repairs (gas, electrical/data)	395,000	SF	1.25	493,750	
147							
148							
149	3	UTILITY NETWORK REPAIRS				493,750	1 \$/SF
150							
151		<u>Covered Walkway</u>					
152							
153		Assume repair/reroof 50% of covered walkway roof (built-up roof) and walkways (concrete) area	14,800	SF	30.00	444,000	
154							
155							
156	4	COVERED WALKWAY				444,000	30 \$/SF
157							
158		<u>Playground - Relocate Bike Enclosure</u>					
159							
160		New chain link fenced enclosure and asphalt ground surface	1,500	SF	20.00	30,000	
161							
162							
163	4	PLAYGROUND - RELOCATE BIKE ENCLOSURE				30,000	20 \$/SF
164							
165		<u>Solar Panels</u>					Under District Study - excluded
166							
167							
168	TBD	SOLAR PANELS					



LATHAM ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 5,760

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
1							
2		<b>Site Accessibility</b>					
3							
4		Demolition	1,620	SF	1.00	1,620	
5		Rough and fine grading	1,620	SF	0.50	810	
6		New pathways	1,620	SF	30.00	48,600	
7							
8							
9	1	<b>SITE ACCESSIBILITY</b>				<b>51,030</b>	<b>32 \$/SF</b>
10							
11		<b>Play Cluster</b>					
12							
13		Build new play area for preschool	1,000	SF	20.00	20,000	demo, landscaping
14		Drainage, irrigation, lighting	1,000	SF	7.00	7,000	
15		Play equipment	1	LS	50,000.00	50,000	
16							
17							
18	1	<b>PLAY CLUSTER</b>				<b>77,000</b>	<b>77 \$/SF</b>
19							
20		<b>Fences And Gates</b>					
21							
22		Demo existing	1	LS	2,500.00	2,500	
23		Ornamental fence	380	LF	200.00	76,000	8'ht
24		Gates	3	EA	5,000.00	15,000	pedestrian
25							
26							
27	1	<b>FENCES AND GATES</b>				<b>93,500</b>	
28							
29		<b>Shade Structure</b>					
30							
31		New open-sided shade structure with a fabric roof in playground area	1,200	SF	85.00	102,000	
32							
33							
34	1	<b>SHADE STRUCTURE</b>				<b>102,000</b>	<b>85 \$/SF</b>
35							
36		<b>Outdoor Landscaped Spaces</b>					
37							
38		Demolition	7,000	SF	1.00	7,000	
39		Rough and fine grading, allow	7,000	SF	0.50	3,500	
40		New hardscape	2,100	SF	35.00	73,500	30%
41		Tot turf	2,800	SF	18.00	50,400	40%
42		New softscape	2,100	SF	15.00	31,500	30%
43		Drainage	7,000	SF	2.50	17,500	
44		Irrigation	2,100	SF	3.00	6,300	
45		Allow for site furnishings - benches, seatwalls, tables etc)	7,000	SF	5.00	35,000	
46		Shade feature, allow	1	LS	50,000.00	50,000	allowance
47		Electric/data connections	7,000	SF	3.00	21,000	
48		Lighting	7,000	SF	3.00	21,000	
49		Potable water/bib	7,000	SF	1.00	7,000	
50							
51							
52	1	<b>OUTDOOR LANDSCAPED SPACES</b>				<b>323,700</b>	<b>46 \$/SF</b>
53							
54		<b>Technology Upgrades</b>					
55							
56		Replace ethernet cable with OM4 fiber cables to connect to MDF, replace all copper cables with Cat6a cables P1-P6, connecting to MDF	520	LF	25.00	13,000	
57							
58							
59	2	<b>TECHNOLOGY UPGRADES</b>				<b>13,000</b>	



LATHAM ELEMENTARY SCHOOL - ESTIMATE DETAIL

GSF : 5,760

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
60							
61		<b>Classroom Modernization</b>					not required
62							
63							
64	3	<b>CLASSROOM MODERNIZATION</b>					

# Mountain View Whisham School District

## Student Facilities Improvement Plan Update

Mountain View, California

### Masterplan Budget Plan SFIP Update

#### Report Prepared for:

Artik Art & Architecture

November 1, 2019

more value, less risk

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Mountain View Whisham School District  
Student Facilities Improvement Plan Update  
Mountain View, California



Masterplan Budget Plan SFIP Update  
November 01, 2019

#### BASIS OF ESTIMATE

##### REFERENCE DOCUMENTATION

This Construction Cost Estimate was produced from the following documentation. Design and engineering changes occurring subsequent to the issue of these documents have not been incorporated in this estimate.

##### Document

- SFIP Update-2019\_PROJECTS+COSTS\_23 Oct 19\_v3.1

##### BASIS FOR PRICING

This estimate reflects the fair construction value for this project and should not be construed as a prediction of low bid. Prices are based on local prevailing wage construction costs at the time the estimate was prepared. Pricing assumes a procurement process with competitive bidding for all sub-trades of the construction work, which is to mean a minimum of 3 bids for all subcontractors and materials/equipment suppliers. If fewer bids are solicited or received, prices can be expected to be higher.

Subcontractor's markups have been included in each line item unit price. Markups cover the cost of field overhead, home office overhead and subcontractor's profit. Subcontractor's markups typically range from 15% to 25% of the unit price depending on market conditions.

General Contractor's/Construction Manager's Site Requirement costs are calculated on a percentage basis. General Contractor's/Construction Manager's Jobsite Management costs are also calculated on a percentage basis.

Site Requirements	5.0%
Jobsite Management	10.0%
Phasing	0.0%

General Contractor's/Construction Manager's overhead and fees are based on a percentage of the total direct costs plus general conditions, and covers the contractor's bond, insurance, site office overheads and profit.

Insurance & Bonding	2.5%
General Contractor Bonding	
Sub-Contractor Bonding	
OSIP	

Fee (G.C. Profit)	5.0%
-------------------	------

Unless identified otherwise, the cost of such items as overtime, shift premiums and construction phasing are not included in the line item unit price.

This cost estimate is based on standard industry practice, professional experience and knowledge of the local construction market costs, TBD Consultants have no control over the material and labor costs, contractors methods of establishing prices or the market and bidding conditions at the time of bid, Therefore TBD Consultants do not guarantee that the bids received will not vary from this cost estimate.

##### CONTINGENCY

Design Contingency	15.0%
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The Design Contingency is carried to cover scope that lacks definition and scope that is *anticipated* to be added to the Design. As the Design becomes more complete the Design Contingency will reduce.

Construction Contingency	10.0%
--------------------------	-------

The Construction Contingency is carried to cover the unforeseen during construction execution and Risks that do not currently have mitigation plans. As Risks are mitigated, Construction Contingency can be reduce, but should not be eliminated.

Soft Costs	30.0%
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An owners contingency has not been included in this construction cost estimate, but it is advised that the owner carry additional contingency to cover scope change, bidding conditions, claims and delays.



**BASIS OF ESTIMATE**

**ESCALATION**

Escalation is included to October 2024 at the following per annum escalation rates:

Escalation:	33.82%
Year 0 - 1	6.00%
Year 1 - 2	6.00%
Year 2 - 3	6.00%
Year 3 - 4	6.00%
Year 4 - 5	6.00%
Beyond 5 Years	6.00%

This calculation does not account for adverse bidding conditions and a separate Bid Contingency should be carried if there are limited qualified bidders or if a market research study indicates.

**EXCLUSIONS**

- Land acquisition, feasibility studies, financing costs and all other owner costs
- All professional fees and insurance
- Site surveys, existing condition reports and soils investigation costs
- Items identified in the design as Not In Contract (NIC)
- Hazardous materials investigations and abatement
- Utility company back charges, including work required off-site and utilities rates
- Work to City streets and sidewalks
- Items defined as Vendor / Owner supplied and Vendor / Owner installed
- Permits
- Owners contingency
- Overtime, 2nd shift and lost productivity premiums
- Design Fees
- PG & E Fees
- Sustainability Fees (LEED)
- Furniture, fixtures and equipment (FF&E)

PROJECT	TOTAL	FIRM	HUFF	LANE/BL	NEUTRAL	CARTRO	MONTA LOBA	TEJUELENDO	THULENKAMP	VARGAS	CHETWOOD	GRAHAM	MONTICELLO	COOPER	
PROJECT 1 DEMO BUILDINGS	818,001	78,100	71,813	68,818			174,450								
PROJECT 1 SITE ENGINEERING	4,232,000	618,000	483,000	508,700			1,617,500								
PROJECT 1 SITE DESIGN/PROVIDE NEW FANWAYS/ACCESS/PERIMETER	13,283,979	897,000	1,000,000	888,400			8,812,729								
PROJECT 1 REBELD PLAYGROUND	960,000	369,000	346,000	275,500											
PROJECT 1 REPLACE BUILDING	72,083,100	11,520,000	10,720,000	10,395,000			18,090,000								
PROJECT 1A DEMO NOT 4 PORTABLES	462,000														
PROJECT 1A SITE ENGINEERING	414,000														
PROJECT 1A DEMO BUILDINGS	64,268,000														
PROJECT 1A SITE DESIGN/LANDSCAPING/IMPROVEMENTS	1,989,010														
PROJECT 1B DEMO BUILDINGS	109,040														
PROJECT 1B SITE ENGINEERING	249,000														
PROJECT 1B DEMO BUILDINGS	6,108,000														
PROJECT 1B NEW ENTRY IN RENOVATED BLDG	1,438,200														
PROJECT 1 NEW RESTROOMS	299,000														
PROJECT 1 NEW RESTROOMS	898,000		299,000	298,000		299,000									
PROJECT 1 DEMO PORTABLES	28,000														
PROJECT 1 NEW BUILDINGS	36,332,000										18,482,500		4,840,000		
PROJECT 1 NEW BUILDINGS	209,000										123,500		195,700		
PROJECT 1 NEW MATERIAL IMPROVEMENTS	1,238,000										1,238,000		1,238,000		
PROJECT 1 NEW MATERIAL IMPROVEMENTS	2,548,000										2,548,000		2,548,000		
PROJECT 1 NEW CLASSROOM BUILDING	7,448,000										7,448,000		7,448,000		
PROJECT 1 SITE ENGINEERING	594,700														
PROJECT 1 SITE DESIGN/LANDSCAPING/IMPROVEMENTS	1,747,120														
PROJECT 1 LANDSCAPING AND PLAY EQUIPMENT	407,000														
PROJECT 1 DEMO BUILDINGS	241,000														
PROJECT 1 SITE ENGINEERING	586,700														
PROJECT 1 SITE DESIGN/LANDSCAPING	1,881,900														
PROJECT 1 REPLACE BUILDING	28,388,000														
SOLAR ENERGY	8,168,000	831,000	496,000	544,500	441,000		646,000	709,500	1,039,000	373,000			1,541,500	644,000	
SECOND LEVEL DECK	472,000						472,000								
RAISED THREE NEW LEVEL RESTROOMS	1,287,000						1,287,000								
RAISED OPEN PAVILION DECK	144,000						144,000								
MODERNIZE PORTABLES FOR CLASSROOM AND OFFICE	1,896,000														
MODERNIZE COURTYARD	429,100														
DEMOS BUILDINGS	61,204														
SITE IMPROVEMENTS	1,952,220														
NEW SHOP	3,018,000														
NEW WAREHOUSE	1,036,000														
NEW ADMIN OFFICE BLDG/OP	992,000														
NEW COVERED LAPOUN FACILITY	875,000														
NEW ELECTRICAL TRENCH	4,168,000														
SITE IMPROVEMENTS	244,000														
<b>SUBTOTAL</b>	<b>216,239,771</b>	<b>14,391,499</b>	<b>13,568,533</b>	<b>12,819,813</b>	<b>14,336,530</b>	<b>2,325,000</b>	<b>26,495,919</b>	<b>708,500</b>	<b>1,699,900</b>	<b>373,000</b>	<b>64,975,485</b>	<b>48,781,342</b>	<b>2,423,960</b>	<b>12,816,374</b>	
SITE REQUIREMENTS	3.8%	18,819,858	777,088	878,227	847,981	817,227	1,481,288	1,223,288	28,478	96,488	18,819	2,247,778	2,448,087	121,288	681,718
JOBSITE MANAGEMENT	10.0%	21,632,071	1,435,160	1,399,453	1,293,982	1,434,653	232,550	2,648,590	76,840	100,000	4,488,555	4,178,154	242,988	1,207,431	
PERMITS															
<b>ESTIMATE SUBTOTAL</b>	<b>248,788,818</b>	<b>16,826,659</b>	<b>15,967,986</b>	<b>14,882,871</b>	<b>18,786,510</b>	<b>2,877,750</b>	<b>30,439,984</b>	<b>884,928</b>	<b>1,939,208</b>	<b>426,328</b>	<b>74,888,818</b>	<b>58,975,348</b>	<b>2,745,877</b>	<b>13,893,481</b>	
RESERVE - BONDING	2.5%	6,219,220	412,609	388,296	372,872	489,885	69,844	109,895	21,123	29,880	5,937,478	4,487,889	69,747	347,127	
RESERVE	6.0%	14,848,441	805,277	776,811	748,144	893,828	133,648	1,821,789	41,266	57,980	21,478	3,736,841	2,657,777	139,494	686,273
<b>ESTIMATE SUBTOTAL</b>	<b>301,428,479</b>	<b>17,744,188</b>	<b>16,844,878</b>	<b>16,428,888</b>	<b>20,208,588</b>	<b>3,874,281</b>	<b>32,719,488</b>	<b>955,294</b>	<b>2,048,116</b>	<b>484,728</b>	<b>101,391,233</b>	<b>80,281,260</b>	<b>2,915,118</b>	<b>14,828,871</b>	
DESIGN CONTINGENCY	19.0%	40,112,372	2,691,235	2,568,247	2,403,088	3,031,290	431,142	4,287,710	142,894	186,021	8,281,281	6,248,180	8,842,181	449,888	2,328,811
CONSTRUCTION CONTINGENCY	10.0%	30,746,848	1,774,317	1,688,488	1,603,089	2,026,846	297,423	3,271,847	99,129	138,614	6,008,123	4,628,121	289,912	1,403,881	
SOFT COSTS	30.0%	80,227,944	5,322,450	5,008,484	4,806,176	6,062,519	862,284	9,115,540	295,289	373,842	18,832,108	14,384,349	899,735	4,478,841	
<b>ESTIMATE SUBTOTAL</b>	<b>401,516,442</b>	<b>27,869,397</b>	<b>26,827,317</b>	<b>26,031,899</b>	<b>31,233,616</b>	<b>4,465,176</b>	<b>38,719,832</b>	<b>1,474,166</b>	<b>1,897,517</b>	<b>715,980</b>	<b>126,689,889</b>	<b>95,835,874</b>	<b>4,848,473</b>	<b>23,138,619</b>	
ESCALATION	33.0%	148,188,329	9,391,284	8,790,307	8,368,789	10,314,345	1,566,841	17,105,645	488,714	605,288	40,887,885	31,856,469	1,972,286	7,831,487	
<b>ESTIMATE TOTAL</b>	<b>549,704,771</b>	<b>36,881,088</b>	<b>34,828,554</b>	<b>32,236,895</b>	<b>41,517,262</b>	<b>5,881,877</b>	<b>67,898,276</b>	<b>1,972,232</b>	<b>2,384,805</b>	<b>957,763</b>	<b>168,264,798</b>	<b>128,695,271</b>	<b>6,791,914</b>	<b>30,889,856</b>	





**BUBB ELEMENTARY SCHOOL - ESTIMATE DETAIL**

GSF :

REF	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
1						
2	<b>Project 1 Demo Buildings</b>					
3						
4	Demo existing Units 1 and 2	11,300	SF	7.00	79,100	
5						
6						
7	<b>PROJECT 1 DEMO BUILDINGS</b>				<b>79,100</b>	
8						
9	<b>Project 1 Site Engineering</b>					
10						
11	Site grading, site utilities	123,600	SF	5.00	618,000	
12						
13						
14	<b>PROJECT 1 SITE ENGINEERING</b>				<b>618,000</b>	
15						
16	<b>Project 1 Site Design/Frontage/New Parking/Pickup/Dropoff</b>					
17						
18	Allow for demolition, clearing and grading	65,000	SF	1.50	97,500	100%
19	New asphalt	45,500	SF	5.00	227,500	70%
20	Concrete curbs/walkways	13,000	SF	35.00	455,000	20%
21	Landscaping, incl irrigation	6,500	SF	18.00	117,000	10%
22						
23						
24	<b>PROJECT 1 SITE DESIGN/FRONTAGE/NEW PARKING/PICKUP/DROPOFF</b>				<b>897,000</b>	
25						
26	<b>Project 1 Rebuild Playground</b>					
27						
28	Allow for demolition, clearing and grading	46,000	SF	1.50	69,000	100%
29	New asphalt	46,000	SF	5.00	230,000	
30	New play equipment	2	LOC	50,000.00	100,000	
31						
32						
33	<b>PROJECT 1 REBUILD PLAYGROUND</b>				<b>399,000</b>	
34						
35	<b>Project 1 Replace Buildings</b>					
36						
37	New building construction	20,960	SF	550.00	11,528,000	classrooms
38						
39						
40	<b>PROJECT 1 REPLACE BUILDINGS</b>				<b>11,528,000</b>	
41						
42	<b>Project 2 New Restrooms</b>					
43						
44	New adult restroom for park/playfield - new free-standing restroom (m/w) facility at playfield/ park for use by public	480	SF	400.00	192,000	
45	Drinking station	1	EA	10,000.00	10,000	
46	Walkway	500	SF	35.00	17,500	
47	Extend utilities (500 lf) to restroom (water, sanitary sewer, electrical, data)	500	LF	160.00	80,000	
48						
49						
50	<b>PROJECT 2 NEW RESTROOMS</b>				<b>299,500</b>	
51						
52	<b>Solar Energy</b>					
53						
54	Install roof mounted solar arrays	118	KW	4,500.00	531,000	1-71 kW, 2-47 kW
55						
56						
57	<b>SOLAR ENERGY</b>				<b>531,000</b>	



**HUFF ELEMENTARY SCHOOL - ESTIMATE DETAIL**

REF	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
1						
2	<b>Project 1 Demo Buildings</b>					
3						
4	Demo existing Units 1 and 2	10,219	SF	7.00	71,533	
5						
6						
7	<b>PROJECT 1 DEMO BUILDINGS</b>				<b>71,533</b>	
8						
9	<b>Project 1 Site Engineering</b>					
10						
11	Site grading, site utilities	116,700	SF	5.00	583,500	
12						
13						
14	<b>PROJECT 1 SITE ENGINEERING</b>				<b>583,500</b>	
15						
16	<b>Project 1 Site Design/Frontage/New Parking/Pickup/Dropoff</b>					
17						
18	Allow for demolition, clearing and grading	75,000	SF	1.50	112,500	100%
19	New asphalt	52,500	SF	5.00	262,500	70%
20	Concrete curbs/walkways	15,000	SF	35.00	525,000	20%
21	Landscaping, incl irrigation	7,500	SF	18.00	135,000	10%
22						
23						
24	<b>PROJECT 1 SITE DESIGN/FRONTAGE/NEW PARKING/PICKUP/DROPOFF</b>				<b>1,035,000</b>	
25						
26	<b>Project 1 Rebuild Playground</b>					
27						
28	Allow for demolition, clearing and grading	30,000	SF	1.50	45,000	100%
29	New asphalt	30,000	SF	5.00	150,000	
30	New play equipment	2	LOC	50,000.00	100,000	
31						
32						
33	<b>PROJECT 1 REBUILD PLAYGROUND</b>				<b>295,000</b>	
34						
35	<b>Project 1 Replace Buildings</b>					
36						
37	New building construction	19,500	SF	550.00	10,725,000	classrooms
38						
39						
40	<b>PROJECT 1 REPLACE BUILDINGS</b>				<b>10,725,000</b>	
41						
42	<b>Project 2 New Restrooms</b>					
43						
44	New adult restroom for park/playfield - new free-standing restroom (m/w) facility at playfield/ park for use by public	480	SF	400.00	192,000	
45	Drinking station	1	EA	10,000.00	10,000	
46	Walkway	500	SF	35.00	17,500	
47	Extend utilities (500 lf) to restroom (water, sanitary sewer, electrical, data)	500	LF	160.00	80,000	
48						
49						
50	<b>PROJECT 2 NEW RESTROOMS</b>				<b>299,500</b>	
51						
52	<b>Solar Energy</b>					
53						
54	Install roof mounted solar arrays	110	KW	4,500.00	495,000	1-45 kW, 2-64 kW
55						
56						
57	<b>SOLAR ENERGY</b>				<b>495,000</b>	

LANDELS ELEMENTARY SCHOOL - ESTIMATE DETAIL

REF	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
1						
2	<b>Project 1 Demo Buildings</b>					
3						
4	Demo existing Units 1 and 2	9,774	SF	7.00	68,418	
5						
6						
7	<b>PROJECT 1 DEMO BUILDINGS</b>				<b>68,418</b>	
8						
9	<b>Project 1 Site Engineering</b>					
10						
11	Site grading, site utilities	101,340	SF	5.00	506,700	
12						
13						
14	<b>PROJECT 1 SITE ENGINEERING</b>				<b>506,700</b>	
15						
16	<b>Project 1 Site Design/Frontage/New Parking/Pickup/Dropoff</b>					
17						
18	Allow for demolition, clearing and grading	63,000	SF	1.50	94,500	100%
19	New asphalt	44,100	SF	5.00	220,500	70%
20	Concrete curbs/walkways	12,600	SF	35.00	441,000	20%
21	Landscaping	6,300	SF	18.00	113,400	10%
22						
23						
24	<b>PROJECT 1 SITE DESIGN/FRONTAGE/NEW PARKING/PICKUP/DROPOFF</b>				<b>869,400</b>	
25						
26	<b>Project 1 Rebuild Playground</b>					
27						
28	Allow for demolition, clearing and grading	27,000	SF	1.50	40,500	100%
29	New asphalt	27,000	SF	5.00	135,000	
30	New play equipment	2	LOC	50,000.00	100,000	
31						
32						
33	<b>PROJECT 1 REBUILD PLAYGROUND</b>				<b>275,500</b>	
34						
35	<b>Project 1 Replace Buildings</b>					
36						
37	New building construction	18,900	SF	550.00	10,395,000	classroom
38						
39						
40	<b>PROJECT 1 REPLACE BUILDINGS</b>				<b>10,395,000</b>	
41						
42	<b>Project 2 New Restrooms</b>					
43						
44	New adult restroom for park/playfield - new free-standing restroom (m/w) facility at playfield/ park for use by public	480	SF	400.00	192,000	
45	Drinking station	1	EA	10,000.00	10,000	
46	Walkway	500	SF	35.00	17,500	
47	Extend utilities (500 lf) to restroom (water, sanitary sewer, electrical, data)	500	LF	160.00	80,000	
48						
49						
50	<b>PROJECT 2 NEW RESTROOMS</b>				<b>299,500</b>	
51						
52	<b>Solar Energy</b>					
53						
54	Install roof mounted solar arrays	121	KW	4,500.00	544,500	1-57 KW, 2-64 KW
55						
56						
57	<b>SOLAR ENERGY</b>				<b>544,500</b>	

MISTRAL ELEMENTARY SCHOOL - ESTIMATE DETAIL

REF	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
1						
2	<b>Project 1 New Restrooms</b>					
3						
4	New adult restroom for park/playfield - new free-standing restroom (m/w) facility at playfield/ park for use by public	480	SF	400.00	192,000	
5	Drinking station	1	EA	10,000.00	10,000	
6	Walkway	500	SF	35.00	17,500	
7	Extend utilities (500 lf) to restroom (water, sanitary sewer, electrical, data)	500	LF	160.00	80,000	
8						
9						
10	<b>PROJECT 1 NEW RESTROOMS</b>				<b>299,500</b>	
11						
12	<b>Project 2 Demo Portables</b>					
13						
14	Demo existing portables	5,760	SF	5.00	28,800	
15						
16						
17	<b>PROJECT 2 DEMO PORTABLES</b>				<b>28,800</b>	
18						
19	<b>Project 2 Landscaping And Play Equipment</b>					
20						
21	Allow for demolition, clearing and grading	21,500	SF	1.50	32,250	100%
22	Softscape	10,750	SF	18.00	193,500	50%
23	Specialized play surface	6,450	SF	25.00	161,250	30%
24	Hardscape	4,300	SF	35.00	150,500	20%
25	New play equipment	2	LOC	50,000.00	100,000	
26						
27						
28	<b>PROJECT 2 LANDSCAPING AND PLAY EQUIPMENT</b>				<b>637,500</b>	
29						
30	<b>Project 3 Demo Buildings</b>					
31						
32	Demo existing buildings H/J/K/L	18,860	SF	7.00	132,020	
33						
34						
35	<b>PROJECT 3 DEMO BUILDINGS</b>				<b>132,020</b>	
36						
37	<b>Project 3 Site Engineering</b>					
38						
39	Site grading, site utilities	36,400	SF	5.00	182,000	
40						
41						
42	<b>PROJECT 3 SITE ENGINEERING</b>				<b>182,000</b>	
43						
44	<b>Project 3 Site Design/Landscaping</b>					
45						
46	Allow for demolition, clearing and grading	23,650	SF	1.50	35,475	100%
47	New asphalt	4,730	SF	5.00	23,650	20%
48	Concrete	11,825	SF	35.00	413,875	50%
49	Landscaping	7,095	SF	18.00	127,710	30%
50						
51						
52	<b>PROJECT 3 SITE DESIGN/LANDSCAPING</b>				<b>600,710</b>	



MISTRAL ELEMENTARY SCHOOL - ESTIMATE DETAIL

REF	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
53						
54	<b>Project 3 Replace Buildings</b>					
55						
56	New building construction	25,500	SF	550.00	14,025,000	classroom buildings
57						
58						
59	<b>PROJECT 3 REPLACE BUILDINGS</b>				<b>14,025,000</b>	
60						
61	<b>Solar Energy</b>					
62						
63	Install Solar Arrays (free-standing)	98	KW	4,500.00	441,000	
64						
65						
66	<b>SOLAR ENERGY</b>				<b>441,000</b>	



CASTRO ELEMENTARY SCHOOL - ESTIMATE DETAIL

REF	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
1						
2	<b>Second Level Deck</b>					
3						
4	Construct 2nd level deck over parking	6,300	SF	75.00	472,500	New concrete/steel deck over staff parking area, connect to existing 2nd level deck (Bldg. C) for stair and elevator access.
5						
6						
7	<b>SECOND LEVEL DECK</b>				<b>472,500</b>	
8						
9	<b>Build Three New Flex Rooms</b>					
10						
11	New enclosed structure	3,900	SF	325.00	1,267,500	3 new flex rooms on 2nd level deck, connected to existing 2nd level of Bldg. C
12						
13						
14	<b>BUILD THREE NEW FLEX ROOMS</b>				<b>1,267,500</b>	
15						
16	<b>Build Open Pavilion Deck</b>					
17						
18	New open structure, incl cover, pavers, etc	800	SF	180.00	144,000	Create covered pavilion as informal gathering space/group gathering space on 2nd level deck.
19						
20						
21	<b>BUILD OPEN PAVILION DECK</b>				<b>144,000</b>	
22						
23	<b>Solar Energy</b>					
24						
25	Install roof mounted solar arrays	98	KW	4,500.00	441,000	
26						
27						
28	<b>SOLAR ENERGY</b>				<b>441,000</b>	



**MONTA LOMA ELEMENTARY SCHOOL - ESTIMATE DETAIL**

REF	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
1						
2	<b>Project 1 Demo Buildings</b>					
3						
4	Demo existing nine buildings	24,934	SF	5.00	124,670	
5						
6						
7	<b>PROJECT 1 DEMO BUILDINGS</b>				<b>124,670</b>	
8						
9	<b>Project 1 Site Engineering</b>					
10						
11	Site grading, site utilities	313,500	SF	5.00	1,567,500	
12						
13						
14	<b>PROJECT 1 SITE ENGINEERING</b>				<b>1,567,500</b>	
15						
16	<b>Project 1 Site Design/Landscaping</b>					
17						
18	Allow for demolition, clearing and grading	290,470	SF	1.50	435,705	100%
19	New asphalt	87,141	SF	5.00	435,705	30%
20	Concrete	87,141	SF	35.00	3,049,935	30%
21	Landscaping	116,188	SF	18.00	2,091,384	40%
22						
23						
24	<b>PROJECT 1 SITE DESIGN/LANDSCAPING</b>				<b>6,012,729</b>	
25						
26	<b>Project 1 Replace Buildings</b>					
27						
28	New building construction	32,900	SF	550.00	18,095,000	classroom building
29						
30						
31	<b>PROJECT 1 REPLACE BUILDINGS</b>				<b>18,095,000</b>	
32						
33	<b>Solar Energy</b>					
34						
35	Install roof mounted/free standing solar arrays	148	KW	4,500.00	666,000	148kW
36						
37						
38	<b>SOLAR ENERGY</b>				<b>666,000</b>	



**STEVENSON ELEMENTARY SCHOOL - ESTIMATE DETAIL**

REF	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
1						
2	<b>Solar Energy</b>					
3						
4	Install roof mounted/free-standing solar arrays	171	KW	4,500.00	769,500	170kW
5						
6						
7	<b>SOLAR ENERGY</b>				<b>769,500</b>	



**THEUERKAUF ELEMENTARY SCHOOL - ESTIMATE DETAIL**

REF	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
1						
2	<b>Solar Energy</b>					
3						
4	Install roof mounted solar arrays	224	KW	4,500.00	1,008,000	224kW
5						
6						
7	<b>SOLAR ENERGY</b>				<b>1,008,000</b>	



**VARGAS ELEMENTARY SCHOOL - ESTIMATE DETAIL**

REF	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
1						
2	<b>Solar Energy</b>					
3						
4	Install roof mounted solar arrays	83	KW	4,500.00	373,500	83kW
5						
6						
7	<b>SOLAR ENERGY</b>				<b>373,500</b>	



CRITTENDEN ELEMENTARY SCHOOL - ESTIMATE DETAIL

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
1							
2		<b>Project 1 New Building</b>					
3							
4		Allow for clearing and grading	43,400	SF	1.50	65,100	100%
5		New building construction	43,400	SF	500.00	21,700,000	admin/MUR/classroom
6		Reconfigure parking/pickup/dropoff	1	LS	75,000.00	75,000	
7							
8							
9		<b>PROJECT 1 NEW BUILDING</b>				<b>21,840,100</b>	
10							
11		<b>Project 1 Demo Buildings</b>					
12							
13		Demo wood framed structures	25,040	SF	7.00	175,280	
14							
15							
16		<b>PROJECT 1 DEMO BUILDINGS</b>				<b>175,280</b>	
17							
18		<b>Project 1 Site Engineering</b>					
19							
20		Site grading, site utilities	189,500	SF	5.00	947,500	
21							
22							
23		<b>PROJECT 1 SITE ENGINEERING</b>				<b>947,500</b>	
24							
25		<b>Project 1 Site Design/Landscaping/Improvements</b>					
26							
27		Allow for demolition, clearing and grading	163,500	SF	1.50	245,250	100%
28		Asphalt	65,400	SF	5.00	327,000	40%
29		Concrete	65,400	SF	35.00	2,289,000	40%
30		Softscape	32,700	SF	18.00	588,600	20%
31							
32							
33		<b>PROJECT 1 SITE DESIGN/LANDSCAPING/IMPROVEMENTS</b>				<b>3,449,850</b>	
34							
35		<b>Project 2 New Buildings</b>					
36							
37		New building construction	33,900	SF	575.00	19,492,500	STEM classroom
38							
39							
40		<b>PROJECT 2 NEW BUILDINGS</b>				<b>19,492,500</b>	
41							
42		<b>Project 2 Demo Building</b>					
43							
44		Demo existing building	17,705	SF	7.00	123,935	
45							
46							
47		<b>PROJECT 2 DEMO BUILDING</b>				<b>123,935</b>	
48							
49		<b>Project 2 Site Engineering</b>					
50							
51		Site grading, site utilities	46,950	SF	5.00	234,750	
52							
53							
54		<b>PROJECT 2 SITE ENGINEERING</b>				<b>234,750</b>	
55							
56		<b>Project 2 Site Design/Landscaping/Improvements</b>					
57							
58		Allow for demolition, clearing and grading	26,600	SF	5.00	133,000	100%
59		Concrete	15,960	SF	35.00	558,600	60%
60		Softscape	10,640	SF	18.00	191,520	40%
61							
62							
63		<b>PROJECT 2 SITE DESIGN/LANDSCAPING/IMPROVEMENTS</b>				<b>883,120</b>	
64							



CRITTENDEN ELEMENTARY SCHOOL - ESTIMATE DETAIL

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
65		<b>Project 3 New Buildings</b>					
66							
67		New building construction	26,100	SF	550.00	14,355,000	classrooms
68							
69							
70		<b>PROJECT 3 NEW BUILDINGS</b>				<b>14,355,000</b>	
71							
72		<b>Project 3 Demo Building</b>					
73							
74		Demo existing building	16,140	SF	7.00	112,980	
75							
76							
77		<b>PROJECT 3 DEMO BUILDING</b>				<b>112,980</b>	
78							
79		<b>Project 3 Site Engineering</b>					
80							
81		Site grading, site utilities	74,950	SF	5.00	374,750	
82							
83							
84		<b>PROJECT 3 SITE ENGINEERING</b>				<b>374,750</b>	
85							
86		<b>Project 3 Site Design/Landscaping/Improvements</b>					
87							
88		Allow for demolition, clearing and grading	59,300	SF	1.50	88,950	100%
89		Asphalt	23,720	SF	5.00	118,600	40%
90		Concrete	23,720	SF	35.00	830,200	40%
91		Softscape	11,860	SF	18.00	213,480	20%
92							
93							
94		<b>PROJECT 3 SITE DESIGN/LANDSCAPING/IMPROVEMENTS</b>				<b>1,251,230</b>	
95							
96		<b>Solar Energy</b>					
97							
98		Install roof mounted/free standing	381	KW	4,500.00	1,714,500	169KW
99							
100							
101		<b>SOLAR ENERGY</b>				<b>1,714,500</b>	



GRAHAM ELEMENTARY SCHOOL - ESTIMATE DETAIL

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
1							
2		<b>Project 1A Demo Mot &amp; Portables</b>					
3							
4		Demo existing	5,760	SF	7.00	40,320	
5							
6							
7		<b>PROJECT 1A DEMO MOT &amp; PORTABLES</b>				<b>40,320</b>	
8							
9		<b>Project 1A Site Engineering</b>					
10							
11		Site grading, site utilities	82,800	SF	5.00	414,000	
12							
13							
14		<b>PROJECT 1A SITE ENGINEERING</b>				<b>414,000</b>	
15							
16		<b>Project 1A New Buildings</b>					
17							
18		New building construction	25,900	SF	550.00	14,245,000	MOT/preschool
19							
20							
21		<b>PROJECT 1A NEW BUILDINGS</b>				<b>14,245,000</b>	
22							
23		<b>Project 1A Site Design/Landscaping/Improvements</b>					
24							
25		Allow for demolition, clearing and grading	67,300	SF	1.50	100,950	100%
26		Asphalt	13,460	SF	5.00	67,300	20%
27		Concrete	26,920	SF	35.00	942,200	40%
28		Softscape	26,920	SF	18.00	484,560	40%
29							
30							
31		<b>PROJECT 1A SITE DESIGN/LANDSCAPING/IMPROVEMENTS</b>				<b>1,595,010</b>	
32							
33		<b>Project 1B Demo Building</b>					
34							
35		Demo existing	15,220	SF	7.00	106,540	
36							
37							
38		<b>PROJECT 1B DEMO BUILDING</b>				<b>106,540</b>	
39							
40		<b>Project 1B Site Engineering</b>					
41							
42		Site grading, site utilities, site amenities/student use areas	24,800	SF	10.00	248,000	
43							
44							
45		<b>PROJECT 1B SITE ENGINEERING</b>				<b>248,000</b>	
46							
47		<b>Project 1B New Buildings</b>					
48							
49		New building construction	11,100	SF	550.00	6,105,000	classrooms
50							
51							
52		<b>PROJECT 1B NEW BUILDINGS</b>				<b>6,105,000</b>	
53							
54		<b>Project 1B New Library In Renovated Bldg</b>					
55							
56		Renovation	4,784	SF	300.00	1,435,200	
57							
58							
59		<b>PROJECT 1B NEW LIBRARY IN RENOVATED BLDG</b>				<b>1,435,200</b>	
60							



GRAHAM ELEMENTARY SCHOOL - ESTIMATE DETAIL

REF	PRIORITY	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
61		<b>Project 2 Demo Building</b>					
62							
63		Demo existing building	22,396	SF	7.00	156,772	
64							
65							
66		<b>PROJECT 2 DEMO BUILDING</b>				<b>156,772</b>	
67							
68		<b>Project 2 Site Engineering</b>					
69							
70		Site grading, site utilities	140,000	SF	5.00	700,000	
71							
72							
73		<b>PROJECT 2 SITE ENGINEERING</b>				<b>700,000</b>	
74							
75		<b>Project 2 Site Frontage Improvements</b>					
76							
77		Expand pickup/dropoff/parking	55,000	SF	23.00	1,265,000	100%
78							
79							
80		<b>PROJECT 2 SITE FRONTAGE IMPROVEMENTS</b>				<b>1,265,000</b>	
81							
82		<b>Project 2 Site Design/Landscaping/Improvements</b>					
83							
84		Landscaped courtyards	48,000	SF	18.00	864,000	100%
85							
86							
87		<b>PROJECT 2 SITE DESIGN/LANDSCAPING/IMPROVEMENTS</b>				<b>864,000</b>	
88							
89		<b>Project 2 New Buildings</b>					
90							
91		New building construction	8,800	SF	550.00	4,840,000	admin facility
92							
93							
94		<b>PROJECT 2 NEW BUILDINGS</b>				<b>4,840,000</b>	
95							
96		<b>Project 2 New Mur/Kitchen/Snack Shack</b>					
97							
98		New building construction	11,600	SF	650.00	7,540,000	Excludes kitchen equipment
99							
100							
101		<b>PROJECT 2 NEW MUR/KITCHEN/SNACK SHACK</b>				<b>7,540,000</b>	
102							
103		<b>Project 2 New Classroom Building</b>					
104							
105		New building construction	13,900	SF	550.00	7,645,000	
106							
107							
108		<b>PROJECT 2 NEW CLASSROOM BUILDING</b>				<b>7,645,000</b>	
109							
110		<b>Solar Energy</b>					
111							
112		Install roof mounted/free standing solar arrays	347	KW	4,500.00	1,561,500	350kW
113							
114							
115		<b>SOLAR ENERGY</b>				<b>1,561,500</b>	



MONTECITO PRESCHOOL - ESTIMATE DETAIL

REF	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
1						
2	<b>Modernize Portables For Classroom And Office</b>					
3						
4	Modernize portables for new preschool classrooms & office	12,480	SF	160.00	1,996,800	
5						
6						
7	<b>MODERNIZE PORTABLES FOR CLASSROOM AND OFFICE</b>				<b>1,996,800</b>	
8						
9	<b>Modernize Courtyard</b>					
10						
11	Allow for demolition, clearing and grading	9,400	SF	1.50	14,100	100%
12	Concrete	5,640	SF	35.00	197,400	60%
13	Softscape	3,760	SF	18.00	67,680	40%
14	New Playground/Play Areas	3	LOC	50,000.00	150,000	
15						
16						
17	<b>MODERNIZE COURTYARD</b>				<b>429,180</b>	



COOPER - ESTIMATE DETAIL

REF	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
1						
2	<b>Demo Buildings</b>					
3						
4	Demo existing	9,042	SF	7.00	63,294	
5						
6						
7	<b>DEMO BUILDINGS</b>				<b>63,294</b>	
8						
9	<b>Site Improvements</b>					
10						
11	Allow for demolition, clearing and grading	134,900	SF	1.50	202,350	100%
12	Asphalt	121,410	SF	5.00	607,050	
13	Softscape	13,490	SF	18.00	242,820	
14						
15						
16	<b>SITE IMPROVEMENTS</b>				<b>1,052,220</b>	
17						
18	<b>New Shop</b>					
19						
20	New shop (metal, wood weld)	6,700	SF	450.00	3,015,000	Shop facility for metal, wood and welding work. Specialized ventilation to contain airborne particulates/gases. 15' tall. Steel frame structure.
21						
22						
23	<b>NEW SHOP</b>				<b>3,015,000</b>	
24						
25	<b>New Warehouse</b>					
26						
27	New warehouse	10,300	SF	100.00	1,030,000	High-bay warehouse, torckintight truck accessible, storage racks and oversized items. 25' tall. Steel frame structure.
28						
29						
30	<b>NEW WAREHOUSE</b>				<b>1,030,000</b>	
31						
32	<b>New Admin/Office Building</b>					
33						
34	New building	1,800	SF	550.00	990,000	Offices for 4 pns, conference & break rm for 20 pns (2), restrooms/kitchen/lockers/shower. 15' tall. Wood or steel frame structure.
35						
36						
37	<b>NEW ADMIN/OFFICE BUILDING</b>				<b>990,000</b>	
38						
39	<b>New Covered Laydown Facility</b>					
40						
41	New covered laydown facility	5,000	SF	175.00	875,000	Open-sided covered structure for material and equipment laydown.
42						
43						
44	<b>NEW COVERED LAYDOWN FACILITY</b>				<b>875,000</b>	
45						
46	<b>Vehicle Laydown</b>					
47						
48	Vehicle laydown					See Site improvements
49						
50						
51	<b>VEHICLE LAYDOWN</b>					
52						





COOPER - ESTIMATE DETAIL

REF	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
53	<b>New District Kitchen</b>					
54						
55	New kitchen building	6,400	SF	650.00	4,160,000	Excludes kitchen equipment
56						
57						
58	<b>NEW DISTRICT KITCHEN</b>				<b>4,160,000</b>	
59						
60	<b>Site Improvements</b>					
61						
62	Allow for demolition, clearing and grading	28,800	SF	1.50	43,200	100%
63	Asphalt	28,800	SF	5.00	144,000	
64	Softscape	3,200	SF	18.00	57,600	
65						
66						
67	<b>SITE IMPROVEMENTS</b>				<b>244,800</b>	
68						
69	<b>Solar Energy</b>					
70						
71	Install roof mounted solar arrays	9,200	SF	70.00	644,000	
72						
73						
74	<b>SOLAR ENERGY</b>				<b>644,000</b>	





Mountain View  
Whisman  
School District

NORTH BAYSHORE  
URBAN SCHOOL STUDY  
**APPENDIX G**



MVWSD MASTER FACILITIES PLAN

November 2019





Mountain View  
Whisman  
School District

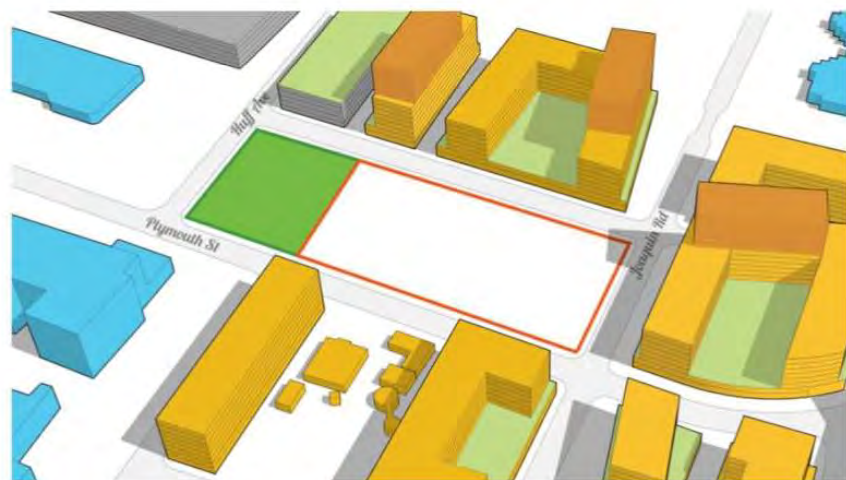
# Site Analysis performed by Google

# Shadow Analysis

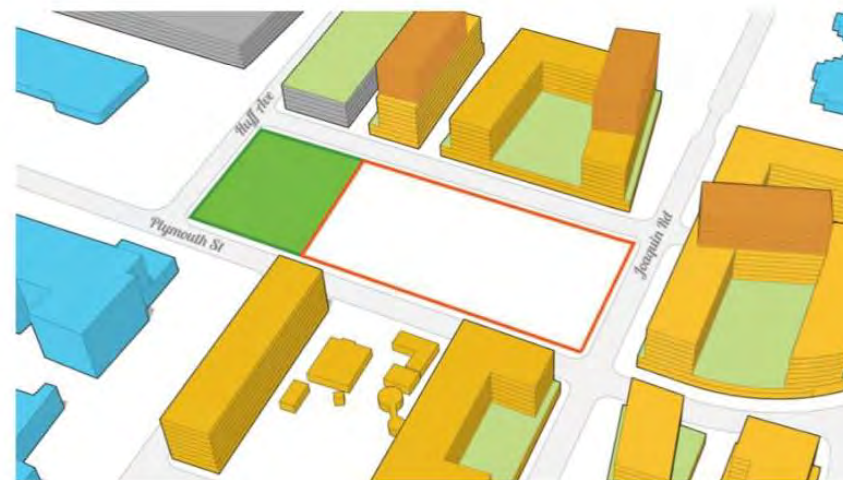
SUMMER SOLSTICE – JUNE 21

**\*Updated March 26, 2019 to identify surrounding land use**

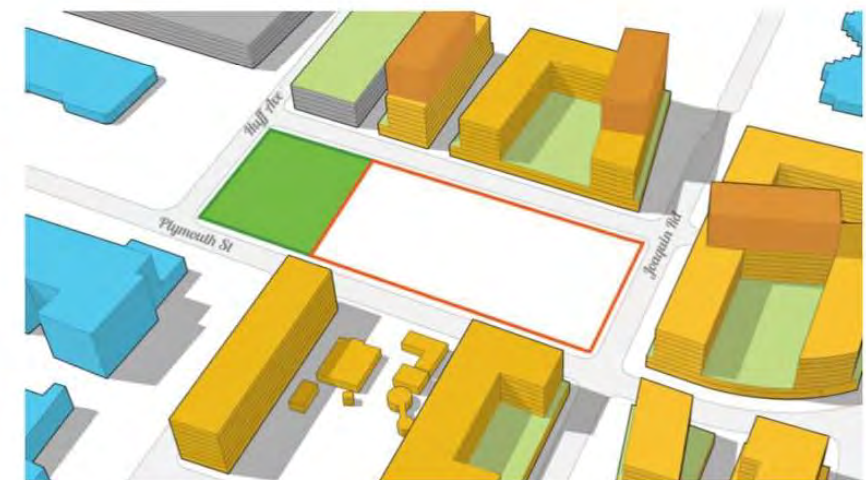
*NOTE: Conceptual only, to be further studied by shadow consultant*










**9 AM**



**NOON**



**3 PM**

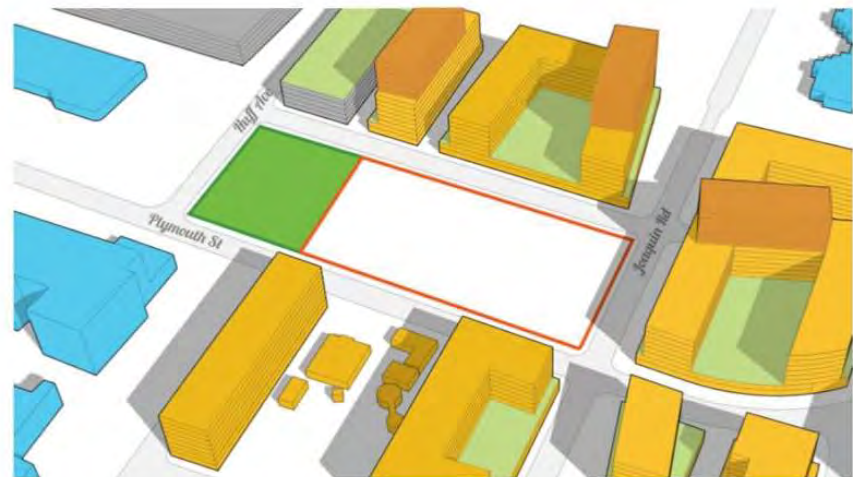
-  PROPOSED SCHOOL SITE
-  SHARED OPEN SPACE
-  PODIUM COURTYARD
-  8-STORY RESIDENTIAL
-  14-STORY RESIDENTIAL
-  OFFICE
-  PARKING

# Shadow Analysis

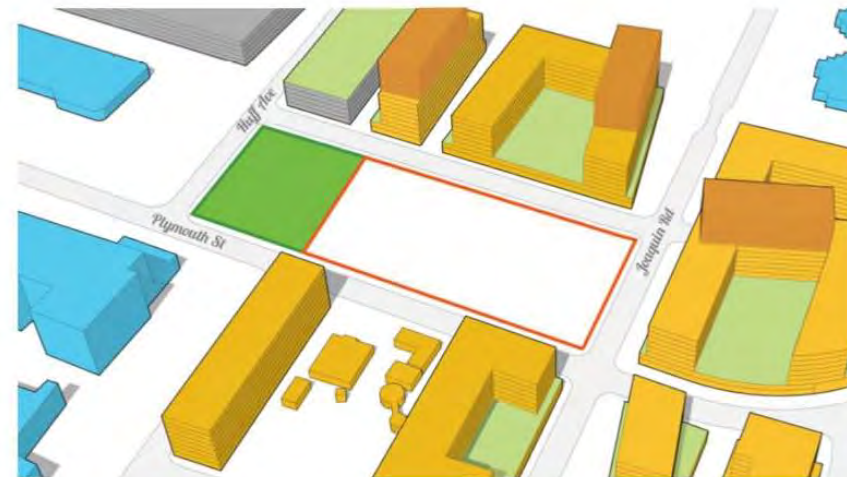
EQUINOX – SEPTEMBER 23

**\*Updated March 26, 2019 to identify surrounding land use**

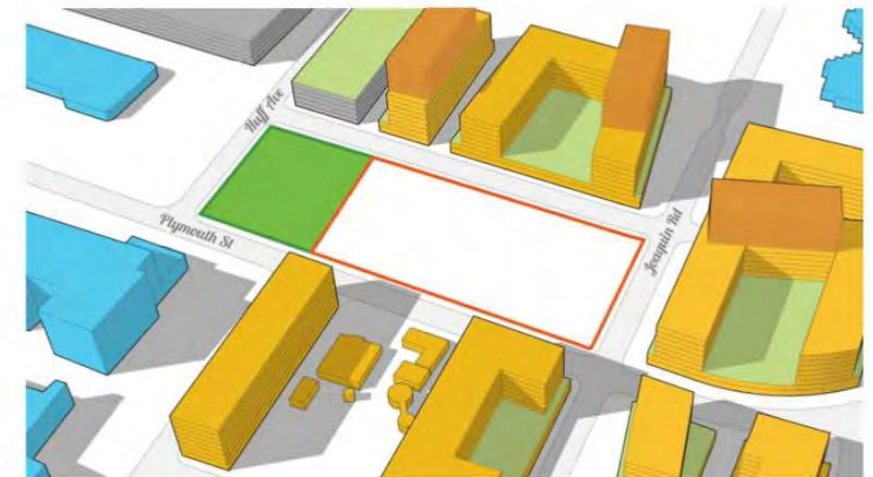
*NOTE: Conceptual only, to be further studied by shadow consultant*










**9 AM**



**NOON**



**3 PM**

-  PROPOSED SCHOOL SITE
-  SHARED OPEN SPACE
-  PODIUM COURTYARD
-  8-STORY RESIDENTIAL
-  14-STORY RESIDENTIAL
-  OFFICE
-  PARKING

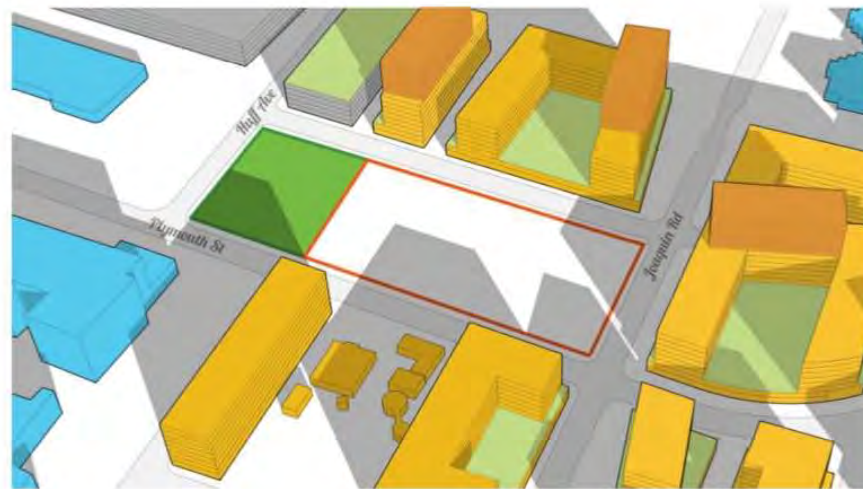
# Shadow Analysis

WINTER SOLSTICE – DECEMBER 21

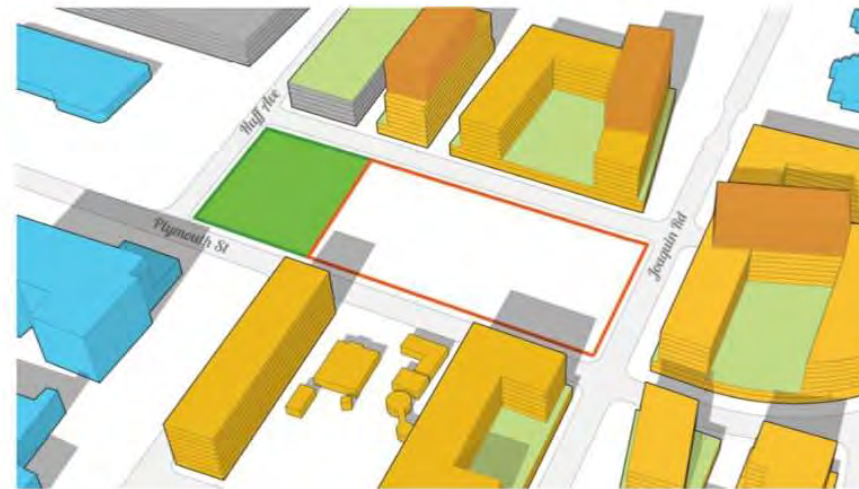
**\*Updated March 26, 2019 to identify surrounding land use**

*NOTE: Conceptual only, to be further studied by shadow consultant*

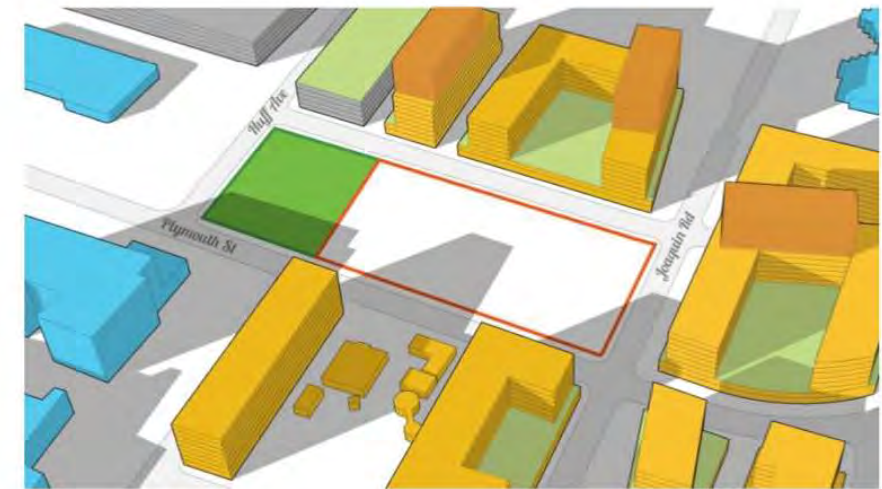
Max impact during potential winter break



9 AM



NOON



3 PM

- PROPOSED SCHOOL SITE
- SHARED OPEN SPACE
- PODIUM COURTYARD
- 8-STORY RESIDENTIAL
- 14-STORY RESIDENTIAL
- OFFICE
- PARKING

**MAX IMPACT:**  
Shadow impact from mid-rise buildings to the south and east

Shadow impact from mid-rise buildings to the south



# Travel routes

## Pedestrian and Bicycle Connectivity

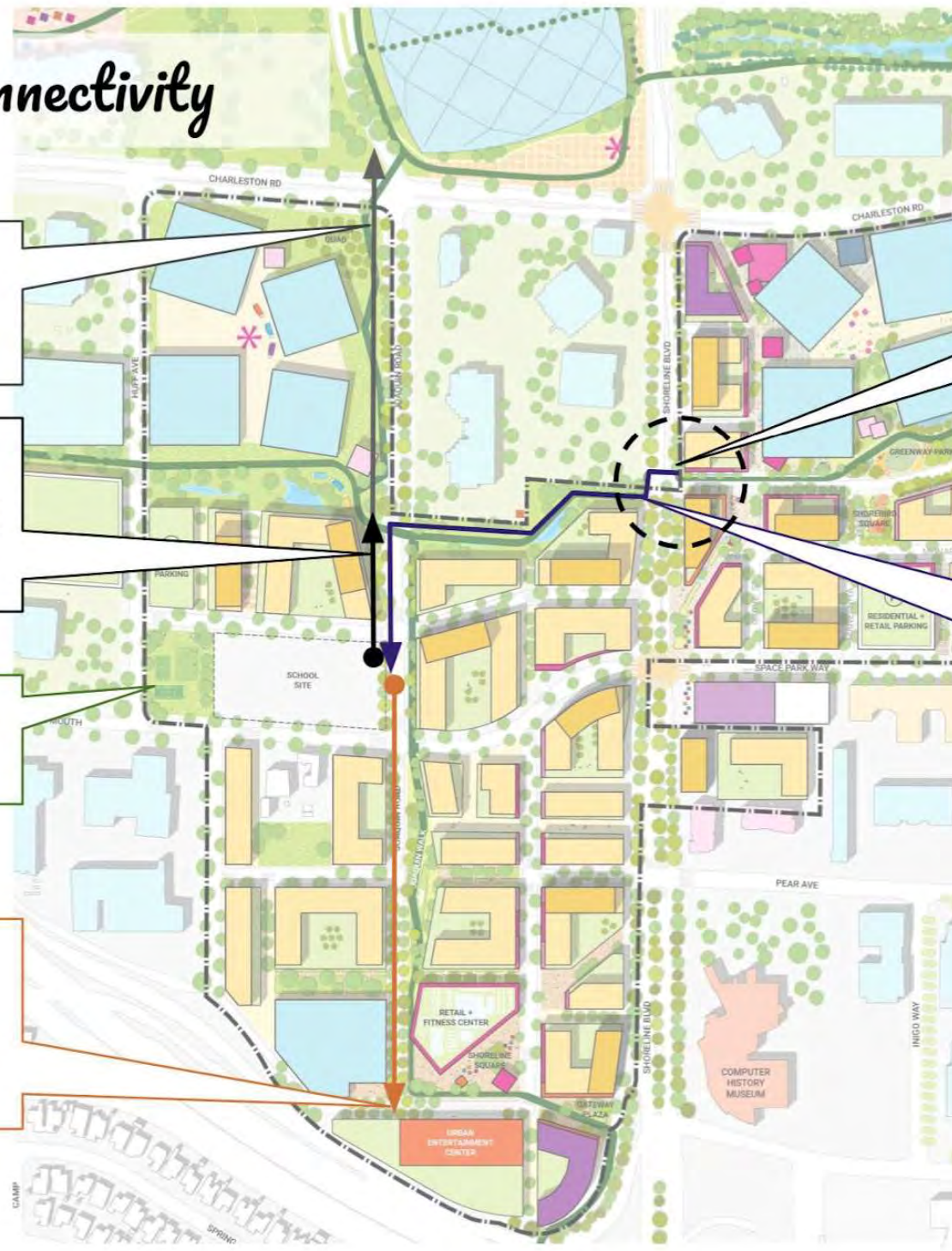
\*New March 26, 2019

5-7 min walk  
to Charleston Park

1-2 min walk  
to neighborhood  
open space

Adjacent  
recreation

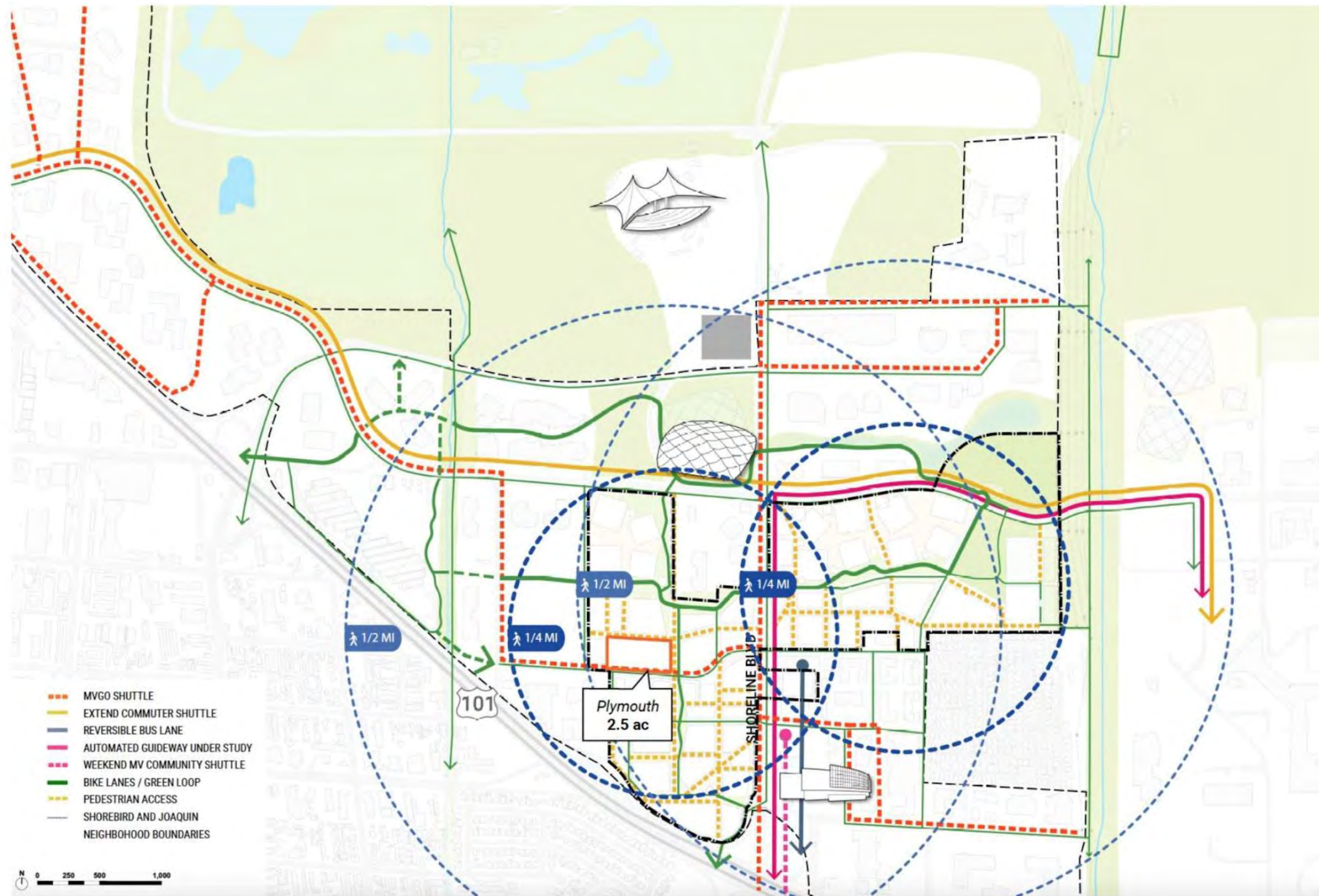
5-7 min walk  
to Entertainment  
Center



**Pedestrian and bike  
priority design** at  
intersection to slow traffic and  
ensure safe route for  
pedestrians and bicyclists

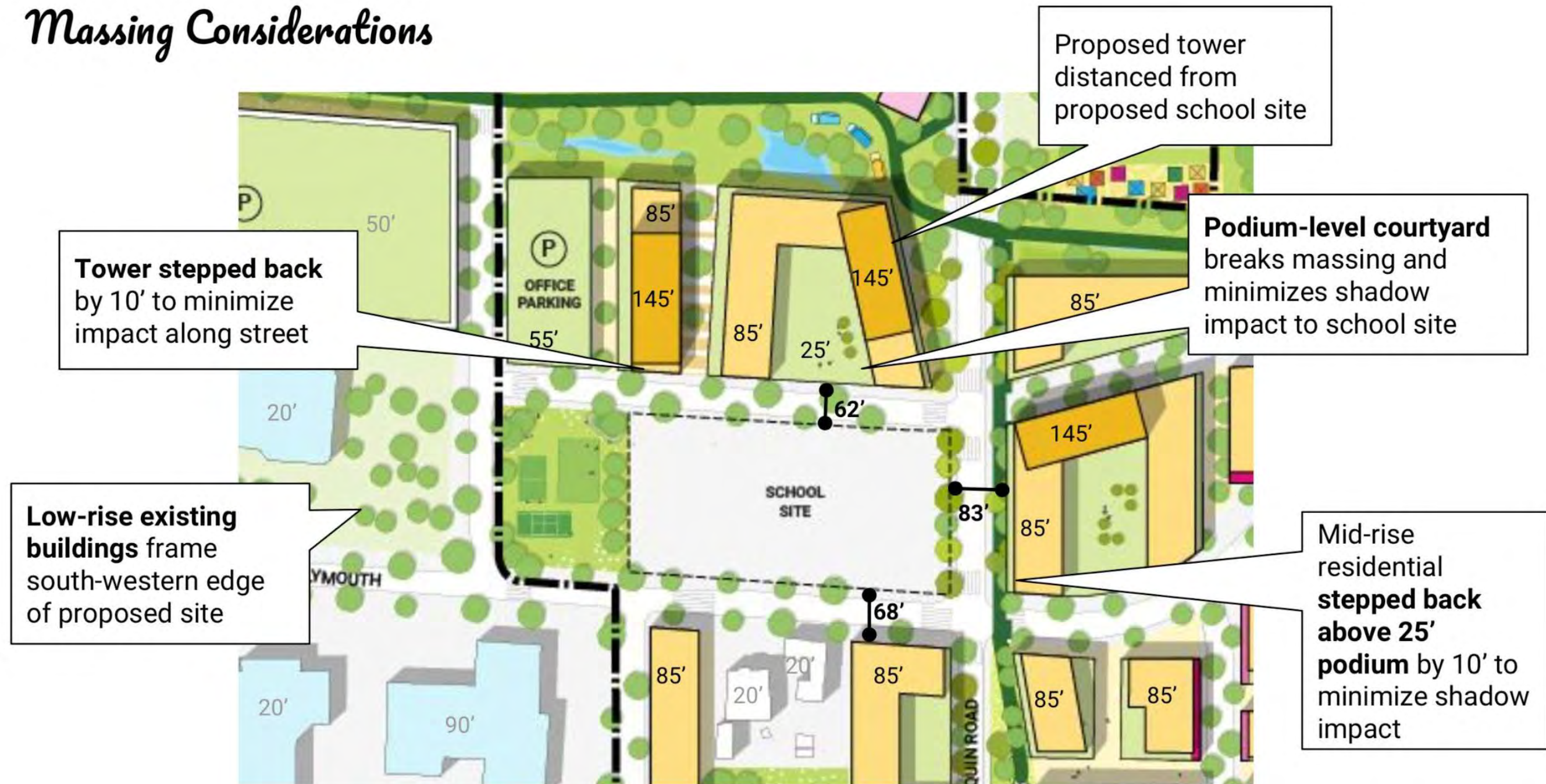
**5-7 min safe route  
to school  
from Shorebird**

# Travel routes



# Canyon effect caused by surrounding buildings

## Massing Considerations



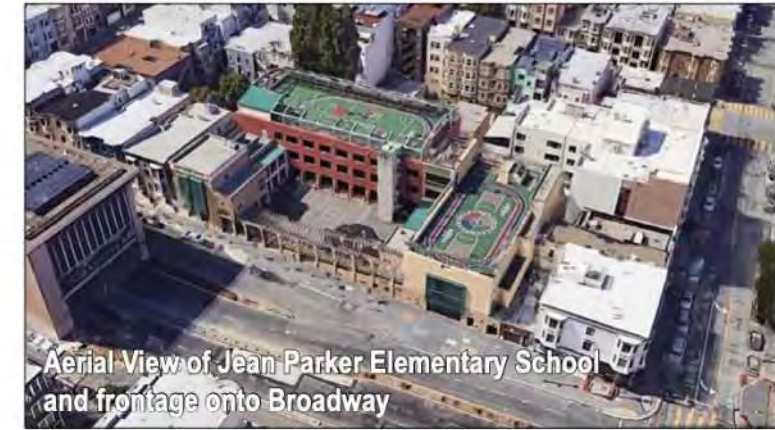


Mountain View  
Whisman  
School District

# Lessons learned



Rooftop Play Area with Fencing for Grades 3-5



Aerial View of Jean Parker Elementary School and frontage onto Broadway



Ground Level PLANS NOT TO SCALE



Rooftop Play Area with Fencing for Grades 3-5 on Level 3

Ground Level Playcourt for K-1



Level 2 Hallway leading to Library



Entry Gate and Ground Level Courtyard (View from Office)



Multi-Use Room (MUR) accessible from Courtyard



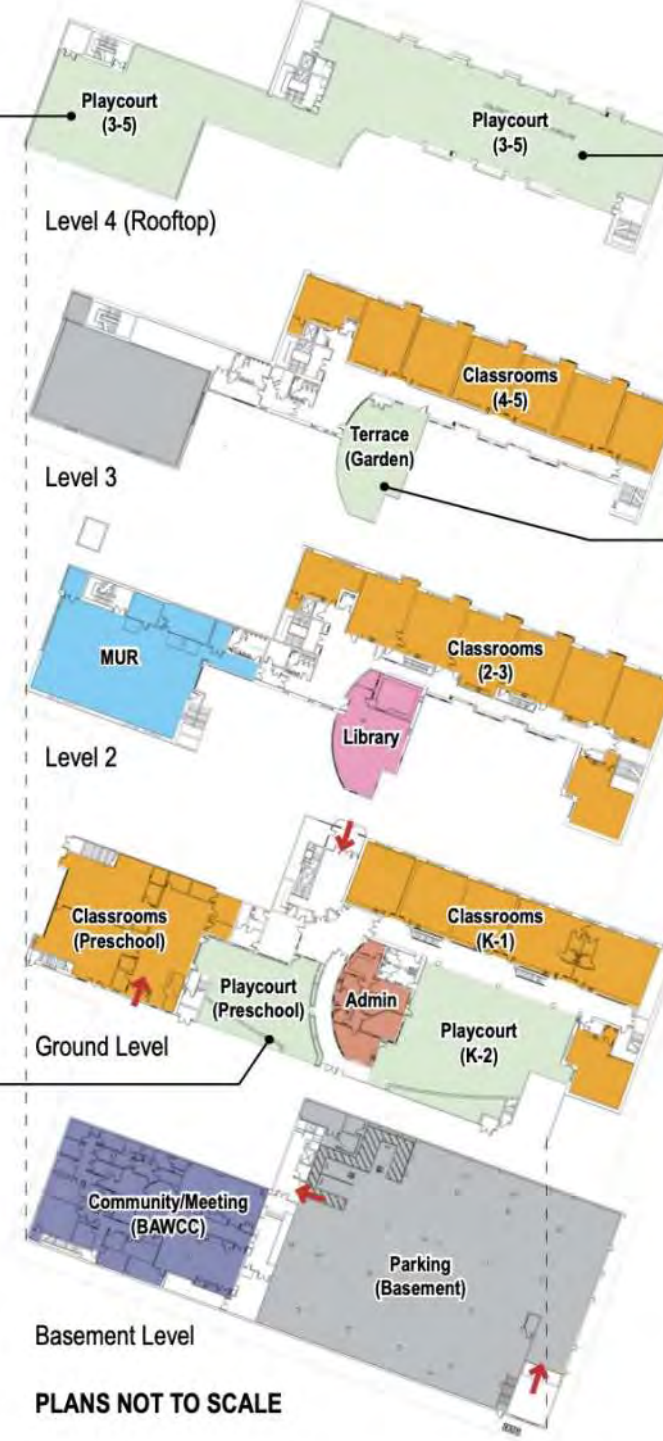
# Lessons Learned

## Jean Parker Elementary School

- Provide shared facilities for students on upper levels (e.g., library on 2<sup>nd</sup> level, rooftop playcourt on 3<sup>rd</sup> level)
- Provide faculty/admin facilities on upper levels
- Use covered walkways/breezeways along south face of classrooms to shade classroom spaces
- Orient windows in classrooms to the north for natural daylight
- Maximize single-loaded corridors & orient to courtyards
- Create villages/communities on the upper levels



Rooftop Play Area at Level 4 with Storage and Stairs



Rooftop Play Area at Level 4



Community/Faculty Garden on Rooftop at Level 3



Preschool Play Area on Ground Level (over Basement)



Aerial View of Tenderloin Community Elementary School

# Lessons Learned

## Tenderloin Community Elem. School

- Minimize double-loading corridors
- End long corridors with shared facilities or open spaces
- Minimize south-facing classroom spaces
- Use shade structures and softscape on rooftop play areas
- Provide direct connections between MUR & open play areas
- Provide daylight into interior spaces



**Aerial View** over North 6th Street/East Santa Clara Street



**Aerial View** over North 7th Street



# Lessons Learned

## Horace Mann Elementary School

- Provide shared facilities for students on upper levels (e.g., library on 2<sup>nd</sup> level, rooftop playcourt on 3<sup>rd</sup> level)
- Provide faculty/admin facilities on upper levels
- MUR adjacent to open play areas and outdoor courtyards
- Direct service access to MUR from street
- Multiple controlled campus entrances from street edges
- Curbside pickup/dropoff
- Street trees shade/cool multi-story buildings & open play areas

**Rooftop Play Area with Field Turf, Green Roof, and Netting**



**Landscaped Gathering Area on Page Street Campus**



**Aerial View of Urban School of San Francisco Campuses**



**Upper Level Informal Student Gathering Spaces overlooking Gym**



**Upper Level Classrooms and Informal Student Gathering Spaces overlooking Park**



# Lessons Learned

## Urban School of San Francisco

- Vary surfaces and furnishings on rooftop play areas (e.g. lawn, benches, gardens, terraces)
- Place trees alongside rooftop play areas to provide shade
- Be creative about rooftop containment fencing/enclosures
- Provide visual connections to exterior landscapes
- Use large, multi-story open spaces to connect upper level spaces
- Provide informal gathering areas on all levels
- Provide indoor/outdoor visual & physical connectivity

Upper Level Gym with Extensive Daylighting



Main Entrance to Nueva School from E. 28th Ave.



Idea Lab with Operable Interior and Exterior Walls

Aerial View of Nueva School/ San Mateo Campus



Rooftop Landscaped Terrace on Level 2

Lobby Area from E. 28th Ave.



# Lessons Learned

## Nueva School


- Use rooftop terraces/gardens as extensions of interior common areas
- Maximize flexible interior/exterior wall systems to connect spaces



Mountain View  
Whisman  
School District

# Preliminary Site Concepts

*Source References*  
 1-City of Mountain View Development Update (Nov 2018)  
 2-City of Mountain View Development Update (May 2018)  
 3-Mountain View Voice (11/2/2018)  
 4-Mountain View Voice (11/26/2018)  
 5-Shoreline Gateway Master Plan (11/30/18)




**CHARLESTON EAST<sup>1</sup>**  
**Google**  
 2000 North Shoreline Blvd.  
 Commercial Office  
 595k sf, 18.6 acres

**SHORELINE TECH CTR<sup>4</sup>**  
**Google** (Lessee and Land Acquisition)  
 2011-2091 Stierlin Court  
 Commercial Office (Existing)  
 800k sf, 51.8 Acres



**SHASHI HOTEL<sup>1</sup>**  
**Shashi**  
 1625 North Shoreline Blvd.  
 Hotel  
 200 Rooms/104k sf, 1.39 acres



**1255 PEAR AVE<sup>1</sup>**  
**Sobrato**  
 Commercial/Residential  
 635 Residential Units  
 Commercial-409k sf, 15.5 acres



**CORPORATE CAMPUS<sup>1</sup>**  
**Microsoft**  
 1045-1085 La Avenida Street  
 Commercial Office  
 643k sf, 32 acres



**SHORELINE GATEWAY<sup>5</sup>**  
**SyWest**  
 Commercial Office/Residential  
 742 Residential Units  
 885k sf (Office), 15.8 Acres



**1625 PLYMOUTH<sup>2</sup>**  
**Google** (leased from Broadreach Capital)  
 1625 Plymouth Street  
 Commercial Office  
 245k sf, 5.15 Acres

**PARKING STRUCTURE<sup>3</sup>**  
**Google**  
 Huff Ave. Site  
 1,792 Parking Stalls (replace Shoreline leased parking)  
 8 Acres



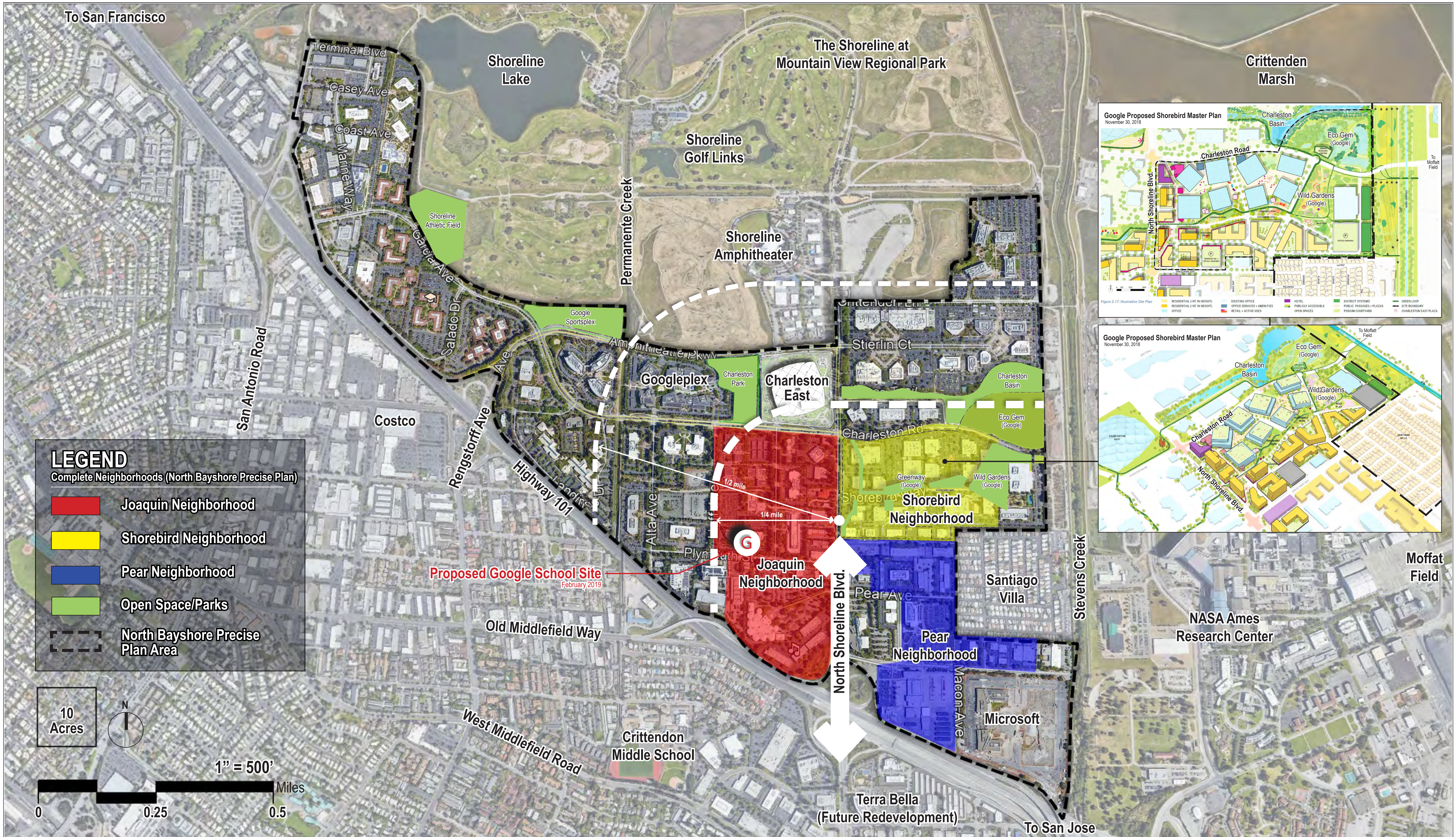
**LANDINGS PROJECT<sup>3</sup>**  
**Google**  
 2171 Landings Drive  
 Commercial Office (2020)  
 800k sf, 1,408 Parking Stalls

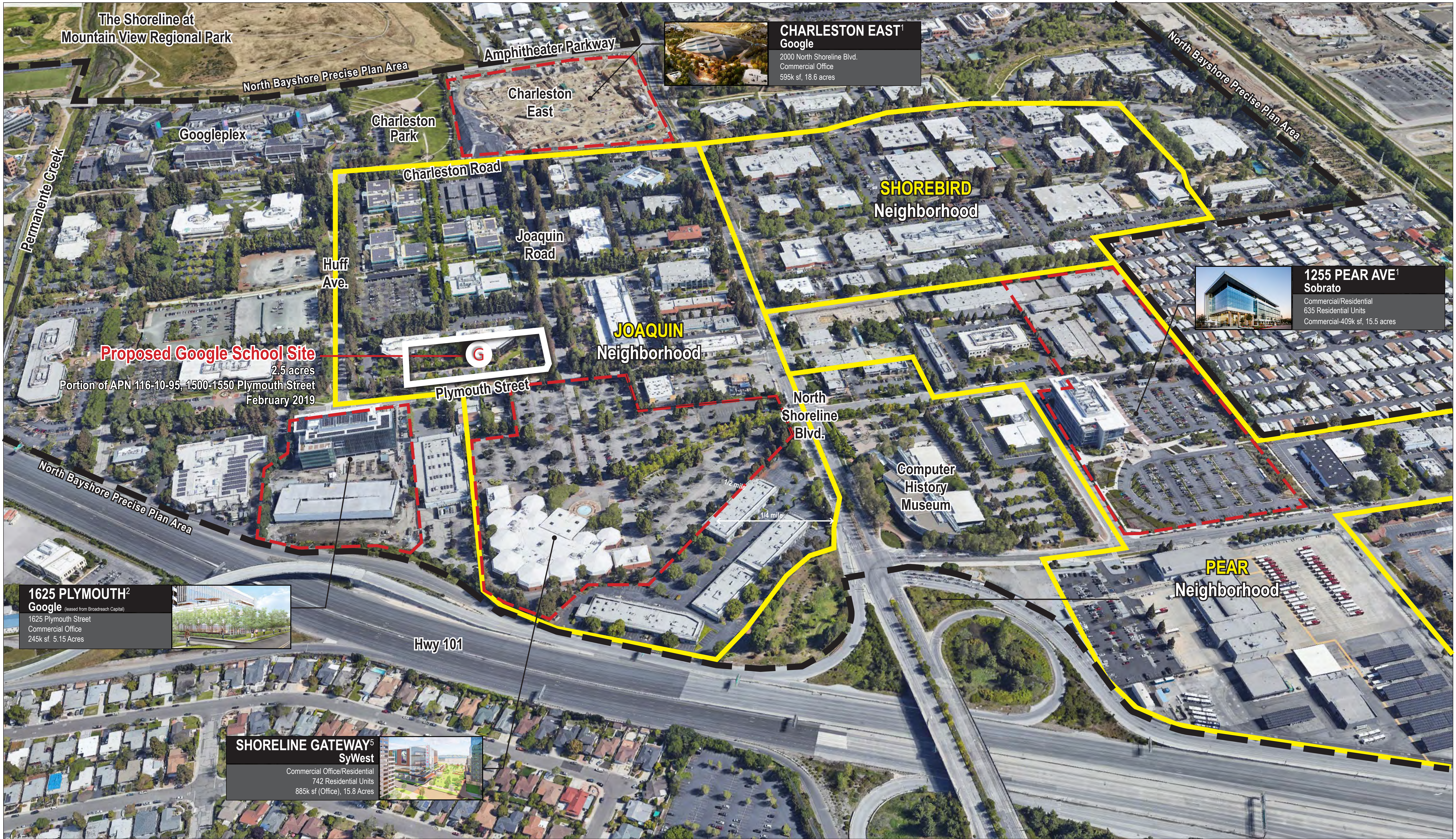
**Proposed Google School Site**  
 February 2019

**Terra Bella**  
 (Future Redevelopment)









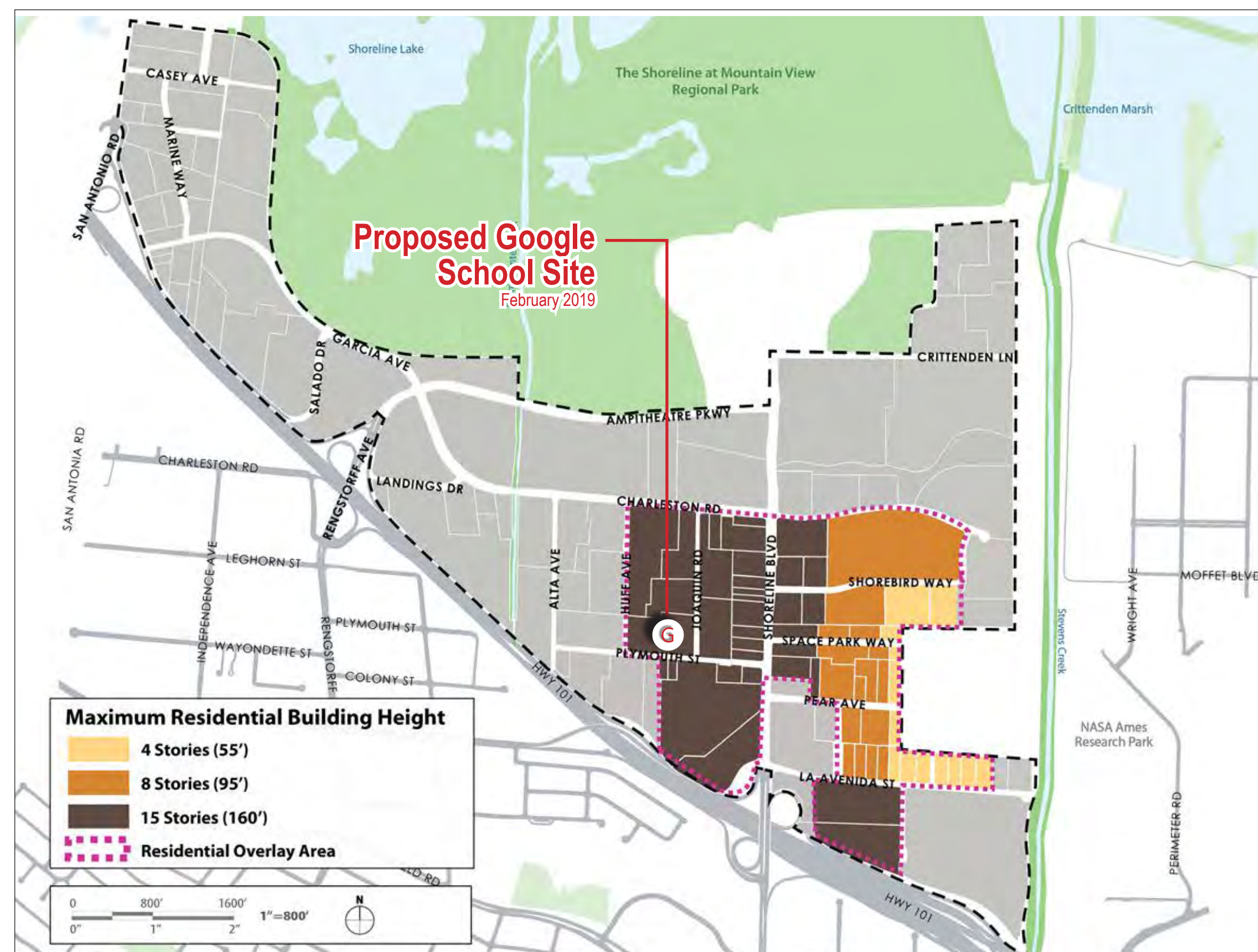
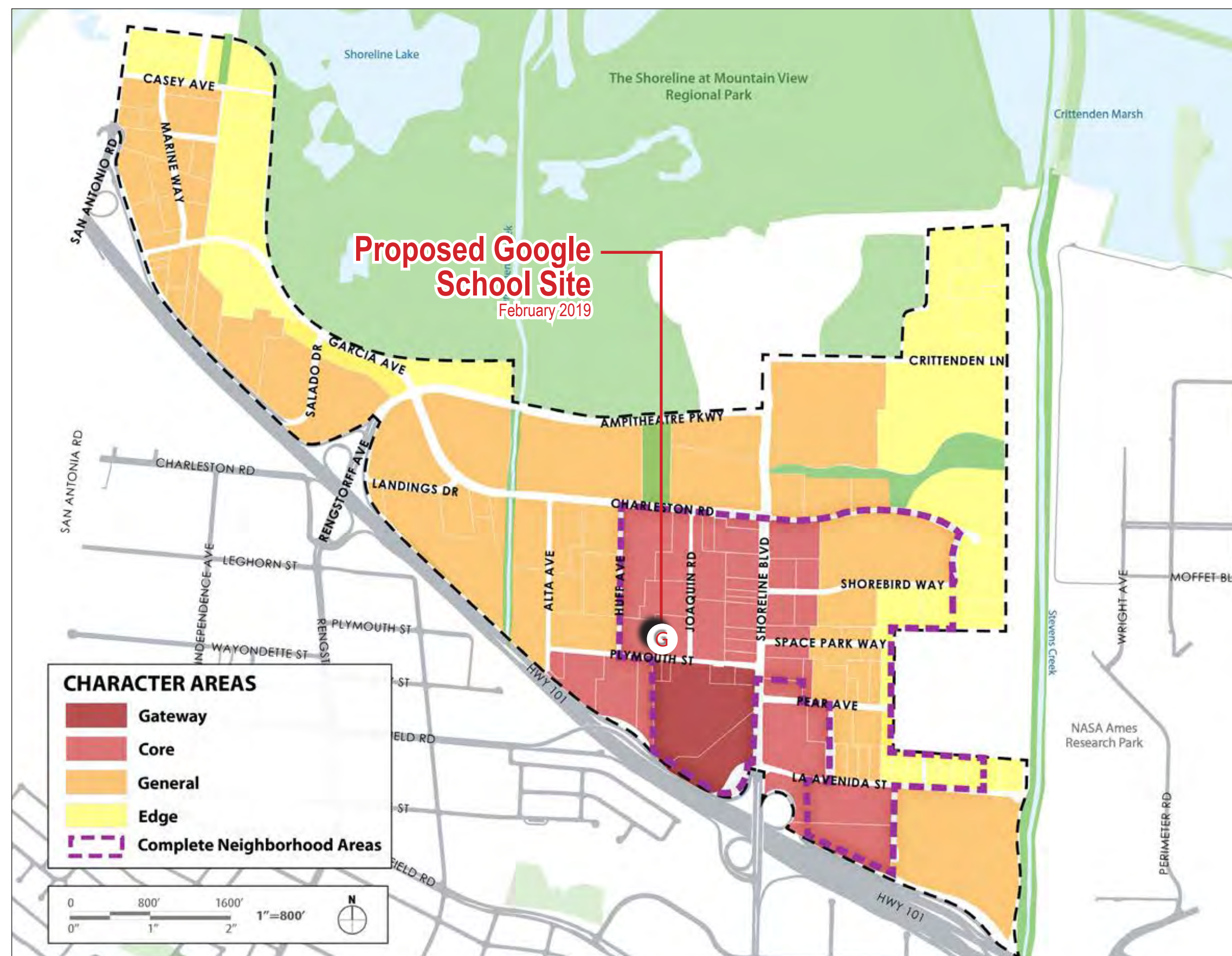


Table 2: Targets for Complete Neighborhood Areas

	JOAQUIN NEIGHBORHOOD	SHOREBIRD NEIGHBORHOOD	PEAR NEIGHBORHOOD
<b>Size</b>	68 acres	43 acres	43 acres
<b>Residential Units*</b>	3,950 units	2,950 units	2,950 units
<b>Affordable Housing Units**</b>	790 units	590 units	590 units
<b>Employment***1</b>	2,500,000 sf	1,500,000 sf	1,000,000 sf
<b>Retail and Entertainment****1</b>	240,000 sf	15,000 sf	35,000 sf
<b>Hotel</b>	200 rooms	0	200 rooms
<b>Public Open Space (minimum)</b>	Community park; Neighborhood park	Neighborhood park	Neighborhood park

\*The North Bayshore district has a housing unit mix goal of 40% micro-unit/studios; 30% 1 bedroom units; 20% 2 bedroom units; and 10% 3 bedroom units.

\*\*Assumes 20% of the residential units are built as affordable.

Table 3: Allowed Land Use Table

USE AND REQUIRED PERMIT	GATEWAY	CORE	GENERAL	EDGE
<b>INDUSTRIAL</b>				
Food products (Food and Beverage)	-	PUP	PUP	PUP
Printing and publishing	-	PUP	PUP	PUP
Wholesaling and distribution (commercial products only)	-	PUP	PUP	PUP
Manufacture, assembly or packaging of products from previously prepared	-	-	PUP	PUP
Manufacture of electric and electronic instruments and devices	-	-	PUP	PUP
Data centers	-	PUP	PUP	PUP
<b>RECREATION, EDUCATION, PUBLIC ASSEMBLY</b>				
Child day-care facilities	PUP	PUP	PUP	PUP
Community assembly	PUP	PUP	PUP	PUP
Community center	PUP	PUP	PUP	PUP
Indoor recreation and fitness centers	P	P	PUP	PUP
Libraries and museums	PUP	PUP	PUP	PUP
Outdoor commercial recreation	-	PUP	PUP	PUP
Parks and open spaces	P	P	P	PUP
Private schools	PUP	PUP	PUP	PUP
Schools	PUP	PUP	PUP	PUP
Schools—specialized education and training	PUP	PUP	PUP	PUP
Studios for dance, art, music, photography, martial arts, etc.	PUP	PUP	PUP	PUP
Theaters	PUP	PUP	PUP	PUP
<b>RETAIL TRADE</b>				
Accessory retail uses	P	P	PUP	PUP
Bars and drinking places	PUP	PUP	PUP	-
Certified farmer's markets	P	P	PUP	-
Grocery stores	PUP	PUP	PUP	-
Liquor stores	PUP	PUP	-	-
Outdoor merchandise and activities	PUP	PUP	-	-
Restaurants serving liquor, with entertainment	PUP	PUP	PUP	-
Restaurants serving liquor, without entertainment	PUP	PUP	PUP	-
Restaurants with or without beer and wine	P	P	PUP	-
Restaurants, take-out	P	P	PUP	-
Retail stores, general merchandise	P	P	PUP	-
Shopping centers	P	PUP	PUP	-
<b>TRANSPORTATION AND COMMUNICATIONS</b>				
Pipelines and utility lines	P	P	P	P
Transit stations and terminals	PUP	PUP	PUP	PUP
Renewable energy or other energy facility	PUP	P	P	P

USE AND REQUIRED PERMIT	GATEWAY	CORE	GENERAL	EDGE
<b>RESIDENTIAL</b>				
Live/work residential	PUP	PUP	PUP	PUP
Multiple-family residential	P	P	P	P
Rooftop amenities	PUP	PUP	PUP	PUP
Residential accessory uses and structures	P	P	P	P
Senior care residential facility	PUP	PUP	PUP	PUP
Supportive and transitional residential	P	P	P	P
<b>SERVICES</b>				
Automatic teller machines (ATMs)	P	P	P	P
Banks and financial services	P	P	P	PUP
Business support services	P	P	P	PUP
Dry cleaning services	P	P	P	PUP
Commercial parking lots	PUP	PUP	PUP	PUP
Bicycle or pedestrian accessible services	P	P	P	PUP
Hotels	P	P	-	-
Medical services—< 3,000 square feet	P	P	P	P
Medical services—3,000 to 20,000 SF	PUP	PUP	PUP	PUP
Offices	P	P	P	P
Offices Administrative and executive	P	P	P	P
Personal services	P	P	P	P
Public safety and utility facilities	PUP	P	P	P
Repair and maintenance—consumer products	P	P	P	P
Research and development/light testing and assembly	P	P	P	P
Storage, accessory	P	P	P	P
Warehousing	-	PUP	PUP	PUP
<b>OTHER USES</b>				
Other uses not named, but similar to listed uses and consistent with the purpose and intent of the Precise Plan.	PUP	PUP	PUP	PUP

\*Residential uses are only allowed within Complete Neighborhood areas as shown in Figure 4.\* (Section 3.3.2, Land Uses, NBPP)

Key to Land Use Permit Requirements	Symbol
Permitted uses, zoning compliance, and Development Review required	P
Provisional use, Provisional Use Permit Required	PUP
Use not allowed	-

Table 4: Floor Area Ratio Standards

STANDARDS	GATEWAY		CORE		GENERAL		EDGE	
	BASE	MAXIMUM	BASE	MAXIMUM	BASE	MAXIMUM	BASE	MAXIMUM
Non-Residential Project	1.0	2.35	0.45	1.50	0.45	1.0	0.45	0.65
Residential Project	1.0	4.50	1.0	4.50	1.0	3.50	1.0	1.85
Mixed-use Non-Residential and Residential Project	1.0	4.50, with the non-residential area equal to or less than 2.35	1.0	4.50, with the non-residential area equal to or less than 1.5	1.0	3.50, with the non-residential area equal to or less than 1.0	N/A	1.85, with the non-residential area equal to or less than 0.65
Hotel	1.0	2.35	0.45	1.85	N/A	N/A	N/A	N/A

## Gene Yong

---

**From:** Gene Yong  
**Sent:** Wednesday, February 20, 2019 4:07 PM  
**To:** 'Ayinde Rudolph Ed.D.'  
**Cc:** 'cghysels@mvwsd.org'; 'Kathi Lilga (klilga@mvwsd.org)'; Bill Gould; jschreder@jschreder.com; 'Philip J. Henderson'  
**Subject:** CDE-Site Visit Notes to 1500-1550 Plymouth St (Google School Site), 2/20/19

Ayinde,

Please find below some notes from our site visit this morning with Fred Yeager and John Gordon of the CA Dept of Education (School Facilities & Transportation Division).

---

### SITE VISIT SUMMARY

#### PURPOSE:

CDE site visit and informal review of potential 2.5-acre elementary school site at 1500-1550 Plymouth Street, North Bayshore, City of Mountain View

#### DATE:

9:30am, Wednesday, 2/20/19

#### ATTENDEES:

- Artik (attending on behalf of MVWSD): Bill Gould, Gene Yong
- CDE: Fred Yeager (Assistant Director), John Gordon (Field Representative, Santa Clara County)

#### DISCUSSION NOTES:

1. Met on the street corner of Plymouth Street and Joaquin Road and walked around the common areas of the site outside the existing office building.
2. Based on a quick visual overview, FY/JG did not see any obvious significant concerns with the site.
  - a. Site was far enough from the freeway (i.e., noise impact).
  - b. No obvious overhead utilities in the immediate vicinity of the site.
  - c. Existing activities on the site appeared to be clean (i.e., offices and parking), as well as on adjoining sites.
3. FY/JG expressed some concern regarding student pedestrian safety, both on-site and off-site. Priority needs to be in favor of the student pedestrian over vehicular circulation.
  - a. Pedestrian routes across Shoreline Blvd. will require young children crossing a very heavy vehicular thoroughfare at both AM commuter peak and student arrival peak periods. Traffic observed on Shoreline Blvd. was heavy (2-3 lanes, continuous flow), fast, and incompatible with young children crossing at peak periods.
  - b. Consider grade-separated crossings across Shoreline Blvd., possibly integrated into mid- and high-rise developments on both sides of Shoreline Blvd.
  - c. Deconflict/segregate on-site student pedestrian access/entry routes from vehicular pickup/dropoff and parking routes. Minimize crossings.
4. With the proposed height of surrounding development, JG commented on the potential for the school to largely be in shadow throughout the day (i.e., shadow cast by neighboring high-rise buildings). This has been an issue at other urban school sites.

5. Regarding the dense, mixed-use nature of the planned community, JG/FY highlighted the potential for liquor and drug/marijuana retail establishments in close proximity to the school site. Ultimately will defer to City/State to enforce applicable zoning/licensing restrictions.
  6. Configuring parking and pickup/drop off may be a challenge, especially if ground level space is at premium and underground parking is not an option (i.e., cost premium, high groundwater table, etc.).
    - a. CDE's typically recommends 2.25 stalls per teaching station (i.e., classroom), but this is a guideline and not a requirement. The school may want to pursue a lower standard considering the close proximity of residential properties. This may be a good shared use opportunity with any future parking facilities on adjoining or nearby redevelopment sites.
  7. FY/JG referenced a similar new school project SFUSD is proposing in the Mission Bay area. The Mission Bay site is compact/undersized and will feature joint/shared use of some adjoining/nearby facilities (e.g., UCSD open space/park). See attached SFUSD brief of a new PreK-5 elementary school on a 2.2 acre site in Mission Bay (downloaded from the SFUSD website following the site visit). JG will forward a SFUSD contact to Artik.
  8. FY confirmed that sites can be leased and still access state funds (per OPSC guidelines) if the term of the lease is for at least 40 years.
  9. FY will be submitting an informal summary of his notes/observations from the site visit.
- 

Let us know if you have any questions or comments.

Thanks.

#### **Gene Yong, AICP**

Senior Planner/Senior Project Manager



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F 408.224.9891

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[www.Artika3.com](http://www.Artika3.com)



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## Gene Yong

**From:** Gene Yong  
**Sent:** Thursday, November 29, 2018 3:18 PM  
**To:** Gene Yong  
**Cc:** Roy Daniel; Sherry Sajadpour  
**Subject:** TelCon Notes-North Bayshore Environmental Issues

TelCon with Kurt Soenen, Cornerstone Earth Group (2:00pm, Thursday, 29 Nov 18):

1. TCE is a major regional concern and priority.
2. The Teledyne site, just to the south of Hwy. 101 is the center of one of the most significant TCE releases in the Bay Area. The plume has spread north towards Charleston Road, along the Shoreline Blvd. corridor (covering the area from Permanent Creek to Stevens Creek). Based on a US EPA and State Water Board map, the TCE plume appears to be most concentrated between Shoreline Blvd. and Huff Ave, coinciding with the Joaquin Neighborhood (City's North Bayshore Precise Plan).
3. Major concern is potential vapor intrusion from subsurface TCE plumes.
4. TCE plumes are migrating with the groundwater. Groundwater is approximately 5 ft. below the surface.
5. There are a large number of environmental releases throughout the area, on both sides of North Shoreline Blvd. (between Hwy. 101 and Charleston Road).
6. Kurt noted at least a dozen known releases in areas east of Shoreline Blvd.
7. The best database for studies would be the Geotracker Database hosted on the State's Water Board website. It has map-based link that can be easily navigated. The majority of documents would be PDF copies of maps and reports.
8. The key agencies with oversight on environmental threats/concerns in the area are U.S. EPA and the San Francisco Bay Regional Water Quality Board (Oakland, CA).
9. Absent better or more definitive information within any of the three neighborhoods (Joaquin, Pear, Shorebird), we should assume that environmental issues apply.
10. Without an environmental consultant on the team, it may be difficult to get a simple overview that credibly and comprehensively maps and defines the environmental threats in the study area.
11. Consider approaching City of Mountain View or Google to see if either has a good overview of the study area.

Gene

**From:** Gene Yong  
**Sent:** Tuesday, November 27, 2018 10:02 AM  
**To:** 'Kurt M. Soenen' <[ksoenen@cornerstoneearth.com](mailto:ksoenen@cornerstoneearth.com)>  
**Cc:** Sherry Sajadpour <[ssajadpour@artika3.com](mailto:ssajadpour@artika3.com)>; Roy Daniel <[rdaniel@artika3.com](mailto:rdaniel@artika3.com)>; Danh Tran <[dtran@cornerstoneearth.com](mailto:dtran@cornerstoneearth.com)>  
**Subject:** RE: plumes in North Bayshore

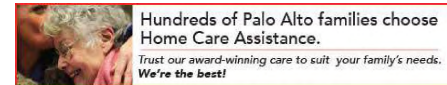
Thanks Kurt. We'll plan to call you at 2:00pm on Thursday (11/29).

**From:** Kurt M. Soenen <[ksoenen@cornerstoneearth.com](mailto:ksoenen@cornerstoneearth.com)>  
**Sent:** Tuesday, November 27, 2018 9:56 AM  
**To:** Gene Yong <[gyong@artika3.com](mailto:gyong@artika3.com)>  
**Cc:** Sherry Sajadpour <[ssajadpour@artika3.com](mailto:ssajadpour@artika3.com)>; Roy Daniel <[rdaniel@artika3.com](mailto:rdaniel@artika3.com)>; Danh Tran <[dtran@cornerstoneearth.com](mailto:dtran@cornerstoneearth.com)>  
**Subject:** RE: plumes in North Bayshore

Hi Gene -

11/20/2018

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## EPA sets sights on TCE vapor intrusion

New cleanup plan focuses on airborne toxic chemical from city's polluted groundwater

by Mark Noack / Mountain View Voice

The U.S. Environmental Protection Agency plans to strengthen cleanup regulations for airborne toxins along a contaminated area covering much of Mountain View's North Bayshore.

In a public meeting last month, EPA officials presented plans to update their cleanup strategy for the Teledyne/Spectra Physics Superfund site, which extends north of the city's Rex Manor neighborhood up into the western side of North Bayshore.

Like Mountain View's other contaminated areas, underground aquifers along the Teledyne site are polluted with trichloroethylene (TCE), an industrial degreaser used in the area's bygone semiconductor industry. Since the early 1990s, the companies responsible for the pollution have been tasked with treating the groundwater to remove traces of TCE, which is known to cause cancer.

In recent years, EPA officials have acknowledged TCE can also present public health risks if it evaporates and becomes airborne. These airborne toxins are considered particularly harmful if they accumulate inside buildings, especially homes or offices where people could be spending prolonged periods of time. Pregnant women, particularly during the first trimester, are considered especially vulnerable to even short-term exposure.

This so-called vapor intrusion would be a new focus for EPA officials, but they pointed out they have already been monitoring it. Since around 2015, about 45 homes in the area have been sampled, some of which needed fixes to their ventilation systems to ensure harmful compounds weren't building up, said Angela Sandoval, EPA project manager. In some cases, homes were found to have cracks in their foundation slabs, allowing the contaminated vapors to seep inside.

Previously, EPA officials were consulted by the city of Mountain View whenever new construction or remodel projects were proposed within the Superfund zone. EPA officials would lend advice on how to reduce exposure risk, although this step was never explicitly included in the Superfund guidelines. Under the new cleanup standards, this vapor intrusion review would be formalized as part of the cleanup plan.

The updated cleanup plan would also emphasize bioremediation, which involves injecting fortified microbes into the groundwater to break down hazardous compounds into harmless byproducts. EPA officials said past trials of bioremediation in the North Bayshore area showed a dramatic reduction in TCE, going from 300 parts-per-billion to four parts-per-billion within a few years.

For about 20 years, the cleanup effort had instead focused on pumping and treating the groundwater, but this was later found to be largely ineffective. Simply leaving the pollution in the ground and letting it naturally break down was found to be just as effective, according to EPA officials.



The trichloroethylene plume of the Teledyne/Spectra Physics Superfund site, shown in pink, encompasses large sections of Mountain View's North Bayshore. EPA officials are revising their cleanup standards with a new focus on airborne toxins. Map provided by EPA



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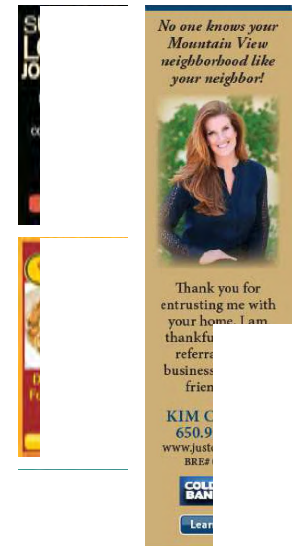
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Mountain View's municipal drinking water comes mainly from Hetch Hetchy and does not draw upon local groundwater.

Sandoval emphasized that the EPA cleanup plan was showing real promise to someday restore the groundwater, possibly someday bringing it to federal drinking water standards.

"Our cleanup plan has the potential to reduce the cleanup time frame from hundreds of years to decades," she said. "These remedies have been proven to be very effective."

More information on the new proposed guidelines can be found at the EPA [website](#).

## Comments

Sorry, but further commenting on this topic has been closed.

The image shows three vertical advertisements stacked on the right side of the page. The top advertisement features a man in a suit and the text: "YOUR HOME IS WHERE OUR..." followed by a quote: "David and I good listeners as to our feedback, engaged them, t happening, —Jim A. Home!". It includes a phone number "650.440.5076" and an email "DAVID@DAVIDTR". The middle advertisement is for CALIVA and says "Now delivering cannabis in you" with the tagline "Fast, Easy, Discreet." and a "SHO" logo. The bottom advertisement is for "OPEN ENROLLMENT FOR 2019" (Kindergarten - January 7 - February 1) and says "Registration Opens January 7". It includes a website "www.mvwsd.edu" and a phone number "650.440.5076".

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 North Bayshore Master Plan  
 Prepared for Mountain View Whisman School District (MVWSD)

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Computer stations, catalog stations, small group/facilitated learning activities.</td> <td></td> </tr> <tr> <td></td> <td>Circulation/Staff Work Area</td> <td>-</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td>17</td> <td>14</td> <td>240</td> <td><b>240</b></td> <td></td> <td>1.35</td> <td>324</td> <td>324</td> <td></td> <td>0.25 x classroom sf. Circulation counter, work tables, low shelving, staging/sorting area for materials</td> <td></td> </tr> <tr> <td></td> <td>Storage</td> <td>-</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td>20</td> <td>10</td> <td>200</td> <td><b>200</b></td> <td></td> <td>1.35</td> <td>270</td> <td>270</td> <td></td> <td>Video equipment</td> <td></td> </tr> <tr> <td></td> <td>Staff restroom</td> <td>-</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td>8</td> <td>6</td> <td>48</td> <td><b>48</b></td> <td></td> <td>1.35</td> <td>65</td> <td>65</td> <td></td> <td>Single occupancy</td> <td></td> </tr> </tbody> </table>																						PARKING		Number of Units		Enrollment/Occupancy			AREA							Notes	References	Sub-Total	Unit Criteria	Sub-Total	Total	Class Size	Sub-Total	Total	Length	Width	Net	Sub-Total (net)	TOTAL (net)	Net-to-Gross	Gross	Sub-Total (Gross)	TOTAL (gross)	Stalls	CDE	No.		stu/unit	stu	stu	ft	ft	sf			nsf x ___	sf	sf	sf	sf	<b>TOTALS</b>		63.0 3-ADA, 1-Van Accessible				<b>672</b>			<b>45,254</b>							<b>67</b>		<b>68,567</b>		102.0		CDE Title V standards is minimum of 59 sf/stu (assumed to be net).		<b>GENERAL CLASSROOMS</b>																				<b>TK-K</b>						<b>672</b>			<b>29,292</b>									<b>46,413</b>					Classrooms	18.0	2.25	8		24	192		45	30	1,350	<b>10,800</b>		1.35	1,823	14,580		MVWSD Standard: 24 stu/classroom.	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Media Center/Computer Lab	-		1					24	20	480	<b>480</b>		1.35	648	648		0.5x classroom sf. Computer stations, catalog stations, small group/facilitated learning activities.			Circulation/Staff Work Area	-		1					17	14	240	<b>240</b>		1.35	324	324		0.25 x classroom sf. Circulation counter, work tables, low shelving, staging/sorting area for materials			Storage	-		1					20	10	200	<b>200</b>		1.35	270	270		Video equipment			Staff restroom	-		1					8	6	48	<b>48</b>		1.35	65	65		Single occupancy	
		PARKING		Number of Units		Enrollment/Occupancy			AREA							Notes	References																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
		Sub-Total	Unit Criteria	Sub-Total	Total	Class Size	Sub-Total	Total	Length	Width	Net	Sub-Total (net)	TOTAL (net)	Net-to-Gross	Gross			Sub-Total (Gross)	TOTAL (gross)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
		Stalls	CDE	No.		stu/unit	stu	stu	ft	ft	sf			nsf x ___	sf			sf	sf	sf																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
<b>TOTALS</b>		63.0 3-ADA, 1-Van Accessible				<b>672</b>			<b>45,254</b>							<b>67</b>		<b>68,567</b>		102.0		CDE Title V standards is minimum of 59 sf/stu (assumed to be net).																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
<b>GENERAL CLASSROOMS</b>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
<b>TK-K</b>						<b>672</b>			<b>29,292</b>									<b>46,413</b>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	Classrooms	18.0	2.25	8		24	192		45	30	1,350	<b>10,800</b>		1.35	1,823	14,580		MVWSD Standard: 24 stu/classroom.	CDE Guide to School Site Analysis & Development (2000)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
	Teacher Work Area	-		-		-	-		-	-	-	See Notes			-	See Notes		Included in classroom area	Locate workrooms/storage between pairs of classrooms																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
	Storage	-		-		-	-		-	-	-	See Notes			-	See Notes		Included in classroom area																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	Restrooms	-		-		-	-		-	-	-	See Notes			-	See Notes		Included in classroom area																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
<b>Grades 1-3: Classrooms</b>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
	Classrooms	27.0	2.25	12		24	288		32	30	960	<b>11,520</b>		1.35	1,296	15,552		MVWSD Standard: 24 stu/classroom	CDE Guide to School Site Analysis & Development (2000)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
	Small Group Break Out Room	-		6		-	-		14	10	140	See Notes			-	See Notes		1 for every 2 classrooms, nsf in classroom area	2009-SFPS Program Standard																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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	Storage	-		6		-	-		10	6	60	<b>360</b>		1.35	81	486			2009-SFPS Program Standard																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
	Restrooms	-		2		-	-		24	8	192	<b>384</b>		1.35	259	518		1-B, 1-G, assume 3-T/2-U/4-L for boys, 5-T/4-L for girls	CDE-CPC/K-12 Toilet Requirements																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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	Classrooms	13.5	2.25	6		32	192		32	30	960	<b>5,760</b>		1.35	1,296	7,776		MVWSD Standard: 32 stu/classroom	CDE Guide to School Site Analysis & Development (2000)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
	Small Group Break Out Room	-		3		-	-		14	10	140	See Notes			-	See Notes		1 for every 2 classrooms, nsf in classroom area	2009-SFPS Program Standard																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
	Teacher Work Area	-		-		-	-		-	-	-	See Notes			-	See Notes		Included in classroom area																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	Storage	-		3		-	-		10	6	60	<b>180</b>		1.35	81	243			2009-SFPS Program Standard																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
	Restrooms	-		2		-	-		18	8	144	<b>288</b>		1.35	194	389		1-B, 1-G, assume 2-T/1-U/3-L for boys, 4-T/3-L for girls	CDE-CPC/K-12 Toilet Requirements																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
<b>SPECIALTY PROGRAM</b>																		<b>2,200</b>		<b>2,970</b>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
<b>Flex Rooms</b>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
	Classrooms	4.5	2.25	2					37	30	1,100	<b>2,200</b>		1.35	1,485	2,970		For co-curricular programs (art, music, science, after school), collocate together	2009-SFPS Program Standard																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
	Teacher Work Area	-		-		-	-		-	-	-	See Notes			-	See Notes		Included in classroom area																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	Storage	-		-		-	-		-	-	-	See Notes			-	See Notes		Included in classroom area																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
<b>LIBRARY/MEDIA CENTER</b>																		<b>2,888</b>		<b>3,899</b>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	Main Library	-		1					64	30	1,920	<b>1,920</b>		1.35	2,592	2,592		House, circulate, centralized distribution o school's information resources/equipment used in school's curriculum.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	Media Center/Computer Lab	-		1					24	20	480	<b>480</b>		1.35	648	648		0.5x classroom sf. Computer stations, catalog stations, small group/facilitated learning activities.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	Circulation/Staff Work Area	-		1					17	14	240	<b>240</b>		1.35	324	324		0.25 x classroom sf. Circulation counter, work tables, low shelving, staging/sorting area for materials																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	Storage	-		1					20	10	200	<b>200</b>		1.35	270	270		Video equipment																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	Staff restroom	-		1					8	6	48	<b>48</b>		1.35	65	65		Single occupancy																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						

**PROPOSED FACILITIES SPACE PROGRAM**  
 North Bayshore Master Plan  
 Prepared for Mountain View Whisman School District (MVWSD)

ELEMENTARY SCHOOL FACILITIES PROGRAM																				
Grades:		TK-Gr 5																		
Enrollment:		684 students <sup>1</sup>																		
Site Area:		2.5 acres <sup>2</sup>																		
		PARKING		Number of Units		Enrollment/Occupancy			AREA										Notes	References
		Sub-Total	Unit Criteria	Sub-Total	Total	Class Size	Sub-Total	Total	Length	Width	Net	Sub-Total (net)	TOTAL (net)	Net-to-Gross	Gross	Sub-Total (Gross)	TOTAL (gross)			
		Stalls	CDE	No.		stu/unit	stu	stu	ft	ft	sf		nsf x ___	sf	sf	sf	sf			
<b>MULTIPURPOSE ROOM (MPR) AND WARMING KITCHEN</b>															<b>5,926</b>			<b>8,605</b>	Accessible to parking and playfields/playcourts	
	Multi-Purpose Space	-		1					67	50	3,360	<b>3,360</b>		1.35	4,536	4,536	Sufficient space for entire school, seated style (5 sf/pn, equal to CBC 1004.1.2-Standing)			
	Stage	-		1					31	22	672	<b>672</b>		2.25	1,512	1,512	Equal to seated area for 1 full grade (assumed to be music). Net-to-Gross includes additional 8'-10' on stage wings/back for staging/support areas.			
	Kitchen	-		1					36	20	725	<b>725</b>		1.35	979	979	Refrigerated storage, limited warming facilities, cleaning/sinks, light prep, work tables/counters. Accessible to service driveways, garbage areas	Size per SRCES ESMS Ed Spec (500-750 students)		
	Serving Area	-		1					21	20	420	<b>420</b>		1.35	567	567	Adjacent to kitchen, may include serving table, separate from multi-purpose space. 1-hot unit line, 1-cold unit line. Area can be float for overflow from main space.			
	Storage (multi-purpose)	-		1					25	15	375	<b>375</b>		1.35	506	506	Store seats, tables			
	Storage (stage)	-		1					17	10	168	<b>168</b>		1.35	227	227	0.25x stage area. Store stage A-V equipment, instruments, props, materials			
	Storage (kitchen)	-		1					10	8	80	<b>80</b>		1.35	108	108	Dry storage room. Store movable courts, equipment)			
	Storage (custodial)	-		1					6	5	30	<b>30</b>		1.35	41	41	Cleaning equipment/materials			
	Restrooms	-		2					8	6	48	<b>96</b>		1.35	65	130	2-single occupancy			
		-																		
<b>ADMINISTRATION</b>															<b>4,180</b>			<b>5,643</b>		
	Reception	-																		
	Workstation	-		3					12	8	96	<b>288</b>		1.35	130	389	Assume 1 secretary, 1 clerk and space for 1 add'l staff (permanent/interim).			
	Seating Area	-		1					20	14	280	<b>280</b>		1.35	378	378	Assume seating for 6-8 people			
	Offices	-																		
	Principal	-		1					20	12	240	<b>240</b>		1.35	324	324	Large enough to hold private meetings for 4 pns at table			
	Assistant Principal	-		1					16	10	160	<b>160</b>		1.35	216	216	Large enough to hold private meetings with 2 pns at desk			
	Conference Room	-		1					20	14	280	<b>280</b>		1.35	378	378	Adjacent to principal's office, 10-12 pns			
	Faculty/Staff Facilities	-																		
	Collaborative Work Space	-		1					20	15	300	<b>300</b>		1.35	405	405	Near reception and offices, copy/print area, layout/work area, work stations			
	Staff Lounge	-		1					30	20	600	<b>600</b>		1.35	810	810	Next to staff work space, next to break room, seating/dining for 15-20, adjacent to private staff patio. Light kitchen facilities (refrigerator, microwave, dishwasher, coffee)			
	Student Support Programs/Spec	-																		
	Resource Work Rooms/Offices	-		4					18	14	252	<b>1,008</b>		1.35	340	1,361	Program offices, resource specialists, special needs, testing, counseling/intervention, small group instruction, 10-12 students.			
	Family Center	-																		
	Work Area	-		1					25	20	500	<b>500</b>		1.35	675	675	Community/Parent/Volunteer work area			
	Health Services	-																		
	Health Room	-		1					16	12	192	<b>192</b>		1.35	259	259	Include space for beds, sink			
	Health Office	-		1					10	8	80	<b>80</b>		1.35	108	108	1 Health Staffperson			
	Support Area	-																		
	Restrooms	-		2					8	6	48	<b>96</b>		1.35	65	130	Single-occupancy, ADA compliant, 1-near health room & 1-near family center			
	Storage	-		2					8	6	48	<b>96</b>		1.35	65	130	1 near break room			
	Utilities Room-IT/Tech	-		1					10	6	60	<b>60</b>		1.35	81	81	1 near reception work area/executive offices			
		-																		



**PROPOSED FACILITIES SPACE PROGRAM**  
 North Bayshore Master Plan  
 Prepared for **Mountain View Whisman School District (MVWSD)**

ELEMENTARY SCHOOL FACILITIES PROGRAM																			
<b>Grades:</b>	TK-Gr 5																		
<b>Enrollment:</b>	684 students <sup>1</sup>																		<sup>1</sup> Jack Schreder & Associates NBPP Student Generation excluding Sobrato
<b>Site Area:</b>	2.5 acres <sup>2</sup>																		<sup>2</sup> Google Proposed School Site @ 1500-1550 Plymouth Street; per meeting
		PARKING		Number of Units		Enrollment/Occupancy			AREA								Notes	References	
		Sub-Total	Unit Criteria	Sub-Total	Total	Class Size	Sub-Total	Total	Length	Width	Net	Sub-Total (net)	TOTAL (net)	Net-to-Gross	Gross	Sub-Total (Gross)			TOTAL (gross)
		Stalls	CDE	No.		stu/unit	stu	stu	ft	ft	sf			nsf x ___	sf	sf	sf		
<b>OTHER</b>																			
	<b>Restrooms for Outdoor Areas</b>	-																	
	Restrooms-Field Area	-		2					16	8	128	256	768	1.35	173	346	1,037	1-boys/1-girls. May be attached to building, orient to field area	
	Restrooms-Hardcourt Area	-		2					16	8	128	256		1.35	173	346		1-boys/1-girls. May be attached to building, orient to field area	
	Restrooms-Apparatus Area	-		2					16	8	128	256		1.35	173	346		1-boys/1-girls. May be attached to building, orient to field area	
<b>OUTDOOR AREAS</b>																			
	<b>Field Area</b>																		
	Playfields			4					120	90	10,800	43,200		1.10	11,880	47,520		Per CDE Guide, field is for most "Games" activities (group games: tag, running, ball games, track & field ;individual/dual games).	CDE Guide to School Site Analysis & Development (2000)-For enrollment of 451-600
	<b>Hardcourt Area</b>																		
	Hardcourts			8					75	60	4,500	36,000		1.10	4,950	39,600		Per CDE Guide, hard courts are for most "Rhythm" activities (skills, creative, dancing, singing games).	CDE Guide to School Site Analysis & Development (2000)-For enrollment of 451-600
	<b>Apparatus Area</b>																		
	Apparatus Areas			5					71	45	3,200	16,000		1.10	3,520	17,600		Per CDE Guide, apparatus areas are for most Climbing/Tumbling/ Gymnastics-type "Activities" (rolling, balancing, climbing, swinging, balancing, hanging, pushing/pulling).	CDE Guide to School Site Analysis & Development (2000)-For enrollment of 451-600

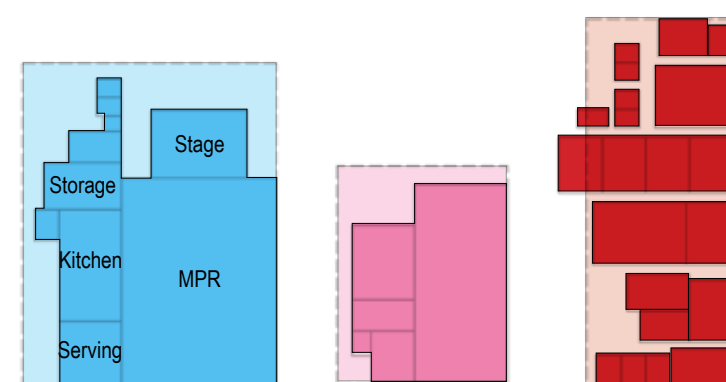
### Parking

60 Stalls (as shown)



### Library

Library, Media Center



### Administration

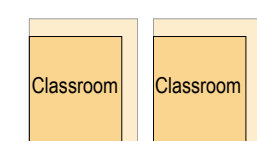
Offices, Work Rooms, Community, Resource, Staff

### Multi-Use Room

MUR, Stage, Kitchen, Support

### Classrooms Flex

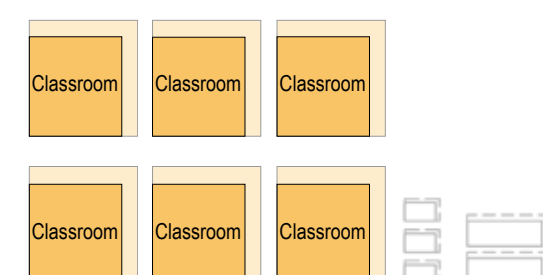
2 Classrooms, 1100 sf/classroom



### Classrooms Grades 4-5

6 Classrooms

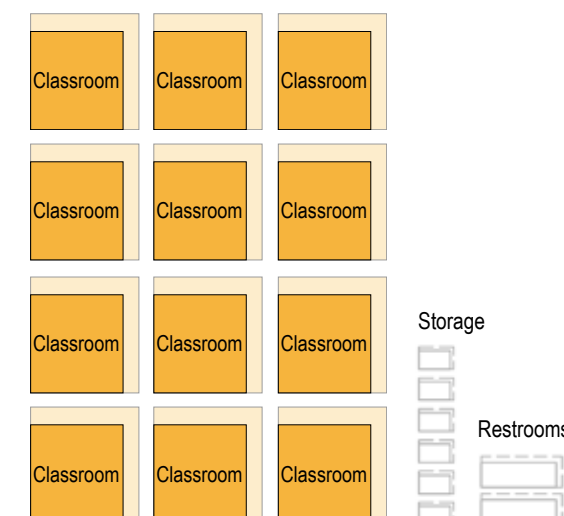
960 sf/classroom



### Classrooms Grades 1-3

12 Classrooms

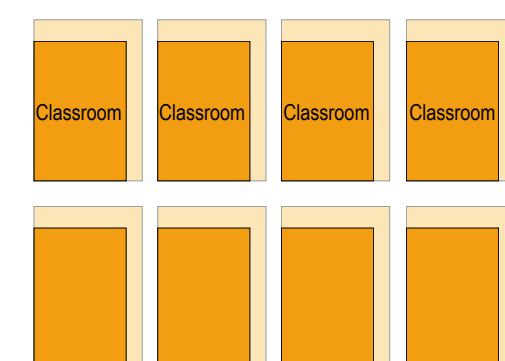
960 sf/classroom



### Classrooms TK-K

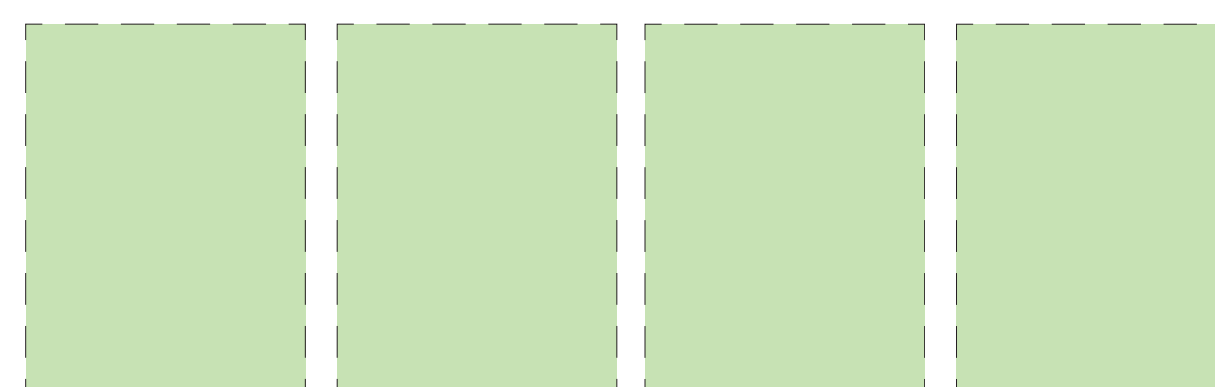
8 Classrooms

1350 sf/classroom



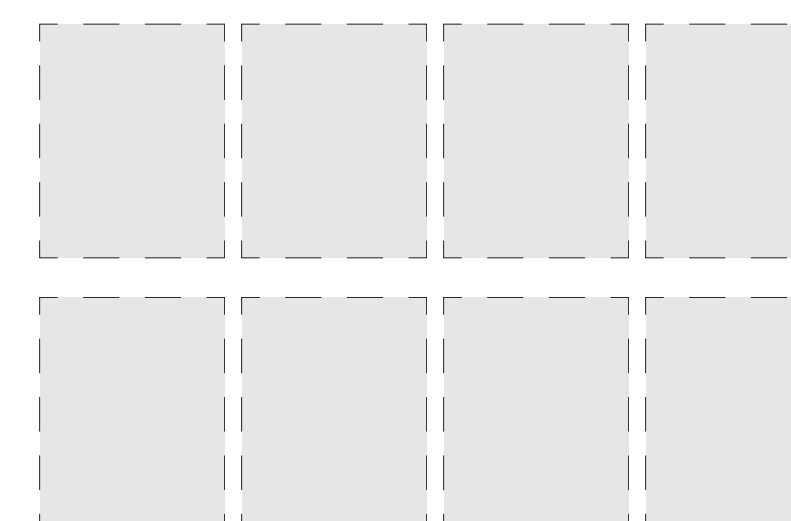
### Field Areas

4 Areas, 10,800 sf/each



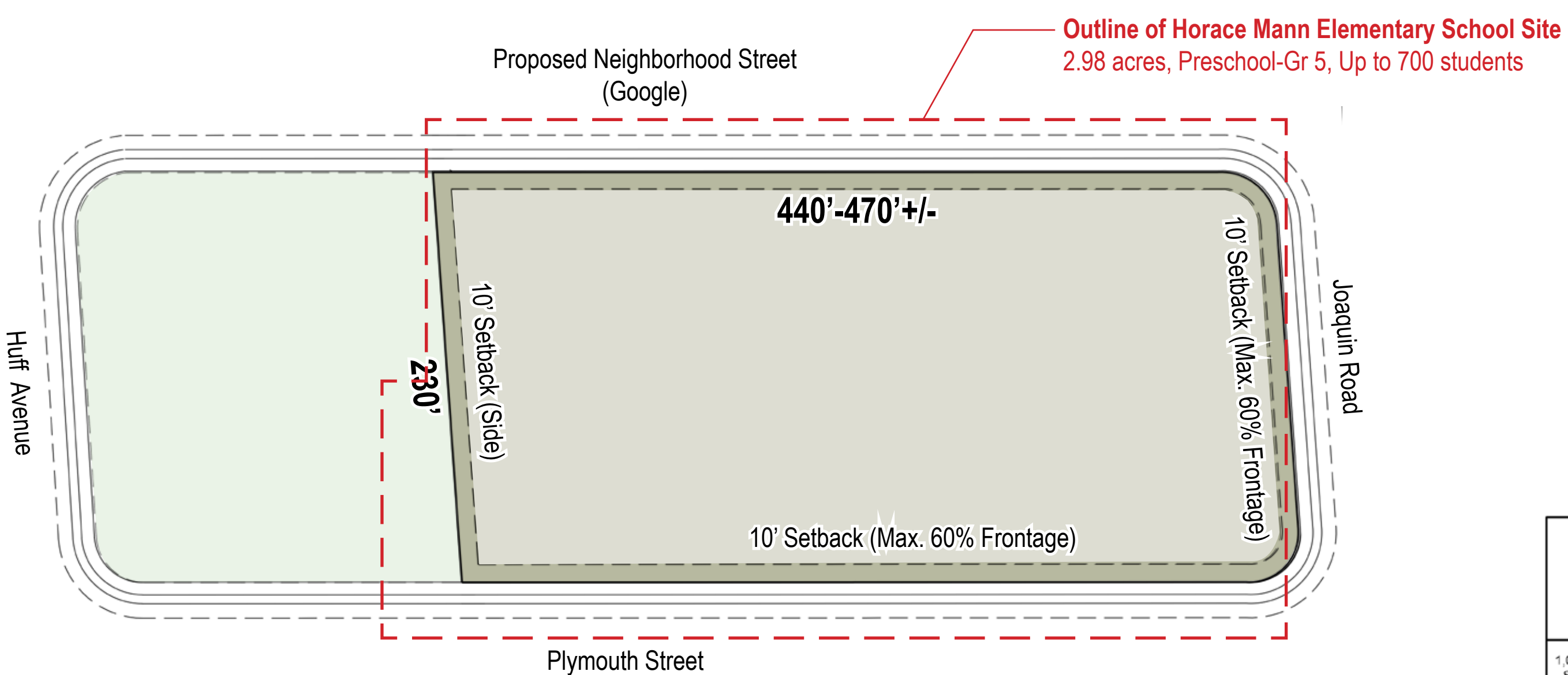
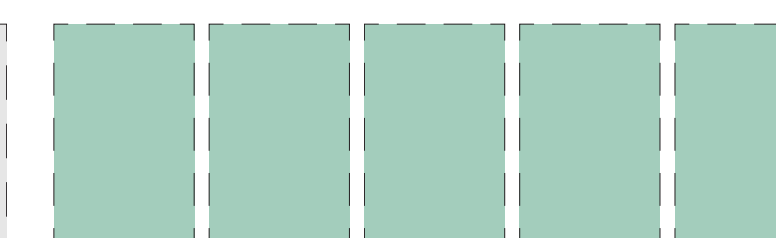
### Hard Court Areas

8 Areas, 4500 sf/each



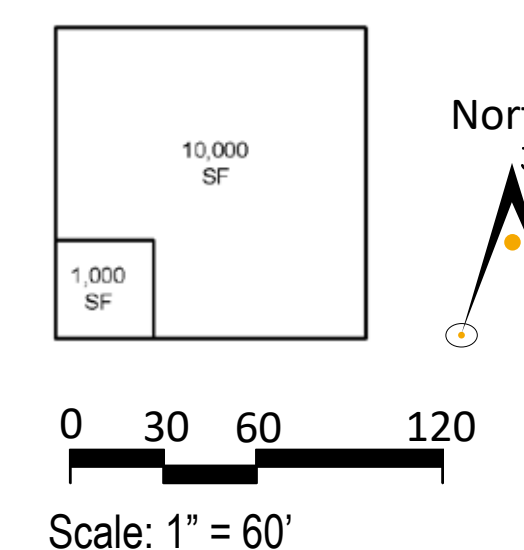
### Apparatus Area

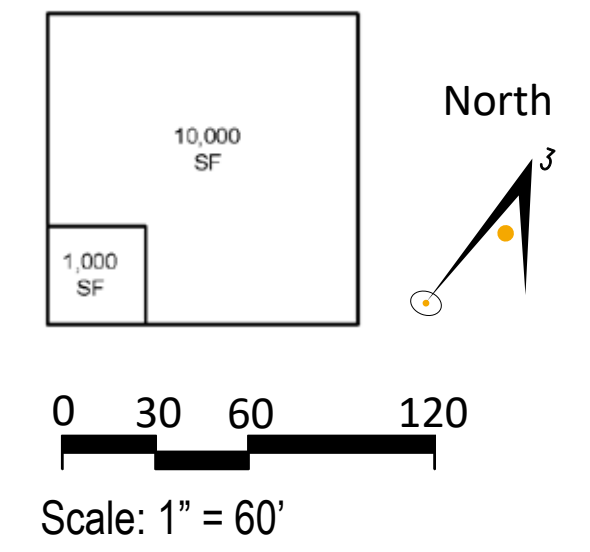
5 Areas, 3200 sf/each



**Park Site**  
Shared Use-City Parks/MVWSD (Google)  
1.0 acre

**North Bayshore Elementary School Site** (Google/MVWSD)  
2.5 acres, 1500-1550 Plymouth St., Mountain View, CA





**CONCEPT A**  
**North Bayshore Elementary School**  
 2.5-3.5 acres, 1500-1550 Plymouth St., Mountain View, CA

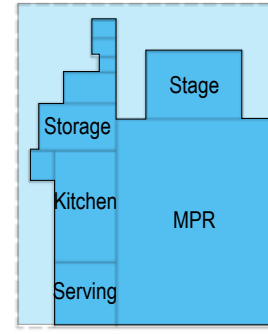


**CONCEPT B**  
**North Bayshore Elementary School**  
 2.5-3.5 acres, 1500-1550 Plymouth St., Mountain View, CA

**FACILITIES PROGRAM** Recommended  
**California Dept. of Education**  
 Up to 700 Students (TK-5th Grade)

**Administration**  
 Offices, Work Rooms,  
 Community, Resource, Staff

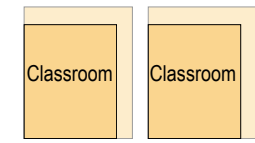
**Multi-Use Room**  
 MUR, Stage, Kitchen, Support



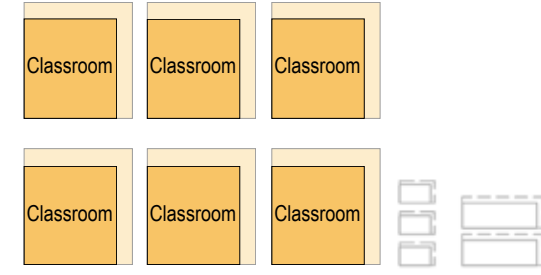
**Library**

Library, Media Center

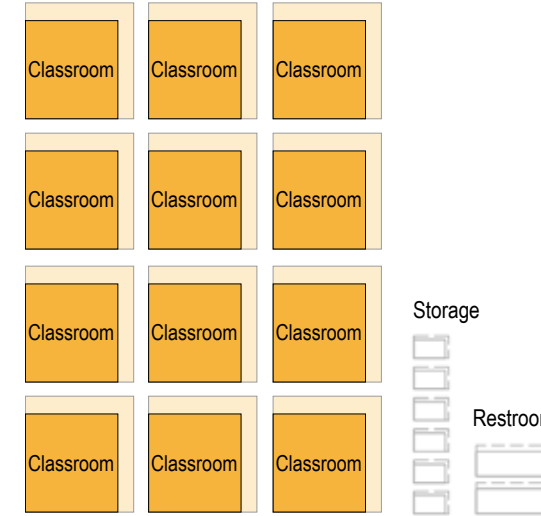
**Classrooms Flex**  
 2 Classrooms  
 1100 sf/classroom



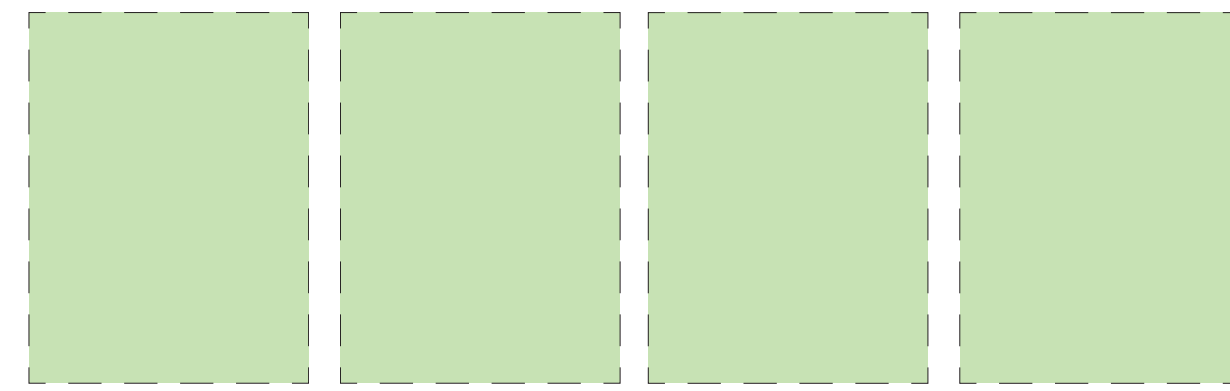
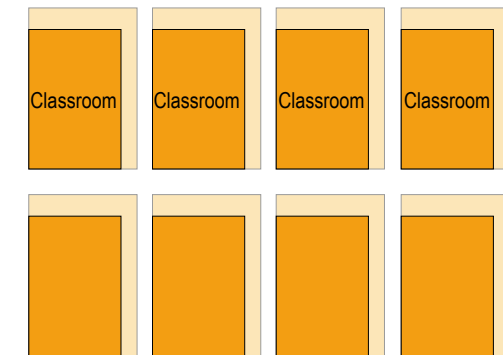
**Classrooms Grades 4-5**  
 6 Classrooms  
 960 sf/classroom



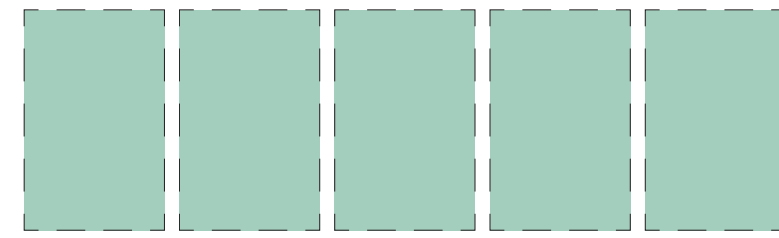
**Classrooms Grades 1-3**  
 12 Classrooms  
 960 sf/classroom



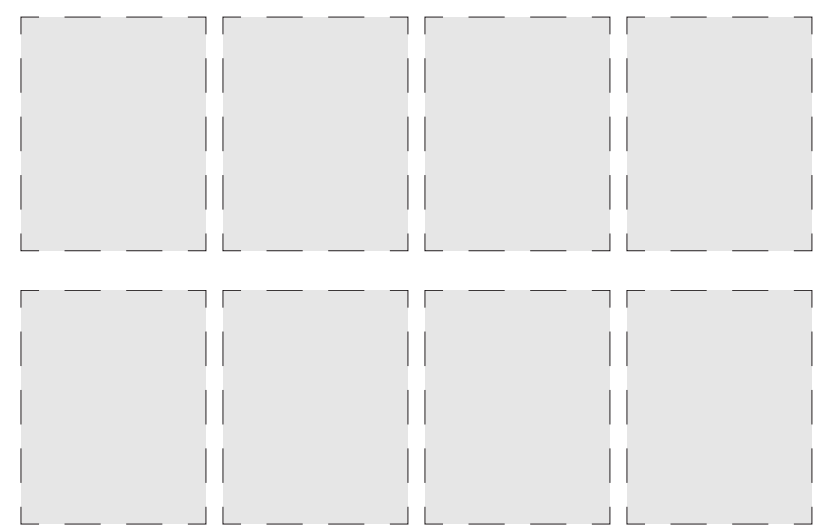
**Classrooms TK-K**  
 8 Classrooms  
 1350 sf/classroom



**Field Areas**  
 4 Areas, 10,800 sf/each



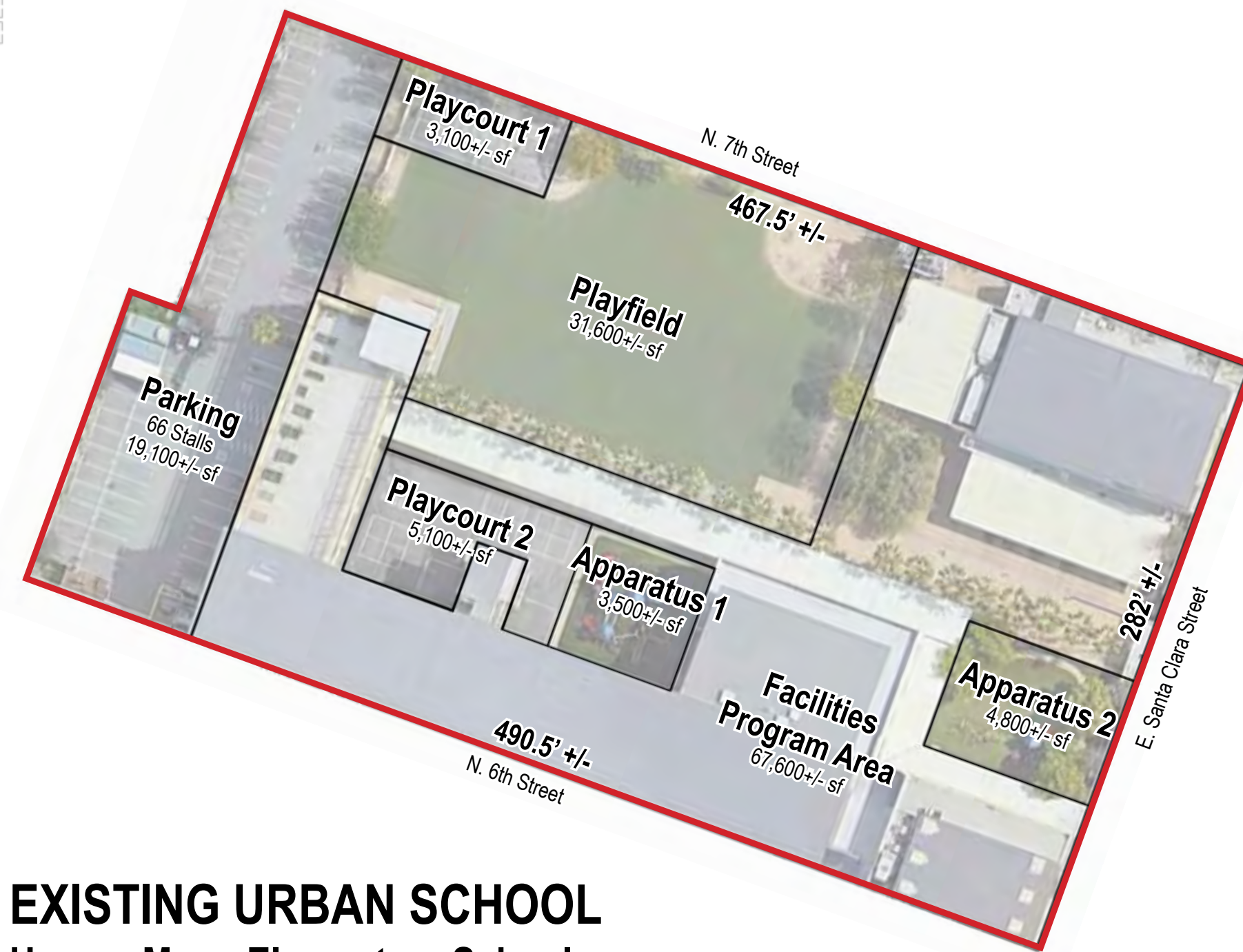
**Apparatus Area**  
 5 Areas, 3200 sf/each



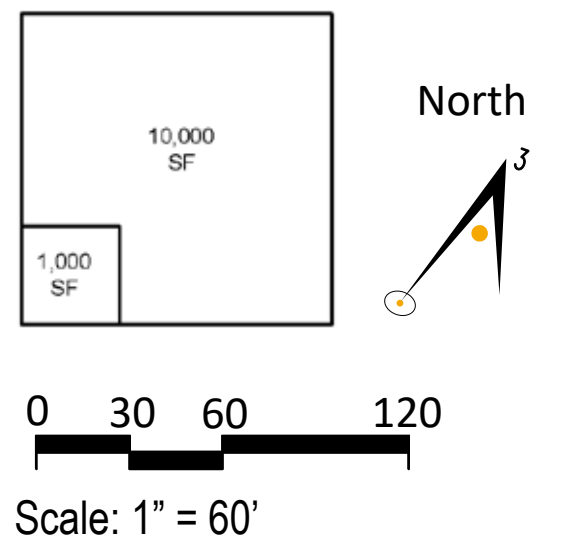
**Playcourt Areas**  
 8 Areas, 4500 sf/each



**Parking**  
 63 Stalls



**EXISTING URBAN SCHOOL**  
**Horace Mann Elementary School** (SJSUD)  
 2.97 acres, Pre-K-5th Grade (Up to 700 students)



**CONCEPT C**  
**North Bayshore Elementary School**  
 2.5-3.5 acres, 1500-1550 Plymouth St., Mountain View, CA

# North Bayshore Masterplan

New Elementary School

**Based on review & analysis of:**

Preliminary Scope Options

**Report Prepared for:**

Artik Art & Architecture

May 31st, 2019

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**BASIS OF ESTIMATE**

**REFERENCE DOCUMENTATION**

This Construction Cost Estimate was produced from the following documentation. Design and engineering changes occurring subsequent to the issue of these documents have not been incorporated in this estimate.

Document	Date
- Preliminary Scope Concept Site Plans	21-May-19
- Space Program Analysis	21-May-19
- Parametric Quantities by Artik Art & Architecture	21-May-19
-	

**PROJECT DESCRIPTION**

The scope of work includes two options to provide a new elementary school at the proposed North Bayshore site.

**BASIS FOR PRICING**

This estimate reflects the fair construction value for this project and should not be construed as a prediction of low bid. Prices are based on local prevailing wage construction costs at the time the estimate was prepared. Pricing assumes a procurement process with competitive bidding for all sub-trades of the construction work, which is to mean a minimum of 3 bids for all subcontractors and materials/equipment suppliers. If fewer bids are solicited or received, prices can be expected to be higher.

Subcontractor's markups have been included in each line item unit price. Markups cover the cost of field overhead, home office overhead and subcontractor's profit. Subcontractor's markups typically range from 15% to 25% of the unit price depending on market conditions.

General Contractor's/Construction Manager's Site Requirement costs are calculated on a percentage basis. General Contractor's/Construction Manager's Jobsite Management costs are also calculated on a percentage basis.

<b>Site Requirements</b>	2.5%
<b>Jobsite Management</b>	7.5%
<b>Phasing</b>	0.0%

General Contractor's/Construction Manager's overhead and fees are based on a percentage of the total direct costs plus general conditions, and covers the contractor's bond, insurance, site office overheads and profit.

<b>Insurance &amp; Bonding</b>	2.5%
General Contractor Bonding	
Sub-Contractor Bonding	
OSIP	

<b>Fee (G.C. Profit)</b>	7.0%
--------------------------	------

Unless identified otherwise, the cost of such items as overtime, shift premiums and construction phasing are not included in the line item unit price.

This cost estimate is based on standard industry practice, professional experience and knowledge of the local construction market costs. TBD Consultants have no control over the material and labor costs, contractors methods of establishing prices or the market and bidding conditions at the time of bid. Therefore TBD Consultants do not guarantee that the bids received will not vary from this cost estimate.

**CONTINGENCY**

<b>Design Contingency</b>	15.0%
---------------------------	-------

The Design Contingency is carried to cover scope that lacks definition and scope that is *anticipated* to be added to the Design. As the Design becomes more complete the Design Contingency will reduce.

<b>Construction Contingency</b>	0.0%
---------------------------------	------

The Construction Contingency is carried to cover the unforeseen during construction execution and Risks that do not currently have mitigation plans. As Risks are mitigated, Construction Contingency can be reduce, but should not be eliminated.

<b>Market Factor Contingency</b>	10.0%
----------------------------------	-------

**BASIS OF ESTIMATE**

A market factor contingency has been included in this construction cost estimate, to cover adverse market bidding conditions due to the current construction market conditions currently existing within the Mountain View Area.

<b>Owners Soft Costs</b>	30.0%
--------------------------	-------

Owners Soft Costs includes internal management costs, professional design fees, site and abatement investigation costs, permitting costs, PGE fees, furniture fittings and equipment (FF&E) as well as additional Owner project contingency to cover scope change, bidding conditions, claims and delays.

**ESCALATION**

Escalation is excluded

**EXCLUSIONS**

- Land acquisition, feasibility studies and financing costs
- Escalation costs to midpoint of construction.
- Items identified in the design as Not In Contract [NIC]
- Utility company back charges, including work required off-site and utilities rates
- Work to City streets and sidewalks
- Phasing costs
- Hazardous material investigations and abatement costs
- Overtime, 2nd shift and lost productivity premiums

North Bayshore Masterplan  
New Elementary School



Preliminary Scope Options  
May 31st, 2019

Estimator: BT  
GSF : Varies

GRAND SUMMARY

	SF	TOTAL (\$)	\$ / SF	COMMENTS
<b>SCOPE OPTIONS</b>				
<b>OPTION V1</b>				
New Classroom Building, Admin/Library and MUR Building	56,690	71,341,291	1,258.45	
Sitework	141,320	11,090,836	78.48	
		82,432,127	1,454.09	
<b>OPTION V2</b>				
New Classroom Building, Admin/Library and MUR Building	60,512	72,593,475	1,199.65	
Sitework	135,969	6,979,066	51.33	
		79,572,542	1,314.99	

North Bayshore Masterplan  
New Elementary School



Preliminary Scope Options  
May 31st, 2019

Estimator: BT  
GSF : 56,690

OPTION V1

REF	MF	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
1							
2		OPTION V1					
3		North Bayshore Elementary School	56,690	SF			GSF by Artik Art & Architecture
4							
5		New Buildings					subtotal \$35,958,930
6		Allow for bldg hazardous materials abatement					not in scope - excluded
7		Site demolition, clearing	33,340	SF	1.00	33,340	assume no abatement required
8		Allow for grading	33,340	SF	1.00	33,340	allow
9		New 2 story Classroom Building	37,940	SF	555.00	21,056,700	GSF by Artik Art & Architecture
10		New MUR Building	8,500	SF	535.00	4,547,500	
11		New 2 story Admin/Library Building	10,250	SF	565.00	5,791,250	
12		Upper level pathways	9,600	SF	160.00	1,536,000	assume above lower level
13		Pavilion (on deck)	800	SF	250.00	200,000	open sided, incl. lighting
14		Playcourts (on deck)	5,680	SF	185.00	1,050,800	incl. fencing, lighting, drainage
15		Playfield (on deck)	9,000	SF	190.00	1,710,000	incl. turf, fence, lighting, drainage
16							
17		Site Work					subtotal \$5,590,235
18		Allow for bldg hazardous materials abatement					not in scope - excluded
19		Site demolition, clearing	141,320	SF	1.00	141,320	assume no abatement required
20		Allow for grading	141,320	SF	1.00	141,320	allow
21		Covered pathways	9,995	SF	210.00	2,098,950	assume adjoining buildings
22		Concrete pathways	2,515	SF	15.00	37,725	
23		Concrete pathways	9,200	SF	20.00	184,000	incl. lighting and benches
24		Grass turf playfield	20,600	SF	12.00	247,200	incl. irrigation and drainage
25		Play area	3,750	SF	45.00	168,750	incl. play equipment and furnishings
26		Landscaping	13,290	SF	8.00	106,320	incl. shrubs and irrigation
27		Parking	16,210	SF	28.00	453,880	63 spaces
28		Park Site playfield/landscaping	30,490	SF	13.00	396,370	grass turf, shrubs, trees, irrigation
29		Park Site playcourts/hardscape	13,070	SF	20.00	261,400	concrete playcourts, lights, benches
30		Sidewalks	22,200	SF	15.00	333,000	7' sidewalk, 5' landscaping
31		Allow for mechanical utilities	1	LS	400,000.00	400,000	
32		Allow for electrical utilities	1	LS	500,000.00	500,000	
33		Allow for site lighting	1	LS	100,000.00	100,000	
34		Allow for signage etc	1	LS	20,000.00	20,000	
35						41,549,165	
36		Site Requirements		2.5%		1,038,729	
37		Jobsite Management		7.5%		3,116,187	
38						45,704,082	
39		Insurance & Bonding		2.5%		1,142,602	
40		GC Fee		7%		3,279,268	
41						50,125,951	
42		Design Contingency		15%		7,518,893	
43		Construction Contingency					assume included in Soft Costs
44						57,644,844	
45		Escalation					excluded
46		Market Factor		10%		5,764,484	allow
47						63,409,329	
48		Project Soft Costs		30%		19,022,799	allow
49		<b>Total Option V1</b>				<b>82,432,127</b>	<b>\$1454.09 / SF</b>



Estimator: BT  
GSF : 60,512

OPTION V2

REF	MF	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
1							
2		OPTION V2					
3		North Bayshore Elementary School	60,512	SF			GSF by Artik Art & Architecture
4							
5		New Buildings					subtotal \$36,590,082
6		Allow for bldg hazardous materials abatement					not in scope - excluded
7		Site demolition, clearing	38,691	SF	1.00	38,691	assume no abatement required
8		Allow for grading	38,691	SF	1.00	38,691	allow
9		New 2 story Classroom Building	43,032	SF	555.00	23,882,760	GSF by Artik Art & Architecture
10		New MUR Building	6,902	SF	535.00	3,692,570	
11		New 2 story Admin/Library Building	10,578	SF	565.00	5,976,570	
12		Upper level pathways					none this option
13		Pavilion (on deck)	800	SF	250.00	200,000	open sided, incl. lighting
14		Playcourts (on deck)	5,880	SF	185.00	1,050,800	incl. fencing, lighting, drainage
15		Playfield (on deck)	9,000	SF	190.00	1,710,000	incl. turf, fence, lighting, drainage
16							
17		Site Work					subtotal \$3,517,735
18		Allow for bldg hazardous materials abatement					not in scope - excluded
19		Site demolition, clearing	135,969	SF	1.00	135,969	assume no abatement required
20		Allow for grading	135,969	SF	1.00	135,969	allow
21		Covered pathways					none this option
22		Concrete pathways	2,515	SF	15.00	37,725	
23		Concrete playcourts	9,200	SF	20.00	184,000	incl. lighting and benches
24		Grass turf playfield	20,600	SF	12.00	247,200	incl. irrigation and drainage
25		Play area	3,750	SF	45.00	168,750	incl. play equipment and furnishings
26		Landscaping	17,934	SF	8.00	143,472	incl. shrubs and irrigation
27		Parking	16,210	SF	28.00	453,880	63 spaces
28		Park Site playfield/landscaping	30,490	SF	13.00	396,370	grass turf, shrubs, trees, irrigation
29		Park Site playcourts/hardscape	13,070	SF	20.00	261,400	concrete playcourts, lights, benches
30		Sidewalks	22,200	SF	15.00	333,000	7' sidewalk, 5' landscaping
31		Allow for mechanical utilities	1	LS	400,000.00	400,000	
32		Allow for electrical utilities	1	LS	500,000.00	500,000	
33		Allow for site lighting	1	LS	100,000.00	100,000	
34		Allow for signage etc	1	LS	20,000.00	20,000	
35						40,107,817	
36		Site Requirements	2.5%			1,002,695	
37		Jobsite Management	7.5%			3,008,086	
38						44,118,599	
39		Insurance & Bonding	2.5%			1,102,965	
40		GC Fee	7%			3,165,509	
41						48,387,073	
42		Design Contingency	15%			7,258,061	
43		Construction Contingency					assume included in Soft Costs
44						55,645,134	
45		Escalation					excluded
46		Market Factor	10%			5,564,513	allow
47						61,209,648	
48		Project Soft Costs	30%			18,362,894	allow
49		<b>Total Option V2</b>				<b>79,572,542</b>	<b>\$1314.99 / SF</b>