SMH-P25-0001 - SB 35 Notice of Intent Diamond Springs Mixed Use
Exhibit A - Aerial Map

677 Pleasant Valley Road | APN 097-010-067

Disclaimer: Parcel boundaries in this map are illustrative only and not considered the legal boundary.

Map created on July 31, 2025.

N

0 100 200 Feet

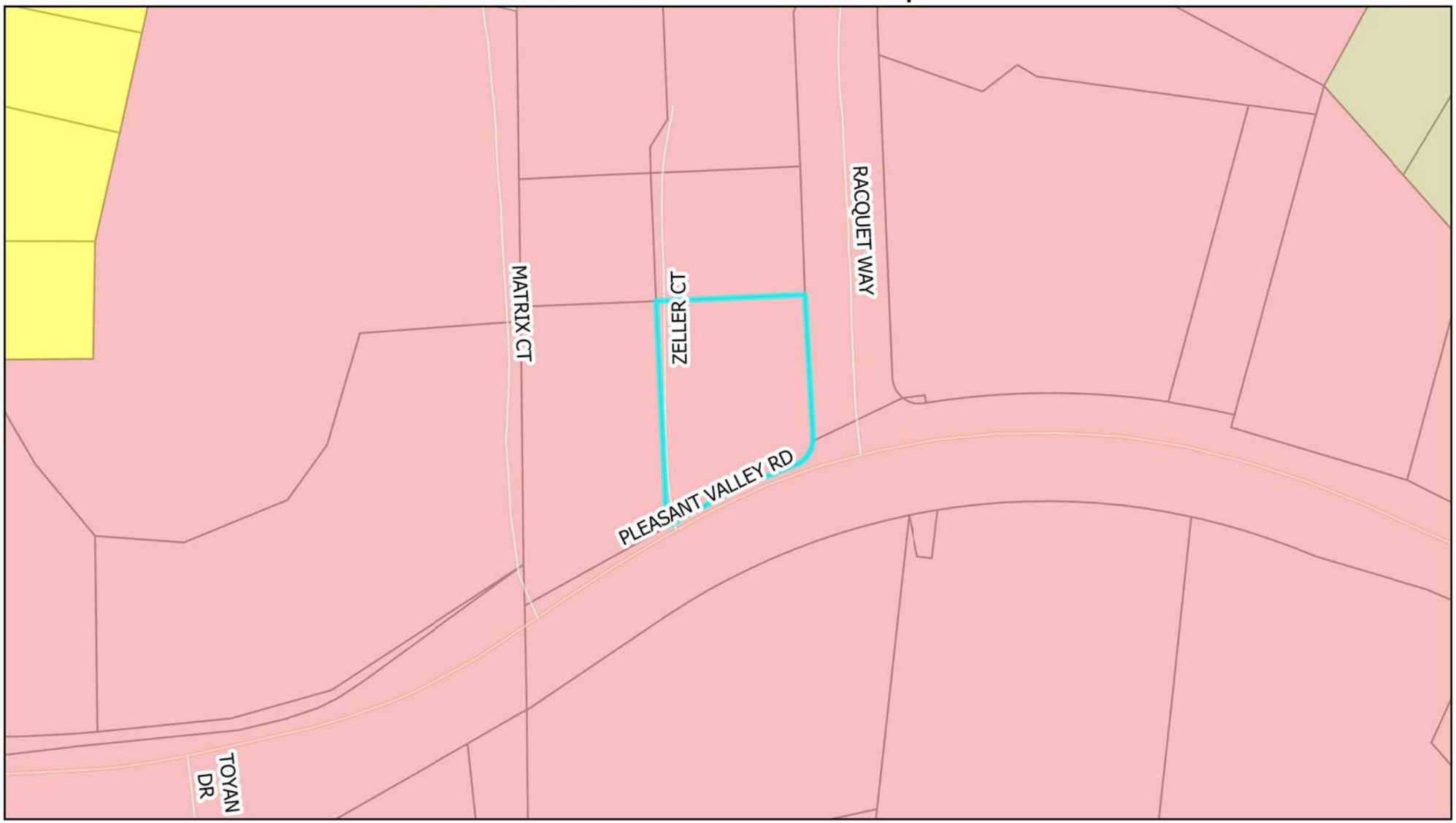
Legend

Roads

MAJOR

MINOR

SMH-P25-0001 - SB 35 Notice of Intent Diamond Springs Mixed Use
Exhibit B - Land Use Map



677 Pleasant Valley Road | APN 097-010-067

Disclaimer: Parcel boundaries in this map are illustrative only and not considered the legal boundary.

Map created on July 31, 2025.

N

0 100 200 Feet

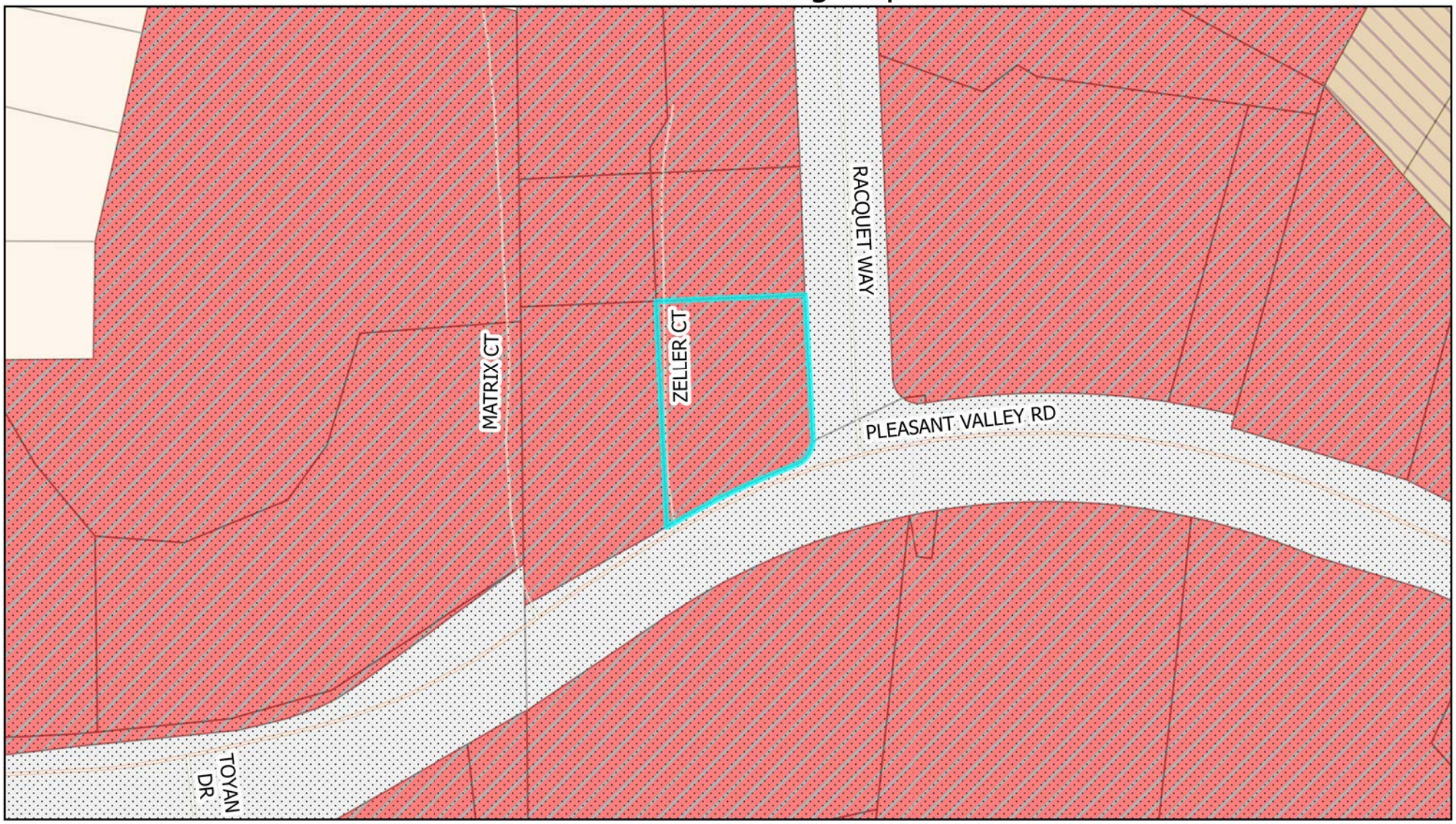
Legend

Land Use Designations
- Commercial (C)
- High Density Residential (HDR)
- Medium Density Residential (MDR)
- Multi-Family Residential (MFR)

Parcel Lines
- Parcel Lines

Roads
- MAJOR
- MINOR

SMH-P25-0001 - SB 35 Notice of Intent Diamond Springs Mixed Use
Exhibit C - Zoning Map



677 Pleasant Valley Road | APN 097-010-067

Legend

Zoning Designations
- CM = Commercial Mainstreet
- RM = Residential Multi-Unit
- R1A = Residential 1 Acre
- TC = Transportation Corridor

Parcel Lines
- Parcel Lines

Roads
- MAJOR
- MINOR

Design Review - Historic overlay
- Design Review - Historic overlay (DH)

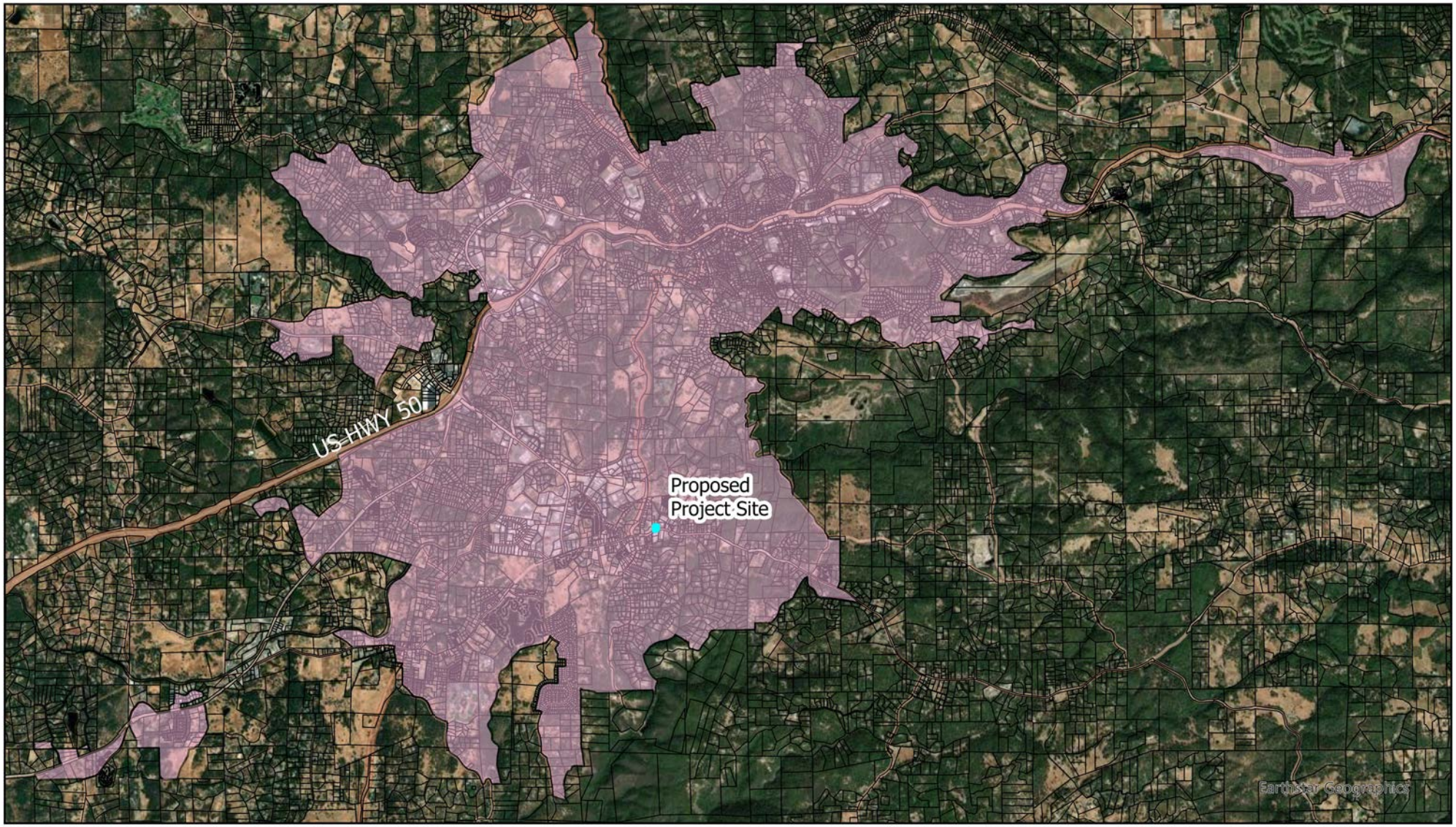
Disclaimer: Parcel boundaries in this map are illustrative only and not considered the legal boundary.

Map created on July 31, 2025.

N

0 100 200 Feet

SMH-P25-0001 - SB 35 Notice of Intent Diamond Springs Mixed Use
Exhibit D - Placerville-Diamond Springs Urban Area Map



Disclaimer: Parcel boundaries in this map are illustrative only and not considered the legal boundary.

Map created on July 23, 2025.

N

0 1 2 Miles

Legend

UrbanArea_2020

UrbanArea_2020

Roads

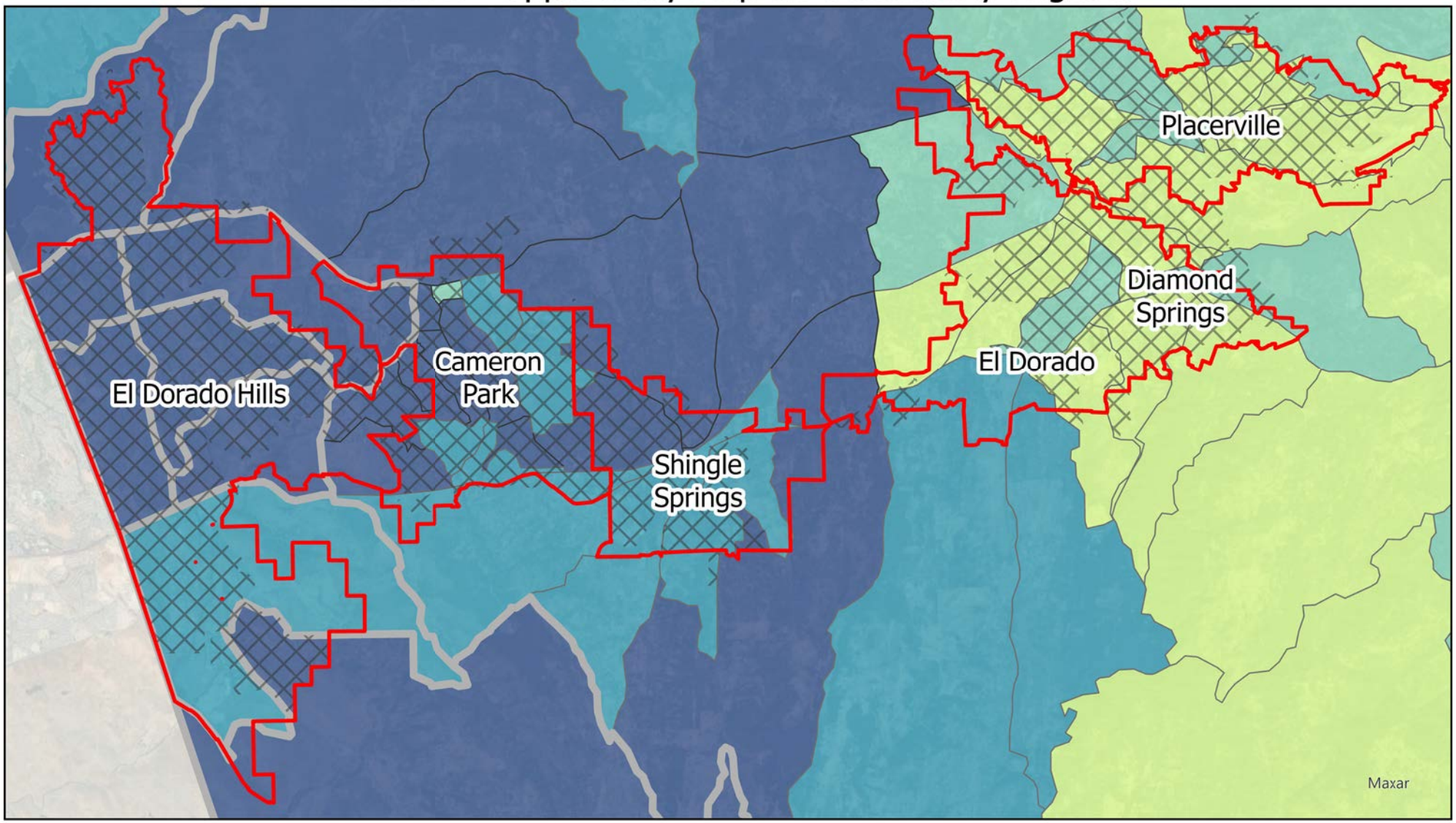
HIGHWAY

MAJOR

Parcel Lines

Parcel Lines

SMH-P25-0001 - SB 35 Notice of Intent Diamond Springs Mixed Use
Exhibit E - Opportunity Map for Community Regions



677 Pleasant Valley Road | APN 097-010-067

Legend

Community Region
Community Region

UrbanArea_2020
UrbanArea_2020

CTCAC_HCD Opportunity
Highest Resource
High Resource
Moderate Resource
Low Resource

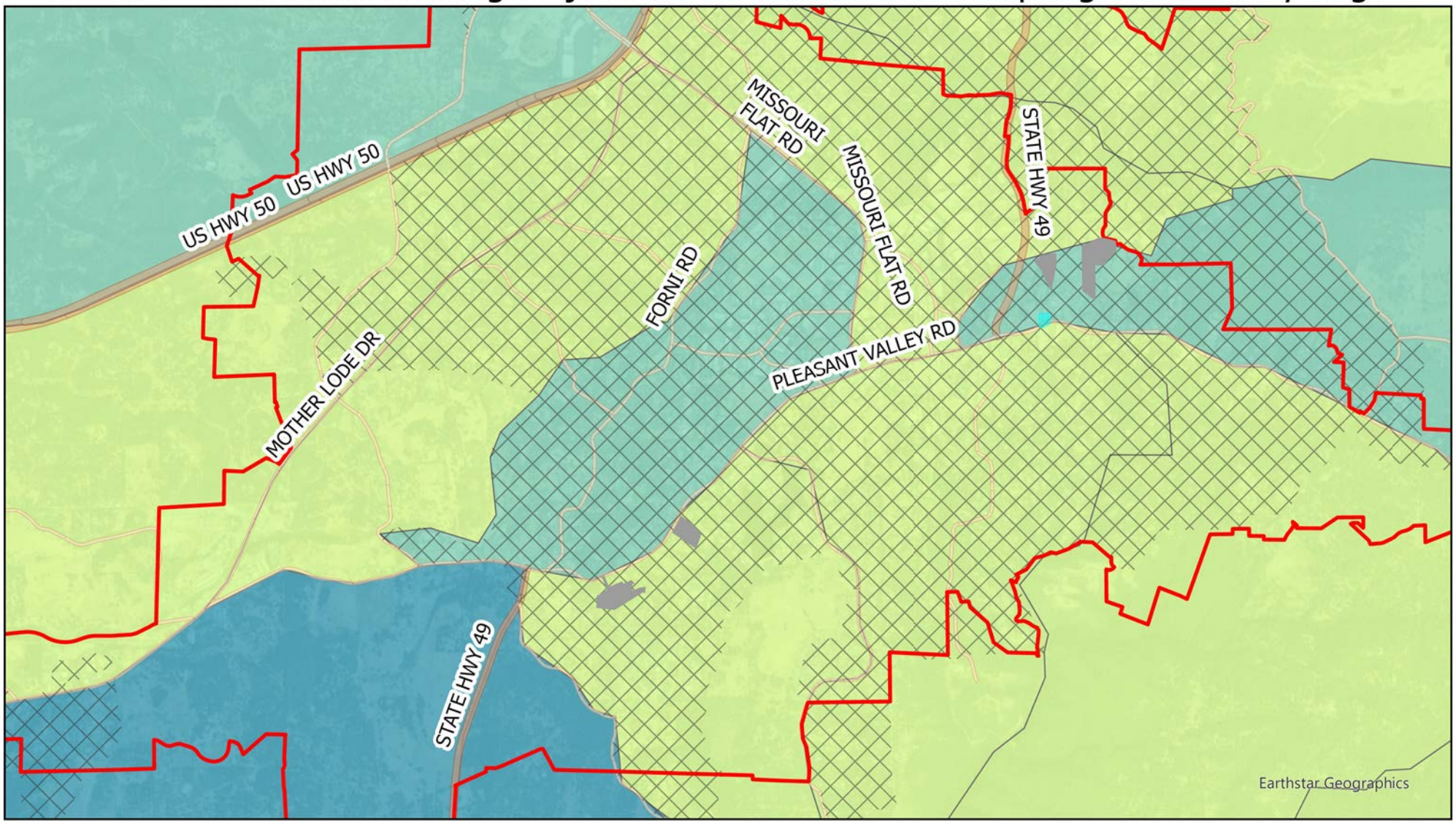
Capital Region
Capital Region

N

0 2 4 Miles

Map created on July 31, 2025.

SMH-P25-0001 - SB 35 Notice of Intent Diamond Springs Mixed Use
Exhibit F - Affordable Housing Projects in El Dorado Diamond Springs Community Region



677 Pleasant Valley Road | APN 097-010-067

N

0 0.5 1 Miles

Legend

CTCAC_HCD Opportunity
- High Resource
- Moderate Resource
- Low Resource

Community Region
- Community Region

UrbanArea_2020
- UrbanArea_2020
- Proposed SB 35 Project
- Approved Affordable Housing Projects

Roads
- HIGHWAY
- MAJOR

Map created on July 31, 2025.

APARTMENTS

CODE DIRECTORY

1.	CALIFORNIA RESIDENTIAL CODE	2022 EDITION
	CALIFORNIA BUILDING CODE	2022 EDITION
	CALIFORNIA MECHANICAL CODE	2022 EDITION
	CALIFORNIA PLUMBING CODE	2022 EDITION
	CALIFORNIA ELECTRICAL CODE	2022 EDITION
	CALIFORNIA GREEN BUILDING STANDARDS	2022 EDITION
	CALIFORNIA FIRE CODE	2022 EDITION
	ENERGY EFFICIENCY STANDARDS	2022 EDITION (TITLE 24)
	WILD URBAN INTERFACE	2022 EDITION

2. THESE DRAWINGS ARE THE PROPERTY OF PREMIER DESIGN. ALL DESIGN AND OTHER INFORMATION ON THE DRAWINGS ARE FOR USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USE. OTHERWISE WITHOUT WRITTEN PERMISSION OF PREMIER DESIGN COPYRIGHT, 2004. PREMIER DESIGN. ALL RIGHT RESERVED

3. OCCUPANCY TYPE A-2
CONSTRUCTION TYPE V

4. FIRE SPRINKLES----------YES
5. ZONING: R-1 - MULTI-FAMILY

HERS FEATURES SUMMARY

- QUALITY INSULATION INSTALLATION (QII)
- INDOOR AIR QUALITY VENTILATION
- KITCHEN RANGE HOOD
- MINIMUM AIRFLOW
- VERIFIED EER/EER2
- VERIFIED SEER/SEER2
- VERIFIED REFRIGERANT CHARGE
- FAN EFFICACY WATTS/CFM
- VERIFIED HSPF
- VERIFIED HEAT PUMP RATED HEATING CAPACITY
- DUCT LEAKAGE TESTING
- DUCTS LOCATED ENTIRELY IN CONDITIONED SPACE CONFIRMED BY DUCT LEAKAGE TESTING
- COMPACT DISTRIBUTION SYSTEM EXPANDED CREDIT
- DRAIN WATER HEAT RECOVERY SYSTEM

DESIGN CRITERIA

OCCUPANCY CATEGORY	II
IMPORTANCE FACTOR	1.0
ROOF DEAD LOAD	12PSF
ROOF LIVE LOAD	20 PSF
SNOW LOAD (PS)	N/A
FLOOR LIVE LOAD	40PSF
WALL DEAD LOAD	15PSF
LATITUDE	38.646
LONGITUDE	-121.274
SS	.442
S1	.221
R	6.5
CS	.0704
SITE CLASS	D
SEISMIC BASE SHEAR	.48K
SDC	D
BASIC WIND SPEED	110 MPH
WIND CATEGORY	II
WIND EXPOSURE	C
SOIL BEARING CAPACITY	=1500 PSF

PROJECT TEAM

DESIGNER:

PREMIER DESIGN
3941 PARK DRIVE STE20-568
EL DORADO HILLS, CA 95672
PHONE (916)743-0123
FAX: (866)631-1424

TITLE 24:

3941 PARK DRIVE STE20-568
EL DORADO HILLS, CA 95672
PHONE (916)743-0123
FAX: (866)631-1424

ENGINEER IN RECORD

CSI ENGINEERING
2795 EAST BIDWELL ST #100-348
FOLSOM, CA 95630
(707) 372-6634
WWW.CSIENG.COM

SHEET INDEX

ID	NAME
A-001	COVER PAGE
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A-006	LANDSCAPE PLAN
C1	COVER SHEET
C2	NOTES
C3	GRADING & DRAINAGE PLAN
C4	EROSION AND SEDIMENTATION CONTROL PLAN
C5	UTILITY PLAN
C6	DETAILS
A-1.1	EXISTING FLOOR PLAN
A-1.2	FLOOR PLANS
A-1.3	FLOOR PLANS
A-2.1	ELEVATION
A-2.2	ELEVATION
A-2.3	ELEVATION

PROJECT DATA

EXISTING DWELLING ---------- 4000 SQ.FT.
(E) UNIT 1 ---------- 1000 SF
(E) UNIT 2 ---------- 1000 SF
(E) UNIT 3 ---------- 1000 SF
(E) UNIT 4 ---------- 1000 SF

NEW APARTMENTS ---------- 8127 SQ.FT.

2ND FLOOR UNIT A -------- 509 SF	3RD FLOOR UNIT A -------- 509 SF
2ND FLOOR UNIT B-------- 507 SF	3RD FLOOR UNIT B--------- 507 SF
2ND FLOOR UNIT C -------- 509 SF	3RD FLOOR UNIT C -------- 509 SF
2ND FLOOR UNIT D-------- 507 SF	3RD FLOOR UNIT D--------- 507 SF
2ND FLOOR UNIT E -------- 509 SF	3RD FLOOR UNIT E -------- 509 SF
2ND FLOOR UNIT F-------- 507 SF	3RD FLOOR UNIT F--------- 507 SF
2ND FLOOR UNIT G -------- 509 SF	3RD FLOOR UNIT G -------- 509 SF
2ND FLOOR UNIT H-------- 507 SF	3RD FLOOR UNIT H--------- 507 SF

LOT SIZE ---------- 16020 SQ.FT.

SCOPE OF WORK

SCOPE OF WORK IS LIMITED TO CONSTRUCTION OF 2 FLOORS OF 16 APARTMENTS IN TOTAL, 8 OF 507 SQ.FT. AND 8 OF 509 SQ.FT. WITH 1 BEDROOM AND 1 BATHROOM EACH, ON AN EXISTING STRUCTURE OF 4000 SQ.FT.

THREE STORY

16 BEDROOM;
16 BATHROOM;

ABBREVIATIONS

L ANGEL	DBL. DOUBLE	FLSH. FLASHING	LCKR LOCKER	REQ. REQUIRED	TYP. TYPICAL
@ AT	DEPT. DEPARTMENT	FLUOR. FLUORESCENT	LT LIGHT	RM ROOM	UNF. UNFINISHED
# POUND OR NUMBER	DET. DETAIL	F.O.C. FACE OF CONCRETE	MAX. MAXIMUM	RWD RED WOOD	VER. VERTICAL
A.DR. AREA DRAIN	DIA. DIAMETER	F.O.F. FACE OF FINISH	M.C. MEDICINE CABINET	S. SOUTH	W. WEST
AGGR. AGGREGATE	DIM. DIMENSION	F.O.M. FACE OF MASONRY	MECH. MECHANICAL	S.C. SOLID CORE	W/ WITH
AL. ALUMINUM	DISP. DISPOSAL	F.O.S. FACE OF STUDS	MEMB. MEMBRANE	SCHED. SCHEDULE	W.C. WATER CLOSET
APPROX. APPROXIMATE	DWN DOWN	F.O.P/B. FACE OF POST/BEAM	MET. METAL	SECT. SECTION	WD. WOOD
ARCH. ARCHITECTURAL	D.OPNG. DOOR OPENING	FP FIREPROOF	MFR. MANUFACTURER	SH SINGLE HUNG	W/O WITHOUT
ASPH. ASPHALT	DR. DOOR	F.S. FULL SIZE	MIN. MINIMUM	SHR SHOWER	WP. WATERPROOF
BD. BOARD	D.S.P. DRY STANDPIPE	FT. FOOT OR FEET	MIR. MIRROR	SHT SHEET	WSCT. WAINSCOT
BLDG. BUILDING	DWG. DRAWING	FTG. FOOTING	N. NORTH	SIM. SIMILAR	WT. WEIGHT
BLK. BLOCK	E. EAST	FTR FUTURE	NO.OR # NUMBER	SPEC. SPECIFICATION	
BLKNG. BLOCKING	EA. EACH	GA. GAUGE	NOM. NOMINAL	SQ. SQUARE	
BM. BEAM	E.J. EXPANSION JOINT	GALV. GALVANIZED	N.T.S. NOT TO SCALE	S.S. STAINLESS STEEL	
BT. BOTTOM	EL. ELEVATION	GL. GLASS	O.A. OVERALL	STND STANDARD	
CAB. CABINET	E.P. ELECTRICAL PANEL	GR. GRADE	O.C. ON CENTER	STL. STEEL	
CEM. CEMENT	EQ. EQUAL	GYP. GYPSUM	O.DIA. OUT SIDE DIAMETER	STOR. STORAGE	
CER. CERAMIC	EQPT. EQUIPMENT	HDWD HARDWOOD	OFF. OFFICE	SYM. SYMMETRICAL	
CLG. CEILING	E.W.C. ELECTRICAL WATER COOLER	HDWE HARDWARE	OPP. OPPOSITE	TRD. TREAD	
CLO. CLOSET	EXIST. EXISTING	HORIZ. HORIZONTAL	PL PLATE	T.B. TOWER BAR	
CLR CLEAR	EXPO. EXPOSED	HR HOUR	P. LAM. PLASTIC LAMINATE	T.C. TOP OF CURB	
COL. COLUMN	EXT. EXTERIOR	HS HORIZONTAL SLIDER	PLAS. PLASTER	TEL. TELEPHONE	
CONC. CONCRETE	F.A. FIRE ALARM	HT HEIGHT	PR PAIR	TER. TERRAZZO	
CONN. CONNECTION	FND FOUNDATION	I.DIA. INSIDE DIAMETER	P.T. PRESSURE TREATED	THK. THICK	
CONSTR. CONSTRUCTION	F.DR. FLOOR DRAIN	IN INCHE	PW PICTURE WINDOW	T.O.F. TOP OF FRAMING	
CONT. CONTINUOUS	F.F. FINISH FLOOR	INSUL. INSULATION	RAD RADIUS	T.O.P. TOP OF PARAPET	
COR. CORRIDOR	F.G. FINISH GRADE	INT. INTERIOR	R DR. ROOF DRAIN	T.O.S. TOP OF SHEATHING	
CTSNK. COUNTERSUNK	F.H.C. FIRE HOSE CABINET	JT JOINT	REF. REFERENCE	T.P. TOP OF PAVEMENT	
CNTR. COUNTER	FIN. FINISH	KIT. KITCHEN	REFR. REFRIGERATOR	T.V. TELEVITION	
CW CASEMENT WINDOW	FL. FLOOR	LAM. LAMINATE	REINF. REINFORCED	T.W. TOP OF WALL	

VICINITY MAP

PREMIER DESIGN
3941 PARK DRIVE STE20-568
EL DORADO HILLS,CA 95672
PHONE:(916)743-0123 FAX:(866)631-1424
EMAIL:PREMIERDESIGN@YMAIL.COM
WEB:PRMIERDESIGNONLINE.COM

CONSULTANTS

APARTMENTS

677 PLEASANT VALLEY RD
DIAMOND SPRINGS, CA
95619

APN: 097-010-067

OWNER'S INFORMATION

NAME: RUSSELL ENYART
PHONE:(916)524-9733
EMAIL:russell@enyarthomes.com

MARK	DATE	DESCRIPTION

PROJECT NO:
REVISION DATE:
DRAWN BY: ANDREY GINZBURG
CHK'D BY:
COPYRIGHT:

SHEET TITLE

COVER PAGE

A-001

THE PLANS TO SPECIFY THE GROUND IMMEDIATELY ADJACENT TO THE NEW FOUNDATION SHALL BE SLOPED AWAY FROM BUILDING AT A SLOPE OF NOT LESS THAN 6" (5 PERCENT SLOPE) IN THE FIRST 10 FEET MEASURED PERPENDICULAR TO THE FACE OF THE WALL. IMPERVIOUS SURFACES WITHIN 10 FEET OF BUILDING SHALL BE SLOPED A MINIMUM OF 2 PERCENT AWAY FROM BUILDING. R401.3

PARKING CALCULATION:

ON SITE PARKING ----------8 SPACES
OFF STREET(CITY) PARKING---14 SPACES

ZELLER CT

PROPERTY LINE

S 90° 00' 00"E 167.79'

N1°42'30"W 167.79'

9 10 11 12 13 14 15 16

20' - 0"

8' - 0"

5' - 0"

10' - 0"

1 2 3 4 5 6 7 8

PARKING SPOTS

39' - 10"

WALK WAY

GARBAGE

(E) SEWER LINE

(E) WATER LINE

PLEASANT VALLEY RD

PROPERTY LINE

N 20° 41' 57" W 118.39'

R 390.00'

0°26"

EXISTING OFFICE BUILDING

5' - 0"

19' - 5"

N88°17'30"E 110.66'

S 0° 00' 00" W 110.66'

PROPERTY LINE

ADJACENT PROPERTY: 4171

LANDSCAPING AREA

15' - 10"

WALK WAY

WALK WAY

1817

30' - 10"

ONE WAY ROAD

N1°42'30"W 125.98'

N 90° 00' 00" W 125.98'

WALK WAY

PROPERTY LINE

SIGN

17 18 19 20 21 22

RACQUET WAY

N

1 **SITE PLAN**
SCALE: 1" = 10'-0"

PREMIER DESIGN
3941 PARK DRIVE STE20-568
EL DORADO HILLS,CA 95672
PHONE:(916)743-0123 FAX:(866)631-1424
EMAIL:PREMIERDESIGN@YMAIL.COM
WEB:PRMIERDESIGNONLINE.COM

CONSULTANTS

APARTMENTS

677 PLEASANT VALLEY RD
DIAMOND SPRINGS, CA
95619

APN: 097-010-067

OWNER'S INFORMATION

NAME: RUSSELL ENYART
PHONE:(916)524-9733
EMAIL:russell@enyarthomes.com

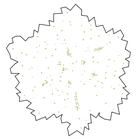
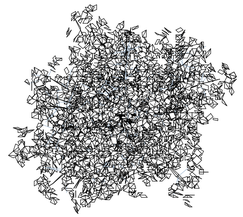
MARK	DATE	DESCRIPTION

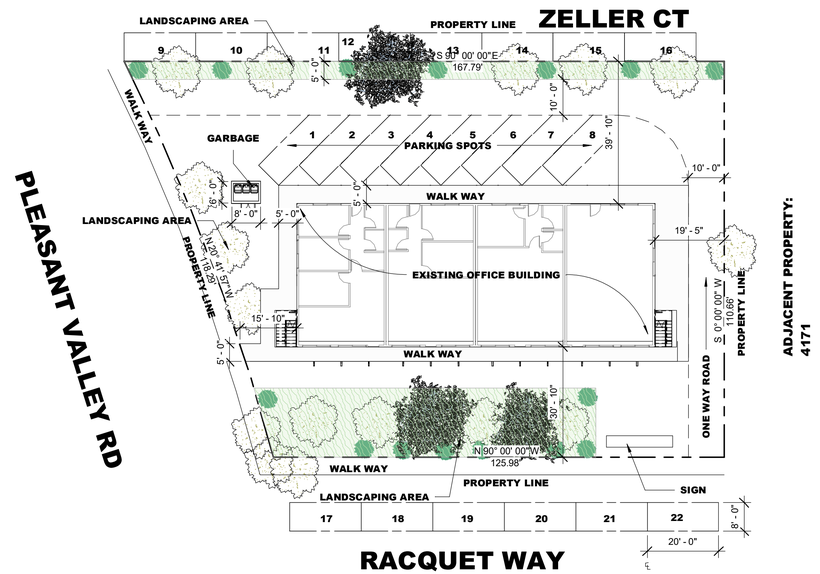
PROJECT NO:
REVISION DATE:
DRAWN BY: ANDREY GINZBURG
CHK'D BY:
COPYRIGHT:

SHEET TITLE

SITE PLAN

A-005

	PLANT LEGEND					
	BOTANICAL TREES		COMMON	SIZE	WATER	QTY
1		ARCTOSTAPHYLOS EMERALD CARPET	GROUNDCOVER MANZANITA	1 GAL	L	16
2		CERCIS OCCIDENTALS	WESTERN REDBUD	15 GAL	L	16
3		QUERCUS DOUGLASII	BLUE OAK	24" BOX	L	3



1 LANDSCAPE PLAN

SCALE: 1" = 20'-0"

PREMIER DESIGN
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CONSULTANTS

APARTMENTS

677 PLEASANT VALLEY RD
DIAMOND SPRINGS, CA
95619

APN: **097-010-067**

OWNER'S INFORMATION

NAME: RUSSELL ENYART
PHONE:(916)524-9733
EMAIL:russell@enyarthomes.com

MARK	DATE	DESCRIPTION

PROJECT NO:
REVISION DATE:
DRAWN BY: ANDREY GINZBURG
CHK'D BY:
COPYRIGHT:

SHEET TITLE

LANDSCAPE PLAN

A-006

CIVIL IMPROVEMENT PLANS FOR

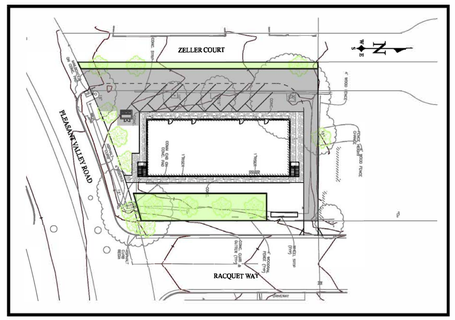
677 PLEASANT VALLEY ROAD
DIAMOND SPRINGS, CA 95619

SYMBOL LEGEND

EXISTING		PROPOSED	CONTRACTOR TO INSTALL STANDARD
SSMH	SANITARY SEWER MANHOLE	SSMH	SEWER MANHOLE
SDMH D	STORM DRAIN MANHOLE		DROP INLET
	CATCH BASIN		CATCH BASIN
	CURB AND GUTTER		CURB & GUTTER
	CATCH BASIN	WV	WATER VALVE
	SIGN	WM	1" WATER SERVICE & CHECK VALVE
	SIGN	FH WV	FIRE HYDRANT ASSEMBLY
	WATER VALVE	BO	BLOWOFF ASSEMBLY
	POWER POLE WITH GUY	SSCO	CLEANOUT
6"G	HP GAS LINE		CONCRETE
T	TELEPHONE		WELL TYPE MONUMENT
6"W	WATER LINE	SL	70W HPSV STREET LIGHT
85	EXISTING CONTOUR		EROSION CONTROL FILTER
	TOP/TOE BANK	SD	NEW STORM DRAIN
	PROPERTY LINE	WL	NEW WATER LINE
	CENTERLINE		

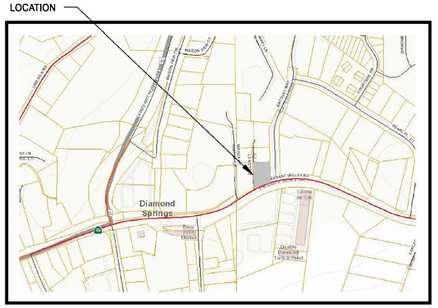
ABBREVIATIONS

AB - AGGREGATE BASE
AC - ASPHALT CONCRETE
ARV - AIR RELEASE VALVE
BF - BLIND FLANGE
B/W - BACK OF WALK
CL - CENTER LINE / CLASS
CONC. - CONCRETE
CU - COPPER
DI - DRAIN INLET
DIP - DUCTILE IRON PIPE
DWY - DRIVEWAY
Ø - DIAMETER
EL - ELEVATION
EP - EDGE OF PAVEMENT
EXIST/EX - EXISTING
FF - FINISH FLOOR
FL - FLOWLINE
FG - FINISH GRADE
FH - FIRE HYDRANT
FOC - FACE OF CURB
GB - GRADE BREAK
GR - GRATE ELEVATION
HP - HIGH POINT
IE - INVERT ELEVATION
INV - INVERT
L - LENGTH
LP - LOW POINT
MAX - MAXIMUM
MIN - MINIMUM
NAPOTS - NOT A PART OF THIS SUBDIVISION
P - PAD ELEVATION
PL - PROPERTY LINE
PP - POWER POLE
PVC - POLYVINYLCHLORIDE
PVMT - PAVEMENT
R - RADIUS
RIM - RIM ELEVATION
R/W - RIGHT OF WAY
S - SLOPE, SOUTH
SD - STORM DRAIN
SS - SANITARY SEWER
STD - STANDARD
S/W - SIDEWALK
TB - TOP OF BANK
TC - TOP OF CURB
TCD - THROUGH CURB DRAIN
TF - TOP OF FOOTING
TW - TOP OF WALL
TYP - TYPICAL
UE- UNDERGROUND ELECTRICAL
UG- UNDERGROUND GAS
UT-UNDERGROUND TELEPHONE
W - WATER MAIN
WM - WATER METER / MAIN
WS - WATER SERVICE



SITE PLAN
SCALE: 1" = 50'

LOCATION



LOCATION MAP
NTS

WATER SERVICE CERTIFICATION

I hereby certify that the water system as shown on Drawing number _____, sheets _____ through _____ has been designed to provide each facility of this project with adequate water pressure and fire flow as of the date shown, based on criteria supplied by the El Dorado Irrigation District.

Registered Civil Engineer | RCE No. | Date

SEWER SERVICE CERTIFICATION

I hereby certify that the sewer system as shown on Drawing number _____, sheets _____ through _____ has been designed to provide each facility of this project with sewer service as of the date shown, based on criteria supplied by the El Dorado Irrigation District.

Registered Civil Engineer | RCE No. | Date

RECORD DRAWING CERTIFICATE

This set of Plans, having been reviewed by me, reflect all approved revisions to the project known to me, and all field deviations to the planned improvements by the construction contractor, as reported to me as of ___(Date)___. It does not represent field verification of planned improvements by me.

Registered Civil Engineer | RCE No. | Date

FEMA NOTE

THE SUBJECT PROPERTY IS LOCATED IN ZONE "X" (AREA OF MINIMAL FLOOD HAZARD) PER FEMA MAP #060040

OWNER

JANET M. BORDGES, AS SURVIVING TRUSTEE OF THE GERALD L. BORDGES AND JANET M. BORDGES REVOCABLE LIVING TRUST OF 2007

LEGAL DECRIPTION:

PARCEL C, AS SAID PARCEL IS DESIGNATED AND SO DELINEATED IN THAT CERTAIN PARCEL MAP ENTITLED "PORTION N.W.¼ SECTION 30, T. 10N., R.11, MDM." FILED JANUARY 14, 1976, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY IN BOOOK 9 OF PARCEL MAPS, AT PAGE 138

BASIS OF BEARINGS & DATUM

UTILIZING OPUS CORRECTED GPS COORDINATES, THE BEARINGS SHOWN ON THIS SURVEY ARE BASED UPON THE NORTH AMERICAN DATUM OF 1983 (NAD83), CALIFORNIA STATE PLANE ZONE 3 AND THE ELEVATIONS SHOWNON THIS SURVEY ARE BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

SURVEY NOTE

BOUNDARY & TOPOGRAPHY ARE BASED ON SURVEY BY SOUSA LAND SURVEYS, VACAVILLE, CA, DATED 4/11/2025

EARTH WORK QUANTITIES

CUT: 65.0 CU YDS
FILL: 13 CU YDS
EXPORT: 52CU YDS
IMPORT: 0 CU YDS

NOTE: EARTHWORK QUANTITIES SHOWN ARE APPROXIMATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INDEPENDENTLY ESTIMATE QUANTITIES FOR HIS/HER OWN USE.

EL DORADO COUNTY

APPROVED BY: _____ DATE

SHEET INDEX

	BY	DATE	EDC	DATE	REVISIONS
△					
△					
△					
△					
△					
△					

El Dorado COUNTY

REGISTERED PROFESSIONAL ENGINEER — LAWRENCE ANDREWS — Exp. 12/31/25 — No. 47013 — CIVIL — STATE OF CALIFORNIA

Date:	April 28, 2025
Scale:	As Noted
Designed:	LA
Drawn:	LA
Checked:	LA
Proj. Engr:	LA
File:	25-27

Plans Prepared By:
CSI Engineering
2795 East Bidwell St #100-348
Folsom, CA 95630
(707) 372-6634
www.csieng.com

COMCAST 811 BEFORE YOU DIG — SAFE DIGGING PARTNER

677 PLEASANT VALLEY ROAD, EL DORADO HILLS, CA 95619

COVER SHEET

SHEET C1
1 OF 6 SHEETS

APN 097-010-067

PUBLIC RIGHT-OF-WAY:

NO PERSON SHALL PERFORM ANY GRADING WORK, PLACE OBSTRUCTIONS OF ANY SEMI-PERMANENT NATURE, OR PLACE PERMANENT STRUCTURES WITHIN THE RIGHT-OF-WAY OF A PUBLIC ROAD OR STREET, OR WITHIN A PUBLIC EASEMENT UNDER THE JURISDICTION OF THE COUNTY OF EL DORADO, WITHOUT PRIOR APPROVAL OF THE DIRECTOR.

.

COMPLIANCE WITH ORDINANCE AND THE GENERAL PLAN:

1. NATURAL FEATURES,INCLUDING VEGETATION, OAK TREES, WATERCOURSES, WETLANDS, STEEP SLOPES AND SIMILAR RESOURCES SHALL BE PRESERVED CONSISTENT WITH THE POLICIES OF THE EL DORADO COUNTY GENERAL PLAN, ANY APPLICABLE SPECIFIC PLAN, THE REQUIREMENTS OF THE COUNTY ZONING ORDINANCE, THE CONDITIONS OF APPROVAL OF ANY APPLICABLE SUBDIVISION MAP OR DISCRETIONARY PERMIT, THE OAK TREE AND WETLANDS PRESERVATION STANDARDS INCLUDED IN VOLUME IV OF THIS MANUAL, AND THE REQUIREMENTS OF THE GRADING PERMIT UNDER WHICH THE WORK IS CONDUCTED. NOTWITHSTANDING ANY OTHER REQUIREMENT, THESE NATURAL FEATURES SHALL BE PRESERVED TO THE EXTENT FEASIBLE.

2. **CONSISTENCY WITH COUNTY DESIGN STANDARDS:**

THE PROPOSED GRADING SHALL CONFORM TO THE DESIGN STANDARDS ESTABLISHED IN THE EL DORADO COUNTY GRADING DESIGN MANUAL.

3. **COMPLIANCE WITH TERMS OF APPROVAL:**

THE PERMIT SHALL BE LIMITED TO WORK SHOWN ON THE GRADING PLANS AS APPROVED BY THE DIRECTOR. IN ISSUING A PERMIT, THE DIRECTOR MAY IMPOSE ANY CONDITION OF APPROVAL DEEMED NECESSARY TO PROTECT THE HEALTH, SAFETY AND WELFARE OF THE PUBLIC, TO PREVENT THE CREATION OF A HAZARD TO PUBLIC OR PRIVATE PROPERTY, AND TO ASSURE PROPER COMPLETION OF THE GRADING, INCLUDING BUT NOT LIMITED TO:

A. MITIGATION OF ADVERSE ENVIRONMENTAL IMPACTS DISCLOSED IN ANY ENVIRONMENTAL DOCUMENT.

B. RECONFIGURATION OF ANY EXISTING GRADED SURFACE TO COMPLY WITH THE STANDARDS OF THE EL DORADO COUNTY GRADING MANUAL

C. INSTALLATION OF FENCING OR OTHER PROTECTIVE DEVICES TO AVOID WORK SITE HAZARDS OR ENVIRONMENTAL DAMAGE.

D. REQUIREMENTS FOR DUST, EROSION, SEDIMENT AND NOISE CONTROL, HOURS OF OPERATION AND SEASON OF WORK, WEATHER CONDITIONS, SEQUENCE OF WORK, ACCESS ROADS AND HAUL ROUTES;

E. REQUIREMENTS FOR SAFEGUARDING WATERCOURSES FROM DEPOSITION OF SEDIMENT OR DEBRIS IN QUANTITIES EXCEEDING NATURAL LEVELS;

F. REQUIREMENTS FOR SAFEGUARDING AREAS RESERVED FOR ON-SITE SEWAGE DISPOSAL;

G. DEMONSTRATION BY THE APPLICANT, THROUGH ADEQUATE ENGINEERING OR GEOLOGIC ANALYSIS AND REPORT, THAT THE SITE OF THE PROPOSED GRADING ACTIVITIES IS NOT SUBJECT TO UNSTABLE SLOPES, SUBSTANTIAL SETTLEMENT, EROSION, FLOODING OR SEISMIC HAZARDS OR THAT SUCH HAZARDS ARE ADEQUATELY MITIGATED BY THE DESIGN RECOMMENDATIONS INCLUDED IN THE SUBMITTED REPORT(S).

H. DEMONSTRATION BY THE APPLICANT OF COMPLIANCE WITH STATE OR FEDERAL REGULATIONS. A GRADING PERMIT ISSUED BY A DEPARTMENT OF THE COUNTY OF EL DORADO SHALL NOT RELIEVE THE PERMITTEE OF RESPONSIBILITY FOR SECURING OTHER PERMITS OR APPROVALS AS REQUIRED BY OTHER COUNTY AGENCIES OR AGENCIES OF THE STATE OR FEDERAL GOVERNMENT.

4. **CHANGED CONDITIONS:**

WHERE CONDITIONS ENCOUNTERED IN THE GRADING OPERATION DEVIATE FROM THAT ANTICIPATED IN THE GEOTECHNICAL AND GEOLOGIC STUDY REPORTS, OR WHERE SUCH CONDITIONS WARRANT CHANGES TO THE RECOMMENDATIONS CONTAINED IN THE ORIGINAL STUDIES, REVISED REPORTS MAY BE REQUIRED BY THE DIRECTOR.

5. SAFETY:

EXCAVATIONS SHALL NOT ENDANGER LIFE OR PROPERTY. ACCESS TO ANY TEMPORARY OR PERMANENT EXCAVATION THAT CONSTITUTES A POTENTIAL SAFETY HAZARD, AS DETERMINED BY THE DIRECTOR, SHALL BE RESTRICTED BY FENCING OR OTHER BARRIER AS LONG AS SUCH HAZARD EXISTS. EXCAVATION SAFETY MEASURES SHALL CONFORM TO ANY APPLICABLE CAL-OSHA STANDARDS.

6. SETBACKS:

GRADING AND OTHER DEVELOPMENT SHALL BE SET BACK FROM PROPERTY BOUNDARIES, ESTABLISHED EASEMENTS, CREEKS OR OTHER WATER BODIES, STEEP NATURAL SLOPES AND OTHER RESOURCES AS REQUIRED BY THE EL DORADO COUNTY GENERAL PLAN, THE COUNTY ZONING ORDINANCE, THE CONDITIONS OF APPROVAL OF ANY APPLICABLE SUBDIVISION MAP OR DISCRETIONARY PERMIT, AND THE CALIFORNIA BUILDING CODE. SETBACK DISTANCES MAY BE INCREASED BASED ON A RECOMMENDATION INCLUDED IN A GEOTECHNICAL OR GEOLOGIC REPORT FOUND ADEQUATE BY THE DIRECTOR. ANY REQUEST FOR A REDUCED SETBACK WOULD REQUIRE SIMILAR DOCUMENTATION AND WOULD BE REVIEWED FOR CONSISTENCY WITH THE GENERAL PLAN, ZONING ORDINANCE AND OTHER APPLICABLE REGULATIONS.

OBSTRUCTION OF STORM WATERS:

GRADING ACTIVITIES THAT OBSTRUCT, DIVERT, IMPEDE OR INTERFERE WITH THE NATURAL FLOW OF STORM WATERS WITHIN MAN-MADE CHANNELS OR NATURAL WATERCOURSES ARE PROHIBITED UNLESS IT IS DEMONSTRATED TO THE SATISFACTION OF THE DIRECTOR THAT ALL OF THE FOLLOWING ARE TRUE:

1. THE PROPOSED ACTIVITIES WILL NOT CAUSE FLOODING OR EXACERBATE AN EXISTING FLOODING CONDITION AS DOCUMENTED IN A COUNTY-ACCEPTED DRAINAGE REPORT CONFORMING TO THE REQUIREMENTS SET FORTH IN THE COUNTY OF EL DORADO DRAINAGE MANUAL.
2. THE PROPOSED ACTIVITIES WOULD NOT RESULT IN SEVERE OR ONGOING EROSION.
3. THE APPLICANT IS IN COMPLIANCE WITH APPLICABLE SECTIONS OF THE STATE OF CALIFORNIA WATER CODE, STATE OF CALIFORNIA FISH AND GAME CODE, THE NATIONAL CLEAN WATER ACT, THE COUNTY STORM WATER MANAGEMENT PLAN, AND OTHER APPLICABLE LOCAL, STATE, AND FEDERAL LAWS.

CONSTRUCTION SITE REQUIREMENTS:

A **PROTECTION OF EXISTING UTILITIES:** THE PERMITTEE SHALL TAKE ALL REASONABLEMEASURES, AS DETERMINED BY THE DIRECTOR, TO PREVENT OR AVOID DAMAGE TO EXISTING PUBLIC UTILITIES OR SERVICES. THE PERMITTEE SHALL BE RESPONSIBLE FOR THE COST OF REPAIR OF ANY DAMAGE TO FACILITIES RESULTING FROM THE GRADING ACTIVITIES PERFORMED UNDER THE AUTHORITY OF THE PERMIT.

B **PROTECTION OF ADJACENT PROPERTY:** THE OWNER OF RECORD OF THE PROPERTY UPON WHICH THE GRADING PERMIT IS ISSUED IS RESPONSIBLE FOR ANY DAMAGE TO ADJACENT PROPERTY RESULTING FROM THE GRADING ACTIVITIES. ALL PERSONS SHALL TAKE ALL REASONABLE MEASURES, AS DETERMINED BY THE DIRECTOR, TO PREVENT OR AVOID DAMAGE TO ANY ADJOINING PUBLIC STREET, SIDEWALK, ALLEY OR OTHER PUBLIC OR PRIVATE PROPERTY.

C **ADVANCE NOTICE:** THE PERMITTEE SHALL CONSTRUCTION-STAKE THE SITE AND NOTIFY THE DIRECTOR AT LEAST FORTY-EIGHT HOURS PRIOR TO THE START OF WORK.

D **GRADING LIMITS:** LIMITS OF GRADING SHALL BE CLEARLY DEFINED AND MARKED IN THE FIELD TO PREVENT DAMAGE BY CONSTRUCTION EQUIPMENT. WETLANDS AND OAK TREES SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITY AS DESCRIBED IN SECTION E.5.A D.5.A OF THE EL DORADO COUNTY GRADING MANUAL.

E **MINIMIZATION OF EXPOSED AREA**: DURING THE RAINY SEASON, THE SMALLEST PRACTICAL AREA OF ERODIBLE LAND, AS DETERMINED BY THE DIRECTOR, SHALL BE EXPOSED AT ANY ONE TIME DURING GRADING OPERATIONS AND THE TIME OF EXPOSURE SHALL BE MINIMIZED.

F **EROSION AND SEDIMENT CONTROL:** THE PERMITTEE SHALL TAKE ALL REASONABLE MEASURES, AS DETERMINED BY THE DIRECTOR, TO PREVENT OR AVOID:

1. DISCHARGE OF SEDIMENT FROM THE SITE, IN QUANTITIES EXCEEDING STATE WATER RESOURCES CONTROL BOARD STANDARDS, TO ANY WATERCOURSE, DRAINAGE SYSTEM, OR ADJACENT PROPERTY.
2. DAMAGE TO WATERCOURSES AND ADJACENT PROPERTIES IN THE FORM OF EROSION, FLOODING, OR DEPOSITION WHICH MAY RESULT FROM THE PERMITTED GRADING.
3. SEDIMENT DEPOSITION ONTO PUBLIC OR PRIVATE VEHICLE WAYS. IMPLEMENTATION OF EROSION-CONTROL AND SEDIMENT-CONTROL PLANS SHALL BE BASED ON THE SEASON OF THE YEAR AND THE STAGE OF CONSTRUCTION AT FORECASTED PERIODS OF RAINFALL. THE PERMITTEE SHALL EMPLOY ALL MEASURES NECESSARY TO PREVENT OR ABATE OFFSITE SEDIMENT DISCHARGE DURING STORM CONDITIONS CONSISTENT WITH THE COUNTY STORM WATER MANAGEMENT PLAN (SWMP). EROSION AND SEDIMENT CONTROL PLANS SHALL ALLOW FOR POSSIBLE CHANGES IN CONSTRUCTION SCHEDULING, UNANTICIPATED FIELD CONDITIONS, AND RELATIVELY MINOR CHANGES IN GRADING. MODIFICATIONS TO PLANS MAY BE REQUIRED BY THE DIRECTOR AFTER INITIAL PLAN APPROVAL. PERMITTEE SHALL USE BEST MANAGEMENT PRACTICES (BMPS) DURING CONSTRUCTION.

G. **APPROVED PLANS:** ONE (1) SET OF APPROVED PLANS AND PERMIT SHALL BE RETAINED ON THE SITE AND MADE AVAILABLE FOR USE BY THE COUNTY INSPECTOR AT ALL TIMES DURING THE WORK.

GENERAL WATER NOTES

1. WORK SHALL BE ACCOMPLISHED UNDER THE APPROVAL, INSPECTION AND TO THE SATISFACTION OF THE EL DORADO IRRIGATION DISTRICT (EID). CONSTRUCTION SHALL CONFORM TO THESE PLANS AND EID's LATEST VERSION OF THE TECHNICAL SPECIFICATIONS AND STANDARD DRAWINGS.
2. CONTRACTOR SHALL SCHEDULE A PRECONSTRUCTION CONFERENCE WITH EID INSPECTION 5 WORKING DAYS IN ADVANCE OF DOING WORK WITHIN THEIR JURISDICTION. CONSTRUCTION SHALL BE STARTED NO LATER THAN FIVE(5) DAYS AFTER THE PRECONSTRUCTION CONFERENCE.
3. LOCATION OF ALL UNDERGROUND FACILITIES ARE APPROXIMATE ONLY - THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL FACILITIES PRIOR TO ANY EXCAVATION.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND FACILITIES AFFECTED BY THE WORK AND SHALL CONTACT UNDERGROUND SERVICES ALERT (USA) 48 HOURS PRIOR TO ANY EXCAVATION WORK FOR DETERMINATION AND LOCATION OF UNDERGROUND UTILITIES (PHONE 1-800-642-2444)
5. CONNECTIONS TO EXISTING WATER FACILITY SHALL BE DONE BY A LICENSED CONTRACTOR IN ACCORDANCE WITH EID TIE-IN PROCEDURES PER TECHNICAL SPECIFICATION.
6. WHERE EXCAVATIONS FOR ANY FACILITIES CONSTRUCTION EXCEED 5 FEET IN DEPTH, CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT FORM CAL/OSHA IN SACRAMENTO (PHONE 1-916-263-2800) POST PERMIT AT THE CONSTRUCTION SITE AND COMPLY WITH ALL REQUIREMENTS.
7. THE CONTRACTOR SHALL NOTIFY EID INSPECTION 48 HOURS PRIOR TO START OR RESTART OF WORK.
8. ONLY EID PERSONNEL SHALL OPERATE ANY VALVES ON EXISTING WATER SYSTEM.
9. THE TOTAL SITE REQUIRED FIRE FLOW IS _____ GPM AT 20 PSIG RESIDUAL.
10. BASED UPON A HYDRAULIC GRADE LINE OF _____ FT AT STATIC CONDITIONS AND _____ FT DURING FIRE FLOW AND MAXIMUM DAY DEMANDS, THE MAXIMUM AND MINIMUM PRESSURES ARE CALCULATED TO BE _____ PSI AND _____ PSI RESPECTIVELY.
11. PIPELINES SHALL BE DISINFECTED, FLUSHED AND HYDROSTATICALLY TESTED IN ACCORDANCE WITH EID'S TECHNICAL SPECIFICATION.
12. SERVICE INSTALLATIONS IN ROADWAYS WITH CUTS OR FILLS GREATER THAN 6 FEET IN HEIGHT AND SLOPES STEEPER THAN 3:1 SHALL HAVE THE METER BOX SET AT FINISH GRADE NEXT TO THE ROAD IN THE LOCATION DIRECTED BY EID. THE SERVICE LINE SHALL THEN BE EXTENDED 5 FEET BEYOND THE SLOPE CATCH POINT WITH PVC SCHEDULE 40 SIZED TO MATCH THE SERVICE. PLACE STEEL T-POSTS PAINTED BLUE AT THE END OF THIS SERVICE LINE.
13. LIDS SHALL BE MARKED "WATER".
14. CURBS SHALL BE WET STAMPED WITH A "W" BRAND WHERE WATER SERVICES INTERCEPT.
15. CONTRACTOR SHALL HAVE A COPY OF EID'S CONSTRUCTION STANDARDS ON THE JOB.
16. REVISIONS TO THE DRAWINGS MUST BE APPROVED IN WRITING BY EID.
17. STAKING INFORMATION: MINIMUM SPACING SHALL BE 50 FEET (25 FEET IN RADIUS) UNLESS OTHERWISE DIRECTED BY EID. INFORMATION WILL INCLUDE OFFSET, TYPE OF FACILITY AND CUT TO FLOW LINE ON THE FRONT OF THE STAKE AND ELEVATION AND STATION NUMBER ON THE BACK. ANGLE POINTS AND APPURTENANCES TO BE STAKED INCLUDING LINE AND CURB STAKES AS NEEDED, CUT SHEETS REQUIRED WHERE SUBGRADE HAS NOT BEEN MADE.

GENERAL SEWER NOTES

1. ALL WORK WILL BE SUBJECT TO INSPECTION AND APPROVAL BY THE EL DORADO IRRIGATION DISTRICT (EID). ALL CONSTRUCTION SHALL CONFORM TO THESE PLANS AND EID'S LATEST VERSION OF THE TECHNICAL SPECIFICATIONS AND STANDARD DRAWINGS.
2. CONTRACTOR SHALL SCHEDULE A PRECONSTRUCTION CONFERENCE WITH EID INSPECTION 5 WORKING DAYS IN ADVANCE OF DOING WORK WITHIN THEIR JURISDICTION. CONSTRUCTION SHALL BE STARTED NO LATER THAN FIVE (5) DAYS AFTER THE PRECONSTRUCTION CONFERENCE.
3. LOCATION OF ALL UNDERGROUND FACILITIES ARE APPROXIMATE ONLY - THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL FACILITIES PRIOR TO ANY EXCAVATION.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND FACILITIES AFFECTED BY THE WORK AND SHALL CONTACT UNDERGROUND SERVICES ALERT (USA) 48 HOURS PRIOR TO ANY EXCAVATION WORK FOR DETERMINATION AND LOCATION OF UNDERGROUND UTILITIES (PHONE 1-800-642-2444)
5. CONNECTIONS TO EXISTING SEWER FACILITIES SHALL BE DONE BY A LICENSED CONTRACTOR IN ACCORDANCE WITH EID TIE-IN PROCEDURES PER TECHNICAL SPECIFICATIONS.
6. WHERE EXCAVATIONS FOR ANY FACILITIES CONSTRUCTION EXCEED 5 FEET IN DEPTH, CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT FORM CAL/OSHA IN SACRAMENTO (PHONE 1-916-263-800).
7. SERVICE INSTALLATIONS IN ROADWAYS WITH CUTS OR FILLS GREATER THAN 6 FEET IN HEIGHT AND SLOPES STEEPER THAN 3:1 SHALL HAVE THE CLEAN OUT SET AT FINISH GRADE NEXT TO THE ROAD IN THE LOCATION DIRECTED BY THE DISTRICT. THE SERVICE LINE SHALL THEN BE EXTENDED 5 FEET BEYOND THE SLOPE CATCH POINT WITH PVC SDR 35 SIZED TO MATCH THE SERVICE. PLACE STEEL T-POSTS PAINTED GREEN AT THE END OF THIS SERVICE LINE.
8. ALL LIDS SHALL BE MARKED "SEWER".
9. ALL CURBS SHALL BE WET STAMPED WITH AN "S" BRAND WHERE SEWER SERVICES INTERCEPT.
10. LINED MANHOLES REQUIRED.
11. CONTRACTOR SHALL HAVE A COPY OF THE EID'S CONSTRUCTION STANDARDS ON THE JOB.
12. ALL REVISIONS TO THESE DRAWINGS MUST BE APPROVED IN WRITING BY EID.
13. THE CONTRACTOR SHALL NOTIFY THE EID INSPECTOR 48 HOURS PRIOR TO START OR RESTART OF WORK.
14. STAKING INFORMATION: MINIMUM SPACING SHALL BE 50 FEET (25 FEET IN RADIUS) UNLESS OTHERWISE DIRECTED BY EID. INFORMATION WILL INCLUDE OFFSET, TYPE OF FACILITY AND CUT TO FLOW LINE ON THE FRONT OF THE STAKE AND ELEVATION AND STATION NUMBER ON THE BACK. ANGLE POINTS AND APPURTENANCES TO BE STAKED INCLUDING LINE AND CURB STAKES AS NEEDED, CUT SHEETS REQUIRED WHERE SUBGRADE HAS NOT BEEN MADE.
15. ON REPLACEMENT PROJECTS, THE EXISTING FACILITY MUST REMAIN IN SERVICE UNTIL THE NEW UTILITY IS ACCEPTED AND PUT INTO SERVICE.

	BY	DATE	EDC	DATE	REVISIONS
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El Dorado COUNTY

REGISTERED PROFESSIONAL ENGINEER — LAURENCE ANDERSON — Exp. 12/31/25 — No. 47013 — CIVIL — STATE OF CALIFORNIA

Date:	April 28, 2025
Scale:	None
Designed:	LA
Drawn:	LA
Checked:	LA
Proj. Engr:	LA
File:	25-27

Plans Prepared By:
CSI Engineering
2795 East Bidwell St #100-348
Folsom, CA 95630
(707) 372-6634
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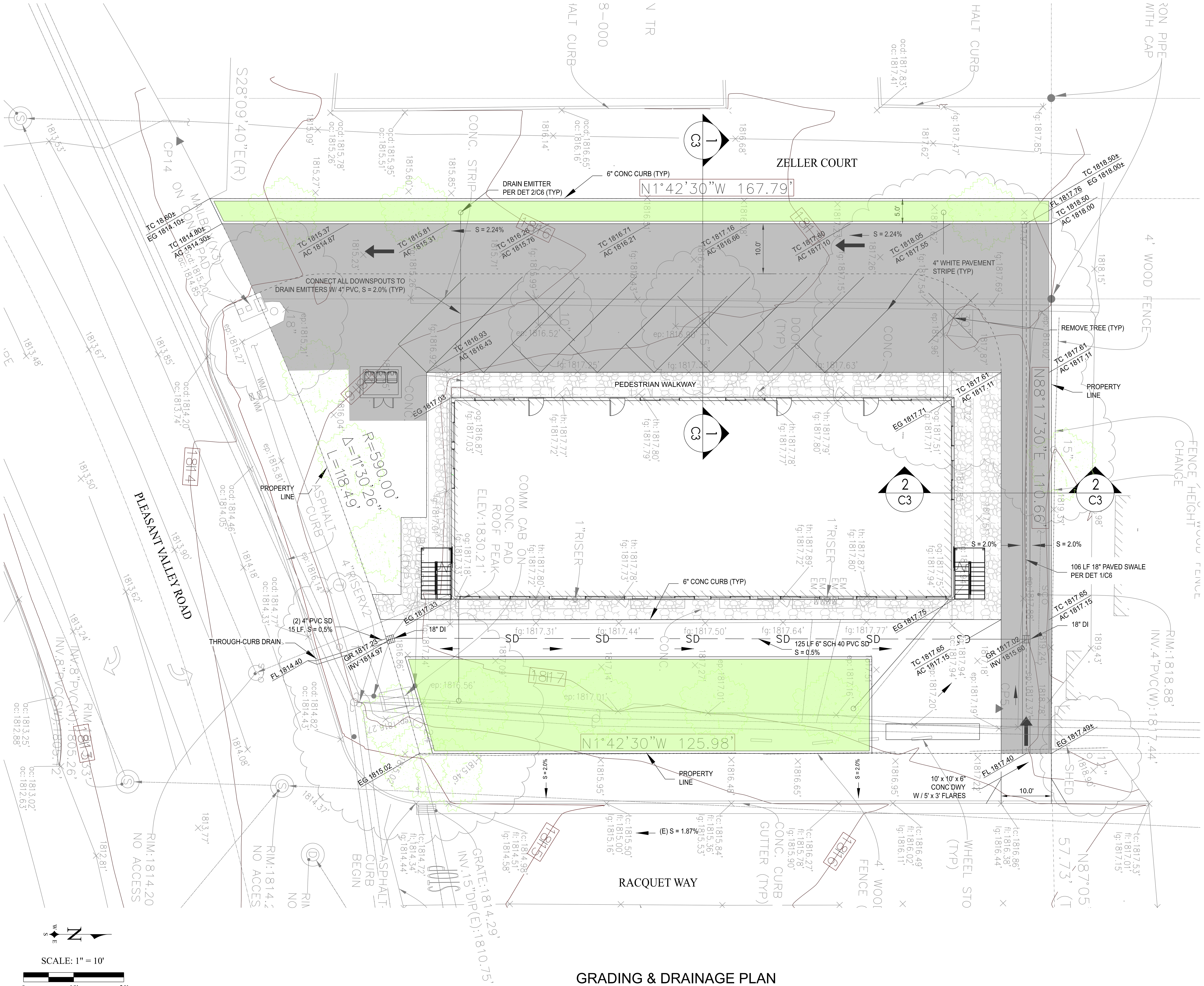
CONTACT 811 BEFORE YOU DIG — 811 — SAFE DIGGING PARTNER

677 PLEASANT VALLEY ROAD, EL DORADO HILLS, CA 95619

NOTES

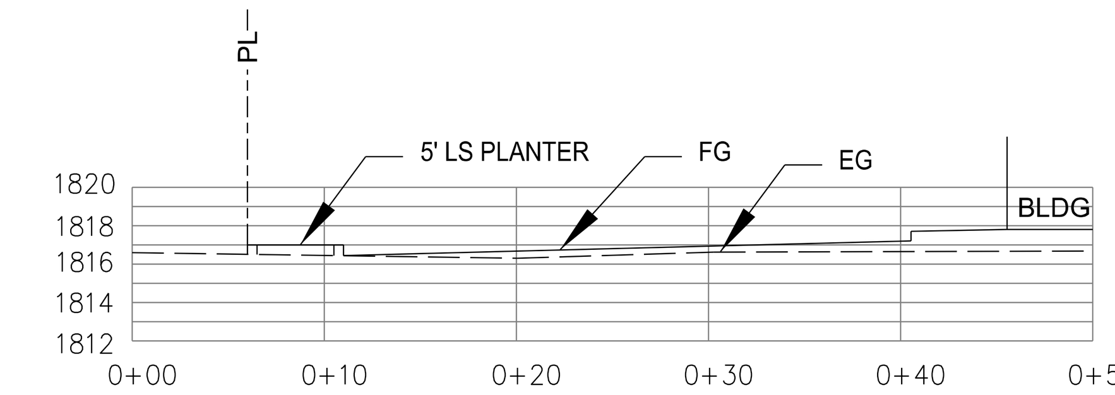
SHEET C2 2 OF 6 SHEETS

APN 097-010-067



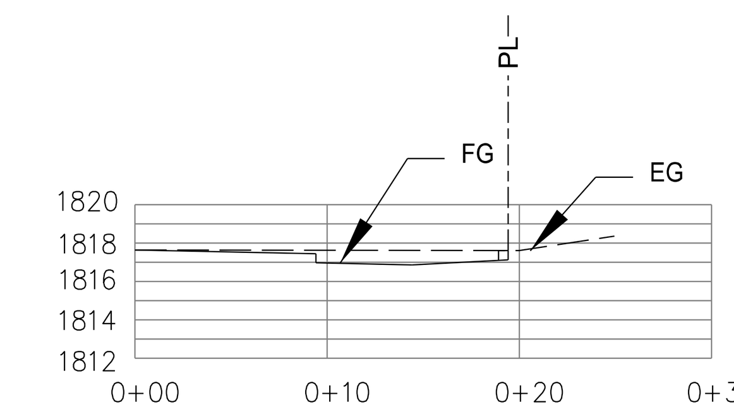
GRADING & DRAINAGE PLAN

SCALE: 1" = 10'



1 C3 CROSS SECTION

SCALE: 1" = 10' (HORIZ)
1" = 10' (VERT)



2 C3 CROSS SECTION

SCALE: 1" = 10' (HORIZ)
1" = 10' (VERT)

REMOVE (E) PAVEMENT & DISPOSE OFFSITE
COMPACT SUBGRADE TO 90% DENSITY
PAVE W/ 2" AC / 6" CL 2 AB

GRADING LEGEND

AC	Asphalt Concrete
BVC	Begin Vertical Curve
BW	Bottom of Wall
B/W	Back of Walk
CONC	Concrete
DI	Drain Inlet
DS	Downspout
DW	Driveway
(E)	Existing
EG	Existing Grade
EP	Edge of Pavement
EVC	End Vertical Curve
FF	Finish Floor
FG	Finish Grade
FL	Flowline (of Gutter)
GR	Grate Elevation
HP	High Point
INV	Invert Elevation
LF	Linear Feet
(N)	New
PL	Property Line
PVI	Point of Vertical Intersection
RG	Rough Grade
RW	Retaining Wall
S	Slope
SD	Storm Drain
TC	Top of Curb

BY	DATE	EDC	DATE	REVISIONS

El Dorado County

REGISTERED PROFESSIONAL ENGINEER LAWRENCE ANDREWS Exp. 12/31/25 No. 47013 CIVIL STATE OF CALIFORNIA

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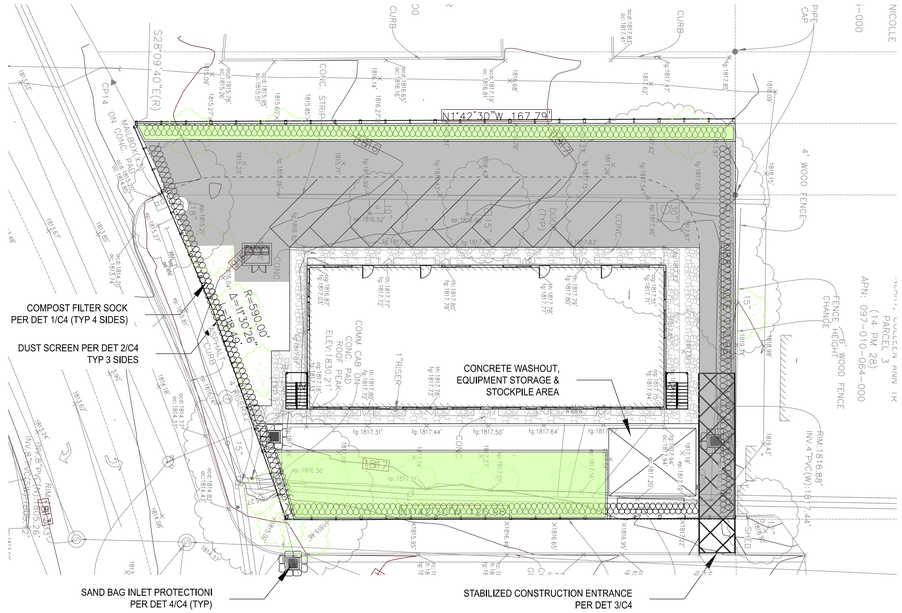
677 PLEASANT VALLEY ROAD, EL DORADO HILLS, CA 95619

GRADING & DRAINAGE PLAN

SHEET C3
3 OF 6 SHEETS

APN 097-010-067



EROSION & SEDIMENT CONTROL PLAN

SCALE: 1" = 20'

LEGEND

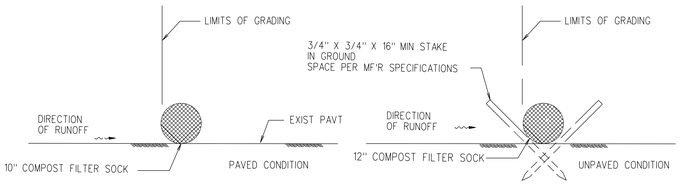
- COMPOST FILTER SOCK
- WORK AREA
- DUST SCREEN
- STABILIZED ENTRANCE
- SAND BAG INLET PROTECTION

EROSION & SEDIMENT CONTROL NOTES

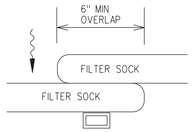
1. TEMPORARY EROSION CONTROL DEVICES SHOWN HEREON, WHICH INTERFERE WITH THE WORK SHALL BE RELOCATED OR MODIFIED WHEN THE INSPECTOR SO DIRECTS AS THE WORK PROGRESSES.
2. ALL LOOSE SOIL AND DEBRIS SHALL BE REMOVED FROM THE STREET UPON STARTING OPERATIONS AND PERIODICALLY THEREAFTER AS DIRECTED BY THE INSPECTOR. ALSO, STREETS SHALL BE CLEANED DAILY.
3. AFTER SEWER AND UTILITY TRENCHES ARE BACKFILLED AND COMPACTED, THE SURFACES OVER SUCH TRENCHES SHALL BE MOUNDED SLIGHTLY TO PREVENT CHANNELING OF WATER IN THE TRENCH AREA. CARE SHOULD BE EXERCISED TO PROVIDE FOR CROSS-FLOW AT FREQUENT INTERVALS WHERE TRENCHES ARE NOT ON THE CENTERLINE OR A CROWNED STREET.
4. EXCEPT AS OTHERWISE DIRECTED BY THE INSPECTOR, ALL DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY.
5. ALL DEBRIS AND SILT SHALL BE REMOVED WITHIN TWENTY-FOUR (24) HOURS AFTER EACH STORM IN ALL BASINS.
6. CHANGES TO THIS EROSION AND SEDIMENT CONTROL PLAN TO MEET FIELD CONDITIONS WILL BE MADE ONLY WITH APPROVAL OF OR AT THE DIRECTION OF THE AGENT FOR THE RESPONSIBLE PARTY.
7. ALL PAVED AREAS WILL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE WILL BE MAINTAINED SO THAT SEDIMENT LADEN RUNOFF DOES NOT ENTER THE STORM DRAINAGE SYSTEM ALL YEAR.
8. AS STORM DRAIN IMPROVEMENTS ARE CONSTRUCTED, ALL STRUCTURES AND INLET PIPES SHALL BE PROTECTED FROM INFLOW OR SILT BY SILT BAGS AND SAND BAGS PER DETAILS.
9. CONTRACTOR SHALL HAVE TOOLS, EQUIPMENT, AND MATERIALS TO PROVIDE EROSION CONTROL MEASURE MADE NECESSARY BY A CONSTRUCTION OPERATION ON THE JOB SITE BEFORE BEGINNING THAT OPERATION.
10. ADJACENT PROPERTIES SHALL BE PROTECTED FROM STORM WATERS, MUD, SILT, ETC. ON A DAILY BASIS.
11. DUST CONTROL SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION AND UNTIL FINAL COMPLETION. THE CONTRACTOR, WHEN HE OR HIS SUBCONTRACTOR ARE OPERATING EQUIPMENT ON-SITE, SHALL PREVENT THE FORMATION OF ANY AIRBORNE NUISANCE BY WATERING AND OR TREATING THE SITE OF THE WORK IN SUCH A MANNER THAT WILL CONFINE DUST PARTICLES TO THE IMMEDIATE SURFACE OF THE WORK. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY DUST FROM HIS OWN ACTIVITIES OR HIS SUBCONTRACTOR'S ACTIVITIES IN PERFORMING THE WORK UNDER HIS CONTRACT AND SHALL BE RESPONSIBLE FOR ANY CITATIONS, FINES, OR CHARGES RESULTING FROM DUST NUISANCE. DUST CONTROL WILL BE PERFORMED ON A DAILY BASIS.

2 / C4 DUST SCREEN

NOT TO SCALE



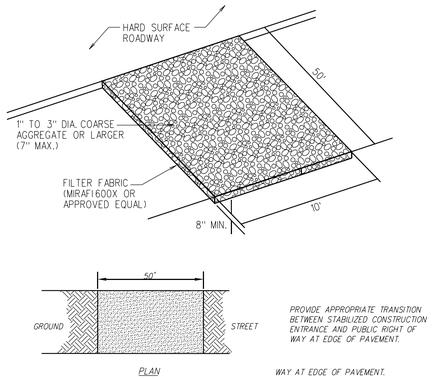
NOTES FOR COMPOST FILLED FILTER SOCKS:
1. MAY BE USED IN LIEU OF SILT FENCE FOR RUNOFF CONTROL
2. BAGS SHALL BE OVERLAPPED BY 2' MIN
3. COMPOST SHALL NOT CONTAIN BIOSOLIDS & SHALL BE CONSISTENT W/ EPA STDS.



TYP SOCK OVERLAP DETAIL

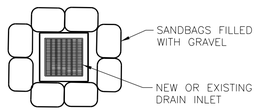
1 / C4 COMPOST FILTER SOCK

SCALE: NONE



3 / C4 STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE



4 / C4 SAND BAG INLET PROTECTION

NOT TO SCALE

BY	DATE	EDC	DATE	REVISIONS

El Dorado County

REGISTERED PROFESSIONAL ENGINEER — LAURENCE ANDREWS — Exp. 12/31/25 — No. 47013 — CIVIL — STATE OF CALIFORNIA

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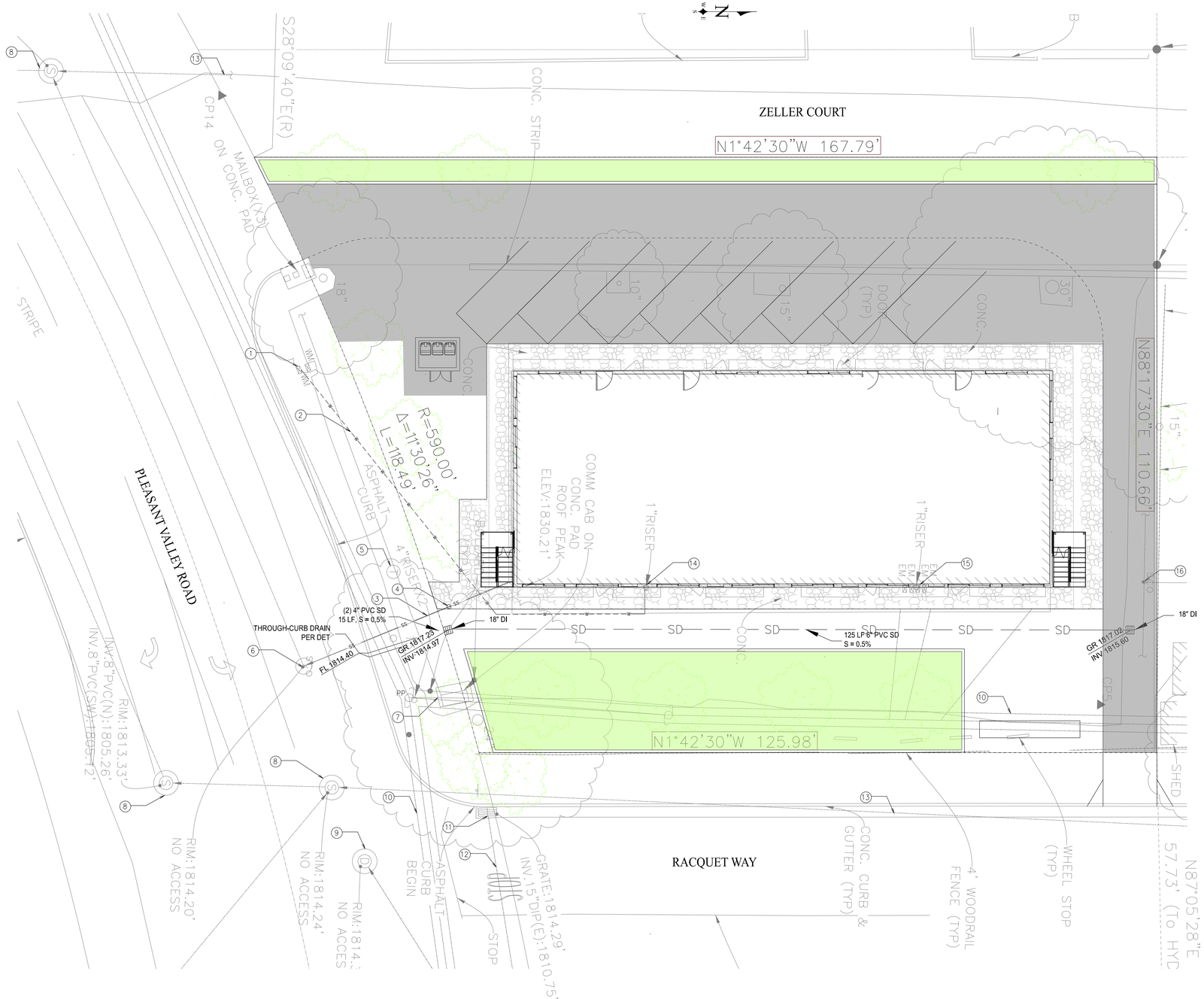
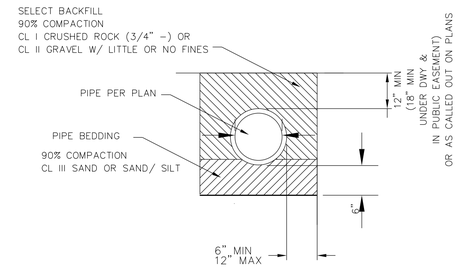
EROSION AND SEDIMENT CONTROL PLAN

SHEET C4
4 OF 6 SHEETS

APN 097-010-067





NOTES:

INITIAL BACKFILL SHALL BE MECHANICALLY CONSOLIDATED UNDER THE HAUNCHES OF THE PIPE.

ALTERNATE BACKFILL MATERIAL AND METHODS SHALL BE SUBJECT TO APPROVAL BY THE CITY ENGINEER.

WHERE MINIMUM COVER CANNOT BE MET PLACE 6" CONC CAP OVER PIPE 1' BEYOND EACH SIDE OF THE PIPE.

1/C5 TRENCH BACKFILL DETAIL FOR ON-SITE UTILITY LINE TRENCHES
NOT TO SCALE

UTILITY NOTES

1	(E) WATER METER – UPGRADE AS REQUIRED
2	(E) WATER DOMESTIC WATER SERVICE – REPLACE W/ 2" CU SERVICE
3	(E) SS LATERAL – TELEVISE & REPLACE OR REPAIR AS REQUIRED
4	(N) INSTALL 4" SS CLEANOUT PER EL DORADO STD DRAWING
5	(E) TELEPHONE VAULT
6	(E) SS LAMPHOLE
7	(E) TELCOM PANEL
8	(E) SS MH
9	(E) SD MH
10	(E) OVERHEAD POWER LINES
11	(E) SD CATCH BASIN
12	(E) 12" DIP SD LINE
13	(E) SS MAIN LINE
14	(E) WATER SERVICE RISER – UPDATE W/ NEW 2" DOMESTIC SERVICE
15	(E) ELECTRIC SERVICE – REPLACE W/ (N) SERVICE
16	(E) SS CO – PRESERVE

SCALE: 1" = 10'

0 10' 20'

IF PHYSICAL DISTANCE ACROSS SCALE BAR IS NOT EXACTLY TWO (2) INCHES, ADJUST SCALE ACCORDINGLY.

El Dorado Irrigation District
Serving people, agriculture, businesses, and the environment in northern California's El Dorado County since 1925

EL DORADO IRRIGATION DISTRICT

APPROVED FOR CONSTRUCTION _____ DATE _____

PROJECT No. | WORK ORDER No. | DRAWING No.

	BY	DATE	EDC	DATE	REVISIONS
△					
△					
△					
△					
△					
△					

El Dorado County

REGISTERED PROFESSIONAL ENGINEER LARBOKE ANDRUS Exp. 12/31/25 No. 47013 CIVIL STATE OF CALIFORNIA

Date:	April 28, 2025
Scale:	1" = 10'
Designed:	LA
Drawn:	LA
Checked:	LA
Proj. Engr:	LA
File:	25-27

Plans Prepared By:

CSI Engineering
2795 East Bidwell St #100-348
Folsom, CA 95630
(707) 372-6634
www.csieng.com

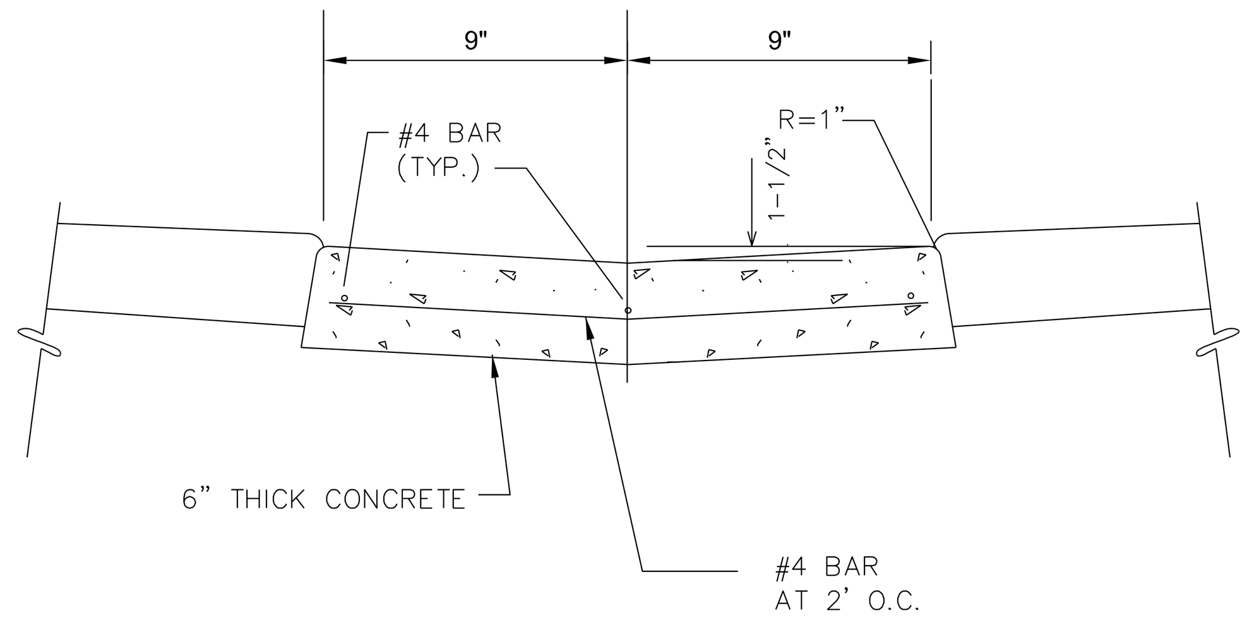
CONTACT 811 BEFORE YOU DIG SAFE DIGGING PARTNER

677 PLEASANT VALLEY ROAD, EL DORADO HILLS, CA 95619

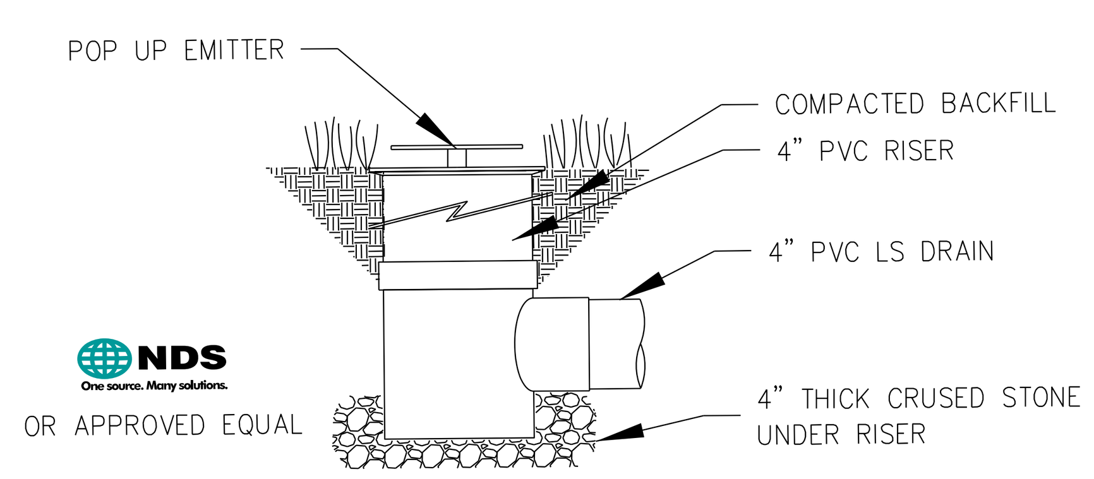
UTILITY PLAN

SHEET C5 5 OF 6 SHEETS

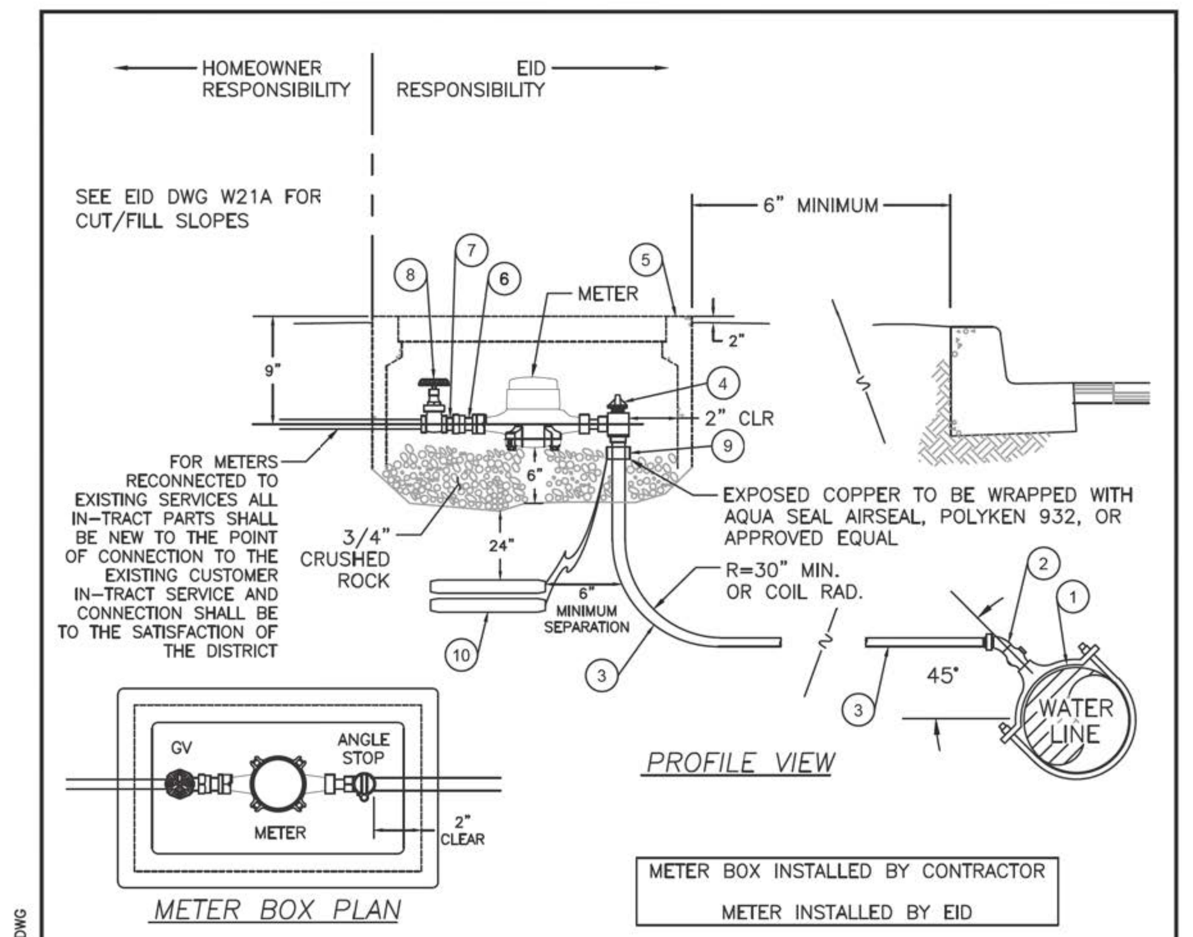
APN 097-010-067



1 / C6 PAVED SWALE NTS



2 / C6 DRAIN EMITTER NTS



METER BOX INSTALLED BY CONTRACTOR
METER INSTALLED BY EID

ITEM #	DESCRIPTION
1	1" FIP AWWA BRONZE SERVICE SADDLE
2	1" MIPxMIP AWWA CORPORATION STOP, WITH 1" FIPxCOMPRESSION 45° STREET BEND
3	1" CONTINUOUS SERVICE TUBING
4	1" COUPLING NUTxSTAB TYPE END ANGLE METER STOP
5	METER BOX (25 1/8"x15 5/8") AND PORTED LID
6	METER COUPLING
7	BRASS CLOSE NIPPLE
8	BRASS GATE VALVE
9	BRASS CABLE TO PIPE CLAMP
10	2 – 4 POUND HIGH PURITY ZINC ANODES (BAGS OR DRIVABLE) WITH INSULATED SOLID CORE COPPER WIRE 10 FEET LONG

CONSTRUCTION NOTES

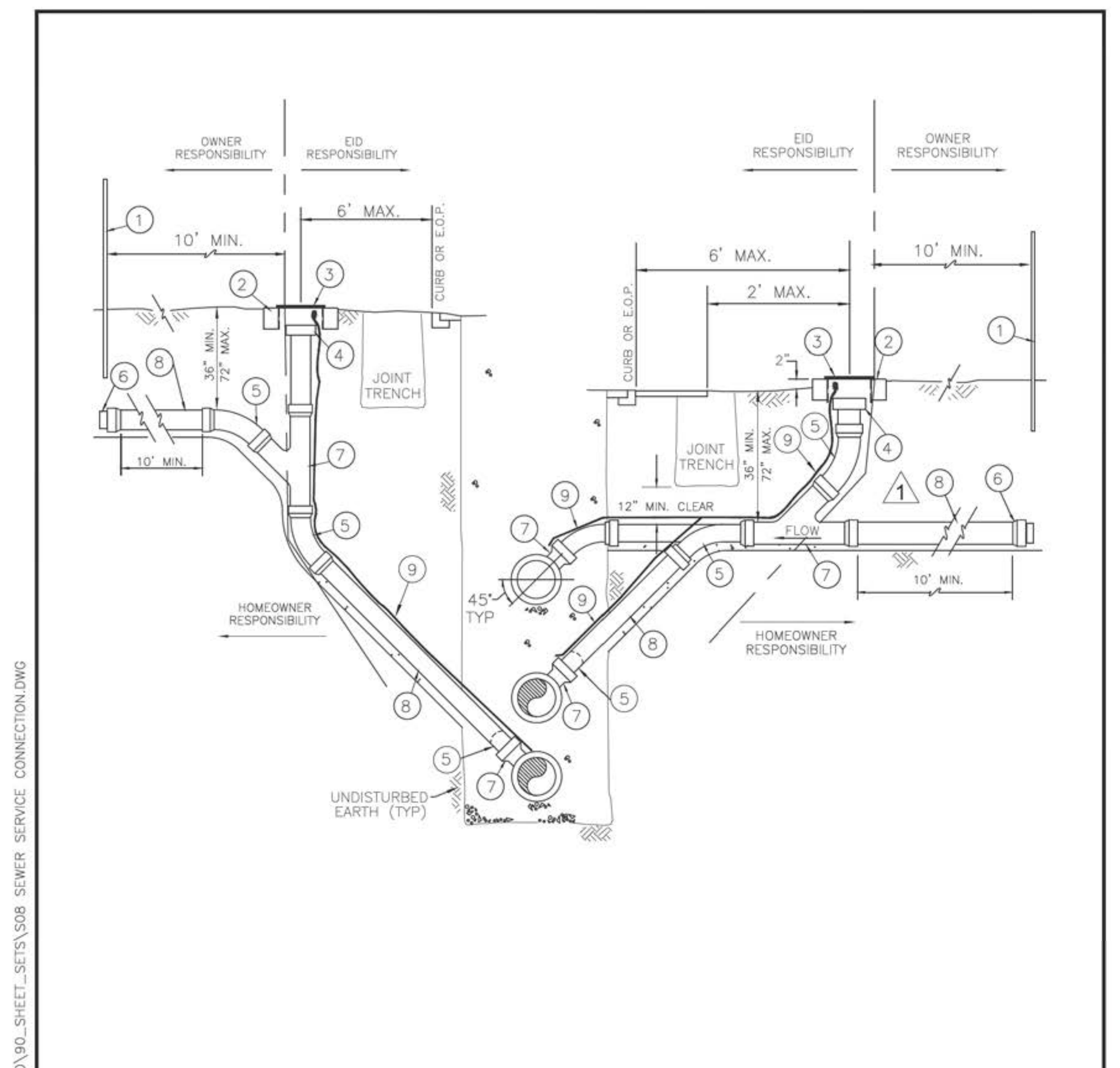
1. ALL MATERIAL SHALL BE PER EID STANDARD DETAIL W08.
2. ALL SERVICES SHALL BE BEDDED IN A MINIMUM OF 6" AGGREGATE BASE COMPACTED TO 90%.
3. SERVICE SADDLE SHALL NOT BE INSTALLED WITHIN 36" OF VALVE, JOINT OR FITTING.
4. SET TOP OF METER BOX FLUSH WITH SIDEWALK OR AS SHOWN.
5. ALL TAPS SHALL BE MADE WITH MACHINE GUIDE OR PILOT TAP.
6. THE WATER SERVICE SHALL EXTEND PERPENDICULAR TO THE CENTERLINE OF THE STREET FROM THE WATER MAIN TO THE METER STOP.
7. COPPER TUBING SHALL BE CONTINUOUS WITH TRACER WIRE. FINAL CUT OF COPPER TUBING FOR CONNECTION TO ANGLE METER STOP SHALL BE COMPLETED WITH THE DISTRICT PRESENT.
8. ALL FITTINGS SHALL BE BRASS.
9. METER BOXES SHALL NOT BE SET WITHOUT THE DISTRICT PRESENT.

EL DORADO IRRIGATION DISTRICT

1" SERVICE & METER BOX INSTALLATION FOR 3/4" & 1" METERS

DRAWN BY	SCALE	REVISION	DATE	BY	EID STANDARD DRAWING NO.
A. URTEAGA	NONE	6	9/18/19	PJW	W20
APPROVED B. MUELLER	DATE 4/2012	7	3/12/21	PJW	
		8	3/15/22	EAR	

M:_STANDARD DESIGN DETAILS CAD\90_SHEET_SETS\DRINKING_WATER_STANDARD_DETAILS.DWG



ITEM #	DESCRIPTION
1	LOCATION POST – GREEN METAL TEE POST IN UNDEVELOPED AREAS
2	4"x4" CONCRETE PAD, MAXIMUM
3	8" I.D. G5 CONCRETE BOX W/IRON LID MARKED SEWER
4	LOOSE CAP (AFTER TESTING) GEMCO OR APPROVED EQUAL
5	LONG-RADIUS SWEEP
6	PLUG OR CAP
7	WYE, MINIMUM 4"
8	PVC PIPE, 4" MIN. DIA.
9	TRACING WIRE

CONSTRUCTION NOTES

1. JOINT UTILITY TRENCH SHALL BE AS SHOWN ON PLANS.
2. MINIMUM SLOPE OF PIPE SHALL BE 1/4" PER FOOT.
3. A MINIMUM OF 6" OF EID APPROVED COMPACTED BEDDING MATERIAL UNDER SERVICE CONNECTIONS
4. IF CLEANOUT DOES NOT EXIST, EID RESPONSIBILITY ENDS AT PROPERTY LINE.

EL DORADO IRRIGATION DISTRICT

SEWER SERVICE CONNECTION

DRAWN BY	SCALE	REVISION	DATE	BY	EID STANDARD DRAWING NO.
A. URTEAGA	NONE	1	4/15/14	TS	S08
APPROVED B. MUELLER	DATE 05/09				

M:_STANDARD DESIGN DETAILS CAD\90_SHEET_SETS\S08 SEWER SERVICE CONNECTION.DWG
20140415.125330

ALL CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 4500 psi.

REINFORCING STEEL SHALL COMPLY WITH ASTM A615 GRADE 60, A706 GRADE 60 OR A497 GRADE 70. BAR BENDING AND PLACEMENT SHALL COMPLY WITH THE LATEST ACI STANDARDS

STANDARD STRUCTURAL DESIGN IS BASED ON AASHTO HS 20 WHEEL LOADING

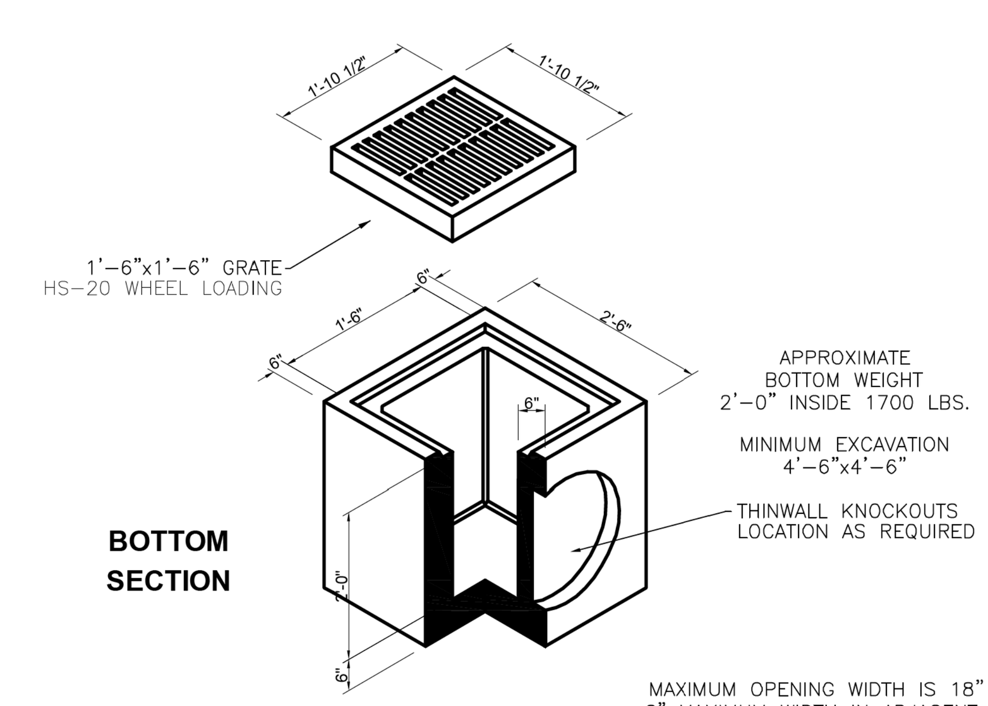
WATER TABLE IS AT 3'–0" BELOW GRADE FOR STANDARD STRUCTURAL DESIGN

THE STANDARD DESIGN IS BASED ON THE TOP AT GRADE AND THE BASE AT 8'–0" MAX. BELOW GRADE.

THE STRUCTURE SHALL BE PLACED ON A COMPACTED GRANULAR BASE TO INSURE UNIFORM DISTRIBUTION OF SOIL PRESSURES.

SPECIAL DESIGNS BASED ON OTHER LOADINGS OR DEEPER INSTALLATION DEPTHS ARE AVAILABLE ON REQUEST.

KNOCKOUTS OR PIPE OPENINGS OR CAN BE PROVIDED IN THE SIZE AND LOCATIONS REQUIRED.



BOTTOM SECTION

MAXIMUM OPENING WIDTH IS 18" WITH 6" MAXIMUM WIDTH IN ADJACENT WALL.

Oldcastle Precast®
GI1515
1'-6"x1'-6" GRATE INLET
FILE NAME: 1515GI.dwg
ISSUE DATE: March, 2005
1900 Rilling Road San Antonio, TX 78214
Phone: (210) 923-4523 Fax: (210) 921-0473
www.oldcastlesanantonio.com

PREFERRED EL DORADO COUNTY TRUCK ROUTES (California Legal, not STAA Trucks)

Preferred Truck Route	Begin Location	End Location
Bass Lake Road	US-50	Green Valley Road
Cambridge Road	US-50	Country Club Drive
Cameron Park Drive	Durock Road	Green Valley Road
Carson Road	City Limit	8 mile Road
Cedar Ravine Road	Pleasant Valley Road	City Limit
Cold Springs Road	City Limit	SR 153/ SR 49
Country Club Drive	Bass Lake Road	Cameron Park Drive
Durock Road	Cameron Park Drive	Mother Lode Drive
El Dorado Hills Boulevard	US-50	Green Valley Road
Francisco Drive	El Dorado Hills Boulevard	Green Valley Road
Green Valley Road	County Line	Lotus Road
Greenstone Road	Mother Lode	US-50
Latrobe Road	County Line	US-50
Lotus Road	Green Valley Road	Gold Hill Road/Luneman Road
Missouri Flat Road	Pleasant Valley Road/SR-49	Plaza Drive
Mother Lode Drive	South Shingle Road	Missouri Flat Road
Mount Aukum	South County Line	Pleasant Valley Road
Omo Ranch Road	Mount Aukum Road	Carson Pass Highway (SR-88)
Pleasant Valley Road	SR-49	Bucks Bar Road
Pony Express Trail	Carson Road	Sly Park Road
Saratoga Way	County Line	El Dorado Hills Boulevard
Serrano Parkway	El Dorado Hills Boulevard	Bass Lake Road
Silva Valley Parkway	US-50	Green Valley Road
Silver Springs Parkway	Bass Lake Road	Green Valley Road
South Shingle Road	Latrobe Road	US-50
Sly Park Road	Pleasant Valley Road	Pony Express Trail
White Rock Road	County Line	Silva Valley Parkway

6/24/2020

	BY	DATE	EDC	DATE	REVISIONS
△					
△					
△					
△					
△					
△					

El Dorado COUNTY

REGISTERED PROFESSIONAL ENGINEER
LAURENCE ANDREWS
Exp. 12/31/25
No. 47013
CIVIL
STATE OF CALIFORNIA

Date:	April 28, 2025
Scale:	None
Designed:	LA
Drawn:	LA
Checked:	LA
Proj. Engr:	LA
File:	25-27

Plans Prepared By:

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677 PLEASANT VALLEY ROAD, EL DORADO HILLS, CA 95619

DETAILS

SHEET
C6
6 OF 6 SHEETS

APN 097-010-067

WINDOW SCHEDULE

MODEL	WIDTH	HEIGHT	OPERATION	MANUF.	HEAD HEIGHT	COMMENTS	QTY.
3050 SH	3' - 0"	5' - 0"	SINGLE HUNG	BY OWNER	6' - 8"		40
2050 SH	2' - 0"	5' - 0"	SINGLE HUNG	BY OWNER	6' - 8"		4
5040 XO	7' - 11"	5' - 0"	SLIDER	BY OWNER	7' - 0"		16

DOOR SCHEDULE

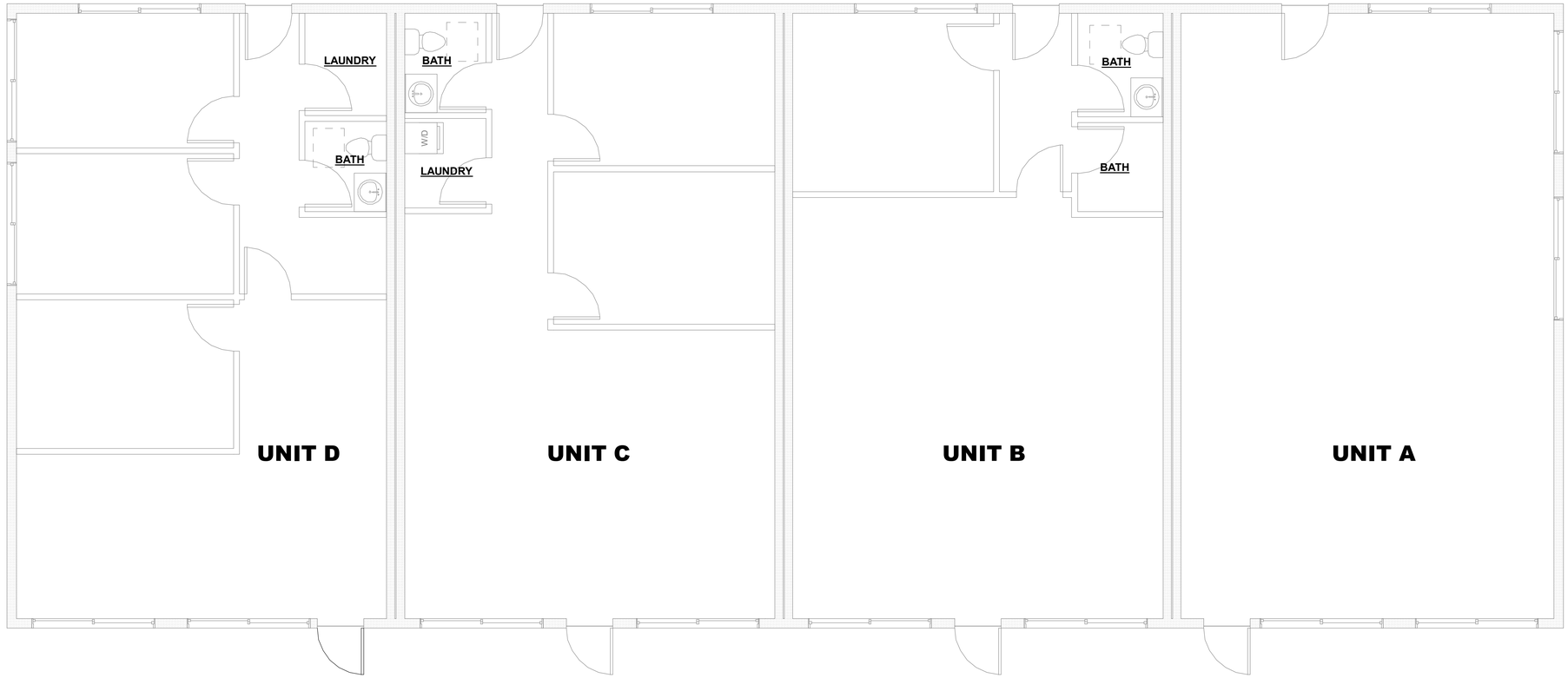
Model	WIDTH	HEIGHT	THICKNESS	OPERATION	MANUF.	NOTES	LOCATION	QTY.
3068	3' - 0"	6' - 8"	0' - 2"	FLUSH DOOR	BY OWNER			78
3668	3' - 6"	6' - 8"	0' - 2"	SLIDER	BY OWNER			16
4050	4' - 0"	5' - 0"	0' - 2"	DOUBLE DOOR	BY OWNER			1

PLUMBING SCHEDULE

MARK:	ITEM:	MANUF:	ITEM#:	DIMENSIONS:	NOTES:	QTY.:
P1	TOILET	BY OWNER	BY OWNER	TOILET - DOMESTIC		16
P2	SINK - VANITY SQUARE	BY OWNER	BY OWNER	24"L x 19"W		16
P3	SINK - KITCHEN DOUBLE	BY OWNER	BY OWNER	33"L x 22"W x 10 1/4"D	FINISH: WHITE	16
P5	SHOWER STALL	BY OWNER	BY OWNER	60" x 34"		16

APPLIANCES AND EQUIPMENT SCHEDULE

MARK:	ITEM:	MANUF:	ITEM #:	DIMENSIONS:	NOTES:	QTY.:
E1	RANGE HOOD	BY OWNER	BY OWNER	30" WIDE		16
E2	RANGE	BY OWNER	BY OWNER	30"L x 26"W		16
E3	REFRIGERATOR	BY OWNER	BY OWNER	24" x 25" LH		16
E4	DISHWASHER	BY OWNER	BY OWNER	24" x 24" x 34"		16
E5	WASHER/DRYER-STACK	BY OWNER	BY OWNER	24" x 28"		16



1 **EXISTING 1ST FLOOR PLAN**
SCALE: 1/4" = 1'-0"

PREMIER DESIGN
3941 PARK DRIVE STE20-568
EL DORADO HILLS,CA 95672
PHONE:(916)743-0123 FAX:(866)631-1424
EMAIL:PREMIERDESIGN@YMAIL.COM
WEB:PRMIERDESIGNONLINE.COM

CONSULTANTS

APARTMENTS

677 PLEASANT VALLEY RD
DIAMOND SPRINGS, CA
95619

APN: **097-010-067**

OWNER'S INFORMATION

NAME: RUSSELL ENYART
PHONE:(916)524-9733
EMAIL:russell@enyarthomes.com

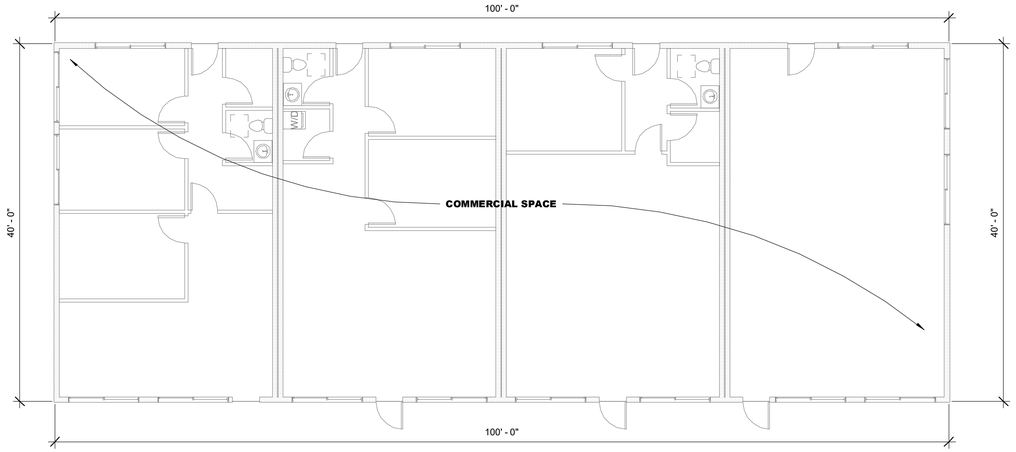
MARK	DATE	DESCRIPTION

PROJECT NO:
REVISION DATE:
DRAWN BY: ANDREY GINZBURG
CHK'D BY:
COPYRIGHT:

SHEET TITLE

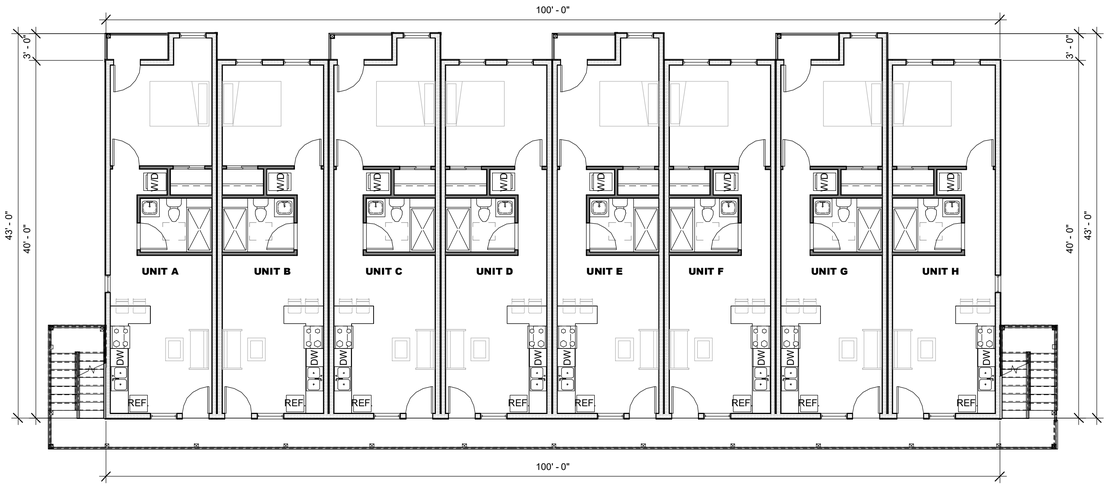
EXISTING FLOOR PLAN

A-1.1



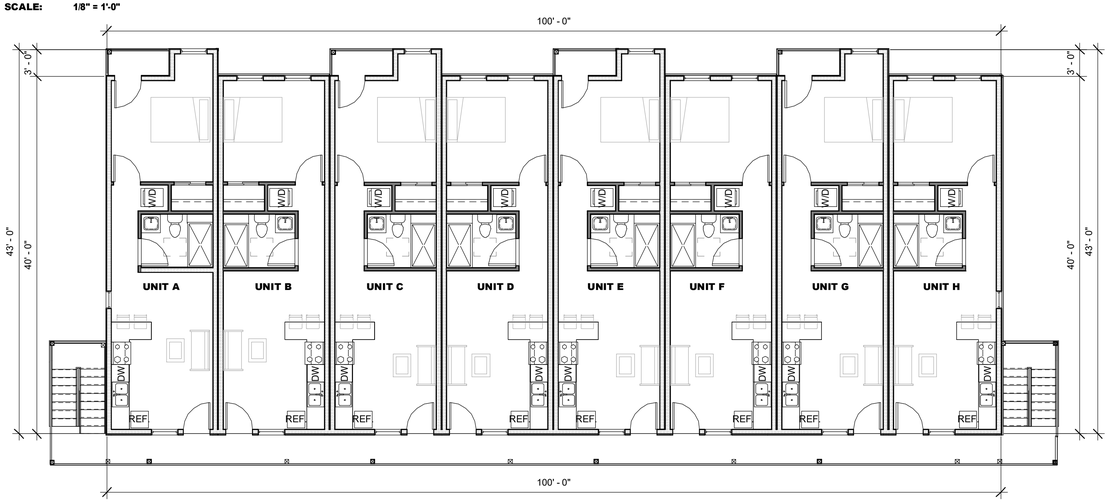
1 EXISTING 1ST FLOOR PLAN

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



2 PROPOSED 2ND FLOOR PLAN.

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



3 PROPOSED 3RD FLOOR PLAN.

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

PROPOSED BUILDING AREA	
(E) UNIT 1	1,000 SF 01 FF
(E) UNIT 2	1,000 SF 01 FF
(E) UNIT 3	1,000 SF 01 FF
(E) UNIT 4	1,000 SF 01 FF
	4,000 SF
2ND FLOOR UNIT A	509 SF 02 FF
2ND FLOOR UNIT B	507 SF 02 FF
2ND FLOOR UNIT C	509 SF 02 FF
2ND FLOOR UNIT D	507 SF 02 FF
2ND FLOOR UNIT E	509 SF 02 FF
2ND FLOOR UNIT F	507 SF 02 FF
2ND FLOOR UNIT G	509 SF 02 FF
2ND FLOOR UNIT H	507 SF 02 FF
	4,063 SF
3RD FLOOR UNIT A	509 SF 03 FF
3RD FLOOR UNIT B	507 SF 03 FF
3RD FLOOR UNIT C	509 SF 03 FF
3RD FLOOR UNIT D	507 SF 03 FF
3RD FLOOR UNIT E	509 SF 03 FF
3RD FLOOR UNIT F	507 SF 03 FF
3RD FLOOR UNIT G	509 SF 03 FF
3RD FLOOR UNIT H	507 SF 03 FF
	4,063 SF
	12,127 SF
2ND FLOOR COMMON AREA	375 SF 02 FF
3RD FLOOR BALCONY UNIT A	21 SF 02 FF
3RD FLOOR BALCONY UNIT C	21 SF 02 FF
3RD FLOOR BALCONY UNIT E	21 SF 02 FF
3RD FLOOR BALCONY UNIT G	21 SF 02 FF
	460 SF
3RD FLOOR BALCONY UNIT A	21 SF 03 FF
3RD FLOOR BALCONY UNIT C	21 SF 03 FF
3RD FLOOR BALCONY UNIT E	21 SF 03 FF
3RD FLOOR BALCONY UNIT G	21 SF 03 FF
3RD FLOOR COMMON AREA	375 SF 03 FF
	460 SF
	919 SF
TOTAL AREA	13,046 SF

PREMIER DESIGN
3941 PARK DRIVE STE20-568
EL DORADO HILLS,CA 95672
PHONE:(916)743-0123 FAX:(866)631-1424
EMAIL:PREMIERDESIGN@YMAIL.COM
WEB:PRMIERDESIGNONLINE.COM

CONSULTANTS

APARTMENTS

677 PLEASANT VALLEY RD
DIAMOND SPRINGS, CA
95619

APN: 097-010-067

OWNER'S INFORMATION

NAME: RUSSELL ENYART
PHONE:(916)524-9733
EMAIL:russell@enyarthomes.com

MARK	DATE	DESCRIPTION

PROJECT NO:
REVISION DATE:
DRAWN BY: ANDREY GINZBURG
CHK'D BY:
COPYRIGHT:

SHEET TITLE

FLOOR PLANS

A-1.2

FLOOR PLAN NOTES

1. HEAT PUMP 40 GAL , PIPE TO EXT. ON 18" H STAND W/2 SEISMIC STRAPS: ONE @1/3 HEIGHT FROM TOP & ONE @1/3 HEIGHT FROM BOTTOM @+4" ABOVE CONTROLS. INSULATE 1st 5' W/R-4 PLATFORM W/ PLWD FRONT AND DRYWALL FACES. IF ENCLOSED PROVIDE 2 VENTS EA. 100 SQ.IN. @12" FROM TOP &12" BOTTOM OF WATER HEATER.
   A. WATER HEATERS SHALL BE INSTALLED 18" ABOVE GARAGE FLOOR CPC 507.13
2. EQUIPMENT BARRIER 4" DIA STEEL PIPE CONCRETE FILLED W/18"X18"X12" CONCRETE FOOTING
3. SOLID CORE 1-3/8" THICK DOOR THRESHOLD AND WEATHERSTRIPPING AND DEAD BOLT LOCK.THE MAIN EGRESS DOOR SHALL BE READILY OPENABLE FROM INSIDE THE UNIT WITHOUT THE USE OF A KEY, SPECIAL KNOWLEDGE OR EFFORT. CRC R311. ONE SIDE-HINGED EGRESS DOOR FROM EACH DWELLING UNIT NOT LESS THAN 3-FT. WIDE AND 6-FT. 6-IN. IN HEIGHT, WITH A MINIMUM CLEAR WIDTH OF 32-IN. EGRESS DOORS SHALL BE READILY OPENABLE FROM INSIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT.
4. SOLID CORE DOOR W/DEADBOLT &VIEW HOLE
5. A. DASHED LINE INDICATES 5/8" TYPE"X" GYP BRD FOUNDATION TO RF STHG.
   B. 5/8" TYPE "X" GYP BRD WALLS AND CELLING W/2x FRAMINGOR RC CHANNEL @16 o.c.
   C. ON POST: 5/8" TYPE "X" GYP BRD W/26 GAgi TO +4" AFF.
   D. 5#8" TYPE "X" GYPBRD UNDER STAIRWAY ALL SURFACES ON 2x @16" o.c.
6. A. ELECTRICAL DRYER
   B. CLOTHES DRYER MOISTURE EXHAUST DUCT MUST BE 4-IN. IN DIAMETER AND LENGTH IS LIMITED TO 14-FT. WITH 2 ELBOWS. THE DUCT LENGTH SHALL BE REDUCED BY 2-FT. FOR EVERY ELBOW IN EXCESS OF TWO. (MC 504.4.2)
   C. PROVIDE VENT IN DOOR W/100 SQ.IN NET FREE.
7. RANGE W/HOOD
   A. COOKTOP & HOOD.
   B. OVEN AND MICROWAVE.
8. DISHWASHER UNDER COUNTERTOP W/AIR GAP PER 2022 CPC 807.4.
9. REFRIGERATOR SPACE W/ICEMAKER HOOCKUP
10. SINK W/GARBAGE DISP PROVIDE AIR GAP PER CPC 807 ,CLEANOUT PER CPC 719
    A. PROVIDE ISLAND SINK VENT PER CPC 909
11. TYPICAL FOR ALL SHOWER AND TUB:

WATER RESISTANT GYPSUM BACKING BOARD SHALL NOT BE USED WHERE THERE WILL BE DIRECT EXPOSURE TO WATER, OR IN AREAS SUBJECT TO CONTINUOUS HIGH HUMIDITY. CRC SECTION R702.3.8.1 BATHTUB AND SHOWER FLOORS AND WALLS ABOVE BATHTUBS WITH INSTALLED SHOWER HEADS AND IN SHOWER COMPARTMENTS SHALL BE FINISHED WITH A NONABSORBENT SURFACE. SUCH WALL SURFACES SHALL EXTEND TO A HEIGHT OF NOT LESS THAN 6 FEET (1829 MM) ABOVE THE FLOOR. CRC SECTION R307.2

   A. TUB 5'x32"
   B. TUB 36"x60"
   C. 5' x36" SHOWER

12. TEMPERED GLASS SHOWER DOORS SHALL SWING OUT.NET AREA OF SHOWER THE RECEPTOR SHALL BE NOT LESS THAN 1,024 SQ. IN. OF FLOOR AREA AND ENCOMPASS 30-IN. DIAMETER CIRCLE
    A. SHOWER CURTAIN ROD
    B. 38" TALL WALL
13. SOLID WASTE CONNECTION @ TUB & SHOWER PRESSURE BAL OR THERMOSTATIC MIXING VALVE PER 2022 CPC 408.3
14. ELECTRICAL PANEL/ METER VERIFY SIZE AND LOCATION 200 AMPS
15. 36" SQ. MIN CONC. LAND'G PER CRC@ ALL EXTERIOR EXIT.2% SLOPE AWAY
16. 1.5" LOWER THAN TOP OF THRESHOLD.(EXPT:7.75" MAX IF DOOR DOES NOT SWING OVER LANDING).THRESHOLD MAX HIEGHTS 1/2"
17. SOLID WOOD DOORS NOT LESS THAN 13/8 INCHES (35 MM) IN THICKNESS, SOLID OR HONEYCOMB CORE STEEL DOORS NOT LESS THAN 13/8 INCHES (35 MM) THICK, OR 45-MINUTE FIRE-RATED DOORS. DOORS SHALL BE SELF-CLOSING AND SELF-LATCHING. THIS WOULD INCLUDE THE PULL DOWN ATTIC ACCESS STAIR IN THE GARAGE IF THE GARAGE CEILING IS USED AS PART OF THE BARRIER BETWEEN THE HOUSE AND GARAGE. CRC SECTION R302.5.1
18. SHOWERS AND .TUB/SHOWERS ARE PROVIDED WITH PRESSURE BALANCE OR THERMOSTATIC MIXING VALVE CONTROLS. INDICATE THAT THE MAXIMUM SETTING SHALL BE 120 DEGREES F.
19. REQUIRED GUARDS AT OPEN-SIDED WALKING SURFACES, INCLUDING STAIRS, PORCHES, BALCONIES OR LANDINGS, SHALL BE NOT LESS THAN 42 INCHES (1067 MM) HIGH MEASURED VERTICALLY ABOVE THE ADJACENT WALKING SURFACE, ADJACENT FIXED SEATING OR THE LINE CONNECTING THE LEADING EDGES OF THE TREADS. CRC SECTION R312.2
20. THE PROPOSED SLOPE ON ANY WEATHER-EXPOSED LANDINGS, BALCONIES, AND ROOF DECKS WHICH ARE SEALED UNDERNEATH. INDICATE THE WALKING SURFACE SHALL HAVE A SLIP-RESISTANT SURFACE PER CRC 2022 FINIISH FLOOR ---------TILE VERIFY BY OWNER
21. HOSE BIBB
22. FORCED AIR UNIT DUCTS AND PENETRATION MUST COMPLY WITH CRC REQ'S PROVIDE SETBACK T-STAT FAU 12" WIDE MAX ALL PIECES OF HVAC MUST FIT THROUGH 22"X30" ACCESS.
23. 22"X30" ATTIC ACCESS W/ WEATHERSTRIPPING WITH 30-IN. MINIMUM HEADROOM FOR ATTIC GREATER THAN 30-SF.(R807.1).
24. A.C UNIT PROVIDE 30"W x36"D WORKING SPACE, A/C DISCONNECT, 36" SQ. CONCRETE PAD
25. SHOWER AND TUB SHOWER COMBINATIONS SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE OR THE THERMOSTATIC MIXING VALVE TYPE. 2022 CPC 408.3
26. THE WATER CLOSET STOOL IN ALL OCCUPANCIE SHALL BE LOCATED IN CLEAR SPACE LESS THAN 30" IN WIDTH. THE CLEAR SPACE IN FRONT OF THE WATER CLOSET STOOL SHALL NOT BE LESS THAN 24". MAXIMUM 1.28 PER FLASH
27. IN EVERY BEDROOM AND BASEMENT, PROVIDE ONE OPENABLE ESCAPE WINDOW MEETING ALL OF THE FOLLOWING: (R310.2, R310.2.2)
A. A NET CLEAR OPENING AREA OF NOT LESS THAN 5.7-SF. EX. GRADE FLOOR NET CLEAR OPENING AREA NOT LESS THAN 5.0 SF
B. A MINIMUM CLEAR HEIGHT OF 24-IN. AND CLEAR WITH OF 20-IN.
C. THE BOTTOM OF THE CLEAR OPENING NOT GREATER THAN 44-IN. MEASURED FROM THE FLOOR.
28. A MINIMUM18"X22" UNDER-FLOOR ACCESS, UNOBSTRUCTED BY PIPES OR DUCTS AND WITHIN 5' OF EACH UNDER-FLOOR PLUMBING CLEANOUT AND NOT LOCATED UNDER A DOOR TO THE RESIDENCE, IS REQUIRED. PROVIDE A SOLID COVER OR SCREEN. 2022 CRC 408.4 & 2022 CPC 707.8
29. FIRE RESISTIVE EXTERIOR DOORS IN ACCORDANCE WITH 2022 CRC (THE DOOR EXTERIOR SURFACE SHALL BE OF NONCOMBUSTIBLE OR IGNITION-RESISTANT MATERIALS OR BE CONSTRUCTED OF SOLID CORE WOOD 1-1/8" THICK OR HAVE A FIRE-RESIS TIVE RATING OF NOT LESS THAN 45 MINS.)
30. WINDOW WELLS SHALL BE DESIGNED FOR PROPER DRAINAGE BY STRUCTURAL CONNECTING TO THE BUILDING'S FOUNDATION DRAINAGE SYSTEMS REQUIRED BY SECTION R405.1 OR BY AN APPROVED ALTERNATE METHOD. (R310.4.3)

A4.303.1 KITCHEN FAUCETS. THE MAXIMUM FLOW RATE OF KITCHEN FAUCETS SHALL NOT EXCEED *1.5* GALLONS PER MINUTE AT 60 PSI. KITCHEN FAUCETS MAY TEMPORARILY INCREASE THE FLOW ABOVE THE MAXIMUM RATE, BUT NOT TO EXCEED 2.2 GALLONS PER MINUTE AT 60 PSI, AND MUST DEFAULT TO A MAXIMUM FLOW RATE OF 1.5 GALLONS PER MINUTE AT 60 PSI.
NOTE: WHERE COMPLYING FAUCETS ARE UNAVAILABLE, AERATORS OR OTHER MEANS MAY BE USED TO ACHIEVE REDUCTION. A4.303.3 APPLIANCES. DISHWASHERS AND CLOTHES WASHERS IN RESIDENTIAL BUILDINGS SHALL COMPLY WITH THE FOLLOWING:

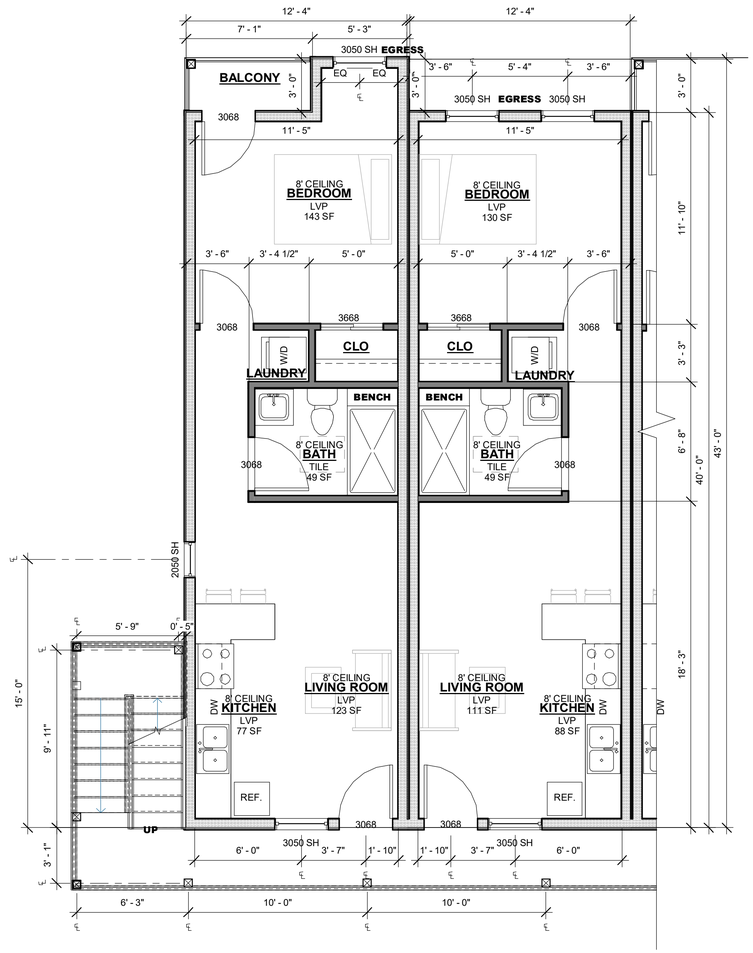
INSTALL AT LEAST ONE QUALIFIED ENERGY STAR APPLIANCE WITH MAXIMUM WATER USE AS FOLLOWS:
1. STANDARD DISHWASHERS - 4.25 GALLONS PER CYCLE.
2. COMPACT DISHWASHERS *3.5* GALLONS PER CYCLE.
3. CLOTHES WASHERS WATER FACTOR OF 6 GALLONS PER CUBIC FEET OF DRUM CAPACITY

THE DUCT SYSTEM WILL BE SIZED IN ACCORDANCE WITH ACCA MANUEL D OR OTHER APPROVED METHOD AND THAT DESIGN WILL BE PROVIDED TO FIELD INSPECTOR AT THE TIME OF INSPECTIONS

HVAC CONTRACTOR MUST PROVIDE PLAN PRIOR INSTALLATION ANY DUCT, WHICH SUPPOSED MEET ACCA STANDARDS.THIS PLAN WILL BE SUBJECT FIELD VERIFICATION.

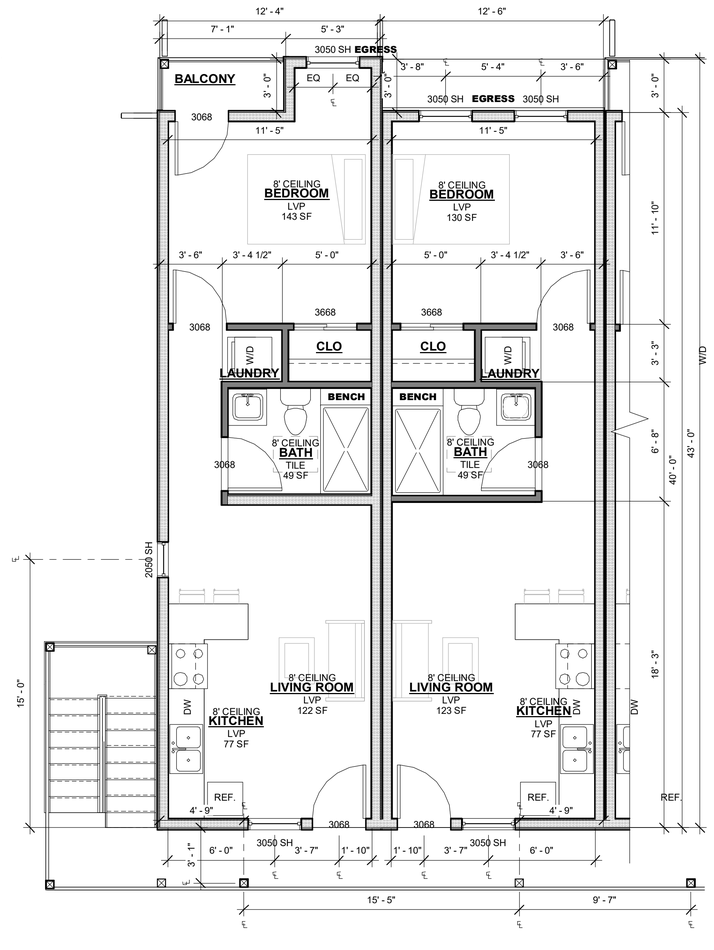
THE STORAGE OF CLASS I, II, AND III LIQUIDS IN ABOVEGROUND TANKS OUTSIDE OF BUILDINGS IS PROHIBITED IN ALL AREAS OF THE TOWN EXCEPT IN AREAS ZONED AS ***INDUSTRIAL SERVICES***. [PMC 15.09.200] (VERIFY ZONING ON INTAKE SHEET)

NATURAL LIGHT AND VENTILATION FOR HABITABLE ROOMS WITHIN A DWELLING UNIT. THE MINIMUM OPENABLE AREA TO THE OUTDOORS FOR VENTILATION SHALL BE 4% PERCENT OF THE FLOOR AREA SERVED. THE MINIMUM NET GLAZED AREA FOR NATURAL LIGHT SHALL BE NOT LESS THAN 8% PERCENT OF THE FLOOR AREA SERVED. EXCEPTION: BATHROOMS, KITCHENS, STORAGE AND LAUNDRY ROOM. ROOMS CONTAINING BATHTUBS, SHOWERS, SPAS AND SIMILAR BATHING FIXTURES SHALL BE PROVIDED WITH MECHANICAL VENTILATION AS PER 2022 C.M.C., C.R.C. AND 2022 CEC



1 PROPOSED 2ND FLOOR PLAN

SCALE: 1/4" = 1'-0"



2 PROPOSED 3RD FLOOR PLAN

SCALE: 1/4" = 1'-0"

THE PRESCRIPTIVE PLUMBING FIXTURE REQUIREMENTS CGBC 4.303.1:

A. WATERS CLOSETS: ≤ 1.28 GAL/FLUSH. CGBSC 4.303.1.1
B. SINGLE SHOWERHEADS: ≤ 1.8 GPM @ 80 PSI. CGBSC 4.303.1.3
C. MULTIPLE SHOWERHEADS: COMBINED FLOW RATE OF ALL SHOWERHEADS AND/OR OTHER SHOWER OUTLETS CONTROLLED BY A SINGLE VALVE SHALL NOT EXCEED 2.0 GPM @ 80 PSI OR ONLY ONE SHOWER OUTLET IS TO BE IN OPERATION AT A TIME. CGBSC 4.303.1.3.2
D. RESIDENTIAL LAVATORY FAUCETS: ≤ 1.2 GPM @ 60 PSI. CGBSC 4.303.1.4.1
E. KITCHEN FAUCETS: ≤ 1.8 GPM @ 60 PSI;

PLUMBING CODE REQUIREMENTS:

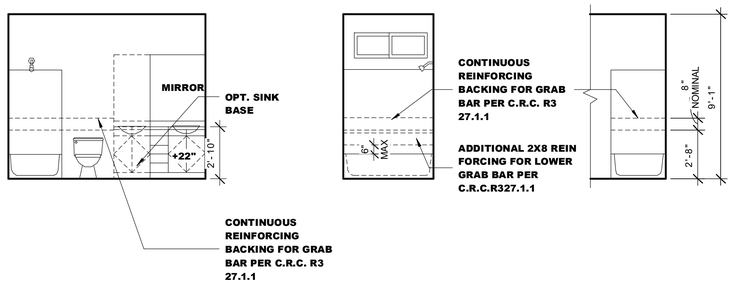
1. INSULATION OF THE FIRST 5 FEET OF HOT AND COLD WATER PIPES FROM THE STORAGE TANK
2. INSULATION OF THE HOT WATER PIPING FROM THE WATER HEATER TO THE KITCHEN APPLIANCES.
3. GAS PIPING TO THE WATER HEATER CAPABLE OF HAVING A 200000 BTU DEMAND.
4. A 120 ELECTRICAL RECEPTACLE WITHIN 3 FEET OF THE WATER HEATER AND ACCESSIBLE
5. A CATEGORY III OR IV VENT OR A TYPE B VENT WITH STRAIGHT PIPE BETWEEN THE OUTSIDE TERMINATION AND THE SPACE WHERE THE WATER HEATER IS INSTALLED

ABREVIATIONS:

TEMP = TEMPER GLASS
SDG = SLIDING DOOR GLSS
FX = FIXED WINDOW
SH = SINGLE HUNG WINDOW
XO = SLIDING WINDOW
EG = EGRESS

WALL LEGEND:

2X6 STUDS@16" O.C W/R-19 INSL FOR EXT.ONLY
2X4 STUDS@16" O.C
2X WALL TO BE DEMOLISHED
1-HOUR FIRE RATED WALL



3 TYP. GRAB BAR REINFORCEMENT

SCALE: 1/4" = 1'-0"

PREMIER DESIGN
3941 PARK DRIVE STE20-568
EL DORADO HILLS,CA 95672
PHONE:(916)743-0123 FAX:(866)631-1424
EMAIL:PREMIERDESIGN@YMAIL.COM
WEB:PRMIERDESIGNONLINE.COM

CONSULTANTS

MARK	DATE	DESCRIPTION

PROJECT NO:
REVISION DATE:
DRAWN BY: ANDREY GINZBURG
CHK'D BY:
COPYRIGHT:

SHEET TITLE

APARTMENTS

677 PLEASANT VALLEY RD
DIAMOND SPRINGS, CA
95619

APN: 097-010-067

OWNER'S INFORMATION

NAME: RUSSELL ENYART
PHONE:(916)524-9733
EMAIL:russell@enyarthomes.com

FLOOR PLANS

A-1.3

1 FRONT ELEVATION.

SCALE: 1/4" = 1'-0"

M1		**OMEGA** ALEX-FLEX **COLOR** COLOR : SNOW
M2		**HARDIE PLANK LAP SIDING** COLOR: **CEDARMILL**
M3		**JAMES HARDIE BOARD AND BATTEN SIDING** COLOR:PEARL GREY
M4		**HARDIE BOARD CEDAR WOOD SHAKES** COLOR MINMAX NATURAL 209 WOOD FINISH
P1		**FASCIA** **WOOD PAINTED BLACK**
P2		**WINDOW** **JELD-WEN WHITE WINDOWS**
P3		REGENCY 36 IN. X 80 IN. 4 LITE 1/4 TOPLITE RHIS CLEAR GLASS ONYX STAINED FIR GRAIN FIBERGLASS PREHUNG FRONT DOOR
L1		**WALL SCONCE** **MILLENNIUM FETTERTON**
R1		**TIMBERLAND HD REFLECTOR** **SERIES - CHARCOAL**

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CONSULTANTS

APARTMENTS

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DIAMOND SPRINGS, CA
95619

APN: **097-010-067**

OWNER'S INFORMATION

NAME: RUSSELL ENYART
PHONE:(916)524-9733
EMAIL:russell@enyarthomes.com

MARK	DATE	DESCRIPTION

PROJECT NO:
REVISION DATE:
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COPYRIGHT:

SHEET TITLE

ELEVATION

A-2.1

1 REAR ELEVATION.

SCALE: 1/4" = 1'-0"

M1		OMEGA SNOW COLOR
M2		HARDIEPLANK LAP SIDING SELECT CEDARMILL
M3		JAMES HARDIE BOARD AND BATTEN SIDING
M4		HARDIE BOARD CEDAR WOOD SHAKES
P1		FASCIA WOOD PAINTED BLACK
P2		WINDOW JELD-WEN WHITE WINDOWS
P3		DOOR ANDRESON 100 SERIES - BLACK
L1		WALL SCONCE MILLENNIUM FETTERTON
R1		TIMBERLAND HD REFLECTOR SERIES - CHARCOAL

PREMIER DESIGN
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ELEVATION

A-2.2

1 FRONT ELEVATION

SCALE: 1/4" = 1'-0"

2 LEFT ELEVATION

SCALE: 1/4" = 1'-0"

3 REAR ELEVATION

SCALE: 1/4" = 1'-0"

4 RIGHT ELEVATION

SCALE: 1/4" = 1'-0"

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MARK	DATE	DESCRIPTION

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COPYRIGHT:

SHEET TITLE

ELEVATION

A-2.3

For more background and detail on the mapping methodology, click here: https://www.treasurer.ca.gov/ctcac/opportunity/2025/Draft-2025-Opportunity-Map-Methodology.pdf

Background

1. **What is the purpose of the opportunity and high-poverty & segregation mapping tools?**

   The mapping tools are intended to advance the state's affirmatively furthering fair housing (AFFH) objectives. AFFH means combating discrimination and taking meaningful actions that overcome patterns of segregation and foster inclusive communities free from barriers that restrict access to opportunity based on protected characteristics.

   The Opportunity Map identifies areas in every region of the state whose characteristics have been shown by research to be associated with positive economic, educational, and health outcomes for low-income families—particularly long-term outcomes for children. As such, the map is intended to inform efforts to advance the AFFH objective of increasing access to opportunity.

   The high-poverty and segregated areas overlay identifies places that meet standards for both high or concentrated poverty rates and racial segregation. The use of this overlay is grounded in two guiding AFFH objectives: to avoid further segregation and poverty concentration, and to increase access to opportunity for low-income families.

2. **What has been the process for creating and updating these tools?**

   In February 2017, the Department of Housing and Community Development (HCD) and the California Tax Credit Allocation Committee (CTCAC) convened a range of independent organizations and research centers which provided input on the original creation of the Opportunity Map. Since then, a subset of research partners has continued to update and refine the map over time. HCD, CTCAC, and the research partners annually review and update the mapping tools' indicators and methodology in response to stakeholder comments and emerging research.

3. How has the Opportunity Map been used in State policy and programs?

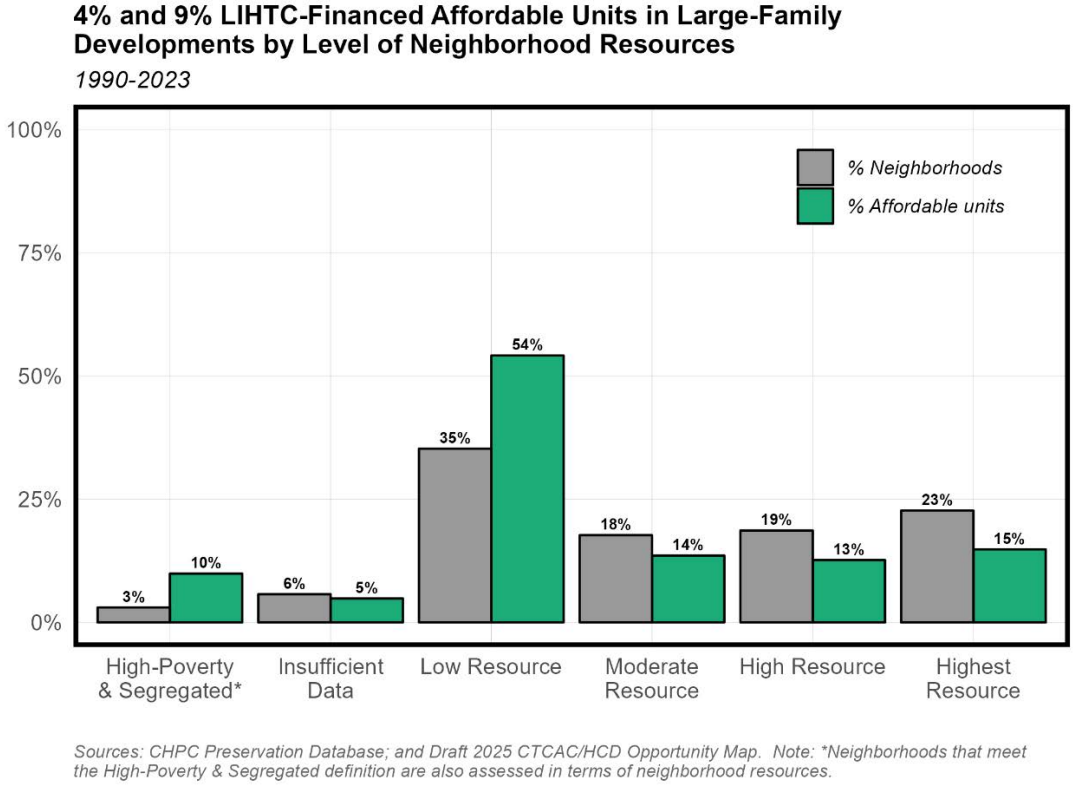
The Opportunity Map was originally created to inform statewide policy for funding affordable housing in the context of the CTCAC regulations which relate to 9% Low Income Housing Tax Credit (LIHTC) program. For this reason, the mapping methodology was designed for the competitive funding infrastructure of the 9% LIHTC program (e.g., geographic competition, a separate funding pool for rural applicants). The Opportunity Map has also been used inform similar policies in the other housing funding programs, including CDLAC regulations for tax-exempt bonds, which are paired with 4% LIHTCs, and HCD's Multifamily Super NOFA. Finally, HCD has used a slightly modified version of the Opportunity Map to inform land use and zoning policy, including the Regional Housing Need Allocation (RHNA) process and Housing Element updates.

4. How has the location of affordable housing for low-income families changed since the introduction of opportunity area incentives?

Since the introduction of incentives several years ago, affordable housing for low-income families financed with LIHTCs in higher resource neighborhoods has increased when compared to historical patterns. This trend is more pronounced for developments financed with 4% LIHTCs than for those financed with 9% LIHTCs. However, even after the introduction of opportunity area incentives, Low Resource areas continue to see more production of affordable housing for families than any other neighborhood category in the Opportunity Map when considering both 4% and 9% LIHTCs combined.

As a result, LIHTC-financed affordable homes for low-income families in California are still notably underrepresented in higher resource areas. Through 2023, only 15 percent percent of all LIHTC funded homes the state's affordable housing portfolio (both 4% and 9%) in family-serving developments are located in Highest Resource neighborhoods, which comprise 23 percent of neighborhoods statewide, contrasted with 54 percent in Low Resource neighborhoods, which comprise 35 percent of neighborhoods statewide, as shown in Figure 1.

Figure 1



Additional details for the 9% and 4% programs are provided below.

9% program: According to analysis by CTCAC and HCD's research partners, the share of affordable homes in 9% LIHTC large family developments in High and Highest Resource areas modestly increased from 17 percent of all funded affordable homes in the four years prior to introduction of incentives to 21 percent since introduction of incentives in 2019, as shown in Figure 2.

Figure 2

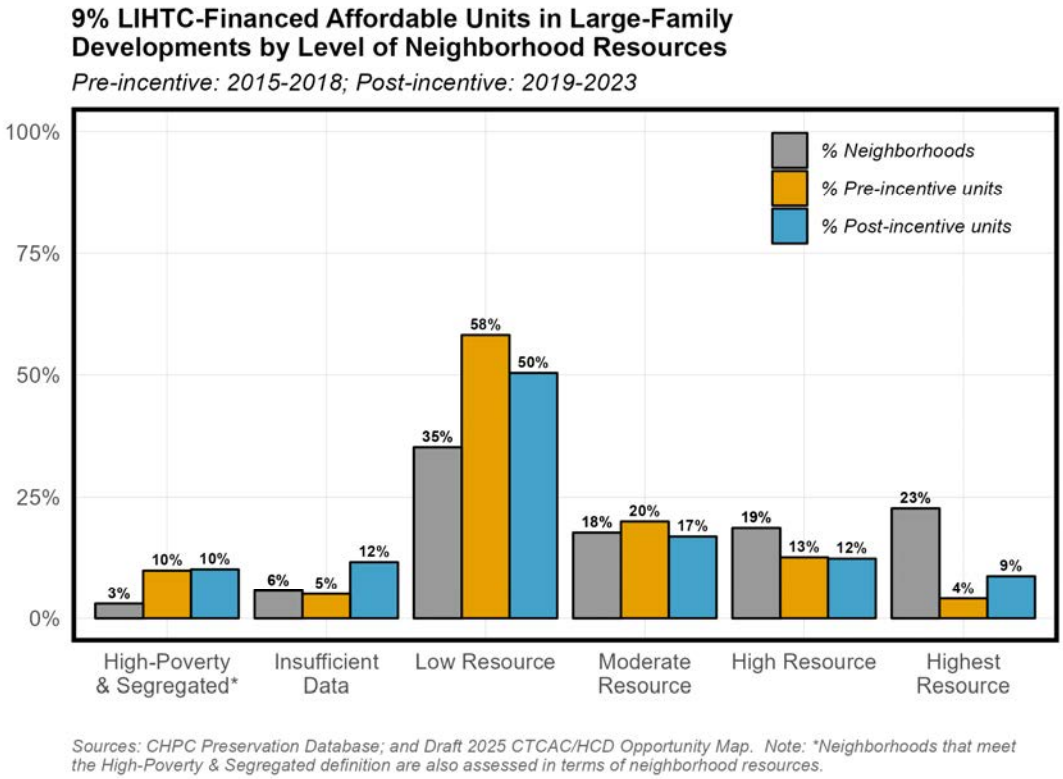
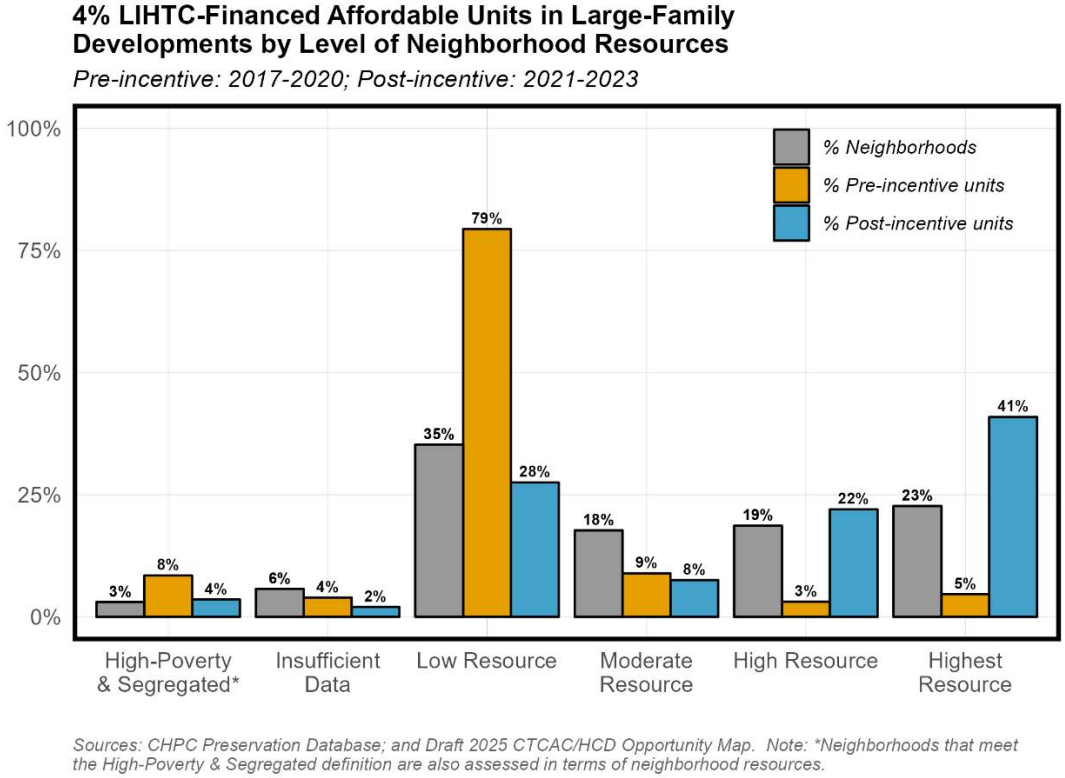


Figure 2 also shows a modest decrease in the affordable housing for low-income families funded in Low Resource areas. Since 2019, the share of affordable homes in large-family developments in Low Resource areas financed with 9% LIHTCs decreased from 58 percent to 50 percent (compared to the four years prior), as can be seen in Table 1.

4% Program: The share of affordable homes in 4% LIHTC large family developments in High and Highest Resource areas substantially increased from 8 percent of all funded affordable homes in the four years prior to introduction of incentives[1] to 63 percent since introduction of incentives in 2021, as shown in Figure 3.

[1] This share is lower than the share for the entire history of the 4% program (28 percent in High and Highest Resource areas) prior to introduction of incentives.

Figure 3



*Sources: CHPC Preservation Database; and Draft 2025 CTCAC/HCD Opportunity Map. Note: *Neighborhoods that meet the High-Poverty & Segregated definition are also assessed in terms of neighborhood resources.*

Low Resource neighborhoods have continued to received a share of affordable homes roughly proportional to their share of the state's neighborhoods (35 percent versus 28 percent). High Poverty & Segregated neighborhoods have also continued to receive a proportional share of funded affordable homes (3 percent versus 4 percent).

In July 2022, CDLAC established a "soft cap" on the number of applicants that can receive a critical point in the scoring system for being in High and Highest Resource areas. The intention of the soft cap was to ensure that projects in lower resource neighborhoods still have a pathway to receive funding – which, as described above, has been the case so far. HCD, CTCAC, and CDLAC will continue to monitor the distribution of affordable homes for families relative to the CTCAC/HCD Opportunity Map categories.

Opportunity methodology

1. How does the Opportunity Map assess neighborhoods?

The Opportunity Map scores neighborhoods across eight economic and educational indicators relative to other neighborhoods in the same region. These indicators were selected because they have been shown by research to be associated with economic, educational, and health outcomes for low-income families—particularly long-term outcomes for children:

Economic Indicators	
Above 200 Percent of Poverty	Percentage of population with income above 200% of federal poverty line
Adult Education	Percentage of adults with a bachelor's degree or above
Employment	Percentage of adults aged 20-64 who are employed in the civilian labor force or in the armed forces
Median Home Value	Value of owner-occupied units
Education Indicators	
Math proficiency	Percentage of 4th graders who meet or exceed math proficiency standards
Reading proficiency	Percentage of 4th graders who meet or exceed literacy standards
High school graduation rate	Percentage of high school cohort that graduated on time
Student poverty rate	Percentage of students not receiving free or reduced-price lunch

The Opportunity Map also reflects local environmental conditions by using a subset of data from the CalEnviroScreen 4.0 tool to identify the geographies that have the highest potential – defined here as ranking in the highest 5% of regional environmental burden – to expose vulnerable populations to nearby health and safety threats.

A neighborhood’s opportunity score is determined by how many economic and education indicators fall above the median (50th percentile) tract or block group value within each region. Each indicator that falls above the regional median adds 1

point from an overall score. A point is subtracted when a tract ranks in the highest 5% of environmental burden within its surrounding region.

Using this method, the final scores are divided into four primary categories:

- 9 or 8 = “Highest Resource”
- 7 or 6 = “High Resource”
- 5 or 4 = “Moderate Resource”
- 3 or lower = “Low Resource”

2. How has the approach to assessing rural areas evolved over time?

The approach to assessing rural areas in the Opportunity Map has evolved over time in large part due to stakeholder feedback. Each of these changes was made in an effort to increase the accuracy of the assessment, often in the context of data challenges which present difficult tradeoffs (e.g., assessing at the block group level allows for a finer-grained analysis but introduces more data reliability challenges). A timeline of these changes is provided below, beginning with the first version of the map in 2018:

- 2018: Rural areas were assessed the same as non-rural areas (at the tract level, with data reliability thresholds) but relative to other rural areas in the same county, as opposed to relative to the metropolitan region (which can include multiple counties) with non-rural areas.
- 2019: Some exclusions are added which relate primarily to rural areas, including areas with very high prisoner populations and areas with low population density.
- 2020: Rural areas are assessed at the block group level[2] instead of at the tract level given the size of some rural tracts and to provide a finer-grained assessment. The population density floor is modified and areas near military bases where it is not possible to develop non-military affordable housing are excluded.
- 2021: No changes related entirely or primarily to rural areas.
- 2022: No changes related entirely or primarily to rural areas.

[2] The one exception to this rule is for environmental burden data due to CalEnviroScreen data only being available at the census tract level, not at the block group level. For rural areas, the county-level environmental burden percentile rank is calculated at the census tract level and then assigned to each of the block groups within a given rural census tract. In rural counties with fewer than 20 tracts, the environmental burden indicator is calculated at a state level, and tracts and the block groups they contain are identified as having high environmental burden if they rank in the top 5% of the state.

- 2023: No changes related entirely or primarily to rural areas.
- 2024: The population density floor is raised in an effort to exclude the most sparsely populated rural block groups from being assigned to a resource category. Transitioning to a threshold-based methodology requires a change to the data reliability threshold.
- 2025 (draft): No proposed changes specific to rural areas. The proposed change is related to addressing instability in annual map updates – to use a three-year rolling average for education indicators, which improves map stability in both rural and non-rural areas.

High-Poverty & Racially Segregated areas methodology

1. How are high-poverty and racially segregated areas defined?

A high-poverty and segregated area overlay identifies areas that meet standards for both concentrated poverty and racial segregation. Concentrated poverty is defined as tracts with at least 30% of the population falling under the federal poverty line. Racial segregation is defined as tracts with a racial/ethnic Location Quotient of higher than 1.25 for Black, Hispanic, Asian, or all people of color in comparison to the county. The Location Quotient is a small-area measure of relative segregation calculated at the residential census tract level that represents how much more segregated an area (e.g., a census tract or block group) is relative to the larger area (in this case, the county).

2. Why is the methodology for identifying high-poverty and racial segregated places a separate mapping layer rather than a filter?

The draft 2025 Opportunity Map identifies high poverty and segregated areas using an overlay. In previous iterations of the map prior to 2024, these areas were "filtered" out from the pool of tracts across the state and were not given opportunity scores. The revised approach allows stakeholders to see both whether a tract is in a High-Poverty & Segregated area as well as its underlying opportunity score and indicator values. The purpose of this change is to increase transparency by communicating the underlying opportunity-related characteristics of segregated areas of concentrated poverty. Under the filter method, stakeholders raised concerns that gentrifying neighborhoods could be caught in the filter if they successfully preserve affordable housing and prevent displacement of high poverty households and people of color. The research partner’s analysis found that the vast

majority of segregated areas of poverty were low resource, but in rare cases, gentrifying, moderate-to-high resource neighborhoods were caught in the filter. The overlay approach allows state housing agencies to make explicit policy decisions about how to treat neighborhoods that are both segregated and high poverty, in accordance with their AFFH strategies.

2025 Methodology for Opportunity and High-Poverty & Segregated Area Mapping Tools

December 2024

Table of Contents

Background and Purpose

About affirmatively furthering fair housing

As defined in state law,[1] affirmatively furthering fair housing (AFFH) means taking meaningful actions, in addition to combating discrimination, that overcome patterns of segregation and foster inclusive communities free from barriers that restrict access to opportunity based on protected characteristics. Specifically, affirmatively furthering fair housing means taking meaningful actions that, taken together:

- Address significant disparities in housing needs and in access to opportunity,
- Replacing segregated living patterns with truly integrated and balanced living patterns,
- Transforming racially and ethnically concentrated areas of poverty into areas of opportunity, and
- Fostering and maintaining compliance with civil rights and fair housing laws.

Purpose of the mapping tools

Each mapping tool described in this methodology documentation is intended to be used to advance specific AFFH objectives. A summary of each mapping tool's purpose is included below.

Opportunity: The opportunity map identifies areas in every region of the state whose characteristics have been shown by research to be associated with positive economic, educational, and health outcomes for low-income families—particularly long-term outcomes for children.[2] As such, the map is intended to inform efforts to advance the AFFH objective of increasing access to opportunity. CTCAC adopted this map into its regulations in December 2017, accompanying new policies aimed at increasing access to high-opportunity areas for families with children in housing financed with 9% Low Income Housing Tax Credits (LIHTCs). For this reason, the research partners aligned this map and the methodology behind it with the competitive funding infrastructure for the 9% LIHTC program (e.g., geographic competition). The map has also since been used to inform similar policies in other state affordable housing funding programs, such as HCD's Multifamily Finance Super NOFA and the California Debt Limit Allocation Committee's regulations. However, some methodological adjustments may be called for if the map is applied to broader contexts and different application processes.

High-Poverty & Segregated Areas: The high-poverty and segregated overlay identifies areas that meet standards for both high or "concentrated" poverty rates (30% or more of the population below the federal poverty line) and racial segregation (overrepresentation of individual non-white racial/ethnic groups and/or people of color as a whole relative to the county). The use of this overlay is grounded in two guiding AFFH objectives: to avoid further segregation and poverty concentration, and to increase access to opportunity for low-income families.

[1] For more information on HCD's approach to advancing AFFH objectives, see: https://www.hcd.ca.gov/planning-and-community-development/affirmatively-furthering-fair-housing.
[2] The mapping methodology is narrowly tailored towards upward mobility for children of low-income families. Although the methodology includes indicators relevant to other populations, some indicators associated with positive outcomes for those populations may not be included.

About the research partners

In February 2017, the Department of Housing and Community Development (HCD) and the California Tax Credit Allocation Committee (CTCAC) convened a group of independent organizations and research centers, referred to henceforth as the "research partners," to provide research support and develop evidence-based approaches – including the mapping tools described in this methodology documentation – to help advance AFFH objectives.[3]

[3] The research partners currently include representation from the Othering & Belonging Institute at UC Berkeley, the Terner Center for Housing Innovation at UC Berkeley, and the California Housing Partnership.

Opportunity Methodology

Overview of the mapping approach

One of the challenges in creating an opportunity map to inform statewide housing policy is that California contains significant regional variation – from Central Valley cities and towns, to Los Angeles, to the San Francisco Bay Area, to rural areas throughout the state.

Using absolute thresholds for place-based opportunity could introduce comparisons between very different areas of the state that make little sense from a policy perspective—in effect, holding a farming community to the same standard as a dense, urbanized neighborhood in one of the state's coastal cities. Deriving opportunity scores through comparison to the entirety of the state would align neither with realistic moving patterns of families, nor with the infrastructure for affordable housing funding programs—where applicants for family-targeted affordable housing typically compete with other applicants in the same region, and rural applicants compete in a separate funding pool.

To allow state housing agencies to incentivize equitable development patterns within each part of the state, the Opportunity Map identifies the neighborhoods that score better across nine economic, educational, and environmental indicators relative to other neighborhoods in the same region. These indicators are described in detail below.

A neighborhood's score for each economic and educational indicator (described later in this document) is determined by whether it falls above or below the median (50th percentile) tract or block group value within each region. Each indicator that falls above the regional median adds 1 point to the final score.

The opportunity score also reflects local environmental conditions. The Opportunity Map uses a subset of data from the CalEnviroScreen 4.0 tool to identify the geographies that have the highest potential – defined here as ranking in the highest 5% of regional environmental burden – to expose vulnerable populations to nearby health and safety threats. Places with this "hazard flag" have 1 point subtracted from the final score. This approach is described in more detail below.

Regional median and top 5% values are calculated based on urban tracts and/or rural block groups within each region.[4] For counties outside of the 8 urban regions, defined below, regional medians are calculated separately for each county. To account for the presence of missing values for indicators in certain tracts or block groups, any tracts or rural block groups for which more than 2 of the indicators are missing are removed from consideration and receive no designation.

Using this method, the final scores are divided into four primary categories:

- 8 or 9 = "Highest Resource"
- 6 or 7 = "High Resource"

[4] For rural geographies, the regional medians for economic and educational indicators are calculated at the block group level. However, because CalEnvrioScreen data are not available at the block group level, environmental hazard percentile ranks are calculated at the census tract level. The environmental hazard percentile rank calculated at the census tract level is assigned to each of the block groups within a given rural census tract.

- 4 or 5 = “Moderate Resource”
- 3 or lower = “Low Resource”

Excluding tracts or block groups

The tool also excludes certain census areas from being categorized. To improve the accuracy of the mapping, tracts and rural block groups with the following characteristics are excluded from categorization based on indicator scores:

- Areas with unreliable data, as defined earlier in this document;
- Areas where people residing in institutional facilities make up at least 75 percent of the population;[5]
- Areas with population density below 25 people per square mile and total population below 750; and
- Areas where at least half of the age 16+ population is employed by the armed forces, in order to exclude military base areas where it is not possible to develop non-military affordable housing.[6]

Excluded tracts and rural block groups are identified as “Insufficient Data” on the mapping tool or “N/A” in the public data file.

Regional boundaries

To determine the regional definitions, the Opportunity Map mostly mirrors the geographic apportionments designated within CTCAC’s regulations but bundles some of these apportionments to create more accurate regions, with guidance from CTCAC and HCD. Following is a list of the opportunity map regions with the respective geographic apportionment(s) captured in that region:

Opportunity Mapping Region	Geographic Apportionment in CTCAC Regulations
Los Angeles Region	City of Los Angeles
	Balance of Los Angeles County
Bay Area Region	East Bay Region
	South and West Bay Region
	San Francisco County
	Marin, Napa, Solano, and Sonoma Counties (from the Northern Region)
Central Valley Region	Central Valley Region
San Diego County	San Diego County
Capital Region	Capital Region minus Sutter and Yuba Counties
Inland Empire Region	Inland Empire Region
Orange County	Orange County

[5] Institutional facilities include adult correctional facilities, juvenile facilities, skilled-nursing facilities, and other institutional facilities such as mental (psychiatric) hospitals and in-patient hospice facilities. Percentage of population residing in institutional facilities is derived from 2020 Census table P5_002N.
[6] Percentage of population employed by the armed forces is derived from ACS table B23025_006.

Central Coast Region	Central Coast Region
Rural Areas	Non-metropolitan counties, plus Butte, Shasta, Sutter, and Yuba Counties, as well as tracts that are eligible for Section 515[7]

Please refer to the CTCAC regulations for a list of counties included in each geographic apportionment.

Identifying and categorizing opportunity in rural tracts

The Opportunity Map measures opportunity in rural parts of the state at the block group level, rather than at the tract level as in the rest of the state. Since tracts in rural areas of California are approximately 37 times larger in land area than tracts in non-rural areas, tract-level data in rural areas may mask over variation in opportunity and resources within these tracts. Assessing opportunity at the block group level in rural areas reduces this difference by 90 percent (each rural tract contains approximately three block groups), and thus allows for finer-grained analysis.

Although rural areas are evaluated at the block group level, the rural designation is assigned by Census tract, rather than block group, to maintain consistency with urban and rural evaluation, i.e. to avoid a scenario in which a tract is split between rural and urban areas, the latter of which are evaluated by tract. To capture the diverse array of rural communities across the state—both within and outside of designated metropolitan statistical areas—this methodology takes a three-tiered approach to identifying rural census tracts. For mapping purposes, tracts that fall in the "Rural Areas" category include:

1. All tracts in the following Non-Metropolitan counties: Alpine, Amador, Calaveras, Colusa, Del Norte, Glenn, Humboldt, Inyo, Lake, Lassen, Mariposa, Mendocino, Modoc, Mono, Nevada, Plumas, Sierra, Siskiyou, Tehama, Trinity, and Tuolumne;
2. All tracts in Butte, Shasta, Sutter, and Yuba Counties;
3. Any other non-urbanized block group with at least half its population in an area deemed as rural on the U.S. Department of Agriculture's online multifamily mapping application.

Any tract that falls within the 25 counties listed above is designated as a "Rural Area." Beyond those counties, the research partners identified areas in the state that correspond with rural areas on the U.S. Department of Agriculture's online multifamily maps.

These areas were then overlaid with census tract boundaries to identify what share of the population within a tract falls within the rural area. If at least 50 percent of a tract's population is located within census blocks which have their population-weighted centroid within the rural area, that census tract was allocated to the "Rural Areas" designation.[8]

For block groups that fall within the rural designation, the maps take a slightly different approach to allocating resource categories. Because rural areas span the state (including both poorer and wealthier regions), rural block groups are ranked in comparison to other rural block groups within the same county, as long as there are at least two observations for any given indicator.

[7] The Section 515 Rural Rental Housing program is a USDA program that provides affordable rental housing for very low-, low-, and moderate-income families, elderly persons, and persons with disabilities in rural areas.
[8] Blocks are the smallest geographic unit available in the U.S. Census.

Indicators

Indicators used in the CTCAC/HCD Opportunity Map are selected based on the following criteria:

- Evidence from peer-reviewed research that the indicator is linked to improved life outcomes for low-income families, particularly children
- Reliable data
- Publicly available data
- Statewide data coverage
- Fine geographic detail[9]

See below for the full list of opportunity indicators, measures, and data sources.

Indicator	Measure	Data Source	Table
Above 200 Percent of Poverty	Percent of population with income above 200% of federal poverty line	2018-2022 ACS	Table C17002
Adult Education	Percent of adults with a bachelor's degree or above	2018-2022 ACS	Table B15003
Employment	Percent of adults aged 20-64 who are employed in the civilian labor force or in the armed forces	2018-2022 ACS	Table B23024
Median Home Value	Value of owner-occupied units	2018-2022 ACS	Table B25077
Environmental Burden	CalEnviroScreen 4.0 Site-Based Pollution Indicators	CalEnviroScreen 4.0	Variables: solid waste sites, groundwater threats, cleanup sites, hazardous waste facilities
Math proficiency	Percentage of 4th graders who meet or exceed math proficiency standards	2018-2019[10], 2021-2022, 2022-2023 California Department of Education (DOE)	
Reading proficiency	Percentage of 4th graders who meet or exceed literacy standards	2018-2019, 2021-2022, 2022-2023 CA DOE	

[9] Data include point source coordinates or are aggregated into small-area geographies such as Census tracts and block groups.
[10] 2018-2019 math and reading score data are used because data are not available for 2019-2020 and relatively few schools administered tests in 2020-2021 due to pandemic related complications.

High school graduation rate	Percentage of high school cohort that graduated on time	2020-2021, 2021-2022, 2022-2023 CA DOE	
Student poverty rate	Percentage of students not receiving free or reduced-price lunch	2021-2022, 2022-2023, 2023-2024 CA DOE	

It should also be acknowledged that an opportunity map's accuracy in measuring place-based resources is limited by the accuracy of the data underlying it. Data may be derived from self-reported surveys of subsets of an area's population, and sometimes may not be recorded or reliable in some areas. Further, even the most recent publicly available datasets typically lag by two years, meaning they may not reflect the most recent conditions in areas undergoing very rapid change. The methodology described in this document attempts to address each of these limitations to the degree possible. In addition, the research partners update the data contained within the mapping tool annually and review the methodology to make improvements over time.[11]

The rationale and metric for each indicator (economic, education, and environmental) is described in more detail below.

Economic

Poverty Rate. Neighborhood poverty rates have been shown through numerous studies to be a strong indicator of an area's level of resources, risk, and opportunity, and predictor of key life outcomes for low income children in particular. Living in high-poverty areas increases exposure to localized risks—such as violent crime, low-quality and underfunded schools, and pollution—that have been shown to contribute to toxic stress, poor physical and mental health, low educational attainment, and impaired cognitive development in children. On the other hand, living in low poverty areas has been shown to be associated with substantial benefits such as higher educational attainment and long-term earnings increases for low-income children, as well as improved mental and physical health for both children and adults.[12][13][14]

This indicator is measured using two hundred percent of the poverty line to reflect the higher cost of living in California. Because each indicator is designed to measure opportunity in a positive sense, this indicator is measured as the percent of a tract's or rural block group's residents who live above 200 percent of the federal poverty line.[15]

[11] The code used to calculate the opportunity scores also goes through an annual review process for quality assurance. Year over year changes in opportunity designations are also reviewed on an annual basis.
[12] For a summary of this research, see "Evidence Shows that Neighborhoods Affect Children's Well-Being and Long-Term Success" in Sard, B., & Rice, D. (2016). Realizing the Housing Voucher Program's potential to enable families to move to better neighborhoods. Washington, DC: Center on Budget and Policy Priorities.
[13] Chetty, R., Hendren, N., & Katz, L.F. (2015). The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment. Cambridge, MA: Harvard University and National Bureau of Economic Research. http://www.equality-of-opportunity.org/assets/documents/mto_paper.pdf
[14] Chetty, R., Friedman, J., Hendren, N., Jones, M., Porter, S. (2018). The Opportunity Atlas: Mapping the Childhood Roots of Social Mobility. Opportunity Insights. NBER Working Paper No. 25147.
[15] In 2024, the federal poverty line for a family of four is $31,200.

To prevent college towns from negatively impacting an area's resource score, college and graduate students are removed from the above 200 percent of poverty calculation in areas where they comprise at least 25% of the population. An internal analysis found that without this adjustment, most tracts with high proportions of college students have lower than typical scores relative to the region, many of which are high resource according to other indicators, likely due to the Census classifying many unemployed and partially employed students living off-campus up as poor.

Adult Education Rate. The tract-level share of adults that have earned a bachelor's degree has been shown to be highly correlated with rates of upward economic mobility for low-income children.[16] Higher rates of post-secondary attainment are also predictive of higher wages and improved work opportunities for adults, meaning that families are less likely to be economically insecure.[17] Research has indicated that children living in neighborhoods with a higher average socioeconomic status (SES) are more likely to graduate from high school. Additionally, starting at age three, children living in higher SES neighborhoods and/or with a greater percentage of managerial or professional residents begin to perform better on IQ tests than their peers who live in lower SES neighborhoods.[18] Additional research has shown that an increasing supply of college graduates is associated with higher earnings for other labor force participants. These findings are especially noteworthy because they show that these "spillover" effects are even more pronounced for less skilled workers; a more highly educated labor force leads to higher wage gains for high school dropouts and high school graduates than those with college degrees.[19]

This indicator is measured by calculating the percent of adults 25 years and older who have earned at least a bachelor's degree in each tract and rural block group.

Employment Rate. The tract-level share of employed adults has been shown to be highly correlated with rates of upward economic mobility for low-income children.[20] Adult unemployment is commonly considered to be an indicator of neighborhood disadvantage that affects not just the individuals who do not have jobs, but members of the entire community.[21] Areas with low levels of employment see outcomes similar to those with high poverty rates, including poor health outcomes, low birthweight babies, and violent crime.[22]

The employment rate is calculated as the percent of individuals in each tract and rural block group age 20-64 who are employed in either the civilian labor force or the armed forces. The employment rate is used because the unemployment rate does not account for individuals who have dropped out of the labor force due to disillusionment with their job prospects.

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[16] Chetty, R., Friedman, J., Hendren, N., Jones, M., Porter, S. (2018).
[17] See Bureau of Labor Statistics (2016), "Unemployment Rates and Educational Attainment." Accessed at https://www.bls.gov/emp/ep_chart_001.htm.
[18] For a full review of the literature on how living in neighborhoods with high socio-economic statuses and/or high adult education rates, see Leventhal, T., & Brooks-Gunn, J. (2000). The neighborhoods they live in: The effects of neighborhood residence on child and adolescent outcomes. Psychological Bulletin, 126(2), 309–337. https://doi.org/10.1037//0033- 2909.126.2.309.
[19] Moretti, E. (2004). Estimating the social return to higher education: evidence from longitudinal and repeated cross-sectional data. Journal of Econometrics, 121(1), 175–212. https://doi.org/10.1016/j.jeconom.2003.10.015.
[20] Chetty, R., Friedman, J., Hendren, N., Jones, M., Porter, S. (2018).
[21] 1 Santiago, C. D., Wadsworth, M. E., & Stump, J. (2011). Socioeconomic status, neighborhood disadvantage, and povertyrelated stress: Prospective effects on psychological syndromes among diverse low-income families. Journal of Economic Psychology, 32(2), 218–230. https://doi.org/10.1016/j.joep.2009.10.008.
[22] Pearl, M., Braveman, P., & Abrams, B. (2001). The Relationship of Neighborhood Socioeconomic Characteristics to Birthweight Among 5 Ethnic Groups in California. American Journal of Public Health, 91(11), 1808–1814.

Home Value. Home value is a strong proxy for neighborhood quality and community resources. Research suggests that neighborhood characteristics, such as school quality, public resources, crime rates, environmental quality and even perceived social benefits are all reflected in home values. For example, research has demonstrated a link between school quality and house prices.[23] Conversely, disruption of schools (such as school closings and redistricting) can be reflected in declining home values.[24] Crime, too, has been shown to negatively impact house prices, especially the prevalence of violent crime.[25] Researchers have quantified the extent to which factors such as clean air, open spaces, and even well-educated neighbors can all capitalize into house prices.[26][27][28] Collectively, home prices are directly impacted by a variety of neighborhood characteristics, and are to a large extent a bellwether of the quality of the neighborhood itself.

This indicator is calculated as the median home value (dollars) of owner-occupied housing units for every Census tract and rural block group.

Education

Starting with the draft 2025 Opportunity Map, a three-year rolling average of the education indicators (e.g., reading and math proficiency, high school graduation rates, and student poverty) replaced the previous practice of using a single year of data to measure these indicators. The three-year rolling average allows real changes to emerge in map updates over time while limiting the effect of noisy data (year to year variability in the data that does not necessarily reflect real changes). This approach increases year-to-year stability in opportunity designations. Further, averaging multiple years of education data mirrors the approach used for the economic indicators in the map (the ACS estimates used for the economic indicators span 5 years of data).

Internal analysis revealed that the map's education indicators tend to be the primary drivers of year-to-year changes in resource designations. The three-year rolling average decreases the number of tracts and block groups shifting by two or more resource designations from one year to another. These cases, though marginal, represent a higher degree of year-to-year instability that indicates possible influence of noisy underlying data. Data used in the Opportunity Map that does not represent real or lasting change – whether due to data reporting error, sampling error, or other sources – present a potential source of instability that should be minimized to the degree practicable, particularly for a mapping tool being used in policy and programs with real stakes over multi-year periods.

[23] Nguyen-Hoang, P., & Yinger, J. (2011). The capitalization of school quality into house values: A review. Journal of Housing Economics, 20(1), 30–48. https://doi.org/10.1016/j.jhe.2011.02.001.
[24] Bogart, W. & Cromwell, B. (2000). How Much is a Neighborhood School Worth? Journal of Urban Economics 47, 280-305.
[25] Gibbons, S. (2004). The costs of urban property crime. The Economic Journal, 114(499).
[26] Smith, V. K., & Huang, J.-C. (1995). Can Markets Value Air Quality? A Meta-Analysis of Hedonic Property Value Models. Journal of Political Economy, 103(1), 209–227. https://doi.org/10.1086/261981.
[27] Bolitzer, B., & Netusil, N. (2000). The impact of open spaces on property values in Portland, Oregon. Journal of Environmental Management, 59(3), 185–193. https://doi.org/10.1006/jema.2000.0351.
[28] Gibbons, S. (2003). Paying for Good Neighbours: Estimating the Value of an Implied Educated Community. Urban Studies, 40(4), 809–833. https://doi.org/10.1080/0042098032000065317.

Pandemic-related gaps in the data mean that some education indicators (i.e. test scores) do not have three consecutive years of complete and reliable data available. In these instances, indicators draw from the three most recent years of available data to create the rolling average.

Math and Reading Proficiency. Elementary school test scores from 3rd and 4th grade are considered in the literature to be strong proxies for the level of resources and opportunity during early childhood both in local schools and more broadly in communities.[29] Indeed, studies have shown that test scores should be understood as an output of students' neighborhood conditions—such as whether they live in a high-poverty or high-crime area—and not only of students' individual abilities and family backgrounds, or the quality of the schools they attend.[3031]Further, test scores and other measures of school quality are highly correlated with upward mobility for low-income children.[32] Proficiency on elementary school-age standardized tests is also a strong predictor of whether individual children will eventually graduate high school,[33] which itself is associated with higher long-term earnings and other social benefits compared to dropping out.[34]

"Proficiency" is defined as the percentage of students that are performing at grade-level in the 4th grade in each school. Math and reading proficiency scores are calculated as the enrollment weighted average proficiency level of students at the three closest schools, within the same county, to each census tract's centroid. The average value from three schools is used because the methodology does not account for school assignment boundaries, which are different from census tract boundaries.

This approach does have limitations, including that students will attend only one of the three closest schools, so the quality of the school they attend may differ somewhat from the average score that is calculated in each census tract. In addition, this approach does not account for school district assignment policies due to data limitations. However, the academic literature suggests that low-income students are more likely to attend their neighborhood schools even when they have a choice to go elsewhere,[35] and that choice-based assignment policies can have the effect of worsening school segregation.[36] Further, experts and researchers consulted as part of a review of education indicators and measurements used in the Opportunity Map

[29] See, for example: Reardon, Sean F. 2017. Educational Opportunity in Early and Middle Childhood: Variation by Place and Age. Stanford Center for Education Policy Analysis. Working Paper No. 17-12.
[30] Burdick-Will, J., Ludwig, J., Raudenbush, S. W., Sampson, R. J., Sanbonmatsu, L., & Sharkey, P. (2011). "Converging evidence for neighborhood effects on children's test scores: An experimental, quasi-experimental, and observational comparison." In G.J. Duncan & R.J. Murnane (Eds.) Whither Opportunity: Rising Inequality, Schools, and Children's Life Chances (255- 276). New York: Russell Sage Foundation.
[31] Schwartz, H. (2012). "Housing Policy is School Policy: Economically Integrative Housing Promotes Academic Success in Montgomery County, Maryland," in Khalenberg, R.D. (ed.), The Future of School Integration. New York City: The Century Foundation).
[32] Chetty, R., Friedman, J., Hendren, N., Jones, M., Porter, S. (2018)
[33] Fiester, L. (2013). Early Warning Confirmed: A Research Update on Third-Grade Reading. The Annie E. Casey Foundation. http://www.aecf.org/m/resourcedoc/AECF-EarlyWarningConfirmed-2013.pdf.
[34] Sum, A. et al. (2009). The Consequences of Dropping Out of High School: Joblessness and Jailing for High School Dropouts and the High Cost for Taxpayers. Northeastern University Center for Labor Market Studies. http://www.issuelab.org/resources/14510/14510.pdf.
[35] Vernez, G. et al. (2009). State and Local Implementation of the No Child Left Behind Act: Volume VII -- Title I School Choice and Supplemental Educational Services: Final Report. Santa Monica, CA: RAND Corporation, 2009. https://www.rand.org/pubs/reprints/RP1383.html. Gill, B., et al. (2008). State and Local Implementation of the No Child Left Behind Act: Volume IV -- Title I School Choice and Supplemental Educational Services: Interim Report. Santa Monica, CA: RAND Corporation, 2008. https://www.rand.org/pubs/reprints/RP1332.html.
[36] See, for example: Goldstein, D. (2019, April 25). San Francisco Had an Ambitious Plan to Tackle School Segregation. It Made It Worse. The New York Times. Retrieved from https://www.nytimes.com/2019/04/25/us/san-francisco-school-segregation.html.

expressed that it was not essential to account for assignment boundaries, and that using data from either the closest school or the three closest schools would serve as an accurate proxy for attendance.

High School Graduation Rate. Low graduation rates indicate that schools are not preparing students for the workforce. Students who do not graduate from high school face a variety of challenges later in life, including an increased risk of going to prison and lower wages than their classmates who graduate.[37,38] In addition, high schools with lower graduation rates have also been found to have disciplinary practices that negatively impact low-income and minority youth as well as lower levels of teacher engagement.[39]

The high school graduation rate indicator is calculated based on the cohort-weighted average of the three high schools nearest to the tract or rural block group centroid, using California Department of Education data on the percent of students who graduate in four years.[40]

Student Poverty. Studies have consistently shown that attending low-poverty and economically integrated schools boosts educational achievement for low-income students, when compared to attending higher poverty schools.[41] Recent research has concluded that the disparity in school poverty rates that Black and white children experience is the primary mechanism through which racial segregation in schools translates to Black-white academic achievement gaps.[42][43]

To the extent that accounting for student poverty also to some extent accounts for race and ethnicity due to their historical and ongoing links, , racial integration in schools provides benefits for low-income students and students of color that both overlap and complement the benefits of economic integration in the classroom—including higher levels of educational attainment, reductions in prejudice and negative attitudes across racial groups, and long-term improvements in earnings, health, and rates of incarceration—all while producing no detrimental effects for white children.[44]

As with the math and reading proficiency indicators, student poverty is calculated by averaging the attribute, weighted by school enrollment, from the three closest schools to the population-weighted centroid of each census tract or rural block group. And similar to the poverty indicator, school poverty rates are measured as the percentage of students that do not receive free and reduced-price lunch, to better align with the opportunity-oriented constructions of the other variables.

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[37] 1 Martin, E. J., Tobin, T. J., & Sugai, G. M. (2003). Current Information on Dropout Prevention: Ideas From Practitioners and the Literature. Preventing School Failure: Alternative Education for Children and Youth, 47(1), 10–17. https://doi.org/10.1080/10459880309604423.

[38] Campbell, L. (2004). As Strong as the Weakest Link: Urban High School Dropout. High School Journal, 87(2), 16–24.

[39] Christle, C. A., Jolivette, K., & Nelson, C. M. (2007). School Characteristics Related to High School Dropout Rates. Remedial and Special Education, 28(6), 325–339. https://doi.org/10.1177/07419325070280060201.

[40] Other graduation indicators exist, such as the percent of 12th graders who graduate within one academic year, but this indicator obscures whether students are repeating grades or dropping out during the first three years of high school.

[41] Ayscue, J., Frankenberg, E., & Siegel-Hawley, G. (2017). Research Brief: The Complementary Benefits of Racial and Socioeconomic Diversity in Schools. The National Coalition on School Diversity: Brief No. 10. http://schooldiversity.org/pdf/DiversityResearchBriefNo10.pdf.

[42] Reardon, S.F., et al. (2019). Is Separate Still Unequal? New Evidence on School Segregation and Racial Academic Achievement Gaps. Stanford Center for Education Policy Analysis Working Paper No. 19-06.

[43] Reardon, S. F. (2016). School Segregation and Racial Academic Achievement Gaps. The Russell Sage Foundation Journal of the Social Sciences, 2(5), 34-57.

[44] Ayscue, J., Frankenberg, E., & Siegel-Hawley, G. (2017).

Environmental

Environmental Burden. Local environmental burden adversely affects community-level opportunity. A long history of research on environmental justice has made clear that environmental and health hazards have tended to accumulate in, and continue to disproportionately impact, low-income communities and communities of color which, for a variety of reasons, show higher levels of vulnerability to these hazards.[45] Environmental hazard data are included in the Opportunity Map in order to identify geographies with high environmental burden and disincentivize new affordable housing development in these areas.

The environmental burden indicator relies on a composite of four indicators that are used in the California Office of Environmental Health Hazard Assessment (OEHHA)'s CalEnviroScreen 4.0 tool (CES) under the "environmental effects" subcomponent of the "pollution burden" domain of CES. These indicators - solid waste sites, groundwater threats, cleanup sites, and hazardous waste facilities - measure the presence and concentration of localized sources of pollution; the indicators are built from data that account for both the number of point sources of pollution within a census tract as well as the distance of a pollution source from populated census blocks within that tract.[46] While other environmental hazard data remain available via CES, they are no longer included in the Opportunity Map either because they are not measured at a scale that is relevant for differentiating conditions at a census tract level or because they include features that complicate their interpretation.

The environmental burden indicator scores work differently than the economic and education indicators. Instead of being used individually, the CES indicator scores for solid waste sites, groundwater threats, cleanup sites, and hazardous waste facilities are averaged for each census tract. The scores are averaged to mirror CES's method of accounting for the cumulative environmental burden that arises when people and places are simultaneously exposed to multiple contaminants from multiple sources. Once averaged, the top 5% of tracts regionally are flagged to identify the places with the highest potential to expose vulnerable populations to nearby health and safety threats.[47] The flagged geographies receive a one point deduction in their opportunity score, which operationalizes the concept that local environmental burden can be a drag on community-level opportunity.

Functionally, opportunity is defined by the eight economic and educational indicators, and the environmental burden indicator only affects overall scores when environmental burden is most severe. This protocol reflects a degree of caution in using CES's environmental effects data. While the data are good proxies for measuring the concentration of nearby environmental hazards, there can be variation within a census tract in terms of how close a proposed

[45] See, for example, Kreig, E. et al. (2004). Not so Black and White: environmental justice and cumulative impact assessments. Environmental Impact Assessment Review 24(7-8). https://doi.org/10.1016/j.eiar.2004.06.008; Morello-Frosch, R. et al. (2011). Understanding The Cumulative Impacts Of Inequalities In Environmental Health: Implications For Policy. Health Affairs, 30(5). https://doi.org/10.1377/hlthaff.2011.0153; Mohai, P. et al. (2015). Which came first, people or pollution? Assessing the disparate siting and post-siting demographic change hypotheses of environmental injustice. Environmental Research Letters, 10(11). https://doi.org/10.1088/1748-9326/10/11/115008; Chakraborty, J. et al. (2016). Environmental Justice Research: Contemporary Issues and Emerging Topics. Int. J. Environ. Res. Public Health, 13(11). https://doi.org/10.3390/ijerph13111072.

[46] See the CalEnviroScreen 4.0 report for additional details and documentation: https://oehha.ca.gov/media/downloads/calenviroscreen/report/calenviroscreen40reportf2021.pdf

[47] Note that for rural geographies, block group level data are used for economic and educational indicators. However, because CalEnvrioScreen data are not available at the block group level, environmental burden percentile ranks are calculated at the census tract level. The environmental burden percentile rank calculated at the census tract level is assigned to each of the block groups within a given rural census tract.

affordable housing development might be to particular sources of pollution. Also of note is that this map update uses 2020 census tract boundaries, while CalEnviroScreen indicators are currently available only for 2010 census tract boundaries. 2010 CES data had to be transformed to 2020 boundaries; for this version of the methodology, all 2020 census tracts for which at least 80% of the total land area overlaps with a 2010 tract designated as having a high environmental burden is also assigned as having a high environmental burden.[48] This data transformation approach is approximate, and will be used only until OEHHA issues updated environmental data that aligns with 2020 geographies. These limitations mean that the CES data are not a perfect match for the task of generating an exact spatial buffer around a given set of pollution sources. Additionally, CES data do not measure the level of exposure to those hazards or indicate the level and type of risk they might generate. As noted in CES documentation, "risk assessment requires extensive characterization of the chemicals present, the routes and levels of exposure, and the dose-response relationship for hundreds of chemicals for which data are neither currently available nor likely to be generated in the foreseeable future."[49] CES does not aim to tackle this set of complex risk pathways; rather, it is designed to more generally identify those places that are relatively more burdened by compounding pollutants than others. The data use protocol outlined here aims to ensure that CES data only impact opportunity scores for those places where the regional environmental burden is highest.

Finally, since the environmental burden indicator identifies geographies with the top 5% of hazards in each region or rural county, it is only calculated if there are at least 20 tracts within that region or rural county (since the indicator is calculated at the tract level in both urban and rural contexts). In rural counties with fewer than 20 tracts, tracts and the block groups they contain are identified as having high environmental burden if they are in the top 5% of the state.

[48] The 80% overlap threshold was selected after testing for a cutoff point that includes the majority of 2010 geographies while also ensuring that 2020 tracts are not misclassified as having high environmental burden. Note that this is a custom transformation of CalEnviroScreen data to 2020 geographies for the purpose of this mapping tool.
[49] https://oehha.ca.gov/media/downloads/calenviroscreen/report/calenviroscreen40reportf2021.pdf

High-Poverty & Segregated Area Methodology

A high-poverty and segregated area overlay identifies areas that meet standards for both concentrated poverty (defined as 30% of the population below the federal poverty line) and racial segregation (overrepresentation of people of color relative to the county).

This overlay is intended to be used to support multiple AFFH objectives, including place-based efforts which seek to transform racially and ethnically concentrated areas of poverty into areas of opportunity, as well as policies which seek to replace segregated living patterns with truly integrated and balanced living patterns.

The high-poverty and racial segregation overlay also aligns with the intent of the federal designation of Racially/Ethnically Concentrated Areas of Poverty (RECAPs). However, the federal RECAP standard—which categorizes all areas where more than half the population people of color as areas of racial or ethnic concentration[50] – is not adapted to the racial and ethnic demographics in many parts of California.

Racial segregation has functioned as a powerful mechanism for unequal distribution of resources and access to opportunity by jurisdiction and neighborhood—resulting, over time, in racially segregated neighborhoods with many predominantly Black and Latinx neighborhoods, in particular, characterized by concentrated poverty, higher levels of environmental and social risk, and fewer resources or opportunities for educational and economic advancement.[51] An extensive body of research has documented the harms of racial segregation and concentrated poverty, both independently and in combination—controlling for family background, income, and housing affordability—on children's educational attainment and long-term economic prospects, as well as on the mental and physical health of both children and adults.[52]

The overlay uses a two-stage approach for identifying high-poverty and segregated areas.

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[50] More information on R/ECAPs, including a visualization tool, can be found on the U.S. Department of Housing and Urban Development website: https://egis-hud.opendata.arcgis.com/datasets/320b8ab5d0304daaa7f1b8c03ff01256_0.

[51] For a history of racial segregation in metropolitan America and the creation of segregated areas of concentrated poverty, see, for example: Rothstein, R. (2017). The Color of Law: A Forgotten History of How Our Government Segregated America. Liveright Publishing Corporation

[52] See, for example: Chetty, R., Friedman, J., Hendren, N., Jones, M., Porter, S. (2018); Chetty, R., Hendren, N., & Katz, L.F. (2015); Ayscue, J., Frankenberg, E., & Siegel-Hawley, G. (2017); Johnson, R. (2011). Long-Run Impacts of School Desegregation & School Quality on Adult Attainment. National Bureau of Economic Research. Working Paper 16664; Sanbonmatsu, et al. (2011). Moving to Opportunity for Fair Housing Demonstration Program: Final Impacts Evaluation. Prepared for: U.S. Department of Housing and Urban Development, Office of Policy Development & Research. November; Ludwig, et al. 2011. Neighborhoods, Obesity, and Diabetes—A Randomized Social Experiment. New England Journal of Medicine. 365:1509-1519. October 20; and Kershaw, K. et al. (2017); Association of Changes in Neighborhood-Level Racial Residential Segregation With Changes in Blood Pressure Among Black Adults: The CARDIA Study. JAMA Internal Medicine, 177(7), 996–1002; Krieger, N., Feldman, J. M., Waterman, P. D., Chen, J. T., Coull, B. A., & Hemenway, D. (2017). Local Residential Segregation Matters: Stronger Association of Census Tract Compared to Conventional City-Level Measures with Fatal and Non-Fatal Assaults (Total and Firearm Related), Using the Index of Concentration at the Extremes (ICE) for Racial, Economic, and Racialized Economic Segregation, Massachusetts (US), 1995-2010. Journal of urban health: bulletin of the New York Academy of Medicine, 94(2), 244–258. https://doi.org/10.1007/s11524-016-0116-z; Osypuk, T. L., & Acevedo-Garcia, D. (2010). Beyond individual neighborhoods: a geography of opportunity perspective for understanding racial/ethnic health disparities. Health & place, 16(6), 1113–1123. https://doi.org/10.1016/j.healthplace.2010.07.002; Williams, D. and Collins, C. (2001). Racial Residential Segregation: A Fundamental Cause of Racial Disparities in Health. Public Health Reports. Volume 116. the literature review in Sard, B. & Rice, D. (2016); and the literature review in Menendian, S., Gailes, A. (2019). The Harmful Effects of Segregation (Racial Segregation in the San Francisco Bay Area, Part 4). The Othering & Belonging Institute at UC Berkeley

High-Poverty: First, the overlay identifies tracts and rural block groups where at least 30 percent of the population is living below the poverty line. Research has found that the impact of neighborhood poverty rates in producing negative outcomes for individuals begin to appear after an area exceeds approximately 20 percent poverty, whereupon the externality effects grow rapidly until the neighborhood reaches approximately 40 percent poverty.[53]

Similar to the above 200 percent poverty indicator, college and graduate students are removed from the poverty calculation in the overlay in tracts where they comprise at least 25% of the population, in this case to prevent college towns from distorting the overlay's concentrated poverty measure. An internal analysis found that without this adjustment, some tracts with high proportions of college students—many of which have high opportunity scores—are shown as having poverty rates exceeding 30 percent. The total population living in areas of extreme poverty declined in the 1990s, following government action designed to affirmatively counteract intentionally segregationist public policy.[54] Following national trends, however, concentrated poverty has risen dramatically in California since 2000.[55]

Racial Segregation: Second, the overlay relies on a measure of racial segregation to capture which tracts and rural block groups have a disproportionate share of households of color. Setting an absolute threshold (as the federal RECAP metric does) does not account for substantial variation in the racial and ethnic population across California's counties. To properly account for the features of inequality operating on individuals at the neighborhood level, a relative segregation measure is more appropriate to reflect the experience of residents.[56] The overlay relies on the location quotient of residential racial segregation (LQ), which is increasingly being used in studies that seek to assess the impact of racial segregation on individual and community outcomes[57] and has been used to examine, for example, linkages between residential segregation and public health outcomes.[58] The LQ is a small-area measure of relative segregation calculated at the residential census tract level that represents how much more segregated an area (e.g., a census tract or block group) is relative to the larger area (in this case, the county).[59] For the overlay, tracts that have an LQ higher than 1.25 for Black, Hispanic, Asian, or all people of color are flagged as being racially segregated in comparison to the county.

Census tracts and rural block groups that have both a poverty rate of over 30 percent and that are designated as being racially segregated are identified in the high-poverty and segregated overlay. Due to data unreliability at the block group level in the poverty indicator, "High-Poverty and Segregated" is designated at the tract level in rural areas.

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[53] Galster, George C. (2010). "The Mechanism(s) of Neighborhood Effects: Theory, Evidence, and Policy Implications." Presentation at the ESRC Seminar, St. Andrews University, Scotland, UK, 4–5 February 2010.
[54] Berube, A., & Katz, B. (2005). Katrina's window: Confronting poverty across America. Brookings Institution.
[55] California Housing Partnership Corporation (CHPC) tabulation of data provided in Kneebone, E. and Holmes, N. (2016). U.S. concentrated poverty in the wake of the Great Recession. Brookings. https://www.brookings.edu/research/u-s-concentratedpoverty-in-the-wake-of-the-great-recession/.
[56] Wong, D. W. S. (2002). Modeling Local Segregation: A Spatial Interaction Approach. Geographical and Environmental Modelling, 6(1), 81–97. https://doi.org/10.1080/13615930220127305
[57] Sudano, J. J., Perzynski, A., Wong, D. W., Colabianchi, N., & Litaker, D. (2013). Neighborhood racial residential segregation and changes in health or death among older adults. Health & Place, 19(Supplement C), 80–88. https://doi.org/10.1016/j.healthplace.2012.09.015.
[58] Pruitt, S. L., Lee, S. J. C., Tiro, J. A., Xuan, L., Ruiz, J. M., & Inrig, S. (2015). Residential racial segregation and mortality among black, white, and Hispanic urban breast cancer patients in Texas, 1995 to 2009. Cancer, 121(11), 1845–1855. https://doi.org/10.1002/cncr.29282.
[59] Brown, L. A., & Chung, S.-Y. (2006). Spatial segregation, segregation indices and the geographical perspective. Population, Space and Place, 12(2), 125–143. https://doi.org/10.1002/psp.403.

HCD and CTCAC do not see the AFFH objectives of reducing segregation and promoting integration as conceptually fitting within the context of Tribal lands, which are the territories of sovereign politically entities. For this reason, the High-Poverty & Segregated Area methodology does not apply to Tribal lands, including land held in trust, where at least 25 percent of the geography's land area is within federally recognized Tribal lands as provided by the Census.

See below for the list of measures and data sources for the high-poverty and racial segregation layer.

Measure	Data Source	Table
Poverty: Tracts with at least 30% of the population falling under the federal poverty line	2018-2022 ACS	ACS Table B17020
Racial Segregation: Tracts with a racial/ethnic Location Quotient of higher than 1.25 for Black, Hispanic, Asian, or all people of color in comparison to the county	2018-2022 ACS	ACS Table B03002