

APPENDIX C

LAND EVALUATION AND SITE ASSESSMENT MODEL

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MEMORANDUM

DATE: August 22, 2023

To: Lily Cha-Haydostian, MPA, AICP, Senior Planner
City of Clovis Planning Division
1033 Fifth Street
Clovis, CA 93612

FROM: Pamela Reading, Principal, LSA
Ashley Honer, Environmental Planner, LSA

SUBJECT: Land Evaluation and Site Assessment Model (LESA Model) for the Tract Map (TM) 6343 Project

Wilson Premier Homes, Inc. (project applicant) proposes to develop an approximately 71.54-acre project site into a 590-lot single-family residential development in the City of Clovis' Sphere of Influence (SOI) on Assessor's Parcel Numbers (APNs) 556-040-07S, -08S, and 556-030-14S. According to the California Department of Conservation Farmland Mapping and Monitoring Program (FMMP), 1.15 acres of the project site is designated as Prime Farmland, 3.41 acres is designated as Farmland of Statewide Importance, 35.40 acres is designated as Unique Farmland, and 31.56 acres is designated as Farmland of Local Importance. Therefore, the California Agricultural Land Evaluation and Site Assessment (LESA) model prepared by the California Department of Conservation (refer to Attachment A) was prepared to determine if the conversion of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance would constitute a significant impact to agricultural resources pursuant to California Environmental Quality Act (CEQA) Statute and Guidelines.

The information used to prepare the LESA Model was based on information obtained from the California Department of Conservation FMMP, the United States Department of Agriculture, the Natural Resources Conservation Service (NRCS), and Geographic information system (GIS) tools.

LESA is a term used to define an approach for rating the relative quality of land resources based on specific measurable features. The formulation of a California LESA Model is the result of Senate Bill 850 (Chapter 812/1993), which charged the Resource Agency (in consultation with the Governor's Office of Planning and Research) with developing an amendment to Appendix G of the State CEQA Guidelines concerning agricultural lands. Such an amendment is intended "to provide lead agencies with an optional methodology to ensure that significant effects on the environment of agricultural land conversions are quantitatively and consistently considered in the environmental review process" (Public Resources Code [PRC] Section 21095). A LESA analysis is based on the definition of agricultural land contained in the State CEQA Guidelines, PRC Section 21060.1:

21060.1 (a) “Agricultural land” means prime farmland, farmland of statewide importance, or unique farmlands, as defined by the United States Department of Agriculture land inventory and monitoring criteria as modified for California.

21060.1 (b) In those areas of the state where lands have not been surveyed for the classifications specific in subdivision (a), “agricultural land” means land that meets the requirement of “prime agricultural land” as defined in paragraph (1), (2), (3), or (4) of subdivision (c) of Section 51201 of the Government Code [the Williamson Act].

The LESA Model is composed of a Land Evaluation (LE) portion, which measures soil quality, and the Site Assessment (SA) portion, which evaluates other factors that contribute to the site’s agricultural importance (e.g., parcel size and on-farm investments). A Final LESA Score of 0 to 39 points is not considered significant. A final score between 40 to 59 points is considered significant only if the LE and SA subscores are each greater than or equal to 20 points. A final score between 60 to 79 points is considered significant unless either the LE or SA subscores is less than 20 points. A final score between 80 to 100 points is considered significant. The proposed project achieved a Final LESA Score of 44.77 points, with an LE subscore of 25.27 points and an SA subscore of 19.5 points. Because the SA subscore was below 20 points, the LESA model concluded that the conversion of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance associated with implementation of the proposed project would not result in a significant impact.

Attachments: A: LESA Model
B: Figures

ATTACHMENT A

LESA MODEL

Appendix A. California Agricultural LESA Worksheets

NOTES

Calculation of the Land Evaluation (LE) Score

Part 1. Land Capability Classification (LCC) Score:

- (1) Determine the total acreage of the project.
- (2) Determine the soil types within the project area and enter them in **Column A** of the **Land Evaluation Worksheet** provided on page 2-A.
- (3) Calculate the total acres of each soil type and enter the amounts in **Column B**.
- (4) Divide the acres of each soil type (**Column B**) by the total acreage to determine the proportion of each soil type present. Enter the proportion of each soil type in **Column C**.
- (5) Determine the LCC for each soil type from the applicable Soil Survey and enter it in **Column D**.
- (6) From the LCC Scoring Table below, determine the point rating corresponding to the LCC for each soil type and enter it in **Column E**.

LCC Scoring Table

LCC Class	I	Ile	Ils,w	IIle	IIls,w	IVe	IVs,w	V	VI	VII	VIII
Points	100	90	80	70	60	50	40	30	20	10	0

- (7) Multiply the proportion of each soil type (**Column C**) by the point score (**Column E**) and enter the resulting scores in **Column F**.
- (8) Sum the LCC scores in **Column F**.
- (9) Enter the LCC score in box <1> of the **Final LESA Score Sheet** on page 10-A.

Part 2. Storie Index Score:

- (1) Determine the Storie Index rating for each soil type and enter it in **Column G**.
- (2) Multiply the proportion of each soil type (**Column C**) by the Storie Index rating (**Column G**) and enter the scores in **Column H**.
- (3) Sum the Storie Index scores in **Column H** to gain the Storie Index Score.
- (4) Enter the Storie Index Score in box <2> of the **Final LESA Score Sheet** on page 10-A.

Land Evaluation Worksheet

Land Capability Classification (LCC) and Storie Index Scores

A	B	C	D	E	F	G	H
Soil Map Unit	Project Acres	Proportion of Project Area	LCC	LCC Rating	LCC Score	Storie Index	Storie Index Score
Totals		(Must Sum to 1.0)		LCC Total Score		Storie Index Total Score	

Site Assessment Worksheet 1.

Project Size Score

	I	J	K
	LCC Class I - II	LCC Class III	LCC Class IV - VIII
Total Acres			
Project Size Scores			
Highest Project Size Score	<input style="width: 100px; height: 30px;" type="text"/>		

NOTES

Calculation of the Site Assessment (SA) Score

Part 1. Project Size Score:

- (1) Using **Site Assessment Worksheet 1** provided on page 2-A, enter the acreage of each soil type from **Column B** in the **Column - I, J or K** - that corresponds to the LCC for that soil. (Note: While the Project Size Score is a component of the Site Assessment calculations, the score sheet is an extension of data collected in the Land Evaluation Worksheet, and is therefore displayed beside it).
- (2) Sum **Column I** to determine the total amount of class I and II soils on the project site.
- (3) Sum **Column J** to determine the total amount of class III soils on the project site.
- (4) Sum **Column K** to determine the total amount of class IV and lower soils on the project site.
- (5) Compare the total score for each LCC group in the Project Size Scoring Table below and determine which group receives the highest score.

Project Size Scoring Table

Class I or II		Class III		Class IV or Lower	
Acreage	Points	Acreage	Points	Acreage	Points
>80	100	>160	100	>320	100
60-79	90	120-159	90	240-319	80
40-59	80	80-119	80	160-239	60
20-39	50	60-79	70	100-159	40
10-19	30	40-59	60	40-99	20
10<	0	20-39	30	40<	0
		10-19	10		
		10<	0		

- (6) Enter the **Project Size Score** (the highest score from the three LCC categories) in box <3> of the **Final LESA Score Sheet** on page 10-A.

NOTES

Part 2. Water Resource Availability Score:

(1) Determine the type(s) of irrigation present on the project site, including a determination of whether there is dryland agricultural activity as well.

(2) Divide the site into portions according to the type or types of irrigation or dryland cropping that is available in each portion. Enter this information in **Column B** of **Site Assessment Worksheet 2. - Water Resources Availability**.

(3) Determine the proportion of the total site represented for each portion identified, and enter this information in **Column C**.

(4) Using the Water Resources Availability Scoring Table, identify the option that is most applicable for each portion, based upon the feasibility of irrigation in drought and non-drought years, and whether physical or economic restrictions are likely to exist. Enter the applicable Water Resource Availability Score into **Column D**.

(5) Multiply the Water Resource Availability Score for each portion by the proportion of the project area it represents to determine the weighted score for each portion in **Column E**.

(6) Sum the scores for all portions to determine the project's total Water Resources Availability Score

(7) Enter the Water Resource Availability Score in box <4> of the **Final LESA Score Sheet** on page 10-A.

Site Assessment Worksheet 2. - Water Resources Availability

A Project Portion	B Water Source	C Proportion of Project Area	D Water Availability Score	E Weighted Availability Score (C x D)
1				
2				
3				
4				
5				
6				
		(Must Sum to 1.0)	Total Water Resource Score	

Water Resource Availability Scoring Table

Option	Non-Drought Years			Drought Years			WATER RESOURCE SCORE
	RESTRICTIONS			RESTRICTIONS			
	Irrigated Production Feasible?	Physical Restrictions ?	Economic Restrictions ?	Irrigated Production Feasible?	Physical Restrictions ?	Economic Restrictions ?	
1	YES	NO	NO	YES	NO	NO	100
2	YES	NO	NO	YES	NO	YES	95
3	YES	NO	YES	YES	NO	YES	90
4	YES	NO	NO	YES	YES	NO	85
5	YES	NO	NO	YES	YES	YES	80
6	YES	YES	NO	YES	YES	NO	75
7	YES	YES	YES	YES	YES	YES	65
8	YES	NO	NO	NO	-- --	-- --	50
9	YES	NO	YES	NO	-- --	-- --	45
10	YES	YES	NO	NO	-- --	-- --	35
11	YES	YES	YES	NO	-- --	-- --	30
12	Irrigated production not feasible, but rainfall adequate for dryland production in both drought and non-drought years						25
13	Irrigated production not feasible, but rainfall adequate for dryland production in non-drought years (but not in drought years)						20
14	Neither irrigated nor dryland production feasible						0

NOTES

Part 3. Surrounding Agricultural Land Use Score:

- (1) Calculate the project's Zone of Influence (ZOI) as follows:
 - (a) a rectangle is drawn around the project such that the rectangle is the smallest that can completely encompass the project area.
 - (b) a second rectangle is then drawn which extends one quarter mile on all sides beyond the first rectangle.
 - (c) The ZOI includes all parcels that are contained within or are intersected by the second rectangle, less the area of the project itself.
- (2) Sum the area of all parcels to determine the total acreage of the ZOI.
- (3) Determine which parcels are in agricultural use and sum the areas of these parcels
- (4) Divide the area in agriculture found in step (3) by the total area of the ZOI found in step (2) to determine the percent of the ZOI that is in agricultural use.
- (5) Determine the Surrounding Agricultural Land Score utilizing the Surrounding Agricultural Land Scoring Table below.

Surrounding Agricultural Land Scoring Table

Percent of ZOI in Agriculture	Surrounding Agricultural Land Score
90-100	100
80-89	90
75-79	80
70-74	70
65-69	60
60-64	50
55-59	40
50-54	30
45-49	20
40-44	10
<40	0

(5) Enter the Surrounding Agricultural Land Score in box <5> of the **Final LESA Score Sheet** on page 10-A.

Site Assessment Worksheet 3.

Surrounding Agricultural Land and Surrounding Protected Resource Land

A	B	C	D	E	F	G
Zone of Influence						
Total Acres	Acres in Agriculture	Acres of Protected Resource Land	Percent in Agriculture (A/B)	Percent Protected Resource Land (A/C)	Surrounding Agricultural Land Score (From Table)	Surrounding Protected Resource Land Score (From Table)

NOTES

Part 4. Protected Resource Lands Score:

The Protected Resource Lands scoring relies upon the same Zone of Influence information gathered in Part 3, and figures are entered in Site Assessment Worksheet 3, which combines the surrounding agricultural and protected lands calculations.

- (1) Use the total area of the ZOI calculated in Part 3. for the Surrounding Agricultural Land Use score.
- (2) Sum the area of those parcels within the ZOI that are protected resource lands, as defined in the California Agricultural LESA Guidelines.
- (3) Divide the area that is determined to be protected in Step (2) by the total acreage of the ZOI to determine the percentage of the surrounding area that is under resource protection.
- (4) Determine the Surrounding Protected Resource Land Score utilizing the Surrounding Protected Resource Land Scoring Table below.

Surrounding Protected Resource Land Scoring Table

Percent of ZOI Protected	Protected Resource Land Score
90-100	100
80-89	90
75-79	80
70-74	70
65-69	60
60-64	50
55-59	40
50-54	30
45-49	20
40-44	10
<40	0

- (5) Enter the Protected Resource Land score in box <6> of the **Final LESA Score Sheet** on page 10-A.

NOTES

Final LESA Score Sheet

Calculation of the Final LESA Score:

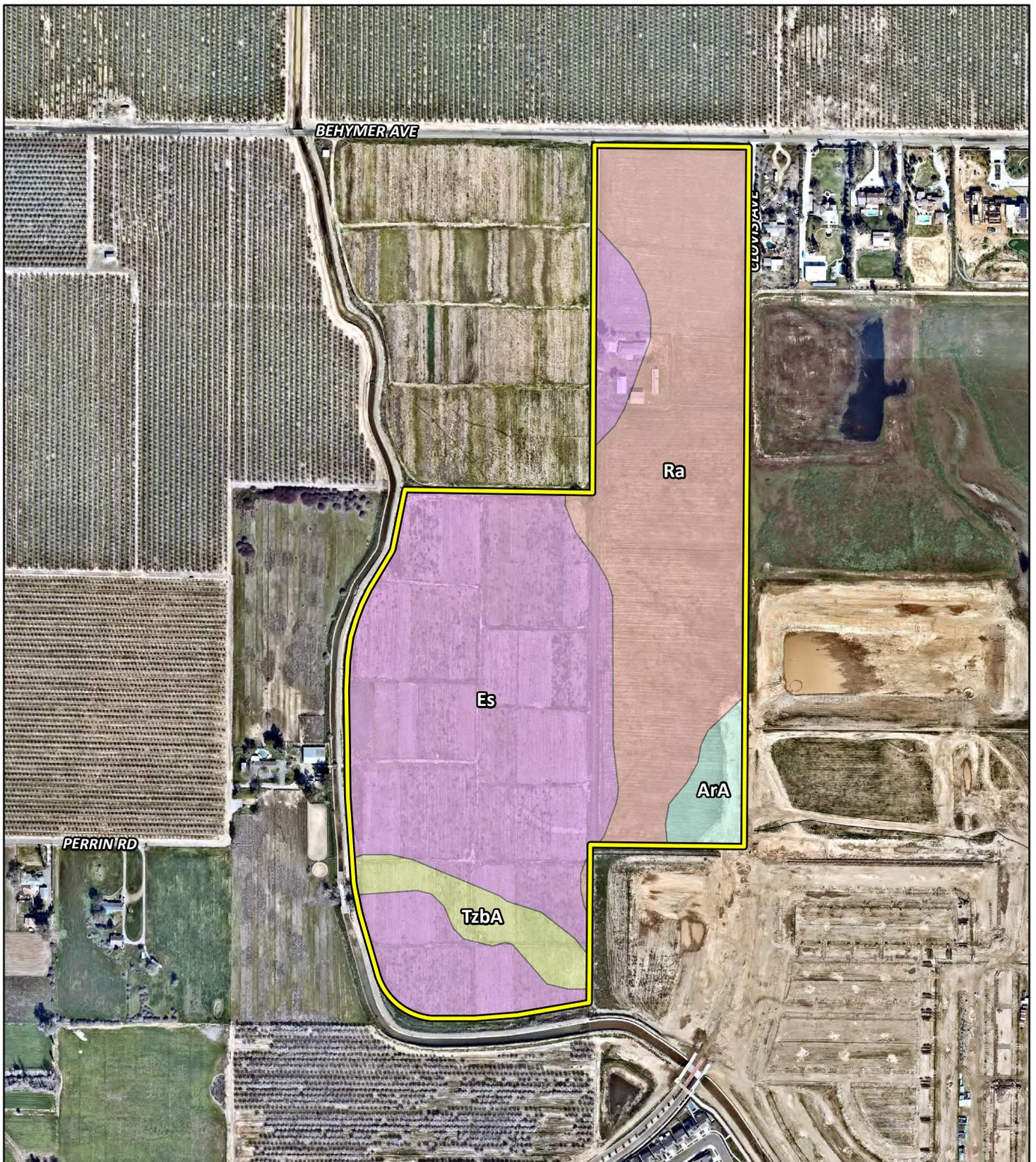
- (1) Multiply each factor score by the factor weight to determine the weighted score and enter in Weighted Factor Scores column.
- (2) Sum the weighted factor scores for the LE factors to determine the total LE score for the project.
- (3) Sum the weighted factor scores for the SA factors to determine the total SA score for the project.
- (4) Sum the total LE and SA scores to determine the Final LESA Score for the project.

	Factor Scores	Factor Weight	Weighted Factor Scores
LE Factors			
Land Capability Classification	<1>	0.25	
Storie Index	<2>	0.25	
<i>LE Subtotal</i>		0.50	
SA Factors			
Project Size	<3>	0.15	
Water Resource Availability	<4>	0.15	
Surrounding Agricultural Land	<5>	0.15	
Protected Resource Land	<6>	0.05	
<i>SA Subtotal</i>		0.50	
Final LESA Score			

For further information on the scoring thresholds under the California Agricultural LESA Model, consult Section 4 of the Instruction Manual.

ATTACHMENT B

FIGURES



LSA

 Project Location (71.54 acres)

Soils

-  ArA - Atwater sandy loam, 0 to 3 percent slopes (2.46 acres)
-  Es - Exeter sandy loam (38.14 acres)
-  Ra - Ramona sandy loam (27.54 acres)
-  Tzba - Tujunga loamy sand, 0 to 3 percent slopes (3.41 acres)

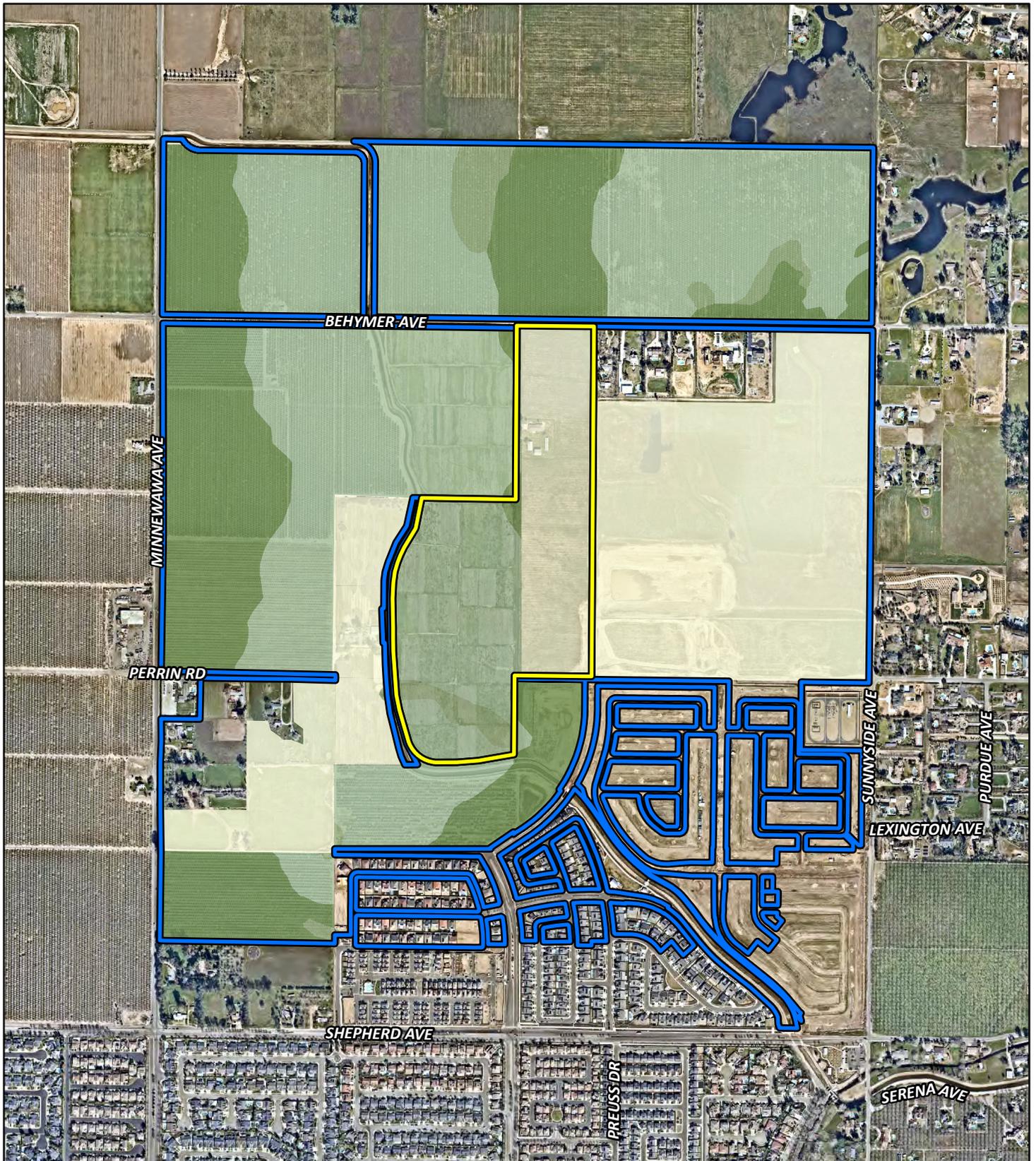


FIGURE 1

Tract Map 6343 Project
Soils

SOURCE: Nearmap (2023), USDA NRCS (2022)

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LSA



0 500 1000
FEET

Project Location (71.54 acres)

Zone of Influence (575.41 acres)

Project Location Farmland

Prime Farmland - 1.15 acres

Farmland of Statewide Importance - 3.41 acres

Unique Farmland - 35.40 acres

Farmland of Local Importance - 31.56 acres

Zone of Influence Farmland

Prime Farmland - 121.69 acres

Farmland of Statewide Importance - 9.59 acres

Unique Farmland - 184.40 acres

Farmland of Local Importance - 148.14 acres

FIGURE 2

Tract Map 6343 Project
Zone of Influence Agricultural Lands

SOURCE: Nearmap (2023), California Department of Conservation (2018)

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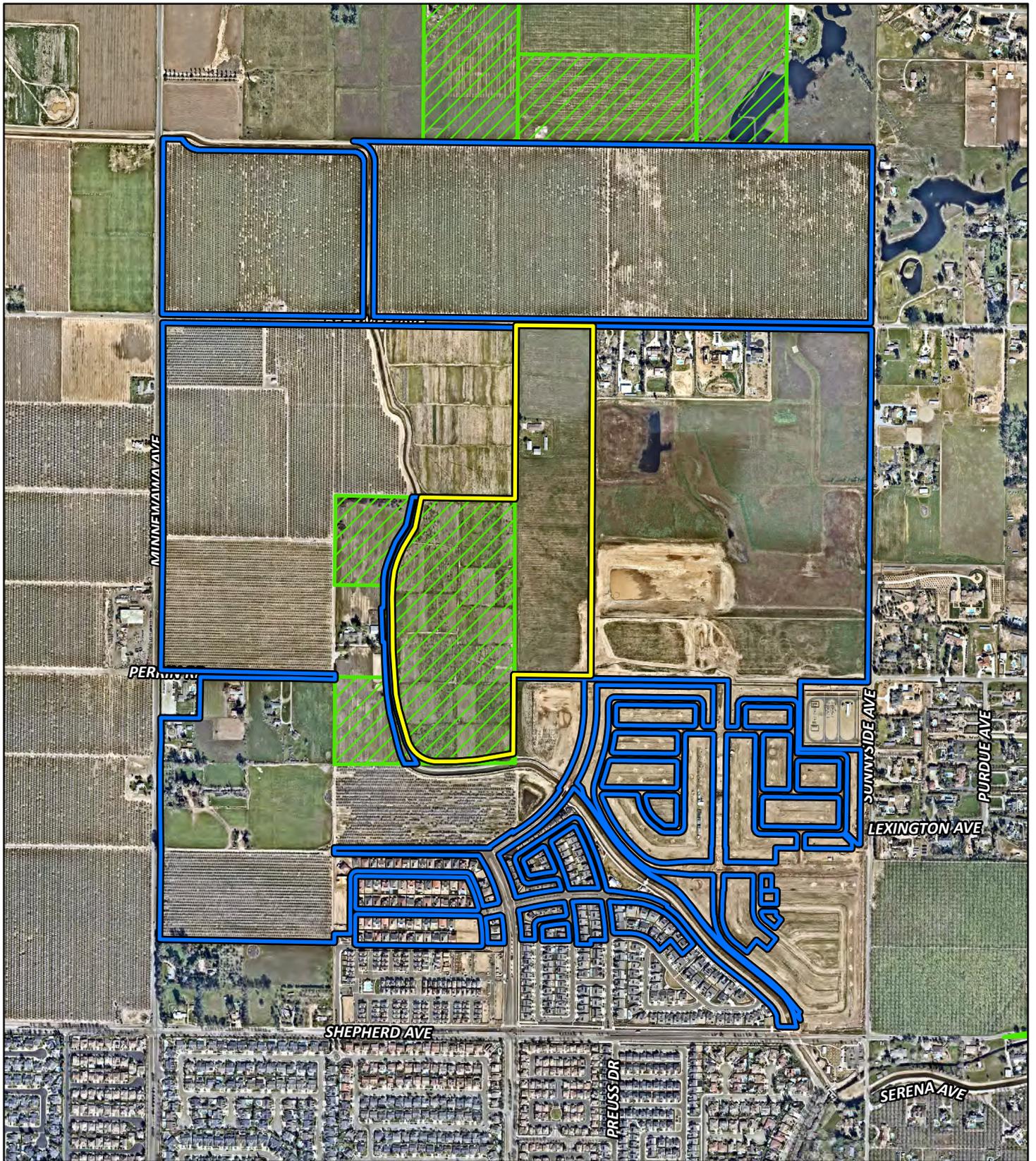
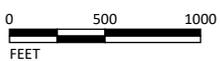


FIGURE 3

LSA

- Project Location (71.54 acres)
- Zone of Influence (575.41 acres)
- Williamson Act Contracted Lands



SOURCE: Nearmap (2023), California Department of Conservation (2018)

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Tract Map 6343 Project
Zone of Influence Protected Resource Lands

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