4.2 AGRICULTURAL RESOURCES

INTRODUCTION

The Agricultural Resources chapter of the EIR summarizes the status of the existing agricultural resources on the site and the areas surrounding the City of Davis, primarily using the current state LESA (Land Evaluation and Site Assessment) model and other data, including identification of any State-designated Important Farmlands on the project site. Information in this chapter is also based upon the *City of Davis General Plan*[1], the *Program EIR for the City of Davis General Plan Update and Project EIR for Establishment of a New Junior High School* (General Plan Update EIR)[2], and various other resources as noted in the text.

ENVIRONMENTAL SETTING

Existing Agricultural Uses

Yolo County is a top producer of agricultural commodities in California, and according to the Yolo County Department of Agriculture, the County's five most valuable crops in 2003 were processing tomatoes, rice, wine grapes, alfalfa hay, and seed crops.[3] The combined total value of agricultural production in the County in 2003 was over $300 million.

According to the *Phase I Environmental Site Assessment* prepared for the project, the project site has likely been utilized for agricultural production since at least the 1920s[4]. In recent years, the site has been used for production of tomatoes and wheat.

Agricultural Land

Farmland Classifications

The USDA Natural Resources Conservation Service (NRCS, formerly known as the Soil Conservation Service [SCS]) uses two systems to determine a soil's agricultural productivity: the Soil Capability Classification System and the Storie Index Rating System. The "prime" soil classification of both systems indicates the absence of soil limitations which, if present, would require the application of management techniques (e.g., drainage, leveling, special fertilizing practices) to enhance production. The California Department of Conservation (CDC) Farmland Mapping and Monitoring Program (FMMP), part of the Division of Land Resource Protection, uses the information from the NRCS to create maps illustrating the types of farmland in the area.

Soil Capability Classification System

The Soil Capability Classification System takes into consideration soil limitations, the risk of damage when soils are used, and the way in which soils respond to treatment. Capability classes range from Class I soils, which have few limitations for agriculture, to Class VIII soils that are unsuitable for agriculture. Generally, as the rating of the capability classification system increases, yields and profits are more difficult to obtain. A general description of soil classification, as defined by the NRCS, is provided in Table 4.2-1, Soil Capability Classification.

Table 4.2-1
Soil Capability Classification

Class	Definition
I	Soils have slight limitations that restrict their use.
II	Soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices.
III	Soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.
IV	Soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.
V	Soils are not likely to erode but have other limitations; impractical to remove that limit their use largely to pasture or range, woodland, or wildlife habitat.
VI	Soils have severe limitations that make them generally unsuited to cultivation and limit their use largely to pasture or range, woodland, or wildlife habitat.
VII	Soils have very severe limitations that make them unsuited to cultivation and that restrict their use largely to pasture or range, woodland, or wildlife habitat.
VIII	Soils and landforms have limitations that preclude their use for commercial plants and restrict their use to recreation, wildlife habitat, or water supply or to aesthetic purposes.

Source: USDA Soil Conservation Service, Soil Survey of Yolo County, California, 1972.

Storie Index Rating System

The Storie Index Rating system ranks soil characteristics according to their suitability for agriculture from Grade 1 soils (80 to 100 rating) which have few or no limitations for agricultural production, to Grade 6 soils (less than 10) which are not suitable for agriculture. Under this system, soils deemed less than prime can function as prime soils when limitations such as poor drainage, slopes, or soil nutrient deficiencies are partially or entirely removed. The six grades, ranges in index rating, and definition of the grades, as defined by the NRCS, are provided below in Table 4.2-2.

Table 4.2-2
Storie Index Rating System

Grade	Index Rating	Definition
1	80 through 100	Few limitations that restrict their use for crops
2	60 through 80	Suitable for most crops, but have minor limitations that narrow the choice of crops and have a few special management needs
3	40 through 60	Suited to a few crops or to special crops and require special management
4	20 through 40	If used for crops, are severely limited and require special management
5	10 through 20	Not suited for cultivated crops, but can be used for pasture and range
6	Less and 10	Soil and land types generally not suited to farming

Source: USDA Soil Conservation Service, Soil Survey of Yolo County, 1972.

Farmland Mapping and Monitoring Program (FMMP)

The FMMP was established in 1982 to continue the Important Farmland mapping efforts begun in 1975 by the USDA Soil Conservation Service (USDA-SCS). The intent of the USDA-SCS was to produce agriculture maps based on soil quality and land use across the nation. As part of the nationwide agricultural land use mapping effort, the USDA-SCS developed a series of definitions known as Land Inventory and Monitoring (LIM) criteria. The LIM criteria classified the land's suitability for agricultural production; suitability included both the physical and chemical characteristics of soils and the actual land use. Important Farmland Maps are derived from the USDA-SCS soil survey maps using the LIM criteria.

Since 1980, the State of California has assisted the USDA-SCS with completing its mapping in the state. The FMMP was created within the CDC to carry on the mapping activity on a continuing basis, and with a greater level of detail. The CDC applied a greater level of detail by modifying the LIM criteria for use in California. The LIM criteria in California utilize the Soil Capability Classification and Storie Index Rating systems, but also consider physical conditions such as dependable water supply for agricultural production, soil temperature range, depth of the ground water table, flooding potential, rock fragment content, and rooting depth.

The CDC classifies lands into seven agriculture-related categories: Prime Farmland, Farmland of Statewide Importance (Statewide Farmland), Unique Farmland, Farmland of Local Importance (Local Farmland), Grazing Land, Urban and Built-up Land (Urban Land), and Other Land. The first four types listed above are collectively designated by the State as Important Farmlands. Important Farmland maps for California are compiled

using the modified LIM criteria (as described above) and current land use information. The minimum mapping unit is 10 acres unless otherwise specified. Units of land smaller than 10 acres are incorporated into surrounding classifications. Each of the seven land types is summarized below, based on CDC's *A Guide to the Farmland Mapping and Monitoring Program* (2004).[5]

Prime Farmland: Prime Farmland is land with the best combination of physical and chemical features able to sustain the long-term production of agricultural crops. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. The land must have been used for the production of irrigated crops at some time during the two update cycles (a cycle is equivalent to 2 years) prior to the mapping date.

Statewide Farmland: Farmland of Statewide Importance is land similar to Prime Farmland, but with minor shortcomings, such as greater slopes or with less ability to hold and store moisture. The land must have been used for the production or irrigated crops at sometime during the two update cycles prior to the mapping date.

Unique Farmland: Unique Farmland is land of lesser quality soils used for the production of the State's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards, as found in some climatic zones in California. The land must have been cultivated at some time during the two update cycles prior to the mapping date.

Local Farmland: Farmland of Local Importance is land of importance to the local agricultural economy, as determined by each county's Board of Supervisors and a local advisory committee. Yolo County local farmland includes lands which do not qualify as Prime, Statewide, or Unique designation, but are currently irrigated crops or pasture or non-irrigated crops; lands that would meet the Prime or Statewide designation and have been improved for irrigation, but are now idle; and lands that currently support confined livestock, poultry operations and aquaculture.

Grazing Land: Grazing Land is land on which the existing vegetation, whether grown naturally or through management, is suited to the grazing of livestock. The minimum mapping unit for this category is 40 acres.

Urban Land: Urban and Built-up Land is occupied with structures with a building density of at least one unit to one-half acre. Uses may include but are not limited to, residential, industrial, commercial, construction, institutional, public administration purposes, railroad yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment plants, water control structures, and other development purposes. Highways, railroads, and other transportation facilities are mapped as part of this unit, if they are part of a surrounding urban area.

Other Land: Other Land is land that is not included in any other mapping categories. The following uses are generally included: rural development, brush timber, government land, strip mines, borrow pits, and a variety of other rural land uses.

According to the CDC, between 2000 and 2002, 17,007 acres of Important Farmland (i.e. Prime, Statewide Importance, Unique, and Local Importance) in Yolo County were converted to non-agricultural use, out of 653,452 acres inventoried.[6] In addition, 2,747 acres of Prime Farmland in Yolo County were converted to other uses during that period; however, 2,934 acres were gained during the same period (mainly due to the creation of irrigated vineyards), in order that the net effect was a gain of 187 acres of Prime Farmland. Farmlands of Statewide Importance and Unique Farmlands remained fairly constant between 2000 and 2002. During that period, however, a net loss of 9,420 acres of Farmland of Local Importance occurred in the County.

Williamson Act Land

The California Land Conservation Act, also known as the Williamson Act, was adopted in 1965 in order to encourage the preservation of the state's agricultural lands and to prevent their premature conversion to urban uses. Williamson Act contracts promote the preservation of land used for agricultural purposes. When a jurisdiction enters into a contract with a landowner under the Williamson Act, the landowner agrees to limit the use of the land to agricultural and compatible uses for a period of at least ten years. The jurisdiction then agrees to tax the land at a rate based on the agricultural production of the land, rather than its real estate market value.

Project Site

The project site encompasses approximately 422 acres of land that has historically been used for agricultural purposes, and is accordingly undeveloped with the exception of a few farm buildings. The site is surrounded by urban uses on three sides. According to the *Soil Survey of Yolo County, California* and the *Soil Candidate Listing for Prime Farmland and Farmland of Statewide Significance*, most of the site is designated Prime Farmland and Farmland of Statewide Importance by the CDC.

According to the Yolo County GIS system,[6] the project site is not under a Williamson Act contract.

The *Soil Survey* shows that the project site contains Capability Class I, III, and IV soils.[7] These soils are described below, and in Table 4.2-3 (see also Figure 4.2-1).

- Yolo silt loam (Ya) – Prime Farmland if irrigated
- Yolo silty clay loam (Yb) – Prime Farmland if irrigated
- Rincon silty clay loam (Rg) – Prime Farmland if irrigated
- Pescadero silty clay, saline alkali (Pb) – N/A
- Merritt Complex, saline alkali (Mp) – Farmland of Statewide Importance
- Sycamore silty clay loam (St) – Prime Farmland if irrigated

Table 4.2-3
On-site Soil Capability Classification and Storie Index Rating

Soil Map Symbol and Name	Soil Capability Classification	Storie Index
Yolo silt loam (Ya)	I-1	100
Yolo silty clay loam (Yb)	I-1	90
Rincon silty clay loam (Rg)	IIIs-3	73
Pescadero silty clay, saline-alkali (Pb)	IVw-6	14
Merritt Complex, saline alkali (Mp)	IVw-6	27
Sycamore silty clay loam, drained (St)	I-1	77

Source: USDA Soil Conservation Service, Soil Survey of Yolo County, 1972.

Yolo silt loam (Ya) is found throughout the northern and central portion of the project site, and is considered Prime Farmland if irrigated. This soil occurs on alluvial fans with slopes of less than one percent. This soil is moderately permeable, surface runoff is very slow, and the erosion hazard is none to slight. Available water holding capacity is 9.0 to 11.0 inches. Effective rooting depth is more than 60 inches and natural fertility is high. This soil is used mainly for the production of almonds, walnuts, corn, sugar beets, tomatoes, alfalfa, and melons; other uses include dry-farmed barley, wildlife habitat, and recreation. The Capability unit is I-l for irrigated soils and IVc for non-irrigated soils.

Yolo silty clay loam (Yb) is found in the southern portion of the project site, and is considered Prime Farmland if irrigated. This soil is similar to Yolo silt loam, except that its texture is silty clay loam throughout the profile. Permeability of this Yolo soil is moderately slow. Available water holding capacity is 10.0 to 12.0 inches. This soil is used mainly for almonds, walnuts, sugar beets, tomatoes, and alfalfa. Other uses include dryfarmed barley, urban development, wildlife habitat, and recreation. The Capability unit is I-1, irrigated; and IVc-1, non-irrigated.

Rincon silty clay loam (Rg) is found in the northern and central portion of the project site, and is considered Prime Farmland if irrigated. This soil occurs on alluvial fans with slopes of less than one percent. This soil is slowly permeable, surface runoff is very

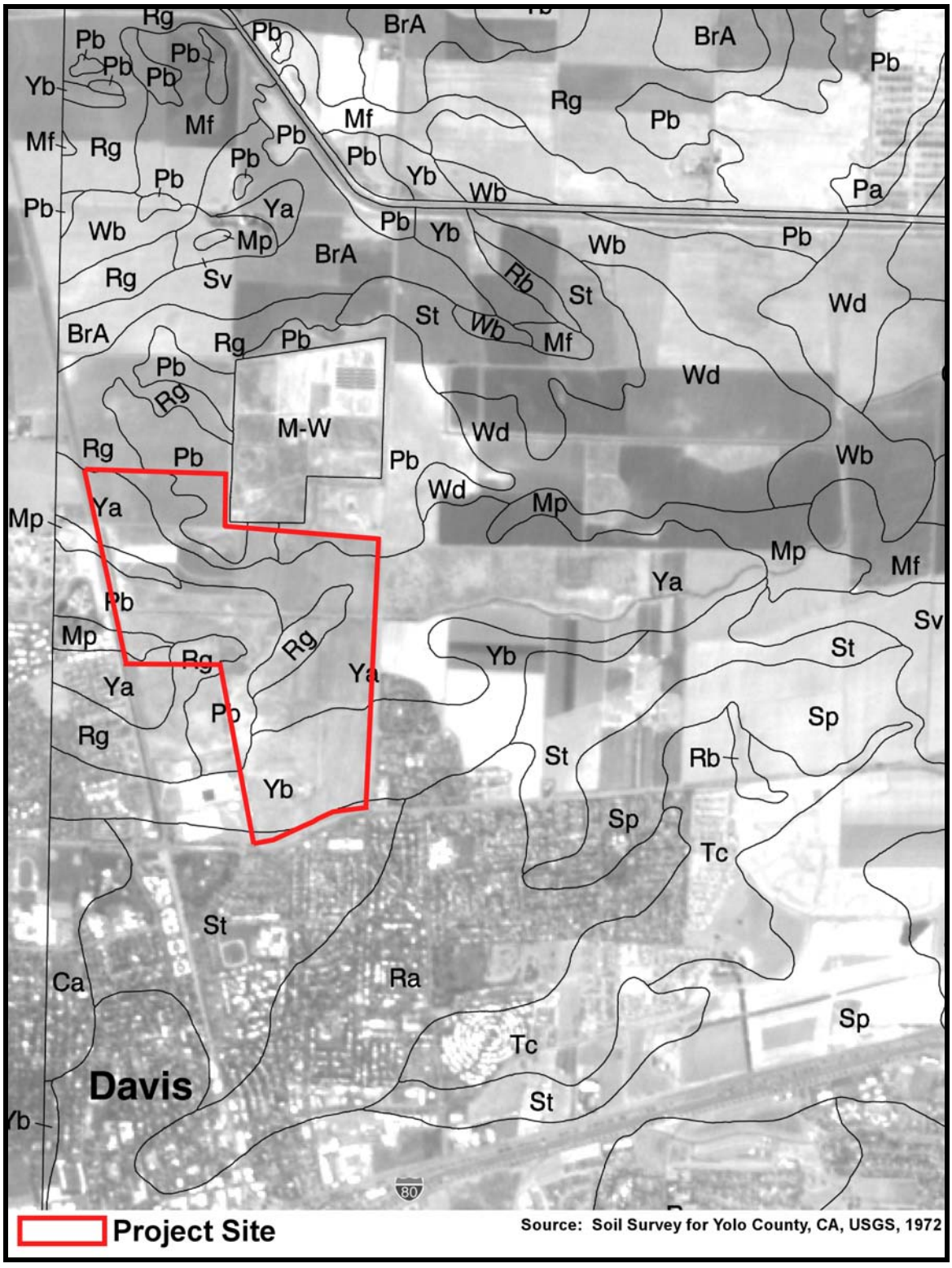
slow, and the erosion hazard is none to slight. Available water holding capacity is 7.0 to 9.0 inches, and effective rooting depth is more than 60 inches. Natural fertility is high, and this soil is used mainly for sugar beets, tomatoes, and alfalfa. Other uses include dryfarmed barley, irrigated pasture, almonds, rice, wildlife habitat, and recreation. The Capability unit is IIIs-3, irrigated; and IVs, non-irrigated.

Pescadero silty clay, saline-alkali (Pb) is found in the throughout the northern and central portion of the project site, and is not classified as either Prime Farmland or Farmland of Statewide Importance. The Pb soil series occupies basins, and slopes are less than one percent. The Pb soil series is slowly permeable, surface runoff is very slow, and the erosion hazard is none to slight. The available water holding capacity is 4.0 to 6.0 inches in areas that have been drained. Effective rooting depth is 20 to 36 inches and is restricted by a high water table, and natural fertility is moderately high. The exchangeable sodium percentage is greater than 20 percent; the high content of sodium accounts for the lower water-holding capacity. This soil is used mainly for dryland pasture; other uses include rice, sugar beets, wildlife habitat, and recreation. The Capability unit is IVw-6, irrigated; and VIw, non-irrigated.

Merritt Complex, saline alkali (Mp) is found in the western portion of the project site, and is considered Farmland of Statewide Importance if irrigated. This complex is about 60 percent Merritt silty clay loam; about 30 percent Merritt silty clay loam, deep; and about 10 percent small areas of Marvin silty clay loam, Sacramento clay, Sycamore complex, and Willows clay. The soils are moderately affected by salts and alkali. Drainage of these soils has been improved by open drains. Permeability is moderately slow to moderate, and available water holding capacity is 4.0 to 6.0 inches. The high content of sodium and alkali accounts for the lower water-holding capacity. A water table is found at a depth of 30 to 60 inches. These soils are moderately high in fertility, and are used mainly for sugar beets and rice. Other uses include irrigated pasture, dryland pasture, wildlife habitat, and recreation. The Capability unit is IVw-6, irrigated and non-irrigated.

Sycamore silty clay loam (St) is found in the extreme southern portion of the project site, and is considered Prime Farmland if irrigated. This soil occurs on alluvial fans, and slopes are less than one percent. The drainage of this Sycamore soil has been improved by natural deepening of channels and by reclamation structures. Permeability is moderately slow, surface runoff is very slow, and the erosion hazard is none to slight. Available water holding capacity is 10.0 to 12.0 inches, and effective rooting depth is more than 60 inches. Natural fertility is high. This soil is used mainly for irrigated sugar beets, tomatoes, alfalfa, asparagus, walnuts, and pears. Other uses include dryfarmed barley, wildlife habitat, and recreation. The Capability unit is I-1, irrigated and non-irrigated.

Figure 4.2-1 Project Site Soils



Local

Yolo County Department of Agriculture Regulations

Yolo County has established regulations in an attempt to reduce nuisances to neighboring properties associated with agricultural operations. Condition Number 1 of the Yolo County Department of Agriculture Conditions Covering the Use of Restricted Materials (January 1, 1999) limits the aerial application of restricted materials, such as pesticides, within one mile of residential areas unless air movement is 90 to 180 degrees away from such areas. The condition also provides minimum distances between the closest operating nozzle and non-target areas as 500 feet for aircraft application of materials labeled as dangerous, 300 feet for air blast orchard sprayers, and 100 feet for ground application. The minimum distance for aerial application of materials labeled "warning" or "caution" is 300 feet and 50 feet for ground application of materials labeled warning or caution. According to the Yolo County Agricultural Commissioner (personal communication 7/3/03), separate regulations do not exist for adjoining non-residential uses; however, these safety buffers would still be applied to protect any use with concentrated human activity.

Yolo County Right-to-Farm Ordinance

The Yolo County Right to Farm Ordinance states that "Agricultural Land" means those land areas of the County specifically classed and zoned as Agricultural Preserve (A-P), Agricultural Exclusive (A-E), and Agricultural General (A-1), as those zones are defined in the Yolo County Zoning Ordinances. Although 383 acres of the project site is zoned Limited Industrial (M-L), 39 acres of the site is zoned Agricultural General (A-1). The Ordinance also states that "No agricultural activity, operation, or facility, or appurtenances thereof, conducted or maintained on agricultural lands for commercial purposes, and in a manner consistent with proper and accepted customs and standards, as established and followed by similar agricultural operations in the same locality, shall be or become a nuisance, private or public, due to any changed condition in or about the locality, after the same has been in operation for more than three (3) years if it was not a nuisance at the time it began."

City of Davis General Plan

The following City of Davis General Plan goals and policies are applicable to agricultural resources:

Agriculture

Goal AG 1. Maintain agriculture as an important industry around Davis.

Policy AG 1.1 Protect agricultural land from urban development except where the general plan land use map has designated the land for urban uses.

Policy AG 1.2 Promote and enhance local agriculture.

Goal AG 2 Encourage sustainable and organic forms of agriculture.

Policy AG 2.1 Foster the growth of environmentally friendly agricultural business and industry in Davis.

City of Davis Right to Farm and Farmland Preservation Ordinance

The goal of the City of Davis General Plan is to work cooperatively with the Counties of Yolo and Solano to preserve agricultural land within the Davis Planning Area, and encourage agricultural operations on land that has not been identified in the General Plan as necessary for development. Additionally, the City seeks to reduce conflicts between agricultural and nonagricultural land uses, and to protect public health. The Right to Farm and Farmland Preservation Ordinance helps achieves these goals by limiting the circumstances under which agricultural operations may be deemed a nuisance.

As part of this effort, the City provides purchasers and tenants of nonagricultural land adjacent to agricultural land with notice about the City's support for the preservation of agricultural lands and operations. This notification requirement promotes a "good neighbor" policy by informing these prospective purchasers and tenants of the considerations associated with living in close proximity to agricultural land and operations. In addition, the City requires all new development adjacent to agricultural operations to provide a buffer zone, in order to reduce potential conflicts between agricultural and nonagricultural land uses.

Relevant portions of the City Municipal Code are summarized below.

40A.01.050 Agricultural Buffer Requirement

This section of the Zoning Ordinance states that all new developments adjacent to designated agricultural, agricultural reserve, agricultural open space, greenbelt/agricultural buffer, Davis greenbelt, or environmentally sensitive habitat areas shall be required to provide an agricultural buffer/agricultural transition area. The transition/buffer areas meet the policy objectives of the City of Davis General Plan and contribute to the area's aesthetic qualities by providing for unobstructed views of farmland, and allowing recreational use through the incorporation of bicycle and pedestrian trails.

The ordinance states that agricultural buffer/agricultural transition areas shall be a minimum of 150 feet measured from the edge of the agricultural, greenbelt, or habitat area; however, in consideration of the 500-foot aerial spray setback established by the Counties of Yolo and Solano, a buffer wider than 150 feet is encouraged. The transition/buffer areas shall be comprised of a 50-foot wide agricultural transition area

located contiguous to a 100-foot wide agricultural buffer, which shall be directly adjacent to the agricultural, greenbelt, or habitat area. The transition/buffer areas may not be used as farmland mitigation.

Various uses are permitted in the 100-foot wide agricultural buffer areas. These uses include native plants, tree or hedgerows, drainage channels, storm retention ponds, natural areas such as creeks or drainage swales, railroad tracks or other utility corridors, and any other use determined by the planning commission to be consistent with the use of the property as an agricultural buffer. The 100-foot wide buffer area does not allow for public access, unless permitted uses such as railroad tracks already exist in the buffer area. Buffer areas shall be developed under a plan approved by the Parks and Community Services Director, and the plan must provide for the establishment, management, and maintenance of the area. In addition, the City shall obtain either an easement for the transition/buffer area, or dedication of the property in fee title.

Unlike the 100-foot wide agricultural buffer areas, the 50-foot agricultural transition areas provide for public use. Uses permitted in the transition area include bike paths, native plants, tree and hedgerows, benches, lights, trash enclosures, fencing, and any other use determined by the Planning Commission to be of the same general character. As with the buffer areas, the 50-foot agricultural transition areas must be developed under a plan approved by the Parks and Community Services Director. Once developed, the land shall be dedicated to the City and annexed to a lighting and landscaping assessment district to pay for the maintenance of the area. The City shall maintain the agricultural transition area.

40A.02.010 Properly Operated Farm not a Nuisance

This section of the Zoning Ordinance states that agricultural operations in compliance with all applicable laws and regulations shall not be considered a nuisance except under California Civil Code Sections 3482.5 and 3482.6. The section further states that any allegations of agricultural nuisance must undergo the agricultural grievance procedure provided in Section 40A.02.020. This section does not interfere with an individual's ability to pursue legal action under other applicable laws.

40A.03.030 Agricultural Land Mitigation Requirements

This section of the Zoning Ordinance states that applicants seeking to change the zoning or other discretionary entitlements of agricultural land to allow nonagricultural use shall be required by the City to provide agricultural mitigation. This shall be accomplished by the granting of a conservation easement to the City on a two-to-one basis, or by the payment of a fee to the City for the purchase of a conservation easement, also on a two-to-one basis (Ordinance 2133, adopted September 16, 2003). The fee payment option must be approved by the City Council, and the fee must be greater than or equal to those required in previous transactions of a similar nature. The fee must be used for farmland mitigation purposes, preferably for the purchase of prime agricultural land. In addition, land required under the Agricultural Buffer Requirement (Section 40A.01.050) does not

count towards the amount of land required for mitigation. This program is intended to work in conjunction with Yolo County habitat management efforts; as such, farmland conservation easement areas may overlap with habitat easement areas managed by Yolo County or DFG. Up to 20 percent of the farmland conservation easement area may be enhanced for wildlife habitat purposes, as per County or DFG management guidelines, and additional fees may be incurred.

IMPACTS AND MITIGATION MEASURES

Standards of Significance

For the purposes of this EIR, impacts are considered potentially significant if implementation of the proposed project would:

- result in the conversion of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance to non-agricultural uses;
- allow development that would be inconsistent with the City's General Plan;
- adversely affect agricultural viability, by placing incompatible or potentially incompatible land uses near active agricultural areas; or
- adversely affect agricultural production.

Methods of Analysis

This section describes impacts on agricultural land that would occur with implementation of the proposed project. Impacts were assessed based upon information contained in the City of Davis General Plan, the City of Davis General Plan Update EIR, and the Soil Survey of Yolo County.

Project Impacts and Mitigation Measures

4.2-1 Loss of prime agricultural land.

Proposed Project

The majority of the 422-acre project site contains soils that are highly suitable for agricultural production and are considered Prime Farmland soils (if irrigated). Four (4) out of the six (6) soil types that make up of the project site are considered Prime Farmland soils according to the *Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance, Yolo County*[8]. These are: Yolo silt loam (Ya); Yolo Silty Clay Loam (Yb); Rincon silty clay loam (Rg); and Sycamore silty clay loam (St). The Merritt complex (Mp) soils are considered Farmland of Statewide Importance, while the Pescadero silty clay, saline-alkali (Pb) soil series does not fall under the Important Farmland designation.

The majority of the project site is composed of Yolo Silt Loam (Ya), Yolo silty clay loam (Yb), and Pescadero silty clay, saline-alkali (Pb). The Ya and Yb soil

series have Storie Index Ratings of 100 and 90 respectively (see Tables 4.2-2 and 4.2-3), indicating that the soils are well suited for agricultural purposes. In addition, the Soil Capability Classification for both series is I-1, which means that the soils have few limitations that restrict their use (see Table 4.2-1). The Pb soil series has greater limitations and is typically used for dryland pasture. Therefore, due to the presence of the Mp and Pb soil types, the entire project site is not made up of Prime Farmland soils. However, Section 40A.03.010 of the Davis Municipal Code indicates that it is the policy of the City to protect and conserve agricultural land, especially in areas presently farmed or having Class 1, 2, 3 or 4 soils. As can be seen in Table 4.2-3, all project site soil types are within this classification range.

The City of Davis General Plan Update EIR (p. 5A-33) states that the City would require preservation of agricultural land on a two-to-one basis to mitigate for the conversion of prime agricultural land to urban uses, and that this requirement would reduce the adversity of the impact. However, the EIR states that the conversion of prime agricultural land to urban uses remains a significant and unavoidable impact. Therefore, the loss of Prime Farmland associated with implementation of the proposed project would be considered a ***significant*** impact.

High Density Alternative

As with the Proposed Project, the High Density Alternative would involve the conversion of uses from agricultural to urban on approximately 422 acres of productive agricultural lands, including areas designated as Prime Farmlands. The General Plan Update EIR identifies the loss of prime agricultural lands as a significant and unavoidable impact. Therefore, the impact of the High Density Alternative would be considered ***significant***.

Mitigation Measure

The following mitigation measure would reduce the magnitude of the impact. However, because the majority of the Prime Farmland and Farmland of Local Importance on the project site would be permanently lost, the impact would remain *significant and unavoidable.*

The following measure is identified for the Proposed Project and the High Density Alternative.

4.2-1 *The project applicant shall set aside in perpetuity active agricultural acreage at a minimum ratio of 2:1 elsewhere in Yolo County, through the purchase of development rights and execution of an irreversible conservation or agricultural easement. The location and amount of active agricultural acreage for the proposed project would be subject to the review and approval of the City Council. The amount of agricultural acreage set aside shall account for the farmland lost due to the conversion of the*

project site as well as up to 50 acres of agricultural acreage for the construction of off-site drainage ponds.

Implementation of this measure would reduce the adversity of the impact; however, consistent with the General Plan Update EIR, the conversion of prime agricultural land to urban uses is still considered a significant and unavoidable impact.

4.2-2 Incompatibilities between future residential uses and hospice facility on the project site and nearby active agricultural uses.

Proposed Project

The City of Davis has expressed the intent to support and encourage agricultural operations both within the City and in Yolo County (2001 General Plan, Policies AG 1.1 and AG 1.2). In addition, the City of Davis has adopted its own Right-to-Farm and Farmland Preservation Ordinance.

Development of the Proposed Project would result in the placement of residential uses adjacent to existing agricultural operations north of the project site. The northern boundary of the project site is directly adjacent to agricultural lands in Yolo County. A 30,000-square foot hospice is planned for construction in the northeast corner of the habitat area proposed for the project, directly adjacent to the neighboring agricultural property. The hospice would result in ongoing human activity throughout the day and into a portion of the night, adjacent to agricultural operations.

Placement of residential uses in a largely agricultural area could potentially result in conflicts with the existing agricultural operations. Such conflicts could include trespassing by residents into the nearby agricultural fields, as well as increased traffic hazards for farm workers moving agricultural equipment on local roadways.

Conversely, agricultural operations may result in conflicts with residential uses, because of the production of dust, noise, and pesticide residues. The agricultural operations surrounding the project site could result in irregular short-term exposure of residents to aerially applied pesticides and dust. Dust nuisances and the application of pesticides are only temporary disturbances; therefore, impacts to residents would not be continual. However, these disturbances would continue from year to year as long as the agricultural operations are active.

As stated in the Regulatory Context above, Condition Number 1 of the Yolo County Department of Agriculture Conditions Covering the Use of Restricted Materials limits the aerial application of chemicals to 300 feet or 500 feet from residential areas, depending on the labeling (i.e., 500 feet for aircraft application of materials labeled as dangerous). Mr. Rick Landon, Yolo County Agricultural Commissioner, reviewed the Covell Village Site Plan and the surrounding

properties to determine if any conflicts would occur between existing nearby agricultural operations and uses proposed for the Covell Village project. Mr. Landon concluded based upon his review that a 500-foot buffer would be required for the hospice[9]. Mr. Landon indicated that his reason for this conclusion is that aerially applied pesticides are intermittently sprayed north of the hospice, which would conflict with the sensitive receptors at the proposed hospice site. The provision of a 500-foot buffer as part of the project would be consistent with Section 40A.01.050 (a), Agricultural Buffer Requirement, Davis Municipal Code, which encourages the incorporation of a 500-foot buffer instead of a 150-foot buffer (as required by the City of Davis) to comply with the aerial spray setback established by the County of Yolo.

The site plan currently does not include a buffer area along the northern boundary of the project site. Because the agricultural buffer requirement has not been satisfied, the incompatibility between active agricultural uses and future residential uses on the project site would be considered a ***significant*** impact.

High Density Alternative

The High Density Alternative generally involves the construction of the same types of land uses as the Proposed Project, such as residential, commercial, and recreational uses on the 422-acre project site. However, the Alternative involves the development of 1,990 residential units as compared to 1,515 units planned for the Proposed Project.

As with the Proposed Project, the High Density Alternative would include the construction of a 30,000-square foot hospice in the northeast corner of the habitat area, in close proximity to active agricultural activities such as soil tilling and pesticide spraying. Therefore, the incompatibility impacts that would occur for the Proposed Project regarding the hospice facility would be expected to occur upon implementation of the High Density Alternative as well, resulting in a ***significant*** impact.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the impact to a *less-than-significant* level.

The following measures are identified for the Proposed Project and the High Density Alternative.

4.2-2(a) *Prior to the submittal of any tentative map showing the proposed hospice facility, the applicant shall change the planned location of the hospice facility to the southeastern corner of the proposed habitat area, in order to incorporate a 500-foot buffer; or, the applicant shall dedicate a portion of the proposed Agricultural Preservation Area north of the project site for an agricultural buffer zone, consisting of 500-feet in width. The buffer zone shall*

comply with all applicable Yolo County and City of Davis requirements as outlined in their respective General Plans and Zoning Ordinances. Pursuant to Section 40A.03.030 (c) of the Davis Municipal Code, the agricultural buffer/transition area shall not qualify as farmland mitigation.

4.2-2(b) *Consistent with Action AG 1.1(g) of the General Plan and the Davis Right-to-Farm Ordinance, the applicant/developer shall inform and provide recorded notice to prospective buyers within 1,000 feet of agricultural land in writing and prior to purchase, as prescribed by the City's Right to Farm Ordinance, about existing and on-going agricultural activities in the immediate area in the form of a disclosure statement. The notifications shall disclose that Davis and Yolo County are agricultural areas and residents of the property may be subject to inconvenience or discomfort arising from the use of agricultural chemicals, and from pursuit of agricultural operations, including, but not limited to cultivation, irrigation, plowing, spraying, aerial application, pruning, harvesting, crop protection, and agricultural burning which occasionally generate dust, smoke, noise, and odor. The language and format of such notification shall be reviewed and approved by the City Engineer prior to recording final maps. Each disclosure statement shall be acknowledged with the signature of each prospective property owner.*

Cumulative Impacts and Mitigation Measures

The cumulative context for agricultural impacts is other development projected in the City of Davis General Plan and in Yolo County.

4.2-3 Long-term impacts to Prime Farmland from the proposed project in combination with existing and future developments in the Davis area.

Proposed Project

The proposed project would contribute to the ongoing conversion of farmland to urban uses. Major areas of growth in the region include Woodland, West Sacramento, and the North Natomas area. Development in these areas would contribute to the loss of agricultural land.

As mentioned above, the General Plan Update EIR found that the conversion of prime farmland would be considered a significant and unavoidable impact even with the implementation of General Plan policies, including the provision of agricultural acreage at a minimum 1:1 ratio. In addition, because the project site is designated as Agriculture on "Figure 11b – Land Use" of the 2001 Davis General Plan, the project site has not been anticipated for urban development. Therefore,

the conversion of the project site in addition to the cumulative loss of Prime Farmland elsewhere in the vicinity would result in a ***significant*** impact.

High Density Alternative

Like the Proposed Project, the High Density Alternative would result in the permanent conversion of approximately 422 acres of agricultural land, some of which is categorized as Prime Farmland, to urban uses. The General Plan Update EIR states that such farmland conversion is a significant and unavoidable impact. Therefore, cumulative impacts to Prime Farmland under the High Density Alternative would be considered ***significant***.

Mitigation Measure(s)

The following mitigation measure would reduce the magnitude of the impact. However, because the majority of the Prime Farmland and Farmland of Local Importance on the project site would be permanently lost, the impact would remain *significant and unavoidable.*

The following measure is identified for the Proposed Project and the High Density Alternative.

4.2-3 Implement mitigation measure 4.2-1.

Endnotes

[1] City of Davis. May 2001. *City of Davis General Plan*.
[2] City of Davis. January 2000. *Program EIR for the City of Davis General Plan Update and Project EIR for Establishment of a New Junior High School*.
[3] County of Yolo. 2003. *Yolo County Crop Report*. [website] Available at: http://www.yolocounty.org/org/ag/acr03/crcont.htm
[4] Geocon Consultants, Inc. June 2003. *Phase I Environmental Site Assessment, Covell Village, Yolo County, California*.
[5] California Department of Conservation. 2004. Division of Land Resource Protection, FMMP: *A Guide to the Farmland Mapping and Monitoring Program*. [website] Available at: http://www.consrv.ca.gov/DLRP/fmmp/pubs/fmmp_guide_2004.pdf
[5] California Department of Conservation. 2003. Division of Land Resource Protection, FMMP: *Yolo County 2000-2002 Land Use Conversion*. [website] Available at: http://www.consrv.ca.gov/DLRP/fmmp/pubs/2000_2002/conversion_tables/yolcon02.xls
[6] [website] Available at: www-gis.yolocounty.org/website/yolo/viewer.htm; September 17, 2004.
[7] U.S. Department of Agriculture, Soil Conservation Service. June 1972. S*oil Survey of Yolo County, California*.
[8] California Department of Conservation. 1995. Farmland Mapping and Monitoring Program: *Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance*.
[9] Personal Communication with Mr. Rick Landon, Yolo County Agricultural Commissioner, September 16, 2004.